# FY 2020 BUSINESS PLAN DALLAS AREA RAPID TRANSIT

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Including FY 2020 Annual Budget and Twenty-Year Financial Plan



## **DART BOARD MEMBERS**

Sue S. Bauman Dallas

Mark Enoch Garland, Rowlett, Glenn Heights

**Doug Hrbacek** Carrollton, Irving

Ray Jackson Dallas

Jonathan R. Kelly Garland

Patrick J. Kennedy Dallas

Jon-Bertrell Killen Dallas

Michele Wong Krause Dallas

Amanda Moreno Dallas

Eliseo Ruiz III Dallas, Cockrell Hill

Gary Slagel Richardson, University Park, Addison, Highland Park

Lissa Smith Plano, Farmers Branch

Rick Stopfer Irving

**Dominique P. Torres** Dallas

Paul N. Wageman Plano

DART's Financial Information is located online at: DART.org/financialinformation



#### How to Use This Book

What's in this Book

This book contains the Business Plan for Fiscal Year 2020 (FY 2020 – which ends September 30, 2020) for Dallas Area Rapid Transit (DART or the Agency).

The Business Plan provides the DART Board of Directors, customers, taxpayers, elected officials, and other stakeholder groups of our region with a comprehensive summary of the Agency's plans and commitments to improve regional mobility, enhance the quality of life, and stimulate economic development. This document consolidates the key elements of the FY 2020 Annual Budget, the FY 2020 Twenty-Year Financial Plan, the Transit System Plan, and the Agency's Strategic Plan.

A summary of the information contained in the various sections follows.

The formal **Letter of Transmittal** summarizes priorities and issues for the upcoming year.

The section titled **Who We Are** should help those not familiar with DART to understand the basis from which the Agency operates. This section also contains an organization chart along functional lines.

The **Twenty-Year Financial Plan** represents a robust long-term projection of DART operating revenues, funding, operating expenses, capital expenditures, and other financial information. The Plan validates the affordability of system expansion and maintenance commitments, operating requirements, and debt repayment. Approval of the Plan requires an affirmative vote of two-thirds of the appointed and qualified members of the DART Board. The Annual Budget requires a majority vote and corresponds to the first year of the Plan.

The **Annual Budget** enumerates the FY 2020 amounts for operating expenses, capital and non-operating costs, and debt service – including the underlying bases, issues, and factors – with an introductory section that describes the agency's strategic priorities as the framework for the annual budget.

The **Organizational Units** section contains modal key performance indicators, as well as the goals and budget detail by organizational unit.

Finally, the **Reference** section contains supporting information including the process employed to develop the Twenty-Year Financial Plan, description of DART financial policies, supplemental financial schedules such as sales tax and debt detail, data on fares, and definitions of terms and acronyms.



### Dallas Area Rapid Transit

FY 2020 Business Plan (Including the FY 2020 Annual Budget and the Proposed FY 2020 Twenty-Year Financial Plan)



Dallas Area Rapid Transit P.O. Box 660163 Dallas, TX 75266-0163 214-749-3278

August 9, 2019

Board of Directors Dallas Area Rapid Transit

On behalf of the DART Executive Management Team, I am pleased to present the Fiscal Year (FY) 2020 Business Plan which includes the proposed FY 2020 Annual Budget and Twenty-Year Financial Plan for Dallas Area Rapid Transit.

The proposed FY 2020 Annual Budget is a balanced budget and meets all Board-adopted Financial Standards. The total proposed FY 2020 Annual Budget is broken down as follows (dollars in millions):

Operating	\$562.3	
Capital & Non-Operating	597.3	
Debt Service	202.5	
Total Proposed FY 2020 Budget	\$1,362.1	

The Twenty-Year Financial Plan represents a long-term projection of DART's operating revenues, funding, operating expenses, capital expenditures, and debt obligations. The plan demonstrates the agency has the financial capacity to achieve its strategic priorities over the next 20 years.

#### **<u>Re-envisioning Our Service</u>**

Providing safe and efficient bus service continues to be one of our primary efforts. We continued making improvements to bus service in FY 2019 to add riders and give them a better experience. Service changes in March and August focused on increasing frequency, making routes more direct and improving on-time performance. Improving frequency has proven to be an effective way to grow ridership.

In late FY 2019, customers experienced the debut of 41 new buses that allow improved frequency and will include new customer amenities such as USB charging stations at every seat. Additional bus service enhancements include fewer bus stops which make the trip faster, as well as more bus stop shelters, benches and lighting to provide more comfort and a better sense of security for our customers.

DART will embark on a significant re-envisioning of our entire bus service. We are working on more direct routes, quicker trip times and better access for everyone. DART is developing a Bus

DART Board of Directors August 9, 2019 Page 2

Service Plan in FY 2020 focused on a ridership versus coverage trade-off, with extensive stakeholder input.

#### **Customer Security**

The security of our customers, employees and contractors is a fundamental goal of the agency. Several DART initiatives launched in FY 2018 continued throughout FY 2019 and will continue into FY 2020 to improve our customers' sense of security. Customers continue to see the benefits of additional police officers on buses and at transit centers throughout the service area. DART has also focused on physical improvements at stations and parking facilities by increasing lighting and removing visual impediments. We will continue the installation of closed-circuit cameras on trains and at park and ride locations. Ongoing marketing campaigns encourage customers to report concerns they have while on DART vehicles and facilities through the DART Say Something mobile app.

#### Major Capital Projects

Progress was made on four significant rail projects during FY 2019 and work will continue into FY 2020.

Rail replacement in the Central Business District (CBD) along Pacific Avenue and Bryan Street began in the second quarter of FY 2019. This project includes replacing worn light rail tracks, adding and repairing crossovers, and repairing streets and drainage along the rail corridor. This project will create a smoother ride through downtown for our customers, eliminate ongoing maintenance issues, and increase the number of areas where trains can switch tracks, which will reduce service disruptions.

The DART Rail Red and Blue Line platform extensions project began in FY 2019. This modification to some of our oldest stations outside of Downtown Dallas adds operational flexibility and, by allowing the deployment of three-car train sets on all rail lines, allows us to increase capacity by 50%.

The \$1.2 billion, 26-mile Cotton Belt Regional Rail (Silver Line) project, which extends between DFW Airport and Shiloh Road in Plano, will provide passenger rail connections and service that will improve mobility, accessibility and system linkages to major employment, population and activity centers in the northern part of the DART Service Area. Service is scheduled to begin in December 2022.

The \$1.4 billion D2 Subway project, DART's second light rail line through downtown Dallas, that extends from Victory Park to Deep Ellum, has made significant progress in the past year. The project reached a 10% design level in March 2019 for the Victory/Commerce/Swiss Locally Preferred Alternative (LPA), which was approved in September 2017 by the Dallas City Council and DART Board of Directors. Feedback from residents, business owners, developers and agency staff has been invaluable in refining the project to minimize impacts to these stakeholders and create an urban design vision.

DART Board of Directors August 9, 2019 Page 3

#### Mobility as a Service (MaaS)

DART continues to lead the global transformation of public transit to provide comprehensive mobility services. We understand that people expect more from public transit than just trains and buses. DART is becoming a true mobility integrator for North Texas – bringing traditional DART services together with newer forms of transportation like ride-sharing, bike-sharing, carsharing and taxis. As much as DART evolves, our mission stays the same: To improve mobility, quality of life, and enhance economic development in our service area and in the region.

As the nation's leader in transit innovation, DART is managing mobility options and services to make movement around North Texas more flexible and fluid to better serve the modern on-demand culture. With the North Texas region's best interests in mind, DART continues to invest in projects that bolster the region's economy and support future growth. Mobility as a Service ensures the success of this transition. Ultimately, we aim to shift the way people think about and use transit. Our goal is to build a system where people can choose all modes of transit via one source.

GoLink was introduced in five zones in FY 2018, including the Plano Legacy area and North Central Plano, and Rylie, Kleberg, and Inland Port in Dallas. GoLink offers direct-request demand-responsive service with connections to other DART routes. Most passengers are picked up within 10 minutes of request. Rowlett received expanded GoLink service in June, and Far North Plano service began in August. UberPool was implemented in Rowlett, Plano, and Southern Dallas in seven zones. GoLink was also expanded to all remaining 6 On Call zones in March 2019 and UberPool will be offered in these zones in FY 2019 and first quarter of FY 2020.

#### **Financial Overview**

The sources of funds in the proposed FY 2020 Twenty-Year Financial Plan (for the period FY 2020 through FY 2039) total \$28.90 billion. This represents a 4.09% (\$1.14 billion) increase over the previous Plan, which covered the period FY 2019 through FY 2038. The proposed FY 2020 Plan projects a greater amount of sales tax revenues than the previous Plan, reflecting continued strong increases in this source of funding driven by growth rates in later years, and a planned zero-growth year from FY 2019 to FY 2020. The total Federal Funds of \$2.45 billion represents a 2.65% increase due to ridership on the Silver Line Regional Rail service, and timing compared to the previous Plan.

The total uses of funds in the proposed FY 2020 Twenty-Year Financial Plan (for the period FY 2020 through FY 2039) total \$29.00 billion, a 4.12% (\$1.15 billion) increase over the previous Plan, which covered the period FY 2019 through FY 2038. Operating expenses of \$14.41 billion reflect a 3.03% increase from the previous Plan driven by higher projected inflation rates received from an external economic consultant. Capital expenditures have increased from the previous Plan by \$0.49 billion to a total of \$6.97 billion. This reflects the addition of double tracking for the Silver Line (offset by interest rate savings from the Rail Rehabilitation and Improvement Financing loan), Light Rail Vehicle fleet replacement in FY 2039, additional capital projects, and

DART Board of Directors August 9, 2019 Page 4

the timing of existing projects compared to the previous Plan. Debt service increased by \$0.19 billion to a total of \$6.83 billion.

Importantly, coverage ratios meet DART Financial Standards throughout the twenty-year period. These standards require an internal coverage ratio of 1.0 or better (revenues available to pay for operations, minus operating expense, must cover current year debt service), and an external coverage ratio (annual sales tax revenues divided by debt service) of 2.0 or better. These ratios demonstrate the long-term financial health of the Agency.

#### In Closing

The enclosed Business Plan document describes in further detail the large number of ongoing initiatives to achieve the Board's goals:

- 1. **Operations.** Service expansion and enhancement that improve travel times and promote a sense of security to attract new riders and retain current riders. Improvement Projects such as vehicle inspection and service disruption programs, to improve the efficiency of our internal processes and service to our customers;
- 2. Capital Projects and System Plan. Strategic investment in system expansion, as well as projects to optimize our existing infrastructure, such as next generation communications and operations center and technology network consolidation, to achieve our vision of being the preferred choice of transportation now and in the future; and
- 3. Administration. Efforts to retain and maintain a skilled and diverse workforce, including: training and mentoring programs, streamlining administrative systems, and healthcare program restructuring.

Much has been accomplished since the establishment of DART, but much more remains to be done. The Annual Budget and Twenty-Year Financial Plan presented for FY 2020 provide confirmation the DART team is highly focused on, and committed to, meeting our obligations to our riders and our residents as we move North Texas forward.

Sincerely,

Gary C. Thomas

President Executive Director

Enclosure





The Government Finance Officers Association of the United States and Canada (GFOA) presented a Distinguished Budget Award to Dallas Area Rapid Transit for its annual budget for the fiscal year beginning October 1, 2018. In order to receive this award, a governmental unit must publish a budget document that meets program criteria as a policy document, as an operations guide, as a financial plan, and as a communications device.

The award is valid for a period of one year only. We believe our current budget continues to conform to program requirements, and we are submitting it to GFOA to determine its eligibility for another award.



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#### Who We Are

We are Dallas Area Rapid Transit – DART. Your preferred choice of transportation for now and in the future.

#### Dallas Area Rapid Transit – What's Next?

Our region is constantly growing and evolving, and DART is evolving too. As we look towards what's next, we are focusing on a new approach to mobility. We understand that people expect more from public transit than just trains and buses. DART is becoming a true mobility integrator for North Texas – bringing together traditional DART services with newer forms of transportation like ride-sharing, bike-sharing, carsharing and taxis. As much as DART evolves, our mission stays the same: To improve mobility, quality of life and enhance economic development in our Service Area and in the region.

#### Organization

Dallas Area Rapid Transit (DART) is a sub-regional transportation authority, created by a voting majority of the citizens on August 13, 1983, to organize and provide public transportation and complementary services to jurisdictions pursuant to Chapter 452 of the Texas Transportation Code (the "Act"). Our service area is comprised of 13 North Texas municipalities (Addison, Carrollton, Cockrell Hill, Dallas, Farmers Branch, Garland, Glenn Heights, Highland Park, Irving, Plano, Richardson, Rowlett, and University Park) as shown in Exhibit 2 (on page 7). Our headquarters is located in downtown Dallas. Under the Act, we are authorized to collect a 1% sale and use tax on certain transactions.

DART provides bus, light rail, commuter rail, paratransit, vanpool, and other services to our 13 municipalities across a 700-square mile service area with a population of 2.4 million in the Dallas, Texas area. DART has operated bus service since its inception in 1983. The first segment of light rail opened in 1996, and the 20-mile Light Rail Starter System was completed in May 1997.

Since then, DART has worked to expand light rail considerably. DART currently operates a total of 93 miles of light rail, including an extension to UNT-Dallas that opened October 24, 2016. DART operates commuter rail service, which also opened in 1996, jointly with Trinity Metro along a 34-mile rail corridor between the cities of Dallas and Fort Worth. Exhibit 6 on page 15 is the DART System Map.



<u>*Mission Statement*</u> – DART's mission statement defines the purpose for which the Agency was created:

The mission of Dallas Area Rapid Transit is to build, establish, and operate a safe, efficient, and effective transportation system that, within the DART Service Area, provides mobility, improves the quality of life, and stimulates economic development through the implementation of the DART Service Plan as adopted by the voters on August 13, 1983, and as amended from time to time.

 $\underline{Vision \ Statement}$  – To help achieve the Board's mission and strategic priorities, the Board has approved a vision statement to address DART's customers and stakeholders.

#### DART: Your preferred choice of transportation for now and in the future.

Vision Statemen . Mission DART: YOUR PREFERRED CHOICE OF **TRANSPORTATION** 





<u>Board Strategic Priorities</u> – To achieve this mission and ensure Agency alignment, in April 2015 the Board adopted the following six Strategic Priorities:

- 1. Continually improve service and safety experiences and perceptions for customers and the public
- 2. Optimize and preserve (state of good repair) the existing transit system
- 3. Optimize DART's influence in regional transportation planning
- 4. Expand DART's transportation system to serve cities inside and outside the current service area
- 5. Pursue excellence through employee engagement, development, and well-being
- 6. Innovate to improve levels of service, business processes, and funding

<u>DART Organizational Values</u> – DART's Strategic Plan is grounded in DART's Values Statement, as follows:

- Focused on Our Customers
  - $\checkmark$  We are dedicated to meeting our customers' needs.
  - ✓ We strive for continuous improvement.
  - ✓ We deliver quality.
- Committed to Safety and Security
  - $\checkmark$  We require safety and security to be the responsibility of every employee.
  - $\checkmark$  We are committed to ensuring the safety and security of our passengers and employees.
- Dedicated to Excellence
  - ✓ We demonstrate a high regard for each other.
  - $\checkmark$  We are committed to innovation and learning from our experiences.
  - ✓ We hold ourselves accountable.
  - ✓ We coach, reinforce, and recognize employees.
  - $\checkmark$  We foster an environment promoting diversity of people and ideas.
- Good Stewards of the Public Trust
  - ✓ We responsibly use public funds and property.
  - $\checkmark$  We maintain open communication with customers and stakeholders.
  - ✓ We respect the environment.
  - ✓ We strive to mitigate risk.
  - ✓ We demand integrity and honesty.



#### **Governance and Management Structure**

#### The Board of Directors

DART is governed by a 15-member Board of Directors. The governing bodies of the participating municipalities appoint members to our Board according to the ratio of the population of each participating municipality to the total population within our service area. A participating municipality having a population which entitles it to make a fraction of an appointment may combine that fraction with one or more other participating municipalities to make one appointment; but no participating municipality may appoint more than 65% of the members of the Board. The Board can be restructured whenever there is a change in the participating municipalities or every fifth year after the date census data or population estimates become available.

Each Board member serves at the pleasure of the governing municipal unit(s) that appoints the member. Board members serve staggered two-year terms. Eight of the member terms begin July 1 of odd-numbered years, and seven of the member terms begin on July 1 of even-numbered years. Each member is entitled to receive \$50 for each Board meeting attended and is reimbursed for necessary and reasonable expenses incurred in the discharge of the member's duties. On the following page, exhibit 1, sets forth information regarding our current Board of Directors.



Name	Represents
Paul N. Wageman, Chair	Plano
Michele Wong Krause, Vice Chair	Dallas
Sue S. Bauman	Dallas
Mark C. Enoch	Garland, Rowlett, and Glenn Heights
Doug Hrbacek	Carrollton and Irving
Ray Jackson, Assistant Secretary	Dallas
Jonathan R. Kelly, Secretary	Garland
Patrick J. Kennedy	Dallas
Jon-Bertrell Killen	Dallas
Amanda Moreno	Dallas
Eliseo Ruiz III	Dallas, Cockrell Hill
Gary Slagel	Addison, Highland Park, Richardson, and University Park
Lissa Smith	Plano and Farmers Branch
Rick Stopfer	Irving
Dominique P. Torres	Dallas

Exhibit 1 Members of the Board of Directors

The Board elects from its members a chair, vice chair, secretary, and assistant secretary as shown in the table. These elections are held in October of each year.



## DART BOARD MEMBERS FY 2020



Sue S. Bauman Dallas



Mark Enoch Garland, Rowlett and Glenn Heights



Doug Hrbacek Carrollton and Irving



Ray Jackson Assistant Secretary Dallas



Jonathan R. Kelly *Secretary* Garland



Patrick J. Kennedy Dallas



Jon-Bertrell Killen Dallas



Michele Wong Krause Vice Chair Dallas



Amanda Moreno Dallas

Eliseo Ruiz III Dallas and Cockrell Hill



Gary Slagel Richardson, University Park, Addison and Highland Park



Lissa Smith Plano and Farmers Branch



Rick Stopfer Irving



Dominique P. Torres Dallas



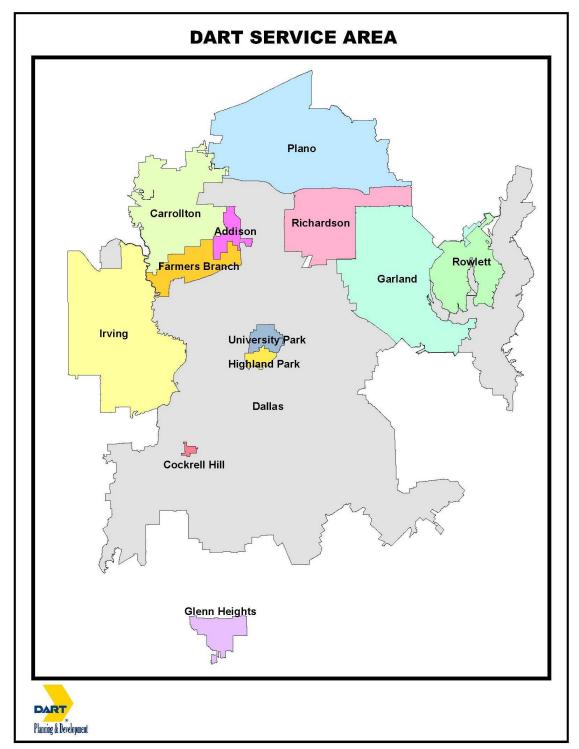
Paul N. Wageman *Chair* Plano

REV 11/2019



Exhibit 2 is a map of the DART Service Area.







#### DART's Management

The Board appoints our President/Executive Director, who also serves as our Chief Executive Officer. The Chief Executive Officer's duties include:

- Overseeing our daily operations, including the hiring, compensation, and removal of employees.
- Awarding contracts for services, supplies, capital acquisitions, real estate, and construction if the amount of any such contract does not exceed \$100,000, and contracts of up to \$250,000 for standard off-the-shelf commercial products.
- Presiding over the growth of our transit system.
- Providing regional leadership and national visibility regarding the transportation needs in North Central Texas.

Exhibit 3, on the following page, is a summary of our executive management team.



Exhibit 3
DART'S Executive Management

NAME	POSITION	
Gary C. Thomas	President/Executive Director	
David Schulze	Chief of Staff to President/Executive Director	2004
Joseph G. Costello	Chief Financial Officer	2014
Nicole Fontayne- Bárdowell	Executive Vice President, Chief Administrative Officer	2014
Timothy H. McKay	Executive Vice President, Growth/ Regional Development	2001
Carol Wise	Executive Vice President, Chief Operations Officer	2012
Chris Koloc	Director of Internal Audit	2008
John Adler	Vice President, Procurement	2006
Tammy Barrow	Vice President, Chief People Officer, Interim	2008
Doug Douglas	Vice President, Mobility Management Services	1990
Edie Diaz	Vice President, Government Relations	2019
Gregory Elsborg	Vice President, Chief Innovation Officer	2019
Gene Gamez	General Counsel	2002
Nevin Grinnell	Vice President, Chief Marketing Officer	2011
Michael Holbrook	Vice President, Rail Operations	2008
Herold Humphrey	Vice President, Bus Operations	2017
Donna Johnson	Vice President, Chief Safety Officer	2004
Nancy Johnson	Director of the Office of Board Support	1999
Marcus Moore	Vice President, Diversity, Interim	1991
Bonnie Murphy	Vice President, Commuter Rail	2017
Todd Plesko	Vice President, Planning & Development	2009
John Rhone	Vice President, Capital Design & Construction	2002
Stephen Salin	Vice President, Capital Planning	2000
Julius Smith	Vice President, Chief Information Officer	2016
James Spiller	Vice President, DART Chief of Police and Emergency Management	2001
Robert W. Strauss	Vice President, Real Property and Transit Oriented Development	2016



#### **Employees and Employee Relations**

There are 3,973 salaried and hourly positions included in the FY 2020 Annual Budget.

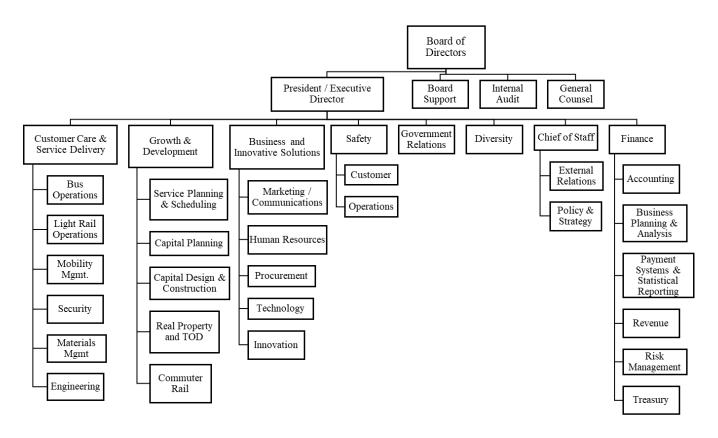
The Amalgamated Transit Union, Local 1338, represents the majority of our operators, mechanics, and call center personnel. As a Texas governmental entity, we are not legally permitted to collectively bargain or sign labor contracts with these employee representatives. We do, however, meet and confer with these representatives on hourly employee issues, compensation, and benefits. DART is organized broadly along the following functional lines ("organizational units"; see Exhibit 4).

- *Customer Care and Service Delivery* is charged with providing effective, efficient, safe, secure transportation service.
- *Growth and Development* oversees the planning and development of the overall system.
- **Business & Innovative Solutions** looks to maximize Agency resources through innovative technology, dynamic marketing, effective procurement, and engaging talent management.
- *DART Safety Office* ensures a safe environment for customers, employees, and people on DART property and construction sites.
- *External Relations* serves as the voice of the agency. This includes media relations, social and digital media, and community relations, including transit education.
- *Finance* provides astute fiscal management.
- *Government Relations* is the agency's key liaison with federal, state, regional and local elected officials and stakeholder groups.
- *Diversity* is responsible for DART's Equal Employment Opportunity (EEO), Minority & Women Business Enterprises (MWBE) and diversity programs.
- *Chief of Staff* is responsible for administrative functions of the Executive Office, records management, external relations, and special programs.



#### Exhibit 4 illustrates the positions that report directly to the Board of Directors.

#### Exhibit 4 Dallas Area Rapid Transit Functional Organization Chart



#### The DART Transportation System

Our current public transportation services include:

- Bus Transit service (including DART On-Call and Flex services);
- Light Rail Transit service;
- Commuter Rail service;
- DART Mobility Management services, including ADA Complementary Paratransit services;
- RideShare matching services for carpools and vanpools; and
- Special event service, provided through the modes listed above.

Exhibit 5 highlights total system ridership by mode for the last ten years along with budgeted ridership for Fiscal Year FY 2019 and FY 2020.

			(III WIIIIOIIS)			
Fiscal			Commuter			
Year	Bus	LRT*	Rail	Paratransit	Vanpool	Total **
2009	43.1	18.9	2.8	0.8	0.9	66.5
2010	38.0	17.8	2.5	0.8	0.9	60.0
2011	37.2	22.3	2.4	0.8	1.0	63.7
2012	38.7	27.7	2.3	0.8	1.0	70.5
2013	38.0	29.5	2.1	0.8	0.9	71.3
2014	37.4	29.5	2.3	0.8	0.9	70.8
2015	36.5	29.9	2.2	0.8	0.9	70.3
2016	33.7	29.8	2.1	0.8	0.8	67.1
2017	32.1	30.1	2.1	0.8	0.7	65.8
2018	30.3	29.0	2.0	0.8	0.6	62.7
2019B	30.6	29.0	2.0	0.9	0.9	63.4
2020B	38.1	29.4	2.0	0.9	0.6	70.80

#### Exhibit 5 Ridership by Mode (in Millions)

\* Streetcar ridership is included in the LRT totals.

\*\*Reporting of HOV ridership was discontinued effective 10/01/2015. Without HOV, Total Agency Ridership will not match previously reported totals.

*Note:* Automatic Passenger Counter (APC) data used for LRT beginning in 2012, Bus and Commuter Rail beginning in 2019. The counters have proven to be considerably more accurate than our previous manual ridership counting methodology. The APCs show that we have been underreporting ridership by approximately 23%.



#### Bus Transit (48.3% of total system ridership in Fiscal Year 2018)

Our bus system provides local, express, crosstown, on-call, flex, feeder bus routes, site-specific shuttles, and GoLink Mobility on Demand service. Local routes are focused on the Dallas Central Business District and serve the largest and densest concentration of employment in the service area. Express service connects the Dallas Central Business District to regionally located park-and-ride facilities that serve as focal points for commuters to make high speed trips. Crosstown routes traverse the service area facilitating intra- and inter-community travel while linking a variety of activity centers. DART On-Call provides our customers personalized demand-responsive weekday neighborhood service within specifically defined areas. Flex Service, a variation of the On-Call approach, provides customers the advantages of a conventional fixed route plus the convenience of curbside service in eight Flex Service Areas. Feeder routes connect residential and employment centers to the light rail system and other bus routes at stations and Transit Centers accommodating transfer connections that expand travel opportunities. Site-specific shuttles are operated and funded with partner organizations that offer direct connections for their employees, students, or customers to the DART Rail network. GoLink Mobility on Demand provides service in five pilot zone began operation in August.

#### Light Rail Transit (46.3% of total system ridership in Fiscal Year 2018)

Light Rail Transit is an electrically-powered rail system that generally operates at street level. A 20-mile "Starter System" opened in phases from September 1996 through May 1997, with lines from South and West Oak Cliff through downtown Dallas, and along the North Central Expressway corridor to Park Lane in Dallas. In 2001-2002, DART's light rail was extended to North Dallas, Garland, Richardson, and Plano. In 2009, the first phase of the Green Line opened southeast of downtown Dallas with the remainder opening in 2010. DART also opened its first

infill station, Lake Highlands Station, in December 2010 on the Blue Line. The first 5-mile segment of the Orange Line to Irving opened for service in July 2012. The second phase of the Orange Line and the Blue Line extension to Rowlett opened for service in December 2012. Rail service opened to the DFW International Airport in August 2014. The extension of the Blue Line to UNT-Dallas opened in October 2016. We currently operate a 93-mile light rail system.



#### Commuter Rail (3.3% of total system ridership in Fiscal Year 2018)

Our commuter rail system, referred to as Trinity Railway Express (the "TRE"), provides diesel powered passenger railroad services on the TRE Corridor between Dallas and Fort Worth, in mixed traffic with freight railroad operations. The 34-mile corridor is jointly owned by DART and the Fort Worth Transportation Authority, which recently rebranded itself as Trinity Metro. TRE service is provided pursuant to an interlocal agreement between DART and Trinity Metro. This agreement was originally entered into in 1994 and was restated and adopted by both Boards in 2003. Pursuant to Trackage Rights Agreements, the Burlington Northern Santa Fe, the Dallas



Garland and Northeastern, and the Union Pacific railroads pay a fee for the right to operate freight services on the TRE corridor. TRE, through its contractor, Herzog Transit Services, Inc., provides dispatching, maintains the corridor, operates the service, and maintains the rolling stock used in the service.

#### Paratransit (1.2% of total system ridership in Fiscal Year 2018)

DART is responsible for providing complementary paratransit service in accordance with the Americans with Disabilities Act of 1990 (the "ADA"). In Fiscal Year 2013, we transitioned to a new service delivery model and a new contractor, MV Transportation, Inc. (MV), for providing paratransit service. MV provides, operates, and maintains a fleet of 80 Starcraft vehicles in dedicated service. MV also oversees and manages a fleet of 116 Dodge Entervans outfitted by Braun, which are taxi vehicles provided and operated by Irving Holdings.

Mobility Management Services continues to work at improving the service received by our customers while striving to provide the most cost-efficient service for the agency and to be good stewards of public funds. The department is focused on providing the highest freedom of mobility to each one of our customers. The department offers several options for customers to learn what options are available to them and to assist them in learning to use each of these options. The Travel Ambassador Program offers free training to any DART customer, regardless of mobility status, in order to promote additional fixed-route ridership in the system.

#### Vanpool (1.0% of total system ridership in Fiscal Year 2018)

DART collaborates with area employers to develop strategies for reducing employee vehicle trips through such programs as carpools, vanpools, and flexible work schedules. We provide funding for up to 183 vans for our vanpool program, which is operated through a third-party contractor. We also assist customers in forming vanpools. Prospective vanpoolers can call in and provide us with information for our Rideshare database while we work to link-up customers with common trip origins and destinations.

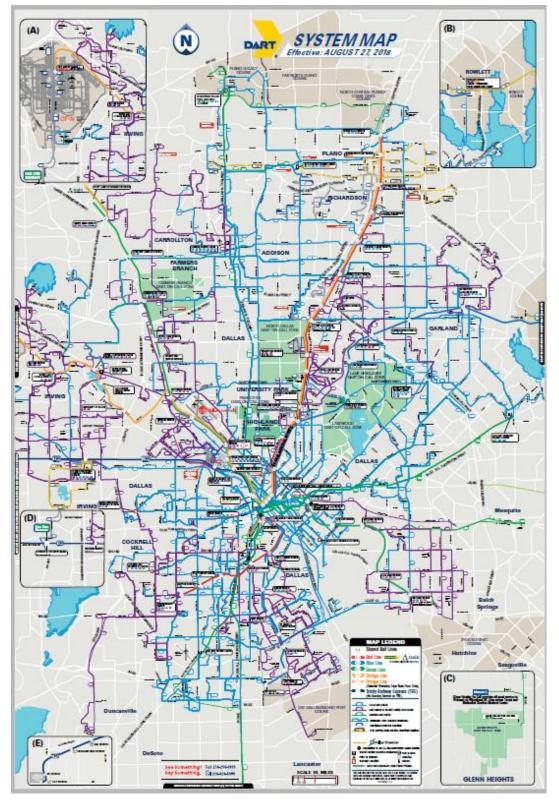
#### Special Events Service

We operate special event services (bus, light rail, and TRE) to the State Fair of Texas, the New Year's Eve celebration in downtown Dallas, concerts, basketball, hockey games, and a wide variety of other events. Consequently, most special event services are provided on the light rail and commuter rail systems, with bus involvement generally restricted to supplementing the capacity of the rail system during periods of very high usage.

On the following page, listed as Exhibit 6, is the current DART System Map.



Exhibit 6 DART System Map







#### DART in the Industry

DART is an established leader within the transit industry. Board members and staff continue to be involved in many significant ways in key transit industry associations. President/Executive Director Gary Thomas has served as the Chair of the American Public Transportation Association (APTA) and, along with other DART staff, continues to serve on APTA's Board of Directors. APTA is a nonprofit international association of more than 1,500 public and private organizations involved in transit. Mr. Thomas is also a past chair of RailVolution and the South West Transit Association.

DART earned many industry awards during 2018-2019 including:

#### American Marketing Association, Dallas/Fort Worth Chapter

Marketer of the Year, Changing the Perception of Public Transportation Marketer of the Year: Public Relations, Changing the Perception of Public Transportation

#### **Government Finance Officers Association**

Certificate of Achievement for Excellence in Financial Reporting (Comprehensive Annual Financial Report) Distinguished Budget Presentation Award and Certificate of Achievement for Excellence in Financial Reporting Investment Policy Certificate of Distinction

#### American Public Transportation Association (APTA)

Rail Safety and Security Excellence Award Light Rail/Streetcar Category Gold Award for Security 2019 Innovation Award winner.

#### National Association of Government Communicators

2018 Blue Pencil & Gold Screen Awards 2nd Place: K-12 Educational Programs "2017 Student Art Contest: The Adventure Starts Here"

#### South West Transit Association

2018 Spotlight Awards 1st Place: Hit the Spot: Event Category V "DART Systemwide Security Blitz"



#### National Procurement Institute, Inc.

2019 Achievement of Excellence in Procurement (AEP)

This prestigious award is earned by those public procurement organizations that demonstrates excellence by obtaining a high score based on industry benchmarks for innovation, professionalism, productivity, e-procurement and leadership.

**Subcontractors USA** 2018 Supplier Diversity Champion

#### Asian American Contractors Association

2018 Moon Award "Capacity Builder"

#### **Regional Hispanic Contractors Association**

2019 Public Sector Nominee

#### **DFW Minority Supplier Development Council**

2019 Buy Those That Buy Us Awardee

#### **Texas Department of Insurance – Division of Workers' Compensation**

High Performer Certificate of Achievement



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#### FY 2020 Twenty-Year Financial Plan

DART's Twenty-Year Financial Plan (the "Plan") represents a robust long-term projection of DART revenues, operating expenses, capital expenditures, and other financial information. The Plan validates the affordability of system expansion and maintenance commitments, operating requirements, and debt repayment. An updated Plan is approved each year (and amended during the year, if necessary). Approval of the Plan requires an affirmative vote of two-thirds of the appointed and qualified members of the DART Board. Approval of the Annual Budget (which corresponds to the first year of the Plan) requires a simple majority vote.

The FY 2020 Twenty-Year Financial Plan demonstrates that DART has the financial capacity to meet the Agency Transit System Plan commitments and to provide the programmed levels of bus, rail, and other transportation services, based on current information and assumptions.

#### Our View

DART has developed a transportation system that provides mobility options to the residents of North Texas. From August of 2009 to August 2014, the light rail system doubled in size, increasing to 90 miles with the connection to the Dallas/Fort Worth International Airport in 2014. An additional 2.6 miles opened in October 2016, bringing the system total to 93 miles.

As the region continues to grow, system expansion continues to meet demand. The Program of Interrelated Projects is underway to increase the core capacity of DART's Light Rail system and DART is in different phases of pursuing federal grants for the program. It includes three separate initiatives:

- Platform extensions to the twenty-eight older stations on the Red and Blue lines to enable them to accommodate three-car trains are under construction and a Full-Funding Grant Agreement (FFGA) was awarded in late 2018;
- A second rail corridor through downtown Dallas (known as D2 Subway) is in preliminary design. The project will both increase capacity and provide operating flexibility in the event of a service disruption; and
- The Dallas Streetcar Central Link project from near Union Station to Uptown is in the planning phase. This project is being done in cooperation with the City of Dallas.

The FY 2020 Financial Plan includes service along the Cotton Belt (now called the Silver Line) corridor in the northern part of the DART Service Area. This line runs from Plano, through Richardson, North Dallas, Addison, and Carrollton and into DFW International Airport. This line has been designed to link up with TEX Rail, operated by Trinity Metro, formerly known as the Fort Worth Transportation Authority. TEX Rail has been in operation from downtown Fort Worth to DFW Airport since January 2019. Long-term, this will allow for a single-seat ride from Plano all the way to Fort Worth. Service along the Silver Line is scheduled to begin in 2022. Initially, headways will be 30 minutes in the peak periods and 60 minutes in the off-peak periods. The line will receive funding over the next 20 years from a variety of sources, some of which will help fund construction and some of which will be used to pay for annual operating and/or debt service costs.

In addition to expansion, the Plan reflects an increasing focus on attracting and retaining customers with responsive service and a sustainable system. The *Annual Budget Section* of this Business Plan document describes several DART customer-facing initiatives, grouped under each DART strategic priority. The capital program, discussed later in this section of this document, includes both expansion programs previously described as well as sufficient funds dedicated to maintaining and replacing our assets; i.e., keeping our entire transportation system in a state of good repair.

The underlying trend in the FY 2020 Twenty-Year Financial Plan is continued economic expansion which includes modest long-term growth in employment, ridership, and sales tax receipts. DART's financial policies structure the Agency's financial condition to weather the inevitable downturns. These policies generate a Plan that reflects conservative revenue forecasts for major sources of funds, including sales taxes (forecasted well below local economist projections) and continued federal formula funding at existing levels. The DART policies also promote continual cost containment efforts to achieve a balanced budget throughout the twenty-year planning horizon.

With that as the backdrop, DART's FY 2020 Financial Plan illustrates the affordability of its capital and operating plans, contains \$3.98 billion over the next 20 years devoted to state of good repair for capital asset maintenance and replacement, higher service levels, and strong debt service coverage ratios.





#### **Our Priorities**

The DART Board has adopted a set of strategic priorities to guide the agency, and to address external factors that we expect will have an impact on DART over the next twenty years.

- 1. Continually improve service and safety experiences and perceptions for customers and the public
- 2. Optimize and preserve (state of good repair) the existing transit system
- 3. Optimize DART's influence in regional transportation planning
- 4. Expand DART's transportation system to serve cities inside and outside the current service area
- 5. Pursue excellence through employee engagement, development and well-being
- 6. Innovate to improve levels of service, business processes and funding

These priorities guide the development of the FY 2020 Annual Budget and Twenty-Year Financial Plan.

#### **Board Approvals**

The approval of the annual budget requires a simple majority vote of the Board of Directors. Approval of the Twenty-Year Financial Plan requires an affirmative vote of two-thirds of the appointed and qualified members of the Board.

The DART Board of Directors is scheduled to approve the FY 2020 Annual Budget and Twenty-Year Financial Plan on September 24, 2019.

#### **Financial Plan Format**

The discussion of the Plan categories follows a Sources and Uses of Funds format.

Each category in the FY 2020 Twenty-Year Financial Plan is described in detail in this portion of the document:

- 1. Sources of Funds
  - a. Sales Taxes
  - b. Operating Revenues
  - c. Interest Income
  - d. Federal Funding
  - e. Debt Issuance
  - f. Other Sources



- 2. Uses of Funds
  - a. Operating Expenses
  - b. Capital and Non-Operating Expenditures
  - c. Debt Program
- 3. Supplemental Financial Information

The following pages also outline the major assumptions used to develop the FY 2020 Financial Plan, discuss changes from prior plans, and illustrate some potential financial risks and opportunities over the life of the Plan.

References are made throughout this section to DART's Financial Standards. The Board's Financial Standards Policy can be found on page 288 Exhibit 103, and the approved FY 2020 Financial Standards are shown beginning on page 289 in Exhibit 104, in the *Reference Section* of this document.

Please Note: Budget schedules are presented and rounded to millions or thousands (as indicated), but are based on actual raw numbers. Consequently, certain schedules may not tie exactly or add properly, due to rounding. In some cases, prior years' numbers have been restated to conform to the current year's format. All schedules are in fiscal years unless otherwise stated.





### FY 2019 Highlights

DART continues work toward implementation of the Program of Interrelated Projects (the Core Capacity program) that was initially incorporated into the FY 2015 Financial Plan. The platform extensions had a Full-Funding Grant Agreement (FFGA) awarded and are under construction with an expected completion date of 2022. Streetcar projects and D2 projects are expected to be completed by 2024.

Design work has begun on the development of regional rail service on the Silver Line corridor. It will be followed by utility relocation and bridge foundation work. Completion of this project is expected in December 2022.

DART is in the planning stage for two additional infill stations along the Orange Line in Irving. These stations, at Loop 12 and Hidden Ridge, are to be completely funded by external contributions and are expected to generate additional ridership. Service at Hidden Ridge is scheduled to begin in May 2020. Service at Loop 12 will be scheduled after an ILA with the City of Irving is executed.

DART completed a Comprehensive Operations Analysis (COA) of a new Transit System Plan. The COA was the basis for service enhancements implemented from 2016 through 2019. A total of 41 new buses have been added to the fleet to enable the service improvements, and DART incorporated \$12.5 million in the Plan for additional annual bus operating expenses to implement the recommendations resulting from the COA. The operating budget for FY 2020 includes an additional \$5 million.



DART published a Transit System Plan Progress report in

June 2019, and continues to develop a new Transit System Plan with a 2045 horizon year. Key work elements of the new plan include:

- Frequent and Flexible Service
- Fare Payment System Enhancements
- State of Good Repair Initiatives
- Core Capacity Upgrades
- Rail Service Expansion



Exhibit 7 is a summary of the changes in sources and uses of funds between the FY 2019 Financial Plan and the FY 2020 Plan, for the 20-year period FY 2020 through FY 2039.

Line	Description	FY19 Plan	FY20 Plan	\$ Variance	% Variance
	SOURCES OF FUNDS	Flan	Fian	variance	variance
1	Sales Tax Revenues	\$18,894.7	\$18,894.7	\$0.0	0.0%
2	Operating Revenues	2,511.2	2.550.6	\$0.0 39.4	0.0% 1.6%
2	Interest Income	397.0	384.7	(12.3)	(3.1%)
4					
	Formula Federal Funding	1,732.6	1,728.7	(3.9)	(0.2%)
5	Discretionary Federal Funding	579.2	720.1	141.0	24.3%
6	Long-term Debt Issuances	3,244.1	3,260.3	16.2	0.5%
7	Commercial Paper Issuances	600.0	627.0	27.0	4.5%
8	Other Operating Contributions	481.2	466.0	(15.2)	(3.2%)
9	Other Capital Contributions	256.2	270.4	14.2	5.6%
10	Total Sources of Funds	\$28,696.2	\$28,902.5	\$206.3	0.7%
	USES OF FUNDS				
	Operating Expenses:				
11	Bus	\$7,050.3	\$7,112.0	\$61.7	0.9%
12	Light Rail Transit	4,493.8	4,517.8	24.0	0.5%
13	Streetcar	119.2	119.9	0.7	0.6%
14	Commuter Rail/RR Management	1,351.0	1,352.2	1.2	0.1%
15	Paratransit	1,255.4	1,260.3	4.9	0.4%
16	General Mobility - TDM	52.2	52.5	0.3	0.6%
17	Total Operating Expenses	\$14,321.9	\$14,414.7	\$92.8	0.6%
	Capital and Non-Operating:				
18	Agency-Wide	\$445.7	\$502.5	\$56.9	12.8%
19	Bus	1,207.5	1,197.1	(10.4)	(0.9%)
20	Light Rail Transit	2,975.5	2,985.6	10.1	0.3%
21	Streetcar	96.6	104.3	7.7	7.9%
22	Commuter Rail/RR Management	1,557.2	1,780.1	222.9	14.3%
23	Paratransit	5.7	5.9	0.2	3.0%
24	General Mobility - Road Impr./ITS	41.8	44.8	3.1	7.4%
25	Non-Operating	31.7	35.3	3.6	11.4%
26	Capital P & D, Start-Up	309.9	312.5	2.6	0.8%
27	Total Capital and Non-Operating	\$6,671.5	\$6,968.2	\$296.7	4.4%
	Debt Service				
28	Principal Payments - Long-term Debt	\$2,655.5	\$2,656.3	0.8	0.0%
29	Long-term Debt Interest Expense	4,032.0	4,012.4	(19.6)	(0.5%)
30	Commercial Paper Interest Expense	148.2	152.2	4.0	2.7%
31	Debt-Related Fees	11.9	12.1	0.2	1.9%
32	Total Debt Service	\$6,847.6	\$6,833.0	(\$14.6)	(0.2%)
33	Commercial Paper Debt Repayment	707.0	786.2	79.2	11.2%

Exhibit 7 20-Year Sources and Uses of Funds Comparison (FY 2020 – FY 2039, in Millions)



#### Structural Balance of the Budget and Financial Plan

DART maintains a structural balance to its budget. This means that current period revenue inflows available for operating and debt service costs equal or exceed the ongoing cash requirements for the same costs. While DART does not have a policy that requires a balanced budget on an annual basis, the structural balance of the budget and the internal coverage ratio perform a related control function. Annual sources of funds are sufficient to pay for all ongoing obligations (operating and debt service) in every year of the FY 2020 Financial Plan. This can be seen on line 18 (highlighted in orange) in Exhibit 8, noting that no existing cash reserves are required for operating expenses during any year of the Plan. For example, FY 2020 operating expenses are \$562.3 million. These ongoing obligations are funded by annual sources of funds including operating revenues (\$87.0 million), interest income (\$19.3 million), federal formula funds for preventive maintenance (\$81.3 million), local funding for TRE (from Trinity Metro) and Streetcar (from the City of Dallas) operations, other sources (\$15.3 million), and sales taxes (\$374.6 million). In this manner, Exhibit 8 illustrates how DART's sources of funds will be applied to uses of funds over the next 20 years. Following Exhibit 8, the FY 2020 Financial Plan is shown as Exhibit 9.



Line	Category	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
1	Total Sources of Funds	\$1,416.2	\$1,430.9	\$1,743.7	\$1,643.4	\$1,399.4	\$1,416.2	\$1,495.5	\$1,425.8	\$1,413.4	\$1,241.2
2	Sales Tax Revenues	\$628.1	\$653.3	\$686.0	\$727.2	\$763.6	\$794.2	\$818.0	\$818.5	\$851.6	\$894.2
3	Operating Revenues	86.7	88.3	99.2	100.8	102.0	109.9	111.3	112.7	122.2	123.6
4	Interest Income	18.1	22.0	23.0	24.3	24.9	23.4	23.3	20.2	20.1	19.4
5	Formula Federal Funding	81.3	88.6	88.6	88.6	90.9	90.9	90.9	90.9	90.9	90.9
6	Discretionary Federal Funding	85.5	63.2	178.0	124.0	100.0	0.0	12.4	30.8	29.7	35.6
7	Long-term Debt Issuances	395.4	410.8	613.9	479.2	288.0	250.0	273.0	250.0	200.0	0.0
8	Commercial Paper Issuances	75.0	68.0	17.0	67.0	0.0	120.0	120.0	60.0	50.0	50.0
9	Other Operating Contributions	15.3	18.9	19.7	19.6	20.5	21.4	21.4	21.9	22.4	22.9
10	Other Capital Contributions	30.7	17.9	18.4	12.6	9.5	6.5	25.1	20.9	26.6	4.6
11	Operating Expenditure	\$562.3	\$574.7	\$603.9	\$616.5	\$632.7	\$650.5	\$661.9	\$678.7	\$693.2	\$709.7
11	Funding Sources:	¢302.3	φ37 <b></b> .7	\$003.7	φ <b>010.</b> 3	φ <b>0</b> <i>32</i> .1	<b>\$050.5</b>	\$001.7	<b>\$070.7</b>	<i><b>4073.2</b></i>	\$707.7
12	Operating Revenues	\$86.7	\$88.3	\$99.2	\$100.8	\$102.0	\$109.9	\$111.3	\$112.7	\$122.2	\$123.6
13	Interest Income	18.1	22.0	23.0	24.3	24.9	23.4	23.3	20.2	20.1	19.4
14	Formula Funds (Capital Prevent Maint.)	80.7	80.0	80.0	80.0	82.2	82.2	82.2	82.2	82.2	82.2
15	FW TRE Ops/Dallas Streetcar Contrib.	14.8	18.4	18.8	18.6	19.5	20.4	20.4	20.9	21.4	21.9
16	Other Operating Sources	0.5	0.5	0.9	1.0	1.0	1.0	1.0	1.0	1.1	1.1
17	Sales Taxes allocated to Operations	361.4	365.5	382.0	391.7	403.1	413.5	423.6	441.7	446.3	461.5
18	General Operating Fund (existing cash)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	Total Funding Sources - Operating	\$562.3	\$574.7	\$603.9	\$616.5	\$632.7	\$650.5	\$661.9	\$678.7	\$693.2	\$709.7
20	Capital/Non Operating Expenditures	\$597.3	\$890.7	\$779.5	\$668.9	\$424.3	\$500.3	\$298.3	\$485.2	\$377.7	\$152.5
	Funding Sources:										
21	Formula Funds	\$0.6	\$8.6	\$8.6	\$8.6	\$8.6	\$8.6	\$8.6	\$8.6	\$8.6	\$8.6
22	Discretionary Grant Funds	85.5	63.2	178.0	124.0	100.0	0.0	12.4	30.8	29.7	35.6
23	Long-term Debt Issuances	395.4	410.8	557.4	400.0	288.0	250.0	46.0	250.0	200.0	0.0
24	Commercial Paper Issuances	75.0	68.0	17.0	67.0	0.0	120.0	120.0	60.0	50.0	50.0
25	Other Capital Sources	30.7	17.9	18.4	12.6	9.5	6.5	25.1	20.9	26.6	4.6
26	Sales Taxes Allocated to Capital	10.1	38.7	0.0	56.7	18.1	89.4	83.4	47.3	56.6	53.7
27	General Operating Fund/Prior Debt Issues	0.0	283.6	0.0	0.0	0.0	25.8	2.7	67.6	6.2	0.0
28	Total Funding Sources - Capital	\$597.3	\$890.7	\$779.5	\$668.9	\$424.3	\$500.3	\$298.3	\$485.2	\$377.7	\$152.5
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	Debt Service Costs	\$202.5	\$219.1	\$237.1	\$260.2	\$274.9	\$291.2	\$311.0	\$329.5	\$348.7	\$365.7
29	Funding Sources: Sales Taxes Allocated to Debt Service	\$202.5	\$219.1	\$237.1	\$260.2	\$274.9	\$291.2	\$311.0	\$329.5	\$348.7	\$365.7
29	Sales Taxes Allocated to Debt Service	\$202.3	\$219.1	\$237.1	\$200.2	\$274.9	\$291.2	\$311.0	\$329.3	\$346.7	\$305.7
30	Commercial Paper (CP) Retirement	\$30.0	\$30.0	\$20.0	\$79.2	\$0.0	\$0.0	\$227.0	\$0.0	\$0.0	\$0.0
	Funding Sources:										
31	Sales Taxes Allocated/Prior CP Issued	30.0	30.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	LTD Debt Issues	0.0	0.0	0.0	79.2	0.0	0.0	227.0	0.0	0.0	0.0
33	Total Funding Sources - CP Retirement	\$30.0	\$30.0	\$20.0	\$79.2	\$0.0	\$0.0	\$227.0	\$0.0	\$0.0	\$0.0
34	Total Uses of Funds	\$1,392.1	\$1,714.5	\$1,640.4	\$1,624.8	\$1,331.9	\$1,442.0	\$1,498.2	\$1,493.4	\$1,419.6	\$1,228.0

# Exhibit 8 FY 2020 – FY 2039 Structural Budget Balance (in Millions)

Line	Category	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	20-Year Total
1	Total Sources of Funds	\$1,231.4	\$1,271.0	\$1,309.2	\$1,342.5	\$1,349.6	\$1,394.1	\$1,451.3	\$1,532.4	\$1,620.4	\$1,774.9	\$28,902.5
2	Sales Tax Revenues	\$947.8	\$995.2	\$1,035.0	\$1,066.1	\$1,066.1	\$1,108.7	\$1,164.1	\$1,234.0	\$1,295.7	\$1,347.5	\$18,894.7
3	Operating Revenues	125.2	135.1	136.7	138.5	149.6	151.4	153.2	165.5	168.4	170.4	2,550.6
4	Interest Income	17.7	18.0	17.9	17.1	16.6	15.7	14.9	14.3	16.0	17.9	384.7
5	Formula Federal Funding	90.9	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	1,728.7
6	Discretionary Federal Funding	12.9	8.6	0.0	3.4	0.0	0.0	0.0	0.0	17.7	18.3	720.1
7	Long-term Debt Issuances	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	3,260.3
8	Commercial Paper Issuances	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	627.0
9	Other Non-Operating Contributions	23.5	24.0	24.6	25.2	25.8	26.4	27.1	27.7	28.4	29.2	466.0
10	Other Capital Contributions	13.5	7.2	12.1	9.4	8.8	9.2	9.2	8.1	11.4	8.8	270.4
11	Operating Expenses	\$726.1	\$742.8	\$759.0	\$776.1	\$792.8	\$811.1	\$828.7	\$847.2	\$863.7	\$883.4	\$14,414.7
	Funding Sources:	4.2012	<b>.</b>	<b>+</b> · <b>-</b> · · · ·	+		+	+	<b>40111</b>	+	+	+= ., -=
12	Operating Revenues	\$125.2	\$135.1	\$136.7	\$138.5	\$149.6	\$151.4	\$153.2	\$165.5	\$168.4	\$170.4	\$2,550.6
13	Interest Income	17.7	18.0	17.9	17.1	16.6	15.7	14.9	14.3	16.0	17.9	384.7
14	Formula Funds (Capital Prevent Maint.)	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	1,636.4
15	FW TRE Ops/Dallas Streetcar Contrib.	22.4	22.9	23.4	24.0	24.6	25.2	25.8	26.5	27.2	27.9	445.0
16	Other Non-Operating Sources	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.3	1.3	1.3	21.0
17	Sales Taxes allocated to Operations	477.5	483.4	497.5	513.0	518.6	535.4	551.3	557.5	568.6	583.6	9,376.9
18	General Operating Fund (existing cash)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	Total Funding Sources - Operating	\$726.1	\$742.8	\$759.0	\$776.1	\$792.8	\$811.1	\$828.7	\$847.2	\$863.7	\$883.4	\$14,414.7
20	Capital/Non Operating Expenditures	\$119.2	\$100.9	\$133.7	\$121.4	\$98.8	\$115.7	\$101.3	\$253.3	\$284.9	\$464.2	\$6,968.2
21	Funding Sources:	\$8.6	\$0.6	\$0.6	\$0.6	¢0. c	\$0.6	\$0.6	\$0.6	\$0.6	¢0.c	\$92.2
21 22	Formula Funds	\$8.6 12.9	\$0.6 8.6	\$0.6 0.0	\$0.6 3.4	\$0.6 0.0	\$0.6 0.0	\$0.6 0.0	\$0.6 0.0	\$0.6 17.7	\$0.6 18.3	\$92.2 720.1
22	Discretionary Grant Funds Long-term Debt Issuances	0.0	8.0 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.3	2,897.7
23 24	Commercial Paper Issuances	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	627.0
24	Other Capital Sources	13.5	7.2	12.1	9.4	8.8	9.2	9.2	8.1	11.4	8.8	270.4
25	Sales Taxes Allocated to Capital	84.1	84.5	90.8	91.9	88.2	9.2 66.5	9.2 91.6	220.5	255.2	336.6	1,863.8
20	General Operating Fund/Prior Debt Issues	0.0	0.0	30.2	16.2	1.2	39.4	0.0	220.3	0.0	0.0	497.0
28	Total Funding Sources - Capital	\$119.2	\$100.9	\$133.7	\$121.4	\$98.8	\$115.7	\$101.3	\$253.3	\$284.9	\$464.2	\$6,968.2
8	#VALUE!	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	# VALUE: Debt Service Costs	\$371.6	\$380.8	\$396.7	\$411.2	\$409.2	\$406.8	\$408.5	\$406.1	\$400.7	\$401.6	\$6,833.0
	Funding Sources:	φ071.0	φ200.0	φ070.1	ψ-11.2	φ-τογ.2	φ-100.0	φ-100.2	φ-100.1	φ-100.7	φ-101.0	φ0,055.0
29	Sales Taxes Allocated to Debt Service	\$371.6	\$380.8	\$396.7	\$411.2	\$409.2	\$406.8	\$408.5	\$406.1	\$400.7	\$401.6	\$6,833.0
30	Commercial Paper Retirement	\$0.0	\$0.0	\$50.0	\$50.0	\$50.0	\$100.0	\$100.0	\$50.0	\$0.0	\$0.0	\$786.2
	Funding Sources:											
31	Sales Taxes Allocated to Debt Service	0.0	0.0	50.0	50.0	50.0	100.0	100.0	50.0	0.0	0.0	480.0
32	General Operating Fund/Prior Debt Issues	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	306.2
33	Total Funding Sources - CP Retirement	\$0.0	\$0.0	\$50.0	\$50.0	\$50.0	\$100.0	\$100.0	\$50.0	\$0.0	\$0.0	\$786.2
34	Total Uses of Funds	\$1,216.9	\$1,224.5	\$1,339.4	\$1,358.7	\$1,350.8	\$1,433.5	\$1,438.5	\$1,556.6	\$1,549.2	\$1,749.3	\$29,002.1

Exhibit 8 FY 2020 – FY 2039 Structural Budget Balance (in Millions) (Cont.)



Line	Description	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
	SOURCES OF FUNDS										
1	Sales Tax Revenues	\$628.1	\$653.3	\$686.0	\$727.2	\$763.6	\$794.2	\$818.0	\$818.5	\$851.6	\$894.2
2	Operating Revenues	86.7	88.3	99.2	100.8	102.0	109.9	111.3	112.7	122.2	123.6
3	Interest Income	18.1	22.0	23.0	24.3	24.9	23.4	23.3	20.2	20.1	19.4
4	Formula Federal Funding	81.3	88.6	88.6	88.6	90.9	90.9	90.9	90.9	90.9	90.9
5	Discretionary Federal Funding	85.5	63.2	178.0	124.0	100.0	0.0	12.4	30.8	29.7	35.6
6	Long-term Debt Issuances	395.4	410.8	613.9	479.2	288.0	250.0	273.0	250.0	200.0	0.0
7	Commercial Paper Issuances	75.0	68.0	17.0	67.0	0.0	120.0	120.0	60.0	50.0	50.0
8	Other Operating Contributions	15.3	18.9	19.7	19.6	20.5	21.4	21.4	21.9	22.4	22.9
9	Other Capital Contributions	30.7	17.9	18.4	12.6	9.5	6.5	25.1	20.9	26.6	4.6
10	Total Sources of Funds	\$1,416.2	\$1,430.9	\$1,743.7	\$1,643.4	\$1,399.4	\$1,416.2	\$1,495.5	\$1,425.8	\$1,413.4	\$1,241.2
	USES OF FUNDS										
	Operating Expenses:										
11	Bus	\$297.0	\$300.0	\$305.1	\$311.9	\$318.1	\$324.6	\$330.0	\$335.8	\$342.9	\$350.1
12	Light Rail Transit	184.5	188.3	191.3	195.2	200.3	206.5	209.5	215.0	218.2	223.0
13	Streetcar	1.7	5.2	5.3	5.4	5.5	5.6	5.7	5.8	6.0	6.1
14	Commuter Rail/RR Management	34.1	35.4	54.9	55.4	58.2	60.9	61.6	63.5	65.4	67.4
15	Paratransit	42.8	43.6	45.0	46.2	48.3	50.4	52.6	56.1	58.3	60.6
16	General Mobility - TDM	2.2	2.2	2.2	2.3	2.3	2.4	2.4	2.5	2.5	2.6
17	Total Operating Expenses	\$562.3	\$574.7	\$603.9	\$616.5	\$632.7	\$650.5	\$661.9	\$678.7	\$693.2	\$709.7
	Operating+P&D+Start Up	\$576.3	\$592.6	\$616.9	\$630.4	\$647.4	\$664.3	\$676.0	\$693.1	\$707.9	\$724.7
	Capital Projects and Non-Operating:										
18	Agency-Wide	\$36.8	\$42.8	\$34.6	\$22.3	\$11.5	\$11.8	\$18.4	\$66.3	\$24.0	\$13.3
19	Bus	23.5	16.0	22.7	26.5	15.4	100.2	129.6	104.1	79.2	27.8
20	Light Rail Transit	177.9	333.7	375.7	381.5	281.2	342.7	93.1	239.7	189.2	52.5
21	Streetcar	7.7	8.6	31.7	36.9	18.6	0.0	0.1	0.0	0.0	0.0
22	Commuter Rail/RR Management	317.3	452.6	291.8	180.7	76.9	27.0	42.6	59.3	69.3	43.6
23	Paratransit	0.4	0.0	0.8	0.0	0.2	0.1	0.0	0.0	0.9	0.0
24	General Mobility - Road Impr./ITS	14.9	6.8	8.1	5.9	4.5	4.6	0.0	0.0	0.0	0.0
25	Non-Operating	5.0	12.3	1.1	1.3	1.3	0.2	0.2	1.4	0.4	0.2
26	Capital P & D, Start-Up	14.0	17.9	13.0	13.9	14.8	13.8	14.1	14.4	14.7	15.0
27	Total Capital and Non-Operating	\$597.3	\$890.7	\$779.5	\$668.9	\$424.3	\$500.3	\$298.3	\$485.2	\$377.7	\$152.5
	Debt Service										
28	Principal Payments - Long-term Debt	\$60.0	\$62.7	\$65.4	\$68.4	\$68.0	\$70.8	\$80.2	\$89.0	\$97.7	\$109.7
29	Long-term Debt Interest Expense	137.9	149.2	163.3	183.8	199.0	210.5	220.8	231.2	239.8	243.2
30	Commercial Paper Interest Expense	4.1	6.7	7.8	7.6	7.4	9.3	9.5	8.8	10.6	12.2
31	Debt-Related Fees	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6
32	Total Debt Service Costs	\$202.5	\$219.1	\$237.1	\$260.2	\$274.9	\$291.2	\$311.0	\$329.5	\$348.7	\$365.7
33	Commercial Paper Debt Repayment	30.0	30.0	20.0	79.2	0.0	0.0	227.0	0.0	0.0	0.0
34	Total Uses of Funds	\$1,392.1	\$1,714.5	\$1,640.4	\$1,624.8	\$1,331.9	\$1,442.0	\$1,498.2	\$1,493.4	\$1,419.6	\$1,228.0
35	Net Inc (Dec) in cash	\$24.1	(\$283.6)	\$103.3	\$18.5	\$67.5	(\$25.8)	(\$2.7)	(\$67.6)	(\$6.2)	\$13.2
36	Change in Balance Sheet Accts	75.3	77.2	(25.9)	(29.0)	(60.4)	13.6	(45.7)	32.2	(20.5)	(59.8)
37	Cash, End of Period	756.0	549.7	627.0	616.5	623.6	611.4	563.0	527.7	501.0	454.4
38	Less: Cash Reserves & Restricted Funds	(73.9)	(73.9)	(73.8)	(73.7)	(73.6)	(73.6)	(73.6)	(73.6)	(73.5)	(73.4)
			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	Less: Advance Funding (Core Capacity Grant)	0.0	0.0								
39 40		0.0 (140.6)	(143.7)	(151.0)	(154.1)	(158.2)	(162.6)	(165.5)	(169.7)	(173.3)	(177.4)
	Less: Advance Funding (Core Capacity Grant)				(154.1) (12.0)	(158.2) (13.3)	(162.6) (14.6)	(165.5) (16.0)	(169.7) (17.3)	(173.3) (18.7)	(177.4) (20.0)
40	Less: Advance Funding (Core Capacity Grant) Less: Working Cash Requirement	(140.6)	(143.7)	(151.0)							
40 41	Less: Advance Funding (Core Capacity Grant) Less: Working Cash Requirement Less: Mobility Assistance and Innovation Fund	(140.6) (10.0)	(143.7) (9.9)	(151.0) (10.7)	(12.0)	(13.3)	(14.6)	(16.0)	(17.3)	(18.7)	(20.0)
40 41 <b>42</b>	Less: Advance Funding (Core Capacity Grant) Less: Working Cash Requirement Less: Mobility Assistance and Innovation Fund Unrestricted Cash (Net Available Cash)	(140.6) (10.0) <b>\$531.5</b>	(143.7) (9.9) <b>\$322.2</b>	(151.0) (10.7) <b>\$391.6</b>	(12.0) \$376.7	(13.3) <b>\$378.4</b>	(14.6) \$360.5	(16.0) <b>\$308.0</b>	(17.3) <b>\$267.1</b>	(18.7) <b>\$235.5</b>	(20.0) <b>\$183.5</b>
40 41 <b>42</b> 43	Less: Advance Funding (Core Capacity Grant) Less: Working Cash Requirement Less: Mobility Assistance and Innovation Fund Unrestricted Cash (Net Available Cash) External Coverage Ratio	(140.6) (10.0) <b>\$531.5</b> 3.2	(143.7) (9.9) <b>\$322.2</b> 3.1	(151.0) (10.7) <b>\$391.6</b> 3.0	(12.0) <b>\$376.7</b> 2.9	(13.3) <b>\$378.4</b> 2.9	(14.6) <b>\$360.5</b> 2.8	(16.0) <b>\$308.0</b> 2.7	(17.3) <b>\$267.1</b> 2.6	(18.7) <b>\$235.5</b> 2.5	(20.0) <b>\$183.5</b> 2.5

# Exhibit 9 FY 2020 Twenty-Year Financial Plan (in Millions- Inflated Dollars)

Line	Description	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
	· · · · · · · · · · · · · · · · · · ·	2030	2031	2032	2035	2034	2035	2030	2037	2036	2039
1	SOURCES OF FUNDS Sales Tax Revenues	\$947.8	\$995.2	\$1,035,0	\$1.066.1	\$1.066.1	\$1 108 7	\$1 164 1	\$1 234 0	\$1,295.7	\$1 347 5
2	Operating Revenues	125.2	135.1	136.7	138.5	149.6	151.4	153.2	165.5	168.4	170.4
3	Interest Income	125.2	18.0	130.7	130.5	149.0	151.4	133.2	14.3	16.0	17.9
4	Formula Federal Funding	90.9	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8
5	Discretionary Federal Funding	12.9	8.6	0.0	3.4	0.0	0.0	0.0	0.0	17.7	18.3
6	Long-term Debt Issuances	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
7	Commercial Paper Issuances	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	Other Operating Contributions	23.5	24.0	24.6	25.2	25.8	26.4	27.1	27.7	28.4	29.2
9	Other Capital Contributions	13.5	7.2	12.1	9.4	8.8	9.2	9.2	8.1	11.4	8.8
10	Total Sources of Funds	\$1.231.4	\$1.271.0	\$1.309.2	\$1.342.5	\$1.349.6	\$1.394.1	\$1,451.3	\$1,532.4	\$1,620.4	\$1.774.9
	USES OF FUNDS										
	Operating Expenses:	<b>\$257.1</b>	<b>\$254.2</b>	<b>\$271.2</b>	\$250 F	\$205 C	\$202 I	¢ 100 0	\$ 100 F	<b></b>	¢ 100 c
11	Bus	\$357.1	\$364.3	\$371.3	\$378.5	\$385.6	\$393.4	\$400.8	\$408.5	\$414.5	\$422.6
12	Light Rail Transit	227.8	232.4	236.8	241.5	245.9	250.8	255.4	260.3	264.9	270.1
13	Streetcar	6.2	6.3	6.4	6.6	6.7	6.8	6.9	7.1	7.2	7.3
14	Commuter Rail/RR Management	69.3	71.5	73.6	75.8	78.0	80.5	82.9	85.4	87.9	90.6
15	Paratransit	63.0	65.6	68.2	70.9	73.7	76.7	79.7	82.9	86.1	89.6
16	General Mobility - TDM	2.6	2.7	2.7	2.8	2.8	2.9	3.0	3.0	3.1	3.1
17	Total Operating Expenses Operating+P&D+Start Up	<b>\$726.1</b> \$741.3	<b>\$742.8</b> \$758.3	<b>\$759.0</b> \$774.9	<b>\$776.1</b> \$792.3	<b>\$792.8</b> \$809.3	<b>\$811.1</b> \$827.9	<b>\$828.7</b> \$845.9	<b>\$847.2</b> \$864.7	<b>\$863.7</b> \$881.5	<b>\$883.4</b> \$901.5
	Operating+1 aD+Start Op	\$741.5	\$750.5	<i>φ</i> // <del>4</del> . <i>9</i>	\$192.5	\$609.5	<i>\$</i> 027.9	<i>\$</i> 04 <i>J.9</i>	φ00 <b>4.</b> 7	\$661.5	\$901.5
	Capital Projects and Non-Operating:										
18	Agency-Wide	\$18.8	\$19.7	\$17.0	\$12.4	\$13.5	\$43.3	\$33.4	\$31.7	\$16.9	\$13.9
19	Bus	26.6	15.3	46.7	39.9	17.0	7.7	6.3	149.6	200.8	142.4
20	Light Rail Transit	18.8	27.5	21.0	23.7	35.9	33.9	26.1	40.9	31.5	259.0
21	Streetcar	0.1	0.3	0.0	0.1	0.0	0.0	0.3	0.0	0.0	0.0
22	Commuter Rail/RR Management	37.6	21.5	31.5	25.8	15.6	13.5	15.1	13.3	16.6	28.5
23	Paratransit	0.4	0.3	0.2	0.2	0.1	0.1	1.1	0.1	0.6	0.3
24	General Mobility - Road Impr./ITS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	Non-Operating	1.5	0.8	1.5	3.1	0.3	0.3	1.8	0.3	0.6	2.0
26	Capital P & D, Start-Up	15.3	15.6	15.9	16.2	16.5	16.8	17.2	17.5	17.8	18.1
27	Total Capital and Non-Operating	\$119.2	\$100.9	\$133.7	\$121.4	\$98.8	\$115.7	\$101.3	\$253.3	\$284.9	\$464.2
	Debt Service										
28	Principal Payments - Long-term Debt	\$119.9	\$134.8	\$158.0	\$181.7	\$190.0	\$199.1	\$213.3	\$223.0	\$227.9	\$236.8
29	Long-term Debt Interest Expense	238.1	232.4	225.9	218.3	209.6	200.5	191.2	181.5	172.1	164.1
30	Commercial Paper Interest Expense	13.0	13.0	12.2	10.6	8.9	6.5	3.3	0.8	0.0	0.0
31	Debt-Related Fees	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7
32	Total Debt Service Costs	\$371.6	\$380.8	\$396.7	\$411.2	\$409.2	\$406.8	\$408.5	\$406.1	\$400.7	\$401.6
33	Commercial Paper Debt Repayment	0.0	0.0	50.0	50.0	50.0	100.0	100.0	50.0	0.0	0.0
34	Total Uses of Funds	\$1,216.9	\$1,224.5	\$1.339.4	\$1.358.7	\$1,350.8	\$1,433.5	\$1,438.5	\$1.556.6	\$1,549.2	\$1.749.3
35	Net Inc (Dec) in cash	\$14.5	\$46.5	(\$30.2)	(\$16.2)				(\$24.2)		\$25.7
36	Change in Balance Sheet Accts	(21.5)			(5.2)					2.2	33.9
37	Cash, End of Period	447.4	483.1	455.1	433.7	428.9	387.0	389.6	387.9	461.3	520.8
38	Less: Cash Reserves & Restricted Funds	(73.3)			(72.8)						
39	Less: Advance Funding (Core Capacity Grant)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10		(181.5)	(185.7)	(189.7)							
	Less: Working Cash Requirement		(								(3/1/3
	Less: Working Cash Requirement Less: Mobility Assistance and Innovation Fund	(21.5)	(22.8)	(24.2)	(25.7)	(27.1)	(28.5)	(30.0)	(31.4)	(32.8)	(34.3
41	0		(22.8) <b>\$201.4</b>	(24.2) <b>\$168.1</b>	(25.7) <b>\$141.1</b>	(27.1) \$131.0	(28.3) <b>\$83.4</b>	(30.0) \$80.5	(31.4) <b>\$73.1</b>	(32.8) <b>\$141.3</b>	\$194.9
40 41 <b>42</b> 43	Less: Mobility Assistance and Innovation Fund	(21.5)									
41 42	Less: Mobility Assistance and Innovation Fund Unrestricted Cash (Net Available Cash)	(21.5) <b>\$171.1</b>	\$201.4	\$168.1	\$141.1	\$131.0	\$83.4	\$80.5	\$73.1	\$141.3	<b>\$194.9</b> 3.4
41 <b>42</b> 43	Less: Mobility Assistance and Innovation Fund Unrestricted Cash (Net Available Cash) External Coverage Ratio	(21.5) <b>\$171.1</b> 2.6	<b>\$201.4</b> 2.7	<b>\$168.1</b> 2.7	<b>\$141.1</b> 2.7	<b>\$131.0</b> 2.7	<b>\$83.4</b> 2.8	<b>\$80.5</b> 2.9	<b>\$73.1</b> 3.1	<b>\$141.3</b> 3.2	\$194.9

# Exhibit 9 FY 2020 Twenty-Year Financial Plan (in Millions- Inflated Dollars) (Cont.)



### **Sources of Funds**

Total sources of funds for the period FY 2020 through FY 2039 are projected to increase \$498.4 million (1.7%) from that period in the FY 2019 Plan, with discretionary federal funding and debt issuances having the greatest effect. Exhibit 10 illustrates the distribution of DART's sources of funds for the twenty years of the FY 2020 Financial Plan. Each source of funding is detailed below.

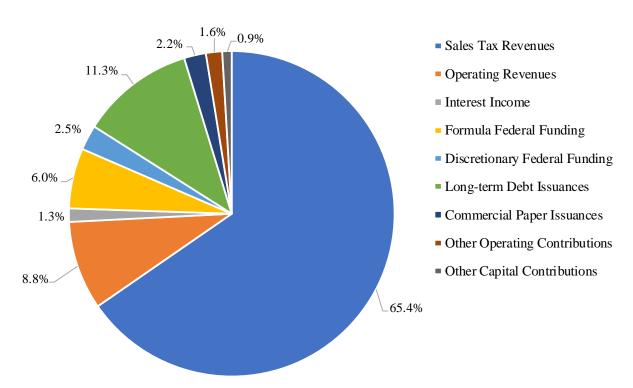


Exhibit 10 FY 2020 – FY 2039 Distribution of Sources of Funds

#### Sales Tax Revenues (line 1 of the Financial Plan)

Sales tax revenues comprise 65.4% of DART's total projected sources of funds through FY 2039 (75.2% of total sources excluding debt issuances). This is the same amount that was projected in the FY 2019 Financial Plan for the same 20-year period.

The method for estimating sales tax revenue for financial planning purposes is discussed in Financial Standard B-1, which states:

Sales tax revenue forecasts shall be based on a sales tax model developed specifically for the DART Service Area by an independent economist. In order to ensure a conservative sales tax estimate, the model's projections may be reduced from the forecasted levels, but not increased for years 2-20 of the Twenty-Year Financial Plan. The most current year may be based on management's best estimate. All such modifications shall be approved by the Board during the financial planning process. DART currently bases its long-range sales tax growth and inflation factors on a forecast developed by an independent economic analysis firm (The Perryman Group), headed by M. Ray Perryman, Ph.D. DART has used Dr. Perryman's models for many years. For the last several years, DART has also engaged the services of municipal sales tax specialist Lewis McLain, Jr., for additional sales tax research. Sales taxes have trended above forecast for the last five years, with year-over-year growth averaging 5.05% from FY 2015 – FY 2019.

Beginning in the FY 2016 Financial Plan and continuing into the current Plan, DART has taken a different approach from previous years with regard to incorporating sales taxes into the Financial Plan. Instead of using the straight-line approach to sales tax growth (as is generated by the regression model provided by the Perryman Group), the 2016 Plan incorporated periodic mild recessions in seven-year cycles as an attempt to better match economic reality. As such, the Plan calls for a zero-growth year every seven years (the first such year was 2019 in the FY 2018 plan, but economic performance in 2018 led to the postponement of this zero-growth year until 2020) followed by a cyclical rebound for several years after that. This methodology should enable the Financial Plan to better weather the inevitable economic flat spots in the road. If, however, there is another crash and sales taxes decline by 10% over two years similar to what occurred in 2009-2010, that would still require significant adjustments to the Plan. Incorporating that kind of generational event into the Plan seems unwise. With this approach, however, there are certain years in which the Financial Plan assumes higher rates of increase than the Perryman projections, but the overall growth rate over the 20-year life of the Plan is significantly lower and results in total sales tax revenues \$2.65 billion (12.5%) less than if we had strictly used Perryman's growth rates for the next 20 years.

A comparison of sales tax growth rates and receipts from the FY 2019 Plan, the FY 2020 Plan, and the Perryman projections is shown in Exhibit 11.



	FY 2019 Fi	nancial Plan	FY 2020 F	inancial Plan	Perryma	n 2019**
Year	%	\$	%	\$	%	\$
2019*		628.1		628.1		628.1
2020	0.0%	628.1	0.0%	628.1	5.2%	661.0
2021	4.0%	653.3	4.0%	653.3	5.3%	696.2
2022	5.0%	686.0	5.0%	686.0	5.3%	733.0
2023	6.0%	727.2	6.0%	727.2	5.2%	771.3
2024	5.0%	763.6	5.0%	763.6	5.2%	811.2
2025	4.0%	794.2	4.0%	794.2	5.1%	852.9
2026	3.0%	818.0	3.0%	818.0	5.1%	896.3
2027	0.0%	818.5	0.0%	818.5	5.0%	941.5
2028	4.0%	851.6	4.0%	851.6	5.0%	988.6
2029	5.0%	894.2	5.0%	894.2	5.0%	1,037.7
2030	6.0%	947.8	6.0%	947.8	4.9%	1,088.9
2031	5.0%	995.2	5.0%	995.2	4.9%	1,142.2
2032	4.0%	1,035.0	4.0%	1,035.0	4.9%	1,197.7
2033	3.0%	1,066.1	3.0%	1,066.1	4.8%	1,255.4
2034	0.0%	1,066.1	0.0%	1,066.1	4.8%	1,315.6
2035	4.0%	1,108.7	4.0%	1,108.7	4.8%	1,378.2
2036	5.0%	1,164.1	5.0%	1,164.1	4.7%	1,443.4
2037	6.0%	1,234.0	6.0%	1,234.0	4.7%	1,511.2
2038	5.0%	1,295.7	5.0%	1,295.7	4.7%	1,581.7
2039	3.0%	1,347.5	4.0%	1,347.5	4.6%	1,655.0
20-Year Total		\$18,894.7		\$18,894.7		\$21,959.0

Exhibit 11 20-Year Cumulative Sales Tax Receipts (2020 – 2039) (in Millions)

\* 2019 is Budget for the FY19 columns and Projected for the FY20 Column, and is not included in the 20-year totals. \*\* Perryman calculation uses Perryman's annual growth rates adjusted to DART's projected FY19 sales taxes.

<u>Sales Tax Repayment</u> – The Texas State Comptroller's Office periodically conducts audits of entities responsible for the payment of state and local sales taxes. As a result of an audit that was concluded in 2006, the Comptroller determined that DART received an overpayment of sales taxes of approximately \$13.2 million. In an effort to mitigate the effects of this repayment on DART, the Comptroller agreed to a 16-year interest-free repayment schedule (\$824,000 per year through 2022). An additional audit, completed in 2008, resulted in another repayment obligation of \$3.6 million. The State Comptroller's Office agreed to extend the \$824,000 repayment plan



through 2026, with the balance of this repayment (\$334,588) to be remitted in 2027. These repayment obligations have been incorporated into the Plan, and all reported sales tax revenues in the Plan (and discussed in this document) are net of these repayments.

Operating Revenues (line 2 of the Financial Plan)

Operating revenues are projected to contribute \$2.60 billion (8.8%) of DART's sources of funds through FY 2039. Exhibit 12 details projected operating revenues for the next twenty years.

			(in Mi	llions)						
Operating Revenues	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Fixed Route Passenger Revenues	\$69.1	\$70.5	\$80.2	\$81.4	\$82.1	\$89.1	\$89.8	\$90.6	\$99.0	\$99.8
Other Passenger Fares	4.0	4.3	4.9	5.0	5.2	5.7	5.9	6.1	6.7	6.8
Total Passenger Revenues	\$73.2	\$74.7	\$85.1	\$86.4	\$87.2	\$94.8	\$95.8	\$96.7	\$105.7	\$106.7
Leases & Rentals	\$7.6	\$7.8	\$8.0	\$8.1	\$8.3	\$8.5	\$8.7	\$8.9	\$9.1	\$9.3
Advertising	4.1	4.2	4.5	4.7	4.7	4.8	5.1	5.3	5.6	5.8
Vanpool (NCTCOG/FHWA)	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.9
Other	1.1	0.8	0.8	0.9	0.9	0.9	0.9	1.0	1.0	1.0
Total Operating Revenues	\$86.7	\$88.3	\$99.2	\$100.8	\$102.0	\$109.9	\$111.3	\$112.7	\$122.2	\$123.6

# Exhibit 12 Operating Revenues (in Millions)

### Exhibit 12 Operating Revenues (in Millions) (continued)

Operating Revenues	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	20-Year Total
Fixed Route Passenger Revenues	\$100.7	\$109.3	\$110.2	\$111.9	\$121.5	\$122.5	\$123.5	\$134.2	\$136.1	\$137.3	\$2,058.7
Other Passenger Fares	7.0	7.7	7.9	8.1	8.9	9.1	9.4	10.3	10.6	10.8	144.4
Total Passenger Revenues	\$107.7	\$117.0	\$118.1	\$120.0	\$130.4	\$131.6	\$132.9	\$144.5	\$146.7	\$148.1	\$2,203.1
Leases & Rentals	\$9.5	\$9.7	\$9.9	\$10.1	\$10.3	\$10.5	\$10.7	\$10.9	\$11.2	\$11.4	\$188.3
Advertising	6.1	6.4	6.8	6.5	6.8	7.1	7.5	7.8	8.2	8.6	120.6
Vanpool (NCTCOG/FHWA)	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.1	1.1	1.1	18.3
Other	1.0	1.0	1.0	1.1	1.1	1.1	1.1	1.2	1.2	1.2	20.2
Total Operating Revenues	\$125.2	\$135.1	\$136.7	\$138.5	\$149.6	\$151.4	\$153.2	\$165.5	\$168.4	\$170.4	\$2,550.6

Passenger revenues are the primary component of operating revenues, representing approximately \$2.192 billion, or 86.6% of operating revenues. Business Planning Parameter FS-B2 states, "the Board will consider fare modifications from time to time to achieve Service Plan, ridership, and subsidy per passenger targets and to maintain DART's financial viability." The Financial Plan



assumes fare increases will occur every three years, resulting each time in an increase to the average fare of approximately 10%.

The DART Board has approved a new Low-Income Fare program, subject to review through public meetings and comments. The intent is to offer fares matching the current reduced-fare programs for seniors and students. If the program receives formal approval, it will take effect on January 1, 2020. Revenue projections in the Financial Plan assume that the program will be approved.

The current fare structure is shown in Exhibit 111 in the *Reference Section*.

Exhibit 13 details the projected fixed-route average fares by mode over the life of the Plan.

Year	Bus	Light Rail	Commuter Rail	Fixed Route
FY20 - FY21	\$0.72	\$1.11	\$3.43	\$1.00
FY22 - FY24	\$0.79	\$1.21	\$3.75	\$1.22
FY25 - FY27	\$0.86	\$1.33	\$4.10	\$1.34
FY28 - FY30	\$0.94	\$1.45	\$4.48	\$1.46
FY31 - FY33	\$1.03	\$1.59	\$4.90	\$1.60
FY34 - FY36	\$1.13	\$1.73	\$5.36	\$1.75
FY37 - FY39	\$1.23	\$1.90	\$5.86	\$1.91

Exhibit 13 Projected Fixed-Route Average Fare

Operating revenues other than fare revenues include items such as the following: advertising revenue, lease & rental income, contract service revenues from cities outside the Service Area, shuttle service agreement revenue from UT-Dallas and the Surface Transportation Program/Metropolitan Mobility (STP/MM) vanpool contribution.

### Interest Income (line 3 of the Financial Plan)

Interest income is projected to contribute \$436.6 million (1.5%) of total sources of funds for the next twenty years. This is a \$39.6 million (10.0%) increase from the amount contained in the FY 2019 Plan due to higher interest rate projections.

Interest income rates are estimated to average between 205 and 250 basis points (2.05% - 2.50%) throughout the year in 2020. Interest rates have been low from a historical perspective and are expected to increase slowly over the next few years. As rates rise, a positive spread is expected to develop (supported by historical data) between interest income and interest expense rates. This spread is projected to be 65 basis points (0.65%) by 2022.



### Federal Funding (lines 4 and 5 of the Financial Plan)

Federal funds are included in two line items: Formula Federal Funding and Discretionary Federal Funding.

Formula funds include: Urbanized Area Formula program (UAFP), State of Good Repair (§ 5337), Bus and Bus Facilities Formula Grants (§ 5339), and High Density States and Growing States (§ 5340).

Discretionary funds are authorized under 49 U.S.C. § 5309 (New Starts/Core Capacity/Small Starts) and other programs such as Congestion Mitigation and Air Quality Improvement program (CMAQ) and the State of Texas Mobility Fund (TMF).

In the Surface Transportation Bill enacted in December 2015, known as the Fixing America's Surface Transportation Act, or "FAST Act," Congress provided funding for highways and transit through federal fiscal year 2020. The bill provides slight increases in the near-term over prior funding levels and affords DART an opportunity to develop and finance multi-year projects. Because Congress has chosen not to raise the federal gas tax, this federal transportation program can no longer be called a user-financed program. Instead, Congress transferred approximately \$70 billion from non-transportation sources to the Highway Trust Fund to ensure its solvency. This imbalance will grow during each of the five years of the FAST Act, making the fiscal cliff much steeper and harder to address. The Congressional Budget Office in 2018 estimated that the Highway Trust Fund will need a transfer of \$161 billion by 2028, just to maintain the existing level of transportation spending. Pressure will build on the President and Congress to develop options that are politically viable to ensure the federal government can remain an effective partner in building and maintaining the nation's transportation infrastructure.

### Formula Federal Funding (line 4 of the Financial Plan)

Formula funds are \$1.73 billion (5.9% of total sources of funds) through FY 2039. This is the same amount as the FY 2019 Plan projected. According to the Board-approved Financial Standard B-10 (shown in Exhibit 104 in the *Reference Section* of this document), "Formula funding for future years shall be forecast at the current year's funding level in order to ensure a conservative forecast." There may be some variances from year to year early in the Plan as some funds not spent in the current year may be rolled forward into future years. These levels are adjusted each year based on the most current information available. An exception to that would be for new rail segments. When service begins on the Silver Line in 2022, it will generate additional formula funds beginning in 2024. An estimate of \$2.3 million has been made for these additional funds based on current federal apportionment values.



Exhibit 14 details the anticipated receipt of both discretionary and formula Federal Funds over the life of the Plan.

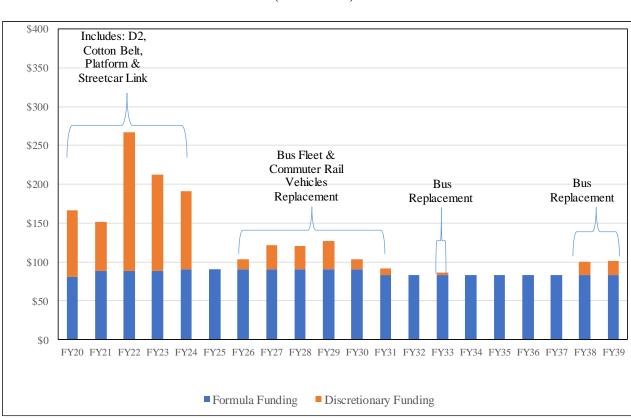


Exhibit 14 Anticipated Capital Grant Funding (FY 2020 – FY 2039) (in Millions)

# Discretionary Federal Funding (line 5 of the Financial Plan)

Discretionary federal funding comprises \$720.1 million (2.5% of total sources) through FY 2039. This is a \$140.9 million (24.3%) increase over the FY 2019 Plan. The increase is primarily due to increased projections for the Silver Line. The Plan assumes \$409 million for Core Capacity, \$119 million for the Silver Line and up to \$77 million in funding for future bus replacement.

DART has been very conservative with regard to programming new discretionary federal funding. There is only one assumption for future discretionary funds in the Financial Plan other than the projects just described, and that is for 10% federal participation in future bus replacements, totaling \$77.0 million between 2026 and 2031 and in 2033, 2038 and 2039.

# Long-Term Debt Issuance (line 6 of the Financial Plan)

DART plans to issue \$3.43 billion in new long-term debt over the next twenty years. The issuances include \$1.1 billion during FY 2020 - FY 2023 for the Core Capacity Program mentioned above and other infrastructure projects, and \$1.24 billion for the Silver Line project. DART has been approved for a \$908 million loan from the Federal Railroad Administration's Railroad



Rehabilitation & Improvement Financing (RRIF) program, \$11.7 million of which has been received to date, to finance the project. The loan is at a substantially lower interest rate than conventional tax-exempt debt and will reduce interest cost by \$42.1 million as compared the projection in the FY 2019 Plan.

### Commercial Paper Issuances (line 7 of the Financial Plan)

DART plans to issue \$227 million during the next four years and an additional \$400 million during the following fifteen years. Under a new bank-backed Commercial Paper (CP) Program, and an Extendible CP Program DART will use the initial funding mechanisms to support DART's capital programs up to a maximum authorized amount of \$125 million per program. A third-party bank promises to provide the funds if the seller cannot repay them. The bank provides a revolving credit facility or letter of credit dedicated to commercial paper note repayments. Extendible CP enables high credit quality issuers to place commercial paper without a bank-backed credit facility. Unlike bank-backed CP, in the event of a failed remarketing and assuming DART does not desire to redeem the Extendible CP with cash, the security is automatically extended up to 270 days from the original issue date. If market conditions and cash flow needs dictate, DART can issue long-term debt to replace the outstanding CP or retire it with cash. The current Financial Plan assumes that the \$227 million in CP will be replaced with \$227M Long Term Debt in 2026.

DART has established a \$125 million maximum authorization Commercial Paper Self-Liquidity (CPSL) Program. When an investor purchases a commercial paper note, the investor has an expectation that when the note matures the seller will return the par value of the note plus interest. The seller demonstrates that the expectation can be satisfied by identifying its own funds that will be used to repay CP notes. This is called a CPSL program. The ability to meet this obligation is



monitored by rating agencies and is reflected in the seller's short-term debt rating. DART is using self-liquidity for the \$80 million in CP that is currently outstanding. This balance will be reduced steadily over the next few years. By the end of FY 2022, all CP currently outstanding at the beginning of FY 2020 will be retired.

#### Other Operating & Capital Contributions (lines 8 & 9 of the Financial Plan)

These line items are predominantly composed of non-grant contributions from other public entities, such as: Trinity Metro's contribution toward its share of the operating and capital costs for the Trinity Railway Express (TRE), City of Dallas contributions toward Streetcar Operating expenses, City of Irving contribution for the construction of the Rail stations capital cost & certain non-operating leases, service area city and other funding partner contributions for specific capital projects, and other miscellaneous contributions.



Other Operating sources of funds total \$471.9 million between FY 2020 and FY 2039 and represent 1.6% of total sources of funds for that same period. This category of funds decreased \$9.3 million (1.9%) from the same period in the FY 2019 Plan, primarily due to a reduction in estimated external contributions for Silver Line Operating expenses.



# **Uses of Funds**

Operating Expenses (lines 11 – 17 of the Financial Plan)

Many of DART's services underwent significant changes over the last several years. The changes from FY 2017 through FY 2019 included the following major elements:

- Two bus service changes, in March and August of 2017, which added another roughly 1.3% to DART's bus service designed to address the rapidly growing employment areas of Legacy in Plano and Cypress Waters in Dallas;
- A restructuring of the TRE schedule which more efficiently utilized deadhead moves and provided more midday service. These changes added nearly 15% more service.
- A D-LINK service change in 2018 connected the Dallas Streetcar to MATA via Main Street and added Sunday service.
- Also, in 2018, there were off-peak bus frequency improvements in eleven routes, route restructuring in northeast Dallas to provide more direct service and improved coverage. The GoLink service started in five pilot zones in Plano and Dallas and now there are thirteen zones.

Looking a little further down the road, the Plan includes even more service enhancements:

- Additional bus service as a result of the COA with the service changes being phased in beginning in 2019 with \$5 million in additional operating expenses;
- Two new infill stations along the Orange Line in Irving (Loop 12 and Hidden Ridge, currently in the planning stage);
- An expanded Streetcar Rail network by 2022; and
- Commuter Rail service along the Silver Line corridor from Plano to DFW Airport in 2022.
- The second light rail alignment through downtown Dallas (D2), currently anticipated to begin service in 2024.



Total operating expenses for FY 2020 through FY 2039 are projected to be \$14.45 billion, an increase of \$128.0 million over the amount in the FY 2019 Plan over the same period of time, primarily due to inflation adjustments, healthcare costs, and the service increases described above.

DART's FY 2020 Operating Budget is \$562.3 million, the same as the amount in FY 2019 plan. Changes in operating expenses that are built into the Financial Plan for future years are controlled from a policy perspective by Financial Standards B-3, B-4, and B-5 (see Exhibit 104 in the *Reference Section*). Standards B-3 and B-4 relate to fixed-route service, which accounts for approximately 92% of projected operating costs over the next five years. The primary cost drivers for the variable expenses of fixed-route service are the number of miles, hours, and vehicles in service, contract rates for purchased transportation (TRE), fuel/electricity prices, security, technology, and health care.

Exhibit 15 shows the modal distribution of total operating expenses.

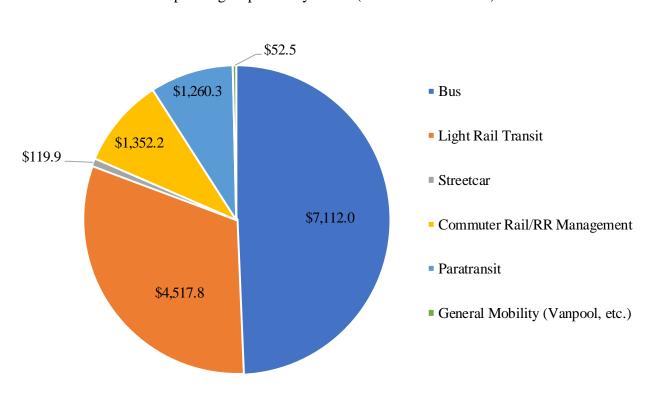


Exhibit 15 Operating Expenses by Mode (FY 2020 – FY 2039)



# Modal Expenses (lines 11 – 17 of the Financial Plan)

Exhibit 16 compares the projected 20-year modal operating expenses (2020 - 2039) based on the FY 2019 Financial Plan and the FY 2020 Plan.

	FY19 FP	FY20 FP	<pre>\$ Variance FY19 to FY20</pre>	% Variance FY19 to FY20
Bus	\$7,050.3	\$7,112.0	\$61.7	0.9%
Light Rail Transit	4,493.8	\$4,517.8	24.0	0.5%
Streetcar	119.2	\$119.9	0.7	0.6%
Commuter Rail/RR Management	1,351.0	\$1,352.2	1.2	0.1%
Paratransit	1,255.4	\$1,260.3	4.9	0.4%
General Mobility (Vanpool, etc.)	52.2	\$52.5	0.3	0.6%
Total Operating Expenses	\$14,321.9	\$14,414.7	\$92.8	0.6%

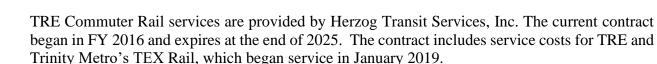
### Exhibit 16 20-Year Modal Expense Comparison (2020 – 2039) (in Millions)

The following details relate to the modal expense line items:

Each year, DART management reviews costs allocated to the various modes of service. During this review, estimates are made regarding how much of each functional division's time and resources will be spent in support of each mode, how much will be spent on general and administrative responsibilities, and how much effort will be spent in support of DART's capital programs. This can lead to some minor fluctuations in cost distribution among the modes from year to year as estimates may vary.

Even with the continued light rail expansion, bus expenses still represent the largest portion of DART's operating costs (49.3%) over the next twenty years. The bus mode includes DART's Innovative Services (GoLink, Flex-Route, and site-specific shuttle services). Twenty-year bus modal costs have increased by \$78.9 million (1.1%) from the FY 2019 Financial Plan.

Over the last ten years, DART has completed an expansion program that has seen the light rail system grow from 48 miles in the summer of 2009 to 93 miles in FY 2017. As such, light rail operating costs have continued to represent an increasing percentage of DART's budget. They have increased from 21.1% of the FY 2009 operating budget to 32.9% of the FY 2020 budget.



Mobility Management Services (Paratransit) is operating under a contract with MV Transportation to provide passenger services (please see page 98 in the *Organizational Units Section* for specifics of this arrangement). Projected ridership over the next twenty years is up by 3.05 million (13.6%) from the FY 2019 Plan.

General Mobility programs consist mainly of vanpool services. Participants and the North Central Texas Council of Governments (NCTCOG) will contribute more than 95% of the cost of this program. The maximum authorized number of vanpools is 228; 200 are budgeted for FY 2020. The contract cost of vanpools has dropped and because of the high rate of cost recovery on this service, much of that savings has been passed on to the customers. Twenty-year Vanpool costs are less than 1% higher than the FY 2019



Plan. Vanpool utilization has not met expectations over the last several years resulting in a reduced budget allocation for these services. Should demand begin to grow again, the budget may need to be revisited.

For a more detailed explanation of specific programs and information on the cost drivers for each mode, please refer to the *Organizational Units Section* of this document.

### Capital and Non-Operating Expenditures (lines 18 – 27 of the Financial Plan)

Exhibit 17, on the following page, compares capital expenditures by mode for the 20-year period 2020 - 2039 from the FY 2019 Plan to the FY 2020 Plan. The agency-wide category refers to capital projects that benefit more than one mode.





	(in minons	, 		
	FY19 FP	FY20 FP	\$ Variance FY19 to FY20	% Variance FY19 to FY20
Agency-Wide	\$445.7	\$502.5	\$56.9	12.8%
Bus	1,207.5	1,197.1	(10.4)	(0.9%)
Light Rail Transit	2,975.5	2,985.6	10.1	0.3%
Streetcar	96.6	104.3	7.7	7.9%
Commuter Rail/RR Management	1,557.2	1,780.1	222.9	14.3%
Paratransit	5.7	5.9	0.2	3.0%
General Mobility - Road Impr./ITS	41.8	44.8	3.1	7.4%
Non-Operating	31.7	35.3	3.6	11.4%
Capital P & D, Start-Up	309.9	312.5	2.6	0.8%
Total Capital Expenditures	\$6,671.5	\$6,968.2	\$296.7	4.4%

Exhibit 17 Comparison of 20-Year Capital Expenditures (2020 – 2039) (in Millions)

Capital and Non-Operating expenditures are budgeted at \$536.3 million for FY 2020 and \$6.98 billion for the twenty years through FY 2039. This is a 20-year increase of \$303.9 million (4.6%) compared to the FY 2019 Plan over the same period. The increase is the net result of adding new Technology projects, adding and expanding LRT and CR projects, and the rollover of funds that were budgeted in FY 2019 but will not be spent in FY 2019.

The list of major Capital and Non-Operating projects (including all new projects) is shown as Exhibit 18.

General Mobility, Road Improvement, and Intelligent Transportation Systems (ITS) Programs (line 24 of the Financial Plan)

Financial Standard B-7 limits General Mobility Road Improvement Programs to funding allowed under the terms of the approved Interlocal Agreements (ILA). Road improvement programs include the Principal Arterial Street System (PASS), Transportation System Management (TSM), Transit Related Improvement Programs (TRIP), and ITS projects. These programs total \$44.8 million over the next twenty years. In addition to these programs, there is \$583,036 remaining from the Local Assistance Program (LAP). These funds are disbursed as requested by service area cities which have remaining balances.



### Non-Operating Costs (line 25 of the Financial Plan)

Non-operating costs relate to projects/programs that do not meet capitalization criteria for accounting purposes, are not operating costs and are not capitalized as a DART asset. Examples of non-operating costs include consulting costs for the Transit System Plan revision, the Transit-Oriented Development study, and the Regional On-Board Survey.

### Capital Planning & Development and Start-up Costs (line 26 of the Financial Plan)

Capital Planning & Development (Capital P&D) and Start-up costs are predominantly internal staff and consulting costs associated with planning, designing, managing, constructing, and opening new capital projects such as the light rail system. Financial Standard B-8 limits capital planning costs to no more than 7% of the total operating budget and start-up costs to no more than 60% of the first year's operating costs.

Capital P&D costs are budgeted at \$14.0 million for FY 2020, and \$312.5 million over the twenty-year period of the Plan.

### Capital Reserves

A variety of reserves exist within the capital program. These reserves represent placeholders within the Financial Plan that are either for known capital asset maintenance and replacement cycles, or for funds that are set aside for projects of a specific type, for which the exact nature, timing, and amount is unknown at the present time. When a project that is to be funded from a specific reserve is requested and approved, the new project is given its own specific line in the capital program, and the balance of the reserve is reduced by the budgeted cost of the new project. Reserve balances are reviewed on an annual basis to ensure they are adequate to cover future needs for each respective mode and expenditure type.

The FY 2020 Financial Plan includes \$3.98 billion in capital reserves and amounts dedicated to "State-of-Good-Repair" (SGR) over the next 20 years. These reserves ensure that DART will be able to maintain a state of good repair with regards to capital maintenance and timely replacement of assets. These reserves constitute over 53% of the total 20-year capital project expenditures.



# FY 2020 Major Capital Project List

Exhibit 18 contains a listing of major capital projects with their budgeted costs.

	Major Capital Projects	
#	Project Description	Total Budget
1	Dallas CBD Second Light Rail Alignment (D2 Subway)	\$1,412,465
2	Silver Line Regional Rail Project	1,243,000
3	Red & Blue Line Platform Extensions	128,749
4	Dallas Streetcar Central Link	96,194
5	Madill Bridges Replacement	35,500
6	Positive Train Control (PTC)	34,800
7	Bus Repower Program	21,000
8	Critical Functions Facility	18,493
9	LRV Repower Program	18,304
10	Bi-level & Cab Car Overhauls	16,103
11	Enterprise Asset Management (EAM)	15,150
12	Comprehensive Payment System (CPS)	15,000
13	Loop 12 Rail Station	12,000
14	Hidden Ridge Station	12,000
15	TRE DFW Track Maintenance	11,083
16	LRV HVAC Upgrade Project	10,256

Exhibit 18 Major Capital Projects (in thousands)



### Dallas CBD Second Light Rail Alignment (D2 Subway)

 Total Budget
 \$1,412,465,000

 Funding Source(s)
 Grant: \$300,000,000; Debt: \$1,090,000,000; General Fund (GF):

 \$22,465,000

### Project Description

This project (known as D2 Subway) establishes a second light rail transit (LRT) line through Downtown Dallas by connecting two points: Victory Station and the Green Line near the Good Latimer/Swiss Avenue intersection. The project is intended to increase core capacity through Downtown Dallas, relieving congestion on the existing Bryan/Pacific Transit Mall and on the downtown junctions, improve operational flexibility and reliability, and serve new downtown markets while enhancing economic development.



The D2 Subway Locally Preferred Alternative (LPA) using Victory/Commerce/Swiss was approved in September 2017 by both the Dallas City Council and the DART Board. This approval followed an extensive subway refinement phase after stakeholders voiced concerns with the original mostly at-grade LPA in 2016. DART completed 10% preliminary engineering on the subway LPA in March 2019 and is advancing towards 20% design in conjunction with a Supplemental Draft Environmental Statement (SDEIS). The SDEIS will update the original May 2010 Alternatives Analysis/Draft Environmental Impact Statement (AA/DEIS). DART will then refine the project up to 30% design with a Final EIS and Record of Decision.

The D2 Subway includes approximately 1.3 miles of below-grade alignment and 0.7 mile at-grade, primarily through the Victory Park area and where the project reconnects with the Green Line. The project includes four new stations (one at-grade and three below-grade) and will include relocation of the existing Deep Ellum station north to Live Oak. The project continues to be refined to



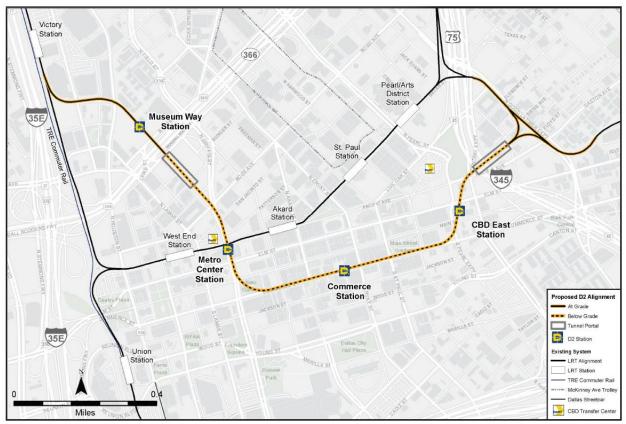
minimize impacts as more engineering and environmental information becomes known. In January 2019, DART incorporated a refinement in the CBD East area.

Assumptions in the FY 2020 Twenty-Year Financial Plan reflected a \$1.4 billion project cost and a conservative \$300 million external grant. However, DART plans to pursue an approximately 50/50 funding share between local/federal sources, and the project is expected to be completed in 2024.



### Status

The last Capital Investment Grant (CIG) Core Capacity submittal to FTA in September 2017 was based on the Victory/Commerce/Swiss Alternative. The D2 Subway project received a Medium-High rating. Based on the need for additional time to complete Project Development (PD) with the subway alignment, DART requested an extension of the PD timeframe from November 2017 to November 2019. On March 20, 2018, FTA denied DART's request to extend Project Development since the two-year timeframe would be exceeded. At the same time, it withdrew the project from the CIG program. DART is continuing PD locally with FTA oversight in anticipation of re-entry into the CIG program in 2020. FTA recommended that DART reapply to enter Engineering phase after all required activities are completed. The project team continues to have a standing bi-weekly project briefing with the City of Dallas and FTA, project coordination meetings with TxDOT, public stakeholder committee and focus area meetings, and one-on-one stakeholder meetings on an "as needed" basis.



**D2** Subway Locally Preferred Alternative – Commerce via Victory/Swiss

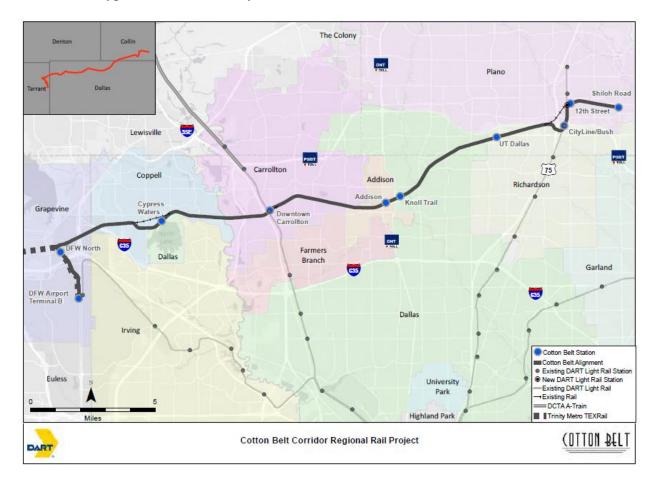


# Silver Line Corridor Regional Rail Project

Total Budget	\$ 1,243,000,000	
Funding Source(s)	Grant: \$139,330,000; Funding Partners/Local: \$195,670,000; Debt:	
	Railroad Rehabilitation & Improvement Financing (RRIF): \$908,000,000	

### Project Description

The 26-mile long regional rail Silver Line Corridor extends from Dallas-Fort Worth International Airport (DFWIA) through the northern portion of the DART Service Area to Shiloh Road in Plano. The corridor (formerly the Cotton Belt Line) passes through the cities of Grapevine, Coppell, Carrollton, Addison, Dallas, Richardson, and Plano. A total of 10 stations were approved by the DART Board on August 28, 2018. The Silver Line Project would interface with three DART LRT lines: The Red/Orange Line in Richardson/Plano, the Green Line in Carrollton, and the Orange Line at DFW Airport. Also, at DFW Airport, the project would connect to the TEX Rail Regional Rail Line to Fort Worth, and the DFW Airport Skylink People Mover. The proposed project is mostly at-grade, with double-track. It includes two diversions from the existing railroad corridor to serve the Cypress Waters and City Line areas.





Ten new station locations have been identified including DFW Airport, DFW North, including a future "through" platform that will allow direct east-west movements across the corridor, Cypress Waters, Downtown Carrollton, Addison, Knoll Trail, University of Texas (UT) Dallas, City Line/Bush, 12<sup>th</sup> Street (which includes a new infill LRT Station on the existing DART Red Line), and Shiloh Road.

The Silver Line Project will operate on tracks that are shared with freight for nearly the entire route except North Dallas where freight is abandoned. FRA-compliant diesel multiple unit (DMU) technology will be used for the corridor, and a fleet of eight vehicles will be procured. The existing Trinity Railway Express (TRE) Irving Yard will serve as the Equipment Maintenance Facility (EMF) for the project.

Three federal agencies are involved in oversight of the Silver Line Project. The Federal Transit Administration (FTA) serves as Lead Agency, the Federal Aviation Administration (FAA) a Cooperating Agency for the environmental clearance, and the Federal Railroad Administration (FRA) was serve was a Participating Agency. Funding for the project is being provided through the DOT-administered FRA Railroad Rehabilitation and Improvement Financing (RRIF) program. FAA has jurisdiction over DFW Airport and Addison Airport.

### <u>Status</u>

The Final Environmental Impact Statement (FEIS) was signed on November 9, 2018. The FTA and FAA have determined that the requirements of federal environmental statutes, regulations, and executive orders have been satisfied for the Silver Line Corridor Regional Rail Project. A Record of Decision (ROD) was issued on November 9, 2018. The FEIS/ROD is available in electronic PDF format at www.DART.org/Cottonbelt.

Notice to Proceed (NTP) was issued to the design-builder on January 7, 2019, and to the Program Manager/Owner's Representative (PMOR) on January 8, 2019. In February 2019, site surveying and data gathering activities were initiated. In March 2019, DART conducted coordination meetings with city representatives and provided updates on design and construction activities to the community.



On October 12, 2018 two additional solicitations were issued: one for vehicle procurement and Equipment Maintenance Facility (EMF) design and a separate solicitation for construction of the EMF. Proposals were received in January 2019. Authorization to award the contract for vehicle procurement sent to DART Board in May 2019.

Anticipated date for project completion is December 2022.



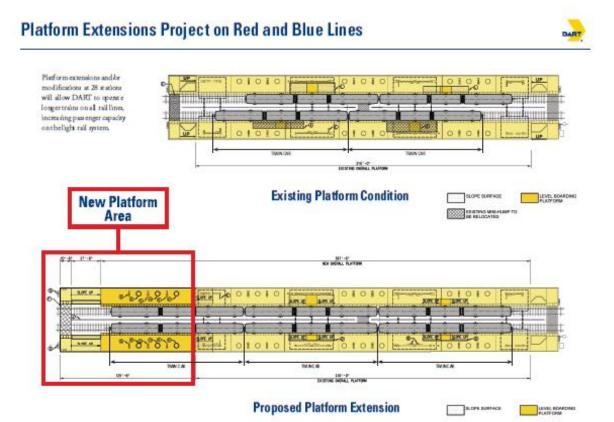
# Red & Blue Line Platform Extensions (RBPE)

Total Budget	\$ 128,749,000
Funding Source(s)	Grant: \$60,760,000; Texas Mobility Fund: \$60,000,000; GF: \$7,989,000

### Project Description

The purpose of this project is to modify platforms at 28 stations, that were constructed before 2004, along the Red and Blue Lines to accommodate three-car trains. Modifications include extending platforms and/or raising portions of the platform to permit level boarding. These modifications will increase the carrying capacity of the LRT system by 30% and enhance the core capacity of the network.

Two ancillary projects related to the platform extension project will be separate from the scope of the federally funded project. These projects to accommodate three-car trains are: modifying the CROF cleaning platform and extending the Westmoreland tail track.





### <u>Status</u>

On January 27, 2017, DART issued an NTP to design teams for Task 1, Standards Development Committee. On July 28, 2017, the FTA provided approval to enter engineering.

NTP for pre-construction activities were issued in October and November 2017. NTP for design services under Task 2 were issued to Groups C, D, and E in December 2017 and to Groups A and B and systems design to Group A in January 2018.



Construction cost was negotiated with CMGC in June 2018. The Issue for Construction (IFC) submittals for Groups C, D, and E were received in July and August 2018. The IFC submittals for Groups A and B were received in October 2018.

Risk assessment workshop was conducted with FTA on July 24 and 25, 2018. The anticipated August 2018 date for submittal to FTA for the Full Funding Grant Agreement (FFGA) was achieved August 17, 2018.

On September 24, 2018, the FTA confirmed use of pre-award authority on long-lead items. On October 30, 2018, the Board authorized award of construction contracts pending FFGA execution. FFGA execution is trending to March 2019.

On March 12, 2019, DART issued NTP to CMGC Group B for work under Letter of No Prejudice (LONP) and long lead procurement items; a revision was issued on March 18, 2019. Anticipated start of construction was delayed from March 25, 2019, to April 1, 2019, due to contractor mobilization. On March 29, 2019, DART issued NTP to CMGC Groups A and C for procurement of long lead items.

CMGC Group B Mobilization has begun at first two stations: Downtown Plano, Galatyn Park: Work will follow at Group B Stations Walnut Hill, Spring Valley, Park Lane, Forest Lane.

#### Issues

#### Schedule Mitigation:

Although the date for the FFGA document submittal to FTA was achieved, the project completion date is trending later than the baseline schedule. DART is working to reconcile the difference between the working schedule and the baseline schedule.

### FFGA Execution:

The FTA-provided roadmap execution of the FFGA in May 2019, followed by a signing ceremony in July 2019 at the Downtown Plano Station.



### **Dallas Streetcar Central Link**

 Total Budget
 \$ 96,194,000

 Funding Source(s)
 FTA Small Starts: \$48,092,000;
 General Fund: \$48,092,000

### Project Description

The Dallas Streetcar Central Link is proposed as a modern streetcar alignment connecting from the Union Station/Omni Hotel area through the central core of Downtown Dallas, linking to the M-Line trolley near Uptown and Klyde Warren Park.

### <u>Status</u>

DART, in cooperation with the city of Dallas and Downtown Dallas, Inc. (DDI), conducted a Supplemental Alternatives Analysis (AA) effort in 2017. Dallas City Council approved a resolution on September 13, 2017, endorsing the Elm/Commerce alternative as the preferred alternative. The resolution also stated the need for additional analysis of the Main Street and Young/Harwood alternatives during subsequent FTA Project Development (PD) efforts.

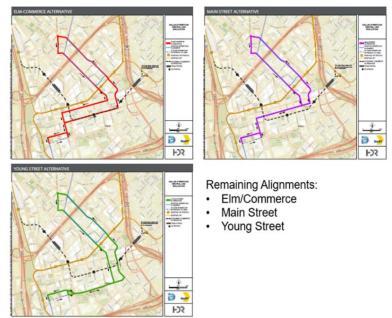
DART provided the City with a proposed scope for the FTA Project Development phase on February 2, 2018. Comments were received on April 10, 2018. A meeting with City staff was held on May 1, 2018, to discuss and finalize the scope. A consultant cost estimate has been requested and negotiated. Additional efforts were pending the approval of the Master Streetcar Interlocal Agreement (ILA). The City and DART recently completed the ILA. The DART Board approved the ILA on July 9, 2019, and Dallas City Council approval is anticipated by September 2019. A Project Specific Agreement will be developed to outline scope, funding and responsibilities for the Project Development of the Central Link project. A request to enter FTA Project Development under Small Starts would be done concurrent with the agreement.

#### Issues

The following approvals are needed for project progress:

Approval of a Master Streetcar ILA by the City of Dallas, approval of a Project Specific Agreement for the Central Link, and timely approval of the request to enter Project Development once submitted to FTA.

The streetcar schedule is linked to the D2 subway project if the Elm/Commerce route is used given construction coordination needs. If other alignments are used, the streetcar could advance separate from D2.





## **Madill Bridges Replacement**

<u>Budget</u>	Total: \$ 35,500,000	
Funding Source(s)	Grant: \$17,750,000	Debt: \$17,750,000

### Project Description

The objective of the Madill Bridge/Double Track Program is to maintain a state of good repair

along the Madill line by rebuilding and modernizing aging timber trestle bridge infrastructure that is over 100 years old and increasing capacity by building three new bridges at the same locations to create double track.

The following work will be accomplished under the grant/cooperative agreement: replace single-track bridge at (MP 705.2); renovate/partially replace single-track bridge at (MP 707.45); construct three new track 2 bridges at (MP 707.45), (MP 707.04), and (MP 705.2) and perform associated track and crossing work. The end-state of the project



will be two modern single-track bridge spans at (MP 707.45), (MP 707.04), and (MP 705.2) that meet current engineering standards to accommodate modern freight cars. This will allow for removal of slow orders that currently exist on the (MP 707.45) and (MP 750.2) bridges.

### <u>Status</u>

A grant application has been submitted. The results will determine the plan going forward.



# **Positive Train Control**

 Total Budget
 \$ 34,800,000

 Funding Source(s)
 Grant: \$12,500,000;
 Trinity Metro: \$11,150,000;
 General Fund:

 \$11,150,000
 State
 State

#### Project Description

Congress approved the Rail Safety Improvement Act of 2008 which resulted in a Federal Railroad Administration (FRA) mandate, CFR 49 Part 236 I, Positive Train Control (PTC). PTC is designed to prevent train-to-train collisions, overspeed derailments, movement of a train through a switch left in the wrong position and incursion into an established work zone.

### <u>Status</u>

After numerous reports to Congress regarding ongoing challenges in implementing PTC, Congress passed the Surface Transportation Extension Act of 2015, which revised the Positive Train Control requirements including the extension of the substantial implementation deadline from December 31. 2015. to December 31, 2018; permits carriers to provide for an alternative schedule and sequence for implementing a PTC system, subject to DOT review; requires railroads to submit a revised



PTC Implementation Plan by January 27, 2016; requires railroads to submit an Annual Status Report to the FRA by March 31st each year; and requires FRA compliance reviews and reports due to Congress by July 1, 2018.

The Trinity Railway Express (TRE) is working on several fronts to advance the implementation of PTC in accordance with the approved TRE PTC Implementation Plan. With safety, interoperability and cost effectiveness as core objectives, DART and Trinity Metro have formed a Regional Positive Train Control coalition to address PTC. To maximize the PTC technology in an efficient manner, it will be implemented as a regional solution consistent with the Operations and Maintenance strategy which leverages shared operations and technology between DART and Trinity Metro.

After unsuccessful negotiation of a Systems Integrator contract, DART and Trinity Metro made the determination to self-perform the various components of the project working directly with the vendors and worked together to devise the roles and responsibilities of each agency.



DART took the lead with PTC-220, LLC, for the spectrum and with Meteorcomm for the radio equipment. A Spectrum Sublease Agreement with Burlington Northern Santa Fe (BNSF) and PTC-220, LLC (comprised of Class I Railroads, spectrum owners through the Trackage Rights Agreement) was signed in June 2017 for the purpose of leasing radio spectrum. DART negotiated the license agreements required for the Regional PTC with



Meteorcomm to allow for the radio equipment necessary for the rolling stock, communication systems and wayside segments. The Meteorcomm Agreement was fully executed in May 2017.

Trinity Metro negotiated the design and installation of the Back-Office System, Dispatch System, rolling stock and wayside. On December 18, 2017, Trinity Metro signed the PTC System Implementation Contract with Wabtec Corporation.

Fiber optic cable installation between Fort Worth Texas & Pacific (T&P) Station and Union Station to support the PTC project was completed in March 2018 through an agreement with MCI/Verizon. The Radio Spectrum Analysis has been completed by the Transportation Technology Institute (TTI), which confirmed the three radio tower structures currently in place along the TRE are sufficient to support the PTC project. Wabtec has completed installation on all onboard vehicles, all WIUs, and all Base Station 220 MHz data radios.

On March 28, 2019, the FRA sent notification of Conditional Approval of the TRE's request to conduct Revenue Service Demonstration (RSD) of its Interoperable Electronic Train Management System. On May 03, 2019. TRE initiated RSD between Richland Hills Station (MP 618.2) and Union Station (MP 644.3). PTC implementation and testing was performed between T&P Station (MP 610.5) and Richland Hill Station (MP 618.2) from May to September. On September 13, 2019, TRE extended RSD across the entire corridor.

Wabtec has reported the following status as of August 31, 2019:

- System Engineering 71% complete
- Engineering Functional Requirements 89% complete
- Track Data Services (GIS) 100% complete
- Communication Implementation 96% complete
- Wayside Implementation 100% complete
- Onboard Installation 100% complete
- Message (ITCM) Hosting 93% complete
- Back Office System 100% complete
- System Integration 48% complete
- Training 88% complete



### **Bus Repower Program**

Total Budget\$23,423,000Funding Source(s)General Fund: \$23,423,000

#### Project Description

The Capital Bus Maintenance Program is designed to address the power plant assembly at a mileage scheduled/condition-based interval and prior to a catastrophic event. The intent of the program is to ensure a State of Good Repair and address progressive degradation of the major power plant assemblies within our bus fleet. The program includes a complete rebuild of the engine, transmission, electronic control sensors, cooling system and electronic control units. This program encompasses the entire bus fleet and is funded in 6-year increments.



These programs are necessary to protect DART's on-time performance, reduce service interruptions, and maintain a continued State of Good Repair in our revenue rolling stock for the safety of our riders, providing the 5-Star customer experience that DART strives to deliver.

#### <u>Status</u>

On schedule to complete 98 repowers by end of FY19, exceeding the planned 92. Repowers completed to date in FY19 = 66; repowers being completed monthly = 8. Estimated repowers to be completed in FY20 is 92.





### Consolidated Dispatch & Command Center [CDCC] Relocation Project

Total Budget\$ 18,481,000Funding Source(s)General Fund: \$18,481,000

### Project Description

The Critical Functions Facility Project is intended to develop a facility with the following goals:

- Ensure all critical functions are sustainable and consistent with COOP/EOP plans
- Enhance cross-communications between bus, rail, and police dispatching
- Suitable to meet current and future capacity and functional requirements for each function
- Located close to DART systems for use by team members
- Support sustainable incident command center operations



• Allow potential shared use with other government entities

The critical functions include the following:

- Critical business functions
- Police Radio Dispatch (TLETS)
- Bus Radio Dispatch
- LRT Radio Dispatch
- LRT Supervisor Control & Data Acquisition (SCADA)
- Surveillance Camera Network Monitoring
- Operations Communication Liaison Operations
- Emergency Command Center (EOC) Operations
- Secondary Dispatching Functions Operations
- Mobility Management Footprint within EOC

#### <u>Status</u>

Department is working to finalize the CDCC plan.



## **LRV Repower Program**

Total Budget\$18,304,000Funding Source(s)General Fund: \$18,304,000

### Project Description

Capital LRV Maintenance Programs are designed to address major systems and components that are detrimental to the LRV on-time performance and safe operation.

The Programs are time-scheduled/condition-based intervals, with the intent of addressing safety and mechanical issues with a pro-active approach.

The time-scheduled intervals are as follows: 3-Year friction brake overhaul (OH), 5-Year door OH and propulsion testing, and 15-Year mid-life door OH and propulsion testing/replacement (LRVs are 30-year assets.)

These programs are funded in 5-year increments.

### Status

On schedule to complete one friction brake overhaul per week if parts supplies from WABTEC are not an issue.

Fleet 53 friction brake overhaul complete (20) Fleet 54 friction brake overhaul 6 of 48 complete Fleet 51-52 door overhaul 31 of 55 complete Fleet 50-51-53-54 paint program 12 of 35 complete





# **Bi-level & Cab Car Overhauls**

<u>Total Budget</u>	\$ 16,103,000	
Funding Source(s)	TRE: \$8,052,000;	General Fund: \$8,051,000

### Project Description

The existing TRE Fleet has six (6) Bi-Level coach cars and two (2) Cab Cars that are scheduled for midlife overhaul. The overhauls also are needed for federally regulated safety updating as part of the System Safety II program for emergency egress.

### <u>Status</u>

This is a sole-source procurement for the overhaul of 4 coach cars and 3 cab cars and the side sill repair to 12 coach cars. The performance schedule is 3 years and only one cab car and two coach cars at a time can be released to be worked on.





# **Enterprise Asset Management System**

<u>Total Budget</u>	\$ 15,150,000
Funding Source(s)	General Fund: \$15,150,000

### Project Description

Since 1999 DART has used SPEAR software in support of its bus, light rail and non-revenue vehicle maintenance and material inventory efforts. After 20 years, this software is nearing end

of life. DART needs replacement that will enhance the systems currently utilized to enhance our abilities to effectively manage both future capital projects and to maintain the assets onboarded by these projects. An agency-wide needs assessment was documented, resulting in a detailed set of requirements for selection of new software systems to provide enhanced asset maintenance capabilities.



Enterprise asset management (EAM) software is used to manage the activities within the lifecycle of assets, both their physical movement and condition and their associated financial information to ensure that the organization's objectives with these assets are achieved. The EAM solution will maximize not only the availability of assets, but also their reliability and performance, resulting in a lower total cost of ownership. The system must be continually reviewed based on both internal change and external factors. The new Enterprise Asset Management system will be the platform that brings the financial and operational information of equipment and other enterprise assets into one place to allow the agency to make the best decision in managing assets.

### **Requirements**

DART has developed the following requirements including but not limited to:

- Implement asset nomenclature and data management standards;
- Implement whole-life investment programs to maintain asset performance;
- Develop a decision-making framework to assess asset life performance and costs;
- Adopt a systematic approach to asset risk management on focus of asset criticality;
- Improve efficiency and effectives of forecasting material requirements;
- Comply with MAP-21 and FTA mandates, and confirm with industry best practices such as PAS 55 and IS55001



### Status

The project involves a System Integrator familiar with the acquisition, configuration, and deployment of Cloud-based EAM solutions within transit environments similar in size and scope to DART. The Systems Integrator provides and manage a Software as a Service (SaaS) solution to assist DART in its efforts. Technology consulting services are utilized to perform the integrations from the DART legacy systems such as Trapeze and Lawson to the new EAM system. The project will be divided into phases. The Phase 0 pilot includes all activities required to convert rail signals assets into the new EAM system. Phase 1 and 1a includes the conversion of all other DART assets into the EAM system.

- Phase 0, Signals Pilot, Go Live date was July 18th. End user training started July 9th with completion on July 17th. The mobile devices for the Signal maintainers have arrived and final preparations are underway for migration to the production environment.
- Phase 1 design workshops for all the remaining asset groups began April 9th with a scheduled completion date of Sept 3rd for the design stage. After design comes build, test, train then deploy. Bi-monthly meetings are held with process owners and key stakeholders to discuss how EAM will improve our ability to plan work on assets and track total cost of ownership with reengineered business processes. Phase 1 is on track for a Go Live date of December 2020 for the remaining SPEAR assets and June 2021 for non-SPEAR assets.





### **Comprehensive Payment System (CPS)**

Total Budget\$ 15,000,000Funding Source(s)General Fund: \$15,000,000

### Project Description

A robust account-based payment solution which utilizes innovative technologies to streamline fare collection and provide customers with convenient and easy-to-understand methods for obtaining and purchasing fares throughout the DART service area.

Unwire was responsible for the development, implementation, and delivery of the mobile ticketing application and Unwire will be responsible for operation and maintenance of the mobile application following initial deployment.



DART engaged in a multi-year agreement with Vix Technology, a system integration firm in August 2015 to streamline DART's fare

payment environment by utilizing new innovative technologies. The goal of this project is to find better methods that permit customers to obtain and purchase fare media that is convenient and easy to understand.

This new solution incorporates an account-based back office system which utilizes best practices of modern technologies in the consumer and fare payment sectors, capable of interfacing with both bank and non-bank financial clearing systems for transaction processing and settlement. One goal of this solution is to allow DART to significantly reduce the total amount of physical cash that the agency must process. DART has determined that this can be accomplished by creating an electronic payment infrastructure for transportation and other services that is ultimately capable of being deployed region-wide, using third-party produced and distributed prepaid cards and



contactless devices such as smart cards, contactless bank cards, RFID tags, and Near Field Communication (NFC) enabled devices.

In addition to the system integrator selection, DART awarded a contract to PayNearMe (PNM) in April of 2016 to provide the retail distribution solution. PNM provides hundreds of retail locations within the DART Service Area for customers to

purchase and reload smart cards for use in the new account-based system. PNM partners include Blackhawk Network, which provides access to the largest grocery store network in the U.S. and Fidelity Express, which provides access to independent and small grocery operators.



DART embraced the concept of mobile payments and introduced a first-generation mobile ticketing and trip planning app in September 2013. In the interest of continuous improvement, DART elected to provide enhanced mobile ticketing capabilities (GoPass 2.0) as part of a larger platform being developed by Vix in conjunction with the mobile ticketing provider.

<u>Status</u>

DART made the following improvements to the GoPass app in Fiscal Year 2019:

January 2019:

- Introduced Apple Pay
- Launched GoPass 3.0 to incorporate the future GoLink booking and Bird Scooters

March 2019:

• Introduced UberPool and launched GoLink in all On Call zones

August 2019:

- Updated GoPass with a new app icon and white agency logos
- Introduced Google Pay

September 2019:

- UberPool was released to all GoLink zones
- eLerts "say something" web reporting in GoPass
- Filter stops and vehicle types in the map and trip planner





# Loop 12 Rail Station

 Total Budget
 \$ 12,000,000

 Funding Source(s)
 City of Irving: \$12,000,000

### Project Description

This station was planned and included in the approved environmental study for the Irving Corridor, but was deferred. It is expected that the City of Irving will fund the development of the station. During the Irving Corridor build-out, grade beams, clearing, grubbing, and some rough grading was completed.

Revenue service will be determined after an ILA with the City of Irving is executed.



### **Hidden Ridge Rail Station**

<u>Total Budget</u> \$ 12,000,000

Funding Source(s) City of Irving: \$ 3,200,000 Grant: \$8,800,000

### Project Description

This deferred light rail station will be constructed on the operating Orange Line and is fully funded by a grant and the City of Irving in accordance with the Interlocal Agreement executed on March 27, 2018

### <u>Status</u>

On October 30, 2018, an NTP was provided for professional services to complete system design and prepare bid documents. Completed bid documents were delivered in March 2019. On April 17, 2019, the RFP for construction services was issued.

Revenue Service is anticipated in May 2020.





# TRE Track Maintenance DFW Subdivision

Total Budget\$ 11,083,000Funding Source(s)General Fund: \$11,083,000

Project Description

Capital Maintenance of the TRE DFW Subdivision: a. Rail / Ties / Other Track Maintenance / Undercutting / Ballast; b. 21,648 Track Feet of Rail / 13,291 Ties / 21,595 Track Feet of undercutting.

<u>Status</u>

Scheduled for FY 2020.



# LRV HVAC Upgrade Project – 115 Cars

 Total Budget
 \$ 10,256,000

 Funding Source(s)
 General Fund: \$ 10,256,000

### Project Description

The production of R-22 refrigerant will cease in 2020 as a part of the US agreement to the Montreal Protocol and only recycled refrigerant will be available at substantially higher costs. Actual costs are unknown at this time. Fleets 50 thru 53 require HVAC upgrade to accommodate the green technology Freon.



### <u>Status</u>

DART staff is finalizing the SOW for the procurement of HVAC equipment upgrade on the older 115 LRVs.



# Capital Projects Summary Grouped by Mode Summarized by Maintenance and Expansion

The capital projects for FY 2020 and the twenty-year totals in the Plan have been summarized by categories. The category totals are provided for each transportation mode (bus, commuter rail, and agency-wide, etc.)

The following project categories were used:

- Guideway
- Passenger stations
- Administrative buildings
- Maintenance buildings
- Revenue vehicles

- Service vehicles (non-revenue)
- Fare revenue collection equipment
- Communications and information systems
- Other

Capital projects include equipment and furniture integral to buildings and structures.

### **Guideways**

This includes the costs for design and engineering, land acquisition and relocation, demolition, and purchase or construction of guideway. It also includes the buildings and structures dedicated for transit operations such as:

- Elevated and subway structures
- Tunnels and bridges
- Track and power systems for rail modes
- Paved highway lanes dedicated to fixed-route modes

Guideway does not include passenger stations and transfer facilities, bus pull-ins, or communication systems.

### Passenger Stations

Capital expenses for passenger stations include the costs for design and engineering, land acquisition and relocation, demolition, and purchase or construction of stations. Passenger stations include park-and-ride facilities.

### Administrative Buildings

Capital projects for administrative buildings include the costs for design and engineering, land acquisition and relocation, demolition, and purchase or construction.

Administrative buildings are the general administrative offices owned by the Agency.

### Maintenance Buildings

Capital expenses for maintenance buildings include the costs for design and engineering, land acquisition and relocation, demolition, and purchase or construction of the maintenance buildings. Maintenance buildings include garages, shops, operations centers, and equipment that enhance maintenance, such as diagnostic equipment.



#### **Revenue Vehicles**

Capital expenses for revenue vehicles include acquisition and major rehabilitation of the vehicles. The cost of the vehicle includes both the vehicle and all fixtures and appliances inside or attached to the vehicle. When equipment such as a farebox, radio, Automatic Vehicle Locator (AVL), or spare engine is included as part of the vehicle purchase, these items are part of the vehicle cost.

Capital funds for revenue vehicles include the following:

- Replacing a fleet the replacement of revenue vehicles having reached the end of their service lives
- Rebuilding a fleet the installation of new or rebuilt major components (e.g., engines, transmissions, body parts) and/or structural restoration of revenue vehicles to extend service life
- Overhauling a rail fleet the one-time rebuild or replacement of major subsystems on revenue producing rail cars and locomotives, commonly referred to as midlife overhaul
- Expanding a fleet the acquisition of revenue vehicles for expansion of transit Service

### Service Vehicles

Capital expenses for the acquisition or rebuilding of service vehicles. Service vehicles include supervisor vans, tow trucks, mobile repair trucks, transit police cars, and staff cars. The cost of the vehicle includes both the vehicle and all fixtures and appliances inside or attached to the vehicle.

### Fare Revenue Collection Equipment

Capital expenses for the acquisition or rebuilding of fare revenue collection equipment. Fare revenue collection equipment includes, validators and automated fareboxes and related software, and ticket vending machines.

### Communications and Information Systems

Capital for systems includes systems that process information, and communication systems that relay information between locations. A system is a group of devices or objects that form a network for distributing something or serving a common purpose (e.g., telephone, data processing systems). Communication systems include two-way radio systems between dispatchers and vehicle operators, cab signaling, and train control equipment in rail systems, AVL systems, automated dispatching systems, vehicle guidance systems, telephones, facsimile machines, and public-address systems.

Information systems include computers, monitors, printers, scanners, data storage devices, and associated software that support transit operations. Associated software may include general office, accounting, scheduling, planning, vehicle maintenance, nonvehicle maintenance, and customer service programs.



# <u>Other</u>

This group includes the capital expenses for other capital projects, including:

- Planning
- Studies

DART further categorizes expenditures as Maintenance (SGR) and Expansion (expansion of services). The 20-Year FY 2020 capital budget includes \$2.5 billion for expansion (the Silver Line and D2), and \$4.1 billion for maintenance/SGR.

Exhibit 19 provides the groups of summaries of all capital projects in the FY 2020 Plan.

Maintenance, Replacement and Improvement							
Category	FY 2020	20-year Total	External Funds	Operating Expense (Saving)			
Agency-Wide							
Administrative Building	\$6,460	\$92,388	\$0	\$0			
Communication/ Information Systems	18,006	306,883		1,015			
Fare Revenue Collection Equipment	1,751	2,010					
Maintenance Building	1,270	15,632					
Passenger Stations	3,240	6,230					
Revenue Vehicles	957	3,584					
Service Vehicles (non-revenue)	5,089	75,821					
Total Agency-Wide	\$36,774	\$502,547	\$0	\$1,015			
	Bus						
Communication/ Information Systems	\$1,632	\$11,451	\$0	\$0			
Fare Revenue Collection Equipment	467	42,026					
Guideway	0	6,792					
Maintenance Building	14,280	109,201					
Passenger Stations	2,333	7,223		-353			
Revenue Vehicles	4,811	1,020,429	80,217				
Total Bus	\$23,523	\$1,197,122	\$80,217	-\$353			
	Commuter Rai	1					
Communication/ Information Systems	\$11,378	\$44,341	\$21,607	\$1,000			
Guideway	35,027	209,018	91,539				
Maintenance Building	6,348	164,595	5,339				
Passenger Stations	4,064	10,024	524				
Revenue Vehicles	8,845	215,328	175,460				
Total Commuter Rail	\$65,661	\$643,306	\$294,469	\$1,000			

# Exhibit 19 Capital Projects Summary (in thousands)



Category	FY 2020	20-year Total	External Funds	Operating Expense (Saving)
	LRT			
Communication/ Information Systems	\$5,659	\$98,843	\$0	\$0
Fare Revenue Collection Equipment	0	49,933		
Guideway	13,842	101,818		
Maintenance Building	18,096	86,982		
Passenger Stations	55,975	172,459	81,557	-883
Revenue Vehicles	663	1,061,667		
Service Vehicles (non-revenue)	721	13,539		
Total LRT	\$94,957	\$1,585,242	\$81,557	-\$883
Paratransit	FY 2020	20-year Total		
Administrative Building	\$170	\$170	\$0	\$0
Maintenance Building	219	5,681		
Total	\$389	\$5,851	\$0	\$0
	Streetca	r		
Revenue Vehicles	\$93	\$1,304	\$1,304	\$0
Total Streetcar	\$93	\$1,304	\$1,304	\$0
	Road Improve	ement		
Total Guideway Road Improvement	\$14,870	\$44,835	\$0	\$0
Total Maintenance, Replacement and Improvem	\$236,266	\$3,980,207	\$457,547	\$779
	Non-Operat	ing		
Total Other	\$4,966	\$35,331	\$0	\$0
	Expansio	on		
Category	FY 2020	20-year Total	External Funds	Operating Expense (Saving)
	LRT			
Guideway	\$82,970	\$1,400,385	\$300,000	\$3,093
Guideway	Commuter I		\$300,000	\$5,095
Crithmen	\$251,595		¢178.002	¢17.100
Guideway		\$1,136,795	\$178,002	\$17,199
	Streetcar			
Guideway	\$7,566	\$102,994	\$55,000	\$3,200
Total Expansion	\$342,130	\$2,640,174	\$533,002	\$23,492
	ditional Capital-R			
Total Capital P&D, Start-up Costs	\$13,979	\$312,497	\$0	\$0
Grand Total	\$597,342	\$6,968,210	\$990,549	\$24,271

Exhibit 19 Capital Projects Summary (in thousands) (cont.)



### **Debt Program**

### Background

On January 23, 2001, the Board approved a Master Debt Resolution which authorized DART to pledge its sales tax revenues for Senior Lien Debt (Bonds) and Senior Subordinate Lien Debt (Commercial Paper).

*Bonds* – With the passage of a bond referendum in August, 2000, DART received voter authorization to issue up to \$2.9 billion of solely pledged Senior Lien sales tax-backed long-term debt (sales tax bonds). A change to DART's enabling legislation was enacted during 2009 allowing DART to pledge multiple revenue sources as a first lien on Senior Lien Long-Term Bonds (multi-revenue bonds). This was confirmed by a bond validation suit in 2012. This change allows DART to issue more than \$2.9 billion in long-term debt, provided that the bonds are backed by multiple revenue sources.

*Commercial Paper* – The Board has authorized the issuance of up to \$200 million in Commercial Paper (CP) notes, backed by self-liquidity, for capital acquisition purposes. A requirement of the self-liquidity program is that DART maintains at least 2.0 times the debt service coverage amount for the notes and ensures that no more than \$35 million of the notes mature within five days.

### Debt Program Structure

DART's two-tiered debt structure program is designed to meet capital funding requirements and to provide flexibility to meet changing debt market conditions. The commercial paper program is issued to meet temporary capital funding requirements and to access variable interest rates when the financial markets dictate that strategy to be advantageous. Long-term bonds are used as the ultimate capital financing instrument for long-lived assets such as buildings and rail lines.

As of September 30, 2019, DART will have approximately \$3.16 billion in bonds outstanding, as well as \$159.2 million in CP.

### Debt Program Implementation

*Commercial Paper* – DART will retire all currently outstanding commercial paper by 2022, but will issue \$227 million (to be replaced by long-term debt in 2026) during the next four years to support the major capital projects under way. Additional issuances will begin in 2025 to provide the initial funding for DART's bus fleet replacement, totaling \$400 million, which will be repaid by 2037.

Short-term interest rates are expected to average 2.50% in 2019, and to remain in the 3.25% - 3.50% range during the remainder of the Plan.

*Long-Term Bonds* – DART believes a sound debt program should have a combination of fixed and variable-rate debt. DART plans to have no more than 15% of its debt in variable-rate products. The variable-rate debt can either be short-term or long-term. DART has never issued variable rate



long-term debt and has no current plans to do so. However, the market will be analyzed for each future debt issuance and either fixed-rate or variable-rate debt may be issued depending on which type of debt is in the best interest of DART at that time.

In the next ten years, DART anticipates issuing \$3.13 billion in support of the Program of Interrelated Projects (Core Capacity Program), the Silver Line, and other capital projects. Beyond that, \$300 million of debt is planned in 2039 to fund the replacement/refurbishment of the first light rail fleet (95 vehicles).

Exhibit 20 summarizes the major commercial paper and long-term debt assumptions. The exact timing, nature, and amounts of long-term debt issuances may be adjusted from Financial Plan estimates depending on interest rates and other considerations, as determined at the time of issuance.

	Commercia	l Paper (CP)	Long-Term Debt (LTD)		
Description	2020	Future	2020	Future	
	Rolling for up	Rolling for up			
Term	to 7 years	to 11 years	None	Up to 39 years	
Interest rates + fees	3.50%	2.25 - 3.25%	None	5.00% - 5.50% Fixed Rate	
Principal Repayment	\$30M	All outstanding (Self-Liquidity) CP will be retired by 2022	None	Multiple Debt Structures	
Net CP* / Total Long-Term Debt issued**	\$45M	(\$159M)	\$395M	\$3.3B	
End of Year Debt/Maximum Outstanding	\$204M	\$400M	\$3.4B	\$5.6B	
Year of maximum debt outstanding	n/a	FY 2029-31	n/a	FY 2028	
Cash reserves required?	Yes****	Yes****	No	No	
Uninsured Debt Rating assumed	A-1+/P-1	A1+/P1	AA-/Aa2	AA-/Aa2	

### Exhibit 20 FY 2020 Financial Plan Debt Assumptions

\*The amounts shown on this line related to commercial paper issuance are the net amount of issuances and retirements.

\*\*Amounts are for issuances between 2020 and 2039 and are at par value.

\*\*\*See page 60 for further discussion.

\*\*\*\* For self-liquidity program only.

*Build America Bonds (BABs) and Federal Budget Cuts* – In 2009 and 2010, DART issued a combined \$1.56 billion in taxable Build America Bonds. As a part of this program, the Federal government agreed to subsidize 35% of the interest expense. In 2019 DART refunded \$362,645,000 Series 2009 bonds, leaving \$1.2 billion outstanding. As part of the federal budget sequester cuts which took effect on March 1, 2013, the federal government reduced the subsidy to be paid to DART. From 2013 to 2019, the expected subsidy was reduced by a total of \$13.6 million. These reductions are scheduled to last through 2023. Projecting future reductions based



on the 2019 reduction percentage of 6.2%, an additional \$5.6 million of anticipated subsidy will not be received. That will result in a total estimated subsidy reduction of \$19.2 million over the 10-year period of the sequester.

### Debt Service Costs (lines 28 - 33 of the Financial Plan)

Exhibit 21 illustrates debt service costs for all existing and projected debt issuances contained in the FY 2020 Financial Plan. Interest expense payments are shown net of the (BABs) subsidy, thus showing only DART's net interest cost.

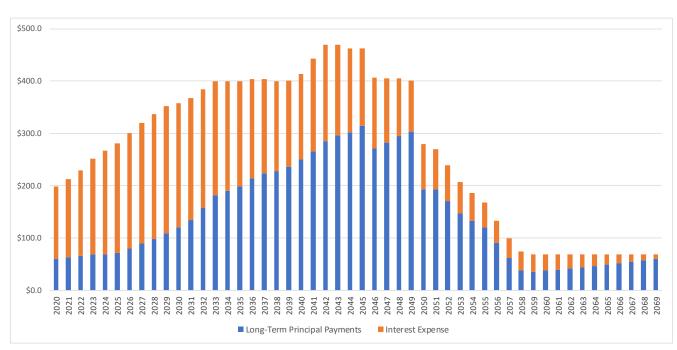


Exhibit 21 FY 2020 Financial Plan Principal and Interest Payments (in Millions)



Exhibit 22 shows the interest rate assumptions contained in the FY 2020 Financial Plan.

	Commercial	30-Year Fixed	Interest
Year	Paper Rate	Rate Bonds	Income rate
2020	2.25%	5.00%	2.75%
2021	3.00%	5.00%	3.65%
2022	3.25%	5.00%	3.90%
2023	3.25%	5.00%	3.90%
2024	3.25%	5.25%	3.90%
2025	3.25%	5.25%	3.90%
2026	3.25%	5.25%	3.90%
2027	3.25%	5.25%	3.90%
2028	3.25%	5.25%	3.90%
2029	3.25%	5.50%	3.90%
2030	3.25%	5.50%	3.90%
2031	3.25%	5.50%	3.90%
2032	3.25%	5.50%	3.90%
2033	3.25%	5.50%	3.90%
2034	3.25%	5.50%	3.90%
2035	3.25%	5.50%	3.90%
2036	3.25%	5.50%	3.85%
2037	3.25%	5.50%	3.85%
2038	3.25%	5.50%	3.85%
2039	3.25%	5.50%	3.85%

Exhibit 22 Interest Rate Assumptions 2020 – 2039

# Additional Debt Service Exhibits

A schedule of DART's annual debt service for the life of all existing long-term debt is included in Exhibit 107. Exhibit 108 is a history of DART's long-term bond issuance credit ratings. Exhibit 109 shows DART's weighted average interest rate. These exhibits are in the *Reference Section* of this document.



# SUPPLEMENTAL FINANCIAL INFORMATION

# Net Increase (Decrease) in Cash and Change in Balance Sheet Accounts (lines 35-36 of the Financial Plan)

Based on each year's programmed sources and uses of funds, DART has projected its Balance Sheet for each of the next twenty years. These line items reflect the net change in cash and non-cash balance sheet accounts. The Change in Balance Sheet Accounts line item is used as a compensating factor for the lag between the occurrence of an accounting transaction, which affects the balance sheet, and the actual receipt or disbursement of cash. DART's projected Balance Sheet for each of the twenty years of the Financial Plan is included in Exhibit 23.

Line	Description	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
	ASSETS										
	CURRENT ASSETS										
1	Cash and cash equivalents & Investments	\$756.0	\$549.7	\$627.0	\$616.5	\$623.6	\$611.4	\$563.0	\$527.7	\$501.0	\$454.4
2	Sales taxes receivable	109.3	113.7	119.4	126.5	132.9	138.2	142.3	142.4	148.2	155.6
3	Transit revenue receivable, net	3.0	3.1	3.5	3.5	3.6	3.8	3.9	3.9	4.3	4.3
4	Due from other governments	16.7	15.2	26.7	21.3	19.1	9.1	10.3	12.2	12.1	12.6
5	Material and supplies inventory	37.3	38.2	39.1	40.0	40.9	41.9	42.8	43.8	44.8	45.8
6	Prepaid Expenses	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
7	TOTAL CURRENT ASSETS	\$925.4	\$722.8	\$818.6	\$810.8	\$823.0	\$807.4	\$765.4	\$732.9	\$713.2	\$675.7
8	Notes Receivable & Investment in Joint Venture	\$12.8	\$9.4	\$6.9	\$5.1	\$3.8	\$2.8	\$2.0	\$1.5	\$1.1	\$0.8
9	Property, Plant & Equipment, Net	4,763.9	5,380.1	5,887.3	6,277.9	6,417.8	6,631.9	6,640.9	6,831.1	6,907.8	6,756.3
10	Restricted Assests held to pay Capital Lease Liabilities	118.7	121.2	123.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	Unamortized debt issuance costs and other	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	Deferred Outflows of Resources	40.0	38.9	37.9	37.0	36.0	35.1	34.3	33.4	32.6	31.8
13	TOTAL ASSETS AND DEFERRED OUTFLOWS	\$5,861.0	\$6,272.7	\$6,874.7	\$7,131.1	\$7,280.9	\$7,477.5	\$7,442.9	\$7,599.2	\$7,655.1	\$7,464.9
	LIABILITIES AND EQUITY										
	CURRENT LIABILITIES										
14	Accounts payable and accrued liabilities	\$208.3	\$263.2	\$248.5	\$230.9	\$189.9	\$206.7	\$172.5	\$209.1	\$192.4	\$154.9
15	Commercial Paper notes payable	204.2	242.2	239.2	227.0	227.0	347.0	240.0	300.0	350.0	400.0
16	Current portion of Long-term Debt Payable	60.0	62.7	65.4	68.4	72.7	76.1	85.4	94.2	102.9	114.9
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	Retainage payable	32.0	58.2	65.6	56.9	42.6	35.8	30.8	30.2	33.4	20.0
18	TOTAL CURRENT LIABILITIES	\$504.5	\$626.4	\$618.7	\$583.1	\$532.1	\$665.6	\$528.7	\$633.5	\$678.7	\$689.8
19	Senior Lien Sales Tax Revenue Bonds Payable	\$3,499.8	\$3,847.9	\$4,396.3	\$4,807.2	\$5,022.5	\$5,196.4	\$5,384.0	\$5,539.8	\$5,636.8	\$5,521.9
20	Net Pension Liability	53.4	49.9	45.9	41.4	36.4	30.8	24.8	17.8	10.3	2.3
21	Net OPEB Liability	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
22	Capital Lease Liabilities	118.7	121.2	123.6	0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
23	TOTAL LIABILITIES AND DEFERRED INFLOWS	\$4,181.1	\$4,650.2	\$5,189.3	\$5,436.5	\$5,595.8	\$5,897.6	\$5,942.3	\$6,195.9	\$6,330.6	\$6,218.8
24	NET ASSETS (EQUITY)	\$1,679.8	\$1,622.6	\$1,685.4	\$1,694.7	\$1,685.1	\$1,579.8	\$1,500.6	\$1,403.4	\$1,324.5	\$1,246.1
25	TOTAL LIADILITIES & NET ACCETS	¢5 961 0	\$6,272.7	\$6,874.7	67 121 1	\$7,280.9	¢7 477 5	\$7.442.0	\$7,599.2	\$7,655.1	\$7.464.0
25	TOTAL LIABILITIES & NET ASSETS	\$5,861.0	\$0,272.7	<b>\$0,874.7</b>	\$7,131.1	\$7,280.9	\$7,477.5	\$7,442.9	\$7,599.2	\$7,055.1	\$7,464.9

# Exhibit 23 FY 2020 Financial Plan 20-Year Balance Sheet (in Millions – Inflated Dollars)



Line	Description	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
	ASSETS										
	CURRENT ASSETS										
1	Cash and cash equivalents & Investments	\$447.4	\$483.1	\$455.1	\$433.7	\$428.9	\$387.0	\$389.6	\$387.9	\$461.3	\$520.8
2	Sales taxes receivable	164.9	173.2	180.1	185.5	185.5	192.9	202.6	214.7	225.4	234.5
3	Transit revenue receivable, net	4.4	4.7	4.8	4.8	5.2	5.3	5.4	5.8	5.9	6.0
4	Due from other governments	10.4	9.1	8.3	8.6	8.3	8.3	8.3	8.3	10.1	10.1
5	Material and supplies inventory	46.8	47.8	48.8	49.9	51.0	52.1	53.2	54.3	55.4	56.6
6	Prepaid Expenses	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
7	TOTAL CURRENT ASSETS	\$676.8	\$720.9	\$700.1	\$685.5	\$681.9	\$648.6	\$662.0	\$673.9	\$761.1	\$830.9
8	Notes Receivable & Investment in Joint Venture	\$0.6	\$0.4	\$0.3	\$0.2	\$0.2	\$0.1	\$0.1	\$0.1	\$0.1	\$0.0
9	Property, Plant & Equipment, Net	6,568.2	6,358.7	6,178.7	5,980.1	5,752.5	5,538.3	5,306.4	5,219.8	5,158.0	5,271.9
10	Restricted Assests held to pay Capital Lease Liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	Unamortized debt issuance costs and other	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2
			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	Deferred Outflows of Resources	31.1	30.3	29.6	28.9	28.3	27.6	27.0	26.4	25.8	25.3
13	TOTAL ASSETS AND DEFERRED OUTFLOWS	\$7,277.0	\$7,110.7	\$6,908.9	\$6,695.0	\$6,463.0	\$6,214.9	\$5,995.7	\$5,920.5	\$5,945.2	\$6,128.3
	LIABILITIES AND EQUITY										
	CURRENT LIABILITIES										
14	Accounts payable and accrued liabilities	\$151.8	\$151.5	\$160.4	\$161.2	\$160.1	\$166.5	\$167.1	\$197.7	\$206.3	\$242.1
15	Commercial Paper notes payable	400.0	400.0	350.0	300.0	250.0	150.0	50.0	0.0	0.0	0.0
16	Current portion of Long-term Debt Payable	125.1	140.0	163.1	186.7	194.9	204.0	213.2	222.8	227.5	236.4
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	Retainage payable	9.7	7.6	8.1	8.9	7.5	7.2	7.3	12.8	20.1	28.5
18	TOTAL CURRENT LIABILITIES	\$686.6	\$699.1	\$681.5	\$656.8	\$612.6	\$527.7	\$437.6	\$433.3	\$454.0	\$507.0
19	Senior Lien Sales Tax Revenue Bonds Payable	\$5,396.8	\$5,256.8	\$5,093.7	\$4,907.0	\$4,712.1	\$4,508.1	\$4,294.9	\$4,072.1	\$3,844.5	\$3,708.1
20	Net Pension Liability	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	Net OPEB Liability	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
22	Capital Lease Liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	TOTAL LIABILITIES AND DEFERRED INFLOWS	\$6,088.2	\$5,960.7	\$5,780.0	\$5,568.6	\$5,329.5	\$5,040.6	\$4,737.3	\$4,510.2	\$4,303.3	\$4,219.9
24	NET ASSETS (EQUITY)	<b>\$1,188.8</b>	\$1,150.0	<b>\$1,128.9</b>	\$1,126.4	\$1,133.6	\$1,174.3	<b>\$1,258.4</b>	<b>\$1,410.3</b>	\$1,641.9	\$1,908.4
25	TOTAL LADITITICS & NET ASSETS	¢7 277 0	\$7 110 7	¢< 0.00 0	\$6 (05 0	\$6.462.0	\$6.214.0	\$5.005.7	\$5.020.5	\$5.045.2	\$ ( 129 2
25	TOTAL LIABILITIES & NET ASSETS	\$7,277.0	\$7,110.7	\$0,908.9	\$6,695.0	\$6,463.0	\$6,214.9	ə <b>ə</b> ,995.7	<b>\$5,920.5</b>	\$5,945.2	\$6,128.3

Exhibit 23 FY 2020 Financial Plan 20-Year Balance Sheet (in Millions) (continued)

# Cash Reserves and Restricted Funds (line 38 of the Financial Plan)

DART maintains several cash reserves. Financial Standard G-5 requires a Master Insurance Reserve for claims and Board liability exposure. This fund is expected to have a balance of approximately \$12.2 million on September 30, 2019.

Financial Standard G-7 requires that sales tax collections that exceed budget during a fiscal year be placed in a "Financial Reserve" account. Once this fund balance reaches \$50 million, all additional funds will be placed in a Mobility Assistance and Innovation Fund (MAIF) account. The Financial reserve and MAIF may be used for any purpose, subject to an affirmative vote of two-thirds of the appointed and qualified Board members. This line item represents the projected end-of-year value. The Financial Reserve is at \$50 million so all future sales tax excesses will be placed in the MAIF.

DART has pledged up to \$10 million of the Financial Reserve Fund as collateral on a defeased lease transaction with Comerica. This amount will decrease over time until it reaches zero in December 2023.



### Less Advance Funding/Reserve (Core Capacity) (line 39 of the Financial Plan)

DART received advance funding in the amount of \$60 million from TxDOT in 2015 in support of the Core Capacity program. These funds are kept as restricted funds until qualifying core capacity expenditures are made. At that time, the general fund is reimbursed for those expenditures and the restricted fund amount is reduced accordingly. All is expected to be drawn down by the end of 2020.

### Working Cash Requirements (line 40 of the Financial Plan)

Financial Standard G-6 states "since sales taxes are received on a monthly basis, the unrestricted cash balance at the end of the year shall not be less than one-twelfth of the difference between the subsequent year's total sources of cash (excluding sales taxes) and total uses of cash as projected in the Financial Plan." For an improved safety margin, the Financial Plan maintains this cash balance to a minimum 90 days' worth of operating expenses (as opposed to 30 days required by policy). This line item represents the projected end-of-year value.

### Mobility Assistance and Innovation Fund (line 41 of the Financial Plan)

In accordance with Financial Standard G-7, once the Financial Reserve Fund balance reaches \$50 million, all sales taxes in excess of budget are placed in a Mobility Assistance and Innovation Fund Reserve. The balance in that reserve as of September 30, 2019 will be approximately \$10.1 million. Any excess sales tax revenues over the FY 2019 budget will be added to this reserve on or before December 31, 2019. Note that the approved FY 2018 Financial Plan reflected the use of \$20 million of these funds for the acceleration of the Silver Line commuter rail project.

### Unrestricted Cash (Net Available Cash) (line 42 of the Financial Plan)

This line item represents the projected end-of-year value and is the bottom-line check regarding the long-term affordability of DART's programs. As long as this value is positive, the Financial Plan is affordable, given the assumptions used to build the Plan. In the FY 2020 Financial Plan, the minimum value of Unrestricted Cash is \$133.9 million, occurring in 2035. This amount is in addition to the reserves described in the previous paragraphs and as such, represents DART's unprogrammed cash balance. DART's minimum total cash on hand inclusive of all reserves and restricted funds is projected at \$439.1 million in 2035.

DART looks at Unrestricted Cash and the internal and external coverage ratios as critical components of affordability analysis. Every decision that is made, as well as every change to a Financial Plan assumption or estimate, is made with consideration of the effect on the overall affordability of the Plan.



### Coverage Ratios (lines 43-44 of the Financial Plan)

Financial Standard D-7 requires DART maintain a debt coverage ratio (the External Coverage Ratio) such that Gross Sales Tax Revenues must be at least two times the amount of annual Debt Service. This is the standard DART is held to by the financial marketplace and in its own external debt documents. In those documents, DART agrees that it will not issue additional debt when it does not comply with this standard. In the FY 2020 Financial Plan, the lowest external coverage value is 2.52in 2028.

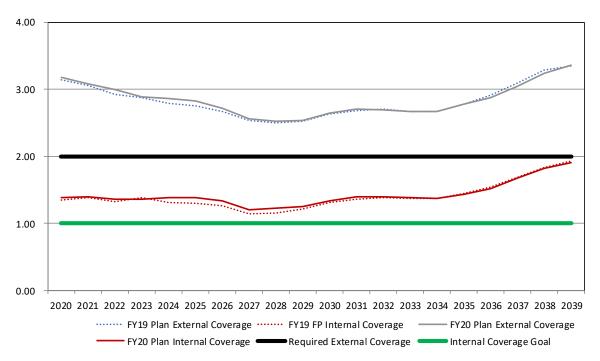
DART also has a goal to maintain another coverage ratio – the Internal Coverage Ratio. Standard D-7 states, "It is a goal of DART that for financial planning purposes, for long-term debt, sales tax revenues plus operating revenues, plus interest income, less operating expenses (excluding debt service and depreciation), for any twelve consecutive months of the prior eighteen months, must be sufficient to cover maximum annual debt service (ratio greater than 1.0). The FY 2020 Financial Plan meets this standard for all years, with a minimum value of 1.22 in 2027. Exhibits 24 and 25 compare the projected annual values of the internal and external coverage ratios from the FY 2019 Plan to those in the FY 2020 Plan. The reduced coverage ratios in the later years are primarily a result of new debt service for D2.



	FY1	9 FP	FY	20 FP	Vari	ance
	External	Internal	External	Internal	External	Internal
Year	Coverage	Coverage	Coverage	Coverage	Coverage	Coverage
2020	3.14	1.35	3.17	1.39	0.03	0.04
2021	3.06	1.39	3.08	1.40	0.02	0.01
2022	2.92	1.32	3.00	1.36	0.08	0.04
2023	2.88	1.38	2.88	1.36	0.01	(0.02)
2024	2.79	1.31	2.86	1.38	0.07	0.07
2025	2.76	1.30	2.82	1.38	0.07	0.08
2026	2.67	1.26	2.72	1.34	0.05	0.08
2027	2.53	1.15	2.56	1.20	0.02	0.05
2028	2.51	1.15	2.52	1.22	0.02	0.07
2029	2.52	1.22	2.53	1.25	0.01	0.03
2030	2.64	1.31	2.65	1.34	0.01	0.03
2031	2.68	1.36	2.71	1.39	0.03	0.03
2032	2.70	1.39	2.70	1.40	(0.00)	0.01
2033	2.67	1.38	2.67	1.38	(0.00)	0.01
2034	2.67	1.38	2.67	1.37	(0.00)	(0.01)
2035	2.78	1.44	2.77	1.43	(0.00)	(0.01)
2036	2.92	1.55	2.88	1.51	(0.04)	(0.03)
2037	3.09	1.68	3.05	1.67	(0.04)	(0.01)
2038	3.29	1.83	3.24	1.82	(0.05)	(0.02)
2039	3.35	1.93	3.36	1.91	0.01	(0.02)

Exhibit 24 Projected Coverage Ratio Comparison





### **Funds and Fund Balances**

DART's cash balances are contained in the following funds:

### General Operating Fund

The primary objective of investment strategies for the operating fund is liquidity achieved by matching investment maturities and income stream with anticipated cash flows. The majority of funds are placed in short-term or readily marketable securities with emphasis on high-grade commercial paper and government agencies. Local government investment pools are used to provide diversity and facilitate daily funding of cash outflows.

The average maturity of this portfolio shall not exceed two years; the maximum maturity for any single holding shall not exceed five years. Yield enhancing techniques applied to a core segment of this portfolio may include the use of Treasury notes in the two to three-year area which can be purchased for yield and held for possible capital gains, and intermediate-term agencies with short-call provisions offering a spread to comparable Treasuries.

### DART Commercial Paper System Expansion & Acquisition Fund

Currently dormant, this fund will be reactivated when additional commercial paper is issued for new capital projects. Deposits in this fund are generally held less than ninety days between the sale of DART's commercial paper and contract payments for the financed capital projects. To provide the short-term liquidity required, investments are limited to money market instruments, such as money market mutual funds or local government investment pools, commercial paper, discount agencies, or repurchase agreements, with maturities matched to check payment dates where feasible. The average maturity for this fund is up to 90 days, with a maximum maturity of 180 days.

### Financial Reserve Fund

The investment goal of capital preservation is primary for this fund, which will be accessed in the event of a downturn in sales tax receipts, unanticipated capital overruns, or other financial difficulties. The need for liquidity is low. To maximize yield while maintaining a relatively stable market value, this portfolio will use an investment strategy of normally placing securities evenly spaced over a one- to five-year maturity range, commonly referred to as a ladder maturity structure, to ensure consistent availability of current funds for reinvestment or cash flow requirements. Securities will be evaluated on a risk-return basis, with bond swaps used to take advantage of market anomalies while maintaining market quality and structure. The average maturity of this portfolio is four years or less with ten years as the maximum maturity for any single holding.

### Insurance Reserve Fund

DART's self-insurance program for liability and workers' compensation claims requires the preservation of assets to ensure funding capability. The reserve amount required will vary on a yearly basis as new claims offset claims payments. The fund will be adjusted no less frequently than yearly to reflect the appropriate level, upon approval of the Investment Officers, and after consultation with Risk Management. The lack of liquidity requirements in this fund allows for an



average maturity of four years or less, with a maximum maturity for any single holding of ten years. Capital preservation is valued above yield, but the stable balance and minimal cash outflow permits a higher level of interim market price volatility than in other DART portfolios.

## Senior Lien Debt Service Funds

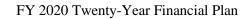
The long-term bond program requires the establishment of two reserve funds: an interest fund and a principal fund. These funds will be used to make payments directly to bond investors as needed during the month. The investment objective of these two funds is to provide sufficient liquidity to meet the payment requirements and to minimize market and credit risk. To meet this investment objective, investments will be limited to money market mutual funds that invest in short-term securities that are issued or guaranteed by the U.S. government or U.S. government agencies, or direct obligations of the U.S. government and its agencies with maturities closely matched to specific payment requirements. The average maturity of the interest fund shall not exceed six months, with a maximum maturity of six months. The average maturity of the principal fund shall not exceed one year with a maximum maturity of one year.

### Senior Subordinate Lien Debt Service Funds

The commercial paper program requires the establishment of two reserve funds: an interest fund and a principal fund. These funds will be used to make payments directly to commercial paper investors as needed during the month. The investment objective of the two funds is to provide sufficient liquidity to meet the payment requirements and to minimize market and credit risk. To meet this investment objective, investments will be limited to money market mutual funds that invest in short-term securities that are issued or guaranteed by the U.S. government or U.S. government agencies, or direct obligations of the U.S. government and its agencies with maturities closely matched to specific payment requirements. The average maturity of these funds shall not exceed 90 days, with a maximum maturity of one year.

### Mobility Assistance and Innovation Fund

In order to provide funding for initiatives that enhance the quality and affordability of public transportation, DART will maintain a Mobility Assistance and Innovation Fund. The liquidity need of this fund is 20%. To maximize yield while maintaining a relatively stable market value and the desired liquidity component, this portfolio will use a two-tiered investment strategy. The liquidity needs will be invested evenly, 50% in the 1 to 6 month and 50% in the 6 to 12-month maturity range. The remainder of the portfolio will be invested by placing securities evenly spaced over a two to five-year maturity range, commonly referred to as a ladder maturity structure, to ensure consistent availability of current funds for reinvestment or cash flow requirements. Securities will be evaluated on a risk return basis, with bond swaps used to take advantage of market anomalies while maintaining market quality and structure. The portfolio allows for an average maturity of four years or less with ten years as the maximum maturity for any single holding.



# DART Bond System Expansion & Acquisition Fund

Currently dormant, this fund will be reactivated when additional bonds are issued for new capital projects. The Bond proceeds in this fund are held up to 36 months between the sale of DART's long-term bonds and contract payments to finance capital projects. The investment goals in this fund will be to provide capital preservation, liquidity needs, and investment return. To meet the investment goals, investments will be in high grade corporate and government/agency instruments and local government investment pools. The investments purchased will have maturities that match forecasted payments. The average maturity for this fund is up to 30 months, with a maximum maturity of 36 months.

# Regional Toll Road (RTR), Streetcar, and Toyota Funds

The deposits in these funds are provided by state, local governments, or other entities for specific projects. Preservation of capital and liquidity are the paramount investment objectives of these funds. Therefore, the deposits in these funds will be invested in AAA or United States Treasury money market funds. The average maturity will be one day, with a maximum maturity of one day.

### Platform Fund

Amounts in this fund are held between their receipt from the Texas Mobility Fund and contract payments to finance the Platform Extension project in the future. The investment goals in this fund are to provide capital preservation and liquidity needs. To meet the investment goals, investments will be in high-grade corporate and government/agency instruments and money market mutual funds instruments. The investments purchased will have maturities that match forecasted payments. The average maturity for this fund is up to 30 months, with a maximum maturity of 36 months.

Exhibit 26, shown on the following page, summarizes projected cashflows into and out of each fund for FY 2019 and FY 2020.





Exhibit 26 provides an illustration of fund cashflows.

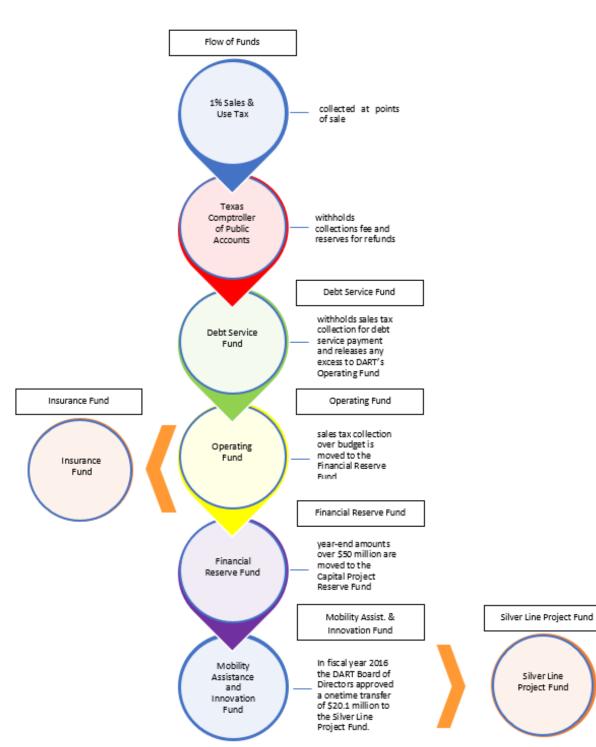


Exhibit 26 Cashflow Chart



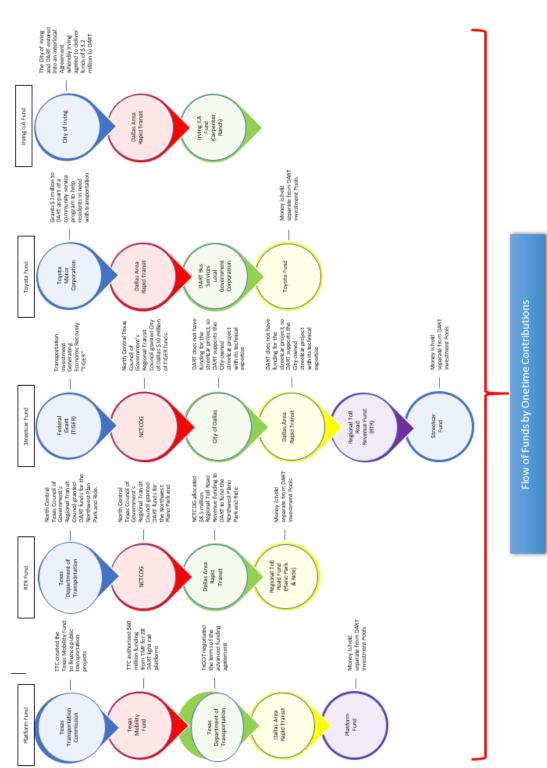


Exhibit 26 Cashflow Chart (cont.)



### MAJOR FINANCIAL PLAN ASSUMPTIONS

### Sources of Funds

- The FY 2020 Twenty-Year Financial Plan contains an economic cycles approach to sales tax forecasting instead of a roughly straight-line approach used in financial plans prior to 2016. Actual sales tax revenues have been over budget for each of the last seven years since bottoming in FY 2010, but are projected to be on budget in FY 2019. In addition to a rebounding economy during that time period, DART has benefitted from expanded alcohol sales in the City of Dallas (approved by voters in 2011) and the inclusion of sales tax collections from Amazon beginning on July 1, 2012, based on a settlement agreement between Amazon and the State Comptroller. DART expects to conclude FY 2019 with \$628.1 million in sales tax receipts. That would equate to 5.5% growth over FY 2018 receipts and 5.7% average annual growth over the last seven years. The FY 2020 Financial Plan calls for a zero-growth year in FY 2020 (as compared to the FY 2019 budget). These zero-growth years are then incorporated every seven years (FY 2027 and FY 2034). The average annual growth rate of the 20-year life of the Plan is 3.9%. See page 133 for additional discussion of DART's process for sales tax projections.
- The DART Board approved a fare structure amendment on February 13, 2018. The fare structure amendment meets the financial commitment in the Twenty-Year Financial Plan and complies with Board-adopted Policy. The amendment made changes to some of the passes and programs offered by DART, as well as change to DART fares. The timing of the changes generally coincides with the implementation of the new payment system.
- Fare revenues are based on an estimated average fare and ridership projections for each mode of service. As fare increases are implemented, reductions in fixed-route ridership are programmed into the Plan, netting against the normal projected ridership growth rate for that year to determine the net ridership change. The fare increase affects all fixed-route modes in a similar manner. Future service level decisions on all modes will also impact future ridership projections.
- Ridership over the next few years will be affected by several different factors, including service changes. Over the last several years, bus ridership has been declining and rail ridership has been stagnant once new line segment openings have been factored out. Ridership information for each mode follows:
  - With the installation of Automatic Passenger Counters (APCs) in the bus fleet, it has become clear (as it did earlier with the LRT results) that ridership has been significantly higher (approximately 23% for bus service) than reported in the past. All projections have been adjusted accordingly. Ridership is projected to grow 0.75% in FY 2020 and grow similarly in each of the next five years. As mentioned earlier, DART built \$12.5 million in additional annual bus service into the Plan ending in FY 2020 as a result of the implementation of the recommendations from the Comprehensive Operations Analysis (COA). This represents a 4-5% increase in service so any losses in ridership due to the recent fare increase are expected to be offset by the gains from the additional service.



- Light Rail Ridership (including Streetcar) is projected to grow by less than 1% per year over the next five years. This incorporates the negative impact of the fare increase and slow growth thereafter.
- TRE ridership for 2020 is expected to remain steady at the 2.0 million passengers currently projected for 2019.
- Paratransit ridership is expected to increase by 2.5% annually over the life of the FY 2020 Financial Plan after 2026, when the current contract period ends. FY 2020 ridership levels are projected at 876,000.
- Vanpool ridership was below budget for several years due in part to low gasoline prices and poor service from the vanpool contractor. The contractor was changed in



late 2015 and demand increased. Ridership is projected to be 645,000 passenger trips in FY 2020, and to remain flat thereafter. Vanpool riders do not pay fares in the traditional sense and therefore ridership is not negatively impacted by future fare increases.

- Miscellaneous operating revenues are generally programmed to grow by inflation each year.
- The Federal Reserve had been increasing interest rates slowly, but recently has reversed the direction of changes. In the future, assuming no recession hits, small upward increases are anticipated each year. DART projects an interest income rate of approximately 3.00% for FY 2020 (varies by fund). As interest rates inevitably increase, it is expected that traditional spreads between commercial paper rates and interest income rates will also return. Investment portfolio yields are expected to increase to 4.2% in 2021, but then drop to 3.90% until 2035, with 3.85% thereafter.
- DART expects to receive \$81.32 million in Federal Formula allocations for Capital Preventive Maintenance, Fixed Guideway Modernization, Bus & Bus Facilities, Transit Enhancement and Security project funds in 2020. This includes DART's annual formula fund allocation plus the rollover of unspent funds that were allocated in prior years. Per Financial Standard B-10, these funds are to be programmed at the most recent known allocation throughout the life of the Plan and not increased, despite a history of growth. The current annual allocation of formula funds is \$80.6 million. An exception is made for formula funds that will be generated by the opening of the Silver Line in 2022. Funding lags two years so DART anticipates an increase of \$2.3 million in formula funds for Silver Line operations that begin in 2022.
- Congestion Mitigation/Air Quality (CMAQ) or Texas Mobility Funds (TMF) in the amount of \$15.0 million is programmed to be received in FY 2020. No additional CMAQ or TMF funds are included in the Financial Plan beyond that year. As additional funds become available and projects are identified to access these funds, additional CMAQ and/or TMF funds will be programmed into the Plan.
- Over the life of the Financial Plan, CMAQ and federal discretionary funding represents just over 11% of DART's \$6.66 billion 20-year capital program. Beyond already existing



discretionary grants, DART has assumed mainly the following federal participation in future programs:

- \$409 million is assumed to be received between 2020 and 2023 for the Program of Interrelated Projects (Core Capacity Program);
- \$124.0 million for Silver Line Rail scheduled to be received between 2020 and 2022;
- All future bus purchases are conservatively assumed to be 10% grant funded. These future grants total \$77.1 million over the life of the Plan and \$92/3 for TRE vehicle procurement plan.
- \$200.4 million in other external capital contributions over the 20-years, including:
  - \$194.7 million from Trinity Metro for their contribution to TRE capital programs;
  - \$7.0 million for Downtown Streetcar projects;
  - \$20.8 million to fund the Loop 12 and Carpenter Ranch in-fill stations on the Orange Line;
  - Tax Increment Financing (TIF) and Value Capture revenues along the Silver Line corridor beginning in 2022. These will be used to support operations, maintenance, and debt service for the Silver Line. They are expected to generate \$54 million between 2020 and 2038.

### Uses of Funds

### **Operating Expenses**

- DART's operating budget is \$562.3 million in FY 2020, virtually the same as the FY 2020 projected budget that was included in the approved FY 2019 Financial Plan.
- Per Financial Standard B-5, operating expenses are planned to grow by 90% of inflation plus new service, new programs, Board-approved contract increases, and adjustments related to fuel prices and actuarial analyses. Projections for rates of inflation are part of the same economic model that is provided by The Perryman Group each year to estimate sales tax revenue growth. Annual local inflation rates are anticipated to be approximately 2.1-2.3% per year over the life of the Plan. This means that DART-allowed inflation per this standard is roughly 1.9% 2.0% per year.
- Light Rail service costs have increased from \$79.4 million (21.6% of the total operating budget) in 2009 to \$185.0 million (32.9%) in 2020 as a result of DART more than doubling its Light Rail system from 45 miles at the beginning of FY 2009 to 93 miles early in FY 2017.
- TRE contract costs are programmed at contract rates for current service levels, and therefore total contract costs will be 3% higher in FY 2020 than in FY 2019. Expanded service in FY 2017, providing more frequent, and therefore more convenient service, has caused ridership to trend higher since that time.
- The number of vanpools in the budget has grown from an allowed maximum of 145 in 2008 to 225 in 2020. Currently, the program has 183 vans in operation with 1,353 participants using vehicles that hold seven to 15 passengers. The vans are used for trips that cannot be made



using other DART services and is available anywhere in Dallas, Ellis, Collin, Hunt, Rockwall, Kaufman and Navarro counties.

NCTCOG's federal funds would offset 35 percent of program costs while 60 percent would come from the users and 5 percent from DART in-kind services.

- DART will make \$10.0 million in contributions in FY 2020 to the Defined Benefit Pension Plan. This plan has been closed since 1988 and because of this, DART's investments within the Pension Plan must become increasingly conservative, with more fixed income assets and a smaller percentage dedicated to equities. This has the impact of reducing yields and therefore may increase the total contributions required to fully fund the Plan by 2030 (the estimated date that the last eligible DART employee will retire). The actual contributions to these plans in future years are dependent on both fund earnings and actuarial analysis of the value of future benefits and may be adjusted annually.
- Increasing healthcare costs have been one of the major challenges to controlling the growth of operating expenses. The cost of claims increased in FY 2017 by 16% over the prior year, but FY 2018 saw a significantly lower increase. And the FY 2020 budget is little changed from

the FY 2019 budget. On January 1, 2018, DART implemented a new strategic approach to Health Care. Based on results thus far, it seems that the approach is moving toward "bending the cost curve downward" and can have a positive impact on DART's 20-year financial plan.

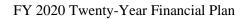
# Capital & Non-Operating Expenditures

• The FY 2020 Financial Plan includes service along the Silver Line corridor in



the northern part of the DART Service Area. This line runs from Plano, through Richardson, North Dallas, Addison, and Carrollton and into DFW International Airport. This line has been designed to link up with TEX Rail operated by Trinity Metro (formerly known as the Fort Worth Transportation Authority) running from downtown Fort Worth to DFW Airport. Long-term, this will allow for a single-seat ride from Plano all the way to Fort Worth. Service along the Silver Line is scheduled to begin in 2022. Headways would be 30 minutes in the peak periods.

- DART's process of replacing its entire bus fleet was completed in FY 2017. There was also a procurement for 41 new buses for service expansion in FY 2019. An additional seven No-Lo (battery-powered) buses were placed into service during FY 2018. The next bus fleet replacement is scheduled to occur during 2025 2028.
- In the Capital/Non-Operating Program over the next 20 years, DART has allocated \$3.5 billion to funding state of good repair (SGR) projects and capital reserves. These funds are devoted to capital maintenance and the timely replacement of DART's assets and are critical to DART's long-term sustainability. Programming funds in this manner helps ensure that DART can continue to serve the community with high-quality, reliable vehicles and infrastructure.





- Capital Planning & Development costs (Capital P&D) are costs spent inside the operating departments that are specifically for planning, management, oversight, and administration of capital projects but are costs that cannot be capitalized. As such, they are shown on budget reports as a credit to total departmental expenses and are deducted from that total (along with start-up costs described below) to calculate operating expenses.
- Start-up costs are all operating-type costs that are both: 1) incurred solely as a result of the opening of new service; and 2) incurred prior to the start of revenue service. Upon the commencement of revenue service for each line section, the appropriate portion of these costs is incorporated into the operating budgets. Start-up costs are shown on budget reports as a credit to total departmental expenses and are deducted from that total (along with Capital P&D costs) to calculate operating expenses.

# Debt Service

- DART will retire all currently outstanding selfliquidity commercial paper by 2022, but will issue \$227 million during the period from 2019 to 2024 (to be replaced by long-term debt in 2026) to support the major capital projects under way. DART will then issue \$400 million in commercial paper between 2025 and 2029 as the initial funding mechanism for our bus fleet replacement program. This will be done through the combined use of a bank-backed liquidity facility and an extensible CP program. That \$400 million is scheduled to be repaid between 2032 and 2037.
- \$2.2 billion in debt is scheduled to be issued between 2020 and 2024 in support of the Program of Interrelated Projects, the Silver Line and other infrastructure projects.
- \$700 million in additional long-term debt will be issued between 2024 and 2028 to fund the rehabilitation and replacement of DART's first fleet of Light Rail vehicles.
- \$46 million in additional long-term debt will be issued in 2026 for Commuter Rail.



- \$300 million in additional long-term debt will be issued in 2039 for light-rail vehicles.
- The actual amount, type, interest rates and timing of debt issuance may change from the Plan depending on DART's financial needs and market conditions.

### POTENTIAL RISKS AND OPPORTUNITIES

As sales tax receipts represent the largest single source of revenues, sales tax projections are unquestionably the single most important estimate in DART's Twenty-Year Financial Plan. Therefore, they are also the largest single area of risk to DART's ability to meet its goals and objectives. DART's primary economic consultant, Dr. M. Ray Perryman projects annual growth rates averaging 5.2% for the next several years before slowly declining to 4.6% by the end of the Plan. Because of the insertion of additional major capital projects over the last several years (Program of Interrelated Projects, Positive Train Control, and the Silver Line), DART is in a tightly constrained period of financial resources through the late 2030s before additional financial capacity opens up. As a result, any sizeable revenue shortfall in the next twenty years may significantly impact operations.

DART may be able to build its sales tax revenue base through the addition of new cities to the service area or through the pursuit of other legislative changes. The nature and timing of such changes would determine the potential financial impact.

Helping to pave the way for possible expansion of regional public transportation beyond borders of the DART service area, on December 8, 2015, the DART Board amended its Policy III.07 DART Services



beyond the Service Area Boundary. Under this amended policy, DART or its Local Government Corporation is able to provide contract services to a municipality or county outside the service area, provided that: 1) the entity pays for 100% of the cost of the contracted service (including capital costs, access and impact fees); 2) a full transit system plan is developed within 36 months of the initial contract; and 3) a plan to become a DART member is developed.

DART Financial Standard B-10 states that federal formula funds will be programmed at the current year's level for all future years in the Plan. The FY 2020 Plan includes \$80.6 million in annual allocations for each year and an additional \$2.3 million annually from the Silver Line beginning in FY 2024.

If funding from the Fixing America's Surface Transportation Act, or "FAST Act," remains funded at the current levels, DART is likely to continue to see increases in formula allocations over the next few years. This will be as a result of increases in ridership reported based on using Automatic Passenger Counters on bus and light rail vehicles, and the aging of the recent light rail system expansion. An additional allocation is provided for in the federal funding formula for fixed guideway segments which are more than seven years old. None of this likely future funding growth has been included in the Financial Plan. However, if the annual allocations are reduced or significantly delayed, it could have a significant negative impact on DART's cash flows as well as future capital project planning.



DART currently has a significant amount of discretionary federal funding (\$550.7 million) programmed into the Financial Plan through 2023. A substantial amount of this relates to the Program of Interrelated Projects (Core Capacity Program) and the Silver Line. If this funding is not received for these projects, they may have to be delayed. The only assumptions of additional discretionary federal funding in the Plan beyond this five-year window are an anticipated 10% contribution for future bus purchases, totaling \$77 million, and \$92.3 million for replacement of TRE vehicles.

Inflation is also addressed in DART's Financial Standards. According to Financial Standard B-5, DART is constrained to grow operating expenses by no more than 90% of the projected inflation rate, plus new programs, new services, and specific other adjustments. The Perryman projections over the last two years call for continued very low inflation, averaging only 2.2% over the life of the Financial Plan. That means that 90% of those inflation projections fall in the range of 1.9% - 2.0% annual rate. This operating expense target is very difficult to achieve year after year.

Over two-thirds of DART's Operating Budget is composed of salaries, wages, and benefits. In the long term, these costs must at least grow by inflation, or DART's ability to attract and retain quality employees may be adversely impacted. Compounding the challenge is the national trend of nearly double-digit annual increases in healthcare costs. DART completely reengineered its healthcare plans for 2018 with an eye toward both cost control and better service for employees and their families. Though there were claims processing issues that affected the timing of reporting, results show that the rate of growth of costs has been noticeably reduced.

Fuel and energy prices have been highly volatile over the last decade. During that time, DART has taken advantages of dips in the market to put both hedges and physical delivery contracts in place to benefit from advantageous forward pricing. As DART has transitioned from diesel and liquefied natural gas buses to compressed natural gas (CNG), the risk associated with that price volatility has been greatly reduced. DART currently has a contract for physical delivery of CNG, with a hedge to cover FY 2021 - 2023. DART has executed an extension to its contract



for electricity with the Texas General Land Office for 2020 through 2023 resulting in a 5-year savings of \$14.8 million compared to what was projected before the extension.

DART has attempted to identify all capital projects that can be foreseen, but every year additional new projects are requested. Significant additions to the capital program (and associated operating costs) without concurrent increases in revenues or the deletions of offsetting capital project costs could adversely affect the Financial Plan. As an attempt to mitigate those items, DART's Financial Plan contains multiple capital reserves, which are placeholders for anticipated future expenditures.

As part of the sequestration budget cuts, the federal government reduced the amount of the subsidy that will be paid to DART in support of the Build America Bonds that DART issued in 2009 and



2010 by an estimated 6.9% over the 12-year period of the sequester. This reduction has been incorporated into the Plan. Further federal budget cuts could result in even more subsidy reductions in the future. DART would have to make up any of this reduction either through expense cuts, enhanced revenues, or by accessing its cash reserves.

Any sustained period of deflation would cause significant financial damage to the Agency. Deflation would undoubtedly result in falling sales tax revenues or at the very least revenues that did not grow as fast as anticipated. Reduced revenues combined with DART's fixed-rate debt obligations already outstanding could result in a significant contraction of Agency services.



# FY 2020 Annual Budget

In this section of our document, we provide the reader with an overview of the Board-approved Strategic Priorities followed by a description of what we anticipate to accomplish toward achieving those priorities through the use of our resources. This discussion is followed by a breakdown of the FY 2020 Annual Budget. This portion of our document is organized as follows:

- Overview
- Budget Basis and Process (pages 93 and 94)
- Strategic Priorities which frame our budget decisions (pages 95 through 129)
- Financial Summary and Discussion ("Inside the Numbers") which enumerates the FY 2020 amounts for operating expenses, capital and nonoperating costs, and debt service (pages 132 through 147)

# Overview

The Annual Budget corresponds to the first year of the DART Twenty-Year Financial Plan (the Plan). We present the Plan beginning on page 19 of this document. The Plan represents a robust long-term projection of DART's operating revenues, funding, operating expenses, capital expenditures, and other financial information. The Plan validates the affordability of system expansion and maintenance commitments, operating requirements, and debt repayment. The FY 2020 Budget incorporates the following amounts:

Operating	\$562,303,350
Capital & Non-Operating	597,341,588
Debt Service	202,491,165
Total FY 2020 Annual Budget	\$1,362,136,103

The FY 2020 Twenty-Year Financial Plan demonstrates that DART has the financial capacity to meet the Agency's Transit System Plan commitments and to continue the programmed levels of bus, rail, and other transportation services, based on current information and assumptions.

The FY 2020 Annual Budget reflects the continued improvement in the efficiency, effectiveness, and quality of the services we deliver. The pages that follow describe many of DART's customer-facing initiatives aimed at attracting and retaining customers, as well as initiatives to address operational improvements. The list of all capital projects is shown as Exhibit 19, page 66, in the *Twenty-Year Financial Plan Section* of this document. The list reflects a key



"Customer-facing initiatives while responsibly meeting operating cost challenges'



strength in the Plan of funding to keep the system in a state of good repair. Notable capital projects in the FY 2020 Plan include a program of interrelated projects to increase the core capacity of DART's service, and the development of rail service along the Silver Line corridor in the northern part of the DART Service Area.

The budget reflects many cost-containment efforts to address cost pressures and achieve a balanced budget.

# **Our Priorities**

The DART Board has adopted strategic priorities to guide Agency initiatives which, in turn, drive the FY 2020 budget.

# Strategic Priorities

- 1. Continually improve service and safety experiences and perceptions for customers and the public
- 2. Optimize and preserve (state of good repair) the existing transit system
- 3. Optimize DART's influence in regional transportation planning
- 4. Expand DART's transportation system to serve cities inside and outside the current service area
- 5. Pursue excellence through employee engagement, development, and well-being
- 6. Innovate to improve levels of service, business processes, and funding

These priorities provide guidance to the Agency as it focuses on retaining and attracting customers with responsive service, a sustainable system, and stronger branding. At the same time, the Agency will continue to explore service connection and partnerships regionally. Capital expenditures will increasingly be directed towards maintaining existing assets in a "state of good repair" and capital asset replacement. A program of interrelated projects designed to increase the core capacity of DART's service through the Dallas Central Business District will benefit the entire service area. Accelerated rail service along the Silver Line corridor in the northern part of the DART Service Area will provide a much-needed east-west connection between the Red Line and Orange and Green lines.

A full discussion of Agency initiatives in support of the Strategic Priorities can be found on pages 99 through 134. Also see Exhibit 54 on page 162, in the *Organizational Units* Section, for an illustration of DART's Strategic Alignment.

Documentation prepared by management for Board briefings and action items include an explanation of the way in which each item supports one or more of these priorities.



### **Strategic Priorities as Framework for Agency Initiatives**

DART's leadership uses the Board-adopted Strategic Priorities as framework for the Agency's initiatives. The following information highlights a number of these initiatives. This discussion is followed, beginning on page 137, by the amounts for operating expenses, capital and nonoperating costs, and debt service, in the FY 2020 budget to accomplish these initiatives.

### **Budget Basis**

The Twenty-Year Financial Plan drives the annual budget. Approval of the Financial Plan requires an affirmative vote of two-thirds of the appointed and qualified members of the Board. The annual budget, which is approved by a majority vote of the Board, corresponds to the first year of the Plan.

DART's Annual Budget is prepared in the same format and organization as DART's financial reports, except the budget does not include depreciation, the offsetting interest income and interest expense from defeased lease transactions, and a small number of other non-system items such as pass-through grants. The activities of DART are accounted for in the same way proprietary funds are accounted for in other local governments and are therefore reported as a single enterprise fund. Enterprise accounting is used to account for entities that operate in a manner similar to a private enterprise. Revenues and expenses are recognized on the full accrual basis of accounting. Revenues are recognized in the accounting period in which they are earned, and expenses are recognized in the period incurred, regardless of when the related cash flows take place.

Certain major repairs and one-time or non-routine projects that are not eligible for capitalization according to Generally Accepted Accounting Principles (GAAP) are budgeted as Capital/Non-Operating projects but are expensed in the year the expense is incurred.

Unexpended funds included in the operating budget expire at the end of the fiscal year and are not carried over into subsequent years. Conversely, Capital/Non-Operating projects are budgeted for the life of the project and funds are not required to be spent in the current fiscal year. Funds that are not expended for capital and non-operating projects in the current year roll forward into the next budget year until the project is completed.

DART's fiscal year runs from October 1 through September 30. Section 452 of the Texas Transportation Code provides for a 30-day review period of the budget by the governing bodies of each municipality in the Agency and that a majority vote of the DART Board is required for approval of the annual budget.

Please Note: Budget schedules are presented and rounded to millions or thousands (as indicated) but are based on actual raw numbers. Consequently, certain schedules may not tie exactly or add properly, due to rounding. In some cases, prior years' numbers have been restated to conform to the current year's format. All schedules are in fiscal years unless otherwise stated.



## Structural Balance of the Budget and Financial Plan

DART strives to maintain structural balance to its budget, meaning current period cash inflows match the outgoing cash requirements for operating and debt service costs. The FY 2020 Budget and Financial Plan meet this test – demonstrating that DART has sufficient income to pay for ongoing operating costs and debt service in all years of the Plan. A more detailed discussion of structural balance can be found beginning on page 25 of the *Financial Plan Section*.

## **Budget Process**

The budget process begins with Strategic Priorities and Board-approved Financial Standards that establish parameters within which management must operate. Targets are established, maintained, and highlighted throughout this document.

Departmental targets are set based on projections from the approved Twenty-Year Financial Plan and other known factors or programs (e.g., increases in health care, contract rates, or fuel costs). Based on direction from executive management, departments prepare detailed budgets for each of their cost centers within those targets. These budgets are, in turn, reviewed during meetings with the department head, Executive Vice President, the President/Executive Director, Chief Financial Officer, the Budget Office (Business Planning & Analysis unit in the Finance Department) and the Budget and Finance Committee of the DART Board to discuss the respective budgets as well as any changes. All new proposed programs are evaluated for effectiveness and efficiency.

The Budget Office then compiles the numbers, coordinates work programs to achieve strategies, and publishes the Business Plan, including the Annual Budget and Twenty-Year Financial Plan, for the legislatively required 30-day budget review period by the cities within the DART Service Area. The Board performs additional reviews in August and September, as necessary, before approving the Budget and Twenty-Year Financial Plan in September.



See Section A (Business Plan Development) on page 277 in the Reference Section of this document for further explanation of our process.

## **Strategic Priority 1**

# Continually Improve Service and Safety Experiences and Perceptions for Customers and the Public

It is DART's goal to provide safe, secure, efficient, and effective services to our customers. The agency works toward improvement in these areas through a variety of strategies including: 5 Star Customer Service, improved customer experience, employee training and development, deployment of new technologies, increased safety and security across all dimensions, improved service delivery planning and processes, and enhanced internal communication and coordination. DART utilizes qualitative measures through face-to-face contact, on-site observations, and formal and informal groups coupled with quantitative measures through the Customer Satisfaction Report and periodic customer surveys to monitor the effectiveness of agency programs and services.

## Efforts to Improve Safety Experiences and Perceptions for Our Customers



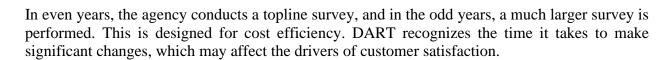
The Safety Department has established an aggressive, proactive, visible safety program designed to educate and inform both our internal customers (employees) and our external customers (passengers) of efforts undertaken to ensure their safety. We have ongoing campaigns to update these constituents on safety trends and concerns as well as detailed programs and procedures for investigating and mitigating unsafe activities that could lead to accidents. We operate on a covered watch schedule of 24 hours a day, 7 days a week, to ensure someone is available to resolve accidents/incidents without adversely impacting DART's revenue service operations.

#### Customer Satisfaction Survey

Based on past Customer Satisfaction Surveys, DART has learned that overall customer satisfaction is driven by six key drivers:

- timeliness
- safety and security
- cleanliness
- customer service
- convenience
- communication

Additionally, one key factor serves to measure the health of the brand and overall customer satisfaction: Net Promoter Score (NPS). The NPS question asks, "How likely are you to recommend a brand to family and friends?" Through the formula of subtracting the detractors from the promoters on an 11-point scale, companies can evaluate their brand health.



DART conducted a 10-minute survey of 3,600 riders from June 13-July 13, 2018. All segments and demographics trended up versus a year-ago in overall satisfaction. Following are survey results:

- 84% of our riders are satisfied with DART, this is up three percentage points from the previous year.
- Of those who ride rail only, overall satisfaction reached 87%, up seven percentage points from a year ago.
- Overall opinion of DART has significantly improved, reaching 67% an increase of six percentage points.
- The NPS has increased two percentage points from 2017 to 2018 from 13.3% to 15.3%.
- 18-34-year-olds and Caucasians displayed the greatest NPS increases from 2017 to 2018, up six and eleven percentage points, respectively.

Safety and Security is a key driver and has had an impact on overall customer satisfaction. As such, we conducted a specific survey to better understand our efforts to increase perception of safety and security. A safety and security survey was conducted in November 2017, February 2018 and June 2018. The survey was conducted online, and participants included Corporate and Student pass holders, DART administrative staff, and a North Texas region data base.



Due to the efforts made by DART Police and amenities, overall perception of safety peaked in June 2018:

- Corporate commuters' perception increased eighteen percentage points from February to June 2018.
- Perception among DART administrative staff increased twenty-three percentage points during the same period.
- Corporate commuters' perception of safety was up nineteen percentage points compared to the previous year.

Perception of DART Police presence also increased significantly across all segments from February to June 2018: up twenty-nine percentage points among DART administration staff; twenty-one among Corporate pass holders; and seven among Student pass holders.



#### 5 Star Service Program

This initiative is a major cultural shift for DART. The customer focus culture is a significant change in how we approach customer service internally and externally. The 5 Star Service Program has five parts: Culture Change, Center of Excellence, Improved Services, High Performance and Recognition, and Image and Brand. During the last



four years there has been a large focus on Culture Change and Improved Services, but a stronger focus will occur in Center for Excellence (training), High Performance and Recognition, and Image and Brand. Focusing on all five parts of the 5 Star Service Program will result in a cultural shift that encompasses individuals, departments, and teams throughout the Agency.

Some of the key elements of the 5 Star Initiative include:

- Development and delivery of 5 Star training programs for all employees.
- Identification, training, and support for internal champions, known as "Customer Experience Officers," within each area to communicate and support the 5 Star Initiative.
- Outreach events at rail stations and transit centers involving staff from across the Agency who meet and greet customers as well as receive feedback and work to resolve customer concerns.
- Process reengineering and process improvement projects to improve the internal and external



customer experience in identified areas, such as improved customer experience relative to bus/rail connections and improved response time to operator requests for police or supervisor assistance.

- Distribution of tablet PCs to field supervisors and Station Concierges to facilitate improved customer information delivery in the field.
- Deployment of employees to assist customers during the implementation of new services and route changes as well as during special events and service disruptions.
- Integration of 5 Star Initiative principles and objectives into job descriptions, performance management plans, and recognition/incentive programs to support the institutionalization of the initiative.

## Enhance Customer Satisfaction and Rider Retention

This customer service initiative has a two-pronged approach to increase customer satisfaction and ridership. It includes: 1) employee motivation/satisfaction, and 2) positive customer experiences. Surveys indicate that one-quarter to one-third of customers describe themselves as "new" riders on the system. A customer's first experience with DART service is a significant factor in building



long-term ridership, and employee motivation/satisfaction impacts the degree to which employees focus on creating a positive first-time customer experience.

During previous years, new rail expansion provided significant opportunities for service quality improvements and additional ridership growth. Market research reveals a significant level of "turnover" in the composition of bus ridership. As new riders are attracted to the system, we also experience attrition among existing riders. The primary causes in the fluctuation of the annual customer base include changes in residence, employer, or employment location, and changing gasoline prices. Apartment tear-downs and redevelopment have also had significant impact upon ridership levels in certain parts of the service area over the last few years.

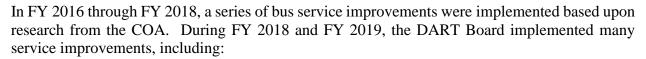
Less significant reasons include changes to the bus network due to the rail expansion or dissatisfaction with service levels or service quality.

Overall, the initiatives put in place in FY 2017 have yielded positive results among riders. Strategies to improve service and safety experiences and perceptions continuing into FY 2020 include the following major categories:

- Improved Bus Service
- Improved Service Reliability, Timeliness, and Service Connections
- In-Transit Customer Communication Services
- Mobile Platforms
- Initial installation of interactive kiosks
- Enhancement of the GoPass Mobile Ticketing Solution
- New Marketing and Promotion Initiatives
- Improved Strategies for Responding to Service Disruptions

*Improved Bus Service* – DART conducted the Comprehensive Operations Analysis (COA) of all DART fixed routes, including evaluation of the effectiveness of all routes and identification of future service improvements. This effort provided the basis for service changes through FY 2019. Based upon Board feedback, DART is developing a Bus Service Plan in FY 2020 focused on ridership versus coverage trade-offs, with extensive stakeholder input. This Service Plan will be incorporated into a new 2045 Transit System Plan. The Plan will identify a phased strategy for improving the bus network that may be implemented over a 20-year period.





- Off-peak frequency improvements on 11 routes, with the resulting schedules offering 30minute service (one route 20-minute service).
- Improved service in the Belt Line North corridor, with double the service frequency at all times between Downtown Carrollton and Spring Valley Station, and improved weekend service to Irving Convention Center Station.
- Service restructuring in Northeast Dallas, with new service coverage along Greenville Avenue.
- Pilot GoLink Mobility as a Service was introduced in five zones in February and March, including Legacy and North Central Plano in Plano, and Rylie, Kleberg, and Inland Port in Dallas. GoLink offers direct-request demand-responsive service with connections to other DART routes; most passengers are picked up within 10 minutes of request. Rowlett received expanded GoLink service in June, and Far North Plano service began in August. UberPool was implemented in Rowlett, Plano, and Southern Dallas in seven zones. GoLink was expanded to all remaining 6 On-Call zones in March 2019 and UberPool will be offered in these zones in the first quarter of FY 2020.



• Schedule adjustments aimed at improved off-peak on time performance.

DART received a delivery of 41 new transit buses in FY 2019 which will support another major bus service expansion, currently slated for August 2019. Improvements in FY 2019 included:

- Additional peak and off-peak frequency improvements on a number of routes.
- Route modifications designed to streamline service and make it more direct.
- Peak and off-peak schedule adjustments aimed at improved on-time performance.
- Approximately \$5.0 million annualized is allocated for route and frequency improvements; another \$2.5 million annualized is allocated for on time performance improvements.
- DART will also review the success of the GoLink zones. Should the service be successful, we expect to propose conversion GoLink and UberPool in other areas within the DART service area in late FY 2020 or FY 2021.

*Improved Service Reliability, Timeliness, and Service Connections* – Throughout FY 2019 bus and rail service reliability, schedule timeliness, and improved connections continued to be one of the most important focuses for service improvement. The increased services allowed the agency to realize a 2.1% improvement in on-time performance over the past year.

We will continue to leverage the new Computer Aided Dispatch/ Automatic Vehicle Location (CAD/AVL) System that is part of our new radio system to help us improve on-time performance, as well as transfer connections for our customers. This system provides comprehensive, detailed information to Service Planning and Scheduling staff to assist them in the development of realistic scheduled arrival and departure times during different periods of the day. The system also provides enhanced real-time monitoring and decision support tools to our operations personnel on the street as well as in the operations control centers. The CAD/AVL system includes tools to enhance the connectivity within the system by monitoring critical transfer connections and alerting staff to the need for intervention to assure that these customer transfer opportunities are preserved. In FY 2017, we expanded the use of these "connection protection" tools for improved bus-to-bus connections and investigated the expansion of their use from bus only, to bus and rail connections. To increase the cross-functional focus of on-time performance, a new Continuous Improvement Team was organized to help ensure improvement in this area.

*In-Transit Customer Communications Program* – This program, co-sponsored by External Relations, and Technology, coordinates ten separate projects to ensure there are no overlaps or inconsistencies between initiatives being developed to provide communications to riders during their trip. Projects include: train arrival dynamic signs on station platforms, digital displays at transit centers, and web-based applications for mobile devices. These applications provide real-time bus and train arrival predictions at stops, stop and route location services, and subscription-based messages about service disruptions and changes delivered by email, text, and social media feeds.



*Mobile Platforms* – The ability to send/receive information on mobile platforms (smart phones and tablets) continues to be enhanced. More than 70 percent of all DART website activity occurs on mobile devices. To better support customers, the Agency has developed mobile tools that deliver real-time information on DART bus and light rail services. These apps are: "Where's My Train? <sup>®</sup>", "Where's My Bus? <sup>®</sup>" and "Where's My DART Stop? <sup>®</sup>". New mobile tools were introduced in with Go Pass 3.0 adding Mobility as a Service enhancements in May 2019.

Customers traveling on the Trinity Railway Express (TRE) or the DCTA A-train benefit from mobile websites developed by DART staff. Riders can plan a region-wide trip on DART, TRE, Trinity Metro, and DCTA routes using the DART mobile website. DART's mobile site, <u>m.DART.org/</u> was updated in August 2014 to improve access to rider tools. During FY 2016, DART participated in the launch of a new transit-related mobile application tied to the region's 511DFW traveler information program. This application includes customer information for transit services, as well as roadway construction that may impact transit travel.

To improve in-transit customer communication, the Agency uses Operations Communications Liaisons who are part of the External Relations Division and work in the Train Control Center where they have access to real-time- service information. They are responsible for sending customer notifications on rail, bus, and TRE service disruptions via subscription email, text, and



Twitter. The liaisons support rail controllers with on-board and platform customer notices via the public address/variable message board system.

*Enhancement of GoPass Mobile Ticketing Solution* – DART introduced an upgraded version of the <u>GoPass® app</u> in May 2019. Enhanced features to the app include more seamless integration with ride-sharing services, including bikes and shared vehicles.

*New Marketing and Promotion Initiatives* – The activities of the Marketing & Communications Department (MarComm) promotes brand awareness and relevance to drive ridership growth.

MarComm segments its target audiences to speak more directly to their lifestyles and needs, versus a broad "catch-all" approach, to be more relevant to them.



*Brand Repositioning* – DART's brand repositioning, "Empowering Discovery," is going into year three. The DARTable campaign is a key element of the brand repositioning, and going forward, the public will see this theme in new and expansive ways that encourages more usage among existing riders, and trials for nonriders.

The messaging and tone of the DARTable theme will speak more to the breadth of accessibility. It will no longer focus on DARTable gems, but instead on DARTable colleges and universities; airports; employer groups; healthcare, and more.

Brand positioning extends to vehicles too. D-Link, Love Link and GoLink, for example, use unique paint schemes and naming to differentiate them from other bus services. This sub-branding strategy can be applied to other DART services, as we have demonstrated with the redesigned Express buses. By branding types of bus services, we have the opportunity to attract new segments of riders. Collaboration with community partners and other North Texas brands is an effective way of reaching new riders as well.



Partnering with big events like the State Fair of Texas and Dallas St. Patrick's Parade & Festival, we can increase our promotional footprint to further raise brand awareness and enhance the positioning of the DART brand.

Working with event partners like these, as well as with cities in the service area, local convention and visitors' bureaus, Dallas Mavericks and Dallas Stars franchises and others, we have an opportunity to grow ridership. *Improved Strategies for Responding to Service Disruptions* – The expansion of the light rail system to 93 miles, together with certain characteristics of the rail system (e.g., having multiple junctions and all rail lines passing through the Dallas Central Business District) have resulted in an increased number of service disruptions over the past few years. In order to deal more effectively with the impact of service disruptions on passengers, a Continuous Improvement Team (CIT) has been established. Its charge is to develop an integrated internal communication process to assure consistent and accurate dissemination of information to all front-line staff regarding operations during service disruptions.

Its deliverables include the following:

- Identify staff requiring information regarding service during disruptions
- Identify communications technology used by each group and data elements required
- Develop mapping of information flow
- Develop specifications for possible tools to disseminate internal communications
- Map the inter-relationship of the internal communication and the customer communication publisher used by the Operations Communication Liaisons





An internal website has been developed by the Technology team based on the needs identified by the Continuous Improvement team and is now in a testing phase. Enhancements have also been identified for DART's Customer Response Team and the Everbridge notification system, that also support communication with customers during service disruptions. Other efforts to address disruptions include:

 In-Transit Customer Communications – The initiation of the changeable message signs on rail platforms and the introduction of Operations Communication Liaisons (OCL) in the Control Center have been in response to this increase in disruptions and have laid the foundation for improved customer communications during these incidents.



- Customer Response Team The Customer Response Team (CRT) is comprised of administrative employees who are assigned to various rail stations to assist with customer communications during service disruptions. Procedures for the activation and deployment of the CRT have been enhanced.
- Severe Winter Weather Contingency Plan A contingency plan was developed during the 2014/2015 winter season to allow DART to provide more reliable services during major winter storms and to recover the system more quickly in the wake of a storm. The contingency plan was activated twice, in late February and early March 2015, and provided significant improvements in service reliability as compared to previous severe weather incidents. Management has evaluated the contingency plan and has made adjustments to refine the plan and process.
- CBD Rail Disruption Contingency Plan DART has experienced a number of rail service disruptions in the Dallas CBD as a result of weather, infrastructure failures, power failures, criminal activity, and other triggering incidents. A new CBD Rail Disruption Contingency Plan was rolled out in FY 2018 to improve our response to these types of incidents. Four basic response plans have been developed and will be applied depending on the nature and extent of the disruption.
- After-Action Reviews, Table-Top Exercises, and Drills After every major service disruption incident, After-Action Reviews are held to debrief all aspects of the incident and the response to the incident to identify lessons learned. All findings and recommendations are documented and tracked by Emergency Preparedness staff to assure that recommendations are distributed, and appropriate modifications are made to our processes. In addition to the After-Action Reviews, Table-Top exercises and drills are also scheduled to reinforce training and procedures. Often these table-tops and drills include emergency response personnel from cities within the DART Service Area or other entities with whom DART needs to collaborate.



#### Providing Customer Service

Technology provides our customers with another touchpoint, but there still is a need for human call centers. DART's Customer Service division fields approximately 1.5 million calls annually. These calls come from current and potential riders seeking information about DART services, including bus and rail operations.

This division responds to customers' needs in person, by phone, and on <u>DART.org</u>.

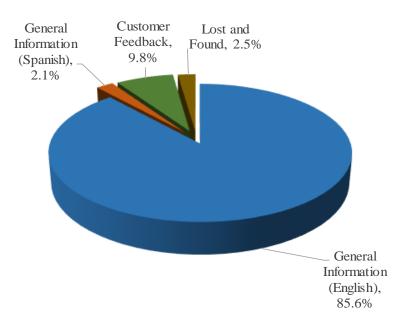
They are responsible for quantifying customer contacts through the development of the Customer Feedback Report.

Customer contacts are identified as belonging to one of three categories: (see Exhibit 27)

- General information (trip planning, event, promotions, advertisements and DART initiatives
- Customer feedback (commendations, suggestions and complaints)
- Lost and found

The customer service call-in and interaction data this division collects serves to gain a more granular and immediate understanding of our customers' needs. Through analysis and aggregation, we are able to identify the breadth and depth of opportunities to enhance service and strengthen brand affinity.

The DART Call Center is open 363 days a year, closed only on Thanksgiving and Christmas days.



## Exhibit 27 Customer Service Call Types

#### **Strategic Priority 2**

## **Optimize and Preserve (State of Good Repair) the Existing Transit System**

The Board-approved Strategic Priorities and Goals include initiatives for managing system improvements and maintaining infrastructure. DART uses its annual process to develop a twenty-year financial plan to ensure the Agency identifies the resources necessary to maintain and operate its existing and planned infrastructure.

#### Affordability

The Twenty-Year Financial Plan demonstrates DART has the financial capacity to meet the Agency Transit System Plan commitments and to continue the programmed levels of bus, rail, and other transportation services, based on current information and assumptions.

The FY 2020 budget reflects both continued rail construction and system expansion and enhancements to DART's bus service. The Agency continues to concentrate on the core business of getting people where they need to go safely, reliably, and affordably, as well as attracting and retaining customers with responsive service and a sustainable system.

The capital program, the full schedules of which can be found in the *Twenty-Year Financial Plan Section*, reflects a shift from expansion to maintaining and replacing our assets – keeping the system in a state of good repair.

Exhibit 28 provides an overview of the capital and non-operating projects by category and highlights the increase in funding for state of good repair for DART's system.

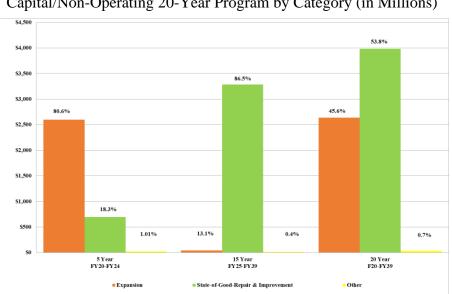


Exhibit 28 Capital/Non-Operating 20-Year Program by Category (in Millions)

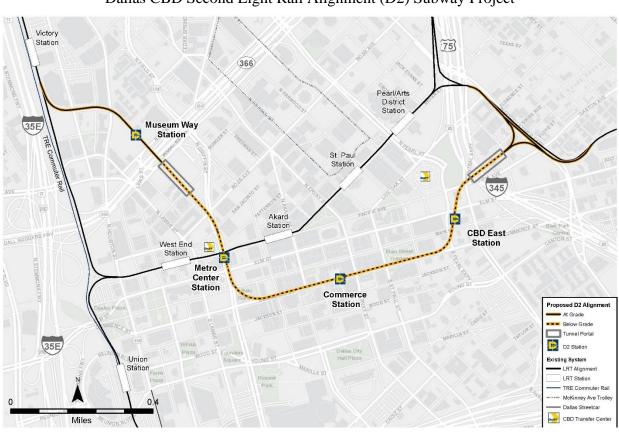
The capital expenditures included in the FY 2020 capital/non-operating budget total \$597.3 million as shown on page 146 in this section.



#### Light Rail Transit (LRT) System

The current LRT system is 93 miles and 64 stations.

The next major LRT investment will be related to core capacity, including a second LRT alignment through downtown Dallas (known as D2 Subway) and Red and Blue Line LRT platform modifications. In September 2017, both the Dallas City Council and the DART Board of Directors unanimously approved the refined LPA D2 Subway alignment. Exhibit 29 illustrates the D2 Subway project. DART is currently in the project development phase, including preliminary engineering (PE) and preparation of a Supplement Draft Environmental Impact Study (EIS). During FY 2020, DART anticipates a request to enter Engineering and continue through the FTA Capital Investment Grant Program.



D2 Subway and Red and Blue Line platform extensions are part of a Program of Interrelated Projects to address capacity needs under the FTA Capital Investment Grant Program. DART's program consists of three significant projects: D2 Subway, platform modifications at 28 stations on the Red and Blue lines to accommodate three-car trains, and a Dallas Streetcar central link in downtown Dallas. These three projects will add significant core capacity and enhanced access to the DART system. The FY 2020 Financial Plan reflects funding for D2, platform modifications,

Exhibit 29 Dallas CBD Second Light Rail Alignment (D2) Subway Project



and the central streetcar link. A Full Funding Grant Agreement (FFGA) was awarded for the platform extensions project in May 2019.

Exhibit 30 provides historical and prospective data on light rail expansion projects.

Corridor	Line	From	То	Miles	Stations	<b>Opening Date</b>	
STARTER SYSTEM							
Central Business District	All	West End	Pearl	1.0	4	June 1996	
Oak Cliff	Red/Blue	West End	8th & Corinth	3.8	4	June 1996	
South Oak Cliff	Blue	8th & Corinth	Ledbetter	4.6	5	June 1996/May 1997	
West Oak Cliff	Red	8th & Corinth	Westmoreland	4.6	4	June 1996	
North Central	Red	Pearl	Park Lane	6.0	4	Jan 1997	
Starter System Subtotal					21		
RED/BLUE LINE EXTENSIONS							
North Central	Red	Park Lane	Parker Road	12.3	9	July-Dec 2002	
Northeast	Blue	Mockingbird	Downtown Garland	11.2	5	Sept 2001-Nov 2002	
Northeast	Blue	Downtown Garland	Downtown Rowlett	4.6	1	Dec 2012	
South Oak Cliff	Blue	Ledbetter	UNT-Dallas	2.6	2	Oct 2016	
	30.7	17					
GREEN LINE							
Northwest (NW-1A)	Green	West End	Victory	1.2	1	Nov 2004	
Northwest (NW-1B)	Green	Victory	Inwood	2.8	3	Dec 2010	
Northwest (NW-2)	Green	Inwood	Bachman	3.2	2	Dec 2010	
Northwest (NW-3)	Green	Bachman	Farmers Branch	4.9	3	Dec 2010	
Northwest (NW-4)	Green	Farmers Branch	Frankford	5.3	3	Dec 2010	
Northwest Subtotal					12		
Southeast (SE-1A)	Green	Pearl	MLK, Jr.	2.7	4	Sept 2009	
Southeast (SE-1B)	Green	MLK, Jr.	Hatcher	1.4	1	Dec 2010	
Southeast (SE-2)	Green	Hatcher	Buckner	6.0	3	Dec 2010	
	10.1	8					
ORANGE LINE							
Northwest-Irving/DFW (I-1)	Orange	Bachman	Irving Convention Center	5.4	3	July 2012	
Northwest-Irving/DFW (I-2)	Orange	Center	Belt Line	3.6	2	Dec 2012	
Northwest-Irving/DFW (I-3)	Orange	Belt Line	DFW Airport	5.0	1	Aug 2014	
Orange Line Subtotal					6		
Total Miles/Stations in Operation*					64		

Exhibit 30 LRT Revenue Service Dates

\*Total miles includes approximately 0.75 miles of pocket track.



#### **Strategic Priority 3**

## **Optimize DART's Influence in Regional Transportation Planning**

The DART Board's Strategic Priorities and Goals include the recognition that DART has an obligation to maintain its leadership of public transportation integration and operation in North Texas – a stakeholder focus.

## Regional Rail Corridor Strategic Management

Leveraging DART's ownership of 254 miles of regional rail corridors, DART provides management and contract services required for the operation, dispatching, scheduling, and maintenance of the TRE commuter rail line, and various freight lines. At the beginning in FY 2016, DART implemented a new ten-year contract for dispatching, operations, and capital maintenance for regional rail services for the TRE and Madill Subdivision with Herzog Transit Services, Inc. This contract included an option for Trinity Metro's TEXRail commuter rail line, which began operation on January 10, 2019.

## Regional Transit Access Agreements

To support the regional objective to expand opportunities for transit services outside the DART Service Area, DART negotiated an umbrella agreement for access funding with the North Central Texas Council of Governments (NCTCOG). Separate agreements were negotiated with STAR Transit for access to DART's Lawnview and Buckner stations, and Texoma Area Paratransit System (TAPS) for bus access connections at Parker Road Station from McKinney, Allen, and

Sherman. TAPS suspended service in January 2016. During FY 2016, DART was asked to provide senior and disabled demand responsive service to parts of Collin County left without transportation following the collapse of the TAPS. The NCTCOG contracted with the DART Bus Service, LGC to provide services in Allen, Wylie, and Fairview. This NCTCOG-funded service began in February 2016 and ended 90 days later in May 2016. This emergency service allowed DART to negotiate funding with Allen, Wylie, and



Fairview along with NCTCOG to provide a similar service through FY 2017. DART was able to obtain a major grant from Toyota Motor North America, Inc., as well as NCTCOG for funding to permit the cities to have a longer time to evaluate their needs for public transportation.

During FY 2017, DART implemented a program for Collin County like the Plano Ride Program to provide service for seniors and disabled persons and has submitted a proposal to continue the taxi voucher program for FY 2018 and FY 2019. In addition, beginning in FY 2017, DART is collaborating with the cities in Collin County to complete a public transportation plan to guide future investments in transit (see updates to Collin County Rides Program section for potential changes).



DART also negotiated a general agreement with NCTCOG for funding for the TRE from non-service area cities; the method is called the Mid-Cities Fund. This agreement allows access for a commuter bus service called the Arlington MAX between UTA-Downtown Arlington and the TRE at CentrePort Station. The service ended in December 2017.

## **Regional Transportation Planning**

DART is a voting member of the Regional Transportation Council (RTC) of NCTCOG, which is the public body responsible for the long-range regional planning and programming of Federal and State funding within the region for highways and transit.

DART actively participates on NCTCOG's Surface Transportation Technical Committee (STTC) with two formal members. The STTC provides technical advice and makes recommendations for the RTC policy body on transportation planning and capital funding issues.

DART staff also formally participates on various NCTCOG subcommittees involving bike and pedestrian issues, Intelligent Transportation System issues, Shared Mobility Programs, Vanpool and other clean air initiatives, clean energy and alternative fuels, special event planning, Managed Lanes (known as TEXpress Lanes), elderly and disabled transportation, and transit planning.

In addition, under Policy III.07, DART coordinates with non-DART communities to develop service plan opportunities in an effort to expand regional transit. Studies with the City of Arlington and the City of Mesquite were completed in FY 2017. NCTCOG is conducting studies with Collin County and best southwest cities in FY 2019 and 2020. DART will be a participant in these efforts.

#### Regional Integrated Corridor Management-511 Traveler Information

DART has provided primary leadership for the DFW Region in managing and operating the Region's Integrated Corridor Management (ICM) Demonstration within the US 75 Corridor since 2006. In 2013, DART implemented the first 511 system in the State of Texas to provide multi-modal, multi-agency traveler information as an outgrowth to the ICM system. DART continued to manage this system through the second quarter of FY 2017, at which time DART transferred the long-term management and operation of the 511DFW system to NCTCOG.

This was a strategic decision supported by DART and the Regional Transportation Council that was designed to reduce the financial risk to DART for maintaining the 511DFW system and help expand the focus of the program to the much larger NCTCOG regional area.





#### **Community Engagement**

Community Engagement involves linking DART to the various communities it serves, ensuring the Agency meets legal and/or government regulations while developing and maintaining relationships with diverse communities throughout the DART Service Area. There are three main areas of focus:

- Provide factual and timely information regarding specific projects to ensure public involvement opportunities in the various stages of the DART project planning, design, and construction phases;
- Support various departments by coordinating and conducting public hearings for such issues as Federal Transit Administration grants and other federal compliance initiatives; and,
- Work with Service Planning to facilitate community meetings and public hearings during the implementation of major bus and rail service changes.

Community Engagement team members continue strengthening and expanding their reach within the cities served by DART by identifying and communicating development and transportation opportunities and working with corporate sales and the local chambers of commerce to broker relationships and drive sales with corporations and local businesses.

#### Community and Stakeholder Outreach

Community and stakeholder outreach efforts are focused on educating current and future rider segments about DART and how to use the system safely. An extensive education program aimed at all age groups delivers this message to a diverse audience comprised of students, senior citizens, service area city organizations, civic groups, businesses, and other stakeholder groups. These partnerships with key stakeholder groups allow DART to promote its services, capital expansion initiatives, business opportunities, and



employer programs via tours, briefings, speakers' bureau, and chamber events. In turn, the chambers have historically supported DART's various community, legislative, and funding initiatives. The DART Promotions staff partners with more than 125 events each year with DART's presence providing information on DART to prospective riders and community stakeholders.



## Economic Opportunity for Disadvantaged, Minority, and Woman-Owned Business Enterprises (D/M/WBEs)

DART's D/M/WBE Programs are designed to involve disadvantaged, minority, small and emerging, and woman-owned businesses to the maximum extent possible in all facets of DART's contracting and purchasing activities. The Department of Diversity positions itself as a bridge between DART and such businesses. To increase access to DART procurement opportunities, the department offers and conducts various modes of technical assistance, outreach, seminars, goal setting, educational training, and counseling in the understanding of federal, state, and DART procurement regulations. The department aggressively seeks integration of DMWBEs in all DART procurement and contracting opportunities, and ensures that DART complies with all appropriate federal and state laws, regulations, and executive orders.

Over the last five fiscal years, DART has averaged annual awards of 139 contracts. With the exception of "Transit Vehicle Manufacturer" procurements and procurements conducted through the State of Texas, the Diversity Department reviews scopes of work, terms, and specifications for all contracts. This is done to assess and identify subcontracting opportunities that will allow DMWBEs an equitable opportunity to compete in the procurement process.

For fiscal year 2014, a Federal Transit Administration (FTA) report recognized DART as having awarded more dollars to Disadvantaged Businesses on a percentage basis than any other transit authority in the country. In fiscal years 2017 and 2018, DART established annual Agency goals of 31% and 32% for participation of minority and woman-owned business enterprises (M/WBE). In those years, D/M/WBE participation on all DART procurement activities exceeded goals, with 36% and 38% participation, respectively. Additionally, in 2018 the Diversity Department underwent FTA's Triennial Review in which the DBE program was rated in full compliance with a rating of "no findings."

On average, nearly 500 active contracts are managed annually for compliance through targeted vendor site visits where applicable, vendor payment reporting, and other forms of communication and correspondence. During site visits, a myriad of topics are discussed with both prime contractors and subcontractors such as:

- Payments reported vs. payments received
- Missing documentation from invoices
- Prompt payment
- Subcontractor utilization
- Working relationship
- Work performed
- Schedule of subcontractors' work

Site visits are essential in identifying and solving any potential non-compliance issues. They also keep the program involved on a frontline level with DART's small business community. DART also works to mediate and resolve any disputes that may arise between primes and subcontractors.



Additionally, DART's ongoing involvement with 26 minority chambers of commerce, minority contractor associations, women and minority supplier development groups has created outreach touch-point opportunities to more than 2,500 individuals. Business community outreach efforts have been expanded to engage the interest of an additional 48 minority organizations. The establishment of DART's Small Business Academy further assists with the development of small businesses to participate and compete for DART procurement opportunities. Some small businesses have established a contracting partnership with DART after participating in the academy.

DART strives to ensure that economic opportunities are available to the whole community.

#### Economic Development

The economic impact of DART on the regional economy has been significant, exceeding \$10.8 billion, according to a study by the University of North Texas (UNT). The study, published in May 2017, looked at public and private transitoriented development along the light rail corridor from 1999 to 2015. A copy of this study is included in the Section G of the *Reference Section* of this document as well as on the DART website, <u>www.DART.org</u>.

DART's investment continues to be a catalyst for investment near DART transit facilities to create transit-oriented development opportunities that result in vibrant, livable communities, increasing transit ridership and generating new sources of revenue.

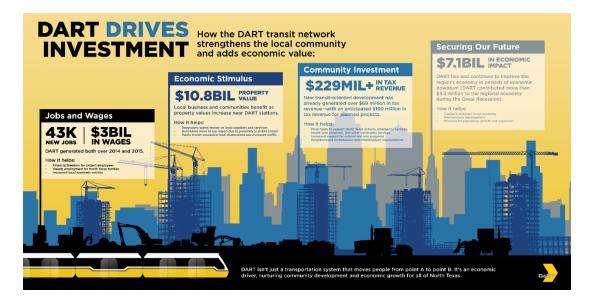


Two of the objectives of the Agency, as stated in the DART mission statement, are to improve the quality of life and to stimulate economic development through the implementation of the Transit System Plan. It has been both surprising and gratifying to see how quickly transit-oriented developments have been constructed along the rail corridors since the launch of DART Rail in 1996. Management continues to support DART's Economic Development staff and continues to monitor, identify, evaluate, and develop opportunities in partnership with service area cities.

DART Economic Development staff periodically engages the UNT Economics Research Group to monitor and assess the impact of all DART assets that have the potential for future transitoriented development (TOD). The latest study presented in May 2017, identified the impact of public and private investment (built, under construction, and planned) in TOD within quarter mile of rail stations to be over \$10.8 billion over the period of 1999 to 2015. For the first time, the study included public projects such as hospitals, educational, and governmental construction. The previous study undertaken in 2014 found that over the period from 2003 through 2013, the average premium on office rents located within the same quarter mile of a DART station was 14%. Economic Development staff is currently working with the UNT Economics Research Group to initiate the next update to the 2017 study; a final report should be available in late 2019.



To support efforts such as these and provide information to the public and development community, DART has established a transit-oriented development web site (<u>www.DART.org/economicdevelopment</u>) which provides an overview of DART's transit-oriented development program including its TOD policy, guidelines, and station area fact sheets for each of the rail stations.





## **Strategic Priority 4**

## Expand DART's Transportation System to Serve Cities Inside and Outside the Current Service Area

The DART Board's Strategic Priorities and Goals include major initiatives for expanding service to the cities inside the current service area, as well as improving the connection to, and provision of, service to cities outside the DART cities' limits.

#### Service to Cities Inside the Current Service Area

Intelligent Interactive Kiosk Deployment – In 2018, the DART Board approved an agreement to deploy 300 to 500 interactive kiosks at all DART light rail and commuter rail stations: bus transfer centers; and other high-traffic areas. These kiosks will provide value-added service to our riders and communities.

Consumers today expect more personalized service. And as digitization proliferates the actions and lifestyles of consumers, the interactive kiosk is designed to provide customized real-time information. The kiosks have dual facing 55" touchscreens that will inform, educate and engage consumers. Additional features of the kiosk will include the following;

- Trip Planning From kiosks location, customers can type in an address or touch the screen to pin a location and obtain a trip itinerary. Customers have the option to email or text directions to themselves or someone else.
- Real Time Scheduling Each kiosk will maintain an active train and bus real time schedule based on its location to the relevant train station and bus stop.
- Local Curated Content The kiosk will highlight local establishments and activities based on location.
- Public Service and Emergency Messages In the event of an emergency or changes within the DART system, we will be able to send out instant messages to a Kiosk in the affected area.
- Advertising The kiosk will also serve as an advertising tool. We will focus our advertising on local merchants, to drive traffic to those advertisers within proximity of the kiosk location.

We are looking to deploy approximately 100 kiosks by the end of 2019 throughout the DART system.





*Streetcar Service Expansion* – In 2015, DART completed work on two separate streetcar projects. The first phase of the Dallas Streetcar, a modern electric streetcar line, operating from Union Station to Colorado Boulevard and Beckley Avenue in Oak Cliff, opened on April 13, 2015. Construction of this starter line was primarily funded by a \$23 million Transportation Investment Generating Economic Recovery (TIGER) grant. The City of Dallas is the owner of the streetcar. An extension further into Oak Cliff to the Bishop Arts District opened in August 2016. DART designed and constructed this extension with Texas Mobility Funds (TMF), and operating funding will be provided by the City of Dallas. With funding provided by the City of Dallas, DART expanded the service hours and frequency in October of 2017. Preliminary design is complete for a Convention Center loop extension from Union Station to the Convention Center. DART is coordinating with the City on this extension as well as the central streetcar link that would further extend the line from the Convention Center to the McKinney Avenue Transit Authority (MATA) M-Line and Klyde Warren Park. Development and operations of the Dallas Streetcar are based on the Master Streetcar Interlocal Agreement (ILA) approved in FY 2019 by the DART Board. The Master Streetcar ILA was scheduled for review for approval by the Dallas City Council in August 2019.

DART was the project sponsor for the second streetcar project, a 0.65-mile urban streetcar trackway, connecting the Olive Street extension of the M-Line to the existing MATA alignment on St. Paul Street. This project provides direct pedestrian access from the McKinney Trolley to the existing DART St. Paul Station. Revenue service began in May 2015. DART will continue to provide funding for the MATA service in FY 2019 consistent with the DART Site-Specific Shuttle Policy and our MATA agreement.

*On-Street Passenger Facilities Program* – This federally-funded program continues with the installation of bus stop improvements in a number of locations throughout the DART Service Area.

During FY 2018, DART targeted the following improvements:

- 10 shelters and 10 pads
- 4 bench pads and 3 benches
- Worked with developers to improve sidewalk and ADA accessibility at 6 existing shelter locations within our service area
- Approval of funding to purchase an additional 200 bus shelters, 200 shelter pads, 9 smart shelters and 200 free-standing lights

In FY 2019 a contract was implemented for the installation of amenities and pads; 67 bus shelters, 67 shelter pads, and 67 free-standing lights to be installed in FY 2019.

New Downtown Light Rail Alignment (D2) – Please see the discussion of this item on page 106, earlier in this section.

*Comprehensive Operations Analysis* – Please see the discussion of this item on page 98, earlier in this section.



DART conducts periodic detailed service reviews in different sectors of the DART Service Area. These reviews include a careful analysis of the demographics and performance of services in the respective areas, looking for gaps in coverage and other changes that can be implemented in a three to five-year time horizon. During FY 2018, DART continued work on two service reviews: Farmers Branch/Carrollton and Rowlett. Rowlett work was completed; Farmers Branch/Carrollton will be completed in FY 2019.

## Collin County Rides Program

During FY 2016, DART was asked to provide senior and disabled demand responsive service to parts of Collin County left without transportation following the collapse of the Texoma Area Paratransit System. The NCTCOG contracted with the DART Bus Service, LGC to provide services in Allen, Wylie, and Fairview. This NCTCOG-funded service began in February 2016 and ended 90 days later in May 2016. This emergency service allowed DART to negotiate funding with Allen, Wylie, and Fairview along with NCTCOG to provide a similar service through FY 2017. DART was able to obtain a major grant from Toyota Motor North America, Inc., as well as NCTCOG for funding to permit the cities to have a longer time to evaluate their needs for public transportation. During FY 2017, DART implemented a program for Collin County like the Plano Ride Program to service seniors and disabled persons. In addition, during FY 2017 and FY 2018, DART collaborated with the cities in Collin County to complete a countywide public transportation plan to guide future investments in transit. DART anticipates that the Cities of Wylie, Fairview, and Allen will contract with the DART LGC to extend the taxi subsidy program through 2020.

## DART Rides Program

For several years, DART partnered with the City of Plano to support the Plano Senior Rides program, a program providing taxi vouchers to help fund transportation for seniors who are unable to use DART fixed route or Paratransit services. DART has made key program changes that replaced paper vouchers with debit cards, which simplified record-keeping and administrative burdens. In 2017 the program administration was also transferred to DART at the request of the City of Plano. The program is offered to any resident of the City of Plano that is age 65 or older, and persons with disabilities that do not qualify or are unable to use DART fixed route or Paratransit services.

DART received requests for transportation subsidy and/or similar programs in Carrollton and Rowlett in areas with very limited or no regular fixed-route transit service. DART submitted and received a grant for funding to help start transportation subsidy programs in Rowlett and Carrollton. These programs began in the summer of 2018.

The success of the existing transportation subsidy programs in Allen, Fairview, Wylie, and Plano along with the expected success in Carrollton and Rowlett has prompted an additional funding request to provide these services in parts of Dallas County. DART has identified nine zip codes in four cities that would benefit from this type of service.



*Silver Line Corridor* – DART owns 54 miles of the Silver Line rail corridor from north Fort Worth to downtown Wylie. In 2016, Trinity Metro negotiated and signed a Full Funding Grant Agreement with FTA for the TEXRail project, which uses the segment of the Silver Line west of DFW Airport, and continues south into downtown Fort Worth to the existing TRE Fort Worth

Central Station and the Fort Worth T&P Station. Service began on January 10, 2019. Trinity Metro is contemplating plans to include a future extension into southwest Fort Worth.

In support of the Silver Line project, DART undertook the early engineering and environmental documentation of the project on the eastern portion of the corridor extending from DFW airport to Plano. Preliminary engineering was taken to the 5% level as of Spring 2014, and a cost analysis



of 41 different service configurations was performed. The service configuration (and associated cost) of full double-track, DFW-to-Plano (Southern alignment) with a shallow trench (or other appropriate mitigation) across North Dallas and a station at Cypress Waters was included in the FY 2016 Financial Plan. The FY 2017 Twenty-Year Financial Plan included a 13-year acceleration of this project. The FY 2016 planned revenue service date was FY 2035. It is now FY 2022. Preliminary engineering to the 10% level and an Environmental Impact Statement (EIS) were initiated in FY 2017 and were completed in FY 2019. This project was awarded to ArcherWestern Herzog 4.0, Joint Venture and notice to proceed was given in January 2019. As currently defined, the project will consist of double-track configuration and ten new stations.

## Service to Cities Outside the Current Service Area

*Regional Service Policies and Operations* – In 2012, the DART Board modified its policy relating to fixed-route service beyond the service area boundary. Board Policy III.07 was modified to authorize contract bus service for cities outside the DART Service Area. This resulted in contracts with the City of Mesquite to operate the Compass Route connecting Mesquite, Texas with the Lawnview Station.

DART currently works through a Local Government Corporation (LGC) to manage out of-service area contracts, including an agreement with the City of Mesquite for services between Hanby Stadium and DART Lawnview Station.



## **Strategic Priority 5**

## Pursue Excellence Through Employee Engagement, Development, and Well-Being

The DART Board's Strategic Priorities and Goals include major initiatives for increasing the Agency's return on its investment in human capital. The Agency has Employee Values and organizational change strategies that balance the expectations and needs of the organization and its employees. During FY 2020, steps will be taken to achieve demonstrable improvement in customer service through the 5 Star Service Program and through improved employee engagement and leadership development.

The commitment has been a guiding principle for the Executive Leadership Team to provide strategic direction in three critical areas:

- Develop and align the organization's Work Force Plan with the Board's strategic priorities
- Implement initiatives to increase employee satisfaction and drive change through employee engagement and development
- Assures the Human Resources function seeks ways to enhance DART employee status as an important investment and to focus on their growth and development within the Agency

The Human Resources (HR) function strives to provide maximum support and responsiveness to employees who are critical to DART's operational needs and programs. The DART Human Resources department embraces contemporary business practices and functions as a business facilitator of efficient and effective delivery systems and programs.

Human Resources has partnered with Southern Methodist University Cox School of Business and the Dallas County Community College District to provide learning environments for Supervisory DART, Executive DART and a modified Leadership DART program. These programs are an accelerated development program for Executives, Managers and Supervisors, designed to create a pool of professionally trained employees who are capable of leading DART into the future. Supervisory DART, a new program, is an introductory online program aimed at supporting new supervisors in overcoming the challenges unique to transitioning from an individual contributor role to a supervisory and/or management role.

The DART People Center will continue to play an important role in providing DART employees with information and access to assistance with all matters pertaining to their employment. General questions and assistance with routine matters are answered by staff in the People Center, while more complex issues are referred to senior staff who have more specialized expertise. Employee communications will continue to be refined and more specifically targeted to reach the intended audiences more efficiently. Such refinements will include a continuing focus on communication strategies and tools such as: People's Corner (employee newsletter), DARTnet, email announcements, videos, and opportunities to reach individual employees through other official electronic channels. Human Resources will provide support and guidance to Executives in the evaluation of the results of an employee engagement survey administered to employees in FY 2018.



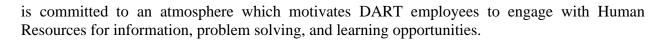
#### Establish Consistency in DART People Practices

Human Resources' goal is to achieve business partner status with departments by accomplishing the following:

- Implement Human Resources "best-in-class" services in order to implement change management initiatives
- Identify skills required to manage the pace of change and how this type of change will impact the workforce
- Compete for the right talent by providing opportunities to attract and retain talent with focus on underutilized categories
- Maintain accurate employee records both electronically and through the use of limited paper files
- Assure that fair compensation and appropriate benefits (Total Rewards) meet the needs of all DART employees
- Promote the Agency's goal to achieve improvement in service quality through increasing DART employee engagement with the 5 Star Service Program
- Strive to promote continuous process improvement, team learning, and personal development
- Assist in the DART employee engagement process by linking Human Resources activities to Agency priorities and develop an effective and flexible organization that responds to people issues with a culture for results and performance. Secure a high degree of DART employee involvement and participation within a climate that fosters learning and growth
- Increase development and training programs to focus and build on workforce contributions and commitments to DART by providing opportunities for a worthwhile and satisfying work experience
- Create partnerships to achieve the Agency's objectives and provide excellent Human Resources services. This will be accomplished through the extensive use of partnerships and direct consultation with functional leaders on Human Resources deliverables, such as: succession planning, workforce planning, career development, and total compensation and professional skill-enhancing programs

## Top Opportunities in Human Resources in FY 2020

Human Resources is committed to organizational effectiveness that requires Human Resources deliverables and programming to be accomplished with a sense of urgency. Human Resources must promote a passionate approach regarding the Agency's business in support of an open work environment in which all DART employees feel personally accountable for meeting business expectations. Human Resources will encourage open, honest dialogue that promotes mutual respect, understanding, conflict resolution, idea sharing, learning, and growth. Human Resources



- Continue to develop and implement Standard Operating Procedures for all functions and change initiatives to improve effectiveness
- Lead and support communication in the implementation of the employee engagement strategy
- Address workforce needs and expectations through an open and honest engagement process in terms of ability to understand and implement changes
- Lead and support enhancements of the benefits function in order to ensure that benefit plans and programs meet the needs of DART employees
- Get the right people in the right jobs in a timely manner as well as bring structure and discipline to compensation management
- Develop continuous improvement programming for Human Resources functions including; use of a Classification and Compensation consultant to update job descriptions and develop a compensation plan for DART's administration of compensation and classification and bottom-up engagement process in order to align task and deliverables with Human Resources functional direction

## Front-Line Employee Engagement

The Division Level Measurement (DLM) Program targets increasing front-line employee ownership of the goals of the Agency, with the ultimate objective of increasing employee motivation and satisfaction in order to drive improved service and increased ridership. The DLM Program also targets improvements in service quality through enhanced data analysis, communications, and problem solving. Peer groups compete with one another on a number of performance measures. In FY 2020, Human Resources will continue to partner with Business Units to assure that the DLM program is effective and fair. This will include providing facilitators to work with focus groups throughout the Bus and Rail Departments to get feedback and reengineer the program.

Each year the peer groups' goals are reviewed and updated. Below is the listing of the current groups.

#### *Peer Group #1*

- Northwest Bus Operating Sections' personnel
- South Oak Cliff Bus Operating Sections' personnel
- East Dallas Bus Operating Sections' personnel



- All LRT Sections' personnel, including Rail Operations, Rail Fleet Services, and Ways, Structures, and Amenities
  - Includes Safety Specialists, Maintenance Training Specialists, Training Supervisors, and Yard Revenue Controllers assigned to specific operating divisions

## *Peer Group #2*

- Customer Service personnel
- Transit Operations Sections' personnel (Station Concierges)
- Maintenance Central Support Sections' personnel

## Peer Group #3

- Non-Revenue Vehicle Maintenance personnel
- TVM Sections' personnel
- Materials Management personnel

Exhibit 31 is a sample of the DLM scorecard from the Third Quarter, FY 2019, showing performance as a percentage of goals for Peer Group 1.

For example, 100% performance on Mean Distance Between Service Calls (MDBSC) for Northwest indicates that the actual number of MDBSC was either at or above the targeted mileage for the quarter.

FY 2019, Third Quarter								
	Rail		South Oak Cliff		Northwest		East Dallas	
Category	Actual	Percent to Target	Actual	Percent to Target	Actual	Percent to Target	Actual	Percent to Target
On-Time Performance	93.1%	99.0%	82.9%	99.88%	82.2%	99.04%	83.1%	100.00%
Complaints/100K Passengers [1]	N/A	90.34%	21.4	100.00%	21.5	100.00%	22.6	100.00%
Complaints/100k Passengers - Rail	3.1	91.72%	N/A	N/A	N/A	N/A	N/A	N/A
Complaints/100K Passengers - WSA	0.6	79.30%	N/A	N/A	N/A	N/A	N/A	N/A
Complaints/100K Passengers - CSR	0.8	100.00%	N/A	N/A	N/A	N/A	N/A	N/A
Unsched. Absences (Maint.)	11.92	86.75%	14.45	84.48%	22.99	53.12%	14.03	87.01%
Unsched. Absences (Oper.)	23.57	69.77%	26.46	54.72%	25.75	56.22%	26.79	54.04%
Unsched. Absences (WSA)	9.92	91.84%	N/A	N/A	N/A	N/A	N/A	N/A
Unsched. Absences (CSR)	10.38	100.00%	N/A	N/A	N/A	N/A	N/A	N/A
Fixed Schedule Programs Completed	11.33	100.00%	N/A	N/A	N/A	N/A	N/A	N/A
Late Pullouts	4.67	100.00%	22	73.85%	37	62.16%	62	30.81%
MDBSC - Mechanical - Large Bus	N/A	N/A	5,577	79.68%	7,448	100.00%	6,850	97.86%
MDBSC - Mechanical - SMART Bus	N/A	N/A	N/A	N/A	4,089	N/A	2,847	N/A
Miles Between Service Calls - LRT	20,426	97.27%	N/A	N/A	N/A	N/A	N/A	N/A
Miles Between Service Calls - Street Car	3,458	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Accidents/100k Miles	N/A	N/A	2.28	98.68%	2.40	0.94	1.94	100.00%
Sfty Violations/100k Sched. Trn Mi.	0.78	100.00%	N/A	N/A	N/A	N/A	N/A	N/A
Ridership/Average Weekday	91,743	97.88%	38,018	100.00%	40,728	100.00%	40,974	100.00%
Unit Cost Per Hour	60.42	98.44%	\$56.00	94.24%	\$52.16	93.66%	\$52.28	96.12%
Unit Cost Per Mile	\$4.111	99.03%	\$1.70	94.83%	\$1.77	80.88%	\$2.04	71.01%
Overall Average for Quarter		94.44%		88.04%		83.87%		83.69%

## Exhibit 31 Division Level Measurement (DLM) Program FY 2019, Third Quarter

<sup>[1]</sup> - Rail Complaints/100K Passengers presented as an average of Rail and WSA.



## **Strategic Priority 6**

## Innovate to Improve Levels of Service, Business Processes, and Funding

DART maximizes Agency resources through effective marketing, innovative technology, and astute financial management.

#### Improve Levels of Service

## Timely, Accessible, and Reliable Services and Information to Customers

Customer transportation services are being optimized by improving the systems used on DART's vehicles to create and adhere to schedules and make operator assignments more efficient and equitable. The Agency continues a focus on business intelligence to provide greater insight into DART services for continuous improvement.

The existing point-to-point rail trip planning application has been modified to provide arrival predictions instead of scheduled times. System enhancements have increased stability and availability of this service.

To address a major customer concern regarding missed connections, connection protection software is being piloted at selected key transfer locations. This system uses automated vehicle location information and bus schedules to temporarily "hold" the departure of a bus if a connecting bus is arriving a few minutes behind schedule.

*Interactive Kiosks* – Connecting with current and potential riders across multiple channels influences their experience with our brand in positive and meaningful ways.

The agency first tested an interactive kiosk at Dallas Love Field airport two years ago. Since then, arriving passengers can plan their ground transportation on the interactive map, and then text or email the directions to themselves.

The agency is looking to expand its usage of interactive kiosks at rail stations and bus transit centers. Interactive kiosks could offer wayfinding and real-time travel information. Wayfinding will be an important feature, as it will assist riders with trip planning and identifying local attractions.





These kiosks could potentially be integrated into other DART systems, including the GoPass app and GoPass Tap card readers. They also could provide Wi-Fi service and offer service in multiple languages.

The kiosks should generate advertising revenue for the agency.

Interactive kiosks complement other customer touchpoints DART provides, including the GoPass app, DART.org, customer service, printed materials and others. Interactive kiosks would make it easier for riders to navigate the system, particularly special occasion riders, tourists and those new to using the service.



*InfoTransit Digital Signage* – The "InfoTransit" digital signage system on all buses displays information on the next and subsequent two stops for passengers. DART is now able to create slideshows onsite, update the "Next Stop" content, and present slideshow content by Stop ID or GPS location. Additionally, this system provides customers with system-wide marketing campaigns relating to current and upcoming DART events.

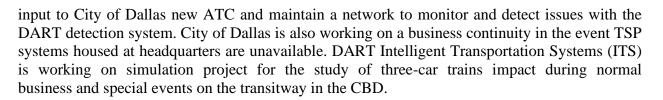
*Broadband Data Communications to Buses and Surveillance Cameras* – All DART buses are also equipped with surveillance cameras and 4G LTE (Long-Term Evolution) cellular communications for police and other authorized parties to view current video streams from the video cameras on the bus in case of an incident. The video is recorded and tagged and is then offloaded automatically from the vehicle in the operating division garage or by special request. The health of the 4G LTE cellular communications link on the bus is regularly monitored, as is the bus's ability to connect to the wireless network at the garages.

Finally, broadband cellular communications will be used for real-time validation of electronic fare media such as DART proprietary smart media, contactless bank cards, and Near Field Communication (NFC) devices for Apple Pay, Android Pay, and Samsung acceptance once the fleet is equipped with validators.

The agency continues to improve the use of technology to provide timely, accessible, and reliable services and information to customers

## Leveraging Technology for Maximum Benefit to the Agency and Stakeholders

*Traffic Signal Priority (TSP)* – The City of Dallas has completed installation of the Advanced Traffic Signal Controllers (ATC) at Dallas Central Business District (CBD). City will be implementing peer-to-peer communication network with new ATC in the LRT mall. At the request of DART, the City will install detectors for vehicular traffic on city streets intersecting the LRT mall. DART Intelligent Transportation Systems (ITS) will continue to provide train detection



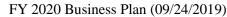
In FY 2018, funding was approved to implement TSP along the Beltline corridor. TSP will reduce or eliminate unnecessary stops at signalized intersections when a bus runs behind schedule. Reduced signalized time at intersections will improve on time performance for buses that operate this corridor. TSP has been expanded to include Buckner and Hampton corridors. There is a capital request for additional funding. If approved, the team will move forward.

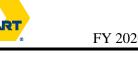
In 2015, DART tested a prototype smart bus shelter. Construction of this shelter was completed in FY 2017, the shelter serves as a model for future enhanced bus services and has additional features normally associated with rail stations, including security cameras, lighted displays and next-bus information. In FY 2018, funding was approved to install nine additional smart shelters.

Automatic Passenger Counters (APC) – The use of APCs on trains and buses supports the collection of real-time ridership as well as schedule performance by stop. To date, APC units have been installed on 175 buses as part of the new radio system implementation and are providing more accurate passenger counts and runtime data to support planning and scheduling decisions. DART had APC equipment installed on the full DART Bus Fleet in FY 2019 to permit passenger counts to be estimated from APC counts rather than farebox data. DART also added additional 21 APCs to the existing rail fleet.

*TRE Next Train Project* – This system provides "Next Train" information at TRE's ten stations and went live in the fall of 2015. This system includes Automatic Passenger Counters, which accurately provide the Agency with timely ridership data. The system also provides schedule adherence and the ability to make announcements onboard the vehicle and at station platforms.







*Comprehensive Payment System (CPS)* – DART entered into a multi-year agreement with Vix Technology, a system integration firm, in August 2015 to streamline DART's fare payment environment by utilizing new innovative technologies. The goal of this project is to find convenient and easy-to-understand methods for customers to obtain and purchase fare media.

This new solution incorporates an account-based back office system which utilizes best practices of modern technologies in the consumer and fare payment sectors, capable of interfacing with both bank and non-bank financial clearing systems for transaction processing and settlement. One goal of this solution is to allow DART to significantly reduce the total amount of physical cash that the agency must process. DART has determined that this can be accomplished by creating an electronic payment infrastructure for transportation and other services that is ultimately capable of being deployed region-wide, using third-party produced and distributed prepaid cards and contactless devices such as smart cards, contactless bank cards, RFID tags, and Near Field Communication (NFC) enabled devices.

In addition to the system integrator selection, DART awarded a contract to PayNearMe (PNM) in April 2016 to provide the retail distribution solution. PNM will provide hundreds of retail locations within the DART Service Area for customers to purchase and reload smart cards for use in the new account-based system. PNM partners include Blackhawk Network, which provides access to the largest grocery store network in the U.S., and Fidelity Express, which provides access to independent and small grocery operators.

Vix Technology (Vix) and PNM implemented the state-of-the-art electronic fare payment, distribution, collection and processing system in phases beginning in the fourth quarter of FY 2018.

*GoPass Mobile Ticketing* – Enhancements scheduled for FY 2019 are; "See Something" integration, robust analytic tools, Google Pay, rider alerts, weather, Scooter battery life, and inbox messaging. FY 2020



anticipates the following enhancements; In-app feedback, parking availability, SDK tickets for third-party sales, vouchers, & couponing, advertising, and Tap Card provisioning.



GoLink is a micro-shuttle that combines the low cost of public transportation with the convenience and technology of ride-sourcing. GoLink provides customers personalized curb-to-curb service anywhere within a zone. There are currently three zones in Plano, a suburb of Dallas, three zones in southern Dallas and one zone in Rowlett. Customers request a GoLink ride through the TapRide mobile app and can track the location of the shuttle bus, like they can with private ride-sharing services.

DART hopes to reach new customers who live or work in areas not served by public transit by introducing a dynamic carpooling service: GoPool. Unlike static carpooling, where commuters must find people in advance to share a trip, dynamic carpooling uses technology to arrange one-



time shared rides on short notice through a mobile app. Commuters who want to reduce travel costs but don't have access to DART service can use GoPool to find the ideal ride companion – someone who lives and works nearby and shares a similar work schedule.

DART was selected to participate in this technology-driven project through two U.S. Department of Transportation (U.S. DOT) initiatives aimed at promoting the use of advanced technologies in transportation: The Advanced Transportation and Congestion Management Technologies Deployment (ATCMTD) program run by the Federal Highway Administration (FHWA) and the Mobility as a Service (MaaS) Sandbox program overseen by the Federal Transit Administration (FTA). Mobility as a Service (MaaS) – As DART moves into providing MaaS, our focus continues to be serving our customers and creating a transit system that is an integral part of communities to enhance quality of life and opportunity, while sustaining our system into the future. MaaS is journey planning and management, digital payment and ticketing, first/last mile transportation combining public transit, on-demand, and shared mobility services.

## Challenge, Redefine, and Update the DART Business Model

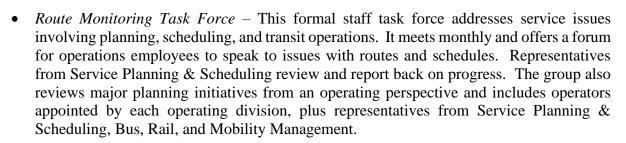
Over the last several years, DART has undergone significant changes in its operating modes. These items are either in-process or have seen successful completion:

- Full replacement of the bus fleet
- Deployment of CNG fueling facilities in all four operating divisions (three bus and one paratransit division)
- Completion of the light rail extensions to DFW Airport and the Dallas UNT Campus (October 2016)
- Implementation of a new delivery model for paratransit services
- Contract bus services for cities outside the service area
- Award of a new 10-year contract for regional commuter rail services
- Introduction of modern, convenient payment systems that will permit the customer to buy tickets, parking passes, event tickets, and other items in a single purchase

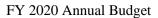
Today, DART has an increasingly customer-focused culture and has institutionalized the teambased improvement philosophy and process to increase efficiencies within the organization.

DART currently has more than 20 cross-functional process teams from all levels, actively engaged to identify efficiencies and quality improvements to ensure DART attains the highest level of performance excellence for their customers, employees, and stakeholders. Examples of these teams include:

- 5 Star Continuous Improvement Teams These cross-functional teams focus on identifying improvements in five-to-six key process areas each year. Recommendations are focused on enhancing the customer experience for external as well as internal customers.
- *Service Planning Committee* This committee is chaired by the President/Executive Director and meets to discuss service planning, ridership, and related issues.



- *Division Level Measurement (DLM) Steering Committee* This committee recommends goals and provides guidance to the Division Level Measurement Program, engaging employees at all levels throughout the operational departments in achieving annual key performance metrics.
- *Employee Communication and Engagement Committee* This committee was formed in response to previous employee survey findings. The committee is composed of employees from throughout the organization who serve as departmental representatives and the voices to communicate information to their respective groups on a timely basis.
- On-Time Performance Data and Radio Team This team focuses on refinements to the Bus Computer Aided Dispatch/Automatic Vehicle Location System (CAD/AVL system) to enhance DART's ability to monitor and optimize the on-time performance and connectivity of the bus and rail networks. The team includes representatives from Planning, Scheduling, Bus, Rail, and Technology who are charged with developing systems and processes to improve on-time performance.
- *Customer Response Team* This is a team of DART administrative employees who help communicate with DART customers during major rail service disruptions that affect a significant portion of our ridership group.
- Service Disruption Committee This continuous improvement team focuses on improving the processes and procedures necessary to enhance internal communications and communications with customers during service disruptions and reduce the negative impact on our customers.
- *Business Intelligence* Considerable progress has been made in the area of Business Intelligence in recent years, including:
  - Creation of a library of reports for On-Time Performance utilizing information from the Transit Master CAD/AVL System.
  - Evaluation of a new, easy-to-use visualization tool for analysis and management reporting of ad-hoc data housed in a cloud-based repository that enables collaboration and sharing of these analyses and improves technology infrastructure performance.
  - Implementation of analysis tools for schedule optimization and service delivery performance. This environment should enable DART to identify significant operational cost savings and improve customer satisfaction by optimizing the delivery of services to our customers.



• Upgrade of the Business Intelligence (BI) environment used in the budget planning process to the current software version that allows the use of new BI reporting and data manipulation tools in that process.

## Funding: Federal, State, and Local Government Relations

Government Relations encompasses all interactions between DART and its external political environment. DART's Government Relations staff plans and implements the Agency's advocacy efforts and ensures that the exchange of information between DART, the 13 cities in the service area, the D/FW region, the U.S. Congress, the U.S. Department of Transportation including but not limited to, the Federal Transit Administration and the Federal Railroad Administration, and the Texas Legislature is accurate, consistent, and timely. In addition to providing tours and briefings to elected officials and members of their staff, Government Relations responds to citizens' concerns as they are relayed to the elected officials' offices for resolution. Government Relations actively participates in transportation-related organizations such as the American Public Transportation Association, South West Transit Association, Texas Transit Association, Dallas Regional Mobility Coalition, Transit Coalition of North Texas, and the Regional Transportation Council. Government Relations oversees the day-to-day administration of DART's contracted legislative consultants in Washington, D.C., and Austin to develop appropriate advocacy strategies for securing Agency objectives for both operations and capital projects.

DART Government Relations staff monitors dialogue emanating from stakeholders and transit advocacy groups regarding the implementation of federal transportation policy authorized by the Fixing America's Surface Transportation or FAST Act, as well as annual appropriations items concerning DART's capital projects and federal funding requests. Government Relations staff coordinates with members of the Dallas-area congressional delegation to convey DART's positions on federal policy and seek letters of support on federal grant applications, such as for the TIGER program, when necessary. The staff provides timely updates on the status of any grant applications submitted by DART to the U.S. Department of Transportation. Finally, staff actively monitors the U.S. Congress and the Administration for any developments relating to potential funding for projects identified in DART's Twenty-year Financial Plan.

## Funding: Rail Right-of-Way

DART owns a total of approximately 254 miles of railroad corridor. The Railroad Management Division of the Commuter Rail Department is responsible for management of DART-owned commuter rail corridors 101 miles (includes future Silver Line commuter rail line), active freight lines (175 miles [a portion of this number has both freight and commuter rail]) and non--operated/freight abandoned lines (25 miles), including the administration of trackage rights agreements with freight railroads that are fulfilling DART's common carrier obligations to provide freight rail service along the freight lines. DART jointly owns the Trinity Railway Express (TRE) with Trinity Metro.

The Regional Rail Right-of-Way Company, a wholly-owned subsidiary of DART, holds the common carrier authority and manages the trackage rights agreements and collection of trackage rights fees for the DART-owned active freight rail corridors.



In total, the division manages approximately 2,675 licenses on the various corridors. Revenues for the TRE corridor are projected at \$2.4 million for FY 2020. The DART/Trinity Metro ILA specifies that revenues generated on the TRE Corridor are joint revenues and are to be applied against TRE operating costs.

The division is also responsible for the property management of the TRE Corridor, which includes the revenue collection from various land licenses, oil and gas leases, signboard rental income, license fees, and trackage rights fees. The potential impact of revenue generated from the oil and gas industry (natural gas wells) is discussed further below.

The non-TRE revenues are allocated to DART's general fund. Exhibit 32 provides a summary of actual and projected revenue from all activities for FY 2013 through FY 2020 (projected), excluding oil and gas leases which is shown in Exhibit 33.

	(		
Fiscal Year	TRE	DART	Total
2013	2.9	2.0	4.9
2014	2.8	2.2	5.0
2015	2.8	2.2	5.0
2016	3.1	2.3	5.4
2017	3.4	2.5	5.9
2018	2.5	2.6	5.1
2019 (Projected)	3.0	2.6	5.6
2020 (Projected)	2.4	2.7	5.1
Total			
(Actual & Projected)	\$22.9	\$19.1	\$42.0

## Exhibit 32 Railroad Management Revenue (in Millions)

#### Oil and Gas Lease Agreements

The Commuter Rail and Railroad Management Department strives to increase license and contract revenue through consistent management and enhancement of existing agreements.

In recent years, oil and gas lease revenues have fallen due to decreases in both well production and a sharp drop in natural gas prices. Oil and gas revenues for FY 2018 were \$119,000. FY 2019 is projected to be \$100,000, and FY 2020 is projected at \$100,000.

Lease royalty and bonus revenues from FY 2013 through FY 2020 are shown in Exhibit 33.



(in Thousands)				
Fiscal Year	Amount			
2013	328.5			
2014	455.6			
2015	50.4			
2016	200.0			
2017	106.6			
2018	119.0			
2019 (Projected)	100.0			
2020 (Projected)	100.0			
Total (Actual & Projected)	\$1,460.1			

# Exhibit 33 Oil & Gas Lease Agreements (in Thousands)

# **Budget Structure**

Three major components comprise the agency's FY 2020 Annual Budget:

- Operating Expense Budget
- Capital and Non-Operating Budget
- Debt Service Budget

The Operating Expense, Capital and Non-Operating, and Debt Service budgets have been developed to support the Board's Strategic Priorities (discussed starting on page 95), while retaining a focus on the core strategic objective of maintaining financial stability. The result is a fiscally responsible plan that clearly supports the agency's mission.

# **Financial Summary**

Exhibit 34 provides a summary view of the FY 2020 Annual Budget. The Agency's overall budget increased by \$329.2 million (31.9 %) from FY 2019. The FY 2020 Operating Expense budget is \$562.3 million, an increase over the FY 2019 Operating Expense budget of \$18 million (3.3%). The Capital and Non-Operating budget are increasing by \$305.8 million (104.9%). The Debt Service budget is increasing by \$5.3 million (2.7%).

FY18 Actuals	Category	FY19 Budget	FY20 Budget	\$ Variance	% Variance
\$501.0	Operating	\$544.3	\$562.3	\$18.0	3.3%
118.0	Capital	291.5	597.3	305.8	104.9%
193.6	Debt Service	197.2	202.5	5.3	2.7%
\$812.6	Total Expenditures	\$1,032.9	\$1,362.1	\$329.2	31.9%

# Exhibit 34 FY 2020 Annual Budget (in Millions)

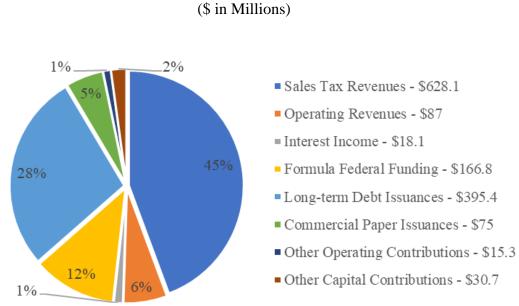
# **Inside the Numbers**

# **Revenue Factors**

Total sources of funds as shown at Exhibit 35 are projected at \$1,416.2 million, \$362.4 million (34.4%) higher than the FY 2019 Budget. The increase is mainly driven by \$395.4M in long-term debt issuances and \$75M in commercial paper issuances due to the Silver Line corridor alignment and the D2 Light Rail alignment. Sales tax revenues remain unchanged compared to the FY 2019 Budget of \$628.1 million. Additional information about Sources of Funds over the next 20 years can be found in the *Financial Plan* Section.

Cotogowy	FY19	FY20	\$	%
Category	Budget	Budget	Variance	Variance
Sales Tax Revenues	\$628.1	\$628.1	\$0.0	0.0%
Operating Revenues	85.4	86.7	1.3	1.5%
Interest Income	17.2	18.1	1.0	5.6%
Federal Funding	167.8	166.8	(1.0)	(0.6%)
Long-term Debt Issuances	90.9	395.4	304.5	334.9%
Commercial Paper Issuances	27.0	75.0	48.0	177.8%
Other Operating Contributions*	14.2	15.3	1.1	7.8%
Other Capital Contributions	23.1	30.7	7.6	32.7%
Total Sources of Funds	\$1,053.7	\$1,416.2	\$362.4	34.4%

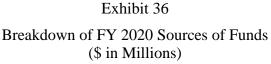
# Exhibit 35 Sources of Funds (in Millions)



# <u>Sales Tax Revenues</u> represent 44% of total sources of funds for FY 2020 and is the largest source of revenue for the Agency. A ten-year history of sales tax receipts by month is included at Exhibit 106 in the *Reference Section*.

The sales tax projections contained in the FY 2020 Budget remain unchanged compared to the FY 2019 budget. This represents a 0% increase from the FY 2019 budget, and 0% increase from FY 2019 projected receipts.

Exhibit 37 shows the year-over-year growth of sales tax from FY 2011 Actual through FY 2020 Budget in terms of both dollars and percentages. More discussion of future sales taxes is included in the *Financial Plan Section*.



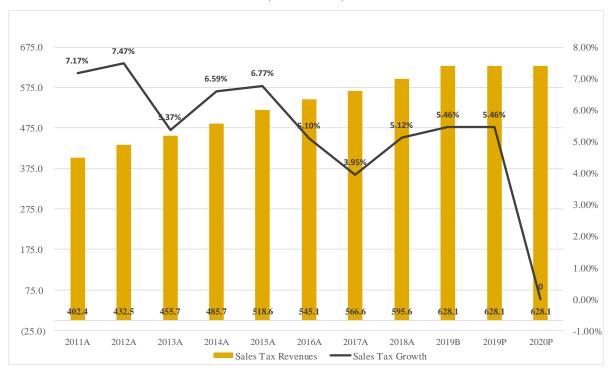


Exhibit 37 Sales Tax Data, Historical and Projected (in Millions)

The category of <u>Operating Revenues</u> totals \$86.7 million for FY 2020, a \$1.3 million (1.5%) increase from FY 2019. The primary cause of the growth is increased ridership driven from the August 2019 bus service improvements that will have the first full year impact in FY 2020.

<u>Interest income</u> is projected to have an increase of \$1.0 million (5.6%) from FY 2019 due to rising interest rates caused by a strong U.S. economy.

The <u>Federal Funds</u> line item includes both Formula and Discretionary Federal Funding. This line item is programmed to decrease by \$1.0 million and represents 12% of total sources. Formula funds include both the current year's allocation and carry-over of unspent funds from prior years. Changes in discretionary funds are primarily a result of timing of receipt of funds on several federally funded projects.

<u>Long-term Debt Issuances</u> is projected to increase by \$304.5 million due to funding for the Silver Line and the D2 light rail alignment.

The <u>Commercial Paper Issuances</u> is projected to increase by \$48.0 million due to funding for the Silver Line.

<u>Other Operating Contributions</u> is projected to increase by \$1.1 million due to increased contributions for Trinity Metro.



<u>Other Capital Contributions</u> is projected to increase by \$7.6 million (32.7%) due to increased contributions for Trinity Metro, Dallas Streetcar Extension, Silver Line, and the Widen Motor Street Project.

More discussion of the debt program and Federal Funds is included in the Financial Plan Section.

# **Operating Expense Assumptions**

The Operating Expense Budget is approved in total by the Board of Directors in late September of each year.

The following assumptions were used to develop the FY 2020 Operating Budget:

- Salary and Wage Assumptions
  - o 3% pool available for adjustments to compensation and related salary-driven benefits.
  - Any funds available for wage increases will be applied across-the-board for hourly personnel and based on performance for salaried personnel.
  - Hourly wage progressions based on tenure and training will continue.
- <u>Benefits Assumptions</u>
  - DART is undergoing healthcare program restructuring to combat rising healthcare costs, focusing on increased accountability of cost and quality of care by providers. This was reflected in the FY 2019 budget and will continue in FY 2020.
  - DART is self-insured for health insurance claims with a third-party administrator.
- Fuel and Energy Assumptions
  - The majority of DART's CNG fuel costs are fixed price by contract and result in an average cost of approximately \$0.97 per DGE (diesel gallon equivalent). CNG fuel is also used for all vehicles providing Paratransit service.
  - Diesel fuel is budgeted at \$2.01 per gallon for TRE.
  - Electricity rates per kWh are budgeted at \$0.06740 with an assumption of 11.34 kWh/car mile consumption rate for light rail vehicles (LRV).
- <u>Purchased Transportation Contract Rates</u>
  - Trinity Railway Express services are provided through a 10-year contract with Herzog Transit Services, Inc. FY 2020 is the fifth year of that contract.
  - FY 2019 is the last year of the seven-year contract with MV Transportation for delivery of Paratransit services. Paratransit contract costs have increased by \$0.6 million related to both scheduled contract increases and anticipated growth in trips to be provided.
  - DART provides Vanpool services through a third-party contractor (vRide).



- <u>Service Levels</u>
  - Bus: DART will see continued bus service enhancements in FY 2020 as a result of our recent Comprehensive Operations Analysis. There were significant increases in peak hour service in FY 2019 with the addition of 41 buses. Routes during off-peak hours and weekends will witness more frequent service.
  - Light Rail: FY 2020 service levels are unchanged from FY 2019.



- o Streetcar: FY 2020 service levels are unchanged from FY 2019.
- Commuter Rail: As stated earlier, the Trinity Railway Express Commuter Rail services are provided by Herzog Transit Services, Inc. through a 10-year contract. The contract includes service costs for TRE and TEXRail project, which opened in January 2019.
- General Mobility: The General Mobility program consists mainly of vanpool services. The maximum number of vanpools is 225 for FY 2020.
- <u>Reserves</u>
  - Funding in the amount of approximately \$650,000 is included in the FY 2020 Budget for possible cost increases or programs unknown during the budget process. These funds may or may not be used during the fiscal year.

Exhibit 38 shows DART's operating expenses by department for the fiscal years 2019 - 2020.

Exhibit 38
FY 2019 – FY 2020 Departmental Expense Comparison
(in Thousands)

Department	FY 2019 Budget	FY 2020 Proposed Budget
President Direct Reports	\$39,016	\$34,247
EVP Customer Care/Svc Delivery	415,150	430,003
EVP Business Solutions & Innovations	40,558	50,099
EVP Growth & Regional Svcs	46,254	49,313
Board Directs	6,043	6,096
Agency-Wide Benefits Allocation/Initatives	9,451	6,400
Total Departmental Expenses	\$556,473	\$576,157
Capital P&D and Startup	(\$12,207)	(\$13,854)
Total Operating Expenses	\$544,266	\$562,303



# **Operating Budget Highlights**

DART's Operating Expense increased over the FY 2019 budget by \$18.0 million (3.3%) to \$562.3 million. Employee compensation, in the form of Salaries and Wages (\$274.4 million) and Benefits (\$124.0 million), comprised 69.1% of the total operating budget. The third largest element of the operating budget is Purchased Transportation at 10.9% (\$62.5 million).

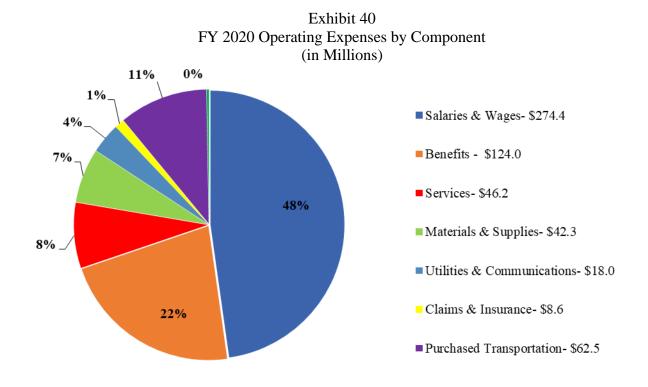
Exhibit 39 displays the Operating Expense budget by object classification and FY 2019 budget, FY 2019 Projected, and the FY 2020 budget. More detail by department can be found in the *Organizational Units Section*.

FY18 Actuals	Object Classification	FY19 Budget	FY 2019 Projected	FY2020 Proposed	\$ Variance	% Variance
\$247.9	Salaries & Wages	\$264.8	\$259.0	\$274.4	\$9.6	3.6%
102.3	Benefits	122.1	116.8	124.0	\$1.9	1.6%
41.8	Services	47.7	45.2	46.2	(\$1.4)	(3.0%)
37.9	Materials & Supplies	41.2	40.4	42.3	\$1.2	2.8%
19.6	Utilities & Communications	16.2	16.9	18.0	\$1.8	11.2%
4.8	Claims & Insurance	5.6	10.8	8.6	\$3.0	53.2%
55.9	Purchased Transportation	58.9	58.1	62.5	\$3.6	6.1%
\$510.3	Sub-Total (All Expenses)	\$556.5	\$547.3	\$576.2	\$19.7	3.5%
(9.2)	Capital P&D	(12.2)	(12.2)	(13.9)	(\$1.6)	13.5%
\$501.0	Total Operating Expenses	\$544.3	\$535.1	\$562.3	\$18.0	3.3%

# Exhibit 39 Operating Expenses by Object Classification (in Thousands)

Exhibit 40, shown on the following page, illustrates the operating budget, showing the amounts and relative proportions of each component.

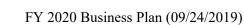




Please note that the expenses totaled in Exhibit 39 above exceed the operating budget by \$13.9 million. This is the amount of departmental expenses classified as Capital Planning & Development costs (Capital P&D).

<u>Salaries and Wages</u> – The FY 2020 Salaries and Wages budget is \$274.4 million, a \$9.6 million (3.6%) increase over the FY 2019 budget.

In the *Salaries and Wages* line item, there is a 3% pool for compensation increases programmed in the FY 2020 budget. There is also 100% funding for the bonus programs Division Level Measurements [DLM] and Reaching Performance Milestones [RPM]), along with the 5 Star Service Program.



**••** 

Exhibit 41 shows a reconciliation of the positions between FY 2019 and FY 2020. Total authorized positions have not increased. Headcount remains the same as FY 2019.

Full-Time	Full-Time Salaried Employees	_
FY 2019	Department	FY 2020
5	Department of the President	3
14	Safety Department	16
15	External Relations	7
98	Finance	98
5	ChiefOfStaff	7
5	Government Relations	14
14	Diversity & Economic Opp.	16
156	Total President Directs	161
37	Human Capital	40
51	Marketing & Communications	50
35	Procurement	35
4	EVP Administration	(
79	Technology	78
206	<b>Total Business Solutions &amp; Innovation</b>	20
8	EVP Customer Care/Service Delivery	9
30	Materials Management	30
429	DART Police	429
57	Mobility Management Services	5
198	Light Rail Operations	19
182	Bus Operations	180
63	Engineering	62
967	Total EVP Customer Care & Svc. Delivery	96
15	Commuter Rail	1:
29	Planning & Development	28
38	Rail Program Development	39
10	Rail Planning	10
92	Total EVP Growth & Regional Dev	9
5	Board Support	
9	Internal Audit	
20	Legal	2
34	Total Board Directs	3
•••	Unassigned Positions	-
1,455	Total Salaried	1,46
1,100	Full-Time Hourly Employees	-,
FY 2019	Department	FY 2020
18	Finance	1
54	Marketing & Communications	4
72	<b>Total Business Solutions &amp; Innovation</b>	64
420	Light Rail Operations	422
214	Rail Operators	214
49	Materials Management	49
	Bus Operations	
1,382	Bus Operators	1,382
381	Non Operator	382
2,446	Total EVP Customer Care & Svc. Delivery	2,44
2,518	Total Hourly	2,51
	·	
3,973	Grand Total Full-Time Employees	3,973

# Exhibit 41 Budgeted Positions

Benefits - The Benefits line includes all statutory benefits such as FICA and Workers' Compensation, and the agency discretionary benefits such as Health Insurance, Life Insurance, Retirement Plans (Defined Benefit, Defined Contribution, and 401k), etc.

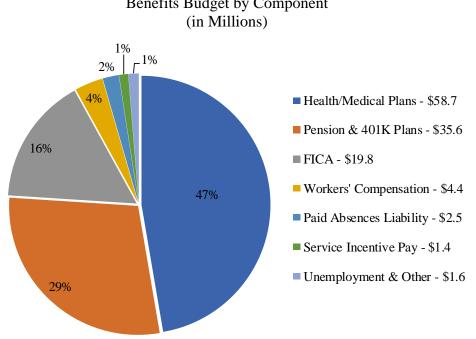
The FY 2020 Benefits budget is \$124.0 million, a \$1.9 million (1.6%) increase from the FY 2019 budget, as shown below in Exhibit 42.

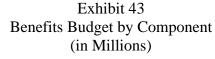
Exhibit 42
Benefits Expenses by Type
(in Thousands)

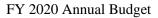
	FY19	FY20	\$	%
Object Classification	Budget	Proposed	Variance	Variance
Health/Medical Plans <sup>[1]</sup>	\$56,288	\$58,682	\$2,395	4.3%
Pension & 401K Plans	35,498	35,614	116	0.3%
FICA	20,298	19,809	(490)	(2.4%)
Workers' Compensation	4,400	4,400	0	0.0%
Paid Absences Liability	2,240	2,506	266	11.9%
Service Incentive Pay	1,448	1,426	(22)	(1.5%)
Unemployment & Other	1,961	1,603	(358)	(18.3%)
Total Benefits	\$122,132	\$124,039	\$1,907	1.6%

[1] Medical plans include medical, vision, dental claims and employee contributions for active and retirees

Exhibit 43 is an overview of the percentage of expenditure to major components within the Benefits category for the FY 2020 budget.







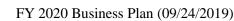
- <u>*Health, Life, and Disability*</u> insurance remains the major cost driver of all DART benefits. The increase year-over-year is approximately \$1.0 million (1.8%).
- DART has seen success in controlling the rate of increase of the Workers' Compensation program over the past few years.

<u>Services</u> – The FY 2020 Services budget of \$46.2 million represents 8.0% of the total agency budget. This is an increase of \$1.4 million (3.0%) under the FY 2019 budget.

Exhibit 44 details the Services component of the budget.

	,			
	FY19	FY20	\$	%
Object Classification	Budget	Proposed	Variance	Variance
Maintenance/Contract Repair Services	\$14,828	\$16,121	\$1,293	8.7%
Computer Svcs / Software License Fees	10,244	7,967	(2,277)	(22.2%)
HR & Benefits-Related Services	4,001	4,750	749	18.7%
Other Consulting Services	5,265	4,610	(655)	(12.4%)
Security Services	4,064	3,409	(655)	(16.1%)
Legal, Auditing & Other Professional Services	2,325	1,858	(467)	(20.1%)
Advertising, Marketing & Public Info Services	2,195	2,915	720	32.8%
Credit Card Processing Fees	1,017	1,293	276	27.1%
Environmental, Engineering & Real Estate Svcs.	892	1,068	176	19.7%
Temporary Help / Contract Labor	939	1,186	248	26.4%
All Other Services	1,897	1,072	(825)	(43.5%)
Total Services	\$47,665	\$46,248	(\$1,417)	(3.0%)

# Exhibit 44 Services Expenses by Type (in Thousands)



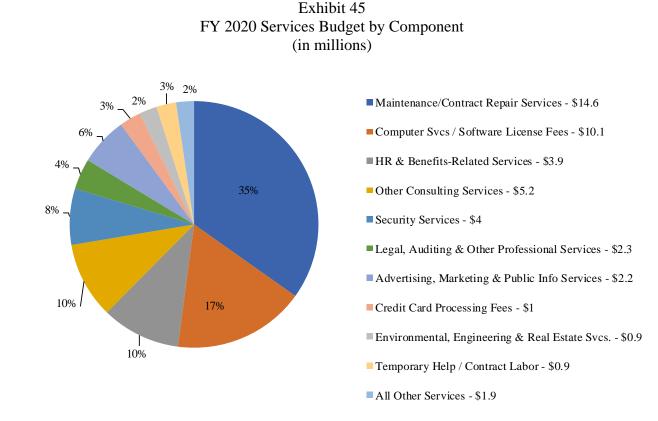


Exhibit 45 illustrates the composition of the Services line item of the budget.

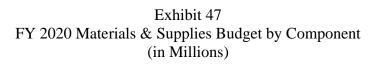
<u>Materials and Supplies</u> – The budget for Materials and Supplies increased year-over-year by \$1.2 million (2.9%).

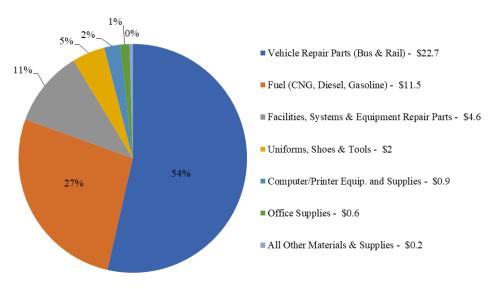
- Vehicle Repair Parts have increased by \$1.4 million (6.4%).
- The Vehicle Repair Parts increase was partially offset by decreases year-over-year in other category in Materials & Supplies.

Exhibits 46 and 47 provide details about the Materials & Supplies component of the budget.

(11 210 05 01 00)						
	FY19	FY20	\$	%		
Object Classification	Budget	Proposed	Variance	Variance		
Vehicle Repair Parts (Bus & Rail)	\$21,319	\$22,676	\$1,356	6.4%		
Fuel (CNG, Diesel, Gasoline)	11,014	11,409	395	3.6%		
Facilities, Systems & Equipment Repair Parts	4,483	4,569	86	1.9%		
Uniforms, Shoes & Tools	2,258	1,971	(287)	(12.7%)		
Computer/Printer Equip. and Supplies	1,205	945	(260)	(21.6%)		
Office Supplies	721	566	(155)	(21.5%)		
All Other Materials & Supplies	150	193	43	29.0%		
Total Materials & Supplies	\$41,151	\$42,329	\$1,178	2.9%		

Exhibit 46 Materials & Supplies Expenses by Type (in Thousands)





<u>Utilities and Communications</u> – This category includes electricity for the Light Rail system and DART facilities, as well as phone and data services for the agency. The budget for FY 2020 is \$16.2 million, a 16.5% decrease year over year. This category represents 2.9% of the total Agency's operating budget.



Exhibit 48 compares the Utilities & Communications expenses over the two three years.

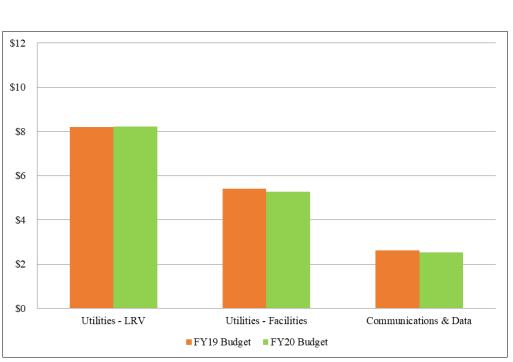


Exhibit 48 FY 2020 Utilities & Communications Expense Comparison (in Millions)

<u>Claims and Insurance</u> – This category includes DART's liability claims and property insurance costs. DART is 100% self-insured for liability claims relating to bus accidents and other operations. On rail operations liability, DART is self-insured for the initial \$3 million per occurrence. DART also carries insurance for Errors and Omissions Liability and other coverage. DART carries property insurance with a \$250,000 deductible per occurrence.

<u>Purchased Transportation</u> – These services are purchased through a third party to provide transportation services for DART. The budget for this category increased by 3.6 million (6.1%) in the FY 2020 budget over FY 2019 due to increases in contract rates and service levels.

Exhibit 49 compares Purchased Transportation expenses between FY 2017 and FY 2019.



(III Thousands)					
	FY19	FY20 Proposed	\$	%	
Object Classification	Budget	Budget	Variance	Variance	
Paratransit	\$27,032	\$28,559	\$1,527	5.6%	
Commuter Rail	22,820	25,206	2,386	10.5%	
Shuttle Services	4,128	4,249	121	2.9%	
Vanpool	1,849	2,075	226	12.2%	
DART On-Call	3,091	2,458	(633)	(20.5%)	
Total Purchased Transportation	\$58,920	\$62,547	\$3,627	6.2%	

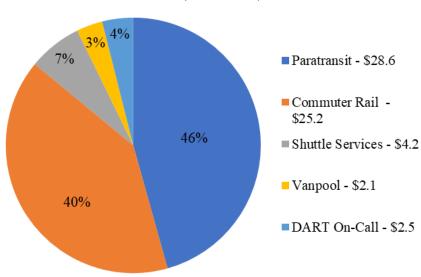
Exhibit 49 Purchased Transportation Expenses by Type (in Thousands)

• Paratransit contract costs increased by \$1.5 million (5.6%) because of both contract rate increases and projected increase in demand for trips.

• Trinity Railway Express costs increased \$2.4 million (10.5%) due to Positive Train Control (PTC).

• Shuttle Services increased 2.9% primarily due to new Mobility as a Service (MaaS) service.

Exhibit 50 highlights the components of the Purchased Transportation category.



# Exhibit 50 FY 2019 Purchased Budget by Component (in Millions)



# Capital and Non-Operating Budget

Exhibit 51 is a summary of the Capital and Non-Operating Project Expenditures from FY 2018-FY 202, which includes: Light Rail Transit (LRT) expansion; TRE track work; vehicle and facility capital maintenance programs; scheduled replacement of vehicles, facilities, infrastructure; etc. A comprehensive list showing all capital and non-operating projects (and associated reserves) is shown in Exhibit 19, on page 67 in the *Financial Plan Section*.

FY18 Actuals	Category	FY19 Budget	FY20 Budget	\$ Variance	
\$117,803	Total Capital Projects	\$255,452	\$563,527	\$308,075	
9,556	Capital Planning & Development & Startup cost	12,200	13,979	1,779	
1,292	Non-Operating	11,858	4,966	(6,892)	
\$128,651	Sub-Total Capital / Non-Operating	\$279,509	\$582,471	\$302,962	
Road Impr	ovements				
\$0	PASS/TSM (General & Street Repair Program)	\$7,783	\$10,584	\$2,801	
2,696	Transit Related Improvement Program	4,228	4,286	58	
\$2,696	Sub-total Road Improvements	\$12,011	\$14,870	\$2,859	
\$131,347	Total Capital & Non-Op./Road Imp.	\$291,520	\$597,342	\$305,821	
\$94	LAP/CMS Program*	\$0	\$0	\$0	
\$131,441	Total Capital & Non-Op./Road Imp./LAP/CMS Program	\$291,520	\$597,342	\$305,821	
* Please note that although no further funds are being allocated to these programs, funds allocated in prior years may be expended.					

# Exhibit 51 Capital & Non-Operating Project Expenditure Comparison (in Thousands)



# **Debt Service Budget**

The FY 2020 Debt Service Budget is shown below in Exhibit 52. Additional information on DART's Debt Program can be found in the *Financial Plan Section*.

Description	FY 2019 Budget	FY 2019 Projected	FY 2020 Proposed	Variance
Long-Term Debt Interest Expense*	\$135.2	\$133.5	\$137.9	\$2.7
	\$155.2	\$155.5	\$157.9	\$2. <i>1</i>
Commercial Paper Program Expenses	3.2	2.7	4.1	0.9
Financial Advisor and Other Fees	0.5	0.5	0.5	0.0
Total Expenses	\$138.9	\$136.7	\$142.5	\$3.6
Principal Repayments - Bonds**	\$58.3	\$58.3	\$60.0	\$1.7
Total Debt Service Budget	\$197.2	\$195.0	\$202.5	\$5.3

# Exhibit 52 Debt Service Expense Comparison (in Millions)

\* Includes Build-America Bonds (BABs) interest expense net of 32% federal subsidy.

\*\* Refunding bonds replace existing debt with an equal amount of new debt and are counted here as zero net new debt issued.



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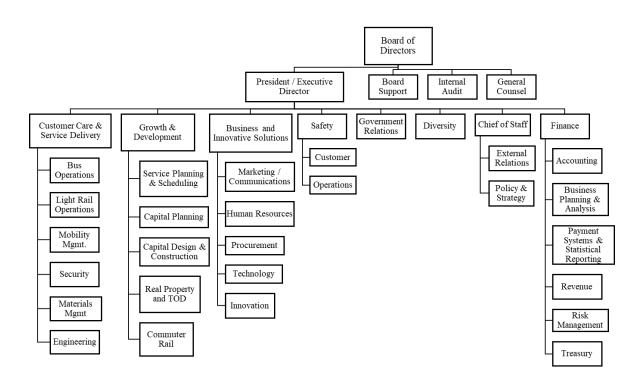


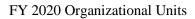
# **Organizational Units**

This section contains key performance indicators and budget details by mode, as well as goals and functions by Organizational Unit.

# Overview

DART is organized broadly along the following functional lines ("organizational units").





# **Functional Units Reporting Directly to the Board of Directors**

The **Office of the General Counsel** represents the Agency in all judicial and administrative proceedings, including Equal Employment Opportunity Commission, employee grievance, and procurement and construction disputes. The Office also provides advice, guidance, and counsel to the Board of Directors and Agency staff on ethics, transactional, real estate, procurement, labor/employment, and regulatory matters. The Office manages the Open Records function in coordination with representatives in the various agency departments.

In accordance with DART's Audit Committee Charter and the Internal Audit Department Charter, the **Office of Internal Audit** operates as an independent appraisal function within DART, reporting to the Board of Directors through the Audit Committee of the Board. The Internal Audit Department conducts audits of operational functions, including technology, to assess the control of the risks to business objectives, and audits of contracts for compliance.

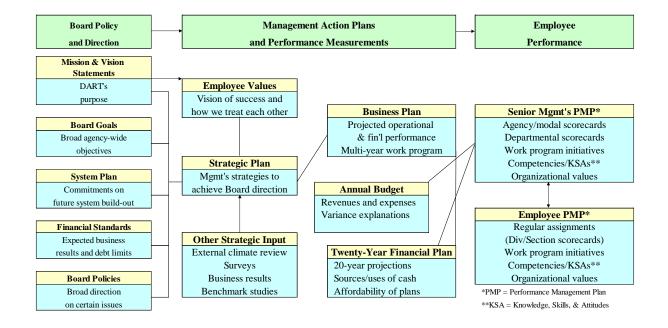
The **Office of Board Support** provides administrative support to the Board of Directors. The primary functions of this office are: to disseminate information, in a variety of formats, to each Board member; to assist in handling Board member requests; coordination of Board/Committee meeting materials; coordination of meeting schedules for Board members; and maintaining official documents of all Board/Committee meetings as well as confidential Board personnel files. The Director of Board Support is also responsible for serving as Secretary to the Trial Board and as Administrative Law Secretary. Administrative support is provided to the Trial Board members, who hear and render decisions on the final appeal on employee grievances, and the Administrative Law Judges, who hear and render decisions on DART contract disputes.

The FY 2020 Operating Budget and Positions by Department are shown in the *FY 2020 Annual Budget* section, in Exhibits 39, 40 and 41.

# **Development of Unit Goals**

DART's leadership uses a framework of aligned strategic planning tools to ensure DART employees understand how their jobs and performance are linked to the Agency's mission statement, direction, and strategic priorities. DART's Strategic Alignment Structure is shown in Exhibit 53 Performance measurements are incorporated into tracking and reporting processes at all levels of the Agency. The major components of the leadership system are described in more detail in the remainder of this section.





# Exhibit 53 DART's Strategic Alignment Structure

<u>Mission Statement</u> – DART's mission statement defines the purpose for which the Agency was created:

The mission of Dallas Area Rapid Transit is to build, establish, and operate a safe, efficient, and effective transportation system that, within the DART Service Area, provides mobility, improves the quality of life, and stimulates economic development through the implementation of the DART Service Plan as adopted by the voters on August 13, 1983, and as amended from time to time.

<u>DART Vision Statement</u> – To help achieve the Board's mission and strategic priorities, the Board has approved a vision statement to address DART's customers and stakeholders.

DART: Your preferred choice of transportation for now and in the future...

<u>Board Strategic Priorities</u> – To achieve this mission and ensure Agency alignment, in April 2015 the Board adopted the following six Strategic Priorities for FY 2016 through FY 2020:

- 1. Continually improve service and safety experiences and perceptions for customers and the public
- 2. Optimize and preserve (state of good repair) the existing transit system
- 3. Optimize DART's influence in regional transportation planning
- 4. Expand DART's transportation system to serve cities inside and outside the current service area
- 5. Pursue excellence through employee engagement, development, and well-being



# 6. Innovate to improve levels of service, business processes, and funding <u>DART Organizational Values</u> – The Agency's values statement is:

DART employees value being:

- Focused on Our Customers
- $\checkmark$  We are dedicated to meeting our customers' needs.
- ✓ We strive for continuous improvement.
- $\checkmark$  We deliver quality.
- Committed to Safety and Security
- $\checkmark$  We require safety and security to be the responsibility of every employee.
- ✓ We are committed to ensuring the safety and security of our passengers and employees.
- Dedicated to Excellence
- $\checkmark$  We demonstrate a high regard for each other.
- $\checkmark$  We are committed to innovation and learning from our experiences.
- $\checkmark$  We hold ourselves accountable.
- $\checkmark$  We coach, reinforce, and recognize employees.
- $\checkmark$  We foster an environment promoting diversity of people and ideas.
- Good Stewards of the Public Trust
  - $\checkmark$  We responsibly use public funds and property.
  - $\checkmark$  We maintain open communication with customers and stakeholders.
  - $\checkmark$  We respect the environment.
  - ✓ We strive to mitigate risk.
  - $\checkmark$  We demand integrity and honesty.

<u>Strategic Plan</u> – DART's Strategic Plan identifies, integrates, and aligns DART's priorities, goals, and tactical objectives. The Plan provides a dynamic structure for staying on track with long-term financial, development, and operational commitments within a rapidly changing political and economic context.

The Strategic Plan identifies what needs to be accomplished; the Business Plan defines how management intends to achieve it. Management's Goals, Department Objectives, and Department Performance Measures indicate progress on the Strategic Plan's priorities.

The Strategic Plan and the events and initiatives contained in the Business Plan are the basis for the FY 2020 Annual Budget and Twenty-Year Financial Plan and for measuring management and employee performance. Executive management monitors key scorecard elements and work program initiatives on a monthly and quarterly basis. Exception reporting for key scorecard elements is provided to the Board on a quarterly basis in a green/yellow/red format. For more

information on performance reporting, readers should review a copy of DART's Quarterly Operating and Financial Performance Report, which is available on DART's website, <u>DART.org</u>.

DART's Strategic Measurements – Exhibit 55 highlights DART's strategic measurements. The leading indicators are the key financial, operational, and employee performance drivers that, if achieved, will yield improved Agency-wide performance. Measurement definitions are included in the Glossary, which is Exhibit 136 on page 353 in the *Reference Section* of this document.

The measurements in Exhibit 54 as well as other measurements are used by the DART organizational units to assess progress towards performance that supports the achievement of DART strategic goals. These measurements ("key performance indicators" or KPIs) can be found in more than one organizational unit – as many agency activities support each strategic priority.





Strategic Priority	Examples of Key Leading Indicators	Examples of Key Lagging Indicators	
• Continually improve service and safety experiences and perceptions for customers and the public	<ul> <li>On-time performance</li> <li>Accidents per 100k miles</li> <li>Complaints per 100k passengers</li> <li>Call Center service levels</li> </ul>	<ul> <li>Ridership</li> <li>Passengers per mile/hour</li> <li>Customer satisfaction surveys</li> <li>Passenger revenues</li> <li>Passengers per mile/hour</li> </ul>	
• Optimize and preserve (state of good repair) the existing transit system	<ul> <li>Revenue miles/hours</li> <li>Average system speed</li> <li>Timely replacement of assets</li> <li>Mean distance between service calls</li> </ul>	<ul> <li>Ridership</li> <li>Customer satisfaction surveys</li> </ul>	
Optimize DART's influence in regional transportation planning	<ul> <li>News clippings and other media</li> <li>Actual schedule vs. plan for system expansion</li> <li>Complaints/Commendations</li> </ul>	<ul> <li>Completion of Transportation System Plan commitments</li> <li>Joint development created</li> <li>Regional funding</li> </ul>	
• Expand DART's transportation system to serve cities inside and outside the current service area	<ul> <li>Actual schedule vs. plan for system expansion</li> <li>Revenue miles/hours</li> </ul>	<ul> <li>Number of arrangements to provide service to cities outside the current service area</li> <li>Ridership</li> </ul>	
• Pursue excellence through employee engagement, development, and well-being	<ul> <li>Employee verbal feedback</li> <li>Number of grievances</li> <li>Corrective disciplinary actions</li> <li>Retention/Absenteeism</li> <li>Operator lost-time claims</li> <li>Unscheduled absences</li> </ul>	• Employee satisfaction survey	
• Innovate to improve levels of service, business processes, and funding	<ul> <li>Passenger revenues</li> <li>Advertising and other revenues</li> <li>Federal Funding</li> <li>Cycle time/process measurements</li> <li>Project implementation vs. plan</li> <li>Benchmark comparisons</li> <li>Deadhead ratio</li> <li>Pay-to-platform ratio</li> </ul>	<ul> <li>Ridership</li> <li>Subsidy per passenger</li> <li>Administrative ratio</li> <li>Sales taxes for operations</li> <li>Unused financing capacity</li> </ul>	

Exhibit 54 DART's Strategic Measurements



#### **DART Key Performance Indicators**

DART's Scorecard of Key Performance Indicators (KPIs) is shown in Exhibit 55. Fiscal Years 2017 and 2018 indicate actual values. Fiscal Year 2019 Third Quarter represents the period ending June 30, 2019. FY 2020 are budgeted numbers.

Indicators	FY17A	FY18A	FY19A	FY19B	FY20B
Ridership Performance			YTD Q3	YTD Q3	
Total Agency Ridership (M)	65.8	62.7	53.3	47.6	70.8
Fixed-Route Ridership (M)	64.4	61.3	52.1	46.3	69.3
Ridership - Bus (M)	32.1	30.3	29.1	23.0	38.1
Ridership - LRT (M)	30.1	29.0	21.5	21.8	29.1
Ridership - TRE (M)	2.1	2.0	1.5	1.5	2.0
Ridership - Paratransit (000s)	795.7	771.0	676.0	636.9	875.7
Ridership - Vanpool (000s)	674.6	596.0	473.6	658.4	645.0
Efficiency Measures					
Subsidy Per Passenger - Total System	\$6.36	\$6.94	\$6.08	\$7.01	\$6.71
Subsidy Per Passenger - Fixed-Route	\$5.98	\$6.52	\$5.64	\$6.56	\$6.28
Subsidy Per Passenger - Bus	\$6.90	\$7.50	\$6.06	\$8.08	\$6.90
Subsidy Per Passenger - LRT	\$4.68	\$5.13	\$4.77	\$4.71	\$5.20
Subsidy Per Passenger - TRE	\$10.63	\$11.73	\$9.83	\$9.98	\$5.08
Subsidy Per Passenger - Paratransit	\$41.47	\$44.97	\$42.15	\$44.83	\$45.55
Subsidy Per Passeger - Vanpool	\$0.54	\$0.61	\$2.20	\$1.77	\$0.48
Farebox Recovery Ratio - Fixed-Route	13.3%	13.1%	12.8%	14.4%	13.4%
Farebox Recovery Ratio - Bus	12.1%	11.6%	9.0%	10.0%	10.1%
Farebox Recovery Ratio - LRT	16.2%	15.1%	16.1%	18.9%	17.4%
Farebox Recovery Ratio - TRE	21.4%	14.9%	24.1%	27.9%	17.7%
Administrative Ratio	9.2%	10.2%	8.8%	9.7%	8.6%
Service Quality					
On-Time Performance - Fixed Route	90.4%	90.7%	89.8%	91.0%	91.0%
On-Time Performance - Bus	80.4%	82.5%	82.4%	83.0%	83.0%
On-Time Performance - LRT	92.1%	92.3%	92.5%	93.0%	93.0%
On-Time Performance - TRE	98.5%	97.4%	94.6%	97.0%	97.0%
Customer Satisfaction					
Complaints Per 100,000 Passengers - Fixed-Route	34.1	34.6	27.4	37.7	34.9
Complaints Per 100,000 Passengers - Bus	52.5	54.0	39.7	57.0	50.0
Complaints Per 100,000 Passengers - LRT	16.6	16.6	12.2	19.5	17.5
Complaints Per 100,000 Passengers - TRE	4.4	3.7	5.6	5.5	5.1
Complaints Per 1,000 Trips - Paratransit	3.9	3.4	3.3	3.0	3.0
Safety					
Accidents Per 100,000 Miles - Fixed-Route	1.92	1.89	1.91	1.97	1.66
Accidents Per 100,000 Miles - Bus	2.26	2.23	2.21	2.30	2.30
Accidents Per 100,000 Train Miles - LRT	0.52	0.82	0.91	0.35	0.35
Accidents Per 100,000 Miles - TRE <sup>[1]</sup>	0.66	0.09	0.41	1.00	0.24

#### Exhibit 55 DART Scorecard of Key Performance Indicators (KPIs)

[1] The measure has been restated from Accidents/Car Mile to Accidents/Train Mile; therefore, will not tie to previous reports.



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# **Customer Care & Service Delivery**

Customer Care & Service Delivery is charged with providing effective, efficient, safe, and secure transportation service. The Executive Vice President, Chief Operations Officer, has oversight of DART Bus, Light Rail, Mobility Management/Paratransit, Engineering, Materials Management, Police and Emergency Management. The organizational realignment that was completed several years ago has provided greater transparency, improved performance and a better alignment with support functions. The Executive Vice President reports to DART's President/Executive Director and is the management liaison for the Board's Operations, Safety, and Security Committee for departmental matters.

# 5 Star Service Program

This initiative is a major cultural transition for DART. Fiscal Year 2019 will be the eighth year of moving the agency towards a customer-oriented culture. The customer focus culture is a significant change in how we approach customer service internally and externally. In addition, the program emphasizes a change in employee behavior, high performance teams and greater accountability. Employees at every level of the organization have a role in facilitating the change and demonstrating ownership needed for making true progress, both for the individual, department, and organization. Four new initiatives will be undertaken in 2020:

- Establish a 5 Star external Advisory Board as recommended by the Peer Review Team.
- Develop culture change initiatives based on the 2019 culture survey results.
- Two new continuous improvement teams will be problem solving new topics in 2019 and 2020. A customer service initiative called "Ask Me," will be piloted at the bus and rail stations and another project will examine how to assist the Homeless using the DART system.
- A coaching initiative will be implemented to assist management personnel in their leadership development.

Ongoing 5 Star Service Program projects:

- 5 Star Friday Messages continue to recognize employees across the agency. There have been amazing WOW stories of heroism, kindness and charity.
- A new class of candidates will be recruited in August 2019. The Customer Experience Officer (CEOs) class will start in January 2020 through 2021. Over 100 employees have graduated from the two-year program.
- The Practicing, Leading and Serving (PLS) course has expanded PLS Toolbox Phase 2 of the program implemented in 2017. This phase trains on the behaviors of good leadership.



- The Culture Change Management Series will continue with guest speakers. The program has been a huge success with employees.
- Customer Service Events are a scheduled series of direct interaction activities at rail stations, transit centers, divisions, departments, and special occasions. Approximately 40

   50 activities are scheduled each year.
- 5 Star training for new employees will be held on a bi-monthly basis.
- 5 Star Suggestions are employee ideas submitted through a workflow process. This continues to be a positive venue in which employees let management know of innovative and useful ways to improve DART.

The 5 Star Service Program has 5 Pillars:

- Culture Change
- Center of Excellence
- Improved Services
- High Performance and Recognition
- Image and Brand





# **Bus Operations Department**

The Bus Operations Department is responsible for the delivery of safe, reliable, and courteous service to DART customers. This team is responsible for the daily operation of a fleet of 640 vehicles that serve 127 bus routes throughout a 700 square mile service area and transports on average100,800 passengers each weekday. The Division employs 1,382 bus operators, 251 maintenance mechanics and 132 supervisory and administrative staff operating. The Department operates three garages located strategically across the region. We endeavor to improve the quality, efficiency, and safety of our system daily. Several key initiatives will be launched in 2020:

- Transit Master a scheduling software will be upgraded to a newer version to improve realtime service monitoring.
- The department will seek consultant services to review maintenance performance standards to improve labor efficiency and vehicle reliability.
- The department will modify the bus operator on-time performance (OTP) recognition program.
- The Bus Operations training team will be reimagined and restructured to include bus operator recruitment, new operator classes, refresher classes, 5 Star customer service training and the Career Link training program.
- Transit Center Services is reallocating personnel to locations that will be able to capture a larger audience due to ridership changes.

In Bus Operations, we are very proud of our employee engagement and incentive programs.



Ronnie Reed - Operator of the Year 2018

(NRV) Division Level Management Winners 2<sup>nd</sup> Quarter 2018 and 1<sup>st</sup> Quarter 2019





# **Bus Operations**

Bus Operations is responsible for ensuring the availability of qualified and trained operators to meet daily service requirements, on-going operator performance management, timekeeping, payroll pre-processing, team communications, and for the recognition and motivation of employees.



# **Bus Maintenance**

The bus maintenance team is comprised of a supervisory staff of 48 and 336 hourly personnel that operate 24/7. Bus maintenance is responsible for the repair, maintenance, and upkeep of all operating facilities, approximately 640 fixed-route buses, and 740 support vehicles/equipment. This division includes bus maintenance service facilities at East Dallas, South Oak Cliff, Northwest, and the non-revenue vehicle maintenance shop.

The primary functions of the Bus Maintenance Service sections are to perform preventive maintenance, corrective maintenance, campaigns, fleet modifications, servicing, fueling, and cleaning of the DART-operated bus fleet. Additionally, each bus fleet service section is responsible for the repair and maintenance of its operating facility, including all associated buildings and equipment, like air compressors, vehicle lifts, pumps, vehicle washers, service stations, and other structures.



A maintenance tracking system called Zonar system was installed in 2018 to improve operator compliance in the reporting of vehicle defects. Zonar reports will assist in improving maintenance and vehicle reliability.



# Central Support

This section is responsible for scheduled bus maintenance, the rebuilding of major and small vehicle components, providing major campaign modification support, and capital program support for the DART-operated bus fleet. This team ensures new buses are ready for revenue service and determines when buses are to be retired from service. Bus Body Support is responsible for the preventive maintenance, accident repair (minor and major), and upholstery rebuilding for the bus fleet.

# Non-Revenue Vehicle (NRV) Service

This section is responsible for preventive and corrective maintenance, fleet campaigns and modifications, vehicle servicing, new vehicle make ready, retired vehicle disposal, and the cleaning of the DART-operated support vehicle fleet. Additionally, NRV Services is responsible for the repair and maintenance of its operating facility, including all associated buildings and equipment like air compressors, vehicle lifts, pumps, and other structures.

# **Bus Scorecard – Key Performance Indicators**

Exhibit 56 highlights the Bus Key Performance. Indicators (KPIs) presented in scorecard format. These KPIs measure our success towards achieving the goal of providing effective, efficient, safe, and secure transportation service. Fiscal Years 2017 and 2018 indicate actual values. Fiscal Year 2019 Third Quarter represents the period ending June 30, 2019. FY 2020 are budgeted numbers.

Indicators	FY17A	FY18A	FY19A YTD Q3	FY19B YTD Q3	FY20B	
Customer Quality						
Ridership (M)	32.1	30.3	29.1	23.0	38.1	
Revenue Miles (M)	25.0	25.2	19.2	19.3	25.1	
Passengers per Mile	1.28	1.20	1.52	1.19	1.52	
Farebox Recovery Ratio	12.1%	11.6%	9.0%	10.0%	10.1%	
Complaints per 100K Passengers	52.5	54.0	39.7	57.0	50.0	
On Time Performance	80.4%	82.5%	82.4%	83.0%	83.0%	
Mean Distance Between Service Calls	9,898	9,696	6,267	12,220	7,000	
Veh. Accidents Per 100K Miles	2.26	2.23	2.21	2.30	2.30	
Indicators	FY17A	FY18A	FY19A YTD Q3	FY19B YTD Q3	FY20B	
Financial Efficiency						
Expenses - Fully Allocated (M)	\$258.1	\$262.5	\$198.2	\$210.5	\$297.0	
Revenues (M)	\$36.5	\$35.4	\$21.6	\$24.4	\$34.0	
Net Subsidy (M)	\$221.6	\$227.0	\$176.6	\$186.1	\$263.0	
Subsidy Per Passenger	\$6.90	\$7.50	\$6.06	\$8.08	\$6.90	
Cost Per Revenue Mile	\$10.31	\$10.42	\$10.33	\$10.89	\$11.85	

# Exhibit 56 Bus Scorecard – Key Performance Indicators



#### **On-time Performance**

Beginning in FY 2014, DART changed the way on-time performance was measured. The automatic vehicle location (AVL) technology that is part of the new radio system enables us to measure the location of each bus at every stop and time point along its route. While the new system provides more detailed information to help staff improve service reliability for customers, the new measures are not directly comparable to the previous measurement system. Other transit properties that have implemented similar systems have seen their on-time performance metrics drop from the 90% range to the 70%-to-80% range.

# **On-Time Performance Initiatives**

Bus on-time performance will continue to be a major emphasis in FY 2020 with enhanced data provided by the radio system and the associated AVL and computer-aided dispatch (CAD) subsystems. The AVL System is allowing DART to:

- Collect detailed on-time performance reporting at the route, vehicle, and operator level
- Collect detailed running time information that enables service planning staff to adjust bus schedules to better reflect actual runtimes, improve the timing of system connections, and provide for adequate recovery times
- Improve the monitoring and real-time service management of bus on-time performance
- Provide real-time feedback to the operator on schedule adherence
- Provide critical information for customer complaint resolution

In 2020, the CAD/AVL system will be used to continue improving the reliability of connections so that a bus departure can be held for a few minutes to allow for customer connections from a late bus. This will help reduce missed connections, which is one of the more frustrating events for riders. Additionally, DART Technology staff is working with Trapeze to update the CAD/AVL system with options that can help improve the performance of our bus service.

#### Fatigue Management

Fully implemented in 2018, DART initiated pilot programs that better manage operator work assignments and reduce the potential for operator fatigue. One element of the Fatigue Management Program has been the reconfiguration of the Extra Board (those operators who work fill-in assignments to cover vacations or sick time) into an AM and PM Board, thus providing operators with improved consistency in the span of their work hours and greater assurance of adequate rest time between one work day and the next. These modifications in work assignments are critical to supporting enhanced safety, as well as employee health and quality of life. DART also requires a mandatory rest period of nine hours between workdays. In 2020, Bus Operations will continue to focus on operator fatigue.



#### **Bus Operator Training**

This section provides training for all bus employees on DART systems and vehicles. This includes training and certification of new employees and also retraining and recertification for active employees. In addition, the team will focus on training employees in all areas of service delivery – operation skills, safety, collision avoidance, and customer service. Last year, DART trained 125 new operators and provided refresher training to 544 operators.

# **Career Link Training Program**

The Operations Management Team takes pride in the unique talents and skills of its employees. We also take pride in giving employees opportunities to learn and grow. Our goal is to meet each employee's individual needs and interests. The CareerLink Program was created to help employees expand on what they know and develop or strengthen new skills.

Employee efforts to complete this coursework require commitment, hard work, and time; all of which are deserving of special recognition. With this in mind, Career Link established specific milestones to reward employees' progress and participation in the CareerLink Training Program. The Careerlink Training Program includes:

- BOSS/ROSS Bus and Rail Operator Succession to Supervisor training
- Training for new supervisors
- Stepping Up: A Roadmap for New Supervisors
- Basic Writing Skills 4 Modules
- Employee Accountability
- Managing Difficult Conversations
- Time Management: Get Organized for Peak Performance
- Project Management
- Crisis Management
- Time Management
- Problem Solving & Decision Making
- Employee Accountability
- Communicating with Impact
- High Impact Feedback & Listening

Careerlink has also partnered with El Centro College to provide advance development of the Bus Operations staff.



# **Transit Center Services**

Transit Center Services is comprised of 44 station concierges, 2 customer support representatives and 5 supervisors. We staff 15 transit centers from 5:00 a.m. to 10 p.m. Monday through Friday and weekends from 8:00 a.m. to 4:00 p.m. The role of this team is providing travel information to our customers. The members also attend special events to educate customers on how to ride DART. In addition, this year Transit Center Services will be involved in a pilot project called "Ask Me." This program will increase the visibility of staff at several transit centers using signage, decals, posters, and buttons with "Ask Me" information on them. Staff is expected to eagerly engage customers.



Continuous Improvement Team Project: "Ask Me"

Exhibit 57 is an overview of the uses of the funds and allocated operating positions for the Bus mode.

Exhibit 57	
Bus Overview	

Overview	FY17A	FY18A	FY19B	FY20B
Allocated Operating Expenses (M)	\$258.1	\$262.5	\$286.4	\$297.0
Capital Expenditures (M)*	\$50.4	\$26.3	\$32.3	\$23.5

\* These amounts are the actual or budgeted capital for this mode only and do NOT include an allocation of Agency-wide capital.

Exhibit 58, on the following page, highlights Bus Ridership. Fiscal Years 2017 and 2018 indicate actual values. Fiscal Years 2019 and 2020 are the target values for those years.

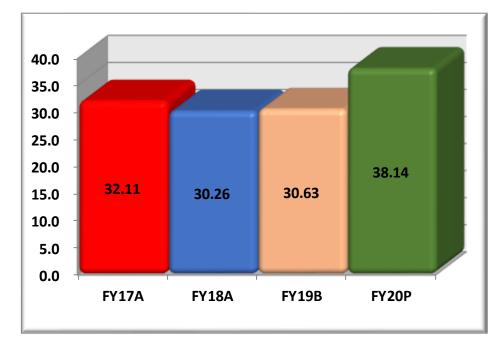
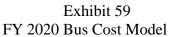
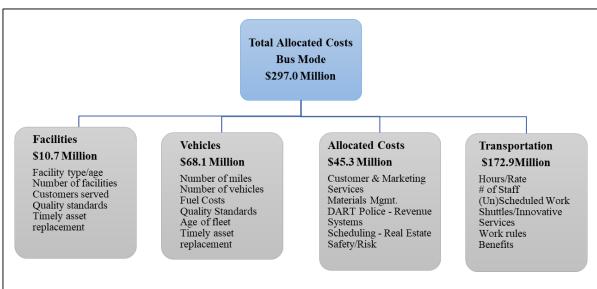


Exhibit 58 Bus Ridership (in Millions)

Please see page 312 in the *Reference Section* for a discussion of ridership trends.

Exhibit 59 is the cost model for the bus system. The cost of transportation (the operator and related costs) is the largest cost element of the bus mode accounting for \$173.4 million.





# **Light Rail Operations**

Light Rail Operations organization includes Rail Operations, Rail Operations Training, Rail Control Center, Rail Fleet Maintenance, Rail Central Support and Ways, Structures and Amenities. This organization has a budget of \$120 million with a total of 831 employees. In FY 2020, DART will operate and maintain 93 miles of light rail, including 64 stations, 163 modern light rail vehicles, 2.5 miles of the Dallas Streetcar Rail system and 4 modern streetcars. There are also two rail operating facilities, the Central Rail Operating Facility (CROF) and the Northwest Rail Operating Facility (NWROF), and the streetcar operations and maintenance. In 2020, the goals of the organization are to improve service delivery, customer service, performance and training.

### Rail Operations

Rail Operations has a team of salaried and hourly personnel. The management team is comprised of 202 salaried exempt and non-exempt positions. The management team has responsibility for the oversight of service delivery, personnel assignments, operator training, scheduling, monitoring, analysis and evaluating operator performance and compliance related to rules and procedures.

The department is focused on improving the customer experience in 2020, one way to achieve this will be the KPI goals consisting of, On Time Performance 93%, Mean Distance Between Failures 21,000 miles and, customer complaints, 19.5 complaints per 100,000 customers.

Our Initiatives to increase customer satisfaction:

- Data analysis and evaluation of success measures, deviations, failures and trends by using such tools as Survey 123 data collection program. This program collects data from Field Supervisors' in real time and provides data on operator performance, efficiency testing, and customer interaction at stations.
- Supervisors will increase OTP monitoring for compliance where trains are running early/late with new data collection program.
- Survey 123 will be used to monitor Supervisor engagement at the stations as a point of contact for customer feedback and complaints.
- Weekly reports utilizing the Vehicle Business System (VBS) to aid in providing accurate data for On Time Performance.
- Weekly LRV Performance and Reliability meetings with stakeholder departments to improve vehicle reliability and performance by identifying trends and repetitive mechanical defects and causes. Improve business rules related to uncontrollable incidents that adversely affect OTP.
- Communication updates to all divisions of their OTP weekly performance and recognition of high performers monthly.



- Improve communication on the Light Rail Vehicles via the PAID announcement system. The Operator will provide information to passengers during service disruptions, provide alternative options, when applicable.
- Weekly review of Customer Service Complaints which uses video and audio recordings to validate customer complaints and/or incidents.



- Re-evaluate KPI categories to determine if the established metrics and goals associated are accurate.
- Addition of CCTV cameras in all 163 Light Rail Vehicles.
- The addition of CCTV cameras and monitors in the West End Station, Rosa Parks Plaza, and West End Transfer Center.
- Improve lighting at all Rail Stations and Park-and-Ride Lots to increase passenger safety and security.

Rail Operations will also concentrate on providing a 5 Star Service culture for employees and customers. The Department will enhance employee training and programs, Succession DART development, career ladder programs, and the recognition of maintenance employees as a part of the existing Efficiency Awards Program.

### Rail Operations Support

This section employs salaried and hourly personnel to include manager and rail supervisors. In 2020 the senior management team will be reevaluating current job descriptions, practices and processes of the department to improve performance and accountability internally and externally. To assist with improving accountability all supervisors are attending the Practicing, Leading and Serving class to ensure the expected standards for the future. The staff has responsibility for scheduling, monitoring, and evaluating operator performance in compliance with all applicable rules and procedures. Emergency management will focus on standard operating procedures, communication with key stakeholders, and emergency coordination protocols. Rail technical support reviews track signal safety operations for compliance and coordination. Operations also directs and manages train movement between the two rail yards.

# Rail Operations Training

This unit was part of an operations decentralization in January 2019. The reorganization realigned the Operators training programs and its function under Light Rail Operations. This section serves to ensure the adequate training for all rail operators, Yard Office and Field Supervisors. This includes providing training and certification of new employees and retraining & recertification for active employees. In addition, the unit will focus on all areas of service delivery, operator training, Yard and Field supervisor training, skills, safety, collision avoidance, and customer service.



#### Rail Fleet Maintenance

Rail maintenance has a team of employees that include senior managers, technical professionals, support staff and skilled/non-skilled hourly personnel. This section is responsible for maintaining a state of good repair of approximately \$6.0 billion in assets including rail operating facilities, rail stations, passenger shelters and stops, light rail right-of-way systems, and commuter rail stations. They also provide preventive and corrective maintenance services for all rail equipment and systems.

- <u>Light Rail Maintenance</u> The primary functions of Light Rail Maintenance are to perform preventive maintenance, corrective maintenance, campaigns, fleet modifications, servicing, fueling, and cleaning of the DART-operated rail fleet. Additionally, each rail service section is responsible for the repair and maintenance of its operating facility including all associated buildings and equipment, which includes air compressors, vehicle lifts, pumps, vehicle washers, service stations, and other structures. Fleet Maintenance strives for continuous improvement with a specific focus on vehicle reliability as measured through the Mean Distance Between Service Calls.
- <u>Light Rail Central Support</u> The Central Support section is responsible for the scheduled maintenance of the rail fleet, rebuilding major and small vehicle components, structural and electronic support, upholstery rebuilding and capital program support for Light Rail, and Dallas Streetcar fleets. Rail support groups will continue light rail and streetcar campaigns through 2020.

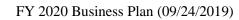
# Rail Train Control Center

The Train Control Center maintains and controls train and streetcar movement along the alignment and responds to Traction Electrification System issues. It also provides an integrated environment for communicating and coordinating onboard travelers' information announcements and message boards of DART bus services. Control Center initiatives for FY 2020 include:

- Revise and update the Rail Controller training program
- Evaluate and revise certification and re-certification process
- Improve business practices and standards
- Develop a professional environment and improve culture and behaviors of work unit

# Ways, Structures, & Amenities

The Ways, Structures, & Amenities Division provides maintenance for DART's 211.16 miles of light rail transit (LRT) right-of-way and systems, including the Dallas Streetcar, Bus/LRT/Commuter Rail passenger facilities, major administrative facilities, and agency-wide radio communications systems. The Division consists of the following five sections:



• <u>Track and Right-of-Way</u> – This section inspects, maintains, and repairs all light rail and Dallas Streetcar track. Time-based, corrective, and condition-based maintenance and repairs are performed on all track turnouts/switches, 183 road crossings, various right-of-way track-related structures, culverts, and other rail related facilities along the right-of-way. Additionally, this section is responsible for maintaining a zero tolerance graffiti program for DART property.



- <u>Passenger Amenities/Facility Services</u> This section inspects, maintains, and repairs passenger facilities for DART's Bus, Rail, and Dallas Streetcar, Commuter Rail services. Time-based, corrective, and condition-based maintenance and repairs are performed on 9 transit centers, 54 LRT at-grade rail platforms, 9 LRT aerial platforms, 1 LRT subsurface platform, 6 commuter rail platforms, 6 Dallas Streetcar Sheltered Stations, 2 Park & Rides, 2 Passenger Transfer Locations, 2 Transfer Centers, 20 enhanced shelters, 19 crew quarters, 1,200 bus shelters, 1,000 benches, 14,000 bus stops/trail blazers, multiple information pylons, Guide-a-rides, and tunnel equipment maintenance including fire life safety equipment. The section is also responsible for the property management of DART Headquarters, DART Police Administrative Facilities and Police sub-stations (building maintenance and repair); Agency moving services, coffee services, cubicle reconfigurations, furniture procurement, space planning, as well as vending services and the parking garage management at Headquarters.
- <u>Traction Electrification Systems</u> This section maintains the Traction Electrification System for DART's light rail transit. Time-based, corrective, and condition-based maintenance and repairs are performed on 208 miles of overhead catenary (including 3.6 miles for the Dallas Streetcar), support structures, conductors, cable, hardware, 78 DC-Traction Power Substations (including two substations for the Dallas Streetcar) providing power to the light rail trains and electrical power to the communication and signal systems, 9 AC power substations for the tunnel system and facilities maintenance, and 3,040 station canopy and tunnel lights.
- <u>Signal Systems</u> This section performs inspections, tests, and conducts preventive maintenance for DART's Signal Systems to ensure safe scheduled train operations. The section will also maintain the switches, signals, Train-to-Wayside Control System, and traffic pre-emption along the Dallas Streetcar segment. Time-based, corrective, and condition-based maintenance and repairs are performed on 266 main line switches, 136 automatic highway grade crossing warning signals, 639 wayside signals/indicators, train coming signals and green bands, 134 yard switches, 40 signal power distribution centers, 102 TWC interrogators, and approximately 10,000 relays, cab signaling equipment, and other electromagnetic apparatus, cables, and train stop apparatus.





<u>Communication & Control Systems</u> – This section provides two-way radio and data communications to support the operations of the Transportation, Maintenance, and DART Police departments. Communications support is also provided to DART Marketing, Technology, and the City of Dallas emergency services.

This section maintains real-time data communication links from field units such as traction power substations and signal houses via a Supervisory Control and Data Acquisition (SCADA) system to the Train Control Center (TCC) and real-time data via the Trapeze Transit Master CAD/AVL system to Bus Dispatch. The section also maintains SCADA, the Communications Transmission System, and all communication devices along the right-of-way for the Dallas Streetcar line segment. Time-based, corrective, and condition-based maintenance and repairs are performed on all communications-related hardware including 52 communication houses, 147 communication interface cabinets, 7 remote radio sites, and a fiber optic communications network. Other systems supported include the digital voice recording system, approximately 1,700 CCTV cameras, 156 public address/visual message boards, Harris Open Sky Radio System (including 1,900 portable radios, 334 LRV radios, 330 NRV radios and 649 bus radios), and 186 passenger emergency call phones. Control System Programmers provide system administration and programming on all software applications, databases, and operating systems used to support Train Control and Bus Dispatch operations.

A map of the current rail system is included as Exhibit 106 in the *Reference Section*.

# <u>Light Rail Scorecard – Key Performance Indicators</u>

Exhibit 60 highlights LRT's Key Performance Indicators (KPIs) presented in scorecard format. These KPIs measure our success towards achieving the goal of providing effective, efficient, safe, secure transportation service. The numbers in the columns for fiscal years 2017 and 2018 indicate actual values. Fiscal Year 2019 Third Quarter represents the period ending June 30, 2019. FY 2020 are budgeted numbers.



Indicators	FY17A	FY18A	FY19A YTD Q3	FY19B YTD Q3	FY20B		
Customer Quality							
Ridership (M) <sup>[1]</sup>	30.1	29.0	21.5	21.8	29.1		
Revenue Miles (M)	10.4	10.5	7.8	7.8	10.4		
Passengers per Mile	2.90	2.75	2.74	2.80	2.81		
Farebox Recovery Ratio	16.2%	15.1%	16.1%	18.9%	17.4%		
Complaints per 100K Passengers	16.6	16.6	12.2	19.5	17.5		
On Time Performance	92.1%	92.3%	92.5%	93.0%	93.0%		
Mean Distance Between Service Calls	19,836	20,776	15,446	21,000	21,000		
Veh. Accidents Per 100K Train Miles	0.52	0.09	0.91	0.35	0.35		
Indicators	FY17A	FY18A	FY19A YTD Q3	FY19B YTD Q3	FY20B		
Financial Efficiency	•						
Expenses - Fully Allocated (M)	\$170.9	\$178.0	\$128.4	\$131.7	\$186.2		
Revenues (M)	\$29.7	\$29.0	\$26.1	\$29.1	\$34.8		
Net Subsidy (M)	\$141.2	\$149.0	\$102.3	\$102.6	\$151.4		
Subsidy Per Passenger	\$4.68	\$5.13	\$4.77	\$4.71	\$5.20		
Cost Per Revenue Mile	\$16.43	\$16.88	\$16.38	\$16.94	\$17.96		

Exhibit 60 Light Rail Scorecard – Key Performance Indicators

<u>Fatigue Management</u> – DART initiated pilot programs focused on better managing operator work assignments to reduce the potential for operator fatigue. One element of Fatigue Management has been the reconfiguration of the Extra Board (those operators who work fill-in assignments to cover vacations or sick time) into an AM and PM Board, providing operators with improved consistency in the span of their work hours and providing greater assurance of adequate rest time between one work day and the next. These modifications in work assignments are critical to supporting enhanced safety, as well as employee health and quality of life.

Exhibit 61 is an overview of the uses of the funds and allocated operating positions for Light Rail. To determine these amounts, each department identifies the percentage of time and money spent on each mode to determine how the expenses and positions are allocated.



Exhibit 61
LRT Overview

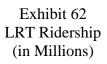
Overview	FY17A	FY18A	FY19B	FY20B
Allocated Operating Expenses (M)	\$170.9	\$178.0	\$181.5	\$186.2
Capital Expenditures (M)*	\$26.3	\$35.3	\$45.5	\$177.9

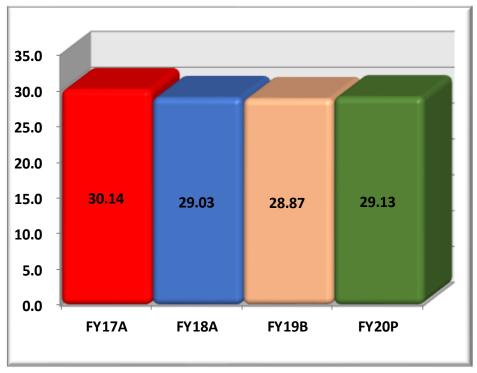
\* These amounts are the actual or budgeted capital for this mode only and do NOT include an allocation of Agency-wide capital. \*\* Allocated positions are based on budgeted position counts.

\*\* Allocatea positions are based on budgeted position

### LRT Ridership

Exhibit 62 highlights LRT Ridership. Fiscal years 2017 and 2018 indicate actual values. Fiscal Years 2019 and 2020 are the target values for those years.





Please see page 312 in the *Reference Section* for a discussion of ridership trends.

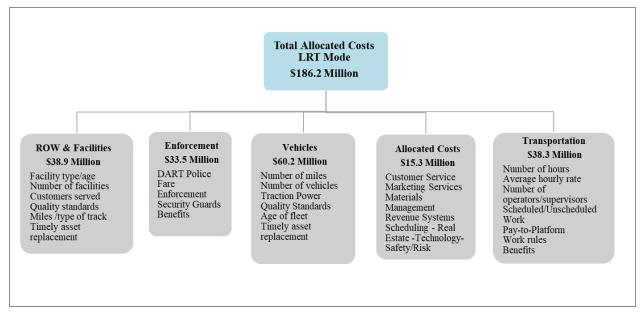


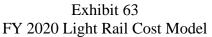
In September 2016, DART entered into an arrangement with the Texas General Land Office fixing the price of DART's electricity from FY 2019 through FY 2023. The average price over those five years is \$0.692/kwh. This is below our current price of electricity and well within the Parameters Resolution approved by the Board on May 24, 2016, which established a maximum price of \$0.085/kwh. This price lock represents a \$14.8 million savings versus the cost contained in the FY 2016 Financial Plan.

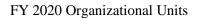
### LRT Cost Model

Exhibit 63 highlights the cost structure for LRT (including Streetcar). Although LRT and Bus have very different cost structures, the drivers for each cost category (transportation, vehicle maintenance, and facility maintenance) are similar. LRT is more expensive per mile due to higher fixed costs for facilities and vehicle maintenance, but less expensive per passenger due to the higher capacity of LRT vehicles versus buses. On a relative basis, LRT vehicle maintenance costs are more significant than buses, while LRT transportation costs are less significant than for buses. Additionally, right-of-way and facility maintenance is a major cost driver for light rail but relatively small for the bus mode.

The cost of vehicle-related costs (number of vehicles, number of miles, traction power, etc.) is the largest cost element of the bus mode accounting for \$59.8 million.









# **Engineering Department**

This department provides engineering, equipment, technical support and on-call construction management services to all Operations divisions. Engineering also provides liaison and oversight project management support for all systems integration changes for bus, rail, facility, passenger amenities, vehicle, track right of way and equipment. The department has a budget of \$8.3 million and is comprised of a staff of 63 employees. Engineering's resource allocation is directed toward five areas: asset availability, asset management, regulatory compliance, customer initiatives and safe workplace.

Key initiatives in 2020 are the following:

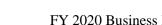
- Complete Arboc Bus Replacement Analysis
- Review and confirm new business processes to support the implementation of the Enterprise Asset Management System
- Explore Light Rail Vehicle Electronic LED Destination Sign Replacement
- Award Energy Savings Performance Contract
- Implement Mystery Rider Quality Assurance Program Refinement

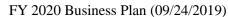
# Fleet Engineering (FE)

This section provides electrical and mechanical engineering support to Bus and Rail Fleet Maintenance Divisions and various Operations Departments, along with other agency departments as projects dictate. Additionally, the section provides assistance to troubleshoot all vehicle systems and components to isolate cause of failure; and develop and document equipment configuration changes when required. Specifications, procedures, and requirements for the purchase, maintenance, and improvement of vehicles and equipment are developed by the section, as well as the development, review, and approval of all technical information related to the vehicles and equipment to ensure that rolling stock assets are maintained in accordance with the manufacturer's and/or industry recommended procedures.

Initatives in 2020:

- Support deployment of 2019 New Low Floor CNG Bus Procurement
- Pilot LRV & Bus Passenger Seat Retrofit
- Design & Implement LRV Electronic LED Destination Retrofit (Fleet 54)
- Initiate the LRV HVAC Retrofit Program
- Complete evaluation of LRV Replacement / End-of-Life Extension Plan
- Work jointly with partners to plan and develop a course to advance Transit Signal Priority for the DART bus system
- Support Automated Bus Initiative





### Facilities and Systems Engineering (FSE)



This section provides civil, electrical, and mechanical engineering support to various Operations Departments and other agency departments as projects dictate. Additionally, the section provides assistance to troubleshoot facility and systems' structural, electrical, pneumatic, mechanical systems, subsystems, and components to isolate cause of failure, develop and document equipment configuration changes when required. Specifications, procedures, and requirements for the purchase, maintenance, and improvement of systems and

facilities are developed by the section, as well as the development, review, and approval of all technical information related to the systems and facilities to ensure that fixed assets are maintained in accordance with the manufacturer's and/or industry's recommended procedures. This section is also responsible for management of the On-Call Construction Services (OCCS) contract. This contract is used to complete construction projects that have a value less than \$250,000 that are identified for facility repair, upgrade, expansion, reconfiguration, and new system finish-out.

The following initiatives will be undertaken in 2020:

- Execute On-Call Construction Services (OCCS) Contract
- LED Lighting Installations for Outlying Stations
- Installation of Security Fencing at DART LRT Bridges (Underpasses)
- Installation of Cameras and Recording Devices on TRE Platforms
- Complete Award of Energy Savings Performance Contract
- Complete Electric Bus Facility Infrastructure Study
- Continue a review of Maintenance Shop (Rail & Bus) Improvements and Upgrades
- Between Car Barriers Manage material procurement and installation
- Support DART Grant Applications: Bus & Bus Facilities grant and BUILD grant
- Support Implementation, Start-Up and Turnover of EAM & EPM Processes



# **Operations Document Control (ODC)**



This section has primary responsibility to maintain and process documents to support a Configuration Management System under a repository within the Operations department. ODC has the responsibility to assure that maintenance documentation needs are met for all new systems and vehicles and validation of maintenance documentation in support of improving vehicle and systems reliability. This includes providing direction on the development of specification

requirements for new systems and vehicles; evaluating submittals related to the manuals and documents and approving the format, scheduling, and delivery of the training. This section is also responsible for document management through archive and document retention. This area develops and maintains the online manual system and the Operations Document Control Workflow used to review and approve all Operations key documents.

Several new initiatives in 2020 include:

- Electronic Parts Catalog (EPC) and Documoto Software Implement and maintain a new system to support Operations.
- Engineering SharePoint Website Create and manage for a single source of Engineering tasks, activities, and announcements. Establish format, guidelines and procedures for Engineering website.
- Engineering Video to Highlight Engineering Record and share a video highlighting Engineering's mission and strategic objectives.

# **Operations Support Services (OSS)**

Operations Support Services is responsible for the administration and compliance of services, commodities, and fuel contracts supporting bus, rail, mobility management, and NRV services.

Several new initiatives in 2020 include:

- Janitorial Cleaning Contract Raise Janitorial Performance Assessment by 1.5 points.
- NRV Fuel Contract Exercise Contract Option.



 Small Purchase Contracts and Recurring Payment Contracts – Execute contract renewals on over 20 small purchase agreements (\$50K or less) and recurring payments.



### Warranty & Maintenance Services (WMS) Section



Warranty & Maintenance Services (WMS) section maintains service quality development, analysis, and distribution of maintenance reports and data. WMS has primary responsibility for the measurement tool calibration program and technical responsibility for the DART tire lease contract. In addition, WMS processes and administers all vehicle, equipment, and facility warranties; and monitors fluids through wear metal and contaminant analysis to prevent system or subsystem failures.

Initiatives in 2020 are as follows:

- EPM Support and Implementation Support, development and implementation of the EPM Program, which will be used to track and manage capital projects.
- EAM Support and Implementation Support, development and implementation of the EAM Program which will replace the current Spear asset management system.
- Support forty-one (41) Bus Expansion Fleet
- Support Electric Vehicle Initiative
- Support Automated Bus Initiative



# <u>Asset Management</u>



The Asset Management Unit is responsible for DART's Transit Asset Management Program. This program oversight includes support for DART's Enterprise Project Management (EPM), beyond database updates and software releases, active updates to Capital Projects Tracking (Operationsrelated). Additionally, under the Enterprise Asset Management (EAM) group support, responsibilities extend to: asset inventory; data-collection oversight; collecting & validating existing asset data; condition assessments of inventoried assets; and prioritized list of investments to improve the state of good repair of DART capital assets.

Initiatives to be continued in 2020:

- Project Oversight and support for Phase I Enterprise Asset Management (Maximo)
- Support implementation of Linear Asset Referencing System
- Manage Renewable Natural Gas Credits



Standards, Performance & Monitoring (SPM)

The SPM section is responsible for establishing uniform standards for DART's Fleet and Facilities State-of-Good-Repair and Operational consistency for On-Time Performance Standards, and Quality Assurance Audits.

Initiatives in 2020 will include:

- Implement Mystery Rider Quality Assurance Program Refinement
- Complete Assessment of Single Camera Solution and provide a recommendation



### Maintenance Training Unit (MTU)



This section provides training to all employees who maintain the systems, equipment, facilities. vehicles. and infrastructure used within the Operations Department. This includes initial training and certification for newly hired employees and refresher training and recertification for existing employees working in these areas: Bus Fleet; Rail Fleet; Non-Revenue Fleet; and Ways, Structure, and Amenities. Maintenance Training also provides support to all areas of service delivery providing training and development in operation skills, safety, collision avoidance, and customer service.

Initiatives for 2020 include:

• Deliver Maintenance Training Programs & Refresher Maintenance Training for: Non-Revenue; Bus; Rail; and Ways, Structures, and Amenities Sections



- Develop and Crosstrain Maintenance Training Specialists to Enhance Opportunities for Training Support
- Provide Training Support for Enterprise Management Systems (EAM and EPM)
- Provide Training Support for Technology Enhancement Initiatives Zonar, APC, CCTV, Wi-Fi, Electric Vehicle, Automated Vehicle Study, and 3D Video Tutorials
- Provide Training Support for Rail Expansion Programs: Silver Line, D2, and Platform Extensions
- Review a new training approach to incorporate refresher training for M6 mechanics



# **Materials Management Department**

The Materials Management department has the primary responsibility of managing the ordering, receiving, distribution and disposal of materials and equipment for the agency. Materials Management manages an inventory of over 15,816 various parts valued at more than \$44.8 million. Materials Management is organized into three sections: Materials Management and Planning, Receiving and Distribution and Warehousing and Distribution. The inventory is maintained at the main distribution center located in Irving,



Texas and in seven satellite locations and one rail yard. The AVP of Materials Management directs the overall activities of the department and reports directly to the Executive Vice President/Chief Operations Officer. The key initiatives to occur in 2020 are: (1) working to install our new EAM system, (2) achieving our KPI's which will help prevent vehicles downed for stocked parts and (3) preparing to bar code and serialize all parts in the warehouse.

The <u>Materials Management and Planning (Administration)</u> section provides fiscal and administrative support and is responsible for inventory planning activities to support Bus, Rail and Facilities Operations. This section is also responsible for the administration of our perpetual inventory, the reconciliation of the inventory, planning and monitoring stock levels and managing 69 parts contracts and recovery administration activities.

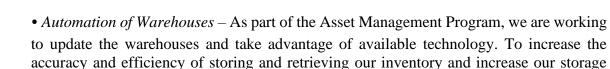


The <u>Materials Management Receiving and Distribution</u> section is located in Irving, Texas at the Pioneer Warehouse. The distribution center serves as our main warehouse and is responsible for receiving all parts from vendors and re-stocking all satellite locations daily.

The <u>Warehousing and Distribution</u> section manages seven satellite warehouses and one rail yard. The satellite warehouses are located in our bus and rail maintenances facilities. These locations are responsible for ensuring that the correct parts are available and can be issued to the mechanics upon request.

During FY 2020, Materials Management will be working to improve the availability of parts for the agency. To achieve this, Materials Management will continue to work to automate warehouses, improve our relations with vendors and set goals that will ensure that we do not have a bus or train down due to unavailable parts.





capacity, Materials Management acquired six (6) Vertical Lift Machines (VLMs) which were installed in FY 2018 in the main warehouse and in one of our satellite locations. These machines have improved the working conditions for our employees by vertically storing the parts and delivering them to a table height platform. The VLMs have allowed DART to consolidate all our small to medium sized parts in one area of the warehouse(s) thus creating additional space that we will use to store large bulky parts/items.



• *Improving relations with vendors* – We have been visiting with vendors to better understand how they are set up and how their ordering processes work. Our goals are to better understand their processes and to make sure they understand our processes. We are also using this opportunity to discuss and develop contact(s) that we can call when we have buses or trains down due to DART not having that part in stock.

• *EAM installation* – Materials Management is part of the team working to install DART's new Enterprise Asset Management (EAM) system. This system will replace Spear which is our current system of record for all parts that are stored in inventory. This is also the system that Maintenance uses to submit work orders. This system will be replaced with Maximo and is schedule to launch Phase I in December 2020.



Materials Management Key Performance Indicators (KPIs) are presented in scorecard format in Exhibit 64.

These KPIs measure our success towards achieving the goal of providing effective, efficient, safe and secure transportation service. Fiscal Years 2015, 2016, 2016, 2017 and 2018 indicate actual values. Fiscal Year 2019 Second Quarter represents the period ending March 31, 2019.

Key Performance Indicators	FY15	FY16	FY17	FY18	FY19
Buses Down for Parts (Stocked) -					
Average Per Day	100.00%	78.40%	100.00%	96.70%	89.57%
LRVs Down for Parts (Stocked) -					
Average Per Day	100.00%	100.00%	100.00%	74.30%	83.38%
Parts Availability	100.00%	100.00%	100.00%	99.90%	99.89%
Inventory Accuracy	99.90%	99.90%	99.70%	99.70%	99.65%

Exhibit 64
Materials Management Scorecard – Key Performance Indicators





### **Police & Emergency Management**

#### Function/organization

The DART Police Department is charged with implementing strategies addressing crime, fare enforcement, emergency preparedness, and video surveillance for DART employees, customers, facilities, and vehicles throughout DART's 700 square mile service area. The Vice President/Chief of Police and Emergency Management reports directly to the Executive Vice President/Chief Operations Officer. The department is comprised of 399 personnel comprised of police and civilian personnel with an



operating budget of \$34M. The Department's key initiatives for 2020 are as follows:

- Increase visibility through deployment and scheduling of available resources (e.g. Police Officers, Fare Enforcement Officers (FEO) and Security Officers).
- Continue to reduce police, FEO, and telecommunicator vacancies by evaluating and improving the hiring and recruiting process.
- Enhance and implement Closed Circuit Television (CCTV0 coverage at transit facilities, park and rides, and DART facilities.
- Demonstrate improvement in public sense of security as measured by surveys that gauge customer perceptions.
- Demonstrate improvement in actual security by enhancing infrastructure and strategic placement of security personnel.
- Improve and reduce customer vulnerability and exposure to crime through enhanced facility environmental designs, emergency preparedness and technology on DART Vehicles and at DART Facilities.
- Maintain competitive employee salaries, quality of life and work life balance.
- Seek Transit Security Grant Program funding for Emergency Preparedness full-scale and tabletop exercises, Counter Terrorist Team/Special Operations Team equipment and overtime funding for special events.

The DART Police Department is comprised of four major divisions: Administrative Services, Field Operations, Operations Support and Public Safety Technology.

<u>Administrative Services</u> provides day-to-day services for employees, internal and external customers. These services are provided through the following areas:

- <u>Budget</u>
  - In FY 2019, we budgeted for 26 additional personnel: 10 Police Officers, 2 Lieutenants, 2 Sergeants, 2 Lead Fare Enforcement Officers (FEO), 5 FEOs, 1 Police Manager, 2 Telecommunicators and 2 Public Safety Technologists.



<u>Records</u> – The Records section perform duties related to the storage and dissemination of police records while also focusing on providing excellent customer service. The staff enters and retrieves various types of data, videos and photos, including offense reports and other information into and from files and automated law enforcement records management systems. They compile data for monthly statistical reports and State and Federal reporting to include the racial profiling report. Also, the section maintains and process all offense reports, accident reports, and citations with the respective State and Justice of Peace Courts on a weekly basis.

A major milestone achieved 2019 was the consolidation of all Police Records to meet the records retention schedules set by the Agency.

	Offense Reports	Accidents	Open Records &	Citations
		Reports	Internal Requests	
CY 2013	6,743	642	1,196	42,417
CY 2014	6,049	467	1,336	53,440
CY 2015	5,661	486	1,334	47,250
CY 2016	5,738	462	1,300	41,752
CY 2017	6,688	442	1,499	49,386
CY 2018	6,236	443	1,376	31,759
CY 2019* *YTD Totals	2,457	206	586	15,887

# Exhibit 65 Police Records Section Transactions

• <u>Quartermaster</u> – The section manages the DART Police vehicle fleet consisting of patrol, administrative, and specialized vehicles (vans, pick-up trucks, T-3's and motorcycles). Additionally, the section coordinates the preventive maintenance and recalls of police vehicles while managing the coordination of vehicle deployments and issuance of equipment to department personnel.

The <u>Field Operations</u> Division provides police services for DART Light Rail, Trinity Metro Mobility Management, Dallas Streetcar and DART Facilities encompassing 700 square miles; covering 93 miles of light rail, 64 light rail stations, 30 miles of commuter rails, six (6) commuter rail stations, one (1) commuter rail operating facility, over 12,000 bus stops, three (3) bus divisions and two (2) light rail operating facilities.

Field Operations is comprised of the following divisions:

• <u>*Rail Operations*</u> – Police and Fare Enforcement Officers (FEO) inspect fares aboard DART Light Rail and TRE commuter trains for fare compliance with DART's Comprehensive Fare Payment System, issuing citations, criminal trespass citations and providing customer service to passengers.

The primary duty of Fare Enforcement Officers is to inspect passengers for proper fare throughout the rail system. Fare Enforcement Officers (FEO) issue fare evasion citations when necessary and report disruptive behavior to DART Police Officers for police action.



While fare enforcement officers possess no police power, they provide a uniformed presence on DART light rail and TRE trains while providing the highest level of customer service to patrons following the pillars of 5-Star Customer Service.

Police Officers provide police visibility, protection, and security on the light rail trains, at rail stations, and light rail platforms in addition to fare enforcement. They issue fare evasion citations, trespass warnings and take police actions for criminal and DART Code of Conduct violations. Officers assist passengers and provide the highest level of customer service to customers following the pillars of 5-Star Customer Service.



- <u>Patrol Operations</u> Patrol Officers provide police services to bus operations, mobility management, Trinity Metro and DART Facilities. Officers board buses, patrol bus routes, conduct visits of bus stops, transit centers, passenger transfer locations, and park and ride facilities, as well as DART Administrative and Operations facilities. Patrol officers also respond to calls for service at rail facilities and provide support to rail officers, fare enforcement officers and contract security guards performing rail operation duties on light rail trains and Trinity Metro throughout our rail operating area.
- <u>Special Operations</u> consist of two categories:
  - Special Operations Team (SOT) The Department of Homeland Security funded a four person team for antiterrorism and domestic terrorism detection and prevention. We expanded the team to include four other team members to reduce crime at identified hotspots and apprehension of felons for DART Warrants. The team also coordinates enhanced security presence at DART light rail stations, transfer centers, and on DART buses with Transportation Security Administration (TSA) Visible Intermodal Protection Response (VIPER) teams from Dallas/Fort Worth International Airport and Dallas Love Field Airport.
  - Canine Handlers (K-9 Unit) Through a Transportation Security Administration (TSA) cooperative agreement, the department has four explosives-detection canines, along with four Ford Expeditions to facilitate K-9 deployment. Explosive detection canine teams greatly increased the Agency's response and timely assessment of bomb threats against DART Assets, decreasing out-of-service time and service disruptions.





- The police department's current deployment plan assigned a police officer, fare enforcement officer or security guard on every train. This has been accomplished through additional hiring and overtime. Police officer staffing was also increased at West End Rail Station, Rosa Parks Plaza and West Transfer Center (The Triangle) to provide increased police presence and visibility.
- <u>The Operations Support Bureau</u> is comprised of criminal investigations, emergency preparedness, and special services. In addition to operating many of the support functions of the police department, Operations Support was the lead bureau in the department being re-recognized by the Texas Police Chiefs Association Best Practices Recognition Program in March 2019.
- <u>Criminal Investigations (CID)</u> is responsible for processing crime scenes, conducting criminal investigations, interacting with the medical examiners' offices; gathering, preparing and distributing intelligence information, and preparing cases for court presentation.
- <u>Emergency Preparedness</u> is responsible for planning and preparing for emergencies, to include developing security actions in response to National Terrorism Advisory System threat alerts; applying for and overseeing Homeland Security grants; conducting multi-jurisdictional, tabletop and full scale exercises; performing needs and threat analyses; conducting Crime Prevention through Environmental Design (CPTED) studies at DART facilities; and providing security awareness training for all DART employees. The section also manages



community relations, the security guard contract, DART employee identification cards, and facility access programs.

• In FY 2019, the division conducted CPTED surveys and used the results for planning and implementation of infrastructure improvements system wide. A regional surface transportation terrorist-related tabletop exercise involving TSA, Amtrak, Union Pacific Railroad, the City of Dallas, DART and TRE was conducted in February. In February 2019, a regional full-scale radiological exercise was held in CityPlace/Uptown Station involving several fire rescue departments, K9 units, bomb squads and the 6<sup>th</sup> Civil Support Team from the State of Texas.



- <u>Special Services</u> oversees hiring, recruiting, and training for the department.
  - Hiring and Recruiting is responsible for complying with all State requirements in the hiring of department personnel, as well as recruiting to fill vacant positions.
    - In 2019, the Hiring and Recruiting section was able to fill the 10 new police officer and five new FEO positions funded in the 2019 budget. The remaining new supervisor positions are being filled through the promotion process.
    - This section's goal for 2020 is to fill all budgeted vacancies within FY 2020.
    - The Training Unit is tasked with providing the state-mandated police training to all officers as well as specialized police training including firearms, use of force, de-escalation, mental health officer training, community policing and problem solving, etc. In 2019, our training unit supported the safety and security goals by ensuring all new police cadets were aligned with the first available training academy. Moreover, the training unit sergeant was the lead instructor in teaching DART Operation supervisors the 5-Star "Practicing Leading and Serving" class.
    - This section's goal for 2020 is to continue preparing new officers, fare enforcement officer, and civilians for the ever-changing policing environment.
- <u>Public Safety Technology Division</u>: DART Police embraces technology to support operations and strategic goals. Our Public Safety Technology Division includes the Telecommunications Section. The section is responsible for soliciting, evaluating and implementing procurement actions for all DART Police Technology projects and Agency

Closed Circuit Television (CCTV) projects for DART trains, facilities and park and rides. Additionally, the Telecommunications Section handles calls for police services throughout our 700square mile service area. The section is comprised of eight public safety technicians, fourteen Telecommunicators and nine camera monitors. Our Officers operate multiple types of technology to complete daily duties, from in-car camera systems to mobile data computers.



- <u>Public Safety Technology (PST)</u> maintains our computer aided dispatch (CAD) and records management system (RMS), body-worn cameras, mobile data computers and in-car camera systems as well as the hand-held electronic citation devices used by police and fare enforcement officers.
  - In FY 2019, the section orchestrated the installation of video monitors at West End Station. Monitors will be installed at Rosa Parks and the West Transfer Center by the end of the current fiscal year.



• In FY2020, the section projects to complete installation of video monitors throughout the transit way mall.







Figure 1 - ELERTS Figure 1 - 912 Commerce St

Figure 3 - Rosa Parks

Figure 4 - LRV "C" Car

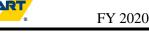
 <u>Police Telecommunications (Police Dispatch)</u> section is responsible for receiving requests for police call for service (CFS), dispatching CFS's to DART Police Officers, monitoring police radio transmissions, and processing requests for National Criminal Information Center (NCIC) and Texas Criminal Information Center (TCIC) reports through the Texas Law Enforcement Telecommunications System.

The section also reports service disruptions, domestic and foreign terrorist incidents to the State of Texas, Transportation Security Administration and Department of Homeland Security.

The camera monitors are an essential element of telecommunications for transmitting visual video of incidents in-progress, previously committed, or review for violation of DART's Code of Conduct.

Camera Monitors assist Police dispatchers by providing video footage for transmittal of information to responding police, fare enforcement officers and other DART employees during an event impacting DART customers, services and continuity of operation. They also respond to customers using our ELERTs app to request CFS or to report incidents on DART trains, buses, and facilities. Because of the large area DART covers both camera monitors and dispatchers work closely with outside agencies to ensure the safety of our customers and assets.





# **Mobility Management Services (Paratransit) Department**

The Mobility Management Services (MMS) Department provides accessible, origin-to-destination and door to door public transportation services within the DART Service Area in accordance with the Board-approved Accessible Services Policy and the Americans with Disabilities Act of 1990 (ADA). Mobility Management Services provides a broad range of transportation choices, innovative solutions to enhance the customer experience, vehicle communication, and equipment enhancements geared toward mobility options for persons with disabilities, older adults, veterans, and those with limited incomes. The Vice President of Mobility Management Services directs the overall activities of the department and reports directly to the Executive Vice President/Chief Operations Officer. This department has a budget of \$39 million with a total of 57 employees and is separated into two divisions: Administration and Operations/Contract Compliance. DART's new contract with MV Transportation, Inc. sets forth for the provision, operation, and maintenance of a fleet of 41 Ford E-350 Lift-Equipped vans, 12 Ford Transit Lift-Equipped vans, 154 Dodge Ramp-Equipped minivans, and 13 Toyota Prius sedans. In Fiscal Year 2020, the key initiatives of the department are:

- Implementation of a new business model aimed at increasing efficiency, customer satisfaction, and to slow overall cost increases
- Changing to a brokerage model and an increase to the number of service providers
- Rollout of a new software platform, Routematch, that connects all department run programs
- Maintaining responsibility for field supervision, contract compliance, eligibility, outreach, travel orientation and training, coordinated



transportation services, administration of the Fixed-Route Reduced Fare Program for Persons with Disabilities, and management of DART's GoLink, Mesquite Compass, and UTD Shuttle services.

• Renewed emphasis on providing 5 Star Customer Service to DART customers

# **Administration Division**

Mobility Management Services Administration is comprised of 28 salaried exempt and nonexempt positions. The management team has responsibility for the oversight of Special Programs, Assistance Program planning, Paratransit Certification and Eligibility, the Mobility Ambassador Program, Customer Relations, and Budget Planning and Spending Oversight. The major initiatives of this section are:

<u>Mobility Ambassador Program and Other Community Training Options</u> – The goals of the Mobility Ambassador Program are to: 1) increase the familiarity and comfort level of older adults, persons with disabilities, and the general public with DART's fixed-route system;



and 2) encourage Health and Human Services caseworkers, non-profit transportation providers, and the public seeking transportation for persons with disabilities to consider the fixed-route system as their first choice.

For customers: The service includes travel orientation for individuals as well as groups. Mobility Ambassadors work with customers to help them become familiar and comfortable with using the fixed-route service through group trips and/or accompanying first-time users on customized transit trips. The travel trainers continue to work with customers with disabilities requiring more intensive and detailed assistance. Customers that have gone through the Mobility Ambassador Program but require more than a few trips in order to feel comfortable using fixed-route services, are referred to the Travel Training Program.

For caseworkers and agencies: Mobility Management Services Planning personnel conduct training among caseworkers and agencies to increase awareness of alternatives to DART Paratransit services, the ease of using fixed-route services, and the goals of service coordination between transportation providers and the Health and Human Services community. The Mobility Ambassador Program also offers group training for human service agencies and other trainers through a train-the-trainer program.

The Mobility Ambassador program was implemented in FY 2013. For those riders transitioning to fixed-route services, Mobility Ambassadors perform route checks to ensure there are no environmental barriers that would impede the rider's travel. They have been successful at educating a number of groups and individuals on using DART's fixed-route services. However, the Mobility Ambassador Program is open to the general public, not just Paratransit riders, and the Mobility Ambassadors can educate the public on fixed-route services as well as services offered by Mobility Management, including Paratransit.

During its inaugural year, the Mobility Ambassador Program successfully trained 22 individuals and 5 groups to use DART fixed-route services. As of April 2019, 604 individuals and 149 groups have been trained. DART anticipates that this program will continue to grow and anticipates continued strong participation of customers in training programs in FY 2020.

<u>Regional Transportation Information/Database</u> – DART has worked with various regional entities to create a searchable, comprehensive, accurate, and current database of transportation resources in North Texas for persons with disabilities, older adults, and other disadvantaged populations. This effort was the first step to a regional one-call/one-click service where individuals, caregivers, and caseworkers can find and ultimately book trips by accessing one centralized source. This project, called "My Rides North Texas," went live to the public in 2017 and is used by individuals across the 16 North Central Texas Council of Government counties.

<u>Paratransit Eligibility and Travel Training Program</u> – Per the ADA, passengers must be certified by DART to use Paratransit services, and passengers' certifications are updated every one-to-three years. DART certifies passengers in person, thereby providing the most accurate assessment of a passenger's ability to use fixed-route buses and trains. The eligibility process determines whether a person is capable of using fixed-route services, or if a disability prevents that passenger, unconditionally or under certain circumstances, from using fixed-route service.



The number of certified riders for FY 2020 is projected to be approximately 12,780. This represents a 4.8% increase from the number of certified riders at the end of FY 2018. This increase reflects the overall population growth and general aging in the DART Service Area. As of May 2019, approximately 12,479 riders are eligible to use Paratransit services.

Eligibility and Training Specialists assess applicants' ability to use fixed-route services and provide travel training. Travel Training enables DART to transition eligible individuals to less costly fixed-route service. The Travel Training Program includes specialized instructions tailored to meet specific needs and skill levels for people with disabilities to successfully transition to fixed-route services. Travel Training requires daily and repetitive instruction until riders feel confident in their ability and can demonstrate competency for complete independence in the use of public transit.

<u>Orientation and Mobility Training</u>: Orientation and mobility training by a certified instructor became available for Paratransit riders with vision disabilities in the fourth quarter of FY 2013. The Orientation and Mobility Trainer provides instruction to people with vision disabilities on how to utilize DART's bus and rail services.

### **Operations/Contract Compliance Division**

Mobility Management Services Operations/Contract Compliance is comprised of 29 salaried exempt and non-exempt positions. The management team has responsibility for the oversight of the Purchased Transportation Contract that includes Paratransit Service, Operations Programs including GoLink and Shuttle Services, Field Supervisor Operations, and Quality Assurance.

The major initiatives of this section are:

<u>Purchased Transportation Contract</u>: The current purchased transportation contract with MV Transportation begins on October 1, 2019 and runs through September 30, 2022. The contract includes two additional two-year option periods. This new contract will harness the power of updated technology and will provide a single, integrated technology platform built on Routematch software that all of the department's programs can work from. This model utilizes a broker, MV Transportation, that operates on the software platform to bring on transportation providers, using a variety of vehicle types, to operate the Paratransit and GoLink services, as well as connect and integrate with other contracted services. In the future, the entire platform will connect through DART's GoPass program to enable mobile payments, as well as other functionality.

<u>Fleet-wide DriveCam Installation</u>: Starting with the new MV Transportation contract in FY 2020, every vehicle operating service under the contract, with the exception of TNCs, will have Lytx DriveCam systems installed. These camera systems identify unsafe and inefficient driving behaviors among operators, provides a reference point to coach drivers, and reduces risk, thereby enhancing customer safety and security.

<u>Lyft Pilot Program/Incorporating TNCs</u> – Mobility Management Services (MMS), in partnership with MV Transportation, began a pilot program in May 2017 to explore the use of a Transportation Network Company (TNC), Lyft, to perform certain trips for eligible customers, in an effort to



provide a more flexible and personalized service. MMS identifies the suitable candidates for the Lyft service, and contact is made with the customer to determine if they are interested and agree to become a participant. As of the end of May 2019, over 85,000 trips have been conducted by over 100 participants on the pilot program. Under the new contract, it is anticipated that a TNC like service will still be provided as an alternative service for ADA Paratransit riders.

<u>Routematch Mobile</u> – A Routematch Mobile platform, including a tablet device, is installed on all revenue service vehicles under the MV Transportation contract. The wireless communication system allows optimal utilization of revenue vehicles through GPS-based vehicle tracking and improved communications.

<u>Productivity</u> – KPIs for productivity include on-time performance, excessive trip lengths, and call center service levels. Compliance with the ADA's zero denial mandate impacts efficiency and lowers productivity by requiring all legitimate trip requests (trips requested by certified riders during applicable service hours) to be accommodated. While productivity has improved over the years, constrained resources resulted in an increase in longer trips and late trips. The business/contract model being implemented in FY 2020 continues to aim at reducing the strain on resources by utilizing technology to bolster productivity.

<u>Manage No-Shows and Cancellations</u> – The difference between scheduled and actual trips is attributed to no-shows (when a customer fails to show for a trip), and customer cancellations (which can happen any time up until the vehicle arrives for a passenger). In FY 2020, Management estimates the ratio for no-shows will remain at or below the 4% range, and the ratio for cancellations will remain in the 15-20% range. These ratios are consistent throughout the transit industry for paratransit services.





#### Paratransit Services Scorecard – Key Performance Indicators

Exhibit 66 highlights the Key Performance Indicators (KPIs) for Paratransit. These KPIs measure our success towards achieving the goal of providing effective, efficient, safe, secure transportation service. Fiscal Years 2017 and 2018 indicate actual values. Fiscal Year 2019 Third Quarter represents the period ending June 30, 2019. The numbers in the columns for Fiscal Years 2019 and 2020 are the target values for those years.

Indicators	FY17A	FY18A	FY19A YTD Q3	FY19B YTD Q3	FY20B		
Customer Quality							
Actual Ridership (000)	796	771	676	637	876		
Actual Trips (000)	732	762	571	586	782		
On Time Performance	89.1%	88.7%	88.9%	95.0%	93.0%		
Preventable Accidents Per 100K Miles	0.4	0.5	0.3	2.0	2.0		
Percentage of Trips Completed	99.8%	99.7%	99.7%	99.0%	99.0%		
Passenger Canceled Trips Ratio	22.6%	23.1%	25.6%	21.9%	20.0%		
Passenger No Shows Ratio	3.0%	3.3%	4.6%	4.0%	4.0%		
Complaints Per 1K Trips	3.90	3.38	3.26	3.00	3.00		
Service Level - Scheduling (3 minutes)	97.5%	87.0%	97.3%	95.0%	93.0%		
Service Level - Scheduling (5 minutes)	97.6%	92.3%	98.0%	99.0%	97.0%		
Service Level - Where's My Ride (3 minutes)	94.8%	92.1%	94.9%	95.0%	93.0%		
Service Level - Where's My Ride (5 minutes)	98.8%	97.2%	98.0%	99.0%	1.0%		
Certified Riders	12,244	11,004	12,393	12,408	12,780		
Indicators	FY17A	FY18A	FY19A YTD Q3	FY19B YTD Q3	FY20B		
Financial Efficiency							
Expenses - Fully Allocated (M)	\$35.22	\$36.84	\$30.20	\$30.31	\$42.79		
Revenues (M)	\$2.22	\$2.17	\$1.70	\$1.75	\$2.90		
Net Subsidy (M)	\$33.00	\$34.67	\$28.50	\$28.55	\$39.88		
Subsidy Per Trip	\$45.10	\$45.49	\$49.90	\$48.75	\$51.03		
Subsidy Per Passenger	\$41.47	\$44.97	\$42.15	\$44.83	\$45.55		

Exhibit 66
Paratransit Scorecard – Key Performance Indicators

KPIs for scheduling and *Where's My Ride?* are referred to as Service Levels and represent the percentage of calls answered within the established time. The contract with MV that begins in FY 2020 requires 93% of calls to be answered within 3 minutes and 97% of calls to be answered within 5 minutes, and offers an incentive once 95% of calls are answered within 3 minutes and 99% of calls are answered within 5 minutes. MV is also required to meet an On-Time Performance target of 92%, and is offered an incentive at 95%. Starting with the contract in FY 2020, a new driver rating metric has been added, rating each driver for their trips performed and receiving an average for each 25 trips performed. MV is required to meet a 3.5 out of 5 average for every 25 trips performed, and an incentive is offered for an average rating of 4.5 out of 5. MV has



committed to meeting all minimum thresholds for these goals and aims to surpass the incentive targets.

Exhibit 67 is an overview of the uses of funds and allocated operating positions for the Paratransit mode. Each department identifies the percentage of time spent on each mode of service to determine the expenses and positions allocated to the mode of service.

Overview	FY17A	FY18A	FY19B	FY20B
Allocated Operating Expenses (M)	\$35.2	\$36.8	\$41.2	\$42.8
Capital Expenditures (M)*	\$0.4	\$0.3	\$0.3	\$0.4

### Exhibit 67 Paratransit Overview

\* These amounts are the actual or budgeted capital for this mode only and do NOT include an allocation of Agency-wide capital.

\*\* Allocated positions are based on budgeted position counts.

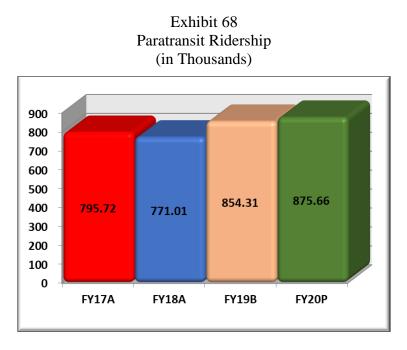
### Paratransit Ridership

One of Mobility Management's goals is to increase efficiency while delivering excellent customer service. The service delivery model implemented in FY 2013 consists of both dedicated and non-dedicated vehicles as well as a diverse fleet mix. The dedicated variety of vehicles in the fleet will continue into the new contract beginning October 1, 2019.

The increase in vehicles and flexibility that accompanied the MV contract has helped to ease the strain on available resources and has decreased customer ride times that had been increasing over several years prior to the change. Ultimately, this change has improved productivity and efficiency. Ridership began to increase at a faster rate in FY 2019, and Mobility Management Services estimates that this ridership trend will continue to be positive with the new contract.



Exhibit 68 highlights Paratransit ridership. Fiscal Years 2017 and 2018 indicate actual values. Fiscal Years 2019 and 2020 are the target values for those years.



Paratransit Costs and Subsidy Per Passenger

Exhibit 69 compares Paratransit cost and net subsidy actual results for FY 2017 through FY 2024 with budget and projections for FY 2019 through FY 2024. Net Subsidy represents the total cost of the service not covered by passenger fares. The calculation for Subsidy per Passenger takes this number and divides it by actual ridership.

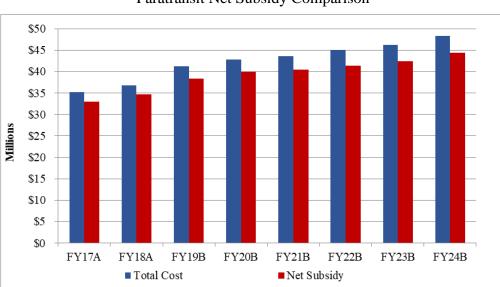


Exhibit 69 Paratransit Net Subsidy Comparison

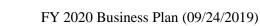
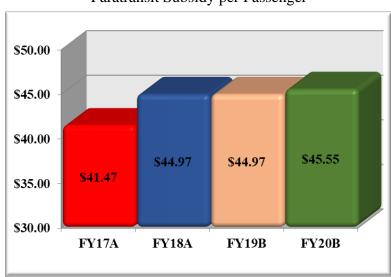
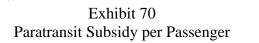


Exhibit 70 highlights Paratransit Subsidy per Passenger. Fiscal Years 2017 and 2018 indicate actual values. Fiscal Year 2019 Third Quarter represents the period ending June 30, 2019. FY 2020 are budgeted numbers.

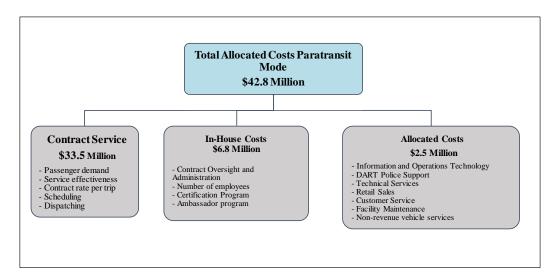




### Paratransit Cost Model

Exhibit 71 is the Paratransit Cost Model. 78.3% (\$32.3 million) of modal costs are contract services costs.

Exhibit 71 FY 2020 Paratransit Cost Model







DART has always considered the safety of our customers, employees, and contractors to be of paramount importance. We have developed and implemented a System Safety Program Plan (SSPP) designed to provide the safest transportation network for customers and citizens of our service area, and the safest work environment for employees. A series of unfortunate public transit and commuter rail incidents around the country in the past ten years has prompted Congress to adopt new regulatory oversight and compliance obligations. These new regulations require DART to further refine our program and elevate even further the emphasis on safety throughout the organization. Under the Federal Transit Administration's adopted principles of Safety Management System (SMS), DART can anticipate more safety oversight auditing and reporting obligations to both the State of Texas and the Federal Transit Administration. In addition, with the implementation of Positive Train Control on our Commuter Rail system, there will be a companion set of new compliance and reporting obligations. Under an Interlocal Agreement (ILA) with the City of Dallas we have also agreed to operate the Dallas Streetcar as a contractor. We have experienced an increase in the involvement of DART's Safety Department with the Dallas Streetcar and expect this to continue throughout the term of the agreement. DART serves in a technical advisory capacity supporting the McKinney Avenue Transit Authority streetcar.

The Vice President, Chief Safety Officer, reports to DART's President/Executive Director. The location of this position within the Agency's reporting structure emphasizes the importance safety should and does play in our daily operations.

Each DART department is directed and empowered to administer the SSPP and its specific activities for the prevention, control, and resolution of unsafe conditions and actions. DART's successful safety record results from the use of this plan, as well as from the regular review and revision process in place to keep the SSPP current. It is fully expected that once the Safety Management System (SMS) is fully implemented, the SSPP will be incorporated intact.

# DART Safe Work Practices Policy

DART's safety policy is guided by the following principles:

- Injuries and occupational illness can be prevented.
- Preventing injuries and incidents is good business.
- Operating exposures can be safeguarded.
- Management will train all employees to work safely.
- Appropriate safety equipment will be available to all employees.
- Safety is the responsibility of every employee.



DART's senior management is responsible for providing leadership in promoting safety and ensuring employees are committed to the safety of DART's customers, employees, property, and the general public who come into contact with the DART system.

The DART Safe Work Practices Policy voluntarily adopts the Occupational Safety and Health Administration (OSHA) standard as the minimum standard for safe work practice. Audits covering all the safety related Standard Operating Procedures, as well as System Safety Program elements, are conducted each year to measure and record improvement with respect to prior audit findings and mitigation implementations.

To further support safe work practices, DART provides safety-specific training for DART operations. Safety rules and techniques are integrated into the task-specific training associated with each departmental discipline. DART's safety professionals provide safety specific training to ensure the delivery maintains continuity of the safety message. DART's Operational Safety Training Program includes the following:

- Light Railway Worker Protection Program (LRWPP)
- DART Police
- Quarterly Safety Training
- Industrial Health and Safety Training

Mandatory quarterly safety training meetings are held each year for Transportation and Maintenance department personnel. The topics and curriculum are based upon current events, recurrent training required by law, or training required by changes in safety-related laws, regulations, guidelines, DART policy, standard operating procedures, and work instructions. Over 6,000 individuals are trained annually.

# **Operations Safety Functions**

DART's safety program includes the following:

- Audits of various components of the system regularly based on safety rules, operating practices, and regulations for the Maintenance and Transportation departments, and other audits as requested.
- Light rail safety audits as mandated by the Federal Transit Administration (FTA) and State Safety Oversight.
- Job safety analyses to recommend mitigation strategies for the risks inherent in performing specific tasks. This, in turn, may affect the safety requirements within the Standard Operating Procedures and Work Instructions.
- Investigation of all collision accidents to determine preventability as well as an appeal process associated with preventability decisions.
- Involvement in integrated testing prior to the opening of new light rail sections.



- Leadership of the activities of the Rail and Bus Safety Committees, which report to the DART Safety Committee (DSC). The DSC is composed of DART executive management and is responsible for safety policymaking, performance accountability, oversight of the subordinate safety committees, and assignment of safety responsibilities throughout the agency.
- Oversight of changes in configuration to bus, rail, and other systems, ensuring adherence to change management principles and processes.
- Oversight and documentation of test results for lead and hexavalent chromium.
- Primary contact for all state safety oversight issues such as compliance with federal and state regulations and serious accident investigation and reporting.
- Primary contact to the National Transportation Safety Board.
- Development and implementation of accident reduction initiatives and implementation of operational policies and procedures.
- Coordination of the National Safety Council's safe-driver recognition program and Rail Safe Operator program.
- Participation in the development and implementation of the safety initiatives of the American Public Transportation Association.

# Bus and Light Rail Accidents per 100,000 Miles

Exhibit 72 shows the results of Bus Accidents per 100,000 miles for FY 2017 through June 2019.

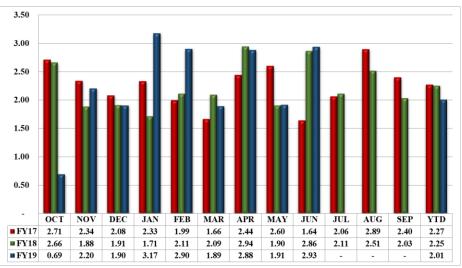


Exhibit 72 Bus Accidents per 100,000 Miles

Exhibit 73 shows the history of Rail Accidents per 100,000 Train Miles for FY 2017 through March 2019.

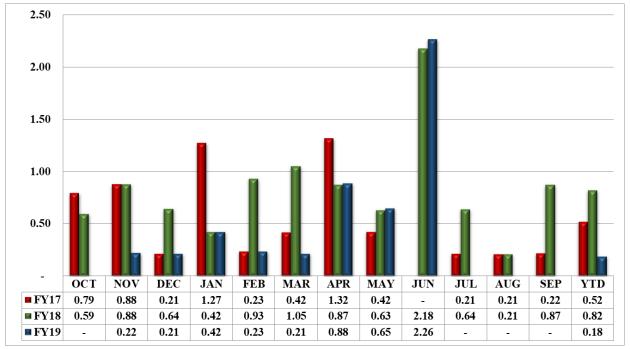
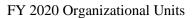


Exhibit 73 Rail Accidents per 100,000 Train Miles

# **Rail Program Development – Safety Program(s)**

Safety and security are primary concerns that encompass all aspects of planning, design, construction, and subsequent operations of the DART Rail, Trinity Railway Express, Bus, Paratransit, Transportation, Maintenance, Dallas Streetcar System, and management facilities and assets. As a result, all of DART's Engineering and Construction staff, support staff, and rail consultants are charged with the responsibility of ensuring the safety and security of patrons, employees, and general public who come into contact either directly or indirectly with DART transportation systems and facilities. Subsequently, the Capital Design & Construction Department directs development, deployment, and management of three separate but integrated safety disciplines: Construction Safety, System Safety, and System Safety Certification. These three elements are the initial safety processes introduced into authority designs, installations, integrated testing, start-up, and the final safety certification of all DART's transportation systems and management infrastructure. The following elements represent critical components of each safety discipline:



The **Construction Safety and Security Program** (CSSP) was established by DART to promote safety and security and to mitigate and control hazards and risks associated with construction, repair, maintenance, and related services for DART, Trinity Railway Express (TRE), and Dallas Streetcar Systems.

- Management, contractual, and contractor compliance, design integration, enforcement of federal regulations and statutes (OSHA, FRA, FTA), state regulations (TxDOT), National/Industry Consensus Standards (NFPA, NEC, ANSI, AREMA, ASTM, etc.), and agency safety requirements, policies, and procedures.
- The Comprehensive Inspection/Assessment and Inspection Program focuses on jobsite construction safety, workforce (personnel) safety, and environmental health. Detailed/specific safety element audits and validation of contractual compliance are conducted, and written reports with supporting photographic documentation are prepared for record-keeping requirements.
- Investigations of accidents/incidents and property damage claims. Identifying causal factors, determining abatement, and follow-on actions. Develops and implements accident reduction initiatives and implementation of operational policies and procedures.
- Management of comprehensive bilingual safety education and training programs; i.e., Construction, Systems Safety, Storm water Protection Awareness, and the Federal Railroad Administration (FRA) Roadway Worker Protection (RWP).
- Establishment and participation of Safety Committees; Construction Safety and Security Advisory Committee (CSSAC); DART Safety Committee (DSC); and several subordinate safety committees; e.g., Bus, Rail, Commuter Rail (TRE), Fire Life Safety Committee (FLSC), and System Safety Certification Readiness Team (SSCRT).

Because of these construction safety processes; DART has achieved an unprecedented low worker injury rate. Since the mid-1990s, DART's construction projects have now exceeded 50+ million man-hours (with the most recent Phase II and Phase III projects exceeding 18 million man-hours alone). The team of seasoned construction professionals has created a culture that promotes a high level of safety awareness that permeates every aspect/element of work being performed. With systematic refinements, the construction safety and security program successfully lowered the medical costs associated with injuries from \$1.31 per man-hour worked on the Light Rail Starter System to a laudable \$0.34 per man-hour worked on the LRT Phase II & III Build-out. These results compare most favorably to published national averages as well as departmental goals and have clearly elevated our integrated construction safety and security program to "world class" status. Exhibit 74 depicts scope increases and cost successes of the Construction Safety Program since the initial introduction of the LRT system, from the earliest phases (Starter System) to current Phase III Capital Build-Out Program.

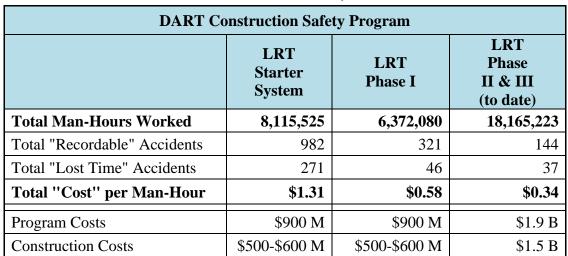
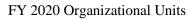


Exhibit 74 Construction Safety

The **System Safety Program** (SSP) applies engineering and management principles, criteria, and techniques to achieve acceptable risk, within the constraints of operational effectiveness and cost throughout all phases of the system life cycle. The program ensures a comprehensive safety hazard analysis of systems and subsystems design, facilities, construction, and operational procedures. Comprehensive safety and security certification checklists are developed and reviewed by committee to assure compliance prior to the transportation system being placed into active revenue service.

- Management of the agency's Capital System Safety Certification, Start-Up, and Integrated Testing programs. Establishes processes and methodologies for formalized testing, evaluation, and acceptance for LRVs, subsystems, i.e., Traction Power Substations (TPSS), Overhead Catenary System (OCS), Communications, Signals, and Fare Collection, in conjunction with other critical rail related systems.
- Directs development, implementation, evaluation, and revision of policies, procedures, standards, and publications relative to system integration testing (Integrated Test Plan) programs. Coordinates development of hazard analysis processes, programs, and methodologies as defined in PHA, OHA, FMEA, TVA, MIL-STD-882.
- Develops technical reports, formal presentations, etc. Interfaces with Federal (FTA and FRA) and State of Texas Safety Oversight (SSO), and Project Management Oversight Committee (PMOC) representatives and officials.
- Identifies and conducts integrated testing activities prior to the start of revenue service. Testing includes safety functions of major system elements: traction power, overhead catenary system, communications, signals, fare collection, and the interoperability of these systems. The published Integrated Test Plan (ITP) includes descriptions of each system's



elements test, personnel required to perform the test, and criteria for determining successful completion of the test.

• Collaborates on development and implementation of plans and procedures to efficiently transfer completed capital projects to the DART Bus and Rail departments. Provides liaison between the Rail Program division and these departments during rail-related projects and design developments.

**System Safety Certification Program** (SSCP) is the process of verifying compliance with a predetermined and approved set of formal safety and security requirements. Specifically, it involves issuing Certificates of Compliance that document that the safety and security requirements of the LRT Build-Out Phase II & III Project and Dallas Streetcar System have been achieved.

- Identifies processes by which projects will be formally certified as being safe to operate in revenue service. Safety and Security Certification verifies that systems, as designed and constructed, meet or exceed the stated requirements (specifications, manufacturers' criteria, etc.) for safe operation, security, and maintenance prior to entering revenue service.
- Emphasizes security requirements through a collaborative effort with the DART Police. Accordingly, the SSCP addresses safety and security as the project progresses from planning, to design, through construction, installation, testing, and finally revenue service. The primary objective is to achieve a state of acceptable risk parameters that achieve a major system security obligation to minimize or eliminate threats and vulnerabilities to the most practical levels.
- Validates that safety and security design criteria and standards are properly incorporated into appropriate design drawings and contract specifications. Project elements are reviewed for safety and security certification upon completion of design, construction/installation, and development of operating procedures (if applicable). During design and final construction/installation, final verification activities are performed, which include inspections and integrated testing. Upon successful completion of the verification process, the project element is certified as being safe and secure for revenue service.
- Collaborates with Jurisdictions Having Authority (JHA), DART Bus and Rail and Police to conduct First Responder system familiarization training. Conducts federally mandated Readiness Drill program by developing exercise criteria and jointly stages and conducts simulated rail vehicle emergency situations.

Collaboration and teamwork with DART personnel, contractors, subcontractors, and consultants has institutionally and effectively achieved a demonstrably high level of success in the workforce and systems safety environments and the overall integrated effectiveness of the agency's Construction Safety, System Safety Start-Up and Integration, and Safety Certification program.

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## **Growth/Regional Development**

The Executive Vice President of Growth/Regional Development has oversight of the Planning & Development, Commuter Rail & Railroad Management, Capital Planning, Capital Design & Construction, and Real Property & Transit Oriented Development (TOD) departments. The Executive Vice President reports to DART's President/ Executive Director and is the management liaison for the Board's Rail Program Committee, Planning Committee, and TOD Committee for departmental matters.

## **Planning & Development Department**

The work plan for the Planning & Development Department consists of a broad range of service planning and project development activities. These include refinement of the current bus system and developing concepts for future services and advancing them to implementation. Planning & Development Department activities also include planning, designing, and constructing various service-related capital projects.

The Vice President of Planning & Development directs the overall activities of the department. The strategic workplan for FY 2020 includes the following programs and projects:

<u>Integrated Corridor Management (ICM)</u> – Developed by the US DOT, Integrated Corridor Management (ICM) concepts may be applied in corridors with multiple transportation networks that are owned and operated by various providers. ICM requires technical, operational, and institutional integration of activities so that for the benefit of the commuter and the traveling public, the entire corridor is managed as one system rather than individual networks. A corridor is defined as an entire geographical area that may consist of highways, arterials, toll roads, parking systems, managed lanes, local bus, express bus, and light rail systems. The program includes freeway management, arterial street monitoring, responsive traffic signal system, parking management, real-time transit vehicle and park-and-ride lot information, regional trip planner, weather information, and the 511DFW, which is the State's first multi-modal Traveler Information System. The federally funded ICM Program is a joint effort of DART, TxDOT, North Central Texas Council of Governments (NCTCOG), North Texas Tollway Authority (NTTA), and the cities of Dallas, Highland Park, University Park, Richardson, and Plano.

At the culmination of nine years of research and testing of the ICM concept technology and software with its partners in FY 2016, DART completed a mandatory US DOT one-year real time pilot test of the ICM project in the US 75 corridor. The results of the demonstration have been evaluated by US DOT and were published in FY 2017. The assessment of the program's value by DART, TxDOT, Dallas, Richardson, Plano, and NCTCOG resulted in funding for the program for FY 2015 and increased funding in FY 2016. Effective October 1, 2016, DART, TxDOT, Richardson, and Plano ended the operation of the ICM project.

The workplan for FY 2016 included implementation of the mobile 511DFW app, 511DFW Twitter feed, upgrade of the ICM-511 software from SMARTNET to Ecotrafix, and an evaluation of the 511DFW to determine how to make the system more effective. Additionally, the FY 2016 work



program included a major initiative to evaluate ICM technology for use within DART to improve management of service disruptions. DART also anticipates expansion of the number of participating cities in the cooperative program.

Based upon the NCTCOG consultant evaluation of the 511DFW program in FY 2016, Regional Transportation Council (RTC) assigned responsibility for the 511DFW to NCTCOG on April 30, 2017. This change has a significant positive benefit to DART by eliminating its major responsibility for project management, procurement, and financing the program. NCTCOG has committed federal funding for three additional years and will invest in a major upgrade of the traveler information program called 511DFW Next Generation which began in FY 2017. TxDOT and DART will continue to provide local match funding to the program. NCTCOG has committed federal funding for three additional years.

The 511DFW partners have invested in a major upgrade of the traveler information program called 511DFW Next Generation. Several new items have been developed and rolled out to the system in FY 2018 and FY 2019:

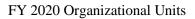
- 1. Website, Mobile App and IVR for Spanish language.
- 2. Modernize the public website experience, with adaptive design to support mobile browsers.
- 3. Waze data integration for the region.
- 4. Electric Vehicle (EV) charging station information on website.

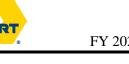
NCTCOG plans closer coordination with DART's GoPass application beginning FY 2019 and beyond. One of the unique accomplishments in FY 2018 resulting from DART's assistance to NCTCOG in the 511DFW transition was obtaining funding to implement real time video-based occupancy counts for Rowlett Station. The project included both electronic signage showing real time space available locations and the ability of DART police to monitor the entire parking lot using the video investment for parking space occupancy. A future plan will include integrating this parking availability data into the DART GoPass application.

<u>Bus Shelter Project</u> – The workplan for FY 2018 was a standard program of 50 shelters, 70 benches, and 40 free-standing light projects. During FY 2019, DART awarded its on-street passenger amenities contract. As part of this contract, 70 benches, 70 free-standing lights, 70 bus shelters and 3 smart shelters installed in FY 2019.

<u>Reserved Parking Program</u> – To ensure the ability of service area residents to find close-in parking at Rowlett Station led to a Reserved Parking Program of 750 spaces in Rowlett. The Rowlett reserved parking program is managed by the Rowlett Volunteers-On-Patrol, which is under the direction of the Rowlett Police Department, with DART's financial assistance to purchase VIP uniforms and supplies.

<u>Regional Service Policies and Operations</u> – DART continues to work on the provision of transit services outside of the DART Service Area under Board Policy III.07 (Fixed Route Service Beyond Service Area Boundary). DART currently works through a Local Government Corporation (LGC) to manage out-of-service area contracts: an agreement with the City of





Mesquite for services between Hanby Stadium and the DART Lawnview LRT Station; and agreements with Wylie, Allen, and Fairview to provide services for seniors and disabled persons.

DART, the City of Mesquite, and STAR Transit jointly provide express bus service between Hanby Stadium in Mesquite and DART Lawnview Station. For FY 2019, service has been reduced to cover peak periods only, and several new stops will be added to the route in Mesquite in December 2018 at the request of the City of Mesquite until September 30, 2019. In FY 2019, the work program will include working with the Inland Port Transportation Management Association (TMA) to develop cost effective strategies to connect DART resident with available jobs in the portions of the Inland Port outside the DART service area. These strategies will include dynamic carpooling, vanpooling, and microtransit service.

During FY 2016, DART was asked to provide senior and disabled demand responsive service to parts of Collin County left without transportation following the collapse of the Texoma Area Paratransit System. The NCTCOG contracted with the DART Bus Service, LGC to provide services in Allen, Wylie, and Fairview. This NCTCOG-funded service began in February 2016 and ended 90 days later in May 2016. This emergency service allowed DART to negotiate funding with Allen, Wylie, and Fairview along with NCTCOG to provide a similar service through FY 2017. DART was able to obtain a major grant from Toyota Motor North America, Inc., as well as NCTCOG, for funding to permit the cities to have a longer time to evaluate their needs for public transportation. In FY 2017, DART implemented a program for Collin County like the Plano Ride Program to service seniors and disabled persons. In addition, during FY 2017 and FY 2018, DART collaborated with the cities in Collin County to complete a countywide public transportation plan to guide future investments in transit. DART anticipates that the municipalities of Wylie, Fairview, and Allen will contract with the DART LGC to extend the Collin County Rides program through 2019.

<u>Plano Ride Program</u> – For several years, DART has partnered with the City of Plano to support the Plano Senior Rides program, a program providing taxi vouchers to help fund transportation for seniors who are unable to use DART fixed route or Paratransit services. DART made a key program change that replaced paper vouchers with debit cards, which simplified record-keeping and administrative burdens. The program has been expanded to include the addition of Plano residents who are former customers of the now-defunct Collin County Area Rural Transit (CCART) system, but do not qualify or are unable to use DART fixed-route or Paratransit services.

In 2017, the City of Plano requested that DART take the program administration over. This transition took place in January 2018. This program now falls under the DART Rides umbrella of service. The change has allowed customers to apply and add funds to their accounts online. By DART staff administering the program, we have gained insight to trip information and have been able to provide customers with quality service.

<u>DART Rides Program</u> – Based on the success of both the Collin County Rides and Plano Rides Programs DART created a new family of service called DART Rides. This service currently provides user side subsidy trips to the cities of Carrollton, Rowlett, and Plano as well as identified zip codes in Addison, Dallas, Farmers Branch, and Irving. These programs allow seniors and persons with disabilities that do not qualify for DART Paratransit the option to use another



available service. Grants through the Federal Transit Administration (FTA) and North Central Texas Council of Governments (NCTCOG) will allow DART to provide these services as pilot programs through FY 2020.

<u>Service Standards</u> – DART Service Standards govern the planning of DART transit services and the evaluation of route performance. After a year-long discussion, the Board of Directors adopted new Service Standards in October 2019. Significant changes include definition of a new core frequent route network service with higher service frequencies and wider service spans, changes to the route performance measurement system, and a new points-based system for bus stop amenity warrants. The new Standards form the backbone for a number of other service planning efforts in FY 2019.

<u>*Transit Service Plan*</u> – During FY 2019 DART worked on the development of a new Transit Service Plan. This Plan will govern future bus service changes throughout the DART Service Area. As a part of the planning effort, DART will evaluate the current system, solicit public stakeholder, and rider input on potential changes, and develop alternative service strategies for consideration. We expect a draft Service Plan to be completed in late Summer 2019.

<u>Area Service Reviews and Service Changes</u> – DART conducts periodic detailed service reviews in different sectors of the DART Service Area. These reviews include a careful analysis of the demographics and performance of services in the respective areas, looking for gaps in coverage and other changes that can be implemented in a three to five-year time horizon. During FY 2016 and FY 2017, DART conducted a service review; covering Oak Cliff and West Dallas. In FY 2018 DART completed a review in Farmers Branch and completed a draft for Carrollton. Some early Oak Cliff/West Dallas service changes occurred in late FY 2016 and through FY 2017, including the extension of the Dallas Streetcar to Zang at Davis, changes to D-Link service, and bus feeder routes that support the startup of the light rail extension to the University of North Texas Station and Camp Wisdom Station. Other changes in these areas will be implemented over the next five years. Service reviews for Rowlett and Carrollton will be completed in FY 2019, and we expect to start work on Richardson review when the Rowlett work is complete.

<u>On-Time Performance Project</u> – DART completed a comprehensive analysis of bus on-time performance and recovery during FY 2015. This study identified the routes which perform below DART's service standard for on-time performance and identified some of the reasons for that level of performance. A major focus of Service Planning's FY 2019 workplan is an effort to reschedule deficient bus routes to adjust running times to better match field operations, increase recovery time, and improve schedule adherence. In FY18, DART implemented revised schedules 14 routes at each of the major service changes in March 2018 and August 2018. Most of the adjustments targeted off-peak schedules; weekday peak changes are planned for FY 2019 when new buses are available to augment peak service. Major schedule modifications are planned and funded for August 2019 when 41 new buses are available for revenue service.

<u>Legacy Area Transportation Study</u> – Due to the explosive employment and residential growth in the Legacy area of northwest Plano, the City of Plano completed a major transportation study to evaluate options to reduce congestion and improve mobility in the area in FY 2016.



DART participated by preparing the transit element of the plan for Plano and adjacent communities as part of our FY 2016 work program. DART implemented several of the recommended route changes from the Legacy Plan in March 2017. The Legacy Study also recommended the implementation of micro transit options supplemented by Transportation Network Companies (Uber/Lyft) and real-time carpooling. A pilot test of this new type of service was implemented in the Plano area during FY 2018. In FY 2019 the other changes will be implemented for microtransit.

<u>Downtown Shuttle</u> – In FY 2016, DART developed a revised routing plan for the downtown Dallas shuttle, D-Link. This project, jointly funded by the City of Dallas, Downtown Dallas, Inc., and

DART, was originally designed to provide a free downtown shuttle between major activity centers. In August 2016, the Dallas Streetcar was extended to Bishop Arts allowing D-Link- to be focused on the downtown area. During FY 2017, DART performed an evaluation of the revised Downtown Shuttle to present to the funding partners. During FY 2018, DART received seven (7) electric buses and implemented electric operation of the route. DART



Marketing and Communications advertised the route vigorously to the general public, downtownrelated media outlets, regular customers, conventioneers, and special event stakeholders such as hotel concierges. In FY 2019, D-Link stakeholders agreed to pursue the implementation of an ondemand microtransit zone to increase service coverage and ridership.

## Vanpool Program

DART and the NCTCOG have worked together to identify strategies for reducing vehicle emissions in the Metroplex. The vanpool program has been identified as a critical component of the State Implementation Plan for improving air quality. Employers in the Metroplex have also discovered that vanpools are a viable transportation alternative for their employees and are subsidizing passenger fares to help with escalating fuel costs.

## Vanpool Scorecard

Exhibit 75 on the following page highlights Vanpool Key Performance Indicators (KPIs) presented in scorecard format. These KPIs measure our success towards achieving the goal of providing effective, efficient, safe, secure transportation service. The numbers in the columns for fiscal years 2017 and 2018 indicate actual values. Fiscal Year 2019 Third Quarter represents period ending June 30, 2019. The numbers in the columns for fiscal Years 2019 and 2020 are the target values for those years.



Indicators	FY17A	FY18A	FY19A YTD Q3	FY19B YTD Q3	FY20B		
Customer Quality							
Ridership (000)	674.6	596.0	473.6	658.4	645.0		
Number of Vanpools	181	168	178	225	190		

Exhibit 75 Vanpool Scorecard – Key Performance Indicators

Indicators	FY17A	FY18A	FY19A YTD Q3	FY19B YTD Q3	FY20B	
Financial Efficiency						
Expenses - Fully Allocated (M)	\$1.88	\$1.84	\$2.22	\$2.56	\$2.17	
Revenues (M)	\$1.52	\$1.48	\$1.17	\$1.39	\$1.86	
Net Subsidy (M)	\$0.36	\$0.36	\$1.04	\$1.16	\$0.31	
Subsidy Per Passenger	\$0.54	\$0.61	\$2.20	\$1.77	\$0.48	

DART offers vans in a range of capacities (up to 15 passengers) through a third-party contractor, Enterprise. Enterprise bought out the previous vendor, vRide, and inherited the contract via a novation agreement.

This program is partially funded by the NCTCOG through a Surface Transportation Program/Metropolitan Mobility (STP/MM) grant. In past years, NCTCOG has provided funding to DART that covers up to 45% of the total cost of operations. In 2018, this was reduced to 35% of the cost of the operations. Through monthly fees and fuel payments, users pay up to 55% of the program costs. The bulk of DART's expenses are in-kind services such as program management. The vanpool program also allows DART to receive over \$1 million of federal formula funds to support programs other than the vanpool program.

Vanpool funding is expected to be capped at or slightly below current levels for FY 2019. Nevertheless, we expect to be able to continue under the current funding arrangement, with NCTCOG funding remaining at approximately 35% of eligible expenses, and user fees covering up to 65% of program costs.

Vanpool programs in the region, including DART's, experienced a decrease in participation over the past few years, spurred in large part by employee reductions at several employers participating in the program and falling gasoline prices.





Exhibit 76 is an overview of the uses of the funds and allocated operating positions for the Vanpool mode of service.

Vanpool Overview							
Overview FY17A FY18A FY19B FY2							
Allocated Operating Expenses (M)	\$1.9	\$1.8	\$2.1	\$2.2			
Capital Expenditures (M)*	\$0.0	\$0.0	\$0.0	\$0.0			

Exhibit 76 Vanpool Overview

\* These amounts are the actual or budgeted capital for this mode only and do NOT include an allocation of Agency-wide capital.

## Road Improvement Programs

The Road Improvement Programs shown in Exhibit 77 represent all of the Board approved road programs with cities in the service area and state agencies. Road improvement programs are recorded as non-operating expenses in the Budget and Twenty-Year Financial Plan because DART does not take an ownership interest in most of these mobility improvements.

Exhibit 77
General Mobility & Road Improvement Programs
(in Millions)

Program	FY16A	FY17A	FY18A	FY19B	FY20B
LAP/CMS	\$0.6	\$0.1	\$0.1	\$0.0	\$0.0
TSM/PASS (includes street repair)	\$0.5	\$0.0	\$0.0	\$7.8	\$10.6
Transit Related Improvement (TRIP)	\$0.0	\$0.0	\$3.3	\$4.2	\$4.3
Total	\$1.1	\$0.1	\$3.4	\$12.0	\$14.9

<u>Local Assistance Program/Congestion Management System (LAP/CMS)</u> – This agreement returned 15% of DART sales taxes collected in a city within the service area to that city until a contract was awarded for rail construction in that city. Irving was included at a 7.5% funding level because it was served by commuter rail.

Additional allocations to the program ended for all cities within the service area in FY 2004. Cities with remaining balances may request the programming of LAP/CMS funds, as necessary, for projects that enhance transit.

Exhibit 78 reflects the LAP/CMS payable to each service area city. The timing of the drawdowns is dependent upon the request of the service area cities with remaining balances.

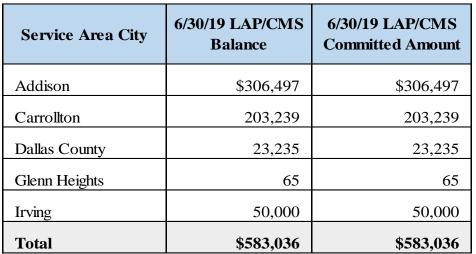


Exhibit 78 LAP/CMS Program – Remaining Balances

<u>Transit Principal Arterial Street System (PASS)</u> – The Transit PASS program is funded in the amount of \$150 million by DART, TxDOT (through the Federal Highway Administration), and eligible counties and DART Service Area cities. Several projects in Addison, Carrollton, Dallas, Farmers Branch, Plano, and Richardson have been completed. A total of \$6.5 million in PASS funding is available for the remaining few projects in the cities of Dallas and Garland. A revised funding arrangement between DART, TxDOT, and NCTCOG was approved whereby DART PASS funding would be reallocated to several key projects in Garland and the City of Dallas. The City of Garland will construct the projects, and DART will transfer its funding to Garland to complete DART's responsibility. The City of Dallas requested that the PASS funds be transferred to street repair projects. Like Garland, the City of Dallas has asked DART to transfer its budgeted PASS and street repair funding to the City, which has agreed to construct the projects. It is anticipated that these transfers will be completed by FY 2019.

<u>Transit Related Improvement Program (TRIPS)</u> – During FY 2017, DART approved Policy IV.15 Transit Related Improvement Program (TRIPS), which is special funding allowable under Texas Transportation Code 452 to fund Complementary Transportation Services for cities where there is no rail in operation or no rail is included within an approved financial plan. As approved by DART, the cities of Glenn Heights, Cockrell Hill, University Park, and Highland Park may request reimbursement for projects like street repair, traffic control and signal systems, public safety systems, sidewalks or other projects which augment and support a public transit system. The maximum funding allowable for each city may not exceed 21% of the sales tax collected for the period of FT 2017 through FY 2025. The program automatically expires after FY 2025. During FY 2018, DART considered interlocal agreements with each city to permit these funds to be provided to support these four non-rail cities for the period of time permitted by the Policy.

<u>*Transportation System Management (TSM)*</u> – A total of \$16.1 million TSM funding is available for the first and second phases of the Street Repair Program as well as General TSM projects over the next five years. TSM funding is available to repair streets damaged by buses and for minor



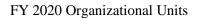
enhancements such as intersection corner radius modifications, bus pads, and traffic studies/signal modifications. Several projects in Dallas, Garland, Glenn Heights, Cockrell Hill, Richardson, and Highland Park have been completed; new projects in Garland and Cockrell Hill were completed in FY 2015; and the remaining projects are in various stages of design or procurement. The City of Dallas has asked DART to draft an ILA for several high priority street repair projects. As with PASS funding, Dallas has requested that DART transfer the street repair funding to the City of Dallas for construction.

<u>Intelligent Transportation Systems (ITS)</u> – ITS is an element of DART's Transit System Plan, which includes Smart Vehicle, Smart Traveler, and Smart Intermodal Systems. DART is working with other regional transportation providers, cities, counties, airports, and national organizations to develop a *Regional Comprehensive ITS Program for the Dallas/Fort Worth Region*. The program's purpose is to review and, if necessary, update the ITS plans for compliance with the ITS national architecture for interoperability and funding purposes. The program is aimed at prioritized implementation of projects to improve transportation throughout the region. It focuses on providing metropolitan areas ITS elements including: Advanced Traveler Information Systems (ATIS), Advanced Public Transportation Systems (APTS), and Advanced Traffic Management Systems (ATMS). The goal of this project is to facilitate information exchange between the various ITS systems and to create a seamless intermodal transportation infrastructure across jurisdictional boundaries. This effort will lead to the implementation of the Regional ITS system being designed by the regional partners.

As part of the ITS program, DART continues to develop the Vehicle Business System (i.e., Smart Vehicle). This effort will be rolled into the overall DART ITS program, but will continue to be funded by DART and the FTA.

<u>Pathfinder Signage Plan</u> – Pathfinder signs help direct motorists to DART and TRE Park & Ride lots from major regional highways and along frontage and arterial roads in the DART Service Area. To comply with updated US DOT and TxDOT Uniform Standards for highway signage, DART completed a project to replace current pathfinding signs with new, compliant versions. During FY 2017, DART completed the GIS mapping of all pathfinder locations allowing more effective state of good repair maintenance.

<u>Crew Room Projects</u> – In FY 2015, DART completed a planning-design study to construct up to 13 bus operator crew rooms. With the rapid build-out of the rail system and modification of bus service to serve the rail lines, DART has identified locations to provide access to restroom facilities during operator recovery periods. These facilities are essential to help improve on-time performance and improve work conditions for bus operators. The Fiscal Year 2016 work program included completion of the design and bid packages for all 13 crew rooms. The construction package was bid and awarded early in Fiscal Year 2017 and prefabricated units were installed during 2017 and FY 2018.





## **Capital Planning Department**

The primary responsibilities for this department are to implement the Transit System Plan, provide policy and capital project coordination with regional partners, develop conceptual and preliminary engineering, and complete environmental clearance documents for a variety of transit projects. Capital Planning provides policy and technical support to all departments during a wide range of activities including state of good repair, bus facilities, special events planning, and other infrastructure improvements that support the DART Mission. The Vice President of Capital Planning directs the overall activities of the department.

Capital Planning consists of three program areas:

- Programming, which focuses on local, state, and federal regulatory and funding programs.
- System Planning, which focuses on development and updates to the Transit System Plan as well as broad policy initiatives both locally and with regional partners.
- Corridor Planning, which focuses on planning and environmental review for a range of transportation projects. This section also provides support for new capital improvements around the system, including state of good repair efforts and bus facilities.

The Modeling team provides support to both System and Corridor Planning efforts.

## Project Milestones

DART will advance the Capital Program per Board direction consistent with published schedules for:

- Red and Blue Line Platform Modifications
- Downtown Dallas Second Light Rail Alignment (D2)
- Dallas Streetcar northern extension to the Convention Center
- Central Dallas Streetcar Link
- High Speed Rail Coordination
- Silver Line Corridor Regional Rail Project

Capital Planning will provide support to construction and system integration efforts prior to revenue service and continue support to Operations and Maintenance teams. Mitigation monitoring programs will be implemented after environmental clearance.

#### DART 2045 Transit System Plan

DART is in the process of developing a new 20-year Transit System Plan to guide the Agency in its efforts to develop more and broader support for public transportation.

- Phase I of the 2045 Plan Update, including Comprehensive Operations Analysis (COA) and Bus Service Plan recommendations are complete, with phasing and prioritization to be developed as part of Phase 2.
- Continue public and agency involvement through FY 2019.
- Complete Phase 2 of the 2045 Plan update, focusing on long-range programs and regional expansion opportunities in FY 2019.

## **Capital Design & Construction Department**

The Capital Design & Construction Department has the primary responsibility for the design, construction, testing, and acceptance of capital projects including light rail and streetcar expansions, commuter rail, and other assigned projects, including State of Good Repair. The Vice President of Capital Design & Construction directs the overall activities of the department.

### Rail Program Division

This division is responsible for management and coordination of engineering for facilities and systems designs, construction, and contract administration implementation oversight.

<u>Systems Engineering</u> – Systems Engineering is responsible for preliminary design, management, and coordination of final design. Included are light rail and streetcar vehicles, overhead catenary system, traction power substations, signal system (train protection and highway crossing protection), communications and control systems (radio and hard line transmissions, train control center, etc.), and fare vending equipment as well as technical support for DART's radio systems and Maintenance department engineering requests.

<u>Facilities Engineering</u> – Facilities Engineering is responsible for management and coordination of engineering design, architectural design, and construction document production efforts associated with the development of DART's fixed facilities. This includes stations, rail track guideways, bridges, service areas, and other improvements. Related activities include implementation of the Art & Design Program and coordination with public agencies regarding facility design, zoning, permits, and certificates of occupancy.

<u>Construction Management</u> – Construction Management is responsible for administering a construction program including LRT and commuter rail line sections with stations, aerial structures and guideway including track installation, bus and rail operating facilities, transit centers, shelter installation, and renovations of existing facilities.

The major elements of construction management are constructability analysis, construction planning, construction engineering, and safety engineering. Managing construction includes

quality control/assurance, materials testing, contract administration, coordination of contracts, conflict resolution, quantity verifications, cost and schedule adherence, and interfaces with outside organizations during construction including the community and jurisdictional authorities.

<u>Contract Administration</u> – Efforts associated with solicitation preparation, contractor and consultant selection, document review for compliance with contract requirements, conflict resolution, dispute processing, claims management, invoice certification, acceptance of the work, and contract close-out.

## **Real Property & Transit Oriented Development (TOD) Department**

The Vice President of Real Property & Transit Oriented Development directs the overall activities of the department. The department has the primary responsibility for:

- Real property assets
- Leveraging the viability of the Transit System
- Adding value to the Community
- Federal, regional, and local initiatives
- Working in close partnership with Service Area Cities to:
  - Identify and implement TOD opportunities
  - Generate new opportunities to create revenue for DART and environmentally sustainable livable communities that are focused on transit accessibility

## Economic Development

The economic impact of DART on the regional economy has been significant, exceeding \$10.8 billion, according to a study by the University of North Texas (UNT). The study, which was published in May 2017, looked at public and private transit-oriented development along the light rail corridor between 1999 to 2015. A copy of this study is included in Section G of the *Reference Section* of this document as well as on the DART website, www.DART.org.

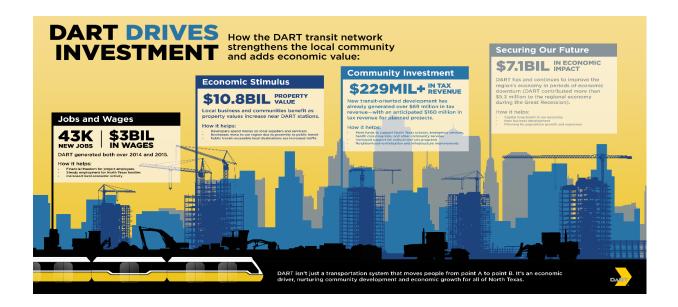
DART's investment continues to be a catalyst for investment near DART transit facilities to create transit-oriented development opportunities that result in vibrant, livable communities, increasing transit ridership and generating new sources of revenue.

Two of the objectives of the Agency, as stated in the DART mission statement, are to improve the quality of life and to stimulate economic development through the implementation of the Transit System Plan. It has been both surprising and gratifying to see how quickly transit-oriented developments have been constructed along the rail corridors since the launch of DART Rail in 1996. Management continues to support DART's Economic Development staff and continues to monitor, identify, evaluate, and develop opportunities in partnership with service area cities.

As noted above, DART Economic Development staff periodically engages the UNT Economics Research Group to monitor and assess the impact of all DART assets that have the potential for



future transit-oriented development (TOD). The latest study, presented in May 2017, identified the impact of public and private investment (built, under construction, and planned) in TOD within <sup>1</sup>/<sub>4</sub> mile of rail stations to be over \$10.8 billion over the period of 1999-2015. For the first time, the study has included public projects such as hospitals, educational, and governmental construction. The previous study undertaken in 2014 found that over the period from 2003 through 2013, the average premium on office rents located within the same <sup>1</sup>/<sub>4</sub> mile of a DART station was 14%. Economic Development staff is currently working with the UNT Economics Research Group to initiate the next update the 2017 study; a final report should be available in late 2019. To support efforts such as these and provide information to the public and development community, DART has established a transit-oriented development website which provides an overview of DART's transit-oriented development program including its TOD policy, guidelines, and station area fact sheets for each of the rail stations. (www.DART.org/economicdevelopment)





### **Commuter Rail & Railroad Management Department**

The purpose of this section is to highlight the Commuter Rail (Trinity Railway Express or more simply, TRE) business plan, including key indicators and strategic initiatives. TRE passenger service is provided jointly with Trinity Metro pursuant to an Interlocal Agreement as restated by the two transit authorities in September 2003. The Vice President of Commuter Rail & Railroad Management directs the overall activities of the department.

#### Commuter Rail – TRE Scorecard – Key Performance Indicators

Exhibit 79 highlights Commuter Rail – TRE's Key Performance Indicators (KPIs) presented in scorecard format. The numbers in the columns for fiscal years 2017 and 2018 indicate actual values. Fiscal Year 2019 Third Quarter represents the period ending June 30, 2019. The numbers in the columns for fiscal years 2019 and 2020 are the target values for those years.

To more accurately depict the true operating costs of TRE, the data shown includes combined revenues and expenses for both DART and Trinity Metro. By including all revenues and expenses, the information presented will provide the reader with data comparable to all other modes. Ridership is collected and reported for the TRE system; therefore, KPIs associated with ridership are calculated as TRE totals.

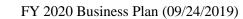
Indicators	FY17A	FY18A	FY19A YTD Q3	FY19B YTD Q3	FY20B
Customer Quality					
Ridership (M)	2.1	2.0	1.5	1.5	2.0
Revenue Car Miles (M)	1.6	1.6	1.7	1.3	1.7
Passengers Per Revenue Car Mile	1.29	1.25	0.93	1.19	1.21
Revenue Train Hours (000)	25.6	25.6	19.7	19.1	19.1
Farebox Recovery Ratio	21.4%	14.9%	24.1%	27.9%	17.7%
On Time Performance	98.5%	97.4%	94.6%	97.0%	97.0%
Complaints per 100K Passengers	4.4	3.7	5.6	5.5	5.1
Accidents Per 100K Train Miles - TRE <sup>[1]</sup>	0.66	0.09	0.41	1.00	0.24

## Exhibit 79 Commuter Rail – TRE Scorecard (System wide) Key Performance Indicators

[1] The measure has been restated from Accidents/Car Mile to Accidents/Train Mile and therefore will not tie to previous reports

Indicators	FY17A	FY18A	FY19A YTD Q3	FY19B YTD Q3	FY20B
Financial Efficiency					
Expenses - Fully Allocated (M) <sup>[2]</sup>	\$30.11	\$31.31	\$25.23	\$27.17	\$34.10
Revenues (M)	\$7.81	\$7.39	\$10.07	\$11.96	\$13.18
Net Subsidy (M)	\$22.31	\$23.92	\$15.16	\$15.21	\$20.92
Subsidy Per Passenger	\$10.63	\$11.73	\$9.83	\$9.98	\$10.21
Cost Per Revenue Car Mile	\$18.47	\$19.20	\$15.14	\$21.18	\$20.06

[2] Fully allocated expenses and revenues for FY17B and FY18B include overhead from Trinity Metro.



<u>*TRE Fuel Hedge*</u> – A fuel hedge was put in place starting in May 2015 and will run through the end of FY 2020. Exhibit 80 shows the fuel hedge costs in place from FY 2015 – FY 2020. With the completion of the transition to CNG-fueled buses, DART's exposure to diesel price fluctuations are limited to TRE and a few non-revenue vehicles.

Fiscal Year	Fuel Hedge Cost per Gallon
2015	\$1.7625
2016	\$2.0650
2017	\$2.1590
2018	\$1.6590
2019	\$1.7645
2020	\$1.8465

Exhibit 80
Fuel Hedge Costs by Fiscal Year

Exhibit 81 is an overview of the uses of the funds and allocated operating positions for the Commuter Rail mode of service. For allocation purposes, each department identifies the percentage of time and money spent on each mode of service to determine the expenses and positions allocated to the mode of service.

## Exhibit 81 Commuter Rail Overview

Overview	FY17A	FY18A	FY19B	FY20B
Allocated Operating Expenses (M)	\$30.1	\$31.3	\$31.6	\$34.1
Capital Expenditures (M)*	\$15.3	\$44.9	\$141.9	\$317.3

\* These amounts are the actual or budgeted capital for this mode only and do NOT include an allocation of Agency-wide capital.

\*\* Allocated positions are based on budgeted position counts.



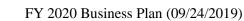
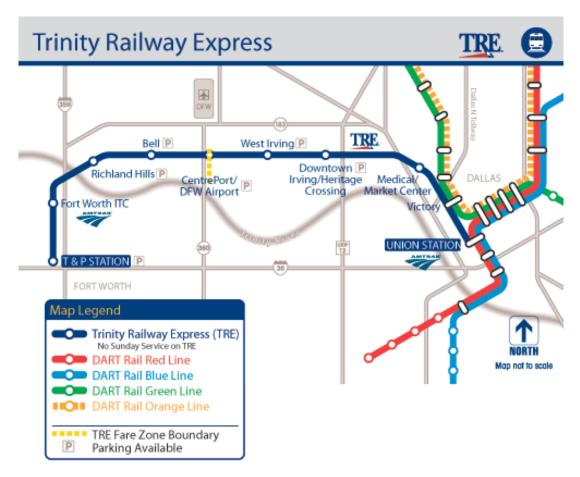
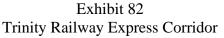




Exhibit 82 is a map that includes the TRE Corridor.

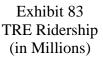




## TRE Ridership and Subsidy Per Passenger

Exhibit 83 graphically depicts actual and budgeted TRE ridership and Exhibit 84 depicts TRE subsidy per passenger. In both exhibits, The numbers in the columns for fiscal years 2017 and 2018 indicate actual values. Fiscal Year 2019 Third Quarter represents the period ending June 30, 2019. The numbers in the columns for fiscal years 2019 and 2020 are the budget values for those years.





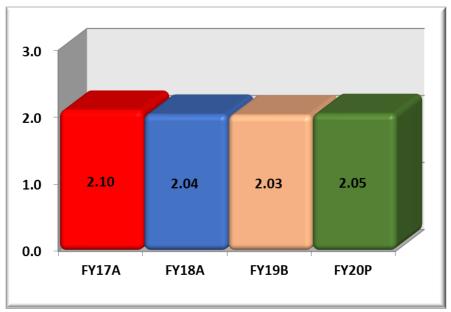
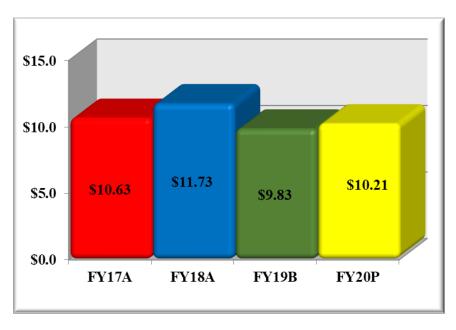


Exhibit 84 TRE Subsidy Per Passenger



<u>Subsidy Per Passenger</u> – This metric increased starting in FY 2016 because of higher first-year contract costs. While those first year costs do not apply in FY 2017 or FY 2018, the majority of those savings have been reinvested into a revised schedule. While these costs will go down in the subsequent fiscal years, the overall subsidy per passenger will continue to increase in FY 2018 and beyond due to additional operating costs associated with operating contract escalation as well as



with the federal mandate for Positive Train Control (PTC). Please see page 225 for more information on this program.

<u>Revenue Contributions from the Mid-Cities</u> – In FY 2002, the cities of Arlington, Bedford, Colleyville, Euless, Grand Prairie, Grapevine, Haltom City, Hurst, and North Richland Hills (the Mid-Cities) agreed through an Interlocal Agreement (ILA) with the North Central Texas Council of Governments (NCTCOG) to contribute to DART and Trinity Metro for TRE services that their citizens utilize. None of the Mid-Cities currently belong to either DART or Trinity Metro. Several additional ILAs have been negotiated over the past few years. NCTCOG, DART, and Trinity Metro secured amendments to extend the 2007 Mid-Cities ILA to the period of October 2011 through September 2016 at the same 2007 funding level. This funding was not allocated by the Mid Cities / NCTCOG in FY 2017, however NCTCOG has proposed to reinstate the program in FY 2019.

<u>Weekday and Weekend Service Expansion</u> – Beginning in October 2016, weekday and Saturday service was expanded to include earlier morning and late-night service with standardized 60-minute headways. Sunday service is not currently offered because maintenance and construction activities within the right-of-way are performed on Sundays. The majority of the double-tracking projects remaining to be done are in Tarrant County, and the project cost is not included in DART's Twenty-Year Financial Plan, as they will be incurred by Trinity Metro.

<u>Ensure Service Quality</u> – There are a number of railroads using the TRE (Amtrak, BNSF, DGNO, FW&W, and UP) which presents a challenge to maintaining on-time passenger service. The TRE has consistently maintained this metric between 97% and 98%. Weekday service improvements implemented in October 2016 added an additional 130 trains per week. Enhancements included 30-minute peak and 60-minute off peak headways, and a longer service day. There is a commitment to our freight customers utilizing the corridor to move as much freight traffic as can be done in a safe manner without disrupting TRE service. There are currently 2025 freight train movements per day along the corridor despite this being a predominantly single-track railroad. This is accomplished through careful coordination with the freight railroads and the TRE Operations and Maintenance contractor. On-time performance was targeted at 97% for FY 2019. Amtrak's intercity passenger rail service was moved from the Union Pacific corridor to the TRE corridor in December of 2016. Amtrak also utilizes two TRE stations; The Intermodal Transportation Center (ITC) in Fort Worth and Union Station in Dallas.

Constant monitoring of the track and signal systems is essential to ensure safe and continued operation of the railroad; but eventually, more sidings, double tracking, and bridge refurbishments and replacements will be required to support both current service levels and future service expansion. One such project is the Valley View double tracking project, which includes adding an additional 1.4 miles of track and the replacement of the Bear Creek Bridge. This project construction began in the fourth quarter of FY 2017 and was completed in the fourth quarter of FY 2018. This project will be partially funded from a grant provided to TxDOT via the Federal Railroad Administration, and grants from the CMAQ and STIP programs.

The major capital projects proposed over the next few years to maintain and improve service quality and safety of the TRE are listed under Departmental Emphasis on page 224. TRE has



developed a 20-year capital program that identify both right-of-way and vehicle maintenance projects required to maintain a state of good repair for the service. Reserves are planned within DART's Twenty-Year Financial Plan to provide for both types of expenditures. These reserves will ensure the timely replacement and overhaul of assets, as well as allow for a certain amount of unanticipated future capital requirements.

## Departmental Overview

The Commuter Rail Division is responsible for the operations and management of the TRE commuter rail service between Dallas and Fort Worth, the Madill Subdivision, and future commuter rail service on the Silver Line corridor.

- <u>Contract operation</u> DART, on behalf of DART and Trinity Metro, has contracted with Herzog Transit Services, Inc. (Herzog) to maintain the commuter rail rolling stock and railroad right-of-way, provide dispatching services for the corridor, and operate the commuter rail service on the corridor. During 2014, the operation and maintenance contract was resolicited. Herzog was chosen to be awarded a ten-year contract commencing at the beginning of FY 2016. The contract expires on September 30, 2025.
- <u>Service</u> TRE service operates Monday through Saturday between downtown Dallas and downtown Fort Worth. This line covers a distance of 34.5 miles and includes a total of 10 stations, 5 of which are maintained by DART and 5 by Trinity Metro.
- <u>Operating Fleet</u> The operating fleet consists of 9 locomotives, 17 bi-level coaches, and 8 bi-level cab cars (all jointly owned by DART and FW Trinity Metro). In FY 2017, DART negotiated the sale of 12 of the 13 rail diesel cars (RDCs). The remaining RDC will be held by the Agency with its future to be determined.
- <u>Sharing of Costs</u> The DART/ Trinity Metro ILA specifies that revenues generated on or by the TRE Corridor are joint revenues and are to be applied against TRE operating costs. After the application of these revenues, the remaining net costs are allocated to DART and Trinity Metro based on revenue seat miles operated in each county. DART's share for FY 2015 was 46.25%, FY 2016 was 46.11%, and FY 2017 was 43.22%, as a result of the new train schedule and is projected to remain at this level in FY 2019. Except for employees that are 100% dedicated to TRE, DART, and Trinity Metro separately absorb their own staff, administrative, and station maintenance costs.
- <u>Madill Subdivision</u> The department is also responsible for the maintenance and operation
  of the Madill Subdivision, which is achieved through the contract with Herzog. This is
  currently a freight-only corridor. The City of Dallas deeded the northern section of the
  Madill Subdivision to DART in exchange for easements related to Hike and Bike Trails.
  The Madill Subdivision located between Irving and Carrollton is now owned in its entirety
  by DART.



• FY 2020 Business Plan (09/24/2019)

<u>Departmental Emphasis on Strategic Priorities</u> – Strategic Priorities that will be the subject of special emphasis during the year are:

- Strategic Priority 1: Continually improve service and safety experiences and perceptions
- Strategic Priority 2: Optimize and preserve (state of good repair) the existing transit system
- Strategic Priority 3: Optimize DART's influence in regional transportation planning.

Major initiatives that are underway or proposed that are targeted at achieving the Board's Goals and at improving the overall safety, efficiency, and effectiveness of the Commuter Rail & Railroad Management services and operations are as follows:

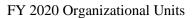
- <u>Operations and Maintenance Contract</u> The current Operations and Maintenance (O&M) contract expires on September 30, 2025. The contract provides for a ten-year base contract with an additional ten-year option for providing long-term commuter rail services to the region, including but not limited, to:
  - General management
  - Train operations, including crews
  - o Maintenance services for all TRE-owned rolling stock and equipment
  - Train dispatching services
  - Timely and accurate communications to customers, to DART and Trinity Metro, and to tenant railroads
  - Provision of 5 Star Customer Service to all commuter rail customers
  - Maintenance of rights-of-way
  - Maintenance of infrastructure, centralized traffic control (CTC), and voice radio system
  - Maintenance and operations of PTC, including configuration management
  - Provision of Federal Railroad Administration (FRA) required Roadway Worker Protection services for the maintenance of the corridors, capital projects, and other contractors on the corridors

The TRE operations and maintenance (O&M) contract provides O&M services for the TRE DFW Subdivision and the right-of-way maintenance of the Madill Subdivision. The Trinity Metro has separately procured an O&M contract with Herzog to provide O&M services on the TEXRail Corridor. The agencies are exploring opportunities of cost for contractor positions that may be shared by the two services.

• <u>Positive Train Control (PTC)</u> – The Rail Safety Improvement Act of 2008 defines PTC and mandated its implementation by December 2015. PTC is defined as a system designed to prevent train-to-train collisions, over-speed derailments, incursions into established work zone limits, and the movement of a train through a switch left in the wrong position. PTC is required for intercity passenger rail or commuter rail passenger main lines and will further enhance safety on the TRE. An implementation plan for TRE was submitted and approved by the FRA. PTC implementation is planned as a regional project with several components of the PTC system to be shared by the TRE and the TEXRail service when it begins revenue operation. Federal legislation was passed in December 2015 that extended the implementation deadline to December 2018 with an available two-year extension available to agencies showing positive progress in the proposed PTC implementation. See page 54 for additional information.

- State of Good Repair and Capital Investment Plan In 2016, The TRE performed a State of Good Repair (SGR) review that included the infrastructure, facilities and rolling stock that addressed the capital maintenance and capital improvement needs over the next twenty years through FY 2036. The Condition Assessment and Capital Investment Plan (CIP) are maintained by the Commuter Rail & Railroad Management Department and serve as the basis for budget planning each fiscal year and help to ensure that all operational and business assets are in working order and fulfill their intended use. The SGR analysis serves as the basis for a long-range capital asset replacement program and a 20-year financial forecast for both the TRE and Madill Subdivision. This enables DART and Trinity Metro to plan for adequate funding to maintain TRE service quality.
  - *Rail and Tie Replacement Program* As a result of continued operations along the TRE and Madill lines, the rail and track ties have experienced wear and will need to be replaced over time in order to maintain a state of good repair and the desired operating speeds and track class. The TRE is replacing 115-pound rail with new 136-pound rail and also replacing wood ties with longer-lasting, concrete ties to extend the life of the assets. This helps reduce capital and operating costs in the long term.
  - Bridge Management Plan and Bridge Replacement Program In FY 2012, an FRA-mandated Bridge Management Plan and Capacity Rating Study was completed. As a result of the Capacity Rating Study, the department is performing preliminary engineering for bridge enhancements and replacements in accordance with the SGR for the TRE and Madill. On the TRE, two bridges in Dallas County (Noble Branch and Inwood) have been designed and will undergo construction beginning FY 2020; the I35/Stemmons freeway has been repaired; the Medical Market Street bridge will be replaced in partnership with Dallas County, TxDOT, and the City of Dallas; and construction on the Trinity River Bridge in Tarrant County began in December 2018.
- <u>Next Train Customer Communication System</u> To improve customer communications, the effort to expand the Next Train system to the TRE vehicles and train stations was completed in August 2016. This project included automatic voice announcements of stops, variable message signs on-board vehicles, and the platforms at TRE stations. An added operational benefit will come from the installation of automatic passenger counters onboard the TRE vehicles.





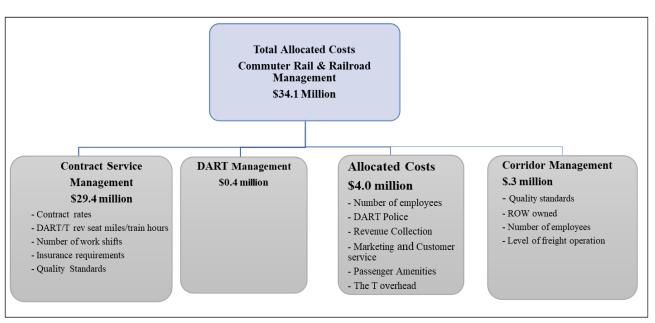


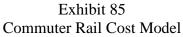
- In FY 2013, Variable Message Boards (VMB) were installed at the ten TRE stations allowing for ad hoc messages to be sent to inform passengers of delays and other TRE-related information.
- <u>Valley View Double-Tracking</u> This project upgraded the existing TRE line by doubletracking 1.5 miles between the Dallas/Tarrant County Line and the existing siding west of West Irving Station. A new bridge will also be constructed over Bear Creek. This project was tied to the TEXRail and Amtrak agreements with DART that were executed in December 2015. The funding and construction agreements between the FRA, TxDOT, and DART were executed in June 2016 to allow for the project activities to commence once the FRA issues Notice to Proceed which occurred on September 8, 2017. This project was complete in the FY 2018.
- <u>Vehicle Maintenance</u> TRE has issued a solicitation for an overhaul program that will extend over the next three years and will include up to six coaches, two cab cars, and two locomotives. The solicitation for the locomotive overhauls was awarded in May 2018 with the Notice to Proceed given in July 2018.
- <u>Vehicle Expansion</u> In FY 2014, TRE performed a study to determine spare fleet ratio requirements. The results of the study indicated the TRE fleet should consist of two additional locomotives and an additional cab car to protect service levels and allow for maintenance, inspection, overhaul activities, and a ready set. In line with the study and in anticipation of removing the RDCs from active status from the fleet, TRE began the process of developing specifications to solicit and purchase a rebuilt locomotive for fleet expansion. In FY 2015, the TRE received a grant to purchase a locomotive using CMAQ funds. The department has developed a statement of work and an estimate for the use of these funds to procure an additional locomotive in FY 2018. The purchase of two locomotives was approved by both the DART and Trinity Metro Boards in FY 2019.

<u>Silver Line Corridor</u> – DART owns 54 miles of the Silver Line rail corridor from north Fort Worth to downtown Wylie. In 2016, Trinity Metro negotiated and signed a Full Funding Grant Agreement with FTA for the TEXRail project, which uses the segment of the Silver Line west of DFW Airport, and continue south into downtown Fort Worth to the existing TRE Forth Worth Central Station and the Fort Worth T&P Station. Service began in January 2019. Plans include a future extension into southwest Fort Worth.



Exhibit 85 is the Commuter Rail and Railroad Management Cost Model. Costs are divided between Commuter Rail and Railroad Management divisions of the Department.







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# **Business & Innovative Solutions**



The Business & Innovative Solutions organizational unit maximizes Agency resources through dynamic marketing, innovative technology, effective procurement, and engaging talent management.

Business & Innovative Solutions plays a critical role enabling all departments across the agency. We scan the marketplace for emerging and disruptive technologies, manage current and future implementations, monitor customer demand, manage the DART brand, and provide procurement and staffing services.

The Executive Vice President/Chief Administrative Officer, reporting to the President/Executive Director, has oversight of Human Resources, Innovation, Marketing & Communications, Procurement and Technology Departments.



## Mission

Be the functional experts to assist in meeting agency goals by providing solutions to futureproof DART



## **Guiding Principles**

- Be Proactive
- Strive for "win-win" solutions
- Leverage the strength of the team
- Serve and engage those who touch our customers
- Continuous learning and improvement
- Be daring and deliver with passion

## **Human Resources Department**

The Human Resources department responds to operational demands and programs by working to ensure the right person is in the right job at the right time. Human Resources strives to provide best-in-class human resource services and is uniquely positioned to utilize contemporary business practices in order to provide efficient and timely services and programs to the employees of DART. The Vice President of Human Resources directs the overall activities of the department.

Human Resources takes ownership for the resolution of people issues, assessing situations, and creating change models to help facilitate and guide relevant human resource programming. Human Resources will also provide guidance for performance management and eliminate barriers to success by providing services and resources which will enhance each individual employee's contribution to the success of DART. Human Resources will demonstrate the interdependencies between business success and "living the DART values" while measuring operational progress against critical success factors. Below you can find the department's Mission, Vision and Values.

## Mission

To be a center of excellence in attracting, hiring, engaging, developing, rewarding, and retaining the best employees necessary to meet DART's business and talent challenges in order to deliver 5 Star service to our customers now and in the future.

## Vision

To be a trusted, collaborative, and agile business partner by delivering flawless 5-Star service and innovative program content focused on creating a highly engaged workforce.

## Values

- Integrity:
  - We are committed to do the right thing
- Accountability:
  - We are accountable for our actions
- Deliver timely and accurate results:
  - We have a sense of urgency to getting tasks done in a timely and accurate manner
- Innovation:
  - We pursue innovation and continuous improvement of service and program content



The responsibilities of the Human Resources department are categorized in the following organizational structure: Talent Acquisition (recruiting), Benefits Administration & Compensation, Organizational Effectiveness, Employee Labor Relations, and HRIS. These areas address the entire life cycle of each employee and are organized at follows.

## Talent Acquisition (recruiting)

The Talent Acquisition (recruiting) division is responsible for the sourcing, recruiting and hiring of DART employees. This area is defined by four major business functions: creating requisitions, recruiting and sourcing candidates, screening and selecting finalists, and managing background verifications.

The Talent Acquisition unit is responsible for posting and sourcing hard to fill positions. Talent Acquisition also uses external resources (job fairs, Workforce Solutions Centers, etc.) to facilitate identifying candidates for jobs with DART.

We want DART to a be known as an employer of choice.

## **Benefits Administration**

DART's Human Resources Benefits Administration facilitates the process of establishing, maintaining, and managing benefits for over 8,000+ Agency employees and their dependents. Benefits include medical, dental, vision, flexible spending insurance, pension plans, 401(k), 457, vacation time, sick time and maternity leave.

The DART Benefits Administration team creates and maintains benefit information profiles for every employee. The programs offered by DART provide comprehensive coverage, considering special employee needs, part-time and temporary hires, as well as adherence to government regulations.

The section is responsible for directing and planning the day-to-day operations of group benefits programs (group health, dental, vision, life insurance, travel and accident plan, flexible spending plan, health reimbursement arrangements). The section is accountable for providing excellent customer service and quality benefits plans, investigating new benefits programs, exploring opportunities to improve existing programs, as well as designing employee benefit plans and providing analytical and technical support in the delivery of the benefit programs.

## People Center

The People Center, DART's Human Resources Call Center primary goal is to make available through phone call or walk-ins, information, assistance and counseling on Human Resources programs (i.e. benefits, recruitment, and training). The following are a few ways that the People Center is of assistance to employees:

- Champion employee concerns and understanding of issues that affect them
- Striving for effective, open communication in conveying benefit plans
- Acting as subject matter experts, patiently explaining HR processes and procedures

The People Center also administrates a robust Wellness Program "Total Health" at DART and plans wellness events for the entire agency.

The People Center implemented an enhanced phone call tree allowing employees and dependents to connect directly to the appropriate departments or vendor to address their needs. (i.e., Retirement, 401(k), 457 ICMARC, Payroll, Talent, STD/LTD, FMLA, Connect your Care, Blue Cross Blue Shield, etc.).

In addition, during Open Enrollment, employees requesting specific information pertaining to providers in the networks are connected directly to appropriate call centers (i.e. Baylor Scott White Quality Alliance or HealthSCOPE Benefits) to address their questions. A new service level reporting tool allows the People Center Staff to closely monitor call volumes, service levels and abandonment rates thus allowing the People Center to improve on the service being delivered.

## Retirement & Pension Plans Section

DART employs almost 4,000 individuals. More than 2,600 (73% of the DART workforce) are within 15 years of the normal retirement in DART pension and retirement plans. Leadership recognized the importance of assisting this large group of employees plan for and transition into retirement. The Retirement/Pension Plan team was formed in early 2017 to develop new tools and programs to assist employees as they prepare to enter a new phase of life.

The Team works closely with DART's retirement plan administrators, including Vanguard, Northern Trust and ICMA-RC, leveraging each vendors service model to provide DART employees with outstanding benefits and to improve the overall efficiency of our retirement plans. The Team has recommended and implemented Best Practices, such as:

- 1. On-line Beneficiary elections for the DART 401(k) and Retirement Plans at Vanguard
- 2. On-line Auto Rebalancing, a valuable tool for individuals who have selected their own investment asset allocation
- 3. Outsourcing of Pension Plan Benefit Calculations to the Defined Benefit Plans Actuarial group
- 4. Posting of all Plan Documents, SPD's and IRS plan qualification letters on both InfoStation and DART.org

## Compensation

The Compensation unit is responsible for maintaining and updating classifications for all positions at DART. The unit evaluates requests for reclassifications and salary market reviews. Compensation also reviews all new hire and promotional requests, and through research and evaluation, makes recommendations for salary adjustments based on market factors and internal equity.



### Organizational Effectiveness Section

Organizational Effectiveness (OE) works to support employee engagement, development and well-being at DART. The section's functions are centered around process improvements, employee development, and the delivery of quality customer service to Agency employees. The section includes OE Learning & Development, OE Talent Management, and Communications.

### Learning & Development

The OE Learning & Development team is supported by career training and development professionals, schooled and educated in adult learning theory and instructional design. These individuals are experts in determining the right learning methodology for the content (blended learning), and in incorporating DART and industry knowledge to create balanced learning.

The team delivers orientation training for all new hires at DART. The team developed and delivered: tuition reimbursement, benefits training for supervisors and managers, career development training for the Summer Intern Program, and supervisor orientation training for the Supervisory DART leadership development program.

Each year the section works closely with local high schools and colleges/universities across the metroplex to participate in the DART Summer Intern Program. The program introduces promising talent to experience transit and the day-to-day operations.

#### Talent Management

OE Talent Management works to identify, retain and develop key talent within the Agency. Our goal is to consistently identify talent across all areas and develop and retain top talent through added resources and exposure, while identifying and closing talent gaps.

Listed below are the training programs administered by the team:

- Supervisory DART is a 24-week supervisor certification program delivered in partnership with the Dallas County Community College District. Employees are selected via a competitive application process.
- Management DART and Executive DART are year-long leadership development programs delivered in partnership with the SMU Cox School of Business.
- Succession DART is the succession planning program at DART. Via a rigorous application and selection process, individuals admitted to the program participate in a 2-year development program, which includes training activities, coaching, mentoring, 360assessment and feedback.



### **Communications**

OE Communications ensures that DART employees are well-informed and receive regular communication, via multiple outlets, related to news and information which impacts them. The Agency intranet, InfoStation, is regularly updated with various news posts throughout the normal course of business. The Human Resources newsletter, 'People's Corner,' is distributed monthly to all employees. People's Corner communicates a constant stream of relevant news and topics related to employee benefits, health and wellness services and resource offerings.

### Human Resources Information Systems

HRIS (Human Resources Information Systems) team provides technical, analytical and business process improvements for the department. This unit is responsible for data entry, data tracking, and data integrity for the agency as it relates to all employees.





## **Technology Department**

The Technology Department provides tech-enabled solutions and plays a critical role in creating improvements and capabilities that positively impact the DART business units, ridership, and other stakeholders. The Technology team is committed to performance, excellence, and 5 Star service to its customers. The Vice President/Chief Information Officer develops strategic plans for business value through technology, ensures technical systems and procedures lead to outcomes in line with business goals, and directs the overall activities of the department.

## **OUR VISION**



Technology, your trusted advisor for DART technology solutions

## **OUR MISSION**



To deliver "beautiful systems", reliable technology, and innovative information solutions with extraordinary customer service

#### OUR GUIDING PRINCIPLES Own It User Self Service Get it Right Disagree without being Disagreeable Beautiful Systems Loyal Opposition & Unity of Command Teamwork

Continuous Learning & Improvement

The Technology Department delivers and maintains critical business systems and infrastructure in support of DART's service delivery, operational performance, and administrative processes. The department operates in a highly integrated manner delivering new capabilities, managing business applications, cloud services, data centers, networks, computers, laptops, technology equipment for conference rooms, data and voice for the agency and mobile devices. The department also manages operations technology such as the Vehicle Business System, and Traffic Signal Prioritization systems.

The department's goal is to deliver "beautiful systems." These are systems that achieve DART's process, service, and information. Ultimately, the goal is to support the Agency's business and customer-facing platforms.

The team will continue to provide technical requirements, applications, risk and security assessments, design reviews, project management, and/or vendor selection services for all the major technology projects throughout the Agency by ensuring alignment with DART's architecture strategy. The department is a major contributor and advisor on technology projects throughout the agency working together with our business partners to innovate and successfully complete the goals of the agency and provide value to our customers.



## Technology Strategy

Strategically, DART is leveraging cloud technology solutions, with software as a service (SaaS) the preferred solution, but also considering platform as a service (PaaS) and Infrastructure as a service (IaaS) as viable options when a SaaS solution does not exist or is impractical. DART is well positioned to take advantage of cloud solutions due to the extensive use of virtual machine (VM) technology. Outsourcing of systems with business processes is also a key strategic solution. However, there are some antiquated systems that will need significant upgrading or even replacement before their migration to a cloud technology platform can begin.

Technology processes continue to mature, and new processes and tools are being implemented with our continuous improvement approach. Project management change management, and application portfolio management are key focus areas where processes are evolving to better meet business requirements.

As part of strategic planning, DART Technology monitors the evolving global technology landscape, paying close attention to how technologies are being adopted by other agencies and planned by industry leaders. Long term goals and objectives include Enterprise Data Analytics, Cyber Security, Mobility-as-a-Service, Digital/Mobile Computing, Machine Learning and Artificial Reality, the Internet of Things, and Converged Networks.

In addition, DART Technology has identified short-term goals and objectives with a shorter delivery horizon than our long-term goals and objectives. These include the delivery of beautiful systems, technology innovation, 5-Star Service, and continuous development to our skillsets for an effective workforce.

## Cloud Strategy

Cloud computing enables flexible access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services). Cloud computing has the potential to enhance collaboration, agility, scaling, and availability, and provides the opportunities for cost avoidance through optimized use of effective and efficient computing resources. The cloud model supports a design where components can be rapidly provisioned, implemented, decommissioned, and scaled up or down to provide an on-demand model of allocation and consumption.

DART has adopted a cloud first strategy with the goal of reducing most on-premise solutions. Through the course of typical IT delivery, each application will be assessed for suitability for a cloud solution, evaluated for a SaaS or cloud business service to complement or replace the application before looking to re-host it. DART will review each data center facility and custom development project, assessing the maturity and suitability of cloud platforms to complement or replace existing infrastructure.



There are several challenges that DART needs to overcome to take full advantage of cloud computing:

- DART's professed need for custom business processes and customized applications
- DART's Technology staffing model, which needs to change to support the industry's digital transformation and service-oriented solutions as the primary solution model
- New skills and training needed to manage vendors and services
- New cost models need to be developed as costs shift from capital costs to operating costs, and where costs are going to be more viable as DART starts paying based on consumption

To accomplish these goals, we are collecting the data necessary to formally analyze our application portfolio to identify and prioritize application migrations moving to the cloud.

## **Digital Transformation**

What is digital transformation and what does it mean to DART? Digital transformation is the application of digital technologies to fundamentally impact all aspects of business and society. It means streamlining our processes and making use of technologies to enhance our interaction with customers and employees and delivering excellent customer experience at the same time.

The journey can result in disruption and cultural change. The key is to navigate it so that the changes are accepted and wanted by everyone affected.

Technology platforms include the team, processes, technology, and data required to enable a business outcome. The department's focus is to support the advancement of DART's business model transformation by using technology solutions for needed digital change and building a customer-centric technology operating model that is reliable and adapts to the rapid pace of the ridership industry. We are building a technology model for digital that allocates plan, build, and run resources to dedicated transit technology platforms.

## Trends in Technology

## Internet of "Things"

The Internet of Things (IoT) is a scenario in which objects, animals or people are provided with unique identifiers and the ability to automatically transfer data over a network without requiring human-to-human or human-to-computer interaction. IoT has evolved from the convergence of wireless technologies, microelectromechanical systems (MEMS) and the Internet.



A thing, in the Internet of Things, can be a person with a heart monitor implant, a family pet with a biochip transponder, an automobile that has built-in sensors to alert the driver when tire pressure is low -- or any other natural or man-made object that can be assigned an IP address and provided with the ability to transfer data over a network. So far, the Internet of Things has been most closely associated with machine-to-machine (M2M) communication in manufacturing and power, oil and



gas utilities. Products built with M2M communication capabilities are often referred to as being *smart*.

According to Gartner®, there will be nearly 26 billion devices on the internet of things by 2020. The combination of data streams and services created by digitizing everything creates four basic usage models — manage, monetize, operate and extend. These four basic models can be applied to any of the four "Internets." We should not limit ourselves to thinking that only the Internet of Things (IoT) (assets and machines) has the potential to leverage these four models. For example, the pay per-use model can be applied to assets (such as industrial equipment), services (such as pay-as-you-drive insurance), people (such as movers), places (such as parking spots) and systems (such as cloud services). Enterprises from all industries can leverage these four models. IoT opportunities will be assessed and leveraged as appropriate to continue to advance services and efficiencies within the DART organization.

## IT Demands

Gartner® research projects that enterprises will see server workload demand increases of 10%, network bandwidth demand increases of 35%, and storage capacity requirements will grow by 50%. DART anticipates similar increases. The Technology Department is continuing to evaluate options and technologies to optimize capacity through virtualization and cloud services.

#### Autonomous Agents and Things

Machine learning gives rise to a spectrum of smart machine implementations — including robots, autonomous vehicles, virtual personal assistants (VPAs) and smart advisors — that act in an autonomous (or at least semiautonomous) manner.

While advances in physical smart machines such as robots get a great deal of attention, the software-based smart machines have a more near-term and broader impact. Virtual personal assistants (VPAs) such as Google Now, Microsoft's Cortana, Amazon Echo, and Apple's Siri are becoming smarter and are precursors to autonomous agents. The emerging notion of assistance feeds into the ambient user experience in which an autonomous agent becomes the main user interface. Instead of interacting with menus, forms and buttons on a smartphone, the user speaks to an app, which is really an intelligent agent.

The Technology Department will monitor advancements in autonomous agents and things over the next 3 - 5 years to look for ways in which such technology might contribute to cost containment, augment human activity and free people from work that today only people can do.

#### **Accomplishments**

Over the past several years the department has gone through a transformation allowing the growth and maturing of many of our staff and the delivery of products, including projects, maintenance of current systems, replacement of devices throughout the agency and recruiting talent. Much of the focus of the department over the past few years has been to review and mature our processes and to deliver quality projects related to the Agency goals.





# The Road Ahead

## Commitment to Success

### Work environment and staffing

- We will
  - continue to achieve success through hiring, mentoring, growing and retaining IT professionals committed to their career and the organization
  - o embrace the organization's core values in our daily work and interactions
  - o provide an environment that promotes innovation and creativity

#### IT and Data Governance

- We will
  - maintain current knowledge and implement best practices in the areas of technology, including software development, systems analysis, project management, database management, network design, technology procurement, and service management
  - ensure the data entry and collection meets precise standards, such as business rules, a data definition and data integrity constraints in the data model
  - prevent technology obsolescence by adhering to a standard hardware and software refresh program
  - use the Executive Team as a committee to prioritize major Technology initiatives when organization demands exceed available resources
  - maintain a centralized IT support and oversight model to insure efficiency, consistency with technology standards, and integration capabilities between systems
  - maintain the goal of selecting the best approach to meet new application requirements, including build, buy or cloud
  - continue to provide clear budget justification to secure approval of funding for technology initiatives

## Risk Management

- We will
  - evaluate the risk/value relationship of new technology solutions and initiatives in advance of procurement, and identify strategies to mitigate risk prior to implementation
  - carefully review and negotiate technology and service contracts with the goal of achieving the highest-level service, protection for Agency data, and vendor accountability

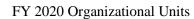


### Security

- We will
  - implement and maintain best practices and policies to secure DART networks, systems and data

# Internal and External Partnerships

- We will
  - provide exceptional customer service and use evaluation and reporting tools to gauge success in achieving performance measures
  - o maintain mutually beneficial relationships with technology service providers
  - continually assess opportunities to collaborate with other transit agencies, and member cities to share expertise
  - serve as a value-added partner by providing project management, implementation, system analysis, hardware and software support services to all departments
  - o maintain the Departments' Strategic Plan and update that plan on an annual basis
  - evaluate emerging technologies and continually identify opportunities to enhance delivery of core services, increase organizational efficiencies, decrease cost, and support Agency priorities
  - o develop and adhere to technology standards
  - o adhere to best practices in the design and support of technology infrastructure
  - build and update technology disaster recovery infrastructure to assure continuation of services in the event of a disaster



# **Technology Department Projects represented in the Agency Goals**

Many of the projects and implementations completed by the department span over multiple years. Represented below are major projects that have been part of agency goals and their current status. Many if not all these projects touch a majority of the agency's staff.

FY 2020 goals

- Align the department to support Mobility as a Service (MaaS) vision by action on the implementation plan developed in FY 2019
  - The Technology department will support MaaS innovation efforts with the integration of various forms of applications, real-time tracking feeds, and technology transport services into a single mobility service accessible on demand.
- Learning Management System (LMS) meet LMS milestones to support unified training, learning, knowledge sharing and management and tracking
  - An LMS is a cloud based multiuser software application. It helps organizations to manage training events, self-paced courses, and blended learning programs. It provides automation that replaces rigorous and expensive manual work, saves times, and enables you to organize your training content, data and learners. Tracking and reporting on training activity and results now become easier and sustainable.



- The benefits of an LMS:
  - For Learners:
    - Central user-friendly learning platform to access ALL training resources



- Course catalogs, easy registration, transcripts and completion certificates
- For Admins / Instructors:
  - Automated user registration
  - Curriculum creation
  - o Training scheduling and resources management
- For Managers:
  - Reports and dashboards



• Team/Individual training compliance tracking



- The LMS strategy to be approved by management in late FY 2019 will allow the team to develop a project implementation plan that will benefit the entire agency training programs. Technology has assembled a core team of trainers from all departments to participate in the gathering of requirements and the implementation, this will align with the success of the project.
- Enterprise Asset Management EAM meet implementation milestones
  - Current status:
    - Phase zero of the project went live on July 18, 2019. This phase contains the Agency Signal assets. Signals systems migrated from Spear to IBM Maximo. A mobile Informer application was deployed allowing the team to use mobile devices in the field to order parts, saving time and providing efficiencies.
    - The next phase overlaps the first phase and is currently gathering requirements through focus groups throughout the agency. The next phase will bring on the remaining Spear assets and non-Spear assets such as Technology, Real Estate and TRE. This phase will also add additional functionality with graphical scheduling and the electronic parts catalog (EPC). Set to go live in quarter two of 2021.
    - Tasks are on schedule to meet the agency deadlines.
- Meet Lawson ERP replacement milestones
  - Infor Lawson is not adding new features to the Lawson ERP and planning to discontinue it in its current form. It is already showing substantial process limitations impacting Human Resource's ability to perform efficiently as well as engaging the workforce actively.
  - This project is a multi-phase project:
    - Phase I: Upgrade or replace Human Resource Management (HRM) core application with cloud-based state of the art scalable solution supporting Human Resources business requirements.
    - Deploy integrated module to support Human Resources processes such as: workforce planning, talent acquisition, onboarding, performance appraisal/assessment, career development, goal management, learning management, competency management, succession planning and compensation and retiree management.
  - Current status:
    - This project is undergoing major scope review. The original project was to replace the Human Resources modules within the enterprise system (LAWSON). After further review it has been decided that the agency will review options to replace LAWSON including Financial and Procurement modules. The team is currently reviewing applications for replacement and will continue to gather requirements for all modules over the coming year. This is a major replacement for the agency and will require very detailed scope and resources. The estimated completion is over a three-year process once selection is made. The team is working on developing an achievable schedule.



Intelligent Interactive Kiosk Deployment

- Current Status:
  - The team will continue to support this agency initiative. You can find additional information under the Agency Strategic Priorities – Priority 4.

# Update on FY 2019 projects related to Agency Goals

*Enterprise Project Management* - EPM - Implement project management software enterprise wide to be used in managing all levels of capital program and other projects to improve:

Regulatory compliance and financial forecasting/planning, provide an integrated business platform for all project management activity, a scalable solution to support a wide range of projects at DART, enhanced contract management functionality, be the single point of data entry, maintain data integrity in a controlled and consistent fashion, ensure traceability of project issues, data and documents, provide real-time and proactive tracking – alerts, flags, scope, schedule and budget, utilize electronic forms/functionality and approval routing, provide comprehensive reporting tools and dashboarding.

- Current status:
  - The Planning module is set to go live in September 2019. This phase will replace the current Capital Project Request Form (CPRF) used to request funding and approval of capital projects throughout the Agency. This will allow the tracking of the project from the start to finish, including feeding information into the EAM system once complete. Phase two, the Execution module, is set to go live in December 2019.
  - Tasks are on schedule to meet the agency deadlines.

*Enterprise Network Upgrade* – Redesign of the network topology anticipating to the extent possible requirements for voice and data transmission in the next 10 years.

This effort will provide the infrastructure for new technologies and solutions, and the bandwidth for expanded use of cloud services from a variety of providers supporting the Agency's business and operational needs. The network upgrade will enhance DART's corporate, operational, and service capabilities by replacing the existing legacy network infrastructure, thereby improving stability, reducing security risks, network latency and impact to Agency business processes and productivity.

- Current status:
  - The network upgrade project is set to replace equipment in 17 remote sites and 61 communication closets throughout the service area. As of July 2019, the team has completed over 70% of the installations and the remaining sites are currently in progress. The team is working on the transit center locations with limited space and will require construction to complete the remaining 19 sites over the summer and fall months.



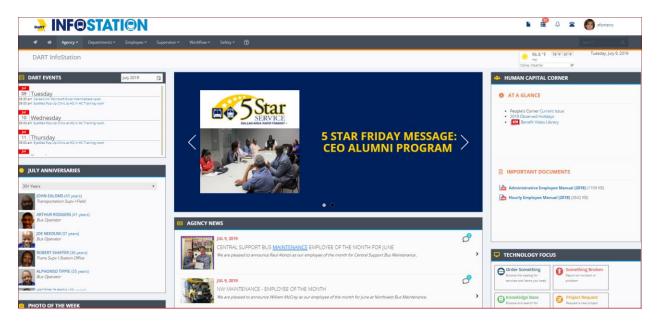
*Data Center Relocation* - The project will improve DART's operational efficiencies with secure and reliable colocation facility solutions. The relocation will leverage facilities that are built to specific specifications and standards to meet the needs of today's high-tech hardware and DART's digital ecosystem's future.

• Current status: This project is currently on hold.

*DARTnet Modernization* - Move DARTnet to a supported system that will provide increased user self-service and streamline internal business processes. Provide power users with better self-service capabilities, enhance workflow capabilities, and stronger auditability of web content utilizing new tools.

• Current status: During FY 2019 the agency intranet was rebranded as InfoStation. The team has 266 applications (166 applications, 100 workflows) that will transition to the new platform. The team is reviewing the top applications that maybe replaced with other systems such as the HRM project listed above. The team has completed the initiation and planning, moved the agency to a new platform and completed 13 of the goal of 25 applications to date.

The new look of DART Intranet





*Enterprise Document Management System Restructuring & Expansion* – EDM - The objective of this project is to implement an enterprise document management solution to support the administration, maintenance and retention of agency records and policies. The solution will allow the implementation of guidelines aligned with business processes and operations-based agency retention policies and strategies. Specifically, in terms of EDM, DART is seeking to:

- Implement EDM portfolio best practices through an artifact and record lifecycle resulting in improved controls and monitoring capabilities for increased transparency and visibility
- Increase DART's capacity to manage and maintain documentation based on agency policy
- Create a performance management system to measure/report on key performance indicators.
- Define the business case and requirements for a solution that will allow the organization to effectively maintain enterprise documents and records
- Define requirements for a solution that will provide the business with access to a document management tool with integrated business processes and workflow
- Define a solution that will allow the business to effectively maintain records more efficiently
- Current Status:
  - This project is in the initiation and planning phase. The team is working within the agency with the Policy team to gather and identify requirements.

*Enterprise Trapeze Application Upgrade* - To advance application performance and future scalability perform an upgrade to the 22 Trapeze modules and underlying databases.

- Current Status:
  - This project is completed and was successful, no downtime was reported, and customers/users accepted the change without any issues.

*In Vehicle Gateway for Bus* - Provide connectivity to the internet and DART network for in-vehicle video and payment systems.

- Current Status:
  - The installation of the gateway on the bus fleet is completed. The dual connection to two providers is currently underway and will be completed over the next six months.



## Governance

Governance is an enabling framework for decision making. It is a means of ensuring business-technology collaboration, leading to increased consistency and transparency in decision making and prioritization of initiatives. Governance is a critical component of ensuring delivery of business value from Technology and driving high satisfaction with our clients.

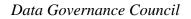
The department has created governance councils for many of the major projects/areas of the department to ensure all stakeholders are engaged and informed throughout the project/initiative.



#### Security Governance Council



The Council is presided by the EVP Business & Innovative Solutions /Chief Administrative Officer, vice chaired by the CIO; the CEO acts as the Executive Advisor. The CIO serves as the facilitator for the council and leads efforts with the Council to provide clear direction and support for cybersecurity management and initiatives; to certify that security policies, processes and procedures are implemented across the Agency; and to provide strategic leadership for organization-wide systems and applications users.





This group is bringing change at the policy level to ensure that work practices support data quality and availability. A cross-functional and inter-departmental committee serves as a decision-making body to resolve data issues and establish interdependent data usage and definitions for the proper handling and interpretation of DART's data. These definitions will be stored in a data dictionary which will contain details of each element from a technical and functional perspective. The committee will serve as a common ground to communicate and coordinate data related issues and will make recommendations to senior management regarding significant issues that have broad implications.



### Functions and overview of the Technology Team

#### Program Management Office (PMO)

The PMO provides decision support information. The PMO reinforces project delivery by ensuring that all business change is managed in a controlled way. As part of the continued focus on reporting the team is working to develop dashboards to keep the department and our business clients apprised on our progress.

The PMO team fulfills a variety of functions on a day-to-day basis including:

- Delivery support, making it easy for project teams to do their jobs by reducing bureaucracy, providing training, business analysis, project management and financial guidance;
- Reporting on financial information, administering the department's budget and financial performance; and
- Training on application suites.

The PMO provides a bi-monthly newsletter to the Agency (Technology Snapshot) providing updates on major projects, key performance indicators, and what's trending in the technology world.

#### Network Security Operations (NSO)

The NSO provides security for DART's enterprise network business ecosystem. The NSO team supports the overall vision and mission of DART by enhancing its cybersecurity posture. They are entrusted to identify, protect, and detect any malicious activity against DART's enterprise network.

#### Enterprise Architecture

The over-riding objective of Enterprise Architecture is to translate DART business strategy and processes into well-defined future capabilities and technology plans to achieve DARTs mission. The team collaborates with business and enterprise systems to continually develop, manage, communicate and govern the DART Architecture ensuring that best practices are followed in strategically developing and enhancing the DART digital ecosystem.

#### Intelligent Transportation Systems (ITS) (systems for improved safety and responsiveness):

The ITS team implements, manages and maintains in-vehicle communication systems, passenger communications, LRT traffic signal priority system, and vehicle business system, while adding value to the business operational needs.

The ITS team enables DART business units to research new ITS technologies in the areas of Internet of things (IoT), Automated and Connected vehicle technologies and their impact on transit business. In addition, ITS team complies with ITS Regional and National Architecture in the deployment of DART ITS Projects including the Safety and Security guidelines.



#### Infrastructure Platform Services (IPS)

Infrastructure Platform Services oversees data and voice networks, data storage, administrative computing infrastructure, application support, and service desk related issues. Fostering communication across these areas improves understanding of the shared infrastructure and facilitates DART-wide input on infrastructure complexities and problems, such as the need for minimum network standards.

IPS is not isolated to one area of DART's enterprise network consisting of the business ecosystem and operations. To share the responsibility and accountability for the seamless delivery of *Beautiful Systems* to DART, the IPS consists of three core areas: Client Services, Network Engineering, and Systems Engineering.

• Client Services

The Client Services team consists of three main areas: desktop support, system administration and help desk support.

- Service Desk
  - This team responds to calls for assistance with workstation and network problems, installation of computer software, password resetting, login issues, printer setup, and help with all DART supported software.
  - The team is also responsible for triage of all incidents and service catalog requests to ensure proper distribution.
- System Administration
  - The team performs a wide range of enterprise-level administrative responsibilities. The team is largely responsible for the health of the Agency servers and micro-computer systems.
- Desktop Support
  - The team supports all computers, laptops, and mobile devices issued to DART employees as well as printers and audio-visual equipment located throughout DART's various locations.
- Network Engineering
  - This area of IPS is responsible for the agency wide data and voice networks. The team specializes in design & setup of new networking systems and administration of the overall network. This includes support for the communications network for the agency and the management of the contracts for those systems.
- Systems Engineering
  - The Systems Engineering team is responsible for the implementation and support of the DART server infrastructure. This includes the architecture, design, and implementation of the infrastructure for new systems and the ongoing server maintenance to provide a robust and stable infrastructure. The team also manages the contracts and vendor relationships for all infrastructure components.



## AVP of Technology Applications and Information Management

Responsible for the strategic direction, overseeing, initiating and managing activities of personnel in Data Analytics and Applications Management practices; including maintenance and support of ERP systems, Information Management and Decision Support systems, web and mobile custom development including the agency's intranet (InfoStation) in the Dallas Area Rapid Transit's (DART) Technology Department.

### Enterprise Applications (EA)

EA provides maintenance and support for DART's enterprise systems and several dedicated applications used across the various business towers. The application development team provides custom web, mobile and desktop computing solutions in support of agency goals and business processes. The application development team also provides integration solutions for Lawson, Spear, Trapeze and other enterprise platforms as needed and is responsible for the ongoing maintenance and support of DART's intranet (InfoStation), as well as DART's public web site, DART.org.

EA supports DART in all Technology needs by providing Customer Relationship Managers (CRM). The CRM functions as the primary contact for all projects and service requests. The major application platforms supported by the divisions are listed below.

- Trapeze Passenger Transportation Enterprise Resource Planning Application
  - Traveler Information Trip planning, customer complaints, and Interactive Voice Response (IVR) integration
  - ITS Real-Time vehicle location, Enhanced automatic passenger counters (APC)
  - Demand Response Paratransit route and service planning, customer service and IVR
  - Fixed Planning and Scheduling Bus route planning and scheduling
  - Transit Workforce Operations Operator assignments, bid assignments, fatigue management, operator markup
- Spear Enterprise Asset Maintenance system to track various assets used by Operations and assign work to available mechanics. Also supports maintenance markup. Do we want to discuss the replacement as noted in projects above?
- Fleet Watch System that controls the fueling of the bus fleet with Compressed Natural Gas (CNG).
- DART.org Public-facing site of DART
- InfoStation DART company intranet integrated with workflows, DART-built applications; runs the various business operations at DART.



- Infor Lawson Enterprise Resource Planning:
  - Financial management providing financial functionality and analysis reports
  - Human Resource Management for Personnel Management, Organization Management, Payroll Management and Personnel Development
  - o Supplier and Purchase Order Management and the supply chain process
- Kronos Workforce Time and Attendance for tracking employee time and attendance, and data collection.
- Filenet Enterprise Document Management System provides enterprise document management, enabling DART to manage the organization's content and documents. It includes lifecycle management, transactional content processing, document management, content consolidation, content-based application development, compliance and governance.

## Information Management & Analytics (IMA)

- The Information Management & Analytics division offers information management, business intelligence, advanced analytics, database management and Geographical Information solutions, all under one umbrella. Our vision is to make DART a data-driven organization. Our expertise in domain, technology and execution, empowers us to transform insights into foresights, collaborating with our customers at every step to answer the unasked questions. We help users design, build and run insight driven applications by helping to maximize the potential of data and analytics by delivering operational excellence. The team is focused on providing analytics on some of DART's key performance indicators like Ridership, Customer Satisfaction, On-Time Performance, Accidents etc.
- The GIS (Geographic Information Systems) Team's primary mission is to support departments at DART on projects with clear and effective maps, geospatial analysis and other solutions. GIS builds Web-Map based applications, that provide distinct map layers for different types of information, which helps business units make business critical decisions.



# Marketing and Communications Department

The Marketing and Communications Department is guided by the principle of being the "customer voice" within the organization, ensuring that the agency is responsive to the wants and needs of our customers.

The department supports agency goals by developing and implementing comprehensive campaigns, programs and initiatives to establish customer engagement, meet key deliverables and milestones, and achieve the broadest and most efficient reach and exposure.

Collectively, these divisions strive to meet the following objectives:

- Influence ridership within the cities we serve.
- Increase farebox and non-farebox revenue.
- Transform riders into brand champions to build brand regard.

Goals of the department for FY 2020 include the following:

- Leverage innovation to meet the needs of our customers.
- Utilize technology to provide a positive experience for customers adapting to how they prefer to move about our region.
- Continue our extensive research to obtain a deeper understanding of our customer segments.
- Engage with DART functions earlier in the project implementation process to provide value added across the agency.
- Accomplish and support objectives outlined in DART's annual business plan.

# Administration

The Vice President of Marketing/Chief Marketing Officer directs the department. The department consists of five divisions that serve our customers:

- Marketing and Advertising
- Communications and Audiovisual
- Market Development and Sales
- Customer Service
- DART Retail



# Marketing and Advertising

Responsible for the strategic marketing planning, project management and the creative expression tied to agency goals and marketing initiatives. This division consist of three primary areas:

- Marketing & Media Services
- Creative Services
- Special Events



Marketing & Media Services:

- Leads the strategic thinking on marketing support of DART goals and marketing-led activities.
- Creates campaigns and advertising to build awareness for DART programs.
- Directs the outside advertising agency's strategy, creative and execution.
- Provides project management for the planning and facilitation of agency requests.
- Manages media advertising buys for the agency based on department requirements that notify the public of system and fare modifications, marketing promotions and programs.
- Manages the DART marketing and activity calendar.

Creative Services:

- Develops and delivers all creative and concepts that support the agency, marketing programs and initiatives.
- Facilitates printing of materials, including collateral, station signage, internal communications, promotional materials, system maps, timetables and other customer information.
- Manages the print vendors and ensures quality standards for all production projects, including vehicle livery as well as customer information.

Special Events:

- Tracks events within our service area and determines DART's participation strategy to ensure standards in service delivery and the overall customer experience.
- Manages the volunteer program for priority events including recruiting, training and administration.
- Cultivates relationships with key organizations throughout the service area to cross promote and enhance DART's presence at participating events and venues.



# Communications and Audiovisual

Responsible for telling DART's story using a consistent brand voice and multi-channel approach to reach customer segments. Partners with other groups within and outside of the agency to develop strategic solutions that meet project objectives. Activities include:

- Communications and Copywriting
- Digital/Social Media
- Audiovisual/Photography/Videography

Communications and Copywriting:

- Develop communication plans to align with and amplify DART marketing campaigns, projects and initiatives.
- Lead and manage an editorial calendar that serves to galvanize all agency efforts for communication across the multiple platforms owned and earned.
- Generate creative ad copy and concepts that motivate key customer segments to use DART more often and for more uses.
- Write, edit and manage print publications: Inmotion stakeholder newsletter, Rider Insider consumer brochure and Insights a safety and security newsletter for DART board.
- Hold three city communicator meetings a year to reinforce a positive working relationship between DART and cities in our service area.

Digital/Social Media:

• Manage DART-owned social media and digital channels (Facebook, Twitter, Instagram, YouTube, DART Daily, GoPass app Events and Offers, and DART.org/specialevents) to reinforce brand messaging and amplify campaign messages.



- Engage in creative storytelling to build awareness, inform, educate and influence our customers, and reinforce our brand positioning.
- Monitor social data analytics to help drive our digital and social media communications strategy.

Audiovisual/Photography/Videography:

- Provide comprehensive AV support and solutions to ensure meetings for internal and external audiences run smoothly.
- Create talking points and customized presentations at the request of DART leadership for Speakers Bureau to help shape the DART narrative and reach new audiences.
- Develop photographic and video graphic content to humanize the DART brand and create opportunities for engagement.



# Market Development & Sales

The main thrust is to increase ridership and revenue for the agency through:

- Corporate Sales
- Advertising Revenue
- Naming Rights/Sponsorships

## Corporate Sales:

• Responsible for increasing ridership and revenue by targeting and selling to organizations including corporations, smaller companies, business associations such as chambers of commerce, schools, groups and commercial and residential realty agencies.

Advertising Revenue:

- Serves to drive revenue through the sale of advertising across DART assets.
- Future opportunities may include advertising on DART digital assets:
  - Bus and train digital screens
  - Station digital screens
  - Station and key location kiosks

Naming Rights/Sponsorships:

• Serves to drive revenue through sponsorship rights aligned with adding the name of paying sponsors to DART assets; primarily, but not limited to, rail lines and stations.

# Customer Service

This division answers nearly one million calls annually and is segmented into three groups:

- Customer Care
- Customer Information
- Lost and Found
- Customer Care
- Addresses complaints, commendations, and suggestions which are categorized to align with our drivers of satisfaction from the annual Customer Satisfaction Survey to cross check data and affect overall customer satisfaction.
- Serves as frontline support to GoPass ticketing assistance.



**Customer Information** 

- Receives approximately 85 percent of the calls
- Most calls are from DART riders and potential riders seeking route and schedule information to get to their destination.

Lost and Found

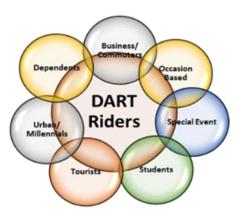
• Assists customers in recovering articles they lost on a bus, train or other DART property.

# DART Retail

DARTmart serves as the central ordering and fulfillment provider for the agency's merchandising. The main functions are to:

- Sell transit passes
- Qualify senior, student and disabled discount passes
- Take pictures for pass identification and service fines for resulting tickets.

DARTmart also serves as a retail hub to enable reload and balance checking on the new GoPass Tap Card. The agency is developing an e-commerce site to facilitate internal DART logo merchandise requests.



Additional e-commerce sites will allow the agency to sell DART logo merchandise to the public and employees.



# **Procurement Department**

The Procurement Department is responsible for purchasing materials, supplies, services and construction for all DART programs. There are specific procurement exceptions for real estate, legal services, and some utilities. The Vice President, Procurement, directs the overall activities of the department.

The Procurement Department's primary role is to support the mission of DART and all departments of DART. This makes Procurement a contributor in most, if not all DART objectives. The Department's high priorities are linked to the Board's Strategic Priorities as shown:

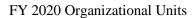


- 1) Award all capital project, system, and program service contracts on time and under budget per the procurement plan (Strategic Priorities 2 and 4).
- 2) Improve procurement process compliance, efficiency, and timeliness (Strategic Priority 6).
- 3) Improve Materials Management supplier delivery performance (Strategic Priorities 2 and 4).
- 4) Augment Sustainable Procurement (Strategic Priority 3).
- 5) Educate employees and customers on procurement policy, regulations and processes (Strategic Priorities 5 and 6).
- 6) Achieve continuous improvement in 5 Star customer service survey results. (Strategic Priority 1).
- 7) Update DART Procurement policies and procedures (Strategic Priority 6).

Specific missions assigned to the Procurement Department include:

Acquisition planning	Contract award
Strategic sourcing	Contract administration
Supply chain analysis	Contract dispute resolution
Solicitation preparation and issuance	Contract close-out
Contract development	Procurement outreach
Cost and price analysis	Small/micro purchases
Supplier management	Negotiations

Contract Specialists are responsible for the preparation and issuance of formal sourcing documents for procurements exceeding \$50,000 in value; receipt and evaluation of bids and proposals; preparation of required reports and analyses; preparation of contracts below, and proposed awards





in excess of established thresholds for Board approval. After award, Procurement is responsible for contract administration, resolution of disputes, and all actions necessary to close out contracts.

Buyers are responsible for the preparation and issuance of requests for quotes (RFQs); receipt and award of purchase orders, or blanket purchase orders for goods and supplies estimated in value of less than or equal to \$50,000.

# **Capital Design and Construction Procurement Division**

The Capital Projects Division consists of two sections responsible for procuring professional planning, architect and engineering services and construction services through multiple project delivery methods, including task orders, design-bid-build, design-build, and construction manager/general contractor.

# Strategic Sourcing Division

The Strategic Sourcing Division consists of three sections responsible for operational, maintenance, capital acquisitions, technology and communications, innovation, program outsourcing, business services and Mobility as a Service (MaaS) procurements in support of all DART departments. This Division procures a wide variety of goods and services, including small purchases, technology, marketing services, and business products and services.

# **Procurement Administration Section**

Procurement Administration provides administrative, technical, and policy-related support to the Procurement Department, and responds to questions from internal customers and suppliers regarding supplier registrations, contracts, and the solicitation process. They maintain the supplier/vendor database, issue public notices, and advertisements of procurement opportunities, make procurement-related postings to DART's supplier portal, and manage the receipt and storage of bids and offers.

This section is responsible for technical support and change management, including the development of reports, coordination with IT staff, assisting with the development and enhancement of applications, and assisting staff with IT requirements. This section identifies process improvements and business/system process solutions to meet business objectives.

Policy support includes coordination with internal and external audit/review teams, updating policies and procedures, responding to public record requests, and other activities. The team also provides cost and price analysis in support of all major acquisitions.



Key Performance Indicators (KPIs) for FY 2019

- 32% D/M/WBE Participation
- 100% capital project contracts awarded on-time and within budget •
- 90% of contracts extended before the original expiration date •
- 90% of contract extensions to Board 180 days or more before the expiration date •
- 90% customer satisfaction .
- 3 or more bidders on at least 90% of solicitations •
- Measured savings 10x budget •
- 100% of protests responded to on time •
- 100% compliance with FTA requirements, where applicable •

Exhibit 86 illustrates a reduction in transactions as a result of consolidating purchase activity under contracts and automating the delivery order process.

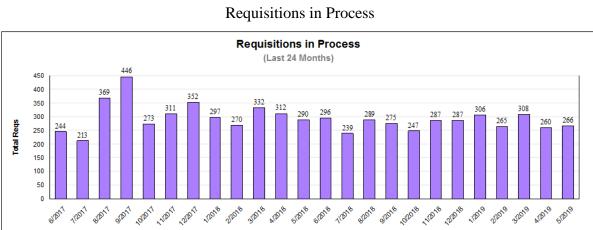
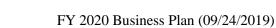
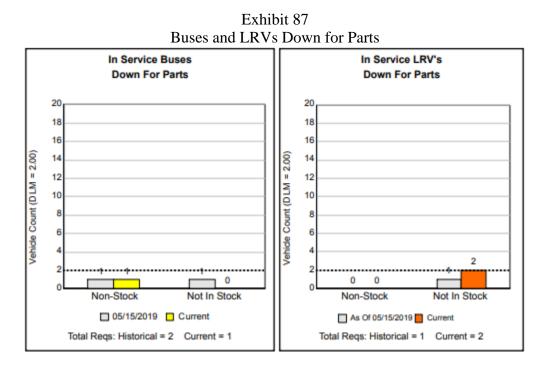
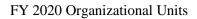


Exhibit 86



The Procurement Department produces an Executive Dashboard and a Procurement Dashboard daily. The dashboards identify measurements toward Key Performance Indicators (KPIs) on a weekly basis. Exhibit 87 shows the number of bus and light rail vehicles (LRVs) that are down for parts each day.







# **Innovation Department**

The goal of the Office of Innovation is to empower business transformation through driving innovative thinking and practices across the DART organization. Primary activities supported by the Office of Innovation include the development of new revenue streams, facilitation of new product introductions, and enabling recognition and actionability of new organization process enhancements across DART. This variety of activities will be achieved through leveraging market research, fostering internal and external partnerships, and leveraging emerging technologies.

Key areas of focus for the Office of Innovation include:

- Pursuit of a seamless and exemplary end to end customer journey experience
- Governance and expansion of DART's Mobility as a Service (MaaS) strategy
- Leading the continued development of the GoPass mobile app
- Supporting best practice through developing and implementing an Innovation Evaluation Framework.
- Acting as primary liaison for innovation centric Public Private Partnership (P3) opportunities
- Educate and facilitate innovative thinking and practice throughout DART's processes

In pursuit of these objectives, the Office of Innovation will seek to leverage leading edge technology to positively impact a variety of channels, equipping teams across the organization to create scalable, replicable efficiencies and service improvements.

Additionally, the Office of Innovation will maintain a '5 year out' vision of introducing potentially disruptive technology on the horizon spanning the public transit sector and beyond. This will ensure the wider business can remain well informed and agile in response to potential emerging opportunities and threats that may impact our market leadership position.



# **Diversity Department**

The Diversity Department is responsible for the development, evaluation, implementation, coordination, and monitoring of DART's Disadvantaged Business Enterprise Program, Minority and Woman-Owned Business Enterprise Program (DMWBE), Equal Employment Opportunity (EEO) Program, and Employee and Labor Relations. It is also responsible for compliance with the Americans with Disabilities Act (ADA), Title VI and Title VII of the Civil Rights Act. The functional areas of the department are: Civil Rights, Diversity and Equal Employment Opportunity, Employee and Labor Relations, and Outreach and Training. The Vice President of Diversity & Inclusion/Employee and Labor Relations directs the overall activities of the department.

- <u>Civil Rights</u> is responsible for managing and administering DART's Disadvantaged Business Enterprise (DBE), Minority and Woman-Owned Business Enterprise (MWBE), and Small Business Enterprise (SBE) Programs. This division is also charged with the responsibility of ensuring compliance with the Americans with Disabilities Act (ADA) and Title VI of the Civil Rights Act. The division ensures that transportation-dependent, underprivileged, minority and disability populations are treated fairly in all DART services, activities and programs.
- <u>Diversity and EEO</u> is responsible for developing and managing DART's EEO Plan, investigating EEO discrimination complaints, developing a focused recruitment plan and diversity strategy, formalizing a Veterans' Recruitment Program, and providing ADA job accommodations for employees.
- <u>Outreach and Training</u> is responsible for general and contract-specific outreach designed to ensure DART achieves its DMWBE goals, offers educational workshops, seminars and a Small Business Academy, engages in communication programs, maintains relationships with organizations representing the small business community, and provides EEO and Diversity Training.

# Federal, State, Local, and Regional Government Relations

Government Relations encompasses all interactions between DART and its external political environment. DART's Government Relations staff plans and implements the Agency's advocacy efforts and ensures the exchange of information between DART and the 13 cities in the DART service area, as well as the D/FW region, the U.S. Congress, the U.S. Department of Transportation (including the Federal Transit Administration and the Federal Railroad Administration), and the Texas Legislature. In addition to providing tours and briefings to elected officials and members of their staff, Government Relations responds to citizens' concerns as they are relayed to elected officials for resolution. Also, Government Relations actively participates in transportation-related organizations such as the American Public Transportation Association, South West Transit Association, Texas Transit Association, Dallas Regional Mobility Coalition, Transit Coalition of North Texas, and the Regional Transportation Council. Government Relations oversees the day-to-day administration of DART's contracted legislative consultants in both Washington, D.C. and



Austin to develop appropriate advocacy strategies for securing Agency objectives to continue its ongoing operations and capital projects.

DART Government Relations staff monitors dialogue emanating from stakeholders and transit advocacy groups regarding the implementation of federal transportation policy authorized by the Fixing America's Surface Transportation or FAST Act, as well as annual appropriations for DART's capital projects and other federal funding requests. Additionally, Government Relations staff coordinates with members of DART's congressional delegation to convey the Agency's positions on federal policy and seeks letters of support on the Agency's federal grant applications, such as for the Low or No Emission Vehicle Program, when necessary. Finally, Government Relations staff provides timely updates on the status of any grant applications submitted by DART to the U.S. Department of Transportation, and closely monitors the U.S. Congress and the Administration for new developments relating to potential funding for projects identified in DART's Twenty-Year Financial Plan.

Continuing in the first quarter of FY 2019 will be the ongoing interim study committees of the 85th Texas Legislature, leading up to the next regular legislative session, the 86th Texas Legislature, convening on January 8, 2019. Working with DART's Austin legislative counsel team, staff will continue to monitor closely the activities of these interim legislative study committees for issues potentially impacting DART and engaging as necessary to ensure DART's position is effectively communicated and advocated. Staff will monitor and provide relevant agency testimony as requested prudent relating to DART's operations, maintenance, capital projects, financing and mobility management expertise.

Government Relations staff will also monitor the outcome of the general election held on November 6, 2018, for any changes to the make-up of the agency's congressional and state legislative delegations. Staff will brief executive management and the Board of Directors on the results of the general election and provide analysis of its potential impact on the political landscapes in Washington and Austin as it relates to DART's legislative goals and agenda.

Government Relations actively maintains a strong presence in local government activities through regular attendance at service area city council meetings and work sessions, and continues strong relationships with service area city staff, ensuring timely resolution of DART issues. Staff will be increasingly engaged in the development and implementation of strategies for the future association between DART and cities outside the DART service area.



# **Chief of Staff**

<u>Strategic Planning</u> – The Office leads and supports DART's strategic planning and development initiatives. Goal setting, policy analysis, policy development, organizational strategy, and high-level issue analysis are significant parts of the strategic planning process led by the Office.

<u>Policy Analysis, Review and Coordination</u> – Another major focus is the continuing comprehensive review and analysis of DART's Administrative Policies and implementation of a system for regular review and updates. A separate but related activity focuses on making all strategic planning documents and Administrative Policies easily available to DART employees.

<u>Support for Strategic Initiatives</u> – The Chief of Staff provides administrative and executive level strategic project management and support. This function requires highly responsible and responsive review and analysis of matters including governmental reports, regulations, and policies. Leadership, support, and management for other complex, high-priority administrative and executive level projects and initiatives is another function of the Office. The importance of consistency across Agency functions requires a high level of engagement, coordination with key decision-makers and executives, and broad knowledge of all aspects of the Agency's business.

<u>Records Management</u> – Responsibility for records management as contemplated by Board Policy is under the leadership of the Office of Policy and Strategy. Key activities in FY 2020 will include a continuing review of current practices and processes, focused training for individuals in other departments charged with managing records, along with an analysis of potential efficiencies with implementation dependent on shared resources. The DART Historical Archive, created in 2018, will also be a significant focus as historically significant records of the agency are identified and accessioned into the archive. An oral history project will supplement materials in the archive by including the perspectives of key individuals on the history and growth of DART.

<u>External Relations</u> – Serves as the voice of the agency. The varied activities of this group reach customers, prospective customers and stakeholders. Staff are responsible for ongoing media relations support as well as public meetings required by statute. Transit Education staff are in the field almost daily reaching "students" of all ages with DART information as well as teaching them about the value of public transit in North Texas.

- Media Relations
- Social & Digital Media
- Community Relations
- Transit Education



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# Finance

Finance looks to effectively collect passenger fares, pay DART employees and its business partners in a timely manner, ensure cash is available to meet payment obligations in a cost efficient manner, and collect and provide financial information to DART management and other stakeholders to make informed decisions. Accounting (including payroll and accounts payable), budgeting and financial planning, revenue systems and administration, risk management, and treasury comprise the Finance Department. Performance reporting from the various Finance Department divisions is included in the DART Quarterly Operating and Financial Performance Report which is available on DART's website, <u>DART.org</u>.

## Accounting Division

This division has three sections: Financial Accounting and Reporting, Payroll, and Accounts Payable. The Accounting Division is responsible for financial recordkeeping, financial reporting, payroll, accounts payable, and management of the corporate card function at DART.

The <u>Financial Accounting and Reporting</u> section is responsible for managing the annual financial audit and recording all of DART's business transactions in accordance with generally accepted accounting principles (GAAP). This section includes accounts receivable, cash accounting, fixed assets, general ledger, and financial reporting. Financial reports prepared by this section include: monthly, quarterly, and annual financial reports; DART's three retirement plan financial reports; and the DART Comprehensive Annual Financial Report, as well as reporting for DART subsidiaries and interests.

This section also maintains proper accounting records and delivers consistent, accurate, and timely reporting of financial results, with the following goals: build stakeholder confidence that DART is being a good steward of public funds; ensure that financial information is accessible to accommodate the interest of the purchasers and holders of debt issued by the agency; assist in tracking financial targets and goals; and provide financial data that supports grant reporting and enhances DART's ability to obtain grants in the future.





Exhibit 88 illustrates the KPIs tracked for Financial Reporting.

Key Performance Indicators	FY 2016	FY 2017	FY 2018	Q3 FY 2019
Monthly Close/On-Time Percentage (Avg. 5				
days)	90%	97%	100%	100%
Number of Financial Statements Issued	40	41	41	32
Financial Statement Issuance/On-Time				
Percentage	100%	100%	100%	100%
Clean Opinion on Audited Financials	100%	100%	100%	100%
Received GFOA Certificate of Achievement				
for Excellence in Reporting	Yes	Yes	Yes	N/A

Exhibit 88 Financial Reporting KPIs

The <u>Payroll Section</u> is responsible for ensuring that all employees are paid accurately, timely, and in compliance with DART policies, state, and federal regulations. This section is also responsible for employee payment resolution, ensuring that all statutory and non-statutory deductions are made, filing of employee-related taxes, W-2 issuance, and maintaining employee payment records in compliance with DART policies, and state and federal governmental agencies.

The Payroll Section utilizes Kronos software with a time and attendance system that can capture actual hours worked and can be programmed with work rules and pay policies resulting in improved service to our employees and an efficient, effective, payroll process. Prompt and accurate processing of payroll, direct deposit, and other services give DART employees peace of mind.

Exhibit 89 highlights the KPIs for the Payroll section:

Payroll Processing					
Key Performance Indicator	FY 2016 FY 2017		FY 2018	FY 2019 Q3	
Number of out-of-cycle checks	749	1,058	1,142	753	
Total number of checks	109,492	108,638	109,503	83,903	
Percent on time statutory reporting	100%	100%	100%	100%	
Service requests volume	3,201	3,337	4,031	2,663	
Average service request turn- around time in days	7.8	5.5	6.4	12.2	

Exhibit 89



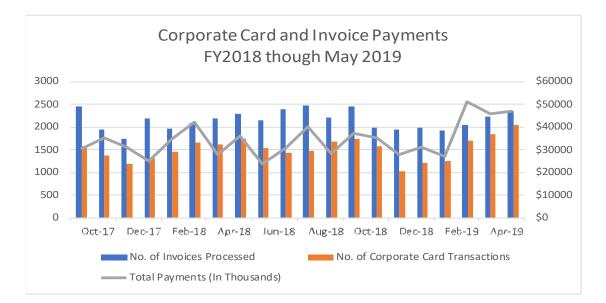
The <u>Accounts Payable</u> section oversees vendor payment and administration of the corporate card program. This section is responsible for vendor payment which includes invoice payment resolution, escheatment of unclaimed payments, 1099 issuance, maintaining vendor payment records, and ensuring that vendor payments are made accurately, timely, and in compliance with the prompt payment act and DART payment policies. Accounts Payable is also responsible for the DART Corporate Card program including training, distribution, and audit of corporate card transactions.

The following outlines the Accounting Division's work plan and the key performance indicators to track the effectiveness of the work plan in supporting the Agency strategic goals and initiatives.

A record of prompt and proper payment of vendor invoices provides confidence to the business community when doing business with DART. Prompt payment is particularly important to the small business community which includes many minority-owned businesses.

Accounts Payable also administers the corporate card program including an annual audit of all corporate cardholders. The corporate card program not only improves the efficiency at which small purchases are made, but the annual audit builds stakeholder confidence that DART is being a good steward of public funds.

Exhibits 90 and 91 highlight KPIs for the Accounts Payable section.



# Exhibit 90 Accounts Payable Payments Processed

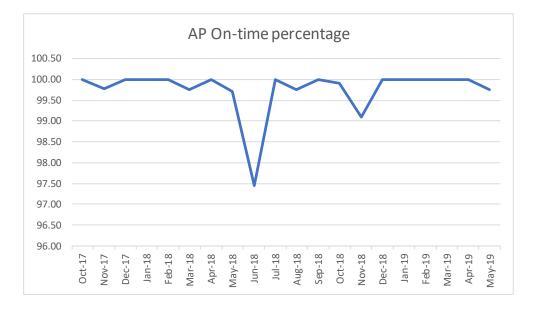


Exhibit 91 Accounts Payable On-Time Payments Record

## Business Planning and Analysis Division

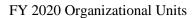
This division develops and administers the annual Operating and Capital budgets, long-range financial plan, preparation of the annual business plan, and the quarterly operating and financial performance report. This includes revenue tracking and reporting, business analysis project support, and performance reporting (e.g., key performance indicators).

The Operating Budget section implements financial target analysis reporting, works with all departments to ensure that budget targets are maintained, and monitors departmental budgets and assists departments with their budgets throughout the year.

The Capital Budget section provides maintenance and administration for the capital budget and Twenty-Year Financial Plan, performs a thorough review of estimated final funding requirements for all current capital projects, and maintains current tracking and reporting systems for all capital projects.

The primary functions of this group in FY 2020 will be the continued coordination with the Technology Department for the automation of current KPI reporting and the creation of executive financial dashboards from the recently updated financial planning software. Key performance measures for this area include on-time reporting by established deadlines for documents such as:

- Revenue, Operating Expense, and Capital budgets
- The Twenty-Year Financial Plan
- The Business Plan



- - Sales tax results and projections
  - Quarterly Operating, Performance, and Compliance Report
  - Agency Division Level Measurement (DLM) program report

# Revenue Division

This division consists of Revenue Administration and Revenue Systems.

<u>Revenue Administration</u> consists of two separate sections within the Revenue Division (Revenue Administration and Finance Distribution). The primary responsibilities of these sections include ridership, revenue, and pass sales reporting, preparation and distribution of payroll and accounts payable checks, payroll tax transmissions, Payment Card Industry (PCI) compliance oversight, fare media inventory and procurement, and fare collection systems software administration and reconciliation for fareboxes, ticket vending machines (TVM), GoPass mobile ticketing, software to support the micro transit (GoLink), Plano Rides and Collin County Ride programs and count room currency collections software. In addition, Revenue Administration is providing project management and implementation oversight for the Comprehensive Payment System (CPS) project which is DART's state-of-the-art integrated electronic fare payment, distribution, collection, and processing system.

Revenue Administration also prepares monthly, quarterly, and annual ridership reports, financial data, and agency services and safety data to regulatory agencies such as the National Transit Database (NTD), American Public Transportation Association (APTA), and the Texas Department of Transportation (TxDOT). Exhibit 92 shows the fare media purchases by month from October 2012 to April 2018.

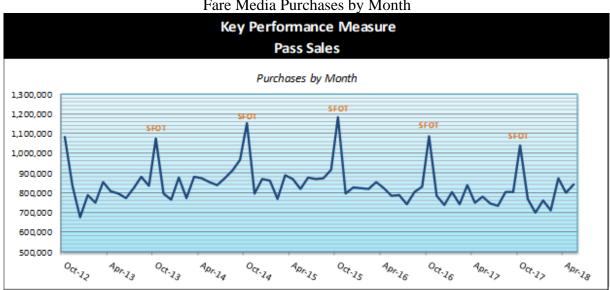


Exhibit 92 Fare Media Purchases by Month

SFOT - State Fair of Texas





The <u>Revenue Systems</u> section includes all fare equipment dispatch responsibilities, revenue technicians, bus yard control, the maintenance personnel assigned to repair TVMs, and the count room. The fare equipment dispatch unit deploys available resources to bus or rail stations that

have equipment in need of service or repair on a day-to-day basis. The dispatchers log all revenue equipment issues, coordinate all TVM repairs, and track both revenue technician and mechanic work progress throughout the day. They track all services provided under contract to Denton County Transportation Authority (DCTA), and submit information to the Accounting Division on a regular basis so DCTA can be invoiced for those services. Section investigate personnel all customer complaints relating to TVMs. The revenue



technicians perform routine TVM service including the removal of coin and currency from collection containers, and replenishing pass stock, change supply, and receipt paper. They clear jams and perform the first line of troubleshooting for any TVM problems.

The revenue technicians that provide 24/7/365 bus yard control functions are located at each of the bus divisions and issue the buses to bus operators, collect the ridership data and revenue from bus fareboxes when the buses return to the divisions, and keep the buses parked on the yard in an organized manner. The fare equipment maintenance personnel are responsible for all TVM field repairs, repair of Ticket Reader/Issue Machine (TRiM) units, and vault and probing systems at all bus divisions, fare collection component rebuilds, and TVM preventive maintenance. This unit works closely with Fleet Service and Materials Management to ensure that parts are available to keep fareboxes in working condition on the buses.



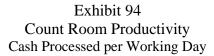


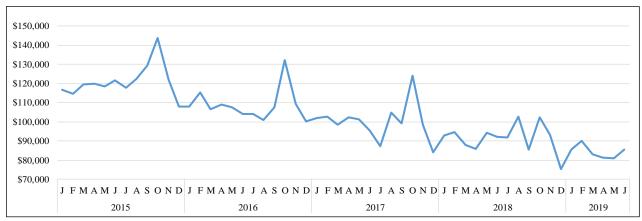
Exhibit 93 is an example of the Division Level Measurements for the revenue technicians assigned to TVM service and fare equipment maintenance personnel.

2019 Goals					2019 Results			
Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4
10.48	10.48	10.48	10.48	Complaints/100k Passengers	5.16	4.13	9.03	
11.32	11.32	11.32	11.32	Unscheduled Absences (Per Person Annually)	13.66	3.93	4.62	
288,873	288,873	288,873	288,873	Average Weekday Ridership - Rail	95,736	88,418	91,743	
99.24%	99.24%	99.24%	99.24%	% TVMs In Service	97.71%	97.55%	97.54%	
2,940	2,940	2,940	2,940	Service Calls Completed	2,319	2,149	2,051	
184	184	184	184	PMIs Completed	202	267	191	
2019 Goals					2019 Results			
	2019	Goals				2019 R	esults	
Q1	<b>2019</b> Q2	Goals Q3	Q4		Q1	<b>2019 R</b> Q2	esults Q3	Q4
Q1 266			Q4 253	Complaints	Q1 137			Q4
`	Q2	Q3	· · ·	Complaints Ridership - Rail	· · ·	Q2	Q3	Q4
266	Q2 244	Q3 252	253	L L	137	Q2 92	Q3 209	Q4
266 2,534,364	Q2 244 2,330,993	Q3 252 2,401,265	253 2,412,801	Ridership - Rail	137 2,550,768	Q2 92 2,241,322	Q3 209 2,303,196	Q4
266 2,534,364 18.86	Q2 244 2,330,993 18.86	Q3 252 2,401,265 18.86	253 2,412,801 18.86	Ridership - Rail Unsched. Absences 8 Hr. Days	137 2,550,768 16.82	Q2 92 2,241,322 4.68	Q3 209 2,303,196 4.81	Q4

Exhibit 93 Division Level Measurement Scorecard – Revenue – TVM

The Count Room section is responsible for processing cash collected from fareboxes and ticket vending machines. A report is prepared that monitors cash processed to gain insight into the effects of fare increases, alternative pass sales methods, or significant changes to existing service revenue derived from cash (see Exhibit 94).





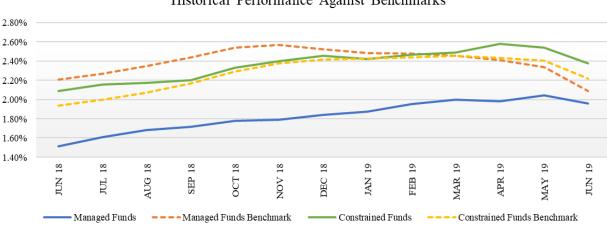


#### Treasury Division

This division has responsibility for cash and investment management, debt management, and securing and monitoring grants.

Treasury manages DART's funds in strict compliance with the Texas Public Funds Investment Act (PFIA) and DART Board investment policies. Fund management focuses on three goals, in descending order of priority: 1) preservation of capital; 2) liquidity to meet obligations in a timely manner; and 3) optimal return on investment. PFIA compliance is monitored through an extensive series of reports prepared daily, monthly, and quarterly. Treasury staff also maintains tight controls over all cash held by the depository bank or any other institution holding funds on DART's behalf. The Government Treasurers of Texas Investment Policy Certificate of Distinction Award has been awarded to DART since March 2013, in recognition of the outstanding Investment Policy and Procedures maintained by the Treasury Division. See Exhibit 95 for an example of the information tracked by the Treasury Division.

#### Exhibit 95 Fund Yields



#### Historical Performance Against Benchmarks

Treasury's grants team administers all federal, state, and miscellaneous sources of funding and ensures compliance with the relevant reporting regulations. Employees in this section search for new funding opportunities, assist in the preparation of grant applications, and submit the applications to the appropriate entity. Once funding is awarded, the grant information is entered into the Transportation Improvement Program/State Transportation Improvement Program system through the North Central Texas Council of Governments (NCTCOG), as well as into DART's accounting system for tracking. When expenditures occur, reimbursement requests are submitted, receipt of funds is monitored, and information is properly recorded in DART's general ledger. The grants team takes the lead on all external audits of federal and state funds and coordinates the responses to requests for information.



Treasury has broad debt-related responsibilities. Staff serves as a key intermediary with national capital market entities—including bond credit rating agencies, investment banking entities, and institutional bond purchasers—helping to maintain DART's ability to finance major infrastructure projects. Treasury staff coordinates the issuance of bonds and other debt instruments. For existing debt, Treasury is responsible for making timely debt service payments and providing legally required financial disclosures to the capital markets.



RESOURCE

KNOWLEDGE

TREATMENT SCOP



# **Risk Management Division**

The Risk Management Division consists of four sections that focus on cost containment and risk reduction with a focus on 5 Star service to both internal and external customers.

The Integrated Disability Programs Section is • responsible for oversight of the Workers' Compensation Program, Short-Term and Long-Term Disability Programs, Department of Labor federally mandated Family and Medical Leave Act Program, Alternative Duty return-to work program, and Employee Assistance Program (EAP).

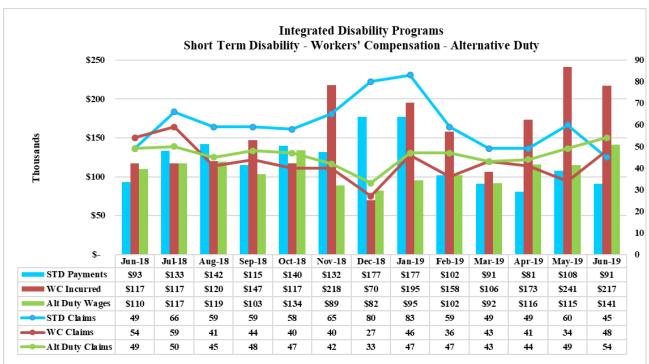
AVOIDANCE

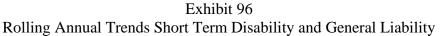
- The Liability Claims Section is responsible for the intake, management, and resolution of all bodily injury and property damage claims arising out of DART operations, responding to open records requests, identification and maintenance of video evidence from the smart drive camera system, and subrogation or recovery of damages from responsible third parties.
- The <u>Medical Compliance Section</u> is responsible for pre-employment physicals, drug and alcohol testing required by DOT/FTA and DART policy, CDL recertification physicals, mandatory employee drug awareness and reasonable suspicion supervisor training, medical surveillance physicals and rehabilitation opportunities.
- The Insurance Programs Section manages DART's property and casualty insurance programs, Owner Controlled Insurance Program for Capital Construction Projects, vendor insurance recommendations and compliance, review of operating agreements including licenses, leases, trackage rights, and access agreements to identify and recommend appropriate risk allocations, development and oversight of cost effective programs to manage the unique risks associated with major construction projects, and facilitation of contract and insurance program closeouts for completed contract and construction projects.

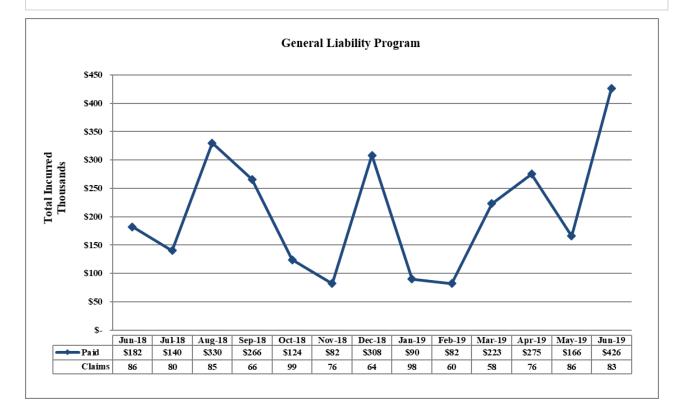
The Division's primary objectives are to:

- reduce the cost of employee injuries through timely appropriate medical care, •
- return-to-work initiatives. •
- compliance with Workers' Compensation and Family and Medical Leave Act statutory requirements,
- maintain a ratio of one claim closed for every claim opened, actively pursue recovery ٠ of the cost of damage to property and injuries to employees by responsible third parties,
- supporting hiring initiatives and DOT requirements, and ٠
- equitable risk allocation mechanisms to ensure that the Agency's cost of risk stays • within industry norms.

Exhibits 96 illustrates the rolling annual trends for short term disability and general liability.









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# Reference

# A. BUSINESS PLAN DEVELOPMENT

#### **Purpose of Business Plan**

The FY 2020 Business Plan provides the DART Board of Directors, DART customers, and the region's taxpayers, elected officials, and other stakeholders with a comprehensive summary of the Agency's plans and commitments to improve regional mobility, enhance the quality of life, and stimulate economic development. This document consolidates the key elements of the FY 2020 Annual Budget, the FY 2020 Twenty-Year Financial Plan, the Transit System Plan, and the Agency's Strategic Plan. The draft resolutions shown in Exhibit 100 approve the funding levels for the FY 2020 Annual Budget and at Exhibit 101 approve the FY 2020 Twenty-Year Financial Plan as required by DART's enabling legislation.

The Business Plan is management's written document that outlines DART's performance projections and commitments for each mode of service and the Agency as a whole. The Plan includes key operating, financial, and quality measures that identify the initiatives necessary to improve performance, ridership, and financial targets.

#### **Business Planning Process**

Exhibit 97 highlights the business planning, compilation, and approval process used at DART.

Date	Description					
	Management reviews Strategic Plan every five years					
Dec – Feb	Management reviews and makes recommendations for changes to Financial Standards					
Feb – Mar	Board reviews and approves Financial Standards					
Mar – Jul	Staff develops Business Plan (which includes the Annual Budget and Twenty-Year Financial Plan) for following year					
Jul	Management presents proposed Budget and Twenty-Year Financial Plan to Board					
Aug	Board approves issuance of the Budget and Twenty-Year Financial Plan to the cities within the DART Service Area					
Aug – Sep	Service area cities provide input to DART					
Sep	Board approves Budget and Twenty-Year Financial Plan					

Exhibit 97 Business Plan Development Schedule

DART takes a top-down approach to business planning. The approach begins with the Board Goals, Strategic Plan, and Board-approved Financial Standards which establish parameters within which management must operate.



The Board reviews projected business and financial results, including proposed new operating and capital programs, beginning in the Spring. Departmental targets are set based on projections from the Twenty-Year Financial Plan and other known factors or programs (e.g., increases in health care, contract rates, or fuel costs). Based on the direction of senior management, departments prepare detailed budgets for each of their cost centers within those targets. These budgets are in turn reviewed during meetings with the department head, the Deputy Executive Director or Executive Vice President, the President/Executive Director, the Chief Financial Officer, and the Budget Office to discuss the respective budgets as well as any changes. All new proposed programs are evaluated for effectiveness and efficiency.

The Finance Department then compiles the numbers, coordinates work programs to achieve strategies, and publishes the Business Plan (including the Annual Budget and Twenty-Year Financial Plan) for review by the cities within the DART Service Area. The Board performs additional reviews in August and September, before approving the Budget and Twenty-Year Financial Plan in September.

<u>Capital Budgeting</u> – DART's capital budgeting processes are focused on ensuring that DART spends its available capital dollars on projects that provide the most benefit to the service area and are done in the most cost-effective manner possible. Capital projects are prioritized based on the following criteria:

- Compliance with government regulations;
- Safety-related;
- Interlocal Agreement (ILA) or other prior commitment;
- Required to maintain existing infrastructure; and
- Cost effectiveness.

Many dimensions of each project must be submitted with the project request, including:

- Consequences of not doing the project;
- Potential ridership generated;
- Effect of the project on customers, employees, and other stakeholders;
- Compliance with long-range plans of the Agency, such as the Strategic Plan, Transit System Plan, and Twenty-Year Financial Plan;
- Time criticality;
- Life-cycle cost including capital expenditures, operating and maintenance expenses, and revenue generation in comparison with current operations;
- Other potential alternatives to the proposed project and associated life-cycle costs of each alternative; and
- Concurrence from all affected departments.



For certain classes of expenditures (such as infrastructure maintenance), discrete projects cannot be specifically identified or the timing of equipment replacement cannot be accurately determined. Capital reserves have been established in the Twenty-Year Financial Plan for each capital project category based on historic spending patterns and projected levels of new work. These reserves act as placeholders for anticipated future capital expenditures. Once a specific project is identified that relates to a particular reserve, that project is given its own unique identification number, and the reserve is reduced accordingly.

# **Budget and Financial Plan Approval and Amendments**

<u>Annual Budget</u> – DART's legislation requires the Board to approve an annual budget. The proposed annual budget must be made available to the governing bodies of the participating municipalities at least 30 days prior to final budget adoption.

<u>Twenty-Year Financial Plan</u> – The Twenty-Year Financial Plan addresses the affordability of the Transit System Plan and the timing of service and capital expansion projects. The Twenty-Year Financial Plan details projected sources and uses of cash for twenty years. The first year of the Plan corresponds with the coming year's budget. The Plan validates the affordability of our long-range Transit System Plan, and includes our commitments for future system expansion and the issuance and repayment of debt.

The Board approves two resolutions prior to the start of each new fiscal year (see Exhibits 108 and 109). The Board approves the Annual Budget including operating expense, capital, and debt service budgets in one resolution which requires a simple majority for approval. The Twenty-Year Financial Plan is approved in a second resolution and requires an affirmative vote of two-thirds of the appointed and qualified members of the Board for approval.

Any major change to the Twenty-Year Financial Plan that occurs outside of the normal approval schedule requires a Financial Plan Amendment. A major change is defined as when DART's share of a new operating program, or DART's share of an increase to an existing operating program, is in excess of \$500,000 per year; or, when DART's share of a new capital program, or the cumulative addition to an existing capital program, is in excess of \$1 million (see Exhibit 112, FS-G9). These changes require the affirmative vote of two-thirds of the number of appointed and qualified members of the Board.

# **Budget Basis and Presentation of Amounts and Years**

DART's Annual Budget is presented on the same basis as our audited financial statements, but does not include depreciation, amortization of Federal grants, or the interest income and interest expense from leveraged lease transactions. Each of these non-cash transactions, however, is incorporated into the projected balance sheet shown at Exhibit 23 in the *Financial Plan Section*.

Schedules are presented and rounded to millions or thousands (as indicated), but are based on actual raw numbers. Consequently, certain schedules may not tie exactly or add due to rounding. In some cases, prior years' numbers have been restated to conform to the current year's format. All schedules are in fiscal years unless otherwise stated.



# **Board Planning Documents**

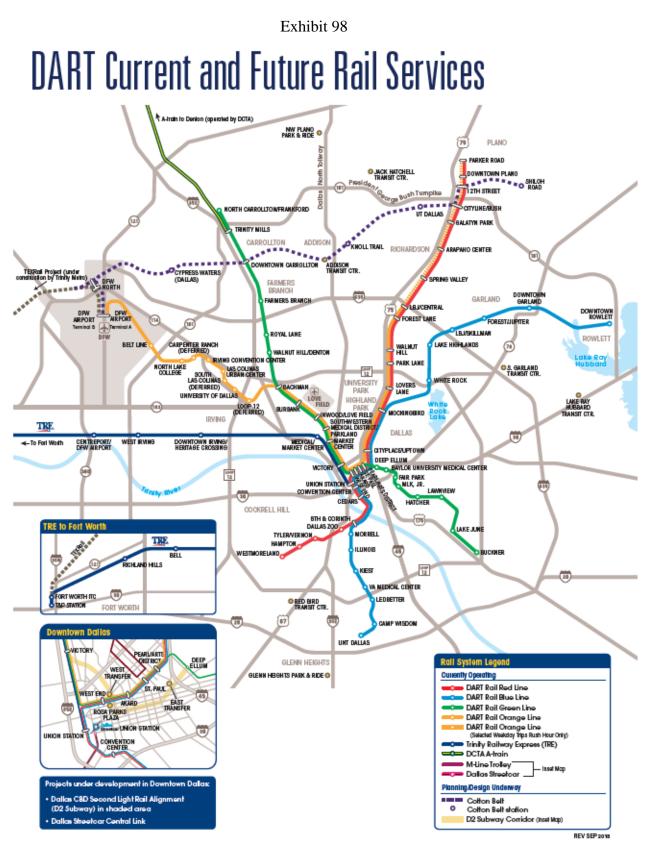
Several related reports are referenced in this document. Readers may wish to refer to these for a more comprehensive understanding of DART's plans and operations. These documents may be obtained from DART's Finance or Capital Planning departments. See Exhibit 107 for an illustration of how the Transit System Plan interrelates with other documents.

<u>Service Plan and Transit System Plan</u> – DART has a Service Plan and a Transit System Plan. The Service Plan is required by DART's legislation and describes, in legal terms, where DART's facilities and rail alignments are physically located. DART's Transit System Plan is a long-range planning tool that identifies and prioritizes major capital projects needed to improve regional mobility. The Transit System Plan provides detailed discussions of bus service recommendations, light rail and regional rail project development phasing schedules, paratransit strategies, as well as recommendations associated with system-wide mobility elements, and transit-oriented development. The Transit System Plan is closely coordinated with development of the North Central Texas Council of Governments' Metropolitan Transportation Plan and undergoes a major revision every five to ten years.

<u>2030 Transit System Plan (TSP)</u> – In October 2006, the DART Board adopted the 2030 Transit System Plan. The TSP focused on transit needs and opportunities within the context of a 2030 horizon. It includes recommendations for DART's core services (bus, light rail, regional rail, and [previously] HOV) and includes a discussion of issues such as land use and economic development, system accessibility, bicycle and pedestrian integration, and policies relative to DART's role in regional transit initiatives. The plan is financially constrained and is thus closely coordinated with the DART Twenty-Year Financial Plan. The economic slowdown of the late 2000's resulted in placing a number of major capital projects in the 2030 TSP in a deferred/unfunded status. Those projects that remain in deferred status are being re-evaluated and may be incorporated into the 2045 Transit System Plan currently under development.



Exhibit 98 is the map of DART Current and Future Services.

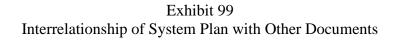


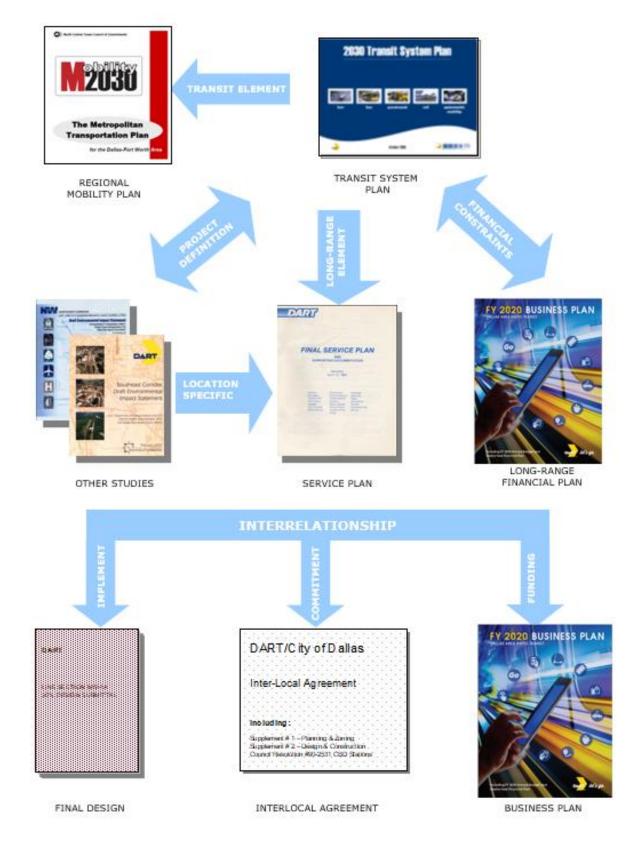


<u>2045 Transit System Plan</u> – The DART Board has initiated a revision to the existing 2030 Transit System Plan using a two-phased approach. Phase 1 included a Comprehensive Operations Analysis (COA) of the bus system to develop recommendations for improvements to the bus network. Phase 2 focused on evaluating potential high capacity transit corridors, including those deferred from the 2030 Transit System Plan. Phase 2 also integrated COA bus recommendations while focusing on system sustainability including low cost initiatives to grow ridership, improve accessibility, and increase operating efficiency, maintaining the system in a state of good repair, and regional opportunities. Projects in the 2030 Transit System Plan that were deferred/ underfunded over the past several years were reviewed and evaluated for potential inclusion in the 2045 Plan along with any new projects that may be identified. The Draft 2045 Plan is expected to be approved by the Board in FY 2019 and will be a financially constrained plan. A Final 2045 Plan will be presented to the Board of Directors following Board approval to distribute the plan for public and stakeholder comment.

<u>Quarterly Operating and Financial Performance Reports</u> – DART's Quarterly Operating and Financial Performance Reports provide updates on management's progress against financial and operating projections for the current year and provide status reports on ridership, planning, and capital projects in progress. These reports are available on DART's website, <u>DART.org</u>.









# Exhibit 100 Annual Budget Resolution # 190119

# RESOLUTION of the

190119



#### DALLAS AREA RAPID TRANSIT BOARD

(Executive Committee)

RESOLUTION

#### Approval of Fiscal Year (FY) 2020 Annual Budget

WHEREAS, on May 14, 2019 (Resolution No. 190053), the Board approved the Financial Standards (including the General Standards, Business Planning Parameters, and Debt Service Standards) which were the basis for compiling the FY 2020 Annual Budget; and

WHEREAS, the Board has been briefed on the assumptions used to prepare the FY 2020 Annual Budget; and

WHEREAS, the proposed FY 2020 Annual Budget was sent to the governing bodies of the municipalities within the DART Service Area at least thirty days prior to Board approval in accordance with Section 452.113(3) of the Texas Transportation Code.

NOW, THEREFORE, BE IT RESOLVED by the Dallas Area Rapid Transit Board of Directors that the FY 2020 Annual Budget is approved in the amount of \$1,362,136,103.

Annual Operating Budget	\$562,303,350
Capital and Non-Operating Budget	\$597,341,588
Debt Service Budget	\$202,491,165
Total FY 2020 Annual Budget	\$1,362,136,103

Michele Wong Krause Secretary

APPROVED AS TO FORM:

Gene Gamez General Counsel

Sue S. Bauman

Chair/

ATTEST

Gary C. Thomas

President Executive Director

September 24, 2019 Date



# Exhibit 101 Twenty-Year Financial Plan Resolution # 190120

# RESOLUTION of the

190120



# DALLAS AREA RAPID TRANSIT BOARD

#### (Executive Committee)

# RESOLUTION

#### Approval of Fiscal Year (FY) 2020 Twenty-Year Financial Plan

WHEREAS, on May 14, 2019 (Resolution No. 190053), the Board approved the Financial Standards (including the General Standards, Business Planning Parameters, and Debt Service Standards) which were the basis for compiling the FY 2020 Twenty-Year Financial Plan; and

WHEREAS, all Financial Standards have been met in the compilation of the FY 2020 Twenty-Year Financial Plan; and

WHEREAS, the Board has been briefed on the assumptions used to prepare the FY 2020 Twenty-Year Financial Plan; and

WHEREAS, the proposed FY 2020 Twenty-Year Financial Plan was made available to the governing bodies of the municipalities within the DART Service Area at least thirty days before the adoption of the Financial Plan; and

WHEREAS, Section 452.111 of the Texas Transportation Code, Article III, Section 14 of the Board Bylaws, and DART Board Policy II.02. Financial Standards Policy, require that the Board approve the Financial Plan by a two-thirds vote of the appointed and qualified members of the Board.

NOW, THEREFORE, BE IT RESOLVED by the Dallas Area Rapid Transit Board of Directors that the FY 2020 Financial Plan as shown in Exhibit 1 is approved.

190120 Approval of Fiscal Year (FY) 2020 Twenty-Year Financial Plan

Michele Wong Krause Secretary

Tome

APPROVED AS TO FORM:

Lene

General Counsel

Gene Gamez

Chair

ATTEST

Gar C. Thomas

President/Executive Director

September 24, 2019 Date



# B. FINANCIAL POLICIES

<u>Board Policies</u> – The Board has a number of policies that provide direction to management for implementation. Examples of Board policies are: real estate purchases, advertising, and fare structure. DART's enabling legislation requires the Board to adopt an annual budget prior to the commencement of a fiscal year. It also requires the Board to have a Financial Plan. The Financial Plan details the projected sources and uses of cash for twenty years and reviews the affordability of DART's currently-approved Transit System Plan. The Board's Bylaws require a two thirds vote of the appointed and qualified Board Members to approve or amend the Financial Plan. Budget and Financial Plan amendments are required when DART's share of a new operating program or increase to an existing operating program is in excess of \$500,000 per year; or when DART's share of a new capital program or the cumulative addition to an existing capital program is in excess of \$1 million. The Board's Financial Standards Policy (Exhibit 109) requires that the Board review the Financial Standards each year as a part of the budget and financial planning process.

<u>Financial Standards</u> – DART's Financial Standards (Exhibit 110) are divided into three sections: General (FS-G), Business Planning Parameters (FS-B), and Debt Service (FS-D). The purpose of the General Standards is to ensure that DART prudently manages its financial affairs and establishes appropriate cash reserves. The Business Planning Parameters (BPPs) provide management with a framework for developing the following year's budget and Twenty-Year Financial Plan and establish future business targets for management to achieve. The purpose of the Debt Service Standards is to limit the level of debt that may be incurred and to ensure that debt assumptions are based on financial parameters similar to (or more conservative than) those that would be placed on DART by the financial marketplace.

The combination of these policy documents provides a framework within which management can formulate strategy and action plans to maximize return on investment (for example, increase ridership and improve subsidy per passenger). Exhibit 103 highlights which Financial Standards correlate with the major sources and uses of cash included in the Annual Budget and Twenty-Year Financial Plan.



# Exhibit 102 FY 2020 Financial Standards Resolution No. 190053

#### RESOLUTION

of the



DALLAS AREA RAPID TRANSIT BOARD

(Executive Committee)

RESOLUTION

#### Approval of Financial Standards for FY 2020 Budget and Twenty-Year Financial Plan Process

WHEREAS, the Board desires to provide management with a financial and operating framework for development of the FY 2020 Budget and Twenty-Year Financial Plan; and

WHEREAS, DART Board Policy II.02, Financial Standards Policy, requires the Board to review and approve the Financial Standards each year as a part of the Budget and Financial Plan process; and

WHEREAS, DART Board Policy II.02, Financial Standards Policy, also states that an affirmative vote of two-thirds of the appointed and qualified members of the Board is required for approval of DART's Financial Standards.

NOW, THEREFORE, BE IT RESOLVED by the Dallas Area Rapid Transit Board of Directors that the Financial Standards for the FY 2020 Budget and Twenty-Year Financial Plan process as shown in Exhibit 1 to this Resolution are approved.

Michele Wong Krause

Secretary

APPROVED AS TO FORM:

Gene Gamez Interim General Counsel

stic . Batman

Chair

ATTEST

Gary C. Thomas

President/Executive Director

May 14, 2019 Date

287



# Exhibit 103

# Board Financial Standards Policy

DATE ISSUED:	May 13, 1997
Resolution No.	970083
Amended by Resolutions:	980067, 980239, 990087, 990145, 000117
Policy No.	II.02 (Finance)

The Board shall review and approve a set of Financial Standards each year as part of the Budget and Financial Plan approval process. The Financial Standards shall be divided into three sections:

1. General Financial Standards – The purpose of the general standards is to ensure that DART prudently manages its financial affairs and establishes appropriate cash reserves to be able to meet its future financial commitments.

2. Debt Financial Standards – The purpose of the debt standards is to limit the level of debt that may be incurred and to ensure that debt assumptions used in the Financial Plan are based on financial parameters similar to (or more conservative than) those that would be placed on DART by the financial marketplace. Actual debt covenants may differ from these standards. Where this occurs, the Financial Plan may reflect the actual covenants in the Board-approved debt instruments.

3. Business Planning Parameters – The purpose of the Business Planning Parameters is to provide management with a framework for developing the following year's budget and the twenty-year Financial Plan and establish future business targets for management to achieve.

Approval or amendment of this policy and of DART's Financial Standards will require an affirmative vote of two-thirds of the appointed and qualified Board members.



Exhibit 104 FY 2020 Financial Standards Resolution No. 190053

# FY 2020 Financial Standards

The Financial Standards are divided into three sections: General, Debt Service, and Business Planning Parameters. The purpose of the general standards is to ensure that DART prudently manages its financial affairs and establishes appropriate cash reserves. The purpose of the debt service standards is to limit the level of debt that may be incurred and to ensure that debt assumptions are based on financial parameters similar to (or more conservative than) those that would be placed on DART by the financial marketplace. Actual debt covenants may differ from these standards. Where this occurs, the Financial Plan will reflect the actual covenants in the Board-approved debt instrument. The Business Planning Parameters provide management with a framework for developing the following year's budget and the Twenty-Year Financial Plan and establishing future business targets for management to achieve. Since DART's enabling legislation requires a two-thirds vote on debt and the Financial Plan, approval or amendment of DART's Financial Standards will require an affirmative vote of two-thirds of the appointed and qualified Board members.

# FY 2020 Financial Standards – General

- G1. Complete and accurate accounting records shall be maintained in accordance with Generally Accepted Accounting Principles as promulgated by the Government Accounting Standards Board. DART's fiscal year-end for financial reporting purposes shall be September 30.
- G2. Funds of the Authority shall be invested within the guidelines of the Board's approved Investment Policy and Investment Strategy, and in compliance with applicable State law, including Section
   452.102 of the Texas Transportation Code, Article 717q V.T.C.S., the Texas Public Funds Investment Act, and applicable Federal law. The Board shall approve the signatories for all Agency checking and savings accounts.
- G3. An independent accounting firm shall perform an examination of DART's consolidated financial statements (including Single Audit requirements) and DART's retirement plan financial statements on an annual basis. The Agency's goal is to receive an unqualified opinion on the financial statements and an opinion that DART is in compliance with Federal Single Audit requirements in all material respects.
- G4. An annual actuarial analysis shall be performed on the Defined Benefit Plan. This Plan shall be funded in accordance with guidance received from the actuaries.
- G5. Appropriate insurance coverage shall be maintained to mitigate the risk of material loss. For self- insured retentions, a separately funded Master Insurance Reserve shall be maintained in an amount equal to the estimated liability for incurred losses and a reasonable allowance for claims incurred but not filed. An actuarial review of self-insured retentions will be made at least once every three years to ensure adequacy of the Master Insurance Reserve.



# FY 2020 Financial Standards – General (cont.)

- G6. Since sales taxes are received on a monthly basis, the unrestricted cash balance at the end of the year shall not be less than one-twelfth of the difference between the subsequent year's total sources of cash (excluding sales taxes) and total uses of cash as projected in the Twenty-Year Financial Plan. This reserve will be invested in accordance with the investment strategy for the Operating Fund.
- G7. In order to provide a buffer against an unanticipated shortfall in sales tax collections, DART will maintain a Financial Reserve. The goal of this reserve is to maintain a balance of at least 10% of the current year's sales tax budget. During periods in which sales taxes exceed the budget, the excess collections will be deposited into the Reserve by January 1 of the following year, up to a maximum fund balance of \$50 million. In order to provide funding for initiatives that enhance the quality and affordability of public transportation, DART will maintain a Mobility Assistance and Innovation Fund. Sources of funding shall include: i) sales tax received in excess of the amount budgeted for the fiscal year after such excess has been used to meet the requirements established for the Financial Reserve; ii) non-operating revenue and non-passenger operating revenue, received in excess of the amount budgeted for the fiscal year, and not already designated for a specific purpose (if actual operating expense net of operating revenue, is less than or equal to budget for the fiscal year just ended), such as real estate sales and leases, station naming rights, and other innovative sources; iii) investment earnings on the Financial Reserve and Mobility Assistance and Innovation Fund balances; and iv) grants and other contributions (including private). The Mobility Assistance and Innovation Fund shall be used for capital or operating projects and initiatives that advance the goals and objectives identified by the Agency, as well as mitigation of fare increases. Authorization to spend Reserve funds requires the affirmative vote of two-thirds of the appointed and qualified members of the Board.
- G8. The fiscal year of DART shall end on September 30 of each year. At the beginning of the budget and financial planning process each year, the Board should review and approve a set of Financial Standards that can be used by management as a framework for developing the following year's Budget, Business Plan, and Twenty-Year Financial Plan. The Board shall approve the Budget and Twenty-Year Financial Plan by September 30 of each fiscal year. The Annual Budget shall be the first year of the Twenty-Year Financial Plan.
- G9. Twenty-Year Financial Plan amendments shall require a two-thirds vote of the number of appointed and qualified Board members. An amendment is necessary when DART's share of the addition of a new capital project or the cumulative modification of an existing capital project is in excess of \$1 million or DART's share of the addition of a new operating program or increase in an existing operating program is in excess of \$500,000.



# FY 2020 Financial Standards – Business Planning Parameters

- B1. Sales tax revenue forecasts shall be based on a sales tax model developed specifically for the DART Service Area by an independent economist. In order to ensure a conservative sales tax estimate, the model's projections may be reduced from the forecasted levels, but not increased for years 2- 20 of the Twenty-Year Financial Plan. The most current year may be based on management's best estimate. All such modifications shall be approved by the Board during the financial planning process.
- B2. Passenger revenue forecasts shall be derived from ridership and average fare forecasts based on the Board's approved fare policy and fare structure. The Board will consider, from time to time, fare modifications to achieve Service Plan, ridership, and subsidy per passenger targets (see B4) and to maintain DART's financial viability.
- B3. The Board shall approve annual fixed route service levels by mode for each of the next five years. Fixed route service levels shall be based on the Five-Year Action Plan prepared by the Planning and Development Department. Cost of service will be developed jointly by Finance and Planning.
- B4. The Board desires to steadily improve service efficiency over time. Subsidy per passenger will continue to be monitored and managed. Management will continue to report the subsidy per passenger in the Quarterly Operating and Financial Performance Report. Items that impact subsidy per passenger will be reported in the Financial Considerations section of Agenda Reports.
- B5. For financial planning purposes, total operating expenses may not increase by more than 90% of the projected rate of inflation for the Dallas area, plus the incremental costs associated with the addition of new services, programs, and/or facilities as approved by the Board, as well as Board- approved contract increases, actuarial analyses, health-care cost increases, and fuel prices. The projected incremental cost impact of new services, programs, and/or facilities shall be presented to the Board for approval as part of the Twenty-Year Financial Plan assumption process each year.
- B6. As the Board desires to maximize financial resources devoted to the provision of service and minimize administrative costs, the administrative ratio [net administrative costs (administrative costs minus administrative revenues) divided by direct costs] may not increase for two consecutive years and shall not be higher than 12.0%. As such the direct cost ratio (direct costs minus net administrative costs divided by direct costs) shall not be lower than 88%.

Management shall use a consistent methodology for computing net administrative costs and direct costs.

Administrative costs shall include such costs as human capital, legal, marketing and communications, finance and associated technology. Administrative revenues shall include non- passenger revenues such as advertising, concessions, and other system-generated revenue. Direct costs shall include costs incurred in the provision of service such as bus operations, rail operations, mobility management services, police and fare enforcement, planning and development, revenue collection, and customer service.



# FY 2020 Financial Standards – Business Planning Parameters (cont.)

Management will present the projected costs of the major components of net administrative costs and direct costs to the Board as part of the Budget process each year.

This Financial Standard shall be achieved by maximizing direct costs relative to net administrative costs.

- B7. General Mobility programs for road improvement programs such as the Local Assistance Program (LAP), Principal Arterial Street System (PASS), Transit Related Improvement Program (TRIP), and Transportation System Management (TSM) and Intelligent Transportation System projects shall be funded according to the terms of the approved Interlocal Agreements and recorded as non- operating expenses in the Twenty-Year Financial Plan.
- B8. Capital planning and development costs and start-up costs are the internal staff costs associated with planning, designing, constructing, and opening new capital projects such as the light rail system. Management shall use a consistent methodology for allocating costs between operating and capital planning. Capital planning and development costs shall not exceed 7% of total operating costs. Cumulative start-up costs for a line section shall not exceed 60% of the first-year operating costs of that line section.
- B9. The Twenty-Year Financial Plan shall include funding for asset replacement and expansion projects. Capital projects in excess of \$1 million shall be approved by the Board. Timely replacement of assets shall be the highest priority to ensure a safe system. Accordingly, the Twenty-Year Financial Plan shall include replacement reserves by major asset category to ensure adequate future funding. The reserve levels shall be based on an independent assessment of asset condition (to be completed at least once every five years). Expansion projects shall be prioritized based on the project's cost, impact on ridership, return on investment, available funds, and other relevant factors. Capital construction projects shall be increased at annual inflation rates no less than the greater of those: (i) contained in projections developed specifically for DART by an independent economist; or (ii) based on the current available data from construction contract awards. Inflation rates will be reviewed annually and as construction capital projects will be increased at rates no less than general inflation (Consumer Price Index).
- B10. DART receives formula and discretionary Federal funding. Formula funding shall be programmed primarily for bus replacement, capital preventive maintenance (if available), state-of-good repair projects, and passenger facility construction. Formula funding for future years shall be forecast at the current year's funding level or at the minimum levels included in Federal authorizations to ensure a conservative forecast. Discretionary funding shall be programmed primarily for major system expansion projects (e.g., LRT or new bus maintenance facilities). Discretionary funding levels shall be estimated by project based on Federal criteria and the likelihood of obtaining congressional appropriations and require Board approval during the Budget/Twenty-Year Financial Plan process.



# FY 2020 Financial Standards – Debt Service

- D1. DART may not enter into a debt or financing arrangement unless the transaction is in full compliance with all applicable provisions of the Texas Transportation Code and other applicable state and federal laws.
- D2. Long-term debt may be included in the Twenty-Year Financial Plan; however, no debt secured solely by a pledge of sales and use tax revenues and that has a maturity longer than five years from the date of issuance shall be incurred without the approval by the voters of the Service Area.
- D3. Debt shall only be issued for approved capital projects and insurance reserves. Specific debt issuances are not tied to specific projects. Any project included in the Budget or Twenty-Year Financial Plan may be funded from the General Operating Fund or with debt, as needed.
- D4. Sinking funds shall be established to ensure that cash is available to make timely debt service payments on fixed-rate debt issuances that have maturities of one year or less and have periodic semi-annual interest payments. DART shall deposit on a monthly basis a prorated amount sufficient to fund the next principal and interest payment.
- D5. Reserve fund(s) that may be required by the financial markets for each debt issuance shall be maintained. These reserves may be funded by cash and securities, insurance, or surety bonds, but shall not be accessed unless the sinking funds have insufficient money to make the principal and interest payments as due. For financial planning purposes, reserve projections shall be based on the actual requirement on existing debt, plus the lower of maximum annual debt service, 125% of average annual debt service, or 10% of principal outstanding on projected debt.
- D6. DART shall establish a legal security structure of liens, agreements, pledged revenues, and other covenants which will be sufficient to (1) secure a rating of "A" or better on sales tax securities; (2) a MIG1 or SP1 rating on short-term notes; or (3) secure A1 or P1 rating on other short-term debt, or if necessary, secure a credit enhancement from a financial institution with a rating of "A" or better.
- D7. Certain debt service coverage ratios are required to access the financial markets. For financial planning purposes, annual sales tax revenues must exceed DART's current year debt service obligations by a factor of at least two (External Coverage Ratio). It is a goal of DART that for financial planning purposes, for long-term debt, sales tax revenues plus operating revenues, plus interest income, less operating expenses (excluding debt service and depreciation), for any twelve consecutive months of the prior eighteen months, must be sufficient to cover maximum annual debt service (ratio greater than 1.0). However, the DART Board may choose to grant exceptions to this standard in the interest of expediting the completion of the System Plan.



Exhibit 105 shows the linkages between DART's Financial Standards and its financial information.

Sources and Uses of Cash						
	Where Covered					
Description						
Sources of Cash						
Sales Taxes	FS-B1					
Operating Revenue	FS-B2					
Federal Funding	FS-B10					
Debt	FS-D1 to D7					
Uses of Cash						
Operating Budget						
Fixed Route Service	FS-B3 & B4					
Administrative Costs	FS-B6					
Total Expenses	FS-B5					
Capital Budget						
Gen. Mobility-Road Improvements	FS-B7					
Start-up/Capital Planning Costs	FS-B8					
Capital Projects	FS-B8, FS-B9					
Net Debt Service Budget	FS-D1 to D7					
Cash Reserves	FS-G5 & G7					
Working Cash Requirement	FS-G6					

Exhibit 105
Relationship of Financial Standards to
Sources and Uses of Cash

# **C.** SALES TAX

Exhibits 106 and 107 provide sales tax information for DART and for the cities within DART's Service Area.

(in Millions)												
	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19
Oct	\$31.4	\$30.2	\$28.7	\$29.0	\$33.3	\$35.4	\$38.0	\$41.3	\$42.2	\$43.3	\$46.7	\$49.1
Nov	31.6	27.3	26.6	30.2	31.7	32.1	36.3	38.1	40.4	43.3	46.7	47.7
Dec	44.8	43.5	41.7	43.0	46.1	47.8	50.2	55.9	57.5	59.7	60.2	64.6
Jan	31.4	27.2	28.3	29.1	30.8	35.5	35.0	38.4	40.3	43.5	44.9	47.6
Feb	29.5	27.0	25.8	27.5	31.8	32.9	36.1	37.0	39.8	42.1	42.3	46.2
Mar	37.9	35.8	36.7	39.7	39.5	41.1	44.5	49.5	51.8	53.7	57.2	55.6
Apr	32.0	29.7	29.0	31.9	33.4	35.8	39.2	41.8	41.9	42.9	47.5	51.0
May	33.9	29.6	29.7	31.1	33.9	37.9	36.8	39.6	42.7	47.0	50.9	49.6
Jun	41.6	37.3	37.3	39.5	40.9	43.0	44.7	50.1	51.9	52.2	54.6	56.7
Jul	33.3	28.8	27.8	33.3	37.2	36.5	39.7	39.3	42.3	43.6	46.6	
Aug	31.4	27.7	28.7	29.6	34.8	36.0	40.1	39.8	44.3	45.1	46.5	
Sep	37.4	33.4	35.3	38.4	39.1	41.7	45.2	47.9	50.0	50.2	51.4	
FY												
Total	\$389.1	\$416.1	\$377.6	\$375.5	\$402.4	\$432.5	\$455.7	\$485.8	\$545.1	\$566.5	\$595.6	\$468.1

# Exhibit 106 Sales Tax History, FY 2008 – FY 2019 (in Millions)



<u> </u>	(January 1984 - June 2019)							
FIS CAL YEAR	DART	ADDISON	BUCKINGHAM*	CARROLLTON	COCKRELL HILL	DALLAS	FARMERS BRANCH	GARLAND
Yrs. 1984 to 1999	\$3,429,800	\$89,685	\$1.407	¢152 502	\$941	\$1,986,023	\$128.220	\$172,391
2000	\$3,429,800 373,781	9,430	\$1,407 0	\$152,503 17,995	\$941 37	201,494	\$128,229 13,660	
2000	357,883	9,430	0	17,995	45	193,830	11,793	17,138 16,763
2001	325,545	9,080	0	17,384	35	195,850	10,172	15,673
2002	323,343	8,180	0	16,139	45	165,809	9,046	15,075
			0				,	
2004	332,396	8,546		17,207	67	176,897	9,411	15,704
2005	341,757	8,733	0	17,528	65	177,708 190,406	9,686	16,148
2006	370,519	8,765	0	18,361	165	· · ·	10,602	18,340
2007	389,129	9,407	0	19,617	95	198,850	11,996	19,328
2008	416,148	9,937	0	20,063	159	214,308	12,091	20,605
2009	377,597	8,828	0	19,264	246	191,124	11,550	18,645
2010	375,471	8,531	0	18,471	298	189,197	10,427	18,498
2011	402,404	9,140	0	20,480	253	202,934	11,544	18,812
2012	432,478	10,682	0	23,046	254	218,145	12,122	20,135
2013	455,700	12,020	0	24,677	258	230,959		21,113
2014	485,740	13,083	0	26,483	311	243,594	12,724	22,101
2015	518,624	12,671	0	30,091	314	260,892	13,809	23,846
2016	545,083	12,485	0	33,539	332	273,161	13,492	27,713
2017	566,594	13,263	0	35,394	362	283,719	13,834	27,531
2018	595,576	15,523	0	38,862	448	295,141	14,082	27,660
2019 YTD	468,133	11,082	0	28,247	307	233,128	12,546	21,177
TOTAL	11,872,175	297,131	1,407	611,382	5,080	6,304,310	365,792	574,486
% of 2019		2.37%	0.00%	6.03%	0.07%	49.80%	2.68%	4.52%
% of Total		2.50%	0.01%	5 1 5 9/	0.040/	52 100/	3.08%	4.0.40/
		210070	0.01 /0	5.15%	0.04%	53.10%	3.00 /0	4.84%
		210070	0.0170	5.15%	0.04%	53.10%	5.06 /6	4.84% COPPELL/
FISCAL	GLENN	HIGHLAND	0.0170	5.15%	0.04%	53.10%	UNIVERSITY	
	GLENN HEIGHIS		IRVING	PLANO	0.04% RICHARDSON*	ROWLEIT		COPPELL/
FISCAL		HIGHLAND					UNIVERSITY	COPPELL/ FLOWER
FISCAL YEAR	HEIGHTS	HIGHLAND PARK	IRVING	PLANO	RICHARDSON*	ROWLEIT	UNIVERSITY PARK	COPPELL/ FLOWER MOUND
FISCAL YEAR Yrs. 1984	HEIGHTS	HIGHLAND PARK	IRVING	PLANO	RICHARDSON*	ROWLEIT	UNIVERSITY PARK	COPPELL/ FLOWER MOUND
<b>FISCAL</b> <b>YEAR</b> Yrs. 1984 to 1999	<b>HEIGHTS</b> \$698	HIGHLAND PARK \$16,724	<b>IRVING</b> \$341,255	PLANO \$299,315	RICHARDSON* \$200,017	<b>ROWLEIT</b> \$13,744	UNIVERSITY PARK \$23,836	COPPELL/ FLOWER MOUND \$2,991
FIS CAL YEAR Yrs. 1984 to 1999 2000	<b>HEIGHTS</b> \$698 102	HIGHI_AND PARK \$16,724 1,488	<b>IRVING</b> \$341,255 41,643	PLANO \$299,315 43,639	<b>RICHARDSON*</b> \$200,017 23,175	<b>ROWLEIT</b> \$13,744 1,789	UNIVERS ITY PARK \$23,836 2,191	COPPELL/ FLOWER MOUND \$2,991
FISCAL YEAR Yrs. 1984 to 1999 2000 2001	HEIGHTS \$698 102 113	HIGHI.AND PARK \$16,724 1,488 1,517	IRVING \$341,255 41,643 37,480	PLANO \$299,315 43,639 43,893	RICHARDSON* \$200,017 23,175 21,441	<b>ROWLEIT</b> \$13,744 1,789 2,232	UNIVERS IIY PARK \$23,836 2,191 2,131	COPPELL/ FLOWER MOUND \$2,991 0 0
<b>FIS CAL</b> <b>YEAR</b> Yrs. 1984 to 1999 2000 2001 2001 2002	HEIGHTS \$698 102 113 112	HIGHLAND PARK \$16,724 1,488 1,517 1,459	IRVING \$341,255 41,643 37,480 34,078	PLANO \$299,315 43,639 43,893 41,556	RICHARDSON* \$200,017 23,175 21,441 17,186	<b>ROWLEIT</b> \$13,744 1,789 2,232 2,406	UNIVERS ITY PARK \$23,836 2,191 2,131 1,947	COPPEL/ FLOWER MOUND \$2,991 0 0 0
FIS CAL YEAR Yrs. 1984 to 1999 2000 2001 2002 2002 2003	HEIGHTS \$698 102 113 112 133	HIGHLAND PARK \$16,724 1,488 1,517 1,459 1,422	IRVING \$341,255 41,643 37,480 34,078 32,652	PLANO \$299,315 43,639 43,893 41,556 41,899	RICHARDS ON* \$200,017 23,175 21,441 17,186 17,197	<b>ROWLEIT</b> \$13,744 1,789 2,232 2,406 2,491	UNIVERS ITY PARK \$23,836 2,191 2,131 1,947 1,761	COPPELI/ FLOWER MOUND \$2,991 0 0 0 0 0
FIS CAL YEAR Yrs. 1984 to 1999 2000 2001 2002 2003 2003 2004	HEIGHTS \$698 102 113 112 133 158	HIGHLAND PARK \$16,724 1,488 1,517 1,459 1,422 1,557	IRVING \$341,255 41,643 37,480 34,078 32,652 34,630	PLANO \$299,315 43,639 43,893 41,556 41,899 45,208	RICHARDS ON* \$200,017 23,175 21,441 17,186 17,197 18,402	ROWLEIT \$13,744 1,789 2,232 2,406 2,491 2,825	UNIVERS ITY PARK \$23,836 2,191 2,131 1,947 1,761 1,782	COPPELI/ FLOWER MOUND \$2,991 0 0 0 0 0 0 0 0
FIS CAL YEAR Yrs. 1984 to 1999 2000 2001 2002 2003 2004 2005	HEIGHTS \$698 102 113 112 133 158 125	HIGHLAND PARK \$16,724 1,488 1,517 1,459 1,422 1,557 1,743	IRVING \$341,255 41,643 37,480 34,078 32,652 34,630 36,805	PLANO \$299,315 43,639 43,893 41,556 41,899 45,208 46,826	RICHARDS ON* \$200,017 23,175 21,441 17,186 17,197 18,402 19,577	ROWLEIT \$13,744 1,789 2,232 2,406 2,491 2,825 3,342	UNIVERS ITY PARK \$23,836 2,191 2,131 1,947 1,761 1,782 3,471	COPPELI/ FLOWER MOUND \$2,991 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
FIS CAL YEAR Yrs. 1984 to 1999 2000 2001 2002 2003 2004 2005 2006	HEIGHTS \$698 102 113 112 133 158 125 175	HIGHLAND PARK \$16,724 1,488 1,517 1,459 1,422 1,557 1,743 1,857	IRVING \$341,255 41,643 37,480 34,078 32,652 34,630 36,805 39,697	PLANO \$299,315 43,639 43,893 41,556 41,899 45,208 46,826 53,949	RICHARDS ON* \$200,017 23,175 21,441 17,186 17,197 18,402 19,577 18,831	ROWLEIT \$13,744 1,789 2,232 2,406 2,491 2,825 3,342 6,560	UNIVERS ITY PARK \$23,836 2,191 2,131 1,947 1,761 1,782 3,471 2,810	COPPELI/ FLOWER MOUND \$2,991 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
FIS CAL YEAR Yrs. 1984 to 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008	HEIGHTS \$698 102 113 112 133 158 125 175 198 221	HIGHLAND PARK \$16,724 1,488 1,517 1,459 1,422 1,557 1,743 1,857 2,012 2,250	IRVING \$341,255 41,643 37,480 34,078 32,652 34,630 36,805 39,697 41,717 47,195	PLANO \$299,315 43,639 43,893 41,556 41,899 45,208 46,826 53,949 56,365 59,440	RICHARDSON* \$200,017 23,175 21,441 17,186 17,197 18,402 19,577 18,831 21,171 21,480	ROWLEIT \$13,744 1,789 2,232 2,406 2,491 2,825 3,342 6,560 5,574 5,574 5,498	UNIVERS ITY PARK \$23,836 2,191 2,131 1,947 1,761 1,782 3,471 2,810 2,800 2,902	COPPELI/ FLOWER MOUND \$2,991 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
FIS CAL YEAR Yrs. 1984 to 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009	HEIGHTS \$698 102 113 112 133 158 125 175 198 221 208	HIGHLAND PARK \$16,724 1,488 1,517 1,459 1,422 1,557 1,743 1,857 2,012 2,250 2,122	IRVING \$341,255 41,643 37,480 34,078 32,652 34,630 36,805 39,697 41,717 47,195 43,870	PLANO \$299,315 43,639 43,893 41,556 41,899 45,208 46,826 53,949 56,365 59,440 52,547	RICHARDSON* \$200,017 23,175 21,441 17,186 17,197 18,402 19,577 18,831 21,171 21,480 21,239	ROWLEIT \$13,744 1,789 2,232 2,406 2,491 2,825 3,342 6,560 5,574 5,498 5,264	UNIVERS ITY PARK \$23,836 2,191 2,131 1,947 1,761 1,782 3,471 2,810 2,800 2,902 2,690	COPPELI/ FLOWER MOUND \$2,991 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
FIS CAL YEAR Yrs. 1984 to 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010	HEIGHTS \$698 102 113 112 133 158 125 175 198 221 208 237	HIGHLAND PARK \$16,724 1,488 1,517 1,459 1,422 1,557 1,743 1,857 2,012 2,250 2,122 2,240	IRVING \$341,255 41,643 37,480 34,078 32,652 34,630 36,805 39,697 41,717 47,195 43,870 41,005	PLANO \$299,315 43,639 43,893 41,556 41,899 45,208 46,826 53,949 56,365 59,440 52,547 54,756	RICHARDSON* \$200,017 23,175 21,441 17,186 17,197 18,402 19,577 18,831 21,171 21,480 21,239 23,174	ROWLETT \$13,744 1,789 2,232 2,406 2,491 2,825 3,342 6,560 5,574 5,498 5,264 5,780	UNIVERS ITY PARK \$23,836 2,191 2,131 1,947 1,761 1,782 3,471 2,810 2,800 2,902 2,690 2,858	COPPELI/ FLOWER MOUND \$2,991 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
FIS CAL YEAR Yrs. 1984 to 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011	HEIGHTS \$698 102 113 112 133 158 125 175 198 221 208 237 333	HIGHLAND PARK \$16,724 1,488 1,517 1,459 1,422 1,557 1,743 1,857 2,012 2,250 2,122 2,240 2,418	IRVING \$341,255 41,643 37,480 34,078 32,652 34,630 36,805 39,697 41,717 47,195 43,870 41,005 45,300	PLANO \$299,315 43,639 43,893 41,556 41,899 45,208 46,826 53,949 56,365 59,440 52,547 54,756 59,389	RICHARDSON* \$200,017 23,175 21,441 17,186 17,197 18,402 19,577 18,831 21,171 21,480 21,239 23,174 23,112	ROWLETT \$13,744 1,789 2,232 2,406 2,491 2,825 3,342 6,560 5,574 5,498 5,264 5,780 5,443	UNIVERS ITY PARK \$23,836 2,191 2,131 1,947 1,761 1,782 3,471 2,810 2,800 2,902 2,690 2,858 3,247	COPPELI/ FLOWER MOUND \$2,991 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
FIS CAL YEAR Yrs. 1984 to 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012	HEIGHTS \$698 102 113 112 133 158 125 175 198 221 208 237 333 353	HIGHLAND PARK \$16,724 1,488 1,517 1,459 1,422 1,557 1,743 1,857 2,012 2,250 2,122 2,240 2,418 2,769	IRVING \$341,255 41,643 37,480 34,078 32,652 34,630 36,805 39,697 41,717 47,195 43,870 41,005 45,300 45,852	PLANO \$299,315 43,639 43,893 41,556 41,899 45,208 46,826 53,949 56,365 59,440 52,547 54,756 59,389 67,616	RICHARDSON* \$200,017 23,175 21,441 17,186 17,197 18,402 19,577 18,831 21,171 21,480 21,239 23,174 23,172	ROWLETT \$13,744 1,789 2,232 2,406 2,491 2,825 3,342 6,560 5,574 5,498 5,264 5,780 5,264 5,780 5,443 4,662	UNIVERS ITY PARK \$23,836 2,191 2,131 1,947 1,761 1,782 3,471 2,810 2,800 2,902 2,690 2,858 3,247 3,118	COPPELI/ FLOWER MOUND \$2,991 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
FIS CAL YEAR Yrs. 1984 to 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2011 2012 2013	HEIGHTS \$698 102 113 112 133 158 125 175 198 221 208 237 333 353 398	HIGHLAND PARK \$16,724 1,488 1,517 1,459 1,422 1,557 1,743 1,857 2,012 2,250 2,122 2,240 2,418 2,769 2,814	IRVING \$341,255 41,643 37,480 34,078 32,652 34,630 36,805 39,697 41,717 47,195 43,870 41,005 45,300 45,852 50,191	PLANO \$299,315 43,639 43,893 41,556 41,899 45,208 46,826 53,949 56,365 59,440 52,547 54,756 59,389 67,616 66,404	RICHARDSON* \$200,017 23,175 21,441 17,186 17,197 18,402 19,577 18,831 21,171 21,480 21,239 23,174 23,172 23,722 25,556	ROWLETT \$13,744 1,789 2,232 2,406 2,491 2,825 3,342 6,560 5,574 5,498 5,264 5,780 5,443 4,662 5,154	UNIVERS ITY PARK \$23,836 2,191 2,131 1,947 1,761 1,782 3,471 2,810 2,800 2,902 2,690 2,858 3,247 3,118 3,210	COPPELI/ FLOWER MOUND \$2,991 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
FIS CAL YEAR Yrs. 1984 to 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2011 2012 2013 2014	HEIGHTS \$698 102 113 112 133 158 125 175 198 221 208 237 333 333 353 398 436	HIGHLAND PARK \$16,724 1,488 1,517 1,459 1,422 1,557 1,743 1,857 2,012 2,250 2,122 2,240 2,418 2,769 2,814 3,272	IRVING \$341,255 41,643 37,480 34,078 32,652 34,630 36,805 39,697 41,717 47,195 43,870 41,005 45,300 45,852 50,191 54,525	PLANO \$299,315 43,639 43,893 41,556 41,899 45,208 46,826 53,949 56,365 59,440 52,547 54,756 59,389 67,616 66,404 71,695	RICHARDSON* \$200,017 23,175 21,441 17,186 17,197 18,402 19,577 18,831 21,171 21,480 21,239 23,174 23,112 23,722 25,556 28,481	ROWLETT \$13,744 1,789 2,232 2,406 2,491 2,825 3,342 6,560 5,574 5,498 5,264 5,780 5,443 4,662 5,154 5,395	UNIVERS ITY PARK \$23,836 2,191 2,131 1,947 1,761 1,782 3,471 2,810 2,800 2,902 2,690 2,858 3,247 3,118 3,210 3,639	COPPELI/ FLOWER MOUND \$2,991 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
FIS CAL YEAR Yrs. 1984 to 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015	HEIGHTS           \$698           102           113           112           133           158           125           175           198           221           208           237           333           353           398           436           493	HIGHLAND PARK \$16,724 1,488 1,517 1,459 1,422 1,557 1,743 1,857 2,012 2,250 2,122 2,240 2,418 2,769 2,814 3,272 3,351	IRVING \$341,255 41,643 37,480 34,078 32,652 34,630 36,805 39,697 41,717 47,195 43,870 41,005 45,300 45,852 50,191 54,525 60,124	PLANO \$299,315 43,639 43,893 41,556 41,899 45,208 46,826 53,949 56,365 59,440 52,547 54,756 59,389 67,616 66,404 71,695 73,711	RICHARDSON* \$200,017 23,175 21,441 17,186 17,197 18,402 19,577 18,831 21,171 21,480 21,239 23,174 23,112 23,722 25,556 28,481 29,757	ROWLETT \$13,744 1,789 2,232 2,406 2,491 2,825 3,342 6,560 5,574 5,498 5,264 5,780 5,443 4,662 5,154 5,395 5,732	UNIVERS ITY PARK \$23,836 2,191 2,131 1,947 1,761 1,782 3,471 2,810 2,800 2,902 2,690 2,858 3,247 3,118 3,210 3,639 3,833	COPPELI/ FLOWER MOUND \$2,991 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
FIS CAL YEAR Yrs. 1984 to 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016	HEIGHTS           \$698           102           113           112           133           158           125           175           198           221           208           237           333           353           398           436           493           506	HIGHLAND PARK \$16,724 1,488 1,517 1,459 1,422 1,557 1,743 1,857 2,012 2,250 2,122 2,240 2,418 2,769 2,814 3,272 3,351 3,466	IRVING \$341,255 41,643 37,480 34,078 32,652 34,630 36,805 39,697 41,717 47,195 43,870 41,005 45,300 45,852 50,191 54,525 60,124 62,225	PLANO \$299,315 43,639 43,893 41,556 41,899 45,208 46,826 53,949 56,365 59,440 52,547 54,756 59,389 67,616 66,404 71,695 73,711 76,055	RICHARDSON* \$200,017 23,175 21,441 17,186 17,197 18,402 19,577 18,831 21,171 21,480 21,239 23,174 23,112 23,722 25,556 28,481 29,757 31,767	ROWLETT \$13,744 1,789 2,232 2,406 2,491 2,825 3,342 6,560 5,574 5,498 5,264 5,780 5,443 4,662 5,154 5,395 5,732 6,471	UNIVERS ITY PARK \$23,836 2,191 2,131 1,947 1,761 1,782 3,471 2,810 2,800 2,902 2,690 2,858 3,247 3,118 3,210 3,639 3,833 3,871	COPPELI/ FLOWER MOUND \$2,991 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
FIS CAL YEAR Yrs. 1984 to 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017	HEIGHTS           \$698           102           113           112           133           158           125           175           198           221           208           237           333           353           398           436           493           506           517	HIGHLAND PARK \$16,724 1,488 1,517 1,459 1,422 1,557 1,743 1,857 2,012 2,250 2,122 2,240 2,418 2,769 2,814 3,272 3,351 3,466 3,360	IRVING \$341,255 41,643 37,480 34,078 32,652 34,630 36,805 39,697 41,717 47,195 43,870 41,005 45,300 45,852 50,191 54,525 60,124 62,225 63,792	PLANO \$299,315 43,639 43,893 41,556 41,899 45,208 46,826 53,949 56,365 59,440 52,547 54,756 59,389 67,616 66,404 71,695 73,711 76,055 79,350	RICHARDSON* \$200,017 23,175 21,441 17,186 17,197 18,402 19,577 18,831 21,171 21,480 21,239 23,174 23,112 23,722 25,556 28,481 29,757 31,767 34,763	ROWLETT \$13,744 1,789 2,232 2,406 2,491 2,825 3,342 6,560 5,574 5,498 5,264 5,780 5,443 4,662 5,154 5,395 5,732 6,471 6,656	UNIVERS ITY PARK \$23,836 2,191 2,131 1,947 1,761 1,782 3,471 2,810 2,800 2,902 2,690 2,858 3,247 3,118 3,210 3,639 3,833 3,871 4,053	COPPELI/ FLOWER MOUND \$2,991 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
FIS CAL YEAR Yrs. 1984 to 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018	HEIGHTS \$698 102 113 112 133 158 125 175 198 221 208 237 333 353 398 436 493 506 517 579	HIGHLAND PARK \$16,724 1,488 1,517 1,459 1,422 1,557 1,743 1,857 2,012 2,250 2,122 2,240 2,418 2,769 2,814 3,272 3,351 3,466 3,360 3,941	IRVING \$341,255 41,643 37,480 34,078 32,652 34,630 36,805 39,697 41,717 47,195 43,870 41,005 45,300 45,852 50,191 54,525 60,124 62,225 63,792 65,346	PLANO \$299,315 43,639 43,893 41,556 41,899 45,208 46,826 53,949 56,365 59,440 52,547 54,756 59,389 67,616 66,404 71,695 73,711 76,055 79,350 86,813	RICHARDSON* \$200,017 23,175 21,441 17,186 17,197 18,402 19,577 18,831 21,171 21,480 21,239 23,174 23,112 23,722 25,556 28,481 29,757 31,767 34,763 35,754	ROWLETT \$13,744 1,789 2,232 2,406 2,491 2,825 3,342 6,560 5,574 5,498 5,264 5,780 5,443 4,662 5,154 5,395 5,732 6,471 6,656 7,092	UNIVERS ITY PARK \$23,836 2,191 2,131 1,947 1,761 1,782 3,471 2,810 2,800 2,902 2,690 2,858 3,247 3,118 3,210 3,639 3,833 3,871 4,053 4,333	COPPELI/ FLOWER MOUND \$2,991 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
FIS CAL YEAR Yrs. 1984 to 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 YTD	HEIGHTS \$698 102 113 112 133 158 125 175 198 221 208 237 333 353 398 436 493 506 517 579 504	HIGHLAND PARK \$16,724 1,488 1,517 1,459 1,422 1,557 1,743 1,857 2,012 2,250 2,122 2,240 2,418 2,769 2,814 3,272 3,351 3,466 3,360 3,941 3,233	IRVING           \$341,255           41,643           37,480           34,078           32,652           34,630           36,805           39,697           41,717           47,195           43,870           41,005           45,852           50,191           54,525           60,124           62,225           63,792           65,346           38,702	PLANO \$299,315 43,639 43,893 41,556 41,899 45,208 46,826 53,949 56,365 59,440 52,547 54,756 59,389 67,616 66,404 71,695 73,711 76,055 79,350 86,813 65,166	RICHARDSON* \$200,017 23,175 21,441 17,186 17,197 18,402 19,577 18,831 21,171 21,480 21,239 23,174 23,112 23,722 25,556 28,481 29,757 31,767 34,763 35,754 29,153	ROWLETT \$13,744 1,789 2,232 2,406 2,491 2,825 3,342 6,560 5,574 5,498 5,264 5,780 5,443 4,662 5,154 5,395 5,732 6,471 6,656 7,092 3,662	UNIVERS ITY PARK \$23,836 2,191 2,131 1,947 1,761 1,782 3,471 2,810 2,800 2,902 2,690 2,858 3,247 3,118 3,210 3,639 3,833 3,871 4,053 4,333 3,373	COPPEL/ FLOWER MOUND \$2,991 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
FIS CAL           YEAR           Yrs. 1984           to 1999           2000           2001           2002           2003           2004           2005           2006           2007           2008           2009           2011           2012           2013           2014           2015           2016           2017           2018           2019 YTD           TOTAL	HEIGHTS           \$698           102           113           112           133           158           125           175           198           221           208           237           333           353           398           436           493           506           517           579           504 <b>6,599</b>	HIGHLAND PARK \$16,724 1,488 1,517 1,459 1,422 1,557 1,743 1,857 2,012 2,250 2,122 2,240 2,418 2,769 2,814 3,272 3,351 3,466 3,360 3,941 3,233 <b>65,020</b>	IRVING           \$341,255           41,643           37,480           34,078           32,652           34,630           36,805           39,697           41,717           47,195           43,870           41,005           45,852           50,191           54,525           60,124           62,225           63,792           65,346           38,702           1,274,281	PLANO \$299,315 43,639 43,893 41,556 41,899 45,208 46,826 53,949 56,365 59,440 52,547 54,756 59,389 67,616 66,404 71,695 73,711 76,055 79,350 86,813 65,166 <b>1,485,659</b>	RICHARDSON* \$200,017 23,175 21,441 17,186 17,197 18,402 19,577 18,831 21,171 21,480 21,239 23,174 23,112 23,722 25,556 28,481 29,757 31,767 34,763 35,754 29,153 <b>684,913</b>	ROWLETT \$13,744 1,789 2,232 2,406 2,491 2,825 3,342 6,560 5,574 5,498 5,264 5,780 5,443 4,662 5,154 5,395 5,732 6,471 6,656 7,092 3,662 109,374	UNIVERS ITY PARK \$23,836 2,191 2,131 1,947 1,761 1,782 3,471 2,810 2,800 2,902 2,690 2,858 3,247 3,118 3,210 3,639 3,833 3,871 4,053 4,333 3,373 83,665	COPPEL/ FLOWER MOUND \$2,991 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
FIS CAL YEAR Yrs. 1984 to 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 YTD	HEIGHTS \$698 102 113 112 133 158 125 175 198 221 208 237 333 353 398 436 493 506 517 579 504	HIGHLAND PARK \$16,724 1,488 1,517 1,459 1,422 1,557 1,743 1,857 2,012 2,250 2,122 2,240 2,418 2,769 2,814 3,272 3,351 3,466 3,360 3,941 3,233	IRVING           \$341,255           41,643           37,480           34,078           32,652           34,630           36,805           39,697           41,717           47,195           43,870           41,005           45,852           50,191           54,525           60,124           62,225           63,792           65,346           38,702	PLANO \$299,315 43,639 43,893 41,556 41,899 45,208 46,826 53,949 56,365 59,440 52,547 54,756 59,389 67,616 66,404 71,695 73,711 76,055 79,350 86,813 65,166	RICHARDSON* \$200,017 23,175 21,441 17,186 17,197 18,402 19,577 18,831 21,171 21,480 21,239 23,174 23,112 23,722 25,556 28,481 29,757 31,767 34,763 35,754 29,153	ROWLETT \$13,744 1,789 2,232 2,406 2,491 2,825 3,342 6,560 5,574 5,498 5,264 5,780 5,443 4,662 5,154 5,395 5,732 6,471 6,656 7,092 3,662	UNIVERS ITY PARK \$23,836 2,191 2,131 1,947 1,761 1,782 3,471 2,810 2,800 2,902 2,690 2,858 3,247 3,118 3,210 3,639 3,833 3,871 4,053 4,333 3,373	COPPELI/ FLOWER MOUND \$2,991 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Exhibit 107 Sales Tax Collections by City Since Inception (\$000s)



# **D. DEBT PROGRAM**

# DART's Debt Program

On January 23, 2001, the Board approved a Master Debt Resolution which authorized DART to pledge its sales tax revenues for Senior Lien Debt (Bonds) and Senior Subordinate Lien Debt (Commercial Paper).

*Bonds* – With the passage of a bond referendum on August 12, 2000, DART received voter authorization to issue up to \$2.9 billion of solely pledged Senior Lien sales tax-backed long-term debt (sales tax bonds). A change to DART's enabling legislation was enacted during the 2009 Texas legislative session allowing DART to pledge multiple revenue sources as a first lien on Senior Lien Long-Term Bonds (multi-revenue bonds). This change allows DART to issue more than \$2.9 billion in long-term debt, provided that DART issues bonds backed by multiple revenue sources.

The Office of the Attorney General of Texas disagreed with that interpretation and on July 23, 2012, DART filed a Bond Validation Petition in District Court 160 in Dallas County. DART sought a judicial ruling clarifying whether a \$2.9 billion limitation on "solely" pledged Sales Tax Revenue Bonds applies to "combined" Pledged Revenue Bonds. The hearing was conducted on August 13, 2012, and the Court concurred with DART's position. As a result, DART is no longer limited to \$2.9 billion in long-term debt so long as the debt is backed by a combined pledge of revenues (sales taxes plus another revenue source).

*Commercial Paper* – The Board has authorized the issuance of up to \$125 million in Commercial Paper notes, backed by self-liquidity, for capital acquisition purposes. DART maintains at least 2.0 times the debt service coverage amount for the notes and ensures that no more than \$35 million of the notes mature within five days. As of September 2018, DART had \$125 million in Commercial Paper debt outstanding.

# Debt Program Structure

DART's two-tiered debt structure program is designed to meet capital funding requirements and to provide flexibility to meet changing debt market conditions. The commercial paper program is issued to meet temporary capital funding requirements and to access variable interest rates when the financial markets dictate that strategy to be advantageous. Long-term bonds are used as the ultimate capital financing instrument for long-lived assets such as buildings and rail lines.



# Exhibit 108 is DART's Annual Debt Service Schedule as of September 30, 2019.

Fiscal Year	Principal	Interest	BABS Reimbursement	Net Interest	Total Net Debt Servi
FY20	\$59,974,081	\$152,016,444	(\$21,133,791)	\$130,882,653	\$190,856,73
FY21	62,688,511	149,293,952	(\$21,133,791)	128,160,161	190,848,6
FY22	65,449,816	146,535,171	(\$21,133,791)	125,401,380	190,851,1
FY23	68,358,050	143,620,688	(\$21,133,791)	122,486,897	190,844,9
FY24	67,963,270	140,509,814	(\$22,530,694)	117,979,120	185,942,3
FY25	68,495,533	137,454,353	(\$22,530,694)	114,923,659	183,419,1
FY26	71,494,899	134,454,999	(\$22,530,694)	111,924,305	183,419,2
FY27	73,871,429	131,269,435	(\$22,530,694)	108,738,741	182,610,1
FY28	77,195,186	127,954,733	(\$22,530,694)	105,424,039	182,619,2
FY29	81,036,235	124,239,143	(\$22,530,694)	101,708,449	182,744,6
FY30	85,169,642	120,099,868	(\$22,530,694)	97,569,174	182,738,8
FY31	89,550,477	115,723,857	(\$22,530,694)	93,193,163	182,743,6
FY32	94,213,271	111,123,537	(\$22,530,694)	88,592,843	182,806,1
FY33	98,964,174	106,359,021	(\$22,530,694)	83,828,327	182,792,5
FY34	103,547,722	101,410,291	(\$22,530,694)	78,879,597	182,427,3
FY35	108,733,993	96,213,577	(\$22,530,694)	73,682,883	182,416,8
FY36	118,843,849	90,579,677	(\$22,121,945)	68,457,732	187,301,5
FY37	124,238,944	84,454,919	(\$21,288,174)	63,166,745	187,405,6
FY38	124,635,656	78,175,477	(\$19,985,127)	58,190,350	182,826,0
FY39	128,805,258	71,756,220	(\$18,197,365)	53,558,855	182,364,1
FY40	135,818,349	64,931,297	(\$16,345,026)	48,586,270	184,404,6
FY41	141,155,029	57,661,184	(\$14,425,788)	43,235,396	184,390,4
FY42	146,705,406	50,109,322	(\$12,437,276)	37,672,046	184,377,4
FY43	152,519,585	42,226,083	(\$10,366,317)	31,859,766	184,379,3
FY44	150,287,678	34,207,316	(\$8,209,613)	25,997,703	176,285,3
FY45	156,569,798	26,073,222	(\$5,974,372)	20,098,850	176,668,6
FY46	105,191,064	19,345,870	(\$4,261,324)	15,084,546	120,275,6
FY47	109,276,597	14,078,631	(\$3,091,443)	10,987,188	120,263,7
FY48	113,531,520	8,605,830	(\$1,882,892)	6,722,937	120,254,4
FY49	112,868,943	2,991,876	(\$634,398)	2,357,478	115,226,4
FY50	555,004	159,639	-	159,639	714,6
FY51	571,543	142,854	-	142,854	714,3
FY52	588,575	125,729	-	125,729	714,3
FY53	606,114	107,609	-	107,609	713,7
FY54	624,177	89,438	-	89,438	713,6
FY55	642,777	70,561	-	70,561	713,3
FY56	661,932	51,178	-	51,178	713,1
FY57	681,657	31,047	-	31,047	712,7
FY58	701,971	10,488	-	10,488	712,4

# Exhibit 108 DART Annual Debt Service Schedule

Exhibit 109 is a list of DART's long-term bond issuance credit ratings:

	Standard & Poor's	Moody's Investor	Fitch
	Rating Services	Services	Ratings
Series 2007	AA+	Aa2	AA-
Series 2009B	AA+	Aa2	No rating sought
Series 2010A	AA+	Aa2	No rating sought
Series 2010B	AA+	Aa2	No rating sought
Series 2012	AA+	Aa2	No rating sought
Series 2012A*	AA+	Aa2	No rating sought
Series 2014A	AA+	Aa2	No rating sought
Series 2014B	AA+	Aa2	No rating sought
Series 2015	AA+	No rating sought	No rating sought
Series 2016A	AA+	Aa2	No rating sought
Series 2016B	AA+	Aa2	No rating sought
Series 2018	AA+	Aa2	No rating sought
Series 2019	AA+	Aa2	No rating sought

Exhibit 109
Long-Term Bond Credit Ratings

\*TIFIA Bonds

Exhibit 110 shows DART's weighted average interest rate on long-term debt as of September 30, 2018.

	U	U			
	Series	All-In Rate At Issue		Remaining Principal (000s)	Final Payment Date
Bond Pri	ncipal Outstanding	& Rates as o	of 9/30/19	)	
	2007	4.492%		\$118,395	12/1/2032
	2009B *	4.010%		\$466,970	12/1/2044
	2010A	2.740%		\$55,695	12/1/2023
	2010B *	3.260%		\$729,390	12/1/2048
	2012	3.513%		\$113,995	12/1/2042
	2012A	2.910%		\$98,726	12/1/2047
	2014A	3.220%		\$354,435	12/1/2036
	2014B	3.920%		\$46,555	12/1/2043
	2015	2.090%		\$94,395	12/1/2027
	2016A	3.780%		\$482,530	12/1/2048
	2016B	2.912%		\$228,900	12/1/2038
	2018	2.980%		\$11,706	12/1/2057
	2019	2.690%		\$301,095	12/1/2038
Combine	ed Weighted Average	3.377%	Total	\$3,102,788	

Exhibit 110 Weighted Average Interest Rate

\* Build America Bonds subject to federal subsidy changes.



# **E. FARES**

# **DART Fare Collection**

DART entered into an interlocal agreement with the City of Dallas to manage and operate the public transportation services known as Dallas Transit System (DTS), empowering the DART Board to establish fares for any and all services provided. On September 18, 1983, the interim DART Board called for a public hearing to reduce the base fare to \$0.50. The Board approved this fare reduction December 6, 1983, making it effective January 1, 1984. In February 1988, DART formally acquired the Dallas Transit System and its operations from the City of Dallas. A history of DART's fare structure is shown in Exhibit 110. DART's current fare structure is shown at Exhibit 111.

Approval Date	Effective Date	Base Rate	Board Resolution	Comments
December 6, 1983	January 1, 1984	\$0.50	830026	Multiple fare rates for different cities and routes
December 16, 1986	February 1, 1987	\$0.75	860106	Two-year phased-in fare increase
December 8, 1987	February 1, 1987	\$0.75	870100	Rescinded second year rate increase approved in Resolution No. 860106
June 10, 1997	August 1, 1997	\$1.00	970101	Consolidated all fares and increased some fare types including Paratransit
November 26, 2002	March 3, 2003	\$1.25	020192	
April 24, 2007	October 1, 2007	\$1.50	070064	Across-the-board fare increase with a two-year phased-in approach for Paratransit
May 12, 2009	September 14, 2009	\$1.75	090067	Fare increase for all base fares, excluding Paratransit
August 28, 2012	December 3, 2012	\$2.50	120105	Fare increase for all base fares, excluding Paratransit
February 12, 2018	March 1, 2018	\$3.00	180017	Changes to some passes and programs in March 2018, across-the-board fare increase in August 2018.

Exhibit 111 DART Fare Structure History



# FY 2019 Fare Structure Amendment

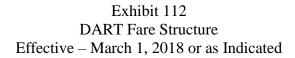
The DART Board approved a fare structure amendment on February 13, 2018. The fare structure amendment met the financial commitment in the Twenty-Year Financial Plan and complies with Board-adopted Policy. The amendment made changes to some of the passes and programs offered by DART, as well as change to DART fares. The timing of the changes generally coincides with the implementation of the new payment system.

Fares: In general, the fare increase represents a 20% price increase except midday passes increase only  $25\phi$ , from \$1.75 to \$2.00. Two-hour passes were expanded to passes that are good from start of service until noon and from noon until end of service. DART re-introduced single-ride fare for bus service at \$2.50. Generally, the new fare became effective August 2018.

New Payment System: The new payment system includes contactless payment cards available at hundreds of retail locations throughout the service area, as well as an enhanced version of the DART mobile ticket app GoPass. Riders tap their DART card to the validator – or activate their GoPass ticket – as the travel on DART. The new payment system was new beneficial features including:

- Stored value a payment system feature that allows DART riders to load value into an account to use to purchase DART passes or pay for travel.
- Best value the payment system deducts the lowest appropriate fare from the customer's stored value as the customer travels on DART.
- Fare capping a pay-as-you-go feature that allows DART riders to travel with their GoPass or DART card, the DART payment system keeps track of the amount spent, and automatically cap the daily and monthly fare so the rider will not spend more than needed on travel. Riders pay for each part of their journey until the daily or monthly amounts are reached, then pay no more. No need to pay the monthly amount up front!
- Lost card value protection a customer that has registered their DART card account can have their stored value (account balance) restored if their card is lost.
- Customers can add value to their GoPass account without the use of a credit card by using cash at the retail locations.

Exhibit 112 shows the current fare structure.



Section 1: Product Fare Schedule	<b>Effective Date</b>
	<u>August 8, 2018</u>
Single Ride (1) (available only on bus)	<b>#2.5</b> 0
Local	\$2.50
Reduced Fare	1.25
Single Ride - Paratransit	<u>January 1, 2020</u>
Paratransit – Demand Response Van/Sedan Service	\$3.50
Paratransit – Book of 10	35.00
Paratransit – Trips to Fixed-Route Stops	1.00
Paratransit-Eligible Riders on Fixed-Route Service	FREE
A.M./P.M. (2)	August 8, 2018
Local (3)	\$3.00
Regional (4)	6.00
Reduced Fare (5)	1.50
<u>Mid-Day (9:30 a.m. – 2:30 p.m.) (6)</u>	
Local	2.00
Regional	4.00
Day	
Local	6.00
Regional	12.00
Reduced (5)	3.00
Regional Day Pass Book of 10	
	Nov. 1, 2018
Regional – Book of 10 (7)	36.00

Parenthetical numbers 1 through 8 refer to the footnotes following this schedule.

192.00

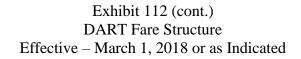


# Exhibit 112 (cont.) DART Fare Structure Effective – March 1, 2018 or as Indicated

# Section 1: Product Fare Schedule (cont.)

Effective Date August 1, 2018	
August 1, 2018	}
Month	
Local \$96.00	)
Regional 192.00	)
Reduced Fare (5) 48.00	)
Lone Star – Local $(8)$ 48.00	)
Lone Star – Regional (8) 96.00	)
<u>January 1, 2020</u>	1
Paratransit \$112.00	)
Annual August 9, 2010	>
<u>Annual</u> Local <u>August 8, 2018</u> \$960.00	
Local \$900.00	,
Regional 1,920.00	)
Senior (regional) 576.00	
Corporate – Local 720.00	
Corporate – Regional 1,440.00	
Higher Education Program - Middle & High School, Colleges & Trade Schools	
Passes for Entire Student Body:	
Quarter 60.00	)
Semester 78.00	)
Passes Purchased by Individual Students	
Quarter 144.00	)

Semester



# Section 1: Product Fare Schedule (cont.)

Parenthetical numbers 1 through 8 refer to the footnotes following this schedule.

#### Footnotes to Product Fare Schedule:

- 1. Single trip on a DART bus. No pass issued for this trip.
- 2. A.M./P.M.: Tickets purchased from start of service day until noon are valid for travel until noon; tickets purchased at noon to end of service day are valid until end of DART service day. Valid for travel on all DART buses and trains, Trinity Railway Express Service, DART On-Call and Flex service.
- 3. Local: All DART buses and trains, Trinity Railway Express Service between Union Station and CentrePort Station, DART On-Call and Flex service.
- 4. Regional: All DART buses and trains, all Trinity Railway Express Service, Trinity Metro in Fort Worth, the ATrain, and DCTA in Denton.
- 5. Reduced fare passes are Regional passes (as defined by #4, above). Reduced Fares are applicable on bus and rail for the following:
  - a. Seniors and non-paratransit disabled with a valid ID.
  - b. DART shuttle bus route.
  - c. Children elementary through middle school.
  - d. Students attending high schools within the DART Service Area, with a DART-issued student ID.
  - e. Full-time undergraduate students attending colleges and trade schools in the DART Service Area, with a DART-issued student ID, whose schools are not participating in the Higher Education Program (see #4 in Section 4 Special Programs).
  - f. Service area residents participating in a transitional program administered by an approved social agency, with a valid DART-issued ID.
- 6. Mid-Day Pass: Pass that allows unlimited travel between 9:30 a.m. and 2:30 p.m
- 7. Regional Day Pass Book of 10 is available only to government, alternative schools, and nonprofit institutions to be issued to DART Service Area clients. Passes for alternative schools are valid 6:00 a.m. to 6:00 p.m., Monday through Friday. To be replaced with DART contactless payment cards, at \$3.60 per card, that will enable Regional travel for a day.
- 8. Lone Star cardholders with TANF (Texas Temporary Assistance for Needy Families) benefits are eligible to purchase local and regional Monthly Passes at a 50% discount from listed fares. This discount does not apply to Reduced or High School Monthly Pass purchases.

# Exhibit 112 (cont.) DART Fare Structure Effective – March 1, 2018 or as Indicated

# Section 2: Free Fares

The following categories of riders may ride bus, light rail, or commuter rail without fare payment. (This section is not applicable to charters nor to Paratransit service, except as noted.)

- a) Paratransit-eligible riders on fixed-route services with a valid Paratransit identification card.
- b) ADA (Americans with Disabilities Act) Paratransit-eligible individuals who are authorized to have one personal care attendant (PCA) may have the PCA travel with them on fixed-route service at no charge. A proper ID indicating that an attendant is necessary is required.
- c) Children under the age of five (maximum of two per trip) when accompanied by an adult (age 18 or older) paying the appropriate Local, Regional, or Reduced fare. Any additional child under the age of five traveling with that adult, or any child accompanied only by person(s) younger than 18, shall be charged reduced fare.
- d) Voters showing a valid voter registration card during the hours of 6:00 a.m. to 8:00 p.m. on a state or national primary or general election day in accordance with Board Resolution No. 900232.
- e) Uniformed police officers and plain-clothes police officers displaying badges issued by cities in the DART Service Area.
- f) Uniformed parking enforcement officers.
- g) Downtown Safety Patrol personnel when in uniform and when traveling within the Dallas Central Business District.
- h) Active employees and retirees, and one family member designated by the employee or retiree, with DART photo ID card. (Also honored on Paratransit service with appropriate Paratransit certification and identification.)
- i) Part-time DART employees with DART photo ID card. (Also honored on Paratransit service with appropriate Paratransit certification and identification.) Temporary employees do not qualify for this benefit unless individually authorized by DART management.
- j) Current and former DART Board Members and their spouses with valid DART photo ID card. (Also honored on Paratransit service with appropriate Paratransit certification and identification.)
- k) Employees of contractors who operate fixed-route or demand responsive service on DART's behalf and certain engineering consultants, including General Engineering, System Design, and Design Contract Integration consultants domiciled in the DART headquarters, who have been provided with valid DART photo ID cards. (Also honored on Paratransit service with appropriate Paratransit certification and identification.)

# Exhibit 112 (cont.) DART Fare Structure Effective – March 1, 2018 or as Indicated

1) McKinney Avenue Trolley employees or operators with valid Trolley ID card.

The following table lists the services operated by DART free of charge to riders.

Service Operated by DART Free of Charge to Riders			
Service	Description	Termination Dates	
D-Link	Circulator service in Dallas	Indefinite	
	Central Business District		
Dallas Streetcar	Streetcar service between	Indefinite	
	Dallas Union Station and		
	Dallas Bishop Arts district		
Love Link	Bus service connection	Free service terminates	
	from Dallas Love Field to	upon implementation of	
	DART Inwood/Love Field	DART contactless payment	
	Station	cards.	

# Section 3: Stored Value and Fare Capping

Stored value is a payment system feature that allows DART riders to load value into an account to use to purchase DART passes or pay for travel.

# GoPass Accounts

Customers can set up an account on-line using the DART GoPass mobile app.

# DART Card Accounts

In addition, customers can acquire a DART payment card. The DART payment system will associate a customer's DART card with an account. The customer can then register their DART card account to enable valuable features such as lost card value protection. Customers must tap their DART cards at payment system validators upon each bus and rail boarding during their journey on DART.

Customers can acquire a DART payment card at retail locations throughout the service area, online, at the DART Store, or by calling DART Customer Service. The cost of a card equals the cost of a day's local transit service. Upon activation, the account associated with the card will have transit value equal to the cost of the card.

# Loading Value

Customers can load value at retail locations throughout the service area, on-line, at the DART Store, or by calling DART Customer Service.

# Exhibit 112 (cont.) DART Fare Structure Effective – March 1, 2018 or as indicated

# Section 3: Stored Value and Fare Capping (cont.)

# Fare Capping

Fare capping is a pay-as-you-go feature that allows DART riders to make several trips with their GoPass or DART card, and the DART payment system will automatically cap the daily and monthly (calendar month) fare so the rider will not spend more than needed on travel. Riders pay for each part of their journey until the cap amounts are reached, then pay no more for the rest of the day or month. To benefit from fare capping, riders must tap their DART card at the validator – or activate their GoPass ticket – prior to boarding on every trip.

Fare capping DART cards for Paratransit service is scheduled to become available no sooner than January 1, 2020.

# **Section 4: Special Programs**

1. Customer Promotions:

The President/Executive Director or his designee may approve the free distribution of prepaid media, VIP passes, or special coupons as needed for the following purposes:

- a) To support marketing programs, including but not limited to special route promotions, introductory shuttles, air quality improvement programs, and focus group or survey participation.
- b) To provide inbound travel to jury duty on all DART service, including bus, rail, and Paratransit, to all individuals showing a jury summons with the current date displayed. A pass valid for outbound travel on all DART service, including bus, rail, and Paratransit, will be distributed by Court Services upon request to those individuals reporting for jury duty.
- c) To compensate customers for inconvenience or system problems.
- d) To allow courtesy access to the system for special tour groups, non-local DART visitors, or consultants involved in DART system planning. As a tax-supported governmental agency, DART does not contribute free transportation to other governmental agencies, social service agencies, or charitable organizations.
   e)
- 2. Convention and Special Event Passes:

Day Passes for the dates specified on the ticket for convention registrants and special event participants will be priced at the appropriate (Local or Regional) Day Pass rate. A sliding

# Exhibit 112 (cont.) DART Fare Structure Effective – March 1, 2018 or as indicated

# Section 4: Special Programs (cont.)

scale with discounts ranging from 10% to 30% of the convention and special event base rate will be available on advanced bulk purchase of 2,000 or more passes.

Passes Purchased	Discount
2,000 - 4,999	10%
5,000 - 9,999	20%
10,000 - 14,999	25%
15,000 and above	30%

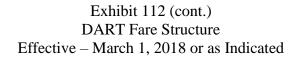
- 3. Corporate and Residential Programs:
  - a. Annual passes, known as Corporate annual passes, may be purchased by businesses, companies, apartment/condominium complexes, or other employer organizations. Minimum purchase requirement is 5 passes. Pricing is as shown in Section 1 Product Fare Schedule.
  - b. Emergency Ride Home (ERH) program, administered by DART, will be made available to employees registered in the Corporate Annual Pass Program.
- 4. Higher Education Programs (Passes Must Be Purchased by the School)

Semester and quarterly passes may be purchased for full-time students by colleges, universities, trade schools, middle schools, or high schools. High school passes are valid Monday through Friday only until March 2018, full week thereafter. Pricing will be as shown in Section 1: Product Fare Schedule.

5. Route Promotion Pass

The Route Promotion Pass is produced through Consumer Programs to support DART's public awareness and outreach efforts. Marketing will negotiate with Special Events organizers to determine where DART could benefit from the exposure the event media and attendance could provide, and the event organizers are interested in including DART Day Passes for their attendees. The parameters of the negotiation are as follows:

- a. The event is within a DART Service Area city.
- b. DART must receive a minimum benefit of a 2-to-1 ratio based on the value of the passes DART is willing to provide to the event. This can be through barter, cash, or any combination of the two.
- c. DART must receive a minimum benefit of a 2-to-1 ratio based on the value of the passes DART is willing to provide to the event. This can be through barter, cash, or any combination of the two.



### Section 4: Special Programs (cont.)

- d. The media provided by the event must promote using DART.
- e. A simple agreement is signed by both DART and the event organizer/chair.
- f. The President/Executive Director or his designee may sign the agreement. Concurrence from the Senior Vice President – Finance or Chief Financial Officer must be received before presenting the agreement for signature.
- g. The Marketing Department will provide documentation to the Finance Department, within 90 days after the conclusion of the special event, that supports the value of the barter used to pay for the passes.
- 6. DART Service Outside Service Area Boundary (replaces "System Fare")

DART Board Policy III.07: *DART Service Outside Service Area Boundary* authorizes and provides guidance regarding the provision of DART service outside its service area boundary. Policy III.07 requires a service agreement approved by the DART Board of Directors. This agreement will establish fares for riders using the service.

7. Site Specific Shuttle Service

DART Board Policy III.16 *Site Specific Shuttle Service Policy* authorizes and provides guidance regarding the provision of DART circulator/distributor shuttle service which connects to rail stations or transit centers operated by employers or other private entities.

Policy III.16 requires proposals for service be approved by the DART Board of Directors. The approved agreement will establish fares for riders using the service.

8. Transportation Network Companies

DART continues to explore mobility-on-demand options using transportation network companies that can connect riders to the DART system, as well as provide public transportation within areas difficult to serve efficiently with traditional transit service, using bicycles, cars, vans and other vehicles. These companies are responsible for some or all of the components – customer access, dispatch, transportation, fare collection, and related information – of delivering customers from origin to destination. The journey may represent premium service with greater customer convenience, improved travel times, and closer origin and destination endpoints. Fare structure may appropriately reflect this premium.

Recognizing the experimental nature of exploring mobility-on-demand options, this portion of the DART Fare Structure authorizes DART management to establish fare structures for these services that are designed to encourage ridership, reflect customer convenience levels and perceived economic value, allow efficient implementation and administration, and contribute to financial sustainability.



# Fares by Type

Exhibit 113 identifies the fares by types DART customers can purchase based on the approved fare structure. This also provides the estimated sales and revenue by fare type.

			-		1			
	FY 2017	ACTUA	L FY 2018	Actua	d FY 2019	Actuals	FY 2020	Estimated
Type of Fare	Actual Units	Actual	Actual Units	Actual	Actuals Units	Actuals	Estimated	Estimated
Single Fare	Units	Revenue	Units	Revenue	Units	Revenue	Units	Revenue
Local	-	\$ -	11,480	\$ 28,700	119,779	\$ 299,448	161,086	\$ 340,665
System	-	-	-	-	-	-	-	-
Regional	-	-	-	-	-	-	-	-
Reduced	-	-	5,461	6,826	38,570	48,213	38,551	48,188
Single Ride - Bus	21,220	000 044		050 0.0	-	-	-	-
Paratransit (book of ten) Total Single Fare	31,328 31,328	939,840 \$ 939,840		959,268 \$ 994,794	31,652 190,001	949,568 \$ 1,297,228	32,450 232,086	973,488 <i>1,362,341</i>
AM/PM	51,528	φ ,55,840	40,720	φ 994,794	150,001	φ 1,297,220	232,000	1,502,541
Local			506,983	\$ 1,520,949	1,597,411	\$ 4,792,215	1,637,649	\$ 4,912,931
Regional			-	-	3,136,205	9,654,483	3,215,206	9,897,680
Reduced			121,887	182,831	429,490	644,231	440,309	660,459
Mesquite			-	-	879,920	1,319,871	902,085	1,353,119
High School			-	-	-	-	-	-
College/Trade Total AM/PM	-	\$-	628,870	\$ 1,703,780	6,043,025	\$ 16,410,800	6,195,249	16,824,189
2-Hour	-	φ -	028,870	\$ 1,703,780	0,043,023	\$ 10,410,800	0,193,249	10,824,189
Local	3,785,876	\$ 9,464,68	3,357,518	\$ 8,076,935	995.0	\$ 2,488	- 1:	s -
Regional	40,606	203,030		193,965		180	_ ľ	-
Reduced	730,510	913,13		696,183	102	128		-
Mesquite	194	679	42	147	-	-		-
High School	254,173	317,717		177,705	-	-	-	-
College/Trade	110,035	137,544		102,275	-	-	-	-
Total 2-Hour	4,921,394	\$ 11,036,79	6 4,238,274	\$ 9,247,210	1,133	\$ 2,795	- ;	ŝ -
Midday Local	886,013	\$ 1,550,52	3 754,805	\$ 1,335,121	882,267	\$ 1,764,514	904,492	1 808 062
Regional	3,603	\$ 1,550,52. 12,61		\$ 1,555,121 14,998	882,207	5 1,764,514	904,492	\$ 1,808,962
Total Midday	889,616			\$ 1,350,119	882,267	\$ 1,764,514	904,492	\$ 1,808,962
Day Passes								
Local	3,030,139	\$ 15,150,69	5 2,819,184	\$ 13,511,004	1,642,160	\$ 9,852,936	1,641,338	\$ 9,848,001
System	-	-	-	-	-	-	-	-
Regional	39,645	396,450		640,470		1,523,160	126,866	1,522,397
Reduced	981,883	2,454,70		2,482,847		1,649,553	549,580	1,648,727
High School College/Trade	127,901 147,986	319,753 369,965		231,724 295,125	19,703 34,450	59,109 103,350	19,693 34,433	59,079 103,298
Mesquite	319	2,23		295,125	72	504	72	504
Vouchers (book of ten)	63,481	1,904,430		1,629,960	46,882	1,742,386	46,859	1,741,513
Total Day Passes	4,391,354	\$ 20,598,23	3,998,805	\$ 18,791,375	2,420,053	\$ 14,930,998	2,418,841	
7-Day Passes								
Local	84,372	\$ 2,109,300	74,741	\$ 1,868,525	-	\$ -	0	s -
System	-	-		-	-	-	-	-
Regional Total 7-Day Passes	689 <b>85,061</b>	34,45 \$ 2,143,75		35,50 \$ 1,904,025	-			- \$-
Monthly Passes	85,001	\$ 2,143,730	/ /3,431	\$ 1,904,023		<i>ф</i> -		-
Local	111,121	\$ 8,889,680	117,320	\$ 9,538,672	94,034	\$ 9,027,264	93,987	\$ 9,022,743
System		-	-	2,700		900	-	900
Regional	2,450			476,43			1,659	318,560
Reduced	29,934			1,275,99				1,254,907
Mesquite	60	6,00		11,10		10,100		10,095
Lone Star - Local	29	1,16		59				1,391
Lone Star - Regional High School	4 20,589	16 823,56		97 742,33		384 5 842,160		384 841,738
College/Trade	4,966	198,64		742,55 52,05				29,121
Total Monthly Passes	169,153							
Annual Passes	,	, , , , , , , , , , , , , , , , , , , ,		, , , , , , , , , , , , , , , , , , , ,	., .	1 1 1 1 1 1		
Local	172	\$ 61,30	1 226	\$ 74,957	366	\$ 393,993	375	\$ 403,917
System	-	-	-	-	-	-		-
Regional	7	3,00		8,18				20,524
Senior	109	16,84		3,24				64,366
Corporate Programs Total Annual Passes	13,528 13,816	9,351,30 \$ 9,432,44		9,859,79 \$ 9,946,176		5 10,056,468 \$ 10,533,265	3 13,763 14,261	10,309,791 10,798,598
I otal Annual Passes Other Programs	15,810	φ 9,452,440	, 14,312	φ 9,940,170	13,911	φ 10,553,205	14,201	10,790,598
Secondary/College Decals	36,288	\$ 2,029,08	5 55,745	\$ 1,840,285	59,152	\$ 2,062,608	60,642	\$ 2,114,565
Special Events	30,053	150,26		50,70		42,47		43,541
Total Other Programs	66,341	\$ 2,179,35		\$ 1,890,985			75,156	
Total Pass Sales	10,568,063	59,402,110	10,014,603	57,929,323	9,763,837	58,530,271	9,980,152	59,355,555

Exhibit 113 Revenue by Fare Type Analysis



# F. OPERATIONAL INFORMATION

Historical data: The data that follows reflects the construction mode that DART has been in since the early 1990s. Exhibit 121 denotes key dates regarding the construction of the DART light rail system. On August 13, 1983, DART was created when 58 percent of voters in 14 cities and Dallas County cast more than 101,000 ballots in favor of regional transportation. DART assumed operations of Dallas Transit System and cut the base bus fare from 70 to 50 cents, and senior fares from 25 to 15 cents. In January 1984, the voter-approved one-cent sales tax took effect, and DART officially began operations. On June 14, 1996, the first 11.2 miles of DART's 20-mile light rail transit starter system opened on time and within budget, with weekend festivities followed by a week of free rides. Revenue service began on June 24. With the opening of Blue Line south extension to the UNT-Dallas campus on October 24, 2016, DART now has 93 miles of light rail in service. This is currently the longest light rail system in North America. A map of DART Current and Future Rail Services is located at Exhibit 106.

Exhibit 114 shows the revenue service dates for all of DART's LRT line segments.

Corridor	Line	From	То	Miles	Stations	Opening Date
STARTER SYSTEM					•	
Central Business District	All	West End	Pearl	1.0	4	June 1996
Oak Cliff	Red/Blue	West End	8th & Corinth	3.8	4	June 1996
South Oak Cliff	Blue	8th & Corinth	Ledbetter	4.6	5	June 1996/May 1997
West Oak Cliff	Red	8th & Corinth	Westmoreland	4.6	4	June 1996
North Central	Red	Pearl	Park Lane	6.0	4	Jan 1997
	Starter S	ystem Subtotal		20.0	21	
RED/BLUE LINE EXTENS	IONS					
North Central	Red	Park Lane	Parker Road	12.3	9	July-Dec 2002
Northeast	Blue	Mockingbird	Downtown Garland	11.2	5	Sept 2001-Nov 2002
Northeast	Blue	Downtown Garland	Downtown Rowlett	4.6	1	Dec 2012
South Oak Cliff	Blue	Ledbetter	UNT-Dallas	2.6	2	Oct 2016
	Exten	sion Subtotal		30.7	17	
GREEN LINE					•	
Northwest (NW-1A)	Green	West End	Victory	1.2	1	Nov 2004
Northwest (NW-1B)	Green	Victory	Inwood	2.8	3	Dec 2010
Northwest (NW-2)	Green	Inwood	Bachman	3.2	2	Dec 2010
Northwest (NW-3)	Green	Bachman	Farmers Branch	4.9	3	Dec 2010
Northwest (NW-4)	Green	Farmers Branch	Frankford	5.3	3	Dec 2010
	North	west Subtotal		17.4	12	
Southeast (SE-1A)	Green	Pearl	MLK, Jr.	2.7	4	Sept 2009
Southeast (SE-1B)	Green	MLK, Jr.	Hatcher	1.4	1	Dec 2010
Southeast (SE-2)	Green	Hatcher	Buckner	6.0	3	Dec 2010
	South	east Subtotal		10.1	8	
ORANGE LINE						
Northwest-Irving/DFW (I-1)	Orange	Bachman	Irving Convention Center	5.4	3	July 2012
Northwest-Irving/DFW (I-2)	Orange	Center	Belt Line	3.6	2	Dec 2012
Northwest-Irving/DFW (I-3)	Orange	Belt Line	DFW Airport	5.0	1	Aug 2014
	Orange	Line Subtotal		14.0	6	
ſ	fotal Miles/St	tations in Operation*		93.0	64	

Exhibit 114 LRT Revenue Service Dates

\*Total miles by includes approximately 0.75 miles of pocket track.



#### **Ridership Trends**

Fixed Route Ridership has been decreasing over the last several years, both for DART and much of the transit industry as a whole. A number of factors have contributed to these trends: changes in employment patterns, including growth of jobs outside of the DART Service area; residential gentrification that has dislocated transit customers from central, transit-friendly locations; relatively low gasoline prices; and competition from new transportation services such as Transportation Network Companies (TNC's).

Ridership should continue to increase slowly over the next several years with other service improvements. During FY 2019, DART implemented additional COA-developed route and service enhancements as newly purchased buses are delivered and peak and off-peak period improvements can be implemented.

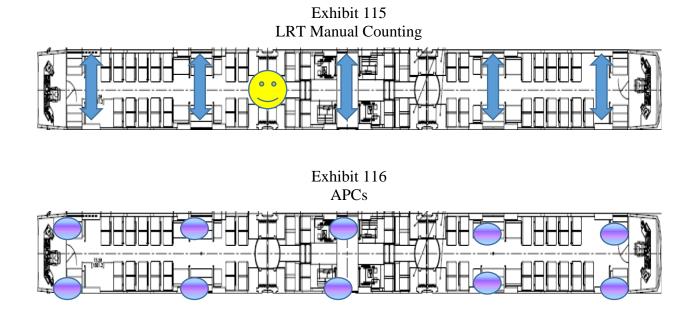
Specific efforts are underway to address the on-time performance of the bus system. These efforts are directed toward improving schedules to more accurately reflect on-street operating conditions; to managing the bus system's performance using the Automatic Vehicle Location (AVL) system to better manage operations and the initiation of a pilot project to provide traffic signal priority to buses in the congested Belt Line road corridor. This latter project will be complimented by an improvement in the service frequency of the primary bus route in the corridor.

Meanwhile, DART is in the process of completing the installation of automated passenger counters (APCs) on its bus fleet. Staff-examined variations between farebox-based counts and APC-based counts – especially where there are high boarding volumes that do not involve physical farebox transactions – and verified that APC-based counts are more appropriate for measurement of bus ridership over the long term. A similar exercise was conducted for light rail, as noted below.

#### LRT Ridership

Ridership counting on light rail was conducted manually from the opening of the light rail system in 1996 through 2011 and was based on a sampling approach. As shown in Exhibit 114, one person counted passengers boarding and alighting through five separate entry/exit points. At low volume times of day and low volume stations, this could be done with reasonable accuracy. Accuracy of the counts suffered during high volume times of the day and at high-volume stations. DART began testing the use of automated passenger counters (APCs) in October 2011. As shown in Exhibit 115, the APCs are able to extract data from all five entry/exit points on each side of each car. The new equipment has been shown to be significantly more accurate than the manual counting method. The result is that ridership counts based on APC data are more than 23% higher than had been previously reported. The APCs also allow DART to count nine times as many cars as could be counted within the available budget using human counters. DART received approval from the FTA to use the APC ridership data as our official data beginning in FY 2012.





# Commuter Rail (TRE) Ridership

TRE Ridership for FY 2019 was trending down by approximately 2.8%. Recent frequency improvements for TRE commuter rail schedules have resulted in significant Saturday ridership improvements. Weekday ridership has not improved to the same degree, but the noticeable losses of previous years have moderated noticeably.

FUNCTION										
	8	2010	1000	2012	2013 11000	2014	2015	30.02	2017	2018
Transport Operations										
Bus Operations	1339	1,207	181	1,487	1,522	14.20	112/1	1,386	1,578	1,309
Commer Rail Operations	2	14	1	1	14	п	2	2	2	2
HOV Lane Opendions*	8	63	63	8	22	<b>e</b> 71	•	•	•	•
Light Rail Operations	225	272	266	919	262	238	98	308	8	8
Purstmast: Operations	14	5	64	9	39	\$	8	60	3	8
Varpoil Operations	ei	e4	64	c4	esi.	e4	e4	e4	CN.	ea
	1,972	696'1	1,859	1942	1,944	1,839	1/8/1	1,940	64.61	1,968
Marinemance										
Vehicle Meinenence	88	802	683	89	338	133	10	722	101	202
No nev elitole Maintenance	214	282	803	a R	20	305	50	380	312	308
	0+8	646	096	2.6	1,008	1035	1,007	1,008	1,018	HOI
Public Safety and Fare Enforcement	221	80	808	319	ŝ	38	8	306	8	381
Operations Total	2,983	3,245	3,128	3,233	3,292	3,236	3,214	3,274	3,319	3300
Administrative	447	405	308	339	889	359	88	374	386	388
Total	3,430	3,080	3,52.6	3,592	3,061	812	3,566	3,648	3,705	3/2/28

Exhibit 116
Number of Employees by Function

\* HOV Lane is managed and operated by Texas Department of Transportation starting from October 1, 2013.

Nov - Number of employees presented how is actual load court of full-time, temperary and pert-time employees at the end of each fitcal year.

Source: DART's personnel data

DALLAS AREA RAPID TRANSIT NUMBER OF EMPLOYEES BY FUNCTION





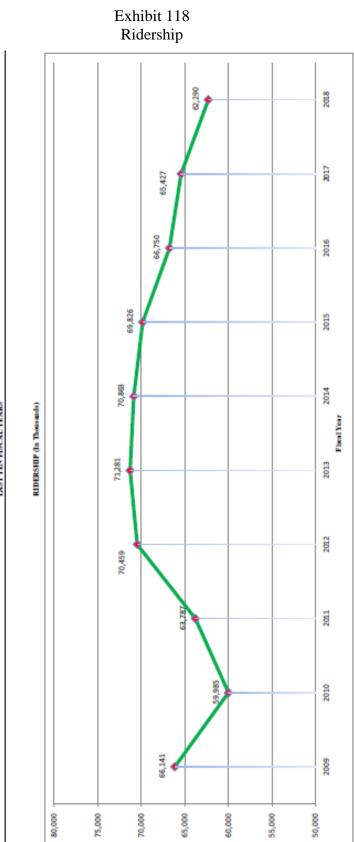
					Field Year	Year				
	6002	2010	2011	2012	2013	2014	2015	2016	2017	2018
AVERAGE WEEKIMY PASSENGERS (KIDER/HIP) Bue	146.023	128,632	907901	131,186	00/ 001	127.430	122.605	113 204	108.72.2	101.063
Light Roil	64,381	59,785	71,748	90,182	8	2228	97,824	96,781	97,112	93,466
Commuter Reil	5,839	8,689	8,482	8,080	7,556	8229	706.7	7,395	7,413	121
Denned Response	3,662	4,004	4,001	4,001	1,845	1,692	17,612	1,233	1,253	1,318
Demand Response-Taxi			1	1	1	1,233	18,484	<b>N</b> N	VN	NN.
Varpool	221386	304.650	3,893	237.516	20,160	3,510	266.377	20.92	216.376	204829
A VERAGE WERKING V REVEN IN MILLING										
	66,8,99	89.626	84,194	87,949	88,730	25728	62.0.68	89,039	89,195	90.818
Light Roul <sup>2</sup>	16,627	16.123	21,897	23,688	20,02	28,433	31.046	31,080	31,827	31,792
Commune Reil 52	1,768	4421	3,815	3,866	3,902	3992	3.992	4.078	5.575	5.674
Demud Response	26,319	28,660	29,242	29,898	14,481	521,01	101,789	7,097	7,822	8,613
Densed Response-Taxi	1	1	1	1	1	13,572	194,431	N/N	NN	MN
Varpodi	13,022	13,803	15,086	15,432	14,301	13,492	8,666	11,589	11/2/11	11,137
	14,575	152,633	154,234	160,833	149,546	156,881	429,003	142,883	145,690	148,034
AVERAGE WEEKDAY REVENUE HOURS										
	6,545	6,352	6,353	6,468	6,732	6706	6,942	7,510	6,945	2,083
Light Bail <sup>2</sup>	2738	804	1,105	1,194	1,377	800	1,436	1,487	1,518	1,417
Commuter Reil N2	6	180	166	169	121	172	173	173	152	254
Denvird Response	1,542	1,752	1,779	1.18,1	1,035	792	1808	25	13	EQ.
Lettered Rosponee-Lax1 Version	318	. 16	377	. 986	. 95	337	2.23	200	202	502
	9,270	9,633	6,780	10,028	9,733	10,239	27,788	10,046	9,786	9,750
AVEAGE WEEKLAY PASSENGESS PER REVENUE MILE										
		1.43	150	1.49	1.46	1.46	1.38	1.27	1.22	T
Light Ruel	3.87	3.71	3.28	3.81	344	33	3.15	3.11	3.05	2.94
Commuter Reil	3.8	1.97	222	2.09	18	500	8	181	1.33	1.27
Denied Response	0.14	0.14	0.14	0.13	0.13	0.17	0.17	0.17	0.16	0.15
Demand Response-Taxi							8.0	VN S	NN NN	ž.
and the second se	1.51	134	139	1.48	8	5	80	154	149	138
A VERAUE WEEKLAY PASSERVIERS PER REVENUEHOUR Bus		69.61	19.90	30.28	19.00	0061	0.01	15.08	19.65	14.97
Light Bail	8.3	M36	6613	75.53	68.97	107.25	8.8	80.89	692	96.9
Commuter Roll <sup>1</sup>	67.11	48.27	51.10	47.81	44.19	47.84	45.71	42.75	29.53	28,43
Demand Response	2.37	229	2.25	221	1.78	2.14	2.18	2.16	1.62	1.87
Demond Response-Taxi		1	1	1	1	•	8.1	V/V	NN.	2
Varpod	10.95	10.55	10.33	10.54	10.41	10.43	8.32	639	6.32	6.01
							1010		100	

Exhibit 117 Level of Service – Average Weekday

Notes (1) Average weeking information for commuter rull for fixed years 2006 to 2009 does not include arrive provided outside DART Service Area. (2) Average weeking revenue rules and hours for rull arrives are our revenue rules and hours.

Source: National Transit Database and internal records





DALLAS AREA RAPID TRANSIT RIDERSHIP LAST TEN PISCAL VEARS

316



DALLAS AREA RAPID TRANSIT REV ENUE MILES LAST TRAPESCAL VIARS

Exhibit 119 Revenue Miles



<sup>\*</sup> Revenue miles for rail services are car revenue miles.



DALLAS AREA RAP ID TRANSIT REVENUE HOURS

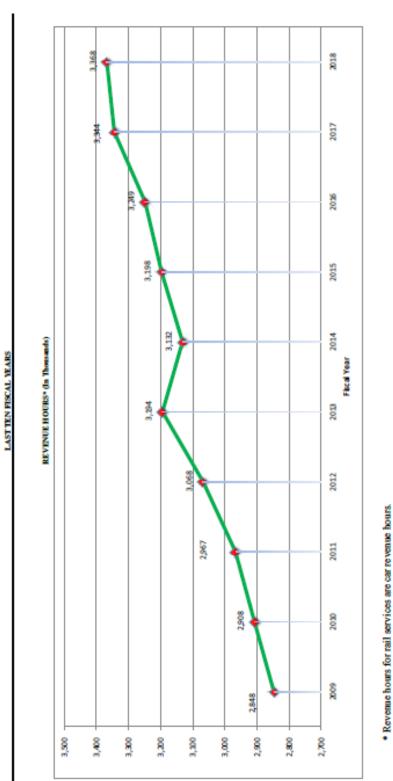


Exhibit 120 Revenue Hours

2) Quatorly Performance Reports for the 4th quator of each fiscal year and internal records.



DALLAS AREA RAPID TRANSIT NUMBER OF VEHICLES AND OPERATING FACILITIES

		2018			162						ven					115					m	14	980'11			64		;	34	10	-		-	
		2017 2		280	162	32	96	115	800	1,133		200	107	23	96	115	186	1'025			e	14	1/2/11		66	64	64	;	34	10	1		-	
		2016		648	163	32	96		190	1,129		503	104	18	106		175	936			e	15	1/2/11		82	62	64	;	34	10	1		-	
		2015		744	163	32	107	125	229	1,400		505	105	18	92	115	162	1,027			e	15	11,973		88	62	64	;	34	10	-		-	
	,	2014		198	9	я	165	R	8	1,493		3	103	ព	148	R	180	080'1			e	5	<i>225</i> /11		8	19	64	;	R	9	-		-	
RS	Flood Very	2013		8	91	я	521		100	1,227		202	102	81	148	•	180	8/6			e	5	12,500		R	8	64	;	R	9	-		-	
LAST TEN FISCAL YEARS		2012		629	81	я	209	•	215	1,251		209	<b>7</b> 2	18	981	•	81	485			e	5	12,500		51	8	64	;	R	9	-		-	
LAST TEP		2011		638	8	6	209	•	200	1,277		507	4	81	186	•	8	815			e	5	12,500		8	8	1	1	R	9	1		-	
		2010		89	13	\$	209	•	178	1,216		556	2	18	8	•	173	610/1			e	5	12,500		8	8	-	;	Ŗ	9	-		-	
		3003		663	115	36	508	•	175	1,198		8.4	84	61	190	•	162	6101			e	15	12,322		45	35	-	;	34	10	-		-	
			Number of vehicles available for service <sup>1</sup>	Bus	Light Roil	Commuter Red	Demand Reported	Domind Reporter-Taxi	Varpoil	Total	Number of vehicles operated during weekday 1	Bus	Light Reil	Commuter Reil	Dennind Reponse	Denned Reponse-Tasi	Varpool	Total	Operating Facilities <sup>2</sup>	Bus	Number of operating garages	Number of transit conters	Number of bus stops	Light Reil	Miles of tracks	Number of stations	Number of operating garages	Commuter Rad	Milles of tracks	Number of stations	Number of operating garages	Demand Response	Number of operating garages	Sources 1) National Transit Database

# Exhibit 121 Number of Vehicles and Operating Facilities

319



PASSENGERS PER REVENUE MILE AND REVENUE HOUR

DALLAS AREA RAPID TRANSIT LAST TENFISCAL YEARS

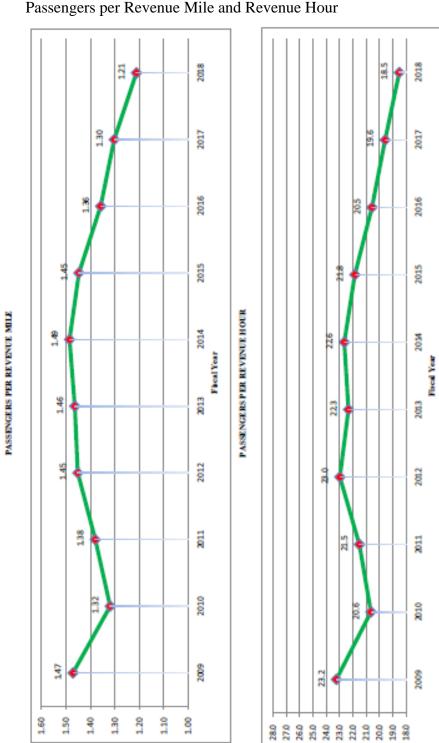


Exhibit 122 Passengers per Revenue Mile and Revenue Hour

2) Quarterly Performance Reports for the 4th quarter of each fiscal year and internal records.

1) National Transit Database

Sources:



DALLAS AREA RAPID TRANSIT NUMBER OF VEHICLES AND OPERATING FACILITIES

LAST TEN FIS CAL YEARS

2008         2009         2010         2011         2012           available for service <sup>1</sup> 728         663         663         658         629           115         115         122         163         163         35           se         209         209         209         209         209         209           se-Taxi         -         -         -         -         -         -         -           se         145         1/13         1/198         1/216         1/277         1/251           operated during weekday <sup>1</sup> -         -         -         -         -         -           all         19         184         190         186         188         188         188         188         188         188         188         188         188         188         188         188         188         188         190         190         196						
ailable for service 1         728         663         663         663         663         663         653 <t< th=""><th></th><th>2013</th><th>2014</th><th>2015</th><th>2016</th><th>2017</th></t<>		2013	2014	2015	2016	2017
728         663         663         658         629           115         115         122         163         163           36         36         44         47         35           209         209         209         209         209           145         175         178         200         215           1233         1,198         1,217         1,251         1,251           1233         1,198         1,216         1,277         1,251           1         564         564         556         507         509           88         84         76         77         78         18           nse-Taxi         19         19         19         19         19         16           15         129         162         173         978         987         18           nse         1         <						
I15         I15         I15         I22         I63         I63 <thi63< th=""> <thi63< th=""> <thi63< th=""></thi63<></thi63<></thi63<>		650	861	744	648	580
36         36         44         47         35           Taxi         -		163	163	163	163	162
Taxi Taxi		35	35	32	32	32
Taxi         I.1         I.1 </td <td></td> <td>175</td> <td>165</td> <td>107</td> <td>96</td> <td>96</td>		175	165	107	96	96
Ids         175         178         200         215           peated during weekday <sup>1</sup> 1,233         1,198         1,216         1,277         1,251           peated during weekday <sup>1</sup> 564         564         556         507         509           s         84         76         77         78         18           sse         84         76         77         78           sse         184         190         190         186         186           sse         184         190         190         186         186           sse         129         162         173         978         987           sse         1         1019         1,013         978         987           sse         15         152         153         978         987           sse         1         1         1         1         2         1           states         3         3         3         3         3         3           states         1         1         1         1         1         1         2           states         3         3         3         3		,	79	125	,	115
I.233         I.198         I.216         I.277         I.251           perated during weekday         564         564         567         509         509           564         564         564         566         507         509           85         84         76         77         78           85         84         76         77         78           85         84         76         77         78           85         184         190         186         186           91         191         190         196         196           91         1019         1,013         978         987           91         1,019         1,013         978         987           91         1,019         1,013         978         987           91         1,013         1,013         978         987           91         1,013         1,013         976         196           91         1,013         1,013         978         987           91         1,019         1,013         1,013         976         15           91         1,01         1,013         1,		204	190	229	190	208
perated during weekday <sup>1</sup> 564 564 556 507 509 85 84 76 77 78 85 84 76 77 78 85 84 76 77 78 85 84 76 77 78 19 19 190 186 186 184 190 190 186 186 981 1,019 1,013 978 987 981 1,019 1,013 978 987 981 1,019 1,013 978 987 981 1,019 1,013 978 987 11,961 12,322 12,500 12,500 12,500 12,500 12,500 12,500 12,500 12,500 12,500		1,227	1,493	1,400	1,129	1,193
85         84         76         77         78           inse         19         19         18         18         18           inseTaxi         -         -         -         -         -         -           inseTaxi         -         -         -         -         -         -         -           inseTaxi         -         -         -         -         -         -         -         -           inseTaxi         -		527	544	535	533	530
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		102	103	105	104	107
mse         184         190         190         186         186           inse-Taxi         -		18	23	18	18	23
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		148	148	92	106	96
129         162         173         190         196           981         1,019         1,013         978         987           981         1,019         1,013         978         987           981         1,019         1,013         978         987           981         1,019         1,013         978         987           981         15         15         15         15           982         15         15         15         15           998         11,961         12,322         12,500         12,500           10         12,322         12,500         12,500         12,500           10         12,322         12,500         12,500         12,500           10         1         1         1         1         2           11         1         1         1         1         2           10         10         10         10         10         10		ı	79	115	ı	115
981         1,019         1,013         978         987           ing garages         3         3         3         3         3         3           icenters         15         15         15         15         15         15           ops         11,961         12,322         12,500         12,500         12,500         12,500           as         35         35         37         39         55         55           ing garages         1         1         1         1         2         55           ing garages         1         1         1         1         1         2           ing garages         1         1         1         1         2         55           ing garages         1         1         1         1         2         34           ing garages         1         1         1         1         1         1         1		183	183	162	175	186
ing garages       3 <td< td=""><td></td><td>978</td><td>1,080</td><td>1,027</td><td>936</td><td>1,057</td></td<>		978	1,080	1,027	936	1,057
ing garages       3 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td></td<>						
er of operating garages       3       5 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
er of transit centers     15     15     15     15     15       er of functions     11,961     12,322     12,500     12,500     12,500       of tracks     45     45     48     72       of tracks     35     35     39     39     55       er of stations     35     35     39     39     55       er of operating garages     1     1     1     1     2       Rail     34     34     34     34     34       of tracks     10     10     10     10     10       er of operating garages     1     1     1     1     1		ю	33	б	ю	ю
er of bus stops 11,961 12,322 12,500 12,500 12,500 0 12,5		15	15	15	15	14
of tracks     45     45     48     48       er of stations     35     35     39     39       er of operating garages     1     1     1     1       Rail     34     34     34     34       of tracks     34     34     34     34       er of operating garages     10     10     10     10       r of tracks     1     1     1     1		12,500	11,973	11,973	11,973	11,973
cks         45         45         48         48           stations         35         35         35         39         39           operating garages         1         1         1         1         1           operating garages         34         34         34         34           cks         34         34         34         34           stations         10         10         10         10           operating garages         1         1         1         1						
stations 35 35 39 39 39 operating garages 1 1 1 1 1 1 1 operating garages 34 34 34 34 34 tations 10 10 10 10 10 10 10 10 operating garages 1 1 1 1 1 1 1		<i>LT</i>	85	85	85	93
operating garages         1		58	61	62	62	64
cks         34		2	2	2	2	7
34         34         34         34         34         34         34         34         34         36         36         37         34<						
ions 10 10 10 10 10 rating garages 1 1 1 1 1		34	34	34	34	34
rating garages 1 1 1 1		10	10	10	10	10
		1	1	1	1	1
Demand Response						
Number of operating garages 1 1 1 1 1 1	1 1	1	1	1	1	1

# Exhibit 123 Number of Vehicles and Operating Facilities

321



LAS T TEN FIS CAL YEARS (Amounts In Thousands)

DALLAS AREA RAPID TRANSIT COST OF CAPITAL ASSETS

					Fiscal Year	Year				
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Non-Depreciable Capital Assets										
Land and right-of-way	\$387,934	\$398,914	\$397,997	\$548,904	\$554,714	\$578,169	\$609,498	\$616,728	\$615,709	\$619,026
Capital projects in progress	1,210,357	1,755,739	2,305,270	859,872	662,567	205,542	70,845	101, 124	190,992	66,867
Total Non-Depreciable Capital Assets	1,598,291	2,154,653	2,703,267	1,408,776	1,217,281	783,711	680,343	717,852	806,701	685,893
Depreciable Capital Assets										
Transit-ways	1,408,118	1,607,364	1,631,987	2,779,751	3,188,305	3,696,268	3,845,836	3,860,836	3,861,876	4,019,867
Buildings and Improvements	404,477	416,472	419,849	696,102	702,179	745,314	746,585	748,445	749,160	749,860
Revenue and Non-Revenue Vehicles and Equipmen	719,346	804,314	935,898	1,218,639	1,275,561	1,319,261	1,303,485	1,287,039	1,282,270	1,301,880
Furniture, Fixtures, and Leasehold Improvements	35,370	38,189	38,940	43,242	49,537	61,184	59,872	64,523	65,909	69,636
Total Depreciable Capital Assets	2,567,311	2,866,339	3,026,674	4,737,734	5,215,582	5,822,027	5,955,778	5,960,843	5,959,215	6,141,243
Less Accumulated Depreciation										
Transit-ways	403,562	452,524	508,156	593,902	690,650	820,845	931,205	1,060,638	1,190,044	1,324,572
Buildings and Improvements	191,518	207,275	221,232	240,967	265,881	292,055	316,802	341,810	366,599	391,305
Revenue and Non-Revenue Vehicles and Equipmen	357,358	395,183	447,998	499,242	559,630	568,776	527,137	536,743	605,467	656,545
Furniture, Fixtures, and Leasehold Improvements	29,214	31,868	31,939	36,569	38,929	46,450	50,973	57,584	60,150	63,499
Total Accumulated Depreciation	981,652	1,086,850	1,209,325	1,370,680	1,555,090	1,728,126	1,826,117	1,996,775	2,222,260	2,435,921
Net Depreciable Capital Assets	1,585,659	1,779,489	1,817,349	3,367,054	3,660,492	4,093,901	4,129,661	3,964,068	3,736,955	3,705,322
Net Capital Assets	\$3.183.950	\$3.934.142	\$4.520.616	\$4,775,830	\$4.877.773	\$4,877,612	\$4.810.004	\$4.681.920	\$4.543.656	\$4.391.215

# Exhibit 124 Cost of Capital Assets

Source: Annual financial statements



# Exhibit 125 Transit Agency Comparison (2017 NTD)

Transit Agency Compari	son (2017	NTD)							
	Dallas	Boston	Denver	Houston	Los Angeles	Philade lphia	Portland	San Diego	St. Louis
Metric	(DART)	(MBTA)	(RTD)	(METRO)	(LACMTA)	(SEPTA)	(TRIMET)	(MTS)	(METRO)
Service Area (Sq.Mi.)	698	3,244	2,342	1,306	1,419	839	378	720	558
Service Area Population		3,109,308		4,365,000	8,360,358	3,829,571	1,536,207	2,462,707	1,566,004
Annual Vehicles Revenu	e Miles (1	In Thousa	nds)						-
Bus	27,566	23,541	35,767	42,976	74,129	40,425	20,948	19,967	18,515
Heavy Rail	N/A	23,635	N/A	N/A	7,011	16,800	N/A	N/A	N/A
Commuter Rail	1,630	24,911	2,581	N/A	N/A	19,449	162	N/A	N/A
Light Rail	10,244	5,919	12,603	3,330	16,699	3,194	8,882	8,728	6,215
Demand Response	7,699	17,667	11,349	18,564	N/A	11,184	7,468	4,806	5,250
Annual Vehicles Revenu	e Hours (	In Thousa	nds)						
Bus	2,170	2,413	2,806	3,172	7,685	4,078	1,886	1,823	1,397
Heavy Rail	N/A	1,540	N/A	N/A	321	906	N/A	N/A	N/A
Commuter Rail	72	799	71	N/A	N/A	918	7	N/A	N/A
Light Rail	492	668	794	287	790	372	624	490	265
Demand Response	480	1,350	725	1,109	N/A	1,070	531	268	293
Annual Unlinked Trips (	In Thousa	nds)		•				•	•
Bus	31,951	118,853	65,266	65,933	289,999	169,407	57,838	49,919	25,529
Heavy Rail	N/A	164,103	N/A	N/A	45,633	93,880	N/A	N/A	N/A
Commuter Rail	2,098	33,950	6,950	N/A	N/A	33,209	449	N/A	N/A
Light Rail	29,994	62,296	24,645	18,319	67,765	26,549	39,741	37,639	14,898
Demand Response	869	1,985	1,215	1,670	N/A	1,704	1,018	636	551
Fixed Guide way Directio	nal Route	Miles			1	· ·	,	<b>I</b>	
Bus	0	38.1	2.8	0	40.3	33	6.3	3	0
Heavy Rail	N/A	76.3	N/A	N/A	31.9	74.9	N/A	N/A	N/A
Commuter Rail	72.3	776.1	58.7	N/A	N/A	446.9	29.2	N/A	N/A
Light Rail	182.4	51	115.2	43.6	171.9	82.9	118.9	108.4	91.1
Vehicles Available/Oper	ated for N	Laximum S	Service	I	<b></b>				<b>I</b>
Bus	707/537	1359/827	1,078/867	1,233/1,002	2,348/1,883	1,454/1,223	658/550	621/512	395/318
Heavy Rail	N/A	432/336	N/A	N/A	104/68	361/286	N/A	N/A	N/A
Commuter Rail	32/23	480/436	66/20	N/A	N/A	404/350	6.0/4.0	N/A	N/A
Light Rail	162/106	219/156	172/159	76/54	196/181	159/122	143/116	130/97	87/58
Operating Expenses (In	Thousand	ls)		<b>I</b>		<b></b>			•
Bus	\$260,332	\$467,577	\$327,515	\$395,608	\$1,198,459	\$643,994	\$261,867	\$166,398	\$155,918
Heavy Rail	N/A	\$355,050	N/A	N/A	\$161,559	\$202,060	N/A	N/A	N/A
Commuter Rail	\$28,267	\$399,040	\$39,236	N/A	N/A	\$269,646	\$7,153	N/A	N/A
Light Rail	\$175,198	\$187,120	\$115,181	\$65,169	\$366,355	\$72,513	\$138,797	\$82,473	\$76,333
Demand Response	\$35,232	\$103,494	\$52,834	\$52,915	N/A	\$63,679	\$40,912	\$19,782	\$24,322
Fare Revenue (In Thous		,	+,001	+,>+0		+,072	÷,> •••	+	, <b>0</b>
Bus	\$27,640	\$111,025	\$77,199	\$52,752	\$231,152	\$176,595	\$65,513	\$51,433	\$26,690
Heavy Rail	027,010 N/A	\$228,678	N/A	ф32,732 N/A	\$35,622	\$101,684	009,945 N/A	N/A	0420,090 N/A
Commuter Rail	\$8,867	\$218,383	\$20,274	N/A	035,022 N/A	\$136,979	\$474	N/A	N/A
Light Rail	\$27,713	\$83,192	\$38,157	\$5,969	\$52,570	\$21,288	\$49,385	\$38,968	\$15,373
Demand Response	\$2,243	\$6,071	\$5,066	\$2,335	N/A	\$13,527	\$8,887	\$2,878	\$2,620
SOURCE: 2017 National T				φ2,555	11/21	φ1 <i>0,021</i>	φ0,007	, <i>42,070</i>	Ψ <b>2</b> ,020

SOURCE: 2017 National Transit Database Agency Profiles

NOTE: Fixed Guideway Directional Route Miles is reported as the mileage in each direction over which public transportation vehicles travel while in revenue service on fixed guideway (including HOV lanes), or exclusive Right-of-Way.



# **G.** DART's Economic Environment

DART periodically contracts with the Center for Economic Development and Research at the University of North Texas to perform a study of the economic and fiscal impacts of capital and operating spending by DART. The following is the most recent study which was released in May 2017. This study is shown below and is located on DART.org.

# The Economic and Fiscal Impacts of Development near DART Stations



# PREPARED FOR DALLAS AREA RAPID TRANSIT

# PREPARED BY MICHAEL C. CARROLL, PH.D. CHRISTOPHER CARLYLE MICHAEL SEMAN, PH.D.

# SECTION I: ECONOMIC AND FISCAL IMPACTS OF THE DART LIGHT RAIL SYSTEM: 1999 - 2013

# INTRODUCTION

Since 1996, the DART Light Rail Transit (LRT) system has moved millions of people and sparked billions of dollars in development in the Dallas-Fort Worth economy. Since 1999, the University of North Texas and DART have partnered to derive the economic impacts of development near light rail stations. As noted, numerous times below, property values near DART LRT stations far exceed and grow much faster than those in similar areas without a light rail station. As DART celebrates the 20th anniversary of opening its light rail system in DFW, the Economics Research Group (formerly The Center for Economic Development and Research, CEDR) at the University of North Texas has compiled a review of the six studies done from 1999 to 2013. The purpose of this study is to merge all former UNT-DART studies and derive a comprehensive dollar value of properties near DART LRT stations since inception.



## **REVIEW OF ECONOMIC IMPACT STUDIES**

#### The Initial Economic Impacts of the DART LRT System (1999)

In 1999, this office began the collaboration between UNT and DART. This first study concentrated on the change in property values, occupancy and rental rates, and retail sales of properties located near DART LRT stations from 1994 to 1998.

The study first compared nearly 700 commercial and residential property values within a quartermile<sup>1</sup> of 15 DART LRT stations with 160 properties in eight comparable areas. These comparable areas were deemed similar in both usage and neighborhood characteristics as those properties near DART stations. As seen from Table 1, retail property values increased 12.39% for those near DART stations compared with 7.79% for the comparable areas. Office property values rose substantially around DART stations, almost 29% compared with similar areas, where property values rose only slightly over 6%. Combining all properties studied, those near DART LRT stations on average increased nearly 16% compared with other properties, which rose just under 13%. Despite residential and vacant properties, the results of Table 1 show that proximity to DART LRT stations increased property values at an overall faster clip.

Table 1:	Average P	ercent Cł	ange in Tota	al Property V	/alues (1994 -	- 1998)
	Retail	Office	Residential	Industrial	Vacant	All Properties
Near DART LRT	12.39%	28.97%	11.02%	3.79%	-5.12%	15.98%
Comparable Areas	7.79%	6.32%	16.17%	0.0%	26.38%	12.86%

The 1999 study also looked at the change in rental and occupancy rates for office buildings, community and neighborhood centers, shopping malls, retail strips, and industrial properties over the same time period. Table 2 shows these changes. Rental rates per square foot for properties analyzed increased at least 20% for 5 out of the eight different property types. Moreover, occupancy rates for the different classes of office buildings were positive over the five-year period.

Ta	ble 2: Ave	erage Per	cent Cha	nge in Occup	ancy & Rental	Rates (199	4 – 1998	3)
	Class A	Class B	Class C	Community	Neighborhood	Shopping	Retail	
	Office	Office	Office	Centers	Centers	Mall	Strip	Industrial
Rent/SF	47.4%	40.4%	20.9%	17.2%	6.25%	20%	18.4%	27.35%
Occupancy	10.4%	6.73%	3.5%	-2.12%	0.83%	0.81%	4.17%	15.99%

Finally, the 1999 study also looked at changes in gross retail sales in the Dallas Central Business District (CBD). Researchers used four DART LRT stations in the Dallas CBD, West End, Akard, St. Paul and Pearl/Arts District, and observed how retail sales changed since the opening of the DART light rail service. As can be seen from Table 3, gross retail sales increased 36.2% from the year beginning third quarter of 1997 when compared with the year beginning third quarter 1996. The change in gross retail sales for the rest of the city of Dallas was only 3.6% for the same time frame, according to the Texas Comptroller of Public Accounts.

Table 3: C	hanges in Gross <b>R</b>	etail Sales, Dallas (	CBD (1996 – 1998,	, \$s in millions)
Quarter	Amount	Quarter	Amount	Percent Change
2Q 98	\$202.3	2Q 97	\$113.2	78.7%
1Q 98	\$197.2	1Q 97	\$109.9	79.4%
4Q 97	\$177.5	4Q 96	\$169.2	4.9%
3Q 97	\$146.2	3Q 96	\$138.7	5.4%
Total	\$723.2		\$531	36.2%

Source: Texas Comptroller of Public Accounts

# An Assessment of the DART LRT on Taxable Property Valuations and Transit-Oriented Development (2002)

In the analysis published in 2002, researchers at UNT again looked to the changes in property values for properties immediately surrounding DART LRT stations. The new study used only properties within a quarter mile from the stations, and similar to the previous study, a set of control properties to compare against. Unlike the previous study, this study focused on changes in median property values rather than averages.

The findings from this analysis confirmed results from the previous study: close proximity to DART stations have a positive impact on property values. Moreover, the authors asserted that "DART rail is an amenity-enhancing service most keenly affecting the market values of properties where people live and where there are comparatively high concentrations of [office] jobs." The largest changes came from office properties, where those near DART stations saw a 24.7% increase in median property values compared with only an 11.5% increase from the control group. Residential properties also saw a substantial increase: 32.1% for properties within a quarter mile of DART stations versus a 19.5% increase in the control group. All changes to the different property types can be seen in Table 4.

Table 4: Changes in Median Property Values (1997 – 2001)					
	Retail	Office	Residential	Industrial	Vacant
Near DART LRT	28.3%	24.7%	32.1%	13.0%	11.1%
Control	30.4%	11.5%	19.5%	21.5%	0.0%

# The Estimated Value of New Investment Adjacent to DART LRT Stations: 1999 – 2005

In 2005, almost a decade after the light rail began operating, the same office at UNT presented another study for DART LRT stations, but with a different approach. This study looked at newspaper articles and other community announcements about development within a quarter-mile proximity of DART stations. The announcements were categorized by station and aggregated to a total economic impact on the Dallas-Fort Worth economy (if property values were not announced in the articles, comparable figures were looked up at county appraisal districts).

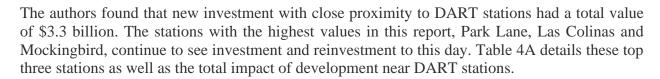


Table 4A: Estimated New Investment and Reinvestment of Selected Stations, Total (1999 – 09/2005)			
Station	Announced Development Value		
Park Lane	\$610,000,000		
Las Colinas	\$420,000,000		
Mockingbird	\$270,000,000		
Total	\$3,314,000,000		

## Assessment of the Potential Fiscal Impacts of Existing and Proposed Transit-Oriented Development in the DART Service Area (2007)

The following research done by this department again looks back at the property values surrounding DART stations since 1999 in tandem with the fiscal impacts of those property values. This report is an update of the previous. Methods used to acquire these property values were similar to the previous report (newspaper announcements for values and locations of development projects), but the authors of this report also utilized work in the field to identify projects not announced in local publications. The study found that values that could be directly attributed to the existence of a nearby DART station totaled \$4.26 billion, (values were excluded if the development would have occurred with or without the station, such as with a convenience store) as detailed in Table 5.

Description	Value	
Announced Value	\$ 4,902,800,000	
Announced Value Attributable to DART	\$ 4,255,700,000	
Cities (Annually)		
Taxable Property Value	\$ 2,843,779,000	
Property Tax Revenues	\$ 16,785,000	
Taxable Retail Sales	\$ 665,552,000	
Sales Tax Revenues	\$ 6,656,000	
Total Revenue to Cities	\$ 23,531,000	
Fotal State and Local Tax Revenues	\$ 127,095,000	

The results from this 2007 study update those done in the 2005 research. The value of properties near DART stations in the 2005 study (\$3.3 billion) increased nearly 50% in the 2007 study (\$4.9 billion) due to higher property values and more new development. While some of this increase



comes from properties that might have been overlooked in the 2005 study, overall development in the North Texas region increased in this time period as well, with an emphasis on transit-oriented development. The authors gave a favorable outlook for more development around DART stations when ridership and support for expansion were taken into account, and they anticipated that property values would continue to rise.

# Economic and Fiscal Impacts of DART Light Rail System Buildout and System Operations (2009)

In 2009, DART was on the brink of finishing major extensions and opening new lines for the light rail system. The next study conducted by CEDR for DART looked at the capital projects in line with the completion of these DART lines as well as the projected impacts of operating expenditures for fiscal years 2009 and 2014.

In Table 6, the total impact of buildout of the Green Line and Orange Line, and extensions of the Blue Line are outlined. According to this report, expenditures for these lines totaled \$2.3 billion, which, when run through the economic input-output model, had a total economic impact of \$4.06 billion on the local economy. Additionally, these expenditures caused labor income in the area to increase by \$1.5 billion and the creation of over 32,000 jobs. Almost \$100 million in taxes were also generated from the spending on the completion of these DART light rail lines.

Table 6: Economic & Fiscal Impacts from DART System Buildout (All Lines)		
Description	Impact	
Total Expenditures	\$2,337,000,000	
Economic Activity	\$ 4,059,672,000	
Labor Income	\$ 1,520,157,000	
Employment	32,095	
Other Property Income	\$ 432,140,000	
Indirect Business Taxes	\$ 99,986,000	

Moreover, this study aimed to estimate the operations spending in 2009 and 2014. DART operations spending supports other spending throughout the local economy despite DART's being a public entity. The spending helps to create direct impacts for local business and employees, as well as creating new jobs and subsequently, tax revenues. According to this 2009 report, DART spent \$411 million (Table 7) on operations, which include wages and salaries, goods, and services to support DART on a day-to-day basis. The operations spending, in turn, created a total economic impact of nearly \$544 million, almost 5,000 jobs and taxes above \$11 million. The paper also estimated what spending on operations might look like in 2014. This produced \$501 million of direct spending causing a total economic impact of \$663 million, over 5,300 jobs and taxes greater than \$13 million (Table 7).

Table 7: Economic and Fiscal Impacts of DART Operations				
Description	2009	2014		
Total Expenditures	\$ 411,000,000	\$501,000,000		
Economic Activity	\$ 543,984,000	\$663,106,000		
Labor Income	\$325,921,000	\$412,013,000		
Employment	4,955	5,327		
Other Property Income	\$ 49,626,000	\$60,494,000		
Indirect Business Taxes	\$ 11,289,000	\$13,760,000		

# **Developmental Impacts of the DART Light Rail System (2013)**

In the most recent study done by this office, property values surrounding DART stations were again compared against a set of control property values in similar locations. Like previous studies, the properties within close proximity to DART stations must have been within a quarter-mile radius of the station – a distance researchers agree yields a positive association with increased development. On top of this support for the quarter-mile distance, the authors conducted further analysis to verify its validity.

The analysis done in this study finds that, from 1996 to 2013, new development occurring within three years of the opening of a DART station (and still existing) had a value of \$1.5 billion compared with \$601 million for the control properties (Table 8). Similarly, the tax revenue generated from the DART station properties outpaced control properties by \$22 million (\$36 million for DART versus \$14 million for control).

	Est. Value of All Properties		Est. Tax Contributions		Tax	
Property Type	DART	Control	DART	Control	Differential	
Industrial	\$23,473,050	\$19,481,050	\$556,311	\$461,701	\$94,610	
Multi-Family	\$751,646,900	\$169,555,466	\$17,814,032	\$4,018,465	\$13,795,567	
Office	\$224,798,649	\$45,121,010	\$5,327,728	\$1,069,368	\$4,258,360	
Retail	\$393,286,515	\$300,039,538	\$9,320,890	\$7,110,937	\$2,209,953	
Single Family	\$140,960,100	\$67,550,410	\$3,340,754	\$1,600,945	\$1,739,810	
Total	\$1,534,165,214	\$601,747,474	\$36,359,716	\$14,261,415	\$22,098,300	

The 2013 analysis then looked to announced values of upcoming planned and proposed development projects. As seen from Table 5 (page 7), the 2007 study found \$4.9 billion in existing and planned development. When this 2013 study was conducted, the authors found, as expected, that some properties slated for future development in the 2007 study were either paused or did not come to fruition, most likely because of the recession. In this analysis, when the properties were updated, planned and proposed developments near DART stations had a total value of \$3.8 billion. This summed together with the \$1.5 billion of existing property values above makes total property values since 1996 worth \$5.3 billion.



In the second section of the 2013 study, the authors looked at the effect of different office classes, ages of the structures, and whether the properties were within a quarter mile or between a quarter mile and a half-mile all on office lease rates. Regression analysis was used to estimate the effect of these variables. The most notable finding of this analysis shows that properties located within a quarter-mile of a DART station gained a \$2.61 statistically significant <sup>5</sup> premium while controlling for office class and age of the building (Table 9). Furthermore, properties outside the quarter-mile radius did not attain the statistical significance nor the positive premium. This aligns with what has been studied in the literature and with the results of past studies done by this office.

Table 9: Regression Analysis of Office Lease Rates				
Variables	Marginal Effect	Р		
Constant	-36.47023	0.0010*		
Class A Office	1.52042	0.0001*		
Class B Office	1.03960	0.0001*		
Year built	0.02577	0.0001*		
Located Within 0.25 miles of station	2.61279	0.0001*		
Located Within 0.5 miles of station	-0.25237	0.6170		

\*Statistically Significant at the 1% level

# CONCLUSION

UNT has conducted six economic impact studies of DART LRT stations from 1999 to 2013. These impact studies range from the change in rental rates over time to the aggregated value of properties surrounding DART LRT stations. Though different in methodologies, the studies done over the past 16 years document the positive effects property values derive from being located near a light rail station. Additionally, some studies highlight the substantial economic, fiscal and developmental impacts that result from capital and operational spending by DART.

In total, the value of properties within a quarter mile of DART LRT stations was \$5.3 billion as of 2013. What follows this summary of previous findings is the Economic Research Group's newest study of developmental impacts of properties near DART stations for 2014 and 2015.

# SECTION II: THE ECONOMIC IMPACT OF PUBLIC PROJECTS AT DART STATIONS

This memorandum details the economic impact of public projects within a quarter mile of DART stations. The projects were not included in previous University of North Texas projects as the amounts were previously not available. The analysis in the memorandum covers projects that were developed from DART's early construction and therefore includes more projects completed in 2014-2015. This report excludes downtown stations because of their closeness to one another and the resulting overlap in the quarter-mile criteria.



- SELECTED HIGHLIGHTS
- Public development had a property value of \$1.81 billion
- Public development produced an economic impact of \$3.36 billion for the Dallas-Fort Worth region
- Public development near DART stations created 20,741 construction jobs in the Dallas-Fort Worth region
- Public development created \$1.3 billion in employee compensation
- Public development generated \$105 million in state and local taxes, and \$278 million in federal tax revenue

# METHODOLOGY

To understand how money being spent developing properties within a quarter mile of a DART station ripples through a regional economy, the first step is to define the region in question. This study uses the Dallas-Fort Worth region for analysis as its economy is strongly integrated. The U.S. Office of Management and Budget's (OMB) definition of the "Dallas-Fort Worth-Arlington Metropolitan Statistical Area" is used and the counties included are Collin, Dallas, Denton, Ellis, Hood, Hunt, Johnson, Kaufman, Parker, Rockwall, Somervell, Tarrant and Wise. Next, the values of the selected properties are placed into an Input/output economic model that examines how the money being spent on property development ripples through a regional economy. Input/output methodology allows for insight into forward and backward linkages that are present in any regional economy, highlighting how they add value to the initial dollar spent. The model – in this case facilitated by the IMPLAN software package – measures the total annual economic activity that results from inter- and intra-industry transactions.

IMPLAN is an industry standard Input/output tool used to calculate the direct, indirect and induced impacts of spending and employment. The model first breaks the economy into 536 separate sectors, with each sector representing an individual industry, and then it uses a sectoring scheme developed by the IMPLAN Group. This scheme is closely related to the Bureau of Economic Analysis (BEA) REIS model and is a 536 X 536 (row x column) matrix showing all the economic activity among the individual sectors. The entries in the matrix are based on the dollar amount that each industry sells to (and purchases from) other industries in a regional economy. It measures the amount of final consumption by the residents of the region as well as how much each industry exports from the area. The model uses data collected at the county level, which are obtained from the IMPLAN Group and the BEA. County data are in turn aggregated or "rolledup" to form service areas such as local regions, states or larger geographic regions, such as the Southwest. Input/Output models are able to estimate economic impacts because the flow of goods and services within an economic region is relatively stable. Predictions can be made of an industry's total economic impact by examining the purchasing patterns of the individual sectors. The BEA collects extensive regional trade data on these flows and reports findings annually. its

After the region is selected and the data on spending are entered, how the spending flows through the region and impacts it can be calculated. The three levels of spending impacts analyzed are direct, indirect and induced. The direct impact includes the purchases of resources (labor, goods



and services) by real estate developers, builders and construction companies for the completion of a project. The indirect impact occurs through industry-to-industry purchases made by regional suppliers. Finally, the induced impact reflects the change in household demand as the employees of real estate developers, builders and construction companies and the employees of their suppliers earn dollars for consumer spending. Therefore, the total impact to the economy is the summation of the direct, indirect and induced components. The indirect and induced portions are commonly known as the multipliers and their impacts often referred to as the "multiplier effect." It shows how the initial (direct) spending get multiplied through the economy. Calculating the multipliers based on the supplier relationships and employee consumption patterns is much more accurate than simple multiplier tables.

The effects that the three levels of impacts and related spending have on employment is also calculated in the IMPLAN economic model. Employment is the total number of full-time wage and salary employees, plus the number of self-employed workers in a particular industry. Part-time workers' hours are aggregated into full-time equivalents (2,080 hours) and reported with the full-time workers. An IMPLAN economic model will draw from multiple sources of data to offer employment estimates. This is due to the differences in how employment data is gathered by varying government agencies. In general, because of nondisclosure rules, the employment figure reported by government agencies often underestimates true employment in a given county. In accordance with U.S. Code Title 13, Section 9, no datum is published that would disclose the operations of an individual employer or put an individual employer at an unfair disadvantage.

By carefully combining employment figures reported by the U.S. Department of Labor, Bureau of Economic Analysis, U.S. Census Bureau and Internal Revenue Service, a fairly comprehensive employment figure can be reconstructed. The raw data are then "sectored" into the appropriate North American Industry Classification System (NAICS) and, in turn, combined into the necessary industry vectors and IMPLAN matrices. The result of this process is a "total employment" impact figure that is a result of the three levels of economic impacts associated with the initial spending. An IMPLAN economic model also calculates employee compensation, which includes all salaries, wages and benefits paid to the industry's employees resulting from the direct, indirect and induced employment impacts. The figure includes the proprietors' income of self-employed people in the industry. The figures reported are gross amounts and taken from the IMPLAN data set.

Input/Output methodology and IMPLAN software allow one to leverage and integrate the enormous amount of data collected by government agencies. As such, a reliable model of how spending affects a regional economy can be developed. These models take into account not only how money is initially spent in the "direct" stage of an event, but also inter- and intra-industry transactions. These transactions establish forward and backward linkages in a regional economy during the "indirect" and "induced" stages. In addition to spending, these models also estimate the resulting change in employment. The end product is a comprehensive economic analysis of a given event and its effect on a region.



## RESULTS

The following section reports the economic impact of public projects within a quarter mile of DART Light Rail stations. The table below details the direct, indirect, induced and total effects on employment, labor income, value added and output as a result of the development projects. These effects show the dollar amount of the output and employment impacts for development spending in the DFW area.

### **Public Project Impacts**

Spending on public projects includes properties built for health care, city halls, school campuses and other public use properties. To correctly analyze the development spending impact, properties were held to a strict quarter-mile radius around DART stations. The dollar amounts and announcements were derived using information from The Dallas Morning News, Dallas Business Journal and other local sources. The property values have been cross-checked with the Dallas and Collin county central appraisal districts and verified using a third-party firm (Cushman & Wakefield). A list of the properties used follows (Table 1).

Table 1: Public Properties within 1/4 mile of DART Stations		
Station	Project Name	
Irving Convention Center	Irving Convention Center	
Mockingbird	Bush Library	
Galatyn Park	Eisemann Center	
Cedars	DCCCD District Office	
Cedars	Dallas Police Headquarters	
Downtown Plano	Courtyard Theater	
Hatcher	Hatcher Station Health Center	
Illinois	DART Police Station	
Baylor Medical Center	Sammons Cancer Center	
Downtown Rowlett	Rowlett City Hall	
Downown Kowieu	Rowlett Public Library	
SW Medical Center/Parkland	New Parkland Hospital	
UNT Dallas	UNT Dallas	

After making the appropriate adjustments, public property spending amounted to \$1,815,333,100. This direct impact generated an additional \$682,884,872 of indirect activity as contractors and construction firms purchased raw materials. Finally, the induced impacts amounted to \$858,142,497, which represents the spending of wages by employees of those suppliers in the study area. The total economic impact (summation of the direct, indirect and induced effects) from development spending within a quarter mile of DART stations amounts to \$3,356,360,469 as shown in Table 2.

Table 2: Impact Summary of Public Properties				
Impact Type	Employment	Labor Income	Value Added	Output
Direct Effect	12,046	\$739,317,390	\$938,939,188	\$1,815,333,100
Indirect Effect	3,206	\$239,001,840	\$374,503,750	\$682,884,872
Induced Effect	5,490	\$292,459,862	\$510,154,127	\$858,142,497
Total Effect	20,741	\$1,270,779,092	\$1,823,597,065	\$3,356,360,469

Also, from Table 2, the description of employment created by public development spending can be seen. The jobs created by the direct spending total 12,046. Additionally, indirect and induced effects generated 3,206 and 5,490 jobs, respectively. The total number of jobs created as a consequence of development of public properties amounts to 20,741. Moreover, value added, a measure that can be seen as gross regional product, shows how the development of public projects adds to the local economy. Total value added summed to \$1,823,597,065 for public projects.

### **Fiscal Impacts**

The effects of public projects within a quarter-mile radius of DART stations generated a total of \$278,141,545 in federal tax revenue and \$105,302,562 in state and local taxes. For ease of comparison, the various federal, state and local taxes have been grouped into four categories: employee compensation-related taxes, production-related, household and corporate taxes. State and local and federal details are presented in Table 3.

Table 3: Tax Impacts of Public Properties					
Description	Total State and Local Tax	Total Federal Tax			
Employee Compensation	\$1,342,609	\$112,220,297			
Proprietor Income	N/A	\$10,570,114			
Tax on Production and	\$04 555 162	\$16 901 166			
Imports	\$94,555,162	\$16,891,166			
Households	\$9,096,993	\$105,446,215			
Corporations	\$307,798	\$33,013,753			
Total	\$105,302,562	\$278,141,545			



# SECTION III: THE ECONOMIC AND FISCAL IMPACTS OF DEVELOPMENT NEAR DART STATIONS 2014 – 2015

#### **Executive Summary**

The purpose of this document is to identify and calculate economic impacts of real estate development projects within a quarter-mile radius of DART light-rail stations. The study is a follow-up to the 2013 analysis completed by this office and analyzes development projects in 2014 and 2015. The values of all projects included in the analysis were determined through a combination of steps, including the use of their estimated values as published in the sources analyzed, cross-checking the properties with the Dallas and Collin county appraisal districts where possible, and augmenting all information with a review by analysts at Cushman & Wakefield. IMPLAN software was used to create an economic input-output model to measure the direct, indirect and induced impacts of the development projects on the Dallas-Fort Worth region.

# Highlights

- A total of 27 private projects were announced in the two-year period, 16 of which were characterized as "Completed or Under Construction" and 11 as "Planned or Proposed."
- Projects "Completed or Under Construction" are responsible for \$2.03 billion in total spending throughout the region supporting over 12,000 jobs paying \$703 million in salaries, wages and benefits.
- Projects "Completed or Under Construction" generated \$69 million in state and local tax revenue.
- Potential spending for projects "Planned or Proposed" could result in \$5.1 billion of total spending in the region, which would support over 31,000 jobs and pay almost \$2 billion.
- Potential spending for projects "Planned or Proposed" could generate \$160 million in state and local tax revenue.

#### Introduction

In 2013, our office examined the economic impacts associated with construction near DART rail stations. This study is a follow-up to that analysis and examines the impacts of projects that were proposed, planned, underway or completed near DART stations in 2014 and 2015. As with the previous study, construction activity is only considered if it took place within a quarter mile of a DART station. Further, this study does not include downtown stations. While our focus is only on projects within a quarter mile of a DART station, it is likely that the effects of station proximity spread beyond this impact zone.

#### Methodology and Data

The underlying data used for the calculation of impacts – the real estate development projects – were gathered through an ongoing review of publicly announced projects in publications such as The Dallas Morning News, Dallas Business Journal and assorted community newspapers and online resources. A total of 27 projects were identified, then organized by type and status of completion. First, details of the projects were examined, which helped assign them to one of four



categories: "Non-Residential," "Multi-Family," "Single-Family," and "Health Care." The next step was to establish their stage of completion. Of the total number of projects, 16 were assessed as "Completed or Under Construction" and 11 as "Planned or Proposed." Intermittent consultation with a DART representative over the two-year period helped refine what emerged as a database of properties proposed, planned, underway or completed during 2014 and 2015. The values of all projects included in the database were determined through a combination of steps, including the use of their estimated values as published in the sources analyzed, cross-checking the properties with the Dallas and Collin county appraisal districts where possible, and augmenting all information with a review for accuracy by commercial real estate analysts.

To understand how the effects of development projects constructed within a quarter mile of DART stations ripple throughout the economy of the Dallas-Fort Worth region, IMPLAN was used to create economic models based on the spending data provided. To better understand this process, a brief look at how impacts are calculated for the development of a property is helpful. Direct effects are the result of the money initially spent in the region by real estate developers, builders and construction companies for the completion of a project. This includes money spent to pay employee salaries, purchase supplies and maintain other operating expenses. Indirect effects are the result of business-to-business transactions. When suppliers to the companies driving the development (e.g., an accounting firm) purchase services or supplies, they create the indirect effect. When the employees of the real estate developers, builders, construction companies and their suppliers spend their income, this causes the induced effect. If the sum of all the activity from direct, indirect and induced impacts is greater than the combined spending of the developer, this is referred to as the multiplier effect. For more detail concerning how the economic impacts were calculated in this study, please see Appendix A.

# Results

What follows are descriptions of the economic and fiscal impacts for "Projects: Completed and Under Construction" and "Projects: Planned or Proposed." It should be noted that the economic impacts for projects not yet in the construction phase are offered as economic scenarios of what may happen if the projects in question come to fruition. It is reasonable to assume that some of the projects planned or proposed may never make it to the construction phase. It is also important to keep in mind that while dollar values are associated with projects as they are announced, once reaching the construction phase projects may be expanded or contracted in scale and material costs may have fluctuated from initial projections. These uncertainties can result in direct spending on a project that is higher or lower than previous expectations.

# **Projects: Completed or Under Construction — Total**

Construction activity within a quarter mile of DART rail stations in 2014 and 2015 resulted in significant economic activity for the Dallas-Fort Worth region. The projects either in the construction phase or completed in this time frame resulted in over \$986 million in direct spending and a total economic impact of \$2.03 billion for the region. This activity created more than 12,000 construction-related jobs paying almost \$69 million in salaries, wages and benefits (Table 1).



Table 1. Projects: Completed or Under Construction, 2014 – 2015			
Description	Impact		
Direct Impact	\$986,175,066		
Total Impact	\$2,030,315,970		
Labor Income	\$703,717,303		
Employment	12,157		
State and Local Taxes* \$69,232,886			
<ul> <li>Includes state and local sales and use taxes, property taxes, and license and permit fees.</li> <li>Source: IMPLAN</li> </ul>			

When the projects are grouped together according to function, further insight is gained concerning the economic effects of differing types of development.

### **Projects: Completed or Under Construction — Non-Residential**

Impacts generated by activity in the non-residential sector are the largest out of all the sectors. The non-residential sector includes office buildings, retail stores, hotels, training facilities, mixeduse developments and public projects such as libraries, convention centers and police headquarters. Direct spending of \$181 million on non-residential real estate development projects resulted in a total economic impact of \$336 million for the Dallas-Fort Worth region. This activity supported just over 2,000 construction-related jobs paying \$127 million in salaries, wages and benefits. State and local fiscal impacts amounted to \$10.5 million (Table 2).

Table 2. Projects: Completed or Under Construction – Non-Residential,2014 - 2015		
Description	Impact	
Direct Impact	\$181,752,260	
Total Impact	\$336,040,875	
Labor Income	\$127,231,184	
Employment	2,077	
State and Local Taxes*	\$10,542,958	
* Includes state and local sales and use taxes, property taxes, and license and permit fees. Source: IMPLAN		

# **Projects: Completed or Under Construction — Multi-Family Residential Impacts**

The multi-family residential sector includes apartment complexes and multi-family residential units within a quarter mile radius of DART stations. Multi-family residential projects were directly responsible for \$796 million in direct spending, creating significant indirect and induced impacts for a combined total impact of over \$1.6 billion. This activity supported almost 10,000



construction-related jobs paying \$570 million in salaries, wages and benefits. State and local taxing entities received \$58 million as a result of these development projects (Table 3).

Table 3. Projects: Completed or Under Construction – Multi-Family		
<b>Residential, 2014 – 2015</b>		
Description	Impact	
Direct Impact	\$796,422,799	
Total Impact	\$1,678,363,786	
Labor Income	\$570,754,859	
Employment	9,980	
State and Local Taxes*	\$58,132,516	
* Includes state and local sales and use taxes, property taxes, Source: IMPLAN	and license and permit fees.	

# **Projects: Completed or Under Construction — Single-Family Residential**

The single-family residential sector showed the weakest economic impact out of the categories analyzed. A total of \$8 million in spending provided a modest \$15 million in total economic impacts for the Dallas-Fort Worth region. This activity facilitated 101 construction-related jobs paying \$5.7 million in wages, salaries and benefits. State and local tax revenues from single-family residential development are also comparably low, with \$557,412 reaching city and state coffers (Table 4).

Table 4. Projects: Completed or Under Construction – Single-Family Residential, 2014 – 2015		
Description	Impact	
Direct Impact	\$8,000,000	
Total Impact	\$15,911,309	
Labor Income	\$5,731,266	
Employment	101	
State and Local Taxes*	\$557,412	
* Includes state and local sales and use taxes, property taxes, Source: IMPLAN	and license and permit fees.	

# **Projects: Planned or Proposed — Totals**

As the spending for projects under construction or completed suggests, real estate development has recovered from the 2007-2009 recession in the Dallas-Fort Worth region. In addition, the region is one of the fastest-growing nationwide in terms of population and continues to be the destination for corporate relocations.<sup>6</sup> <sup>7</sup> As a result, many real estate development projects were proposed or in the planning stages in 2014 and 2015 that fall within a quarter-mile of DART rail stations. To gain perspective of the magnitude of these projects and their potential impacts on the



Dallas-Fort Worth region, the reported details (e.g., square footage, construction value, use classification) of 11 projects were captured from various media outlets, placed into a database, then verified by a third party to ensure accuracy of the media reports.

The estimated value of the 11 projects either in the planning stages or proposed in 2014 and 2015 offers potential for significant economic impact on the Dallas-Fort Worth region. Potential direct spending of \$2.7 billion to complete the projects in question would result in potentially \$5.1 billion in total economic impact for the region. This activity would create more than 31,000 jobs paying almost \$2 billion in salaries, wages and benefits and generate \$160 million in state and local tax revenues (Table 5).

Table 5. Projects: Planned or Proposed, 2014 - 2015				
Description Impac				
Direct Impact	\$2,746,789,671			
Total Impact	\$5,103,459,207			
Labor Income	\$1,924,425,687			
Employment	31,490			
State and Local Taxes*	\$160,779,265			

As with projects that are completed or under construction, when the projects are grouped together according to function, further insight is gained concerning the potential economic effects. Unlike projects that are completed or under construction, projects proposed or already in the planning stages are less varied in scope and fall into the "Non-Residential" and "Multi-Family" categories.

# **Projects: Planned or Proposed — Non-Residential**

The office buildings, mixed-use developments, public projects and more that are proposed or in the planning stages are estimated to provide \$2.6 billion in direct spending, which would result in a total economic impact of almost \$5 billion for the Dallas-Fort Worth region. This activity would provide for just over 30,000 construction-related jobs paying over \$1.8 billion in salaries, wages and benefits. State and local fiscal impacts would amount to close to \$154 million (Table 6).



Table 6. Projects: Planned or Proposed – Non-Residential,2014 - 2015		
Description	Impact	
Direct Impact	\$2,650,329,668	
Total Impact	\$4,900,181,530	
Labor Income	\$1,855297,812	
Employment	30,281	
State and Local Taxes*	\$153,738,452	

#### **Projects: Planned or Proposed — Multi-Family Residential Impacts**

If fully realized, the apartment complexes and multi-family residential units planned or proposed within a quarter-mile radius of a DART station may result in \$96 million in direct spending and \$203 million of total economic impact. This activity would support 1,208 construction-related jobs paying nearly \$69 million in salaries, wages and benefits. State and local taxing entities would receive \$7 million in revenues if these development projects were completed (Table 7).

Table 7. Projects: Planned or Proposed – Multi-Family, 2014 - 2015		
Direct Impact	\$96,460,004	
Total Impact	\$203,277,677	
Labor Income	\$69,127,875	
Employment	1,208	
State and Local Taxes*	\$7,040,811	
* Includes state and local sales and use taxes, proper Source: IMPLAN	ty taxes, and license and permit fees.	



### Conclusion

The Dallas-Fort Worth region's economy weathered the recessionary period between 2007 and 2009 better than most metropolitan regions in the United States. The substantial development within a quarter mile of DART stations analyzed in our last report attests to the region's economic health. The current building boom the region is experiencing is reflected in the number of projects "Completed or Under Construction" while the continued health and growing strength of the region's economy is portrayed in the billions of dollars of projects currently in the planning stages or being proposed.

As this office has done over the past 16 years, the total values of properties near DART stations has been aggregated over the 2014-2015-time period. In Table 8, we add to this the values found in Section II of this report for public projects, as well as Section I values from previous studies. Over the 2014-2015-time period, the total property values, including "Completed or Under Construction" and "Planned or Proposed," summed to \$3.7 billion. When added to the previous totals, total property values near DART stations amount to \$10.8 billion (Table 8).

Table 8. Total Property Values 1999 - 2015		
1999-2013: Private	\$5,300,000,000	
1999-2015: Public	\$1,800,000,000	
2014-2015: Private	\$3,700,000,000	
Total Property Value	\$10,800,000,000	

The trend to develop properties near light rail stations extends across the nation. Connectivity and multimodal access are increasingly important in a Texas that is rapidly urbanizing – this is especially true in the Dallas-Fort Worth region. The 27 projects completed, under construction, planned or proposed represent not only the region's commitment to multimodal transportation options and an urban landscape that reflects the importance of those options, but billions of dollars in economic activity and tens of thousands of jobs throughout the region.



# H. DART FACTS

Dallas Area Rapid Transit (DART) is a regional transit agency authorized under Chapter 452 of the Texas Transportation Code and was created by voters and funded with a one-cent local sales tax on August 13, 1983. The service area consists of 13 cities: Addison, Carrollton, Cockrell Hill, Dallas, Farmers Branch, Garland, Glenn Heights, Highland Park, Irving, Plano, Richardson, Rowlett, and University Park.

DART has the longest light rail system in the U.S. Please see inside the back cover of this document for a map of our light rail system, and the *Who We Are Section* for a map of our service area. Exhibit 126 provides general information about DART.

SECTION	FASTFACTS		
2.0 AGENCY OVERVIEW			
<ul> <li>15 Board Members</li> <li>13 participating cities providing</li> </ul>	• FY18 sales tax revenue \$595.6 million	• 16-county region population 7.4 million (2018 NCTCOG)	
1 cent sales tax	• 700 square mile Service Area	• 3,816 employees (FY18)	
	<ul> <li>Service Area population 2.6 million (2018 NCTCOG)</li> </ul>	Contracted service with     Mesquite	
3.0 RIDERSHIP			
MODE	FY18 ANNUAL	FY18 AVERAGE WEEKDAY	
Bus	30.2 million	100,800	
Light Rail	28.9 million	93,400	
Commuter Rail	2.0 million	7,000	
Paratransit	819,200	2,860	
Vanpool	596,000	2,300	
Total System	62.5 million	206,560	

# Exhibit 126 DART Fast Facts



# Exhibit 126 DART Fast Facts (cont'd)

4.0 OPERATIONS AND PERFORMANCE (FY18)			
<ul> <li>Annual Bus Revenue Miles – 25,512,309</li> <li>Annual Demand Response Revenue Miles – 8,257,777</li> <li>Annual LRT Revenue Car Miles – 10,250,759</li> <li>Annual Commuter Rail Revenue Car Miles – 1,627,050</li> </ul>	Service Quality-On-Time Performance • Bus 82.5% • LRT 92.3% • TRE 97.4%	<ul> <li>Subsidy per Passenger – Total System \$6.93</li> <li>Subsidy per Passenger – Fixed Route \$6.51</li> </ul>	
5.0 FLEET OVERVIEW			
BUS	LIGHT RAIL	COMMUTER RAIL	
<ul> <li>475 NABI Transit (CNG) Buses</li> <li>Vehicle length: 30 feet and 40 feet</li> <li>Capacity: Up to 37 seats</li> <li>123 Arboc Buses (CNG)</li> </ul>	<ul> <li>163 Kinkisharyo Super LRVs</li> <li>Vehicle length: 123'8"</li> <li>Capacity: 94 seated/274 crush (165 peak per DART policy)</li> </ul>	<ul> <li>9 TRE locomotives</li> <li>• Vehicle length: 58'2"</li> <li>• 17 bi-level coaches</li> <li>• Vehicle length: 85 feet</li> <li>• Capacity: 152 seats</li> </ul>	
<ul> <li>Vehicle length: 26 feet</li> <li>Capacity: 17 seats</li> <li>46 New Flyer (CNG)</li> <li>Vehicle length: 40 feet</li> </ul>	PARATRANSIT • 80 Starcraft • Vehicle length: 22 feet	<ul> <li>8 bi-level cab cars</li> <li>Vehicle length: 85 feet</li> <li>Capacity: 132 to 138 seats</li> </ul>	
• Capacity: 39	<ul> <li>Capacity: 6-10 seated/2-3 wheelchair</li> <li>Non-dedicated fleet of 116 Braun entervans</li> </ul>	DALLAS STREETCAR • 4 Dual-Mode Brookville Equipment Corporation	
	NON REVENUE VEHICLE	<ul> <li>Vehicle length: 66'5"</li> <li>Capacity: 36 seats</li> </ul>	
	735 vehicles	- capacity, 50 seats	



Exhibit 126 DART Fast Facts (cont'd)



DART currently consists of the following member jurisdictions: Addison, Carrollton, Cockrell Hill, Dallas, Farmers Branch, Garland, Glenn Heights, Highland Park, Irving, Plano, Richardson, Rowlett, and University Park. The DART Service Area is approximately 700 square miles and includes approximately 2.3 million people. Exhibit 127 contains population and employment breakdown by city.

City	Population 2010 Census	Population 2019 NCTCOG Forecast	% Population Change	Employment 2010 Census
Addison	13,056	15,790	20.9%	54,500
Carrollton	119,097	136,170	14.3%	77,600
Cockrell Hill	4,193	4,190	-0.1%	750
Dallas	1,197,816	1,301,970	8.7%	1,158,500
Farmers Branch	28,616	31,780	11.1%	119,000
Garland	226,876	237,270	4.6%	107,000
Glenn Heights	11,278	11,680	3.6%	1,350
Highland Park	8,564	8,500	-0.7%	2,500
Irving	216,390	240,420	11.1%	219,500
Plano	259,841	284,070	9.3%	135,400
Richardson	99,223	113,710	14.6%	120,500
Rowlett	56,199	59,300	5.5%	11,200
University Park	23,068	22,910	-0.7%	9,700
Total Service Area	2,264,217	2,467,760	9%	2,017,500
16-County NCTCOG Region	6,539,950	7,390,080	13%	4,006,300

Exhibit 127 Population and Employment (Service Area & Region)

Sources: 2010 Census and North Central Texas Council of Governments (NCTCOG) 2019 population estimates.



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#### I. GLOSSARY/ACRONYMS

#### Exhibit 128 Glossary of Terms/Definitions

<u>Accessible</u> – As defined by FTA, a site, building, facility, or portion thereof that complies with defined standards and that can be approached, entered, and used by persons with disabilities.

<u>Accessible Service</u> – A term used to describe service that is accessible to non-ambulatory riders with disabilities. This includes fixed-route bus service with wheelchair lifts or paratransit service with wheelchair lift-equipped vehicles.

<u>Accidents per 100,000 Miles</u> – Measures vehicle accidents reported (Bus, Light Rail, TRE and Paratransit) per 100,000 miles of actual fixed route mileage. Management's objective is to reduce this ratio.

Calculation = [(Vehicle Accidents / Actual Mileage) \* 100,000]

<u>Accounting Basis</u> -- DART uses the accounting principles and methods appropriate for a government enterprise fund. Financial statements are prepared on the accrual basis of accounting under which revenues and expenses are recognized when earned or incurred.

<u>Accrual Method of Accounting</u> – An accounting method that measures the performance and position of a company by recognizing economic events in the period they occur regardless of when cash transactions occur (i.e., recognize revenue in the period in which it is earned rather than when the cash is received; and recognize expenses when incurred rather than when cash is paid).

<u>ADA (The Americans with Disabilities Act of 1990)</u> – This federal act requires changes to transit vehicles, operations, and facilities to ensure that people with disabilities have access to jobs, public accommodations, telecommunications, and public services, including public transit.

<u>ADA Paratransit Service</u> – Non-fixed-route paratransit service utilizing vans and small buses to provide prearranged trips to and from specific locations within the service area to certified participants in the program.

<u>Administrative Ratio</u> – Measures administrative costs as a percentage of direct operating costs. It is management's objective to reduce this ratio. Administrative costs include (but are not limited to) executive management, finance, purchasing, legal, internal audit, human resources, marketing, board support, and administrative services. Administrative revenues include (but are not limited to) advertising revenue.

Calculation = [(Administrative Costs – Administrative Revenues) / (Direct Costs + Start-up Costs)]

<u>Ambulatory Disabled</u> – A person with a disability that does not require the use of a wheelchair. This would describe individuals who use a mobility aid other than a wheelchair or have a visual or hearing impairment.

<u>American Recovery and Reinvestment Act (ARRA)</u> – The American Recovery and Reinvestment Act was signed into law by President Barack Obama on February 17, 2009. ARRA included appropriations and tax law changes totaling approximately \$787 billion to support government-wide efforts to stimulate the economy. Goals of the statute include the preservation or creation of jobs and the promotion of an economic recovery, as well as the investment in transportation, environmental protection, and other infrastructure providing long-term economic benefits.

<u>Arbitrage</u> – Investment earnings representing the difference between interest paid on bonds and the interest earned on the investments made using bond proceeds.



Average Fare (calculated by mode) – Represents the average fare paid per passenger boarding on each mode of service during the period.

Calculation = (Modal Passenger Revenue - Commissions & Discounts) / (Modal Passenger Boardings)

<u>Average Weekday Ridership</u> – The average number of passenger boardings on a weekday. This measurement does not include ridership on Saturdays, Sundays, or holidays.

**Balanced Budget** – A budget in which projected revenues equal projected expenses during a fiscal period.

**Bond Refinancing/Refunding** – The redemption (payoff) and reissuance of bonds to obtain better interest rates and/or bond conditions. This results in the defeasance of the earlier debt. See also *Defeasance*.

**Bus Rapid Transit (BRT)** – BRT combines the quality of rail transit and the flexibility of buses. It can operate on exclusive transitways, High Occupancy Vehicle (HOV) lanes, expressways, or ordinary streets. A BRT system combines intelligent transportation systems, technologies, transit signal priority (TSP), cleaner and quieter vehicles, rapid and convenient fare collection, and integration with land use policies.

<u>Capital</u> – Funds that finance construction, renovation, and major repair projects or the purchase of machinery, equipment, buildings, and land.

<u>**Capital Expenditure**</u> – A cost incurred to acquire a new asset, or add capacity/improve the functionality of an existing asset, or extend the useful life of an existing asset beyond its original estimated useful life. The asset will have an expected life of one or more years and a value of \$5,000 or more.

<u>Major Capital Transit Investment Program</u> – A federal grants program providing capital assistance for new fixed guideway, extensions of existing fixed guideway, or a corridor-based bus rapid transit system. This program includes New Starts, Small Starts, and Core Capacity projects.

<u>Car Mile or Vehicle Mile</u> – A single bus, rapid transit car, light rail vehicle, or commuter rail car traveling one mile.

<u>CAFR</u> – Comprehensive Annual Financial Report. It includes audited financial statements, financial notes, and related materials.

<u>CMAQ</u> – Congestion Mitigation and Air Quality. A federal program to fund transportation projects that will contribute to the attainment of national ambient air quality standards.

<u>Certified Riders</u> – Passengers who have been deemed eligible for Paratransit services because their disability inhibits them from functionally accessing fixed route services. Eligibility is determined in accordance with the criteria outlined in the Americans with Disabilities Act of 1990.

<u>**Complaints per 100,000 Passengers**</u> – Modal quality ratio that measures the number of service complaints per 100,000 passenger boardings (or per 1,000 boardings for Paratransit). Management's objective is to reduce this ratio.

Calculation = [(Service Complaints Received / Modal Passenger Boardings) \* 100,000]



#### Glossary of Terms/Definitions (cont.)

<u>Cost per Revenue Mile</u> – Efficiency ratio that measures the cost of providing a revenue mile of service. This measurement is based on fully loaded costs and excludes operating revenues. Management's objective is to reduce this ratio.

#### Calculation = [Total Operating Expenses / Revenue Miles]

<u>Crimes against persons</u> – Monitoring provides an overview of patron safety by detailing the frequency of crimes that occur on the DART system. Management's objective is to reduce this ratio.

#### Calculation = [Crimes Against Persons/Total Incidents]

<u>Crimes against property</u> – Monitoring provides an overview of the safety of our customer's property. Management's objective is to reduce this ratio.

Calculation = [Crimes Against Property/Total Incidents]

**<u>Debt Service</u>** – The payment of interest and the repayment of principal on long-term borrowed funds according to a predetermined schedule.

**Debt Service Coverage** – The measure of the Agency's ability to meet debt service payments. It is a ratio of cash flows to debt service requirements. See also *External Coverage Ratio* and *Internal Coverage Ratio*.

**Defeasance of Bonds** – The redemption of older higher-rate debt prior to maturity usually with replacement by new securities bearing lower interest rates.

**Demand Responsive** – Paratransit passengers call to request service; therefore, that service is provided on demand, and is considered to be demand responsive, rather than scheduled service. In addition, DART provides some non-traditional demand responsive service that may not be Paratransit related, such as DART OnCall.

**Depreciation** – Expiration in the service life of fixed assets, other than wasting assets, attributable to wear and tear, deterioration, action of the physical elements, inadequacy, and obsolescence. The portion of the cost of a fixed asset, other than a wasting asset, charged to expense during a particular period.

**Enterprise Fund** – Gives the flexibility to account separately for all financial activities associated with a broad range of government services. It establishes a separate accounting and financial reporting mechanism for services for which a fee is charged. Revenues and expenses of the service are segregated into a fund with financial statements separate from all other activities.

**Express Bus or Route** - A suburban or intercity route that operates a portion of the route without stops or with a limited number of stops.

**External Coverage Ratio** – The ratio of gross sales tax revenues to annual debt service. DART standards (and the financial markets in general) require that this ratio be at least two.

**<u>Farebox Recovery Ratio</u>** – the proportion of operating cost that is generated by passenger fares.

Calculation = [Modal Farebox Revenue / Modal Operating Expense]

**Farebox Revenue** – All revenue from the sale of passenger tickets, passes, or other instruments of fare payment.

**<u>Fares</u>** – The amount charged to passengers for use of various services.



<u>FAST Act – Fixing America's Surface Transportation Act</u> - FAST Act was signed into law in December 2015 to provide funding for surface transportation.

<u>FEMA – Federal Emergency Management Agency</u> – An agency of the U.S. Department of Homeland Security. This agency provides grant money to transit systems under the Freight Rail Security Grant Program and other such programs.

**<u>FTA</u>** (Federal Transit Administration) – The FTA is the federal agency that helps cities and communities provide mobility to their citizens. Through its grant programs, FTA provides financial and planning assistance to help plan, build, and operate bus, rail, and paratransit systems.

Fiscal Year – DART's fiscal year is from October 1 through September 30 of the following year.

<u>Fixed-Route Service</u> – Service that operate according to fixed schedules and routes (for DART that service is bus, light rail, commuter rail, and streetcar).

**Full Funding Grant Agreement (FFGA)** – The Federal Transit Administration uses a FFGA to provide financial assistance for new start projects and other capital projects. The FFGA defines the project, including cost and schedule; commits to a maximum level of federal financial assistance (subject to appropriation); covers the period of time for the project; and helps to manage the project in accordance with federal laws and regulations. The FFGA assures the grantee of predictable federal financial support for the project while placing a ceiling on the amount.

<u>Full-Time Equivalent</u> – A measurement equal to one staff person working a full-time work schedule for one year (2,080 hours).

**Fund Balance** – The difference between a fund's assets and liabilities (also called Fund Equity). Often this term refers to moneys set aside or earmarked for future needs. DART uses "reserves" as well as "funds" to ensure resources are available for anticipated and unanticipated needs. See **Funds and Fund Balances** at the end of the Twenty-Year Financial Plan portion of this document for yearly amounts, and Board-adopted financial policies regarding funds and reserves in the preceding pages of this Reference section.

**Formula Grant** - Allocations of federal funding to states, territories, or local units of government determined by distribution formulas in the authorizing legislation and regulations. To receive a formula grant, the entity must meet all the eligibility criteria for the program, which are pre-determined and not open to discretionary funding decisions. Formula grants typically fund activities of a continuing nature and may not be confined to a specific project. Common elements in formulas include population, proportion of population below the poverty line, and other demographic information.

<u>General Operating Account</u> – The operating account that is used to account for all financial resources and normal recurring activities except for those required to be accounted for in another fund.

<u>Grants</u> – Monies received from local, federal, and state governments to provide capital or operating assistance.

Headway - The time span between service vehicles (bus or rail) on a specified route.

**Internal Coverage Ratio** – A ratio which has a numerator of gross sales tax revenues plus operating revenues plus interest income less operating expenses, and a denominator of annual debt service on long-term debt. DART standards state the goal that this ratio be at least one—i.e., total revenues less operating expenses should be at least as great as total annual debt service.



Labor Expenditure – The cost of wages and salaries (including overtime) to employees for the performance of their work.

<u>Line Item</u> – An appropriation that is itemized on a separate line in a budget or financial plan.

**Linked Trip** – A single one-way trip without regard for the number of vehicles boarded to make the trip. For example, a commute from home to work achieved by boarding a bus to a train, and then taking another bus after leaving the train, represents one linked trip. See also *Unlinked Trip*.

<u>Maintenance Expenditure</u> – Expenditures for labor, materials, services, and equipment used to repair and service transit and service vehicles and facilities.

<u>Mean Distance Between Service Calls</u> – Quality ratio that measures the average number of miles a vehicle operates before a service call occurs. Management's objective is to increase this ratio.

Calculation = [Total Miles Operated / Total # of Service Calls]

<u>New Starts Program</u> – A federal program which provides funding for fixed guideway transit projects which utilize and occupy a separate right-of-way or other high occupancy vehicle.

**<u>Obligations</u>** – Funds that have been obligated/committed to a specific purpose but have not yet been expended.

**On-Time Performance** – Quality ratio that measures how often a service is on time (i.e., at a designated pick-up spot within a predetermined timeframe). The timeframe differs based on mode and frequency of service. Bus Operations currently uses 59 seconds early and 4 minutes and 59 seconds late. Light rail uses 1 minute early and 4 minutes late. Commuter rail uses 5 minutes late as required by FRA. Paratransit uses 20 minutes early and late. Management's objective is to increase this ratio.

Calculation = [(# Scheduled Trips Sampled - # of Times Early or Late) / Total # of Scheduled Trips Sampled]

**Operating Budget** – The planning of revenue and expenditures for a given period of time to maintain daily operations.

<u>Off-Peak</u> – Non-rush hour time periods.

<u>Operating Revenues</u> – Includes the revenues obtained from the farebox, special events service, advertising, signboard rentals, leases, pass sales, operating grants, shuttle services, other and other miscellaneous income. Operating revenues do not include sales tax revenue, interest income, or gain on sale of assets.

**Operating Expenses** – Includes the expenses required to operate DART's revenue services, and general mobility projects. Operating expenses do not include the cost of road improvements or the staff costs associated with DART's capital programs.

<u>**Paratransit Service**</u> – Any transit service required by the 1990 Americans with Disabilities Act (ADA), generally characterized by pre-arranged curb-to-curb service provided by accessible vehicles.

**Passenger Canceled Trips Ratio** – Measures the percentage of times that Paratransit users schedule a trip, then cancel the trip. Total scheduled trips include actual trips made, cancellations, and no-shows.

*Calculation* = [# of *Canceled Trips / Total* # of *Scheduled Trips*]



#### Glossary of Terms/Definitions (cont.)

<u>**Paratransit Service**</u> – Any transit service required by the 1990 Americans with Disabilities Act (ADA), generally characterized by pre-arranged curb-to-curb service provided by accessible vehicles.

**Passenger Canceled Trips Ratio** – Measures the percentage of times that Paratransit users schedule a trip, then cancel the trip. Total scheduled trips include actual trips made, cancellations, and no-shows.

Calculation = [# of Canceled Trips / Total # of Scheduled Trips]

**Passenger Mile** – A single passenger traveling one mile.

**Passenger No-Show Ratio** – Quality measurement for Paratransit service that measures the number of times a Paratransit user makes a reservation and does not show-up for the ride. This measurement is different from a cancellation. Management's objective is to reduce this number so that other trips can be scheduled in that timeframe. Users can lose the ability to access the Paratransit system if they have an excessive number of no-shows.

Calculation = [# of No Shows / Total # of Scheduled Trips]

<u>Passengers per Hour – Actual</u> – The total number of Paratransit passengers actually carried, divided by the total hours of revenue service. Management's objective is to increase this number.

Calculation = [Actual Passenger Boardings / Revenue Hours]

**Passengers per Hour - Scheduled** – The total number of Paratransit passengers scheduled per hour of revenue service. Management's objective is to increase this number.

Calculation = [Scheduled Passenger Boardings / Revenue Hours]

<u>**Passengers per Mile**</u> – Effectiveness ratio that measures route productivity by comparing the number of passenger boardings to the number of revenue miles. Management's objective is to increase this ratio.

Calculation = [Passenger Boardings / Revenue Miles]

<u>**Peak Period**</u> – Morning or evening rush hour.

<u>Percentage of Trips Completed</u> – Quality measurement for Paratransit service that measures the number of times DART completes a scheduled passenger pick-up. Management's objective is to increase this ratio.

Calculation = [(# of Actual Trips - # of Trips Missed) / # of Actual Trips]

**Principal** – The amount borrowed or the amount still owed on a loan, separate from the interest.

**<u>Reduced Fares</u>** – Discounted fares for children elementary through middle school, seniors and non-Paratransit disabled with valid ID; high school fares are applicable on bus and rail on Monday through Friday only; college/trade school valid on bus and rail with a DART Student ID.

<u>**Repurchase Agreement**</u> – A money-market transaction in which one party sells securities to another while agreeing to repurchase those securities at a later date.



<u>Reserves</u> – DART uses "reserves" as well as "funds" to ensure resources are available for anticipated and unanticipated needs. See **Funds and Fund Balance** at the end of the Twenty-Year Financial Plan portion of this document for yearly amounts, and Board-adopted financial policies regarding funds and reserves in the preceding pages of this Reference section.

**<u>Revenue Bond</u>** – A bond on which debt service is payable solely from a restricted revenue source (or sources)—for example sales tax revenues.

**<u>Revenue Car Miles</u>** – Total miles operated by LRT or TRE trains in revenue service multiplied by the number of cars operated as part of each train. Power consumption and maintenance requirements are driven by the number of car miles operated. As a result, one area of management focus is to optimize the number of cars operated per train based on ridership and Board-adopted loading standards.

Calculation = Sum for all trips of [# of Revenue Train Miles operated \* # of cars in the train]

**<u>Revenue Miles or Hours</u>** – Measures the number of miles, or hours, that a vehicle is in revenue service (i.e., available to pick up passengers) and includes special events service. This measure does not include "deadhead miles" which are the miles between the bus maintenance facility and the beginning and/or end of a route.

**<u>Reverse Commute</u>** – City-to-suburb commute. This phrase refers to the fact that most riders commute from the suburbs to the city.

**<u>Ridership</u>** – For the total system, this is the total number of passengers boarding a DART vehicle. Transfers are included in total ridership and passenger boarding counts (e.g., if a person transfers from one bus to another bus or from a bus to rail, this is counted as two passenger boardings). Fixed route ridership counts passenger boardings (including transfers) for bus, light rail, streetcar, and commuter rail only. See also *Unlinked Trip*.

<u>Sales Taxes for Operating Expenses</u> – Measures the amount of sales taxes required to subsidize operations. 100% minus this percentage is the amount of sales taxes available for capital and road improvement programs. Management's objective is to reduce this ratio.

Calculation = [(Operating Expenses - Operating Revenues - Interest Income) / Sales Tax Revenues]

**Scheduled Miles Per Hour** – Represents the average overall speed of the modal service as reflected in the schedule, with stops and recovery time included. This value reflects both the composition of the service (i.e., express and local routes for bus mode) and the efficiency of the schedule (e.g., reducing recovery time in the schedule improves average speed).

Calculation (for bus) = [Scheduled Miles / Scheduled Hours] Calculation (for rail) = [Scheduled Train Miles / Scheduled Train Hours]

<u>Service Hours</u> – Paratransit service hours are also known as revenue hours. They are calculated from the time of the first passenger pick-up until the time of the last passenger drop-off. Travel time to and from the garage is not included.

<u>Service Levels</u> – Also known as Telephone Service Factor (TSF), measures the response to calls within a specified period. This measurement is being used to monitor the effectiveness of the main call center (CI: 214-979-1111) within 1 minute, the response to Paratransit scheduling issues within 1 minute, and the response to Where's My Ride inquiries within 2 minutes.

Calculation = (# of Calls Answered) / (# of Calls Received Within the Specified Time Period)



#### Glossary of Terms/Definitions (cont.)

<u>Start-Up Costs</u> – Costs associated with the implementation of a major new light rail, commuter rail, or streetcar expansion that are incurred prior to the service implementation (e.g., vehicle and system testing).

<u>State of Good Repair (SGR)</u> – Capital investment in infrastructure maintenance in order to improve the condition of current transit facilities and provide safe, reliability service.

<u>Subscription Service</u> – Paratransit passengers traveling at least three times per week to the same location at the same time can be placed on "subscription service." This service is "automatically" scheduled for the passenger, and it is not necessary for the passenger to call and schedule the service.

<u>Subsidy per Passenger</u> – Efficiency ratio, which measures the tax subsidy required for each passenger boarding for a mode or combination of modes. Management's objective is to reduce this ratio.

Calculation = [(Operating Expenses - Operating) / Passenger Boardings]

<u>Total Vehicle Miles</u> – The sum of all miles operated by passenger vehicles, including mileage when no passengers are carried.

<u>**Transit Asset Management (TAM)**</u> – Measurement of the condition of capital assets such as equipment, rolling stock, infrastructure, and facilities.

<u>**Transit-Oriented Development (TOD)**</u> – Mixed-use development of residential, commercial, and retail uses within walking distance of a transit station or bus route.

<u>**Transit Signal Priority**</u> – Transit signal priority either gives or extends a green signal to public transit vehicles under certain circumstances to reduce passenger travel times, improve schedule adherence, and reduce operating costs.

<u>**TIGER**</u> (Transportation Investment Generating Economic Recovery)</u> – A program administered by The U.S. Department of Transportation for capital investments in surface transportation infrastructure that are to be awarded on a competitive basis for projects that will have a significant impact on the Nation, a metropolitan area, or a region with regards to fostering economic development.

<u>Unlinked Trip</u> – A trip involving a single boarding and alighting from a transit vehicle. For example, a commute from home to work achieved by boarding a bus to a train, and then taking another bus after leaving the train, represents three unlinked trips. See also *Linked Trip*.

<u>Vanpool</u> – Consists of a group of 5 to 15 people who regularly travel together to work (typically 30 miles or more roundtrip) in a DART-provided van.

<u>Vehicle Revenue Mile</u> – Vehicle mile during which the vehicle is in revenue service (i.e., picking up and/or dropping off passengers.

<u>Yield to worst</u> – The lowest yield that you can earn from a bond when holding to maturity, absent a default. It is a measure that is used in place of **yield to maturity** with callable bonds. As callable bonds can be bought back before their stated maturity date, **yield to maturity** does not provide an accurate picture of what an investor can expect to earn. **Yield to worst** allows apples to apples comparisons of bonds with varying call features and coupon payments.

**Zero Denials** – A Federal mandate that in effect states that a provider cannot systematically deny Paratransit trips on an on-going basis.

DART	
3	

## Acronyms

000s	Thousands
AAC	American Airlines Center
ABC	Activity-Based Costing
ADA	Americans with Disabilities Act of 1990
AHJ	Authority Having Jurisdiction
AM	Asset Management
AMS	Analysis, Modeling, and Simulation
APC	Automatic Passenger Counters
APT	Area Personal Transit (Las Colinas)
АРТА	American Public Transportation Association
APTS	Advanced Public Transportation Systems
APU	Auxiliary Power Unit
AREMA	American Railway Engineering & Maintenance-of-Way Association
ARRA	American Reinvestment & Recovery Act of 2009
ATIS	Advanced Traveler Information Systems
ATMS	Advanced Traffic Management Systems
ATU	Amalgamated Transit Union
AVA	Automated Voice Announcements
AVL	Automated Vehicle Locator
AVP	Assistant Vice-President
В	Billions
BABs	Build America Bonds
BBL	Barrel
BI	Business Intelligence
BNSF	Burlington, Northern & Santa Fe Railroad
BPP	Business Planning Parameter
BRT	Bus Rapid Transit
CABs	Capital Appreciation Bonds
CAD	Computer-Aided Dispatch
CAR	Condition Assessment Report
CBD	Central Business District
CCART	Collin County Area Rural Transit
CCTV	Closed Circuit Television
CDHP	Consumer-Directed Health Care Plan
CDL	Commercial Driver's License
CEO	Customer Experience Officer
CPS	Comprehensive Payment System
CIP	Capital Investment Plan
CIT	Continuous Improvement Team
CMAQ	Congestion Mitigation/Air Quality
CMGC	Construction Manager/General Contractor
CNG	Compressed Natural Gas

C	R	<b>T</b>

Exhibit	129
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	Acronyms
COA	Comprehensive Operations Analysis
COGNOS	Budget Software
COOP	Continuity of Operations
COPS	Community Oriented Policing Services (grant)
CP	Commercial Paper
CPTED	Crime Prevention Through Environmental Design
CPU	Central Processing Unit
CR	Commuter Rail
CROF	Central Rail Operating Facility
CRT	Customer Response Team
CS	Central Services
CSSAC	Construction Safety and Security Advisory Committee
CSSP	Construction Safety and Security Program
CST	Customer Service Team
CTC	Centralized Traffic Control
CVB	Convention and Visitors Bureaus
CY	Current Year
D2	Dallas Central Business District Second Alignment
DART	Dallas Area Rapid Transit
DB	Defined Benefit Retirement Plan
DC	Defined Contribution Retirement Plan
DCTA	Denton County Transportation Authority
DCURD	Dallas County Utility and Reclamation District
DFW	Dallas/Fort Worth International Airport
DGE	Diesel Gallon Equivalent
DGNO	Dallas, Garland, and Northeastern Railroad
DLM	Division Level Measurement
DMU	Diesel Multiple Unit
DMWBE	Disadvantaged, Minority, and Woman-Owned Business Enterprise
DOE	Department of Energy
DOT	Department of Transportation
DSC	DART Safety Committee
EA	Environmental Assessment
EA	Enterprise Application
EAP	Employee Assistance Program
ED	East Dallas Operating Facility
EEO	Equal Employment Opportunity
EEO/AA	Equal Employment Opportunity/Affirmative Action Plan
EMS	Emergency Management System
EOY	End of Year
L	



Acronyms			
EPA	Environmental Protection Agency		
EVP	Executive Vice President		
FAA	Federal Aviation Administration		
FAST	Fixing America's Surface Transportation Act		
FE	Fleet Engineering		
FFGA	Full Funding Grant Agreement		
FGM	Fixed-Guideway Modernization		
FHWA	Federal Highway Administration		
FICA	Federal Insurance Contributions Act		
FLSC	Fire Life Safety Committee		
FP	Financial Plan		
FRA	Federal Railroad Administration		
FSE	Facility and Systems Engineering		
FS-B	Financial Standards-Business Planning Parameter		
FS-D	Financial Standards-Debt Service		
FS-G	Financial Standards-General		
FT	Full-Time		
FTA	Federal Transit Administration		
FY	Fiscal Year		
FYxxA	Actual year-end cost for FY (xx)		
FYxxB	Budget cost for FY (xx)		
FYxxP	Projected cost for FY (xx)		
G&A	General & Administrative		
GAAP	General Accepted Accounting Principles		
GASB	Government Accounting Standards Board		
GLO	General Land Office		
GM	General Mobility		
GPS	Global Positioning System		
HEP	Head End Power		
НМО	Health Maintenance Organization		
HQ	Headquarters		
HRA	Health Reimbursement Account		
HVAC	Heating, Ventilation, Air Conditioning		
IACP	International Association of Chiefs of Police		
ICM	Integrated Corridor Management		
IH	Interstate Highway		

Exhibit 1
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## Acronyms

IMAInformation Management & AnalyticsIRVIrvingITInformation TechnologyITCIntermodal Transportation CenterITILIT Infrastructure LibraryITPIntegrated Test PlanITSIntelligent Transportation SystemIVRInteractive Voice ResponseJHAJurisdictions Having AuthorityJVJoint VentureKThousandskHzKilohertzKPIKey Performance Indicator(s)kWhKilowatt HourLANLocal Area NetworkLAP/CMSLocal Assistance Program/Congestion Management SystemLBJLyndon B. Johnson FreewayLCDLiquid Crystal DisplayLEDLeadership in Energy and Environmental DesignLGCLocal Government CorporationLPALocally Preferred Investment StudyLRTLight Rail TransitLRVLight Rail VerkerLRTLight Rail VerkerMAMillionsMaaSMobility as a ServiceMAIFMobility Assistance and Innovation FundMAP-21Moving Ahead for Progress in the 21st CenturyMAXMetro Artington ExpressMBEMinority-Owned Business EnterpriseMDTMobile Data Terminal	ILA	Interlocal Agreement
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LRVLight Rail VehicleLRWPPLight Railway Worker Protection PlanLT or LTDLong-Term Debt or Long-Term DisabilityMMillionsMaaSMobility as a ServiceMAIFMobility Assistance and Innovation FundMAP-21Moving Ahead for Progress in the 21st CenturyMATAMcKinney Avenue Transit AuthorityMAXMetro Arlington ExpressMBEMinority-Owned Business EnterpriseMDCMobile Data Computer	LPIS	Locally Preferred Investment Study
LRWPPLight Railway Worker Protection PlanLT or LTDLong-Term Debt or Long-Term DisabilityMMillionsMaaSMobility as a ServiceMAIFMobility Assistance and Innovation FundMAP-21Moving Ahead for Progress in the 21st CenturyMATAMcKinney Avenue Transit AuthorityMAXMetro Arlington ExpressMBEMinority-Owned Business EnterpriseMDCMobile Data Computer	LRT	Light Rail Transit
LT or LTDLong-Term Debt or Long-Term DisabilityMMillionsMaaSMobility as a ServiceMAIFMobility Assistance and Innovation FundMAP-21Moving Ahead for Progress in the 21st CenturyMATAMcKinney Avenue Transit AuthorityMAXMetro Arlington ExpressMBEMinority-Owned Business EnterpriseMDCMobile Data Computer	LRV	Light Rail Vehicle
MMillionsMaaSMobility as a ServiceMAIFMobility Assistance and Innovation FundMAP-21Moving Ahead for Progress in the 21st CenturyMATAMcKinney Avenue Transit AuthorityMAXMetro Arlington ExpressMBEMinority-Owned Business EnterpriseMDCMobile Data Computer	LRWPP	Light Railway Worker Protection Plan
MaaSMobility as a ServiceMAIFMobility Assistance and Innovation FundMAP-21Moving Ahead for Progress in the 21st CenturyMATAMcKinney Avenue Transit AuthorityMAXMetro Arlington ExpressMBEMinority-Owned Business EnterpriseMDCMobile Data Computer	LT or LTD	Long-Term Debt or Long-Term Disability
MAIFMobility Assistance and Innovation FundMAP-21Moving Ahead for Progress in the 21st CenturyMATAMcKinney Avenue Transit AuthorityMAXMetro Arlington ExpressMBEMinority-Owned Business EnterpriseMDCMobile Data Computer	М	Millions
MAP-21Moving Ahead for Progress in the 21st CenturyMATAMcKinney Avenue Transit AuthorityMAXMetro Arlington ExpressMBEMinority-Owned Business EnterpriseMDCMobile Data Computer	MaaS	Mobility as a Service
MATAMcKinney Avenue Transit AuthorityMAXMetro Arlington ExpressMBEMinority-Owned Business EnterpriseMDCMobile Data Computer	MAIF	Mobility Assistance and Innovation Fund
MAXMetro Arlington ExpressMBEMinority-Owned Business EnterpriseMDCMobile Data Computer	MAP-21	Moving Ahead for Progress in the 21st Century
MBE     Minority-Owned Business Enterprise       MDC     Mobile Data Computer	MATA	McKinney Avenue Transit Authority
MDC Mobile Data Computer	MAX	Metro Arlington Express
I	MBE	Minority-Owned Business Enterprise
MDT Mobile Data Terminal	MDC	Mobile Data Computer
	MDT	Mobile Data Terminal

	Acronyms
MIS	Major Investment Study
MLK	Martin Luther King, Jr.
MMS	Mobility Management Services
MOU	Memorandum of Understanding
MOWIS	Maintenance of Way Information System
MPH	Miles Per Hour
MPLS	Multi-Powered Label Switching
MS	Microsoft
MV	MV Transportation, Inc. (Paratransit Provider)
NABI	North American Bus Industries (now part of New Flyer Industries, Inc.)
NC LRT	North Central Light Rail Transit
NCIC	National Criminal Information Center
NCTCOG	North Central Texas Council of Governments
NETRMA	Northeast Texas Regional Mobility Authority
NFC	Near Field Communications
NIMS	National Incident Management System
NOC	Network Operations Center
NOx	Nitrogen Oxide
NRV	Non-Revenue Vehicle
NSO	Network Security Operations
NTD	National Transit Database
NTTA	North Texas Tollway Authority
NW	Northwest Corridor
NW-1A	Northwest LRT Line Section (Downtown to American Airlines Center/Victory Station)
NW-1B	Victory Station to Inwood Station
NW-2	Inwood Station to Northwest Highway
NW-3	Northwest Highway to Valley View (Farmers Branch)
NW-4	Valley View to Frankford Rd (North Carrollton)
NWROF	Northwest Rail Operating Facility
O&M	Operations & Maintenance
O/S	Operating System
O/S EOY	Outstanding End-of-Year
OC	Oak Cliff
OCC	Operations Control Center
OCIP	Owner-Controlled Insurance Program

	Acronyms
OCL	Operations Communications Liaisons
OCS	Overhead Catenary System
ODC	Operations Document Control
OEM	Original Equipment Manufacturer
OPEB	Other Post-Employment Benefits
Ops	Operations
OSHA	Occupational Safety Hazard Administration
OSS	Operations Support System
OTP	On-time performance
P&D	Planning & Development
PA/VMB	Public Announcement/Variable Message Boards
PACE	Professionals Achieving Communication Excellence
PASS	Principal Arterial Street System
PBX	Private Branch Exchange
PCA	Personal Care Attendant
PCI	Payment Card Industry
PE/EIS	Preliminary Engineering/Environmental Impact Statement
PEC	Passenger Emergency Call
РМОС	Project Management Oversight Committee
PMP	Performance Management Plan
PMSA	Primary Metropolitan Statistical Area
PNM	PayNearMe
POS	Point of Sale
PPO	Preferred Provider Organization
PPP	Public/Private Partnership
PT	Part-Time
PTC	Positive Train Control
РТО	Paid Time Off
PTP	Pay-to-Platform
Q	Quarter
R	Registration (mark)
RFI	Request for Information
RFID	Radio Frequency Identification
RITA	Research and Innovative Technology Administration
RMS	Records Management System
ROTC	Refresher Operator Training Class
ROW	Right-of-Way

	Acronyms
RPD	Rail Program Development
RPM	Reaching Performance Milestones
RR	Railroad
RRIF	Railroad Rehabilitation & Improvement Financing
RRM	Railroad Management
RTC	Regional Transportation Council
RTR	Regional Toll Roads
RWP	Roadway Worker Protection
S&I	Service & Inspection
S&W	Salaries & Wages
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A
	Legacy for Users
SAP	Shift Assignment Pay
SDC	Secondary Data Center
SE	Southeast Corridor
SE-1A	Southeast LRT Line Section – Downtown to Fair Park
SE-1B	Fair Park to Hatcher
SE-2	Hatcher to Buckner Blvd.
SEAF	System Expansion & Acquisition Fund
SEJ	South East Junction
SGR	State of Good Repair
SH	State Highway
SIP	Service Incentive Pay
SLRV	Super LRV (LRV with additional low-floor section)
SM	Service Mark
SMS	Short Message Service
SMS	Safety Management System
SOCBOF	South Oak Cliff Bus Operating Facility
SOP	Standard Operating Procedure
SPM	Standards, Performance & Monitoring
SS	Support Services
SSCRT	System Safety Certification Readiness Team
SSPP	System Safety Program Plan
ST (F) (I A	Short-Term (debt)
STD/FMLA	Short-Term Disability/Family Medical Leave Act
STP/MM	Surface Transportation Program/Metropolitan Mobility
SU Tep	Start-Up
T&P TPD	Texas & Pacific Station
TBD	To be determined



## Acronyms

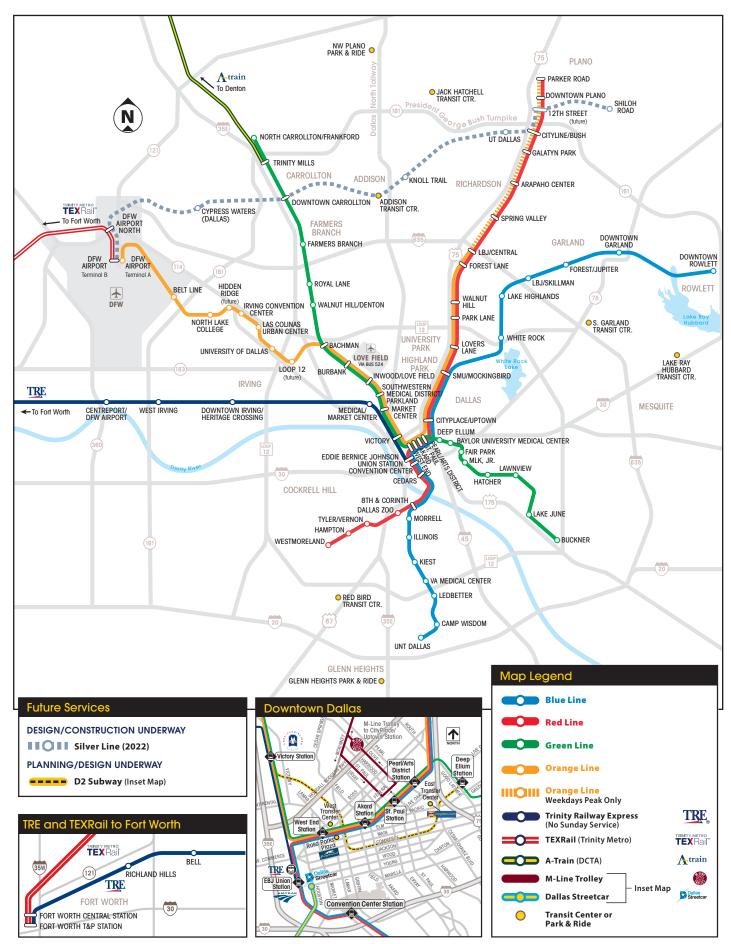
TC	Transit Center
TCEQ	Texas Commission on Environmental Quality
TCIC	Texas Criminal Information Center
TDM	Transportation Demand Management
TES	Traction Electrification System
TIGER	Transportation Investment Generating Recovery
TIF	Tax Increment Financing
TIP	Transportation Improvement Program
TLETS	Texas Law Enforcement Telecommunications System
TMA	Transportation Management Association
TMF	Texas Mobility Funds
TOD	Transit-Oriented Development
TPSS	Traction Power Sub-Station
TRE	Trinity Railway Express
TRIM	Ticket Reader / Issue Machine
TSA	Transportation Security Administration
Trinity Metro	Formerly known as Fort Worth Transportation Authority (FWTA)
TSM	Transportation System Management
TSP	Transit System Plan or Traffic Signal Priority
TTI	Texas Transportation Institute
TVM	Ticket Vending Machine
TxDOT	Texas Department of Transportation
UAFP	Urbanized Area Formula Program
ULEV	Ultra-Low-Emission Vehicles
UNT	University of North Texas
UP	Union Pacific
UPS	Uninterruptible Power Supply
US	United States
USC	United States Code
UT	University of Texas
UTA	University of Texas at Arlington
VAF	Vehicle Acceptance Facility
VBS	Vehicle Business System
VE	Value Engineering
VIPER	Visible Intermodal Protection Response
VMB	Variable Message Boards
VoIP	Voice over Internet Protocol
VP	Vice President
VRDN	Variable Rate Demand Note



Acrony	vms
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WAN	Wide-Area Network
WBE	Women-Owned Business Enterprise
WSA	Ways, Structures & Amenities
XPB	X-Press Booking

# **CURRENT AND FUTURE SERVICES**



DALLAS AREA RAPID TRANSIT P.O. BOX 660163 DALLAS, TX 75266

