

DART BOARD MEMBERS

Sue S. Bauman

Dallas

Catherine S. Cuellar

Dallas and Cockrell Hill

Mark C. Enoch

Garland, Rowlett and
Glenn Heights

Timothy A. Hayden

Carrollton and Irving

Ray Jackson

Dallas

Jonathan R. Kelly

Garland

Patrick J. Kennedy

Dallas

Jon-Bertrell Killen

Dallas

Michele Wong Krause

Dallas

Amanda Moreno

Dallas

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

Plano

DART's Financial Information is located online at:

DART.org/debtdocuments/investorinformation



How to Use This Book

What's in this Book

This book contains the Business Plan for Fiscal Year 2019 (FY 2019 – which ends September 30, 2019) 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 2019 Annual Budget, the FY 2019 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 2019 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 2019 Business Plan
(Including FY 2019 Annual Budget and
FY 2019 Twenty-Year Financial Plan)



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

August 10, 2018

Board of Directors
Dallas Area Rapid Transit

On behalf of the Executive Management Team, I am pleased to present the Fiscal Year (FY) 2019 Business Plan which includes the proposed FY 2019 Annual Budget and Twenty-Year Financial Plan for Dallas Area Rapid Transit.

The proposed FY 2019 Annual Budget, which represents the first year of the FY 2019 Twenty-Year Financial Plan, is a balanced budget and meets all Board-adopted Financial Standards. The total proposed FY 2019 Annual Budget is broken down as follows (dollars in millions):

Operating	\$544.3
Capital & Non-Operating	291.5
Debt Service	197.2
Total Proposed FY 2019 Budget	\$1,033.0

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.

Mobility as a Service (MaaS)

DART is leading the global transformation of public transit from an operator of buses and trains, to the provider comprehensive mobility services. Updates to our fare payment app, GoPass, and the deployment of our first-ever smartcard for fare payment in August, are helping us move our region forward into this new way of thinking about transit.

Further, DART continues developing new tools through a federal "sandbox" grant to explore innovative approaches to meet service opportunities provided by new technologies and approaches to mobility. To make the exploration of these approaches more robust, DART has built upon this grant program to expand the test market to include areas in the southeastern sector of our service area and the far northern sector. New GoLink service was launched in the Rylie, Kleburg, and Inland Port areas of southeast and south Dallas in February and is already showing results with higher ridership in this underserved area. GoLink is a new on-demand service designed to enhance and expand current DART On-Call zones and introduce service to previously unserved or underserved areas.

In addition to the GoLink service in Dallas County, GoLink was implemented in Plano to replace the North Central Plano On Call service and an existing route in the Legacy area. In late August GoLink was deployed in Far North Plano in an area without any fixed bus routes. In addition to providing more service that is more appropriate to those neighborhoods, GoLink helps customers use transit on their terms.

The goal is to use mobile phone technology to deliver more service more cost-effectively. Building on the lessons learned from years of mobile trip planning technology and the updated GoPass app, we hope to enable more of our residents to obtain convenient, affordable access to transit.

New and Improved Fare Payment Systems

The changes to DART's fare payment system help us lower the cost of transit for customers who may not have a credit card or bank account. These customers can load value to their GoPass account with cash at retail outlets throughout the service area. The app also contains a GoPass Wallet that stores value that can be used to purchase tickets for use on DART, TRE, Trinity Metro and the Denton County Transportation Authority.

In August, we will launch our first smartcard, GoPass Tap, for customers who either do not use smartphones or prefer a card as a fare medium. The card can also be reloaded with cash at retail outlets.

In the first quarter of FY 2019, additional modifications to the GoPass app will be introduced to provide seamless integration with shared car operators like Lyft and Uber. Since 2015, GoPass has offered links within the app to these services. The goal is to create functionality within the GoPass app where customers can plan and purchase a complete trip. This new ability reflects the expectation of customers to be able to purchase any good, commodity or service when they want and on their own terms.

Investing in Bus Operations

We continued making improvements to bus service in FY 2018 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.

D-Link, the downtown Dallas circulator, was improved in 2018 with new Sunday service and a modified route to improve connections to the Dallas Farmer's Market and the McKinney Avenue Trolley. The new Sunday service was designed to support the McKinney Avenue Trolley and the Dallas Streetcar.

In July, the distinctively branded D-Link vehicles were replaced with new electric buses. The seven electric buses were funded through a federal grant and made it possible for DART to retire the remaining diesel buses in the fleet. Now all DART buses are fueled by Compressed Natural Gas or electricity.

In FY 2019, we will add 41 new buses as we continue improving bus operations. Bus passenger amenities, such as shelters and benches will continue to be expanded.

Customer Security

The security of our customers, employees, and contractors is a fundamental goal. This was reinforced by a Board resolution in December 2017. Building on several initiatives launched in FY 2018, a major focus for DART in the upcoming year will be a continued effort to improve our customers' sense of security. Customers will see physical improvements at more stations and parking facilities, including better lighting as well as additional sidewalks, fences, and barriers at access points. Increased use of technology also plays a major role. The DART Say Something App, deployed in November 2017, has proven to be an effective way for customers to report incidents and help police respond quickly. 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. The proposed FY 2019 budget also supports expanded coverage by DART Police.

Major Capital Projects

We will continue advancing three significant rail projects during FY 2019. Construction will begin on the DART Rail Red and Blue Line platform extensions in this fiscal year. These modifications to some of our oldest stations outside of Downtown Dallas add operational flexibility and capacity, by allowing the deployment of three-car train sets.

Public meetings for the D2 Subway will resume in late FY 2018 and continue into the new year. We will finalize station location details and advance project design, and are continuing to pursue federal funding options.

We anticipate receiving our Record of Decision for the Cotton Belt regional rail project early in the fiscal year. This will allow us to award construction and railcar procurement contracts while staying on target for our opening in 2022.

Financial Overview

The sources of funds in the proposed FY 2019 Twenty-Year Financial Plan (for the period FY 2019 through 2038) total \$27.8 billion. This represents a 5.1% (\$1.3 billion) increase over the previous Plan, which covered the period FY 2018 through 2037. The proposed FY 2019 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 and a delayed zero-growth year from FY 2019 to FY 2020 that reflect a strong U.S. economy. The FY 2019 Plan incorporates a change to the funding and financing related to both the second Dallas downtown rail alignment and the Cotton Belt Corridor alignment compared to the previous Plan. The total Federal Funds of \$2.4 billion represents a 5.6% increase due to timing compared to the previous Plan.

The total uses of funds in the proposed FY 2019 Twenty-Year Financial Plan sum to \$27.9 billion, a 5.6% (\$1.5 billion) increase over the previous Plan. Operating expenses of \$14.0 billion reflects a 3.1% increase from the previous Plan driven primarily by expanded bus service and increased focus on customer security. Capital expenditures have increased from the previous Plan by \$0.4 billion to a total of \$6.5 billion. This reflects a greater investment in the second downtown rail alignment, additional capital projects, and the timing of existing projects compared to the previous Plan. Debt service increased by \$0.5 billion to a total of \$6.6 billion, reflecting the restructuring of debt, and higher interest rates compared to the previous Plan.

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 priority goals:

1. Service expansion and enhancement that improve travel times and promote a sense of security to attract new riders and retain current riders;
2. 5 Star Continuous Improvement Projects such as vehicle inspection and service disruption programs, to improve the efficiency of our internal processes;
3. Efforts to retain and maintain a skilled and diverse workforce, including: training and mentoring programs, streamlining administrative systems, and healthcare program restructuring; and
4. 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.

DART Board of Directors
August 10, 2018
Page 5

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 2019 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, 2017. 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.

Discover more

DART is far more than just "the thing you ride." It is your "trusted guide" to discovering all that North Texas has to offer.

Our extensive network of light rail, Trinity Railway Express commuter rail, bus routes, paratransit services, and vanpools enables more than 220,000 passengers per day get to where they need to go across our 700-square-mile service area.

Explore North Texas and discover something new on DART. From off-the-beaten-path venues to the trendiest spots in town, every trip can be an adventure. Many of these "DARTable" places are a leisurely walk from a DART rail station or bus stop, and the GoPassSM app makes discovering them easy.

If your journey begins or ends in places not easily served by DART, you now can take the train or bus for the longest portion of the trip and use Uber or Lyft for the short leg. Customers can access these apps through GoPass[®] by selecting the option "More" where the Uber and Lyft apps can be found.

Visit DART.org/DARTable for a list of possibilities that span arts, culture, sports, recreation, dining, shopping, and special events.

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 6). 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 (formerly known as Fort Worth Transportation Authority) along a 34-mile rail corridor between the cities of Dallas and Fort Worth. Exhibit 6 on page 14 is the DART System Map.

Mission Statement – 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.

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.

Board Strategic Priorities – 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



DART Organizational Values – DART’s Five-Year Strategic Plan is grounded in DART’s Values Statement, as follows:

- Focused on Our Customers
 - ✓ We are dedicated to meeting our customers’ needs.
 - ✓ We strive for continuous improvement.
 - ✓ We deliver quality.
- Committed to Safety and Security
 - ✓ 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
 - ✓ We demonstrate a high regard for each other.
 - ✓ We are committed to innovation and learning from our experiences.
 - ✓ We hold ourselves accountable.
 - ✓ We coach, reinforce, and recognize employees.
 - ✓ We foster an environment promoting diversity of people and ideas.
- Good Stewards of the Public Trust
 - ✓ We responsibly use public funds and property.
 - ✓ 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. Exhibit 1 sets forth information regarding our current Board of Directors.

Exhibit 1
Members of the Board of Directors

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

* Board member left in November 2018.

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



Sue S. Bauman
Dallas



Catherine S. Cuellar
Dallas and
Cockrell Hill



Mark C. Enoch
Garland,
Rowlett and
Glenn Heights



Timothy A. Hayden
Carrollton and
Irving



Ray Jackson
Dallas



Jonathan R. Kelly
Garland



Patrick J. Kennedy
Dallas



Jon-Bertrell Killen
Dallas



Michele Wong Krause
Dallas



Amanda Moreno
Dallas



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
Plano

REV 10/2018

As of September 30, 2018.

Exhibit 2 is a map of the DART Service Area.

Exhibit 2





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	JOINED DART
Gary C. Thomas	President/Executive Director	1998
Jesse Oliver	Deputy Executive Director	2012
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
John Adler	Vice President, Procurement	2006
Albert Bazis	Director of Internal Audit	2001
Joseph G. Costello	Senior Vice President, Finance	2014
Doug Douglas	Vice President, Mobility Management Services	1990
Nevin Grinnell	Vice President, Chief Marketing Officer	2011
Michael Holbrook	Vice President, Rail Operations	2008
Herold Humphrey	Vice President, Bus Operations	2017
Nancy Johnson	Director of the Office of Board Support	1999
Morgan Lyons	Vice President, External Relations	1996
Bonnie Murphy	Vice President, Commuter Rail	2017
Michael Muhammad	Vice President, Diversity/Innovative Services	2004
Cheryl D. Orr	Vice President, Chief People Officer	2015
Todd Plesko	Vice President, Planning & Development	2009
John Rhone	Vice President, Capital Design & Construction	2002
Stephen Salin	Vice President, Capital Planning	2000
David Schulze	Vice President, Policy and Strategy	2004
James Spiller	Vice President, DART Chief of Police and Emergency Management	2001
Robert W. Strauss	Vice President, Real Property and Transit Oriented Development	2016
Vacant	General Counsel	-
Vacant	Vice President, Chief Information Officer	-
Vacant	Vice President, Chief Safety Officer	-
Vacant	Vice President, Government Relations	-



Employees and Employee Relations

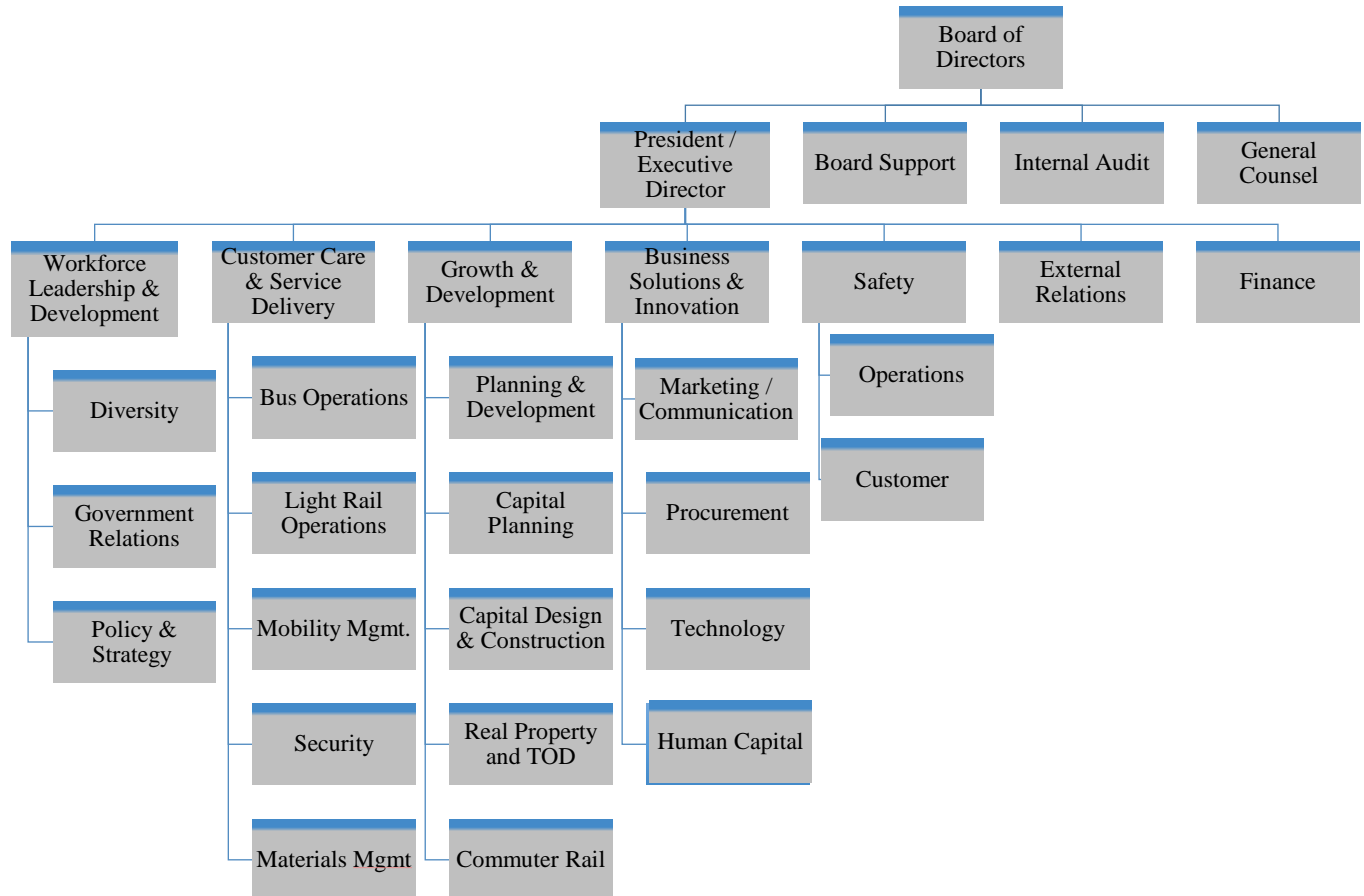
There are 3,972 salaried and hourly positions included in the FY 2019 Annual Budget.

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).

- ***Workforce Leadership and Development*** develops and provides effective leadership.
- ***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 Solutions and Innovation*** 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.

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 2018 and FY 2019.

Exhibit 5
Ridership by Mode
(in Millions)

Fiscal Year	Bus	LRT*	Commuter Rail	Paratransit	Vanpool	Total **
2008	45.0	19.4	2.7	0.7	0.7	68.5
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
2018B	33.0	31.0	2.1	0.9	0.7	67.8
2019B	30.6	29.0	2.0	0.9	0.9	63.4

* Streetcar ridership is included in the LRT totals.

Note: Automatic Passenger Counter (APC) data used beginning in 2012. These 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 15.5%.

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



Bus Transit (48.8% of total system ridership in Fiscal Year 2017)

Our bus system provides local, express, crosstown, on-call, flex, feeder bus routes, and site specific shuttles. Local routes are focused on the Dallas Central Business District and serve the largest and densest concentration of employment in the service area. The routes are characterized by stops at one or two block intervals. Service is generally provided six-to-seven days a week. 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 provides our customers the advantages of a fixed route plus the convenience of curbside service in six 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.

Light Rail Transit (45.8% of total system ridership in Fiscal Year 2017)

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 (3.2% of total system ridership in Fiscal Year 2017)

Our commuter rail system, referred to as the 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 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 2017)

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.

Vanpool (1.0% of total system ridership in Fiscal Year 2017)

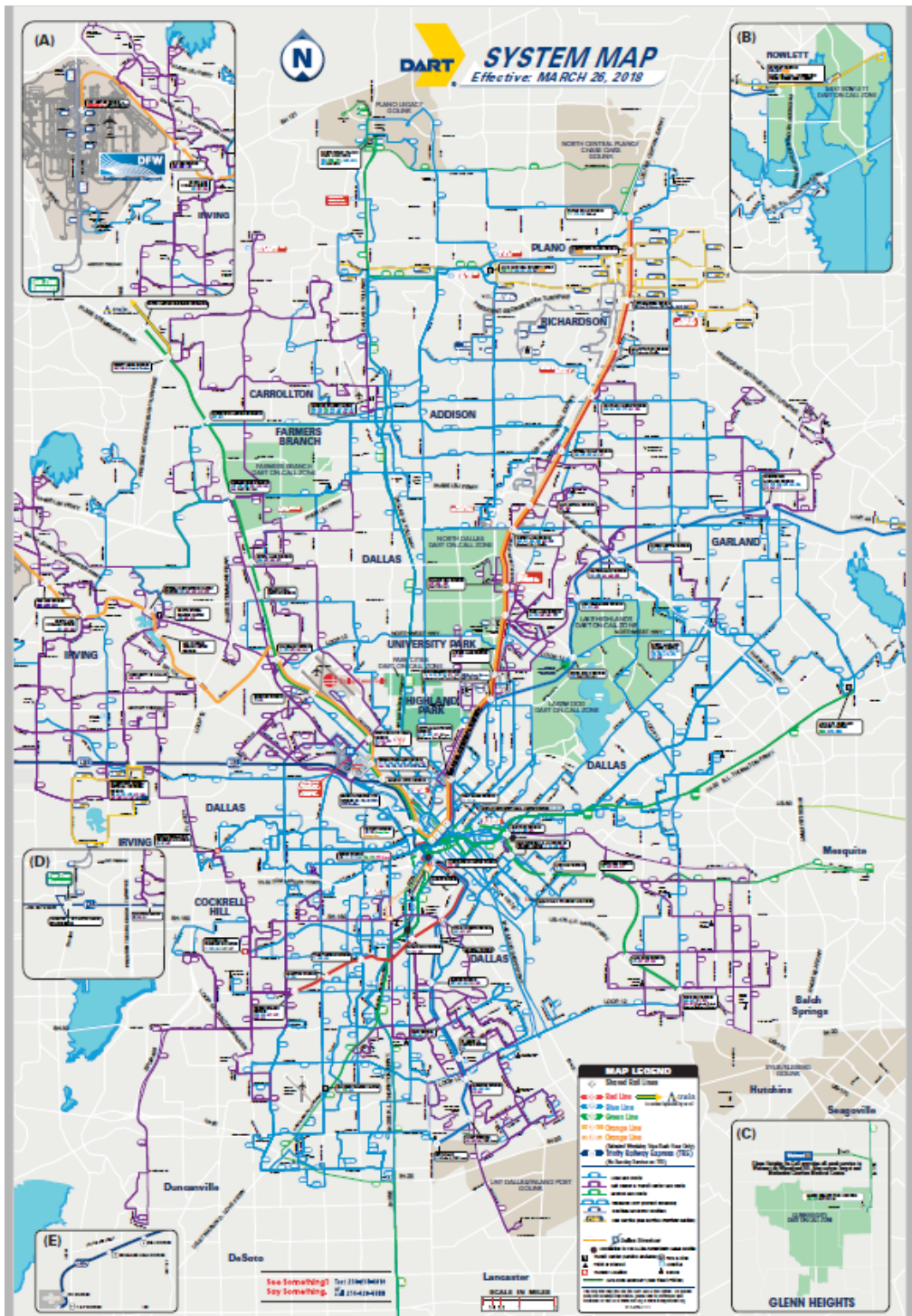
DART collaborates with area employers to develop strategies for reducing employee vehicle trips through such programs as carpools, vanpools, and flexible work schedules. DART provides funding for up to 250 vans for our vanpool program, which is operated through a third-party contractor. DART assists customers in forming vanpools. Prospective vanpoolers can call in and provide us with information for our RideShare database. We then 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 2017-2018, 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)
Award for Distinguished Budget Presentation and Certificate of Achievement for Excellence in Financial Reporting
 - **Texas Comptroller Leadership Circle** – Silver Designation
National Purchasing Institute
Achievement of Excellence in Procurement Award
 - **South West Transit Association**
Award to End Human Trafficking
 - **Workforce Solutions Greater Dallas**
AEL Employer Partnership, Outstanding Accomplishments in the Workforce System, 2017



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FY 2019 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, 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 2019 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 currently 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;
- The construction of a second rail corridor through downtown Dallas (known as D2 Subway) which will both increase throughput and provide a rerouting option in the event of a service disruption; and
- Advancement of the Dallas Streetcar Central Link project from near Union Station to Uptown where it would interface with the McKinney Avenue Streetcar line. This project is being done in cooperation with the City of Dallas.

The FY 2019 Financial Plan includes service along the Cotton Belt corridor in the northern part of the DART Service Area. As proposed, 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 the TEX Rail project which is currently under construction by Trinity Metro (formerly known as the Fort Worth Transportation Authority). This line runs from downtown Fort Worth to DFW Airport starting in late 2018 or early 2019. Long-term, this will allow for a single-seat ride from Plano all the way to Fort Worth. Service along the Cotton Belt is scheduled to begin in 2022. Current plans call for single-track operation with sidings and passing tracks, as opposed to full double-track operation. Headways would be 30 minutes in the 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 2019 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 2019 Financial Plan illustrates the affordability of its capital and operating plans, contains \$3.32 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 2019 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 2019 Annual Budget and Twenty-Year Financial Plan on September 18, 2018.

Financial Plan Format

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

Each category in the FY 2019 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 2019 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 290, Exhibit 110, and the approved FY 2019 Financial Standards are shown beginning on page 292 in Exhibit 111, 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 2018 Highlights

DART continued 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 and streetcar projects are expected to be completed by 2022, and D2 by 2024.

Preliminary engineering work also continued on the development of commuter rail service on the Cotton Belt corridor.

DART has completed a Comprehensive Operations Analysis (COA) in conjunction with the development of a new 2040 Transit System Plan. The COA is a thorough examination of all DART services, with particular emphasis on the bus system, that analyzes demographic and travel data, transit service provided, and transit service needs over the next decade and beyond. DART has reviewed the recommendations of the COA and has begun to implement service enhancements and make any service adjustments necessary to improve the service to our riders while ensuring that changes fit within the framework of the budget and affordability. A total of 41 new buses will be added to the fleet by FY 2019 to enable the service improvements, and DART has incorporated \$10 million in the Plan for additional annual bus operating expenses beginning in FY 2019 to start implementing the recommendations resulting from the COA. The operating budget for FY 2019 includes \$5 million; the remaining \$5 million and associated service changes may be spread over the next two years.

The Agency continued the implementation of a multi-year initiative called, “5 Star Service.” Led by Customer Care and Service Delivery, the vision statement for the program is, “Each member of DART’s team strives every day to create an extraordinary customer experience when interacting with colleagues, riders, partners, and the community.”

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 changes to DART fares. The timing of the changes coincides with the implementation of the new payment system.

In general, the fare increase represents a 20% price increase, except that midday passes increase only 25¢, from \$1.75 to \$2.00. Also, two-hour passes will expand to passes that are good from start of service until noon and from noon until end of service. DART will re-introduce single-ride fare for bus service at \$2.50 (the price of a 2-hour pass today). Generally, the new fares became effective August 2018. The Financial Plan reflects future fare changes at five-year intervals, each of which increase fixed-route average fare by 17%. The exact timing and magnitude of the increase and specifics of the fare structure are subject to public input and Board approval.

DART introduced new Medical Plan offerings to employees and retirees in 2018. Replacing the existing Medical Plan offerings was an Accountable Care Organization and a Reference Based Reimbursement Plan. A new third-party medical claims administrator was also brought on board along with a new life insurance carrier.



DART is in the planning stage for two additional infill stations along the Orange Line in Irving. These stations, at Loop 12 and Carpenter Ranch, are to be completely funded by external contributions and are expected to generate additional ridership.

DART is in the process of generating the 2045 Transit System Plan. The planning process includes:

- Assessment of needs and opportunities in the DART Service Area and a larger regional study area, including changes in demographics, travel patterns, and congestion;
- Developing a bus service vision to respond to changing Service Area needs;
- Definition of corridor opportunities and various service strategies to meet the identified mobility needs; and
- Evaluation of alternatives, including a trade-off analysis within financial constraints through 2045.

Cotton Belt Rail Service

During 2013 and 2014, 41 separate service alternatives were studied for this corridor including different types of service delivery (double-track rail, single-track rail, and Bus Rapid Transit), segments of the corridor being developed (the full DFW-Plano alignment as well as several subsegment configurations), and vertical profiles through North Dallas (at-grade, shallow trench, or tunnel). They also included two alternatives at the east end of the alignment (a north and a south route) as well as the inclusion or exclusion of a Cypress Waters Station in the North Lake area of Irving. Each of these alternatives was detailed with capital and operating costs as well as ridership and revenue potential. The results of this study and the cost of each option were presented to the service area cities and the DART Board in June 2014.

The FY 2016 Financial Plan included the development of rail service along the Cotton Belt corridor from Plano, through the North Dallas area, to DFW Airport. This service will connect with DART's Green Line in Carrollton and the Red Line in Plano. Service was programmed to begin in 2035, but several regional sources of funds and scope modifications allowed for the FY 2017 Financial Plan to advance revenue service along the Cotton Belt Corridor in 2022.

A combination of the 13-year acceleration (reducing the impact of inflation) and the scope modifications lowered the cost of the line from \$2.9 billion in the FY 2016 Plan to \$1.1 billion in the FY 2018 Plan. Note: This is a preliminary cost estimate based on 10% design documents. As the design is advanced further and the scope of the project becomes better defined, the overall cost may change. While this does have the effect of tightening financial resources over the next 15 years, it opens up significantly more financial capacity for projects that may be recommended in the 2040 Transit System Plan and its subsequent updates.

Exhibit 7, on the next page, is a summary of the changes in sources and uses of funds between the FY 2018 Financial Plan and the FY 2019 Plan, for the 20-year period FY 2019 through FY 2038.



Exhibit 7
20-Year Sources and Uses of Funds Comparison (FY 2019 – FY 2038, in Millions)

Line	Description	FY18 Plan	FY19 Plan	\$ Variance	% Variance
SOURCES OF FUNDS					
1	Sales Tax Revenues	\$17,865.0	\$18,175.3	\$310.3	1.7%
2	Operating Revenues	2,623.9	2,415.9	(207.9)	(7.9%)
3	Interest Income	403.9	391.7	(12.2)	(3.0%)
4	Formula Federal Funding	1,605.7	1,739.8	134.2	8.4%
5	Discretionary Federal Funding	604.5	645.8	41.3	6.8%
6	Long-term Debt Issuances	2,900.0	3,035.0	135.0	4.7%
7	Commercial Paper Issuances	400.0	627.0	227.0	56.8%
8	Other Operating Contributions	538.0	464.7	(73.4)	(13.6%)
9	Other Capital Contributions	245.0	270.2	25.3	10.3%
10	Total Sources of Funds	\$27,185.9	\$27,765.5	\$579.6	2.1%
USES OF FUNDS					
Operating Expenses:					
11	Bus	\$6,930.9	\$6,918.1	(\$12.7)	(0.2%)
12	Light Rail Transit	4,291.4	4,407.6	116.2	2.7%
13	Streetcar	96.8	113.5	16.8	17.3%
14	Commuter Rail/RR Management	1,334.0	1,291.9	(42.2)	(3.2%)
15	Paratransit	1,200.2	1,208.3	8.0	0.7%
16	General Mobility - TDM	51.0	51.2	0.2	0.4%
17	Total Operating Expenses	\$13,904.3	\$13,990.6	\$86.3	0.6%
Capital and Non-Operating:					
18	Agency-Wide	\$430.0	\$457.7	\$27.7	6.4%
19	Bus	1,091.4	1,086.0	(5.4)	(0.5%)
20	Light Rail Transit	2,635.5	2,762.0	126.4	4.8%
21	Streetcar	92.6	102.0	9.4	10.1%
22	Commuter Rail/RR Management	1,602.5	1,668.3	65.8	4.1%
23	Paratransit	5.4	5.7	0.3	5.3%
24	General Mobility - Road Impr./ITS	18.0	53.8	35.8	198.7%
25	Non-Operating	20.7	41.5	20.8	101.0%
26	Capital P & D, Start-Up	223.8	304.2	80.4	35.9%
27	Total Capital and Non-Operating	\$6,120.0	\$6,481.2	\$361.1	5.9%
Debt Service					
28	Principal Payments - Long-term Debt	\$2,577.2	\$2,483.5	(93.7)	(3.6%)
29	Long-term Debt Interest Expense	3,592.8	3,999.7	406.9	11.3%
30	Commercial Paper Interest Expense	152.7	151.4	(1.2)	(0.8%)
31	Debt-Related Fees	11.7	11.7	(0.0)	(0.2%)
32	Total Debt Service	\$6,334.4	\$6,646.2	\$311.9	4.9%
33	Commercial Paper Debt Repayment	510.0	737.0	227.0	44.5%
34	Total Uses of Funds	\$26,868.7	\$27,855.0	\$986.3	3.7%



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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 (see page 35) 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 2019 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 2019 operating expenses are \$544.3 million. These ongoing obligations are funded by annual sources of funds including operating revenues (\$85.4 million), interest income (\$17.2 million), federal formula funds for preventive maintenance (\$78.2 million), local funding for TRE (from FWTA) and Streetcar (City of Dallas) operations (\$13.7 million), other sources (\$0.5 million), and sales taxes (\$349.3 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.





Exhibit 8
FY 2019 – FY 2038 Structural Budget Balance
(in Millions)

Line	Category	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
1	Total Sources of Funds	\$1,053.7	\$1,271.3	\$1,668.3	\$1,603.3	\$1,495.4	\$1,361.5	\$1,424.6	\$1,431.4	\$1,384.4	\$1,358.0
2	Sales Tax Revenues	\$628.1	\$628.1	\$653.3	\$686.0	\$727.2	\$763.6	\$794.2	\$818.0	\$818.5	\$851.6
3	Operating Revenues	85.4	84.8	86.5	92.0	94.2	105.3	106.4	108.4	110.4	113.1
4	Interest Income	17.2	19.7	24.2	25.0	25.8	25.7	24.8	23.9	19.9	19.4
5	Formula Federal Funding	90.1	90.2	92.9	95.6	104.5	87.7	87.7	87.7	87.7	87.7
6	Discretionary Federal Funding	77.7	62.1	199.0	130.0	100.0	0.0	12.4	12.8	6.3	6.1
7	Long-term Debt Issuances	90.9	295.4	510.8	470.9	400.0	350.0	240.0	227.0	250.0	200.0
8	Commercial Paper Issuances	27.0	48.0	68.0	66.0	18.0	0.0	120.0	120.0	60.0	50.0
9	Other Non-Operating Contributions	14.2	15.3	19.0	19.9	19.9	20.9	21.9	21.9	22.5	23.1
10	Other Capital Contributions	23.1	27.7	14.5	17.9	5.8	8.4	17.4	11.7	9.1	7.1
11	Operating Expenditure	\$544.3	\$562.3	\$573.8	\$602.8	\$615.6	\$631.1	\$648.2	\$660.9	\$675.1	\$689.6
	Funding Sources:										
12	Operating Revenues	\$85.4	\$84.8	\$86.5	\$92.0	\$94.2	\$105.3	\$106.4	\$108.4	\$110.4	\$113.1
13	Interest Income	17.2	19.7	24.2	25.0	25.8	25.7	24.8	23.9	19.9	19.4
14	Formula Funds (Capital Prevent Maint.)	78.2	84.4	87.1	89.9	98.7	81.9	81.9	81.9	81.9	81.9
15	FW TRE Ops/Dallas Streetcar Contrib.	13.7	14.9	18.6	19.0	18.9	19.9	20.9	20.9	21.4	22.0
16	Other Non-Operating Sources	0.5	0.5	0.5	0.9	1.0	1.0	1.0	1.0	1.0	1.1
17	Sales Taxes allocated to Operations	349.3	358.0	356.9	376.0	377.0	397.3	413.3	424.8	440.4	452.1
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	\$544.3	\$562.3	\$573.8	\$602.8	\$615.6	\$631.1	\$648.2	\$660.9	\$675.1	\$689.6
20	Capital/Non Operating Expenditures	\$291.5	\$640.5	\$805.7	\$713.3	\$587.7	\$411.9	\$489.6	\$273.1	\$448.0	\$335.7
	Funding Sources:										
21	Formula Funds	\$11.9	\$5.8	\$5.8	\$5.8	\$5.8	\$5.8	\$5.8	\$5.8	\$5.8	\$5.8
22	Discretionary Grant Funds	77.7	62.1	199.0	130.0	100.0	0.0	12.4	12.8	6.3	6.1
23	Long-term Debt Issuances	90.9	295.4	510.8	470.9	386.3	350.0	240.0	0.0	250.0	200.0
24	Commercial Paper Issuances	27.0	48.0	68.0	66.0	18.0	0.0	120.0	120.0	60.0	50.0
25	Other Capital Sources	23.1	27.7	14.5	17.9	5.8	8.4	17.4	11.7	9.1	7.1
26	Sales Taxes Allocated to Capital	51.6	35.7	7.6	22.8	71.7	47.8	82.8	77.0	45.8	48.6
27	General Operating Fund/Prior Debt Issues	9.2	165.9	0.0	0.0	0.0	0.0	11.3	45.8	71.0	18.2
28	Total Funding Sources	\$291.5	\$640.5	\$805.7	\$713.3	\$587.7	\$411.9	\$489.6	\$273.1	\$448.0	\$335.7
29	Debt Service Costs	\$197.2	\$204.4	\$219.1	\$241.2	\$260.5	\$281.6	\$298.1	\$316.2	\$332.3	\$350.8
	Funding Sources:										
29	Sales Taxes Allocated to Debt Service	\$197.2	\$204.4	\$219.1	\$241.2	\$260.5	\$281.6	\$298.1	\$316.2	\$332.3	\$350.8
30	Commercial Paper (CP) Retirement	\$30.0	\$30.0	\$30.0	\$20.0	\$0.0	\$0.0	\$0.0	\$227.0	\$0.0	\$0.0
	Funding Sources:										
31	Sales Taxes Allocated/Prior CP Issued	30.0	30.0	30.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0
32	LTD Debt Issues	0.0	0.0	0.0	0.0	0.0	0.0	0.0	227.0	0.0	0.0
33	Total Funding Sources	\$30.0	\$30.0	\$30.0	\$20.0	\$0.0	\$0.0	\$0.0	\$227.0	\$0.0	\$0.0
34	Total Uses of Funds	\$1,062.9	\$1,437.2	\$1,628.6	\$1,577.2	\$1,463.7	\$1,324.6	\$1,435.9	\$1,477.2	\$1,455.4	\$1,376.1
35	Net Differential Between Sources and Uses	(\$9.2)	(\$165.9)	\$39.6	\$26.1	\$31.7	\$36.9	(\$11.3)	(\$45.8)	(\$71.0)	(\$18.2)



Exhibit 8
FY 2019 – FY 2038 Structural Budget Balance
(in Millions) (continued)

Category	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	20-Year Total
Total Sources of Funds	\$1,202.1	\$1,214.4	\$1,260.2	\$1,311.4	\$1,336.0	\$1,356.0	\$1,412.3	\$1,459.0	\$1,546.0	\$1,616.2	\$27,765.5
Sales Tax Revenues	\$894.2	\$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	\$18,175.3
Operating Revenues	126.5	127.8	130.1	132.5	134.9	151.0	152.4	155.0	157.8	161.4	2,415.9
Interest Income	18.3	16.8	17.3	17.5	16.9	16.5	15.8	15.3	15.0	17.0	391.7
Formula Federal Funding	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	1,739.8
Discretionary Federal Funding	0.0	0.0	0.0	3.4	0.0	0.0	0.0	0.0	17.7	18.3	645.8
Long-term Debt Issuances	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3,035.0
Commercial Paper Issuances	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	627.0
Other Non-Operating Contributions	23.7	24.3	24.8	25.5	26.2	26.9	27.6	28.3	29.1	29.9	464.7
Other Capital Contributions	6.7	15.0	10.0	14.8	9.2	12.8	25.0	13.4	9.5	11.1	270.2
Operating Expenses	\$705.2	\$720.2	\$736.5	\$752.2	\$769.2	\$785.2	\$803.2	\$820.5	\$838.6	\$856.1	\$13,990.6
Funding Sources:											
Operating Revenues	\$126.5	\$127.8	\$130.1	\$132.5	\$134.9	\$151.0	\$152.4	\$155.0	\$157.8	\$161.4	\$2,415.9
Interest Income	18.3	16.8	17.3	17.5	16.9	16.5	15.8	15.3	15.0	17.0	391.7
Formula Funds (Capital Prevent Maint.)	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.0	77.0	77.0	1,618.4
FW TRE Ops/Dallas Streetcar Contrib.	22.6	23.2	23.8	24.4	25.1	25.8	26.5	27.2	27.9	28.7	445.3
Other Non-Operating Sources	1.1	1.1	1.0	1.0	1.1	1.1	1.1	1.1	1.2	1.2	19.4
Sales Taxes allocated to Operations	459.8	474.3	487.2	499.8	514.2	513.8	530.4	544.8	559.7	570.7	9,100.0
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
Total Funding Sources	\$705.2	\$720.2	\$736.5	\$752.2	\$769.2	\$785.2	\$803.2	\$820.5	\$838.6	\$856.1	\$13,990.6
Capital/Non Operating Expenditures	\$123.0	\$93.9	\$90.4	\$136.2	\$121.7	\$105.5	\$141.9	\$114.4	\$264.2	\$293.1	\$6,481.2
Funding Sources:											
Formula Funds	\$5.8	\$5.8	\$5.8	\$5.8	\$5.8	\$5.8	\$5.8	\$5.8	\$5.8	\$5.8	\$121.5
Discretionary Grant Funds	0.0	0.0	0.0	3.4	0.0	0.0	0.0	0.0	17.7	18.3	645.8
Long-term Debt Issuances	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2,794.3
Commercial Paper Issuances	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	627.0
Other Capital Sources	6.7	15.0	10.0	14.8	9.2	12.8	25.0	13.4	9.5	11.1	270.2
Sales Taxes Allocated to Capital	60.5	73.1	74.7	89.2	91.4	86.9	72.2	95.3	223.8	258.0	1,616.2
General Operating Fund/Prior Debt Issues	0.0	0.0	0.0	23.0	15.4	0.0	39.0	0.0	7.3	0.0	406.0
Total Funding Sources	\$123.0	\$93.9	\$90.4	\$136.2	\$121.7	\$105.5	\$141.9	\$114.4	\$264.2	\$293.1	\$6,481.2
Debt Service Costs	\$367.6	\$373.2	\$384.5	\$396.0	\$410.5	\$408.6	\$406.1	\$402.9	\$400.5	\$394.9	\$6,646.2
Funding Sources:											
Sales Taxes Allocated to Debt Service	\$367.6	\$373.2	\$384.5	\$396.0	\$410.5	\$408.6	\$406.1	\$402.9	\$400.5	\$394.9	\$6,646.2
Commercial Paper Retirement	\$0.0	\$0.0	\$0.0	\$50.0	\$50.0	\$50.0	\$100.0	\$100.0	\$50.0	\$0.0	\$737.0
Funding Sources:											
Sales Taxes Allocated to Debt Service	0.0	0.0	0.0	50.0	50.0	50.0	100.0	100.0	50.0	0.0	510.0
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	227.0
Total Funding Sources	\$0.0	\$0.0	\$0.0	\$50.0	\$50.0	\$50.0	\$100.0	\$100.0	\$50.0	\$0.0	\$737.0
Total Uses of Funds	\$1,195.7	\$1,187.3	\$1,211.4	\$1,334.4	\$1,351.4	\$1,349.3	\$1,451.2	\$1,437.8	\$1,553.3	\$1,544.1	\$27,855.0
Net Differential Between Sources and Uses	\$6.3	\$27.2	\$48.8	(\$23.0)	(\$15.4)	\$6.8	(\$39.0)	\$21.2	(\$7.3)	\$72.1	(\$89.5)



Exhibit 9
FY 2019 Twenty-Year Financial Plan
(in Millions- Inflated Dollars)

Line	Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
	SOURCES OF FUNDS										
1	Sales Tax Revenues	\$628.1	\$628.1	\$653.3	\$686.0	\$727.2	\$763.6	\$794.2	\$818.0	\$818.5	\$851.6
2	Operating Revenues	85.4	84.8	86.5	92.0	94.2	105.3	106.4	108.4	110.4	113.1
3	Interest Income	17.2	19.7	24.2	25.0	25.8	25.7	24.8	23.9	19.9	19.4
4	Formula Federal Funding	90.1	90.2	92.9	95.6	104.5	87.7	87.7	87.7	87.7	87.7
5	Discretionary Federal Funding	77.7	62.1	199.0	130.0	100.0	0.0	12.4	12.8	6.3	6.1
6	Long-term Debt Issuances	90.9	295.4	510.8	470.9	400.0	350.0	240.0	227.0	250.0	200.0
7	Commercial Paper Issuances	27.0	48.0	68.0	66.0	18.0	0.0	120.0	120.0	60.0	50.0
8	Other Operating Contributions	14.2	15.3	19.0	19.9	19.9	20.9	21.9	21.9	22.5	23.1
9	Other Capital Contributions	23.1	27.7	14.5	17.9	5.8	8.4	17.4	11.7	9.1	7.1
10	Total Sources of Funds	\$1,053.7	\$1,271.3	\$1,668.3	\$1,603.3	\$1,495.4	\$1,361.5	\$1,424.6	\$1,431.4	\$1,384.4	\$1,358.0
	USES OF FUNDS										
	Operating Expenses:										
11	Bus	\$286.4	\$297.0	\$298.6	\$303.5	\$310.0	\$315.9	\$322.2	\$328.2	\$333.9	\$340.2
12	Light Rail Transit	181.5	184.5	188.2	191.0	194.8	199.7	205.8	209.6	213.9	217.9
13	Streetcar	1.6	1.7	5.2	5.3	5.4	5.5	5.6	5.7	5.8	5.9
14	Commuter Rail/RR Management	31.4	34.1	35.4	54.9	55.4	58.1	60.9	61.5	63.5	65.3
15	Paratransit	41.2	42.8	44.2	45.8	47.7	49.5	51.5	53.4	55.6	57.7
16	General Mobility - TDM	2.1	2.2	2.2	2.2	2.3	2.3	2.4	2.4	2.5	2.5
17	Total Operating Expenses	\$544.3	\$562.3	\$573.8	\$602.8	\$615.6	\$631.1	\$648.2	\$660.9	\$675.1	\$689.6
	<i>Operating+P&D+Start Up</i>	<i>\$556.5</i>	<i>\$576.2</i>	<i>\$591.7</i>	<i>\$615.7</i>	<i>\$629.4</i>	<i>\$645.8</i>	<i>\$662.0</i>	<i>\$674.9</i>	<i>\$689.4</i>	<i>\$704.2</i>
	Capital Projects and Non-Operating:										
18	Agency-Wide	\$25.9	\$43.1	\$23.7	\$14.2	\$16.5	\$10.0	\$10.9	\$14.7	\$65.3	\$24.8
19	Bus	36.5	22.1	14.1	18.7	23.8	13.5	100.3	129.6	104.5	91.0
20	Light Rail Transit	45.5	210.8	348.2	327.1	362.8	320.1	320.9	87.7	238.3	188.9
21	Streetcar	5.4	8.5	31.8	36.9	18.4	0.1	0.0	0.1	0.0	0.0
22	Commuter Rail/RR Management	141.9	324.4	350.7	294.3	146.5	48.6	37.7	26.7	25.3	15.2
23	Paratransit	0.3	0.2	0.0	0.8	0.0	0.2	0.1	0.0	0.0	0.9
24	General Mobility - Road Impr./ITS	12.0	13.2	7.5	7.4	4.5	4.5	4.6	0.0	0.0	0.0
25	Non-Operating	11.9	4.3	11.7	1.1	1.3	0.2	1.3	0.2	0.2	0.4
26	Capital P & D, Start-Up	12.2	13.9	17.9	13.0	13.9	14.7	13.7	14.0	14.3	14.6
27	Total Capital and Non-Operating	\$291.5	\$640.5	\$805.7	\$713.3	\$587.7	\$411.9	\$489.6	\$273.1	\$448.0	\$335.7
	Debt Service										
28	Principal Payments - Long-term Debt	\$58.3	\$60.0	\$62.7	\$65.4	\$68.4	\$72.7	\$75.4	\$84.0	\$92.0	\$100.1
29	Long-term Debt Interest Expense	135.2	139.9	150.9	169.2	184.6	201.0	212.8	222.1	230.9	239.6
30	Commercial Paper Interest Expense	3.2	4.1	5.0	6.0	7.1	7.4	9.3	9.5	8.8	10.6
31	Debt-Related Fees	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6
32	Total Debt Service Costs	\$197.2	\$204.4	\$219.1	\$241.2	\$260.5	\$281.6	\$298.1	\$316.2	\$332.3	\$350.8
33	Commercial Paper Debt Repayment	30.0	30.0	30.0	20.0	0.0	0.0	0.0	227.0	0.0	0.0
34	Total Uses of Funds	\$1,062.9	\$1,437.2	\$1,628.6	\$1,577.2	\$1,463.7	\$1,324.6	\$1,435.9	\$1,477.2	\$1,455.4	\$1,376.1
35	Net Inc (Dec) in cash	(\$9.2)	(\$165.9)	\$39.6	\$26.1	\$31.7	\$36.9	(\$11.3)	(\$45.8)	(\$71.0)	(\$18.2)
36	Change in Balance Sheet Accts	25.9	80.0	32.4	(9.0)	(35.3)	(37.4)	5.0	(46.4)	31.3	(22.4)
37	Cash, End of Period	654.5	568.6	640.7	657.8	654.1	653.7	647.3	555.1	515.4	474.8
38	Less: Cash Reserves & Restricted Funds	(73.4)	(73.2)	(73.2)	(73.0)	(73.0)	(72.9)	(72.9)	(72.9)	(72.9)	(72.8)
39	Less: Advance Funding (Core Capacity Grant)	(60.0)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	Less: Working Cash Requirement	(136.1)	(140.6)	(143.5)	(150.7)	(153.9)	(157.8)	(162.1)	(165.2)	(168.8)	(172.4)
41	Less: Capital Reserve	(8.9)	(11.0)	(13.5)	(16.0)	(18.6)	(21.2)	(24.0)	(26.9)	(29.9)	(33.0)
42	Unrestricted Cash (Net Available Cash)	\$376.2	\$343.9	\$410.5	\$418.1	\$408.7	\$401.7	\$388.3	\$290.1	\$243.8	\$196.6
43	External Coverage Ratio	3.25	3.14	3.06	2.92	2.88	2.79	2.76	2.67	2.53	2.51
44	Internal Coverage Ratio	1.44	1.35	1.39	1.32	1.38	1.31	1.30	1.26	1.15	1.15
45	Total CP O/S End-of-Year	\$107.0	\$125.0	\$163.0	\$209.0	\$227.0	\$227.0	\$347.0	\$240.0	\$300.0	\$350.0
46	Total Long-Term Debt O/S End-of-Year	\$3,243.6	\$3,479.0	\$3,927.1	\$4,332.5	\$4,664.2	\$4,941.5	\$5,106.1	\$5,249.1	\$5,407.1	\$5,506.9



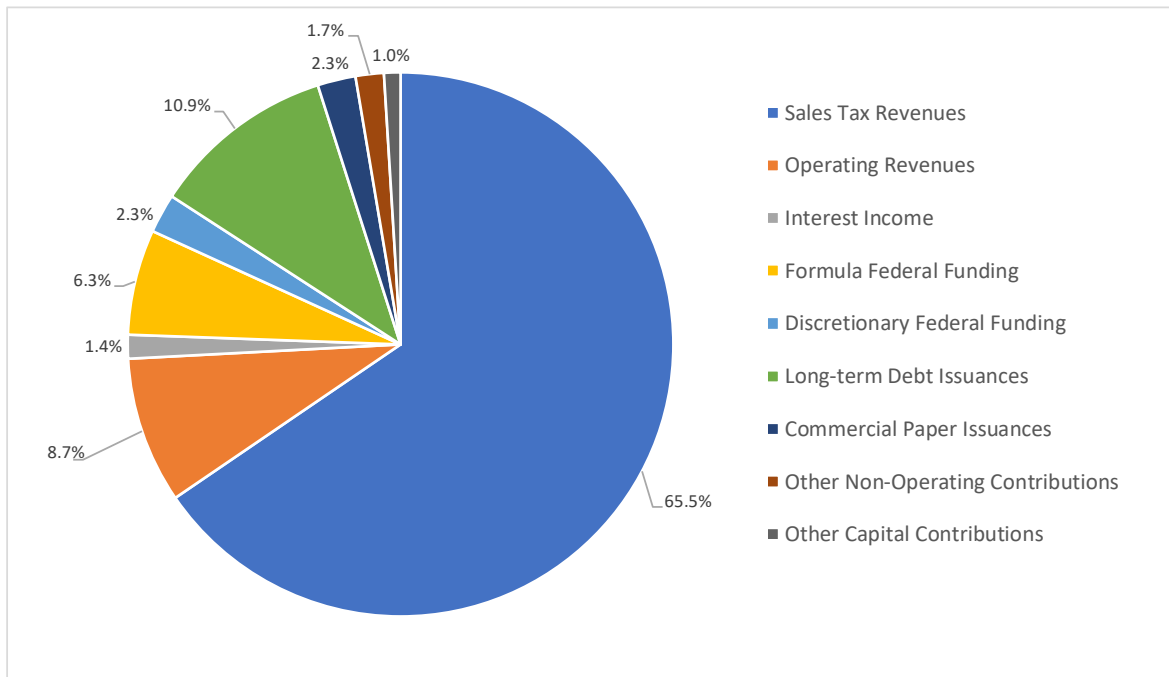
Exhibit 9
FY 2019 Twenty-Year Financial Plan
(in Millions- Inflated Dollars) (Cont.)

Line	Description	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	20-Year Total
SOURCES OF FUNDS												
1	Sales Tax Revenues	\$894.2	\$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	\$18,175.3
2	Operating Revenues	126.5	127.8	130.1	132.5	134.9	151.0	152.4	155.0	157.8	161.4	2,415.9
3	Interest Income	18.3	16.8	17.3	17.5	16.9	16.5	15.8	15.3	15.0	17.0	391.7
4	Formula Federal Funding	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	1,739.8
5	Discretionary Federal Funding	0.0	0.0	0.0	3.4	0.0	0.0	0.0	0.0	17.7	18.3	645.8
6	Long-term Debt Issuances	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3,035.0
7	Commercial Paper Issuances	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	627.0
8	Other Operating Contributions	23.7	24.3	24.8	25.5	26.2	26.9	27.6	28.3	29.1	29.9	464.7
9	Other Capital Contributions	6.7	15.0	10.0	14.8	9.2	12.8	25.0	13.4	9.5	11.1	270.2
10	Total Sources of Funds	\$1,202.1	\$1,214.4	\$1,260.2	\$1,311.4	\$1,336.0	\$1,356.0	\$1,412.3	\$1,459.0	\$1,546.0	\$1,616.2	\$27,765.5
USES OF FUNDS												
Operating Expenses:												
11	Bus	\$347.0	\$353.4	\$360.5	\$367.2	\$374.4	\$381.1	\$388.7	\$395.9	\$403.5	\$410.6	\$6,918.1
12	Light Rail Transit	222.3	226.3	230.8	235.1	239.7	243.9	248.7	253.3	258.1	262.6	4,407.6
13	Streetcar	6.0	6.2	6.3	6.4	6.5	6.6	6.8	6.9	7.0	7.1	113.5
14	Commuter Rail/RR Management	67.3	69.3	71.4	73.5	75.7	77.9	80.4	82.8	85.3	87.8	1,291.9
15	Paratransit	60.1	62.4	64.9	67.4	70.1	72.8	75.7	78.7	81.8	84.9	1,208.3
16	General Mobility - TDM	2.6	2.6	2.7	2.7	2.8	2.8	2.9	2.9	3.0	3.0	51.2
17	Total Operating Expenses	\$705.2	\$720.2	\$736.5	\$752.2	\$769.2	\$785.2	\$803.2	\$820.5	\$838.6	\$856.1	\$13,990.6
	<i>Operating+P&D+Start Up</i>	<i>\$720.1</i>	<i>\$735.3</i>	<i>\$752.0</i>	<i>\$768.0</i>	<i>\$785.2</i>	<i>\$801.6</i>	<i>\$819.8</i>	<i>\$837.4</i>	<i>\$855.9</i>	<i>\$873.7</i>	<i>\$14,294.8</i>
Capital Projects and Non-Operating:												
18	Agency-Wide	\$13.5	\$18.3	\$15.5	\$15.9	\$12.1	\$13.3	\$42.6	\$29.9	\$30.8	\$16.7	\$457.7
19	Bus	30.9	16.4	12.8	46.5	40.7	17.3	7.8	7.2	150.3	202.0	1,086.0
20	Light Rail Transit	52.4	18.8	27.5	21.0	23.7	35.9	33.9	26.1	40.9	31.5	2,762.0
21	Streetcar	0.0	0.1	0.3	0.0	0.1	0.0	0.0	0.3	0.0	0.0	102.0
22	Commuter Rail/RR Management	11.1	23.1	17.8	35.3	27.1	22.3	39.1	32.6	24.5	24.2	1,668.3
23	Paratransit	0.0	0.4	0.3	0.2	0.2	0.1	0.1	1.1	0.1	0.6	5.7
24	General Mobility - Road Impr./TTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.8
25	Non-Operating	0.2	1.5	0.8	1.5	1.7	0.3	1.8	0.3	0.3	0.6	41.5
26	Capital P & D, Start-Up	14.9	15.1	15.4	15.7	16.0	16.3	16.6	17.0	17.3	17.6	304.2
27	Total Capital and Non-Operating	\$123.0	\$93.9	\$90.4	\$136.2	\$121.7	\$105.5	\$141.9	\$114.4	\$264.2	\$293.1	\$6,481.2
Debt Service												
28	Principal Payments - Long-term Debt	\$111.7	\$121.8	\$138.7	\$157.6	\$181.1	\$189.3	\$198.2	\$207.4	\$216.9	\$221.6	\$2,483.5
29	Long-term Debt Interest Expense	243.1	237.9	232.2	225.6	218.2	209.7	200.7	191.5	182.0	172.6	3,999.7
30	Commercial Paper Interest Expense	12.2	13.0	13.0	12.2	10.6	8.9	6.5	3.3	0.8	0.0	151.4
31	Debt-Related Fees	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	11.7
32	Total Debt Service Costs	\$367.6	\$373.2	\$384.5	\$396.0	\$410.5	\$408.6	\$406.1	\$402.9	\$400.5	\$394.9	\$6,646.2
33	Commercial Paper Debt Repayment	0.0	0.0	0.0	50.0	50.0	50.0	100.0	100.0	50.0	0.0	737.0
34	Total Uses of Funds	\$1,195.7	\$1,187.3	\$1,211.4	\$1,334.4	\$1,351.4	\$1,349.3	\$1,451.2	\$1,437.8	\$1,553.3	\$1,544.1	\$27,855.0
35	Net Inc (Dec) in cash	\$6.3	\$27.2	\$48.8	(\$23.0)	(\$15.4)	\$6.8	(\$39.0)	\$21.2	(\$7.3)	\$72.1	(\$89.5)
36	Change in Balance Sheet Accts	(56.8)	(23.2)	(9.0)	3.7	(5.2)	(3.6)	1.2	(13.1)	19.0	2.5	(60.3)
37	Cash, End of Period	424.4	428.3	468.2	448.9	428.2	431.4	393.7	401.7	413.4	488.1	488.1
38	Less: Cash Reserves & Restricted Funds	(72.7)	(72.6)	(72.5)	(72.3)	(72.1)	(71.9)	(71.6)	(71.3)	(70.9)	(70.5)	(70.5)
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	0.0
40	Less: Working Cash Requirement	(176.3)	(180.0)	(184.1)	(188.1)	(192.3)	(196.3)	(200.8)	(205.1)	(209.7)	(214.0)	(214.0)
41	Less: Capital Reserve	(36.3)	(39.6)	(43.1)	(46.8)	(50.5)	(54.5)	(58.5)	(62.7)	(67.0)	(71.6)	(71.6)
42	Unrestricted Cash (Net Available Cash)	\$139.1	\$136.1	\$168.4	\$141.7	\$113.3	\$108.7	\$62.8	\$62.6	\$65.8	\$132.0	\$132.0
43	External Coverage Ratio	2.52	2.64	2.68	2.70	2.67	2.67	2.78	2.92	3.09	3.29	n/a
44	Internal Coverage Ratio	1.22	1.31	1.36	1.39	1.38	1.38	1.44	1.55	1.68	1.83	n/a
45	Total CP O/S End-of-Year	\$400.0	\$400.0	\$400.0	\$350.0	\$300.0	\$250.0	\$150.0	\$50.0	\$0.0	\$0.0	n/a
46	Total Long-Term Debt O/S End-of-Year	\$5,395.2	\$5,273.4	\$5,134.7	\$4,977.1	\$4,796.0	\$4,606.6	\$4,408.4	\$4,201.0	\$3,984.0	\$3,762.5	n/a

Sources of Funds

Total sources of funds for the period FY 2019 through FY 2038 are projected to increase \$579.6 million (2.1%) from that period in the FY 2018 Plan, with sales taxes 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 2019 Financial Plan. Each source of funding is detailed below.

Exhibit 10
FY 2019 – FY 2038 Distribution of Sources of Funds



Sales Tax Revenues (line 1 of the Financial Plan)

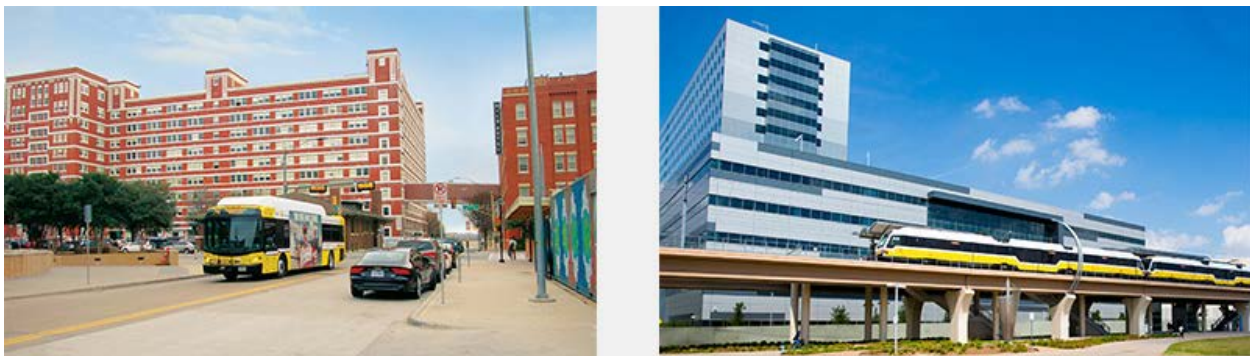
Sales tax revenues comprise 65.5% of DART’s total projected sources of funds through FY 2038 (75.4% of total sources excluding debt issuances). This is a \$310.3 million (1.7%) increase from the amount projected in the FY 2018 Financial Plan for the same 20-year period. The increase is a result of continuing strong sales tax collections, as well as moving the projected year of zero growth from 2019 to 2020, altering the growth pattern (see comments on the following page regarding this approach.)

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 5.64% from FY 2014 – FY 2018.

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 last year's plan, but economic performance to date 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 \$2.63 billion (12.6%) 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 2018 Plan, the FY 2019 Plan, and the Perryman projections is shown in Exhibit 11.



Exhibit 11
20-Year Cumulative Sales Tax Receipts (2019 – 2038)
(in Millions)

Year	FY 2018 Financial Plan		FY 2019 Financial Plan		Perryman 2018**	
	%	\$	%	\$	%	\$
2018*	4.0%	\$593.9	5.8%	\$599.6	5.1%	\$594.0
2019	0.0%	\$593.9	4.8%	\$628.1	5.8%	\$628.2
2020	4.0%	617.7	0.0%	628.1	5.4%	661.9
2021	5.0%	648.6	4.0%	653.3	5.3%	697.0
2022	6.0%	687.5	5.0%	686.0	5.2%	733.5
2023	5.0%	722.0	6.0%	727.2	5.2%	771.5
2024	4.0%	750.9	5.0%	763.6	5.1%	811.1
2025	3.0%	773.4	4.0%	794.2	5.1%	852.2
2026	0.0%	773.4	3.0%	818.0	5.0%	895.0
2027***	4.0%	804.9	0.0%	818.5	5.0%	939.5
2028	5.0%	845.5	4.0%	851.6	4.9%	985.7
2029	6.0%	896.2	5.0%	894.2	4.9%	1,033.8
2030	5.0%	941.0	6.0%	947.8	4.8%	1,083.8
2031	4.0%	978.7	5.0%	995.2	4.8%	1,135.7
2032	3.0%	1,008.0	4.0%	1,035.0	4.7%	1,189.6
2033	0.0%	1,008.0	3.0%	1,066.1	4.7%	1,245.5
2034	4.0%	1,048.3	0.0%	1,066.1	4.7%	1,303.6
2035	5.0%	1,100.8	4.0%	1,108.7	4.6%	1,363.8
2036	6.0%	1,166.8	5.0%	1,164.1	4.6%	1,426.3
2037	5.0%	1,225.2	6.0%	1,234.0	4.5%	1,491.1
2038	4.0%	1,274.2	5.0%	1,295.7	4.5%	1,558.2
20-Year Total		\$17,865.0		\$18,175.3		\$20,807.0

* 2018 is Budget for the FY18 columns and Projected for the FY19 Column. These are not included in the 20 year totals

** Perryman calculation uses Perryman's growth rates with DART's projected FY18 taxes as the base.

*** Note: There is a small increase in sales taxes in 2027 (a zero growth year) in the FY 2019 Financial Plan. This is due to the end of the sales tax repayment plan to the State, not any projected economic growth.

Sales Tax Repayment – 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 and its stakeholders, 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 \$2.42 billion (8.7%) of DART's sources of funds through FY 2038. Exhibit 12 details projected operating revenues for the next twenty years.

Exhibit 12
Operating Revenues
(in Millions)

Operating Revenues	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Fixed Route Passenger Revenues	\$68.3	\$67.6	\$68.9	\$73.7	\$75.5	\$85.6	\$86.3	\$87.7	\$89.1	\$91.2
Other Passenger Fares	3.9	4.0	4.1	4.2	4.3	5.0	5.1	5.2	5.3	5.5
Total Passenger Revenues	\$72.2	\$71.6	\$73.0	\$77.9	\$79.8	\$90.5	\$91.3	\$92.9	\$94.5	\$96.7
Leases & Rentals	\$7.3	\$7.5	\$7.7	\$7.8	\$8.0	\$8.2	\$8.4	\$8.5	\$8.7	\$8.9
Advertising	4.0	4.1	4.2	4.3	4.4	4.5	4.6	4.8	5.0	5.3
Vanpool (NCTCOG/FHWA)	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.9
DCTA Access & Impact Fees	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.8
Other	0.5	0.3	0.3	0.5	0.5	0.5	0.5	0.6	0.6	0.6
Total Operating Revenues	\$85.4	\$84.8	\$86.5	\$92.0	\$94.2	\$105.3	\$106.4	\$108.4	\$110.4	\$113.1

Exhibit 12
Operating Revenues
(in Millions) (continued)

Operating Revenues	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	20-Year Total
Fixed Route Passenger Revenues	\$103.2	\$103.8	\$105.5	\$107.1	\$109.5	\$123.8	\$124.4	\$126.3	\$128.1	\$130.9	\$1,956.5
Other Passenger Fares	6.3	6.5	6.6	6.8	6.9	8.0	8.2	8.4	8.7	8.9	121.8
Total Passenger Revenues	\$109.5	\$110.3	\$112.1	\$113.9	\$116.4	\$131.8	\$132.7	\$134.7	\$136.8	\$139.8	\$2,078.3
Leases & Rentals	\$9.1	\$9.3	\$9.5	\$9.7	\$9.9	\$10.1	\$10.3	\$10.5	\$10.8	\$11.0	\$181.4
Advertising	5.6	5.8	6.1	6.4	6.1	6.4	6.8	7.1	7.5	7.8	110.9
Vanpool (NCTCOG/FHWA)	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.1	1.1	1.1	18.2
DCTA Access & Impact Fees	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	1.0	1.0	15.7
Other	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	11.3
Total Operating Revenues	\$126.5	\$127.8	\$130.1	\$132.5	\$134.9	\$151.0	\$152.4	\$155.0	\$157.8	\$161.4	\$2,415.9

Passenger revenues are the primary component of operating revenues, representing approximately \$1.957 billion, or 86.0% 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 an increase to the average fare of approximately 17% every five years.



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.

In general, the fare increase represents a 20% price increase except midday passes increase only 25¢, from \$1.75 to \$2.00. Also, two-hour passes will expand to passes that are good from start of service until noon and from noon until end of service. DART will re-introduce single-ride fare for bus service at \$2.50 (the price of 2-hour pass today). Generally, the new fare become effective August 2018.

The current fare structure is shown in Exhibit 119 in the *Reference Section*.

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

Exhibit 13
Projected Fixed-Route Average Fare

Year	Bus	LRT	CR	Fixed Route
FY19 - FY23	\$0.90	\$1.11	\$3.43	\$1.11
FY24 - FY28	\$1.05	\$1.30	\$4.01	\$1.29
FY29 - FY33	\$1.23	\$1.52	\$4.70	\$1.51
FY34 - FY38	\$1.44	\$1.78	\$5.49	\$1.77

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 \$391.7 million (1.4%) of total sources of funds for the next twenty years. This is a \$12.2 million (3.0%) decrease from the amount contained in the FY 2018 Plan.

Interest income rates are estimated to average 250 - 300 basis points (2.5% - 3%) throughout the year in 2019. Interest rates have been very low from a historical perspective but are rising, and are expected to continue to increase slowly over the next few years. As rates rise, a larger 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 has estimated that for the next 5-year bill – from 2021 to 2026 – the Highway Trust Fund will need a transfer of \$121 billion, 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.

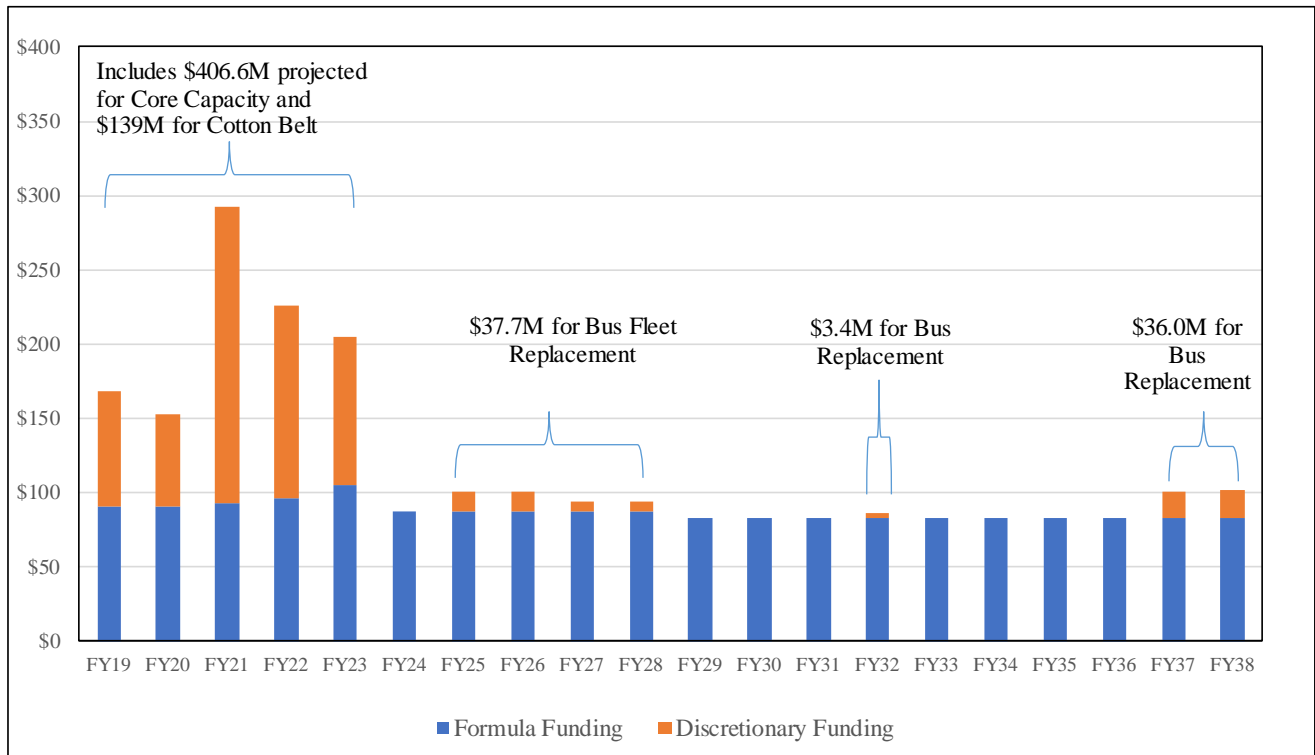
Formula Federal Funding (line 4 of the Financial Plan)

Formula funds are \$1.74 billion (6.3% of total sources of funds) through FY 2038. This represents an increase of \$134.2 million (8.4%) from the FY 2018 Plan due to an increase in the base allocation. According to the Board-approved Financial Standard B-10 (shown in Exhibit 111 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 Cotton Belt 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 2019 – FY 2038)
(in Millions)



Discretionary Federal Funding (line 5 of the Financial Plan)

Discretionary federal funding comprises \$645.8 million (2.3% of total sources) through FY 2038. This is a \$41.3 million (6.8%) increase over the FY 2018 Plan. The increase is primarily due to increased projections for Cotton Belt. The Plan assumes \$406 million for Core Capacity, \$139 million for Cotton Belt 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 2025 and 2028 and in 2032, 2037, and 2038.

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

DART plans to issue \$3.04 billion in new long-term debt over the next twenty years. The issuances include \$860 million during FY 2019 - FY 2023 for the Core Capacity Program mentioned above and other infrastructure projects, and \$908 million for the Cotton Belt project. DART is currently pursuing a loan from the Federal Railroad Administration’s Railroad Rehabilitation &

Improvement Financing (RRIF) program to finance the project. If such a loan can be obtained, it would come at a substantially lower interest rate than conventional tax-exempt debt.

Commercial Paper Issuances (line 7 of the Financial Plan)

DART plans to issue \$227 million during the next five years and an additional \$400 million during the following fifteen years under a new bank-backed Commercial Paper (CP) Program, which will be used as the initial funding mechanism to support DART's capital programs up to a maximum authorized amount of \$350 million. 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. 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 retired with cash during FY 2026, being replaced with \$227M Long Term Debt.

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 \$125 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 2019 will be retired. Issuances will resume in the mid-2020s in support of the next Bus Fleet Replacement project.

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 \$464.7 million between FY 2019 and FY 2038 and represent 1.7% of total sources of funds for that same period. This category of funds decreased \$73.4 million (13.6%) from the same period in the FY 2018 Plan, primarily due to a reduction in estimated external contributions for Cotton Belt 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 2013 through FY 2018 included the following major elements:

- Completing the Orange Line to DFW Airport and the Blue Line north extension from Garland to Rowlett; and
- Opening of the Oak Cliff Streetcar project and its extension to the Bishop Arts District in August 2016;
- Beginning service on the South Oak Cliff-3 (SOC-3) line segment to the University of North Texas, Dallas Campus in October 2016;
- 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 utilizes deadhead moves and provides more midday service. These changes add 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, and new GoLink Mobility on Demand service in five pilot zones in Plano and Dallas. A sixth begins operation in August.

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 intended to be 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 Carpenter Ranch, currently in the planning stage);
- An expanded Streetcar Rail network by 2022; and
- Commuter Rail service along the Cotton Belt corridor from Plano to DFW Airport in 2022.
- The second light rail alignment through downtown Dallas (D2), currently anticipated to begin service in 2024.

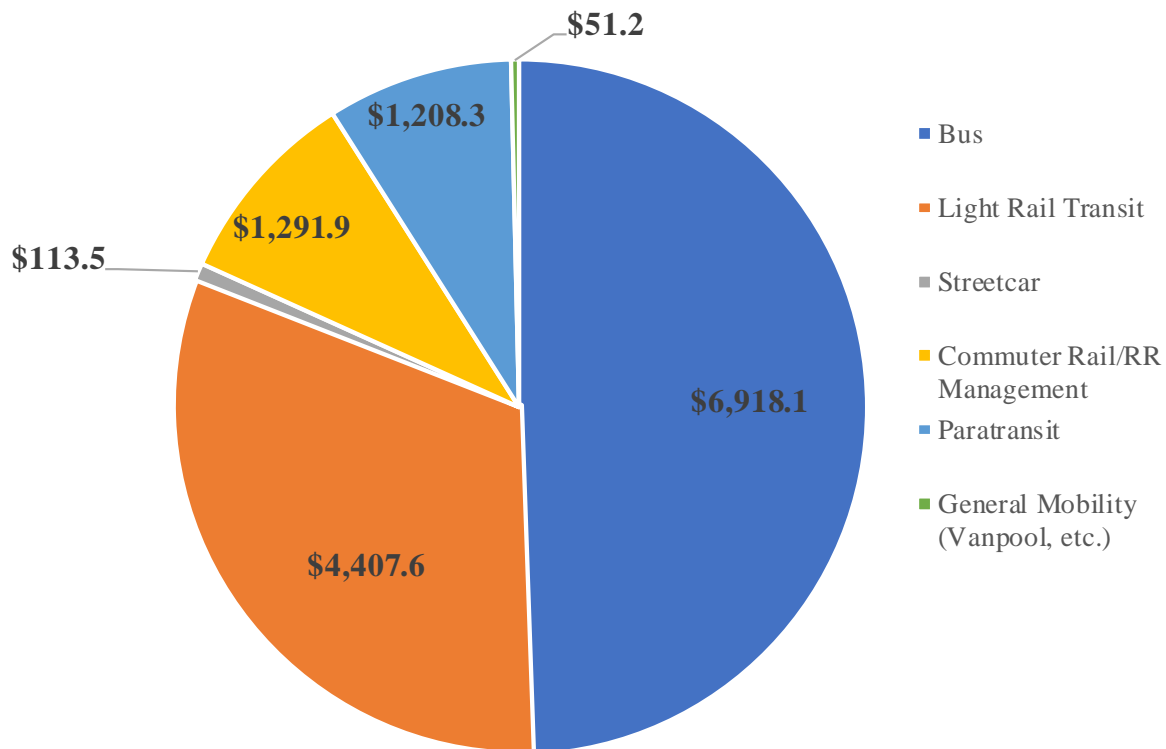


Total operating expenses for FY 2019 through FY 2038 are projected to be \$13.99 billion, an increase of \$86.3 million over the amount in the FY 2018 Plan over the same period of time.

DART’s FY 2019 Operating Budget at \$544.3 million is the same as the FY 2018 plan for 2019. 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 110 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 2019 – FY 2038)





Modal Expenses (lines 11 – 16 of the Financial Plan)

Exhibit 16 compares the projected 20-year modal operating expenses (2019 - 2038) based on the FY 2018 Financial Plan and the FY 2019 Plan.

Exhibit 16
20-Year Modal Expense Comparison (2019 – 2038)
(in Millions)

	FY18 FP	FY19 FP	\$ Variance FY18 to FY19	% Variance FY18 to FY19
Bus	\$6,930.9	\$6,918.1	(\$12.7)	(0.2%)
Light Rail Transit	4,291.4	4,407.6	116.2	2.7%
Streetcar	96.8	113.5	16.8	17.3%
Commuter Rail/RR Management	1,334.0	1,291.9	(42.2)	(3.2%)
Paratransit	1,200.2	1,208.3	8.0	0.7%
General Mobility (Vanpool, etc.)	51.0	51.2	0.2	0.4%
Total Operating Expenses	\$13,904.3	\$13,990.6	\$86.3	0.6%

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.

Twenty-year operating expenses have increased \$86.3 million (0.6%) from the FY 2018 Plan, primarily due to healthcare costs and the service increases described above. Even with the continued light rail expansion, bus expenses still represent the largest portion of DART’s operating costs (49.4%) over the next twenty years. The bus mode includes DART’s Innovative Services (On-Call, Flex-Route, and site-specific shuttle services). Twenty-year bus modal costs have decreased by \$12.7 million (0.2%) from the FY 2018 Financial Plan, primarily due to modal allocation adjustments.

Over the last nine 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% of the FY 2009 operating budget to 33.3% of the FY 2019 budget.

As noted earlier, TRE Commuter Rail services are provided by Herzog Transit Services, Inc. The current contract began in FY 2016 and expires at the end of 2025. The contract includes service costs for TRE and the TEX Rail project, which is being advanced by Trinity Metro and is scheduled to begin service in late 2018 or early 2019.

Mobility Management Services (Paratransit) is operating under a contract with MV Transportation to provide passenger services (please see page 198 in the *Organizational Units Section* for specifics of this arrangement). Projected ridership over the next twenty years is down by 94,000 (6.3%) from the FY 2018 Plan. Twenty-year costs are almost identical to the FY 2018 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; 225 are planned for FY 2019. 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 essentially unchanged from the FY 2018 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 2019 – 2038 from the FY 2018 Plan to the FY 2019 Plan. The agency-wide category refers to capital projects that benefit more than one mode.



Exhibit 17
Comparison of 20-Year Capital Expenditures (2019 – 2038)
(in Millions)

	FY18 FP	FY19 FP	\$ Variance FY18 to FY19	% Variance FY18 to FY19
Agency-Wide	\$430.0	\$457.7	\$27.7	6.4%
Bus	1,091.4	1,086.0	(5.4)	(0.5%)
Light Rail Transit	2,635.5	2,762.0	126.4	4.8%
Streetcar	92.6	102.0	9.4	10.1%
Commuter Rail/RR Management	1,602.5	1,668.3	65.8	4.1%
Paratransit	5.4	5.7	0.3	5.3%
General Mobility - Road Impr./ITS	18.0	53.8	35.8	198.7%
Non-Operating	20.7	41.5	20.8	101.0%
Capital P & D, Start-Up	223.8	304.2	80.4	35.9%
Total Capital Expenditures	\$6,120.0	\$6,481.2	\$361.1	5.9%

Capital and Non-Operating expenditures are budgeted at \$291.5 million for FY 2019 and \$6.48 billion for the twenty years through FY 2038. This is a 20-year increase of \$361.1 million (5.9%) compared to the FY 2018 Plan over the same period. The increase is the net result of increasing the D2 budget, adding new Technology projects, adding and expanding LRT and CR projects, and the rollover of funds that were budgeted in FY 2018 but will not be spent in FY 2018.

The full list of Capital and Non-Operating projects (including all new projects) is shown in Exhibit 19 on page 71. Each project listing includes the proposed expenditures in FY 2019 and the five-year- and twenty-year totals. Totals after the first year reflect year-of-expenditure amounts. There is also an Operating Expense/Savings column reflecting the project requestor’s assessment of the impact on the Operating Budget. The estimated expense or saving is typically developed by an independent cost estimator (“ICE”) and senior staff knowledgeable about the requested project and its expected impact on operations.

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



\$53.8 million over the next twenty years. In addition to these programs, there is \$627,099 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 \$12.2 million for FY 2019.

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 2019 Financial Plan includes \$3.3 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 51.2% of the total 20-year capital project expenditures.



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FY 2019 Major Capital Project List

Exhibit 18 contains a listing of major capital projects followed by a brief description for each project.

Exhibit 18
Major Capital Projects
(in thousands)

#	Project Description	Total Budget
1	Dallas CBD Second Light Rail Alignment (D2 Subway)	\$1,412,465
2	Cotton Belt Corridor Regional Rail Project	1,135,000
3	Red & Blue Line Platform Extensions	124,549
4	Dallas Streetcar Central Link	96,194
5	Central Business District (CBD) Rail Replacement	42,991
6	Positive Train Control (PTC)	34,800
7	Madill Bridges Replacement	39,500
8	Compressed Natural Gas (CNG)-Powered Standard Buses	22,625
9	Bus Repower Program	21,000
10	Critical Functions Facility	18,493
11	LRV Repower Program	18,304
12	Bi-level & Cab Car Overhauls	16,103
13	Enterprise Asset Management (EAM)	15,150
14	Comprehensive Payment System (CPS)	15,000
15	Closed Circuit TV (CCTV) - 163 LRVs	12,283
16	Loop 12 Rail Station	12,000
17	Carpenter Ranch Rail Station	12,000
18	FY19 TRE DFW Track Maintenance	11,083
19	LRV HVAC Upgrade Project - 115 Cars	10,256

Dallas CBD Second Light Rail Alignment (D2 Subway)

Total Budget (000's) \$1,412,465

Funding Source(s) Grant: \$300,000; Debt: \$1,090,000; General Fund (GF): \$22,465

Project Description

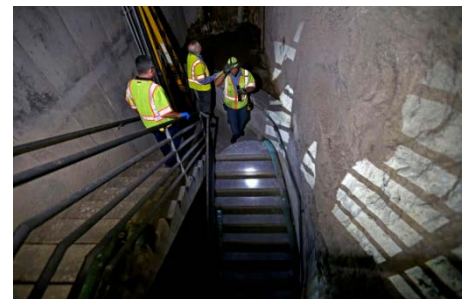
This project (known as D2 Subway) establishes a second light rail transit (LRT) line through Downtown Dallas by connecting two points: Victory Station and the Green Line (at Good Latimer in Deep Ellum). It will add LRT capacity to the DART system, relieve congestion on the existing Bryan/Pacific Transit Mall and at junctions, enhance reliability and operational flexibility, and create land use and economic development opportunities.

An Alternatives Analysis/Draft Environmental Impact Statement (AA/DEIS) was completed in May 2010. The second phase of the AA effort was completed under an FTA grant to address comments received during the AA/DEIS. That effort culminated with the DART Board of Directors' selection of a mostly at-grade Locally Preferred Alternative (LPA) in September 2015. FTA authorized DART into Project Development (PD) in November 2015. Stakeholder comments during 2016 led to reconsideration of subway alternatives. On October 25, 2016, the Board of Directors approved the FY 2017 Financial Plan, which included \$1.4 billion for development of a subway alignment.



This action marked a departure from the direction previously provided with the selection of the mostly at-grade LPA. The new direction required a refinement of the LPA, where options that had been considered during the original AA/DEIS and possibly other corridors would be evaluated. This effort concluded with the Board's confirmation of the Commerce via Victory/Swiss Alternative as the D2 Subway LPA on September 26, 2017. PD was re-initiated on the new D2 Subway LPA in early 2018 and will conclude in early 2020.

Assumptions made in the FY 2018 Twenty-Year Financial Plan include federal funding of \$300 million and local funding of the remainder, including \$1 billion in debt; however, assessment of recent CBD real estate prices has led to the conclusion that an additional \$90 million should be added to the project budget, thereby increasing the planned debt to \$1.09 billion. The project is anticipated to be completed by 2024.



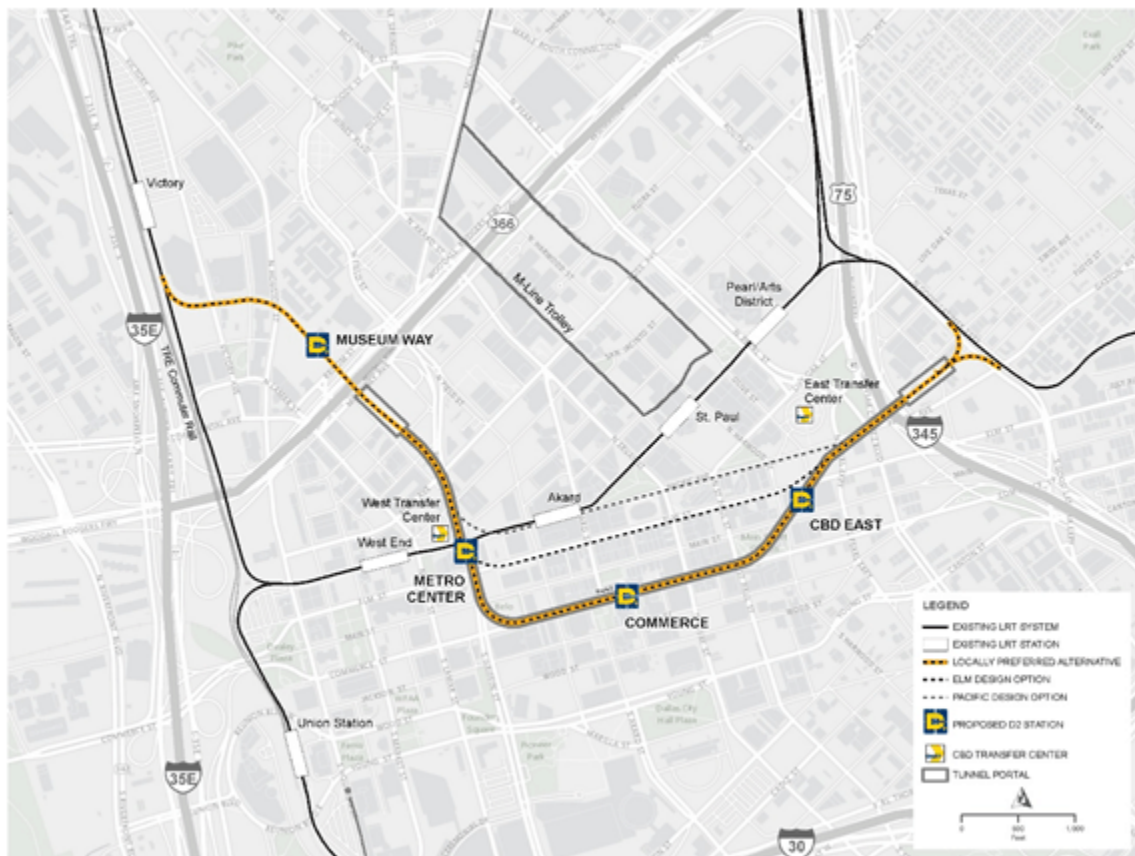
Status

DART completed the LPA refinement process that culminated with the selection of the Commerce via Victory/Swiss Alternative as the LPA and, shortly after in September 2017, submitted DART’s third D2 submittal for Core Capacity Program funding. The submittal was based on the Commerce Alternative, which also serves as the basis for the PD effort (i.e., Preliminary Engineering and Environmental Impact Statement). The D2 submittal led to a Medium-High rating for the project.

On March 20, 2018, FTA denied DART’s request to extend PD to November 2019. At the same time, it withdrew the project from the Capital Investment Grants (CIG) program. FTA recommended that DART reapply to enter the Engineering phase after all required activities are completed. DART is continuing PD locally, with FTA oversight. The PD effort is focused on the Commerce Alternative. Current work efforts include further development of preliminary engineering up to 20% design, and a Supplemental Draft EIS.

On June 21, 2018, the project team held its first Stakeholder Committee Meeting. Follow-up Focus Area meetings were held in August 2018, and public meetings were held on September 12, 2018.

D2 Subway Locally Preferred Alternative – Commerce via Victory/Swiss



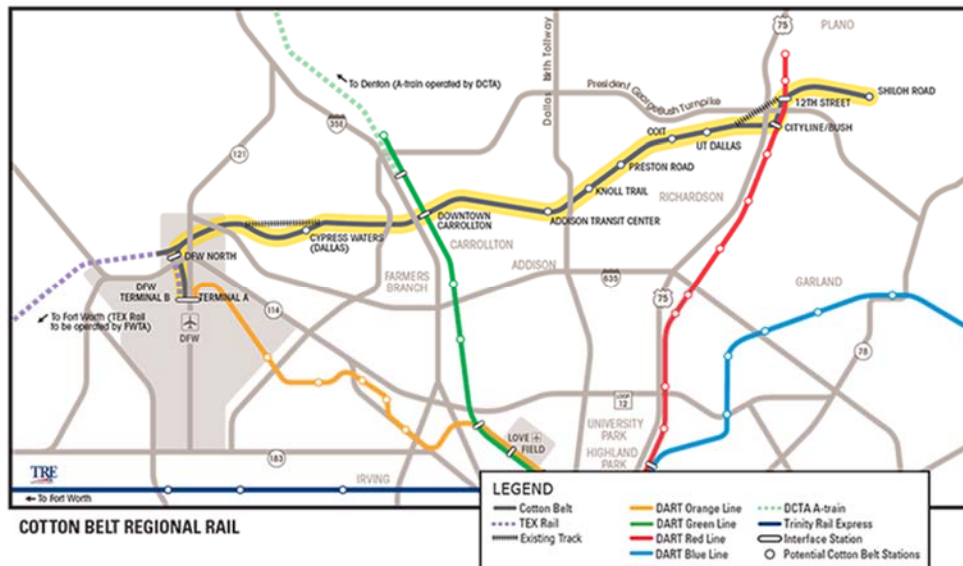
Cotton Belt Corridor Regional Rail Project

Total Budget (000's) \$ 1,135,000

Funding Source(s) Grant: \$139,330; Funding Partners/Local: \$87,700; Debt: Railroad Rehabilitation & Improvement Financing (RRIF): \$908,000

Project Description

The 26-mile Cotton Belt Corridor Regional Rail Project extends from Dallas-Fort Worth International Airport (DFWIA) through the northern portion of the DART Service Area to Shiloh Road in Plano. The corridor passes through the cities of Grapevine, Coppell, Carrollton, Addison, Dallas, Richardson, and Plano. While the project is mostly within DART-owned right-of-way, it deviates from the railroad corridor at DFW Airport to connect to Terminal B, the Skylink people mover, and the Trinity Metro TEXRail Project, in the Coppell/Dallas area to serve Cypress Waters, and in Richardson/Plano to serve the CityLine development. The project is a mostly at-grade, double-track alignment. The Project enhances system connectivity by interfacing with three DART LRT lines (the Red Line in Richardson/Plano, the Green Line in Carrollton, and the Orange Line at DFW Airport), as well as the Addison Transit Center.



Ten new station locations have been identified for the Cotton Belt Project including DFW Airport (under construction as part of TEXRail), DFW North (under construction as part of TEXRail), 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, CityLine/Bush, 12th Street (which includes a new infill LRT Station on the existing DART Red Line), and Shiloh Road.

The Cotton Belt Project will operate on tracks that are shared with freight for nearly the entire route. 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 Cotton Belt Project. The Federal Transit Administration (FTA) serves as Lead Agency and the Federal Aviation Administration (FAA) is a cooperating agency. The Federal Railroad Administration (FRA) is a participating agency. Funding for the project is being sought through the FRA-administered Railroad Rehabilitation and Improvement Financing (RRIF) program. FAA has jurisdiction over DFW Airport and Addison Airport.

Status

In accordance with the National Environmental Policy Act (NEPA), DART developed a Draft Environmental Impact Statement (EIS) for the Cotton Belt Corridor Regional Rail project. The Draft EIS (DEIS) was made available to the public for review and comment on April 20, 2018. The 45-day comment period ended on June 4, 2018 and included three public hearings in May 2018. Comments received are being reviewed and incorporated into the Final EIS (FEIS). In addition, the DART Board held a Service Plan amendment public hearing on March 27, 2018 and subsequently approved the Service Plan Amendment for the project on August 28, 2018. This action removed two stations and added three grade separations from what was proposed in the DEIS. These changes are also being incorporated into the FEIS. The combined FEIS/Record of Decision is anticipated in November 2018.



Since December 2016, DART staff has been coordinating twice monthly with FTA, FRA, and FAA in One DOT meetings. DART is coordinating with lending authorities during the application process for the Railroad Rehabilitation & Improvement Financing (RRIF) loan.

The project is being procured as a Design-Build (D-B) contract, with a Project Manager/Owner's Representative (PMOR) contract overseeing the D-B team. Both PMOR and D-B proposals have been received and are currently under DART evaluation. There will be two more contracts solicited; one for vehicle procurement and Equipment Maintenance Facility (EMF) design and a separate solicitation for construction of the EMF as part of the TRE Irving Yard.

Issues

Residents along the corridor, as well as City Council resolutions for the project, requested consideration of additional walls and betterments in residential areas where noise barrier mitigation was not warranted in the DEIS. DART Board approved a Cotton Belt Corridor Betterments Program on August 28, 2018 to include potential additional walls or other betterments for residential areas along the corridor.

Red & Blue Line Platform Extensions (RBPE)

Total Budget (000's) \$ 124,549

Funding Source(s) Grant: \$58,760; Texas Mobility Fund: \$60,000; GF: \$5,788

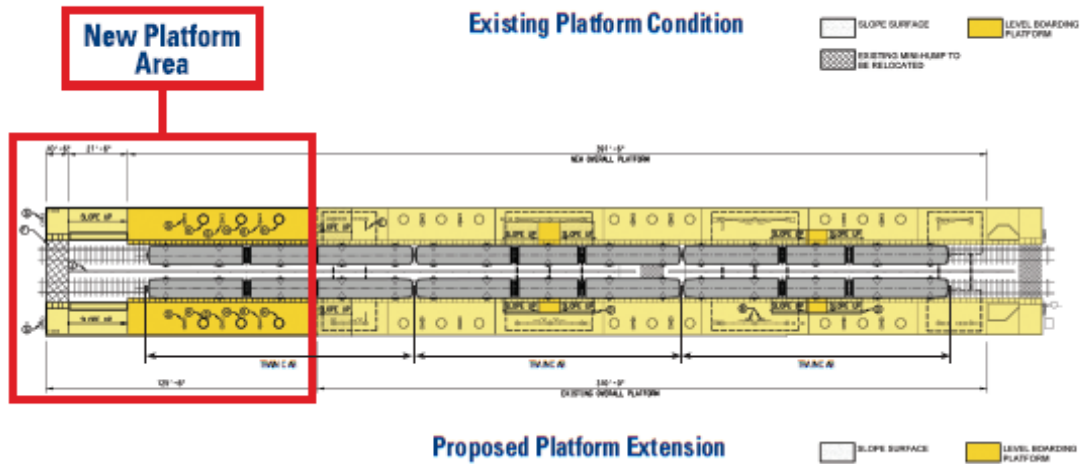
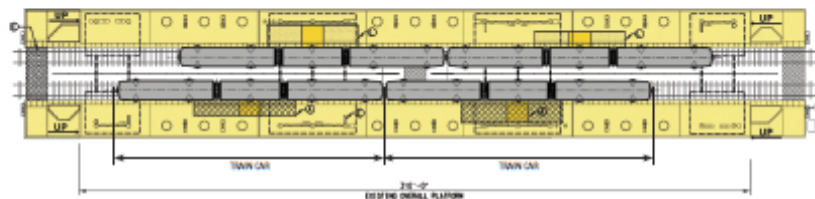
Project Description

The purpose of this project is to modify platforms at 28 stations along the Red and Blue Lines that were constructed before 2004, to accommodate three-car trains. Modifications include extending platforms and/or raising portions of the platform to permit level boarding. This modification will increase the carrying capacity of the system and enhance the core capacity of the network. Further, DART adds over 30% rider capacity to the light rail system. The level boarding improvements will maintain DART's commitment to Americans with Disability Act (ADA) accessibility standards.

Platform Extensions Project on Red and Blue Lines

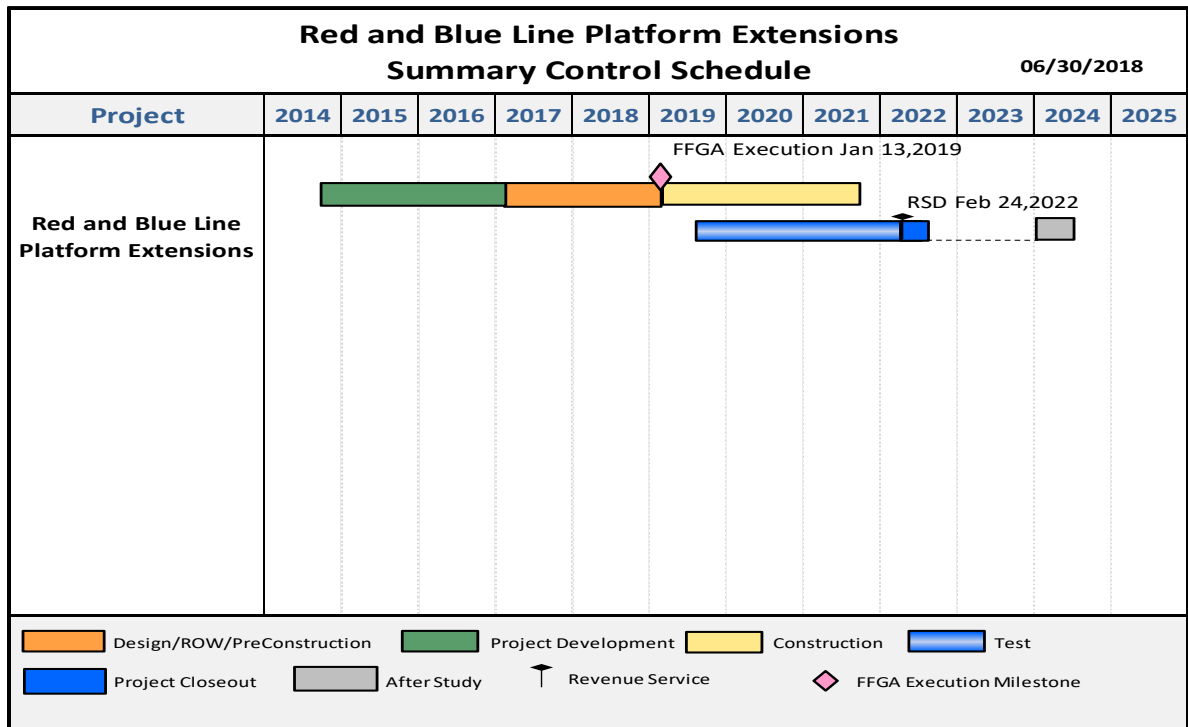


Platform extensions and/or modifications at 28 stations will allow DART to operate longer trains on all rail lines, increasing passenger capacity on the light rail system.



Status

- The project was cleared by FTA to enter Project Development on December 11, 2014.
- FTA approved a Categorical Exclusion for the project on September 21, 2015.
- On July 30, 2016, DART issued the Solicitations for Design services.
- On September 1, 2016, DART submitted the FY18 Annual Report update or Project Development (PD) completion.
- On October 6, 2016, DART received concurrence from Federal Transit Administration (FTA) accepting completion of PD.
- On November 14, 2016, DART issued the Solicitations for Construction Manager/General Contractor.
- On January 20, 2017, DART submitted their request to enter the Core Capacity Engineering (EE) phase of the Capital Investment Grants Program.
- On July 28, 2017, DART received approval from FTA to initiate Engineering.
- On September 1, 2017, DART submitted the FY19 Annual Report update.
- On October 28, 2017 DART submitted the 3-Month update after EE approval.
- On January 26, 2018, DART submitted the 6-Month update after EE approval.



- On July 10, 2018 DART provided an early submission of documents for Readiness to Execute FFGA.
- On August 17, 2018 DART submitted the Readiness to Execute FFGA application for the Red and Blue Line Platform Extensions Project.

Design activities were completed for Cityplace/Uptown Station ventilation capacity study on January 3, 2018. Ventilation capacity is sufficient.

A traction power load flow study was completed, and report submitted on December 12, 2017. Areas of power loss were identified. DART has reviewed findings from traction power load flow study and initiated a revised study using updated assumptions for rail operations. A draft report was received in May with favorable findings; final report was received in June 2018 indicating sufficient traction power capacity.

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 under Group A in January 2018.



Along the Red and Blue lines, 28 light rail stations – which lie outside of Downtown Dallas and were built before 2004 – need to be lengthened and/or modified to accommodate three-car trains.

Issues

Budget Reconciliation:

DART is working to reconcile the difference between the project budget amount of \$149 million with the actual budget amount of \$124 million, as stated in the Financial Plan. Revised estimate aligns with the \$124 million in the Financial Plan. This issue is closed.

Schedule Mitigation: Although the project is on track for the FFGA document submittal to FTA, 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. As of July 2018, DART has reconciled the schedule indicating a revenue service date of February 2022 in the baseline schedule.

Dallas Streetcar Central Link

Total Budget (000's) \$ 96,194

Funding Source(s) FTA Small Start: \$48,092; GF: \$48,092

Project Description

The Dallas Streetcar Central Link is 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.

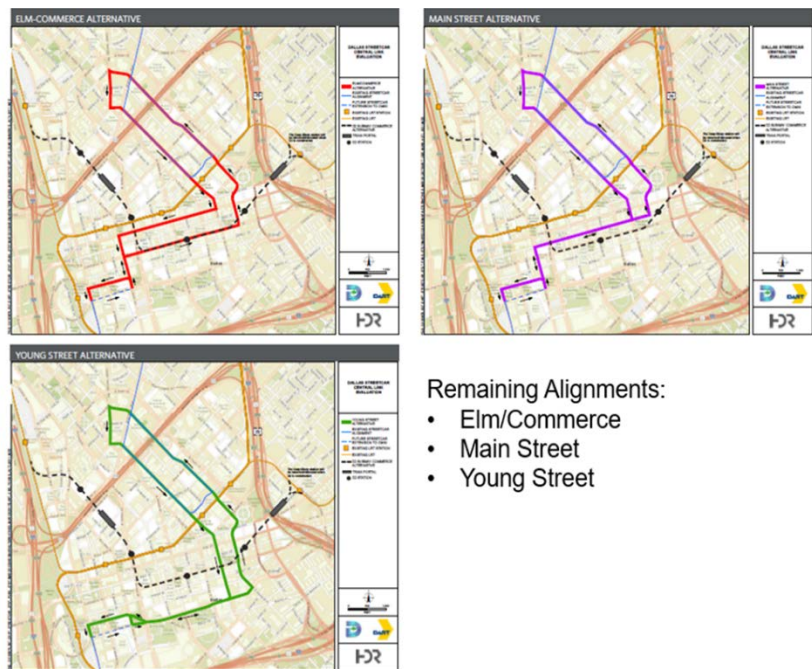
Status

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 was received in August 2018 and is under review. A funding source for the effort will need to be secured through a project specific agreement or ILA with the City of Dallas prior to NTP. A request to enter FTA project development would be done concurrent with the agreement.

Issues

- A funding source for the Project Development phase must be determined.
- A new consolidated ILA is needed.
- Dallas City Council will need to confirm the LPA during early PD efforts.



Central Business District (CBD) Rail Replacement

Total Budget (000's) \$ 42,991

Funding Source(s) Debt: \$30,000; GF: \$12,991

Project Description

The CBD Rail Replacement project is a phased implementation plan to address the condition of rail wear in the CBD (Pearl Station to Houston Street). The project includes: Phase I, limited replacement of worn rail in selected curves; Phase II, special track procurement; and Phase III, full replacement of remaining CBD rail.

Status

Phases I and II

Work was completed in December 2014. Closeout is complete.

Phase IIIA – Special Track Installation

DART has prepared a budget and schedule to advance Phase IIIA in the Financial Plan from FY 22 to FY 18. Phase IIIA will be the replacement and new installation for 50-meter turnouts, with remaining rail replacement in the West End. The project team is working on developing a new schedule and budget based on installation of crossovers and the remainder of new track.



Budget approval is complete. Solicitation of design services, under the comprehensive professional services contracts, was initiated in July 2017. Negotiations are complete.

Design NTP was issued on February 5, 2018.

The 65% design submittal was received in April 2018. The 95% submittal was completed on July 6, 2018. The 100% complete design documents were received on July 16, 2018. Contractor's NTP is anticipated in February 2019.

Phase IIIB – Intersection Work

Phase IIIB will be intersection work associated with Phase IIIA work areas.

Phase IIIC – Remaining Rail Improvements

Phase IIIB is replacement of remaining trackwork, street headers, and drainage improvements. Replacement is scheduled for 2022.

Positive Train Control

Total Budget (000's) \$ 34,800

Funding Source(s) Grant: \$12,500; FUTA: \$11,150; GF: \$11,150

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.

Status

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.

The FRA issued a Status Report to Congress in August 2015 stating most the railroads throughout the country will not be meeting the December 31, 2015, deadline. The Class I Railroads have completed approximately 50 percent of the required installations, while APTA has stated that 29 percent of commuter railroads will meet the target by the end of the year with the remaining railroads requiring until at least 2020.

The negotiations with the Systems Integrator did not yield an acceptable cost proposal; therefore, DART and Trinity Metro made the determination to self-perform the various components of the

project working directly with the vendors. The two agencies 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 November 18, 2016, Wabtec Corporation delivered the revised price proposal for the TRE PTC system design and implementation, including the Hosted Solution for the Back-Office System. On December 18, 2017, Trinity Metro signed the PTC System Implementation Contract with Wabtec Corporation.

On November 18, 2016, Wabtec Corporation delivered the revised price proposal for the TRE PTC system design and implementation, including the Hosted Solution for the Back-Office System. 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 3 of 17 onboard vehicles and 38 of 38 wayside interface units (WIUs).

Madill Bridges Replacement

<u>Budget (000's)</u>	Total: \$ 39,500	
<u>Funding Source(s)</u>	Grant: \$19,750	Debt: \$19,750

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.

Status

The program is in process detailing Independent Cost Estimate (ICE) and solicitation documents.

A potential CRISI grant to expand this project is being considered. Grant app is due in September. If the grant is not awarded, the solicitation should occur in second quarter of FY 2019.

Compressed Natural Gas (CNG)-Powered Standard Buses (41)

Total Budget (000's) \$ 22,625

Funding Source(s) Fed: \$16,363; GF: \$6,262

Project Description

The FY16 Fleet Management Plan included ownership of 652 buses by 2017, including a base fleet of 628, 17 additional standard vehicles in the approved FY16 Capital Budget, and purchase of 7 electric buses for use on the D-Link service. DART is making a series of schedule adjustments aimed at improving on-time performance. These adjustments will require an additional 28 buses over a five-year period. DART also needs to address the anticipated ridership demand associated with rapid growth in parts of the DART Service Area, particularly in the Legacy Area of Plano. Toyota, Liberty Mutual, JP Morgan-Chase, and other major employers are setting up very large operations in Legacy, and we expect demand for transit services to grow substantially in coming years. Other anticipated improvements include more frequent peak service on Routes 466 and 467 in Dallas, improved service frequency on Route 378 in Garland, and major schedule revisions on Route 400 that would also add more frequent service on the busiest part of the route. These improvements are in accordance with the COA work currently under way and require an additional 13 buses over the next five years.



Status

The 2019 new 5-year bus procurement for 41 forty-foot low-floor CNG-powered buses is in process. The Best and Final Offers (BAFOs) were received and negotiated, and on January 9, 2018, DART's Board authorized contract award to New Flyer of America for \$23 million. The contract includes an option for 41 additional buses for expansion service.

DART is scheduled to receive the Pilot Bus in October 2018, with a delivery target of May 31, 2019 for the additional buses.

Bus Repower Program

Total Budget (000's) \$21,000

Funding Source(s) GF: \$21,000

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.



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.

This program encompasses the entire bus fleet and is funded in 6-year increments.

Status

New Flyer Repower- 5 working and 71 complete



Critical Functions Facility (CFF)

Total Budget (000's) \$ 18,493

Funding Source(s) GF: \$18,493

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
- Sustain functions at a TIA-Tier III level
- 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, Bus, and LRT radio dispatch
- LRT supervisor control and data acquisition (SCADA)
- Surveillance camera network monitoring
- Operations communication liaison operations
- Emergency command center operations
- Secondary critical functions operations

Status

The CFF plan and budget have been finalized in anticipation of approval in the FY 2019 Financial Plan.

LRV Repower Program

Total Budget (000's) \$18,304

Funding Source(s) GF: \$18,304

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

- 3-year Program fleet 50: 32 of 40 completed
- 3-year Program fleets 51&52: 54 of 55 complete (LRV 157 upon return from Delaware)
- 5-year Gearbox test fleet 50: 28 of 40
- 5-year Slewing Ring fleet 50: 21 of 40
- 15 Year Overhaul fleets 51&52: 14 of 55



Bi-level & Cab Car Overhauls

Total Budget (000's) \$ 16,103

Funding Source(s) FWTA: \$8,052; GF: \$8,051

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.

Status

In the procurement process.





Enterprise Asset Management System

Total Budget (000's) \$ 15,150

Funding Source(s) GF: \$15,150

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 effectiveness 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 requires 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 will provide and manage a Software as a Service (SaaS) solution to assist DART in its efforts. Technology consulting services are also required perform the integrations from the new EAM system to/from DART legacy systems, such as Trapeze and Lawson. The project will be divided into phases. The Phase 0 pilot includes all activities required to convert rail signals into the new EAM system. Phase 1 includes the conversion of all other DART assets into the EAM system. The project is expected to begin after Procurement approval of the Notice to Proceed. NTP is expected to occur November 2018 with go live projected for mid to late 2021 for Phases 0 and 1. Phase 2 of this project includes the acquisition, configuration, and deployment of an analytics tool. Phase 2 is an optional component and not included in the cost budget referenced in this document.



Comprehensive Payment System (CPS)

Total Budget (000's) \$ 15,000

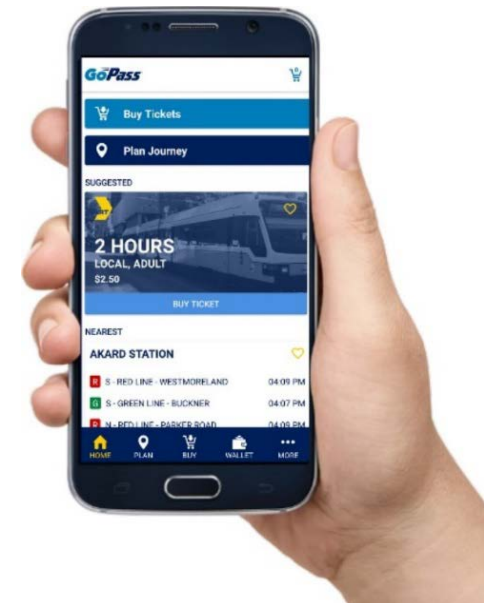
Funding Source(s) GF: \$15,000

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.

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 will provide over 900 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.

Status

DART piloted and deployed several technology methods recently and a launch scheduled for November 2018. These include the following:

- Feb 2018 (GoLive) – Deployment of the new Genfare fareboxes onboard bus
- May 2018 (GoLive) – Deployment of GoPass 2.0 that includes enriched features such as real-time travel tools and cash to mobile option provided by PayNearMe (PNM)
- June 2018 (Pilot) – Customer beta testing of the contactless GoPassTap cards
- Aug 2018 (Soft Launch) – GoPassTap cards
- Nov 2018 (Official Launch) – GoPassTap cards



Closed Circuit TV (CCTV) - 163 LRVs

Total Budget (000's) \$ 12,283

Funding Source(s) Grant: \$ 729 GF: \$ 11,554

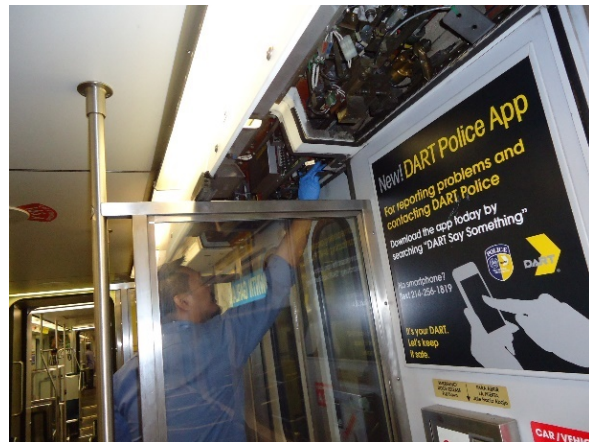
Project Description

The CCTV on LRVs project involves procurement and installation of CCTV cameras, recorders, and modems to provide surveillance capability in DART's fleet of light rail vehicles. The project plan is projected to be performed in two phases: Phase I, installation of 48 pre-wired vehicles, and Phase II, installation of 115 vehicles to be configured by March 2020.

Status

Phase I – 48 LRVs

Notice to Proceed (NTP) for the furnish & install contract was issued on May 9, 2016. Kick-off meeting was held on May 11, 2016. Contractor has substantially completed early action item list. Milestone 1 for completion of design was achieved on July 23, 2016. Notice to Proceed was issued with effective date of July 23, 2016, for start of activities for First Article installation, with a Milestone 2 date of October 28, 2016. Milestone 2 date was missed due to incomplete CCTV design. The Authority approved final design on November 22, 2016. Contractor began First Article installation on December 5, 2016, and completion was June 29, 2017.



NTP for Milestone 3, Production Phase, was given on July 10, 2017. The contractor completed all 48 production vehicles in February 2018.

Phase II – 115 SLRVs

A request to exercise the 115-vehicle option was presented to the Capital Construction Oversight Committee of the DART Board on November 14, 2017. On December 12, 2017, the DART Board approved the request for the 115-vehicle option.

NTP for Fleet 53 Option (20 vehicles) was provided to the contractor on January 15, 2018. The contractor has submitted the design for Fleet 53. Design was approved as noted. As of the end of June 2018, all 20 vehicles from Fleet 53 were completed.

As of August 2018, a total of 88 vehicles had been completed fleetwide out of 163.

Loop 12 Rail Station

Total Budget (000's) \$ 12,000

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

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.



Carpenter Ranch Rail Station

Total Budget (000's) \$ 12,000

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

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.

Status

An ILA with the City of Irving has been proposed to cover the funding for the project.



FY 2019 TRE Track Maintenance DFW Subdivision

Total Budget (000's) \$ 11,083

Funding Source(s) GF: \$11,083

Project Description

Capital Maintenance of the TRE DFW Subdivision: a. Rail / Ties / OTM / Undercutting / Ballast; b. 21,648 TF of Rail / 13,291 Ties / 21,595 TF of undercutting. Also accounts for pulling FY 2020 forward into FY 2019 to accommodate capital MOW prior to Sunday Service.

Status

Scheduled for FY 2019.



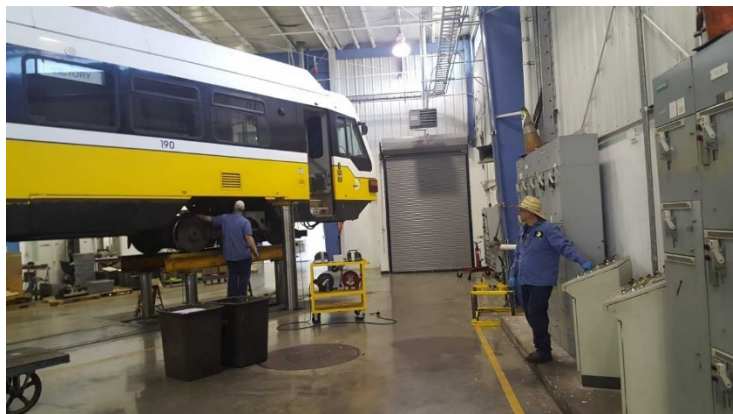
LRV HVAC Upgrade Project – 115 Cars

Total Budget (000's) \$ 10,256

Funding Source(s) GF: \$ 10,256

Project Description

R-22 production 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.



Status

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

Targeting solicitation in the 4th quarter of 2018.



Comprehensive Capital Projects Listing

Exhibit 19 contains the comprehensive list of capital and non-operating projects and capital reserves included in the Financial Plan. These projects are indicated as Expansion/Enhancement (increase volume or quality of service), State of Good Repair (timely maintenance and replacement of assets), and Other (regulatory compliance, etc.) and identify the FY 2019 and 20-year costs; any external grant funding or partner contributions; and the anticipated operating cost or savings.

Exhibit 19
FY 2019 Capital/Non-Operating Project Budget List (in Thousands)

FY 2019 Capital/Non-Operating Project Budget List (in Thousands)								
#	PROJECT NAME	Expansion/ Enhancement Projects	State of Good Repair	Other	2019	20 Year Total	External Funding	Operating Expense/ (Savings)
AGENCY-WIDE								
1	Comprehensive Fare Payment System				\$2,500	\$2,500	\$0	\$0
2	CCTV for Transit Centers and Parking Lots					1,700		
3	Enterprise FileNet Content Management System				399	399		10
4	Project Cashflow Timing Adjustments				-536	-28		
5	State of Good Repair (SGR) Reserve - Infrastructure Technology					80,753		
6	SGR Reserve - Communications					68,608		
7	SGR Reserve - Non-Revenue Vehicle/Equipment Replacement					63,278		
8	SGR Reserve - Application Technology					57,846		
9	Total SGR Reserve -Administration				1,330	54,623		
10	SGR Reserve - Administration HQ					21,164		
11	SGR Reserve - Intelligent Transportation Systems (ITS)					20,843		
12	Critical Functions Facility				4,083	17,981		
13	Enterprise Asset Management Software System				3,860	12,563		
14	Total SGR Reserve - DART Police					5,901		
15	Safety and Security Improvements at Outlying Light Rail Stations				1,000	5,000		
16	Network Upgrade for the Agency				3,000	5,000		
17	SGR Reserve - Oak Cliff NRV Facility					4,882		
18	SGR Reserve - Electronic Parts Catalog Reserve					4,230		
19	DART Police Facility				2,000	4,000		
20	Safety and Security Improvements at Downtown Dallas Stations				1,000	3,000		
21	Enterprise Project Mgmt. System				3,000	3,000		
22	SGR Reserve - Police Motorcycles					2,171		
23	SGR Reserve - Admin Police HQ					2,119		
24	FY19 Service Vehicles Replacement Program					1,747		
25	FY18 NRV Replacement Program				890	1,890		
26	Total SGR Reserve - Marketing					1,805		
27	Upgrade HC Management and Application Systems					1,650		
28	DARTnet Modernization Phase II					1,400		
29	FY17 NRV Replacement Program				1,113	1,113		
30	DART Systemwide Pathfinder Signage Improvement					1,000		
31	Vehicle Business System New Features					1,000		
32	Pedestrian Barriers at Bush Turnpike Station				987	987		
33	SGR Reserve - Material Management Facility					771		
34	PA - Carpet Replacement DART HQ Building				750	750		
35	Total SGR Reserve - Finance					726		
36	Escalator Replacement for 1401 Pacific				710	710		
37	Passenger Facility Accessibility Mods FY14				300	600		
38	System to Alert Operators to Ensure Connections					550		
39	Enterprise Application Integration Implementation					500		
40	Signalized Crossing at Arapaho Station				450	450		
	Expansion/ Enhancement Projects							
	State of Good Repair							
	Other							



Exhibit 19
FY 2019 Capital/Non-Operating Project Budget List (in Thousands) (Cont.)

#	PROJECT NAME	Expansion/ Enhancement Projects	State of Good Repair	Other	2019	20 Year Total	External Funding	Operating Expense/ (Savings)
AGENCY-WIDE (continued)								
41	Signalized Crossing at Ledbetter Station				\$450	\$450	\$0	\$0
42	FY16 NRV Replacement Program				429	429		
43	Replace DART Access System				375	375		
44	Mobile Medical Services for DART Employees				350	350		
45	Desktop PC Replacement				181	330		
46	Total SGR Reserve - Legal					323		
47	Comm Two Way Radios Purchase				304	304		
48	PA Facility Landscape Replacement/Improvements				300	300		
49	COMMs Radio Server System Hardware Replacement				212	212		
50	Implementation of IBM Cognos TM1				206	206		
51	Web Development Improvement				200	200		
52	Multi Function Printer Replacement				93	181		
53	Pedestrian Barriers at Fair Park Station				172	172		
54	Equipment Replacement				151	151		
55	Additional 25 Routers for Police Vehicles				75	75		
56	PA Monroe Shops Structural Engineering Assessment				50	50		
57	Relocation of the fitness center at SOC Transport				36	36		
58	Rev Vehicle Wash Improvement & Winter Ops Study				30	30		
59	Addition of Equipment at Northwest Maintenance				30	30		
60	Improvements at DART HQ Break Room for Fare Enforcement				25	25		
61	Projected Savings					-4,124		
62	Project Cashflow Timing Adjustments				-5,124	-2,756		
63	Video Intelligence Analytics					500		
64	Additional Body Cameras				200	200		
65	Diversity Compliance Management Software System				155	155		
66	Capital Prgm. Support - Configuration Mgmt. and Quality				136	136		
67	Transit Education Program Redesign				106	106		
68	Additional Three-wheel Vehicles				80	80		2
69	Backup Server (Body Cameras & In-car Video)				25	25		
70	Project Cashflow Timing Adjustments				-207	-10		
	Expansion/ Enhancement Projects				2,363	4,571	0	10
	State of Good Repair				23,020	451,959	0	0
	Other				495	1,192	0	2
	Total Agency-Wide				\$25,878	\$457,723	\$0	\$12
BUS								
71	CNG-Powered Standard Buses				\$22,625	\$22,625	\$16,363	\$10,000
72	Mobility on Demand (MOD)				1,500	3,500	1,000	
73	NW Plano Park & Ride				500	500	500	
74	Fareboxes for New Flyer Buses				409	409		
75	Radio Purchase for New Flyer Buses				406	406		
76	Project Cashflow Timing Adjustments				-4,715	-1,724		
77	SGR Reserve - Bus Replacement					770,424	77,042	
78	SGR Reserve - Innovative Services Vans					165,055		
79	SGR Reserve - Bus Capital Maintenance Program					33,363		
80	SGR Reserve - Passenger Amenities - Bus					23,525		
81	SGR Reserve - East Dallas Bus Ops Facility					21,706		
82	Bus Repower Program (FY18-FY23)				4,050	20,273		
83	SGR Reserve - Farebox Replacement					17,688		
84	SGR Reserve - South Oak Cliff Bus Ops Facility					16,353		
85	SGR Reserve - Northwest Bus Ops Facility					8,121		



Exhibit 19
FY 2019 Capital/Non-Operating Project Budget List (in Thousands) (Cont.)

#	PROJECT NAME	Expansion/ Enhancement Projects	State of Good Repair	Other	2019	20 Year Total	External Funding	Operating Expense/ (Savings)
BUS (continued)								
86	Bus lifts replacement 4127 Elm St.				\$1,400	\$7,000	\$0	\$0
87	BRT Elm & Commerce Bus Lanes Reconstruction					7,000		
88	On Street Passenger Facilities - FY2018-FY2022				3,018	6,162	1,598	
89	SGR Reserve - Intelligent Transportation Systems (ITS)					5,409		
90	Transit Signal Priority - Route 453 and Route 467					3,779		
91	SGR Reserve - Planning Equipment Replacement					2,644		
92	ARBOC Vans Replacement				2,500	2,500		
93	Equip Bus fleet with APC				1,500	1,944		-35
94	LRV & Bus Passenger Seat Retrofit				1,300	1,300		
95	Bus Farebox Replacement				1,000	1,000	950	
96	Bus Operator Crew Rooms				1,000	1,000		60
97	Total SGR Reserve - Transportation					929		
98	SOC Cooling Tower and Hydronic Boiler Replacement				495	704		
99	PA-LED Lighting Retrofit for DART Bus Facilities				359	699		-353
100	SOCBOF - Renovate Bus Washer					683		
101	SOC Total Roof Replacement				500	500		
102	Replacement of Overhead doors at 4127 Elm St				456	456		
103	Bus Collision Avoidance Countermeasures Project				452	452		-355
104	Bus Lift Replacements Bays #13 and #14 at 4209 Main				300	300		
105	Replacement of Overhead doors at 4209 Main St.				276	276		
106	PA Bus Facilities Concrete Repair FY 18				273	273		
107	SOCBOF - Bus Lot Sealing and Concrete Replacement				131	131		
108	NWBOF - Remove Inground Lifts in Bays 5 & 6				115	115		
109	NWBOF - Replace Main Electrical Switch Gear				110	110		
110	NWBOF - Bus Lot Concrete Replacement				75	75		
111	NWBOF - Refurbishment of Bus Washer				40	40		
112	NWBOF- Remodel - Upstairs Breakroom and Classroom				20	20		
113	SOCBOF - Renovate Men's Shower for Bus Operators				16	16		
114	NWBOF - Add Lighting to the Bus Parking Lot				16	16		
115	Project Cashflow Timing Adjustments				-3,595	-61,742		
	Expansion/ Enhancement Projects				20,725	25,716	17,863	10,000
	State of Good Repair				15,807	1,060,299	79,590	-683
	Other				0	0	0	0
	Total Bus				\$36,533	\$1,086,015	\$97,453	\$9,317
COMMUTER RAIL								
116	Cotton Belt Construction				\$126,682	\$1,115,478	\$177,396	\$17,199
117	Positive Train Control				11,085	15,085	11,293	3,500
118	Locomotive Purchase				5,750	5,750	5,175	
119	Project Cashflow Timing Adjustments				-31,776	-757		
120	SGR Reserve - Vehicle Maintenance					165,203	82,602	
121	SGR Reserve - DFW ROW & Signals Maintenance					130,528	74,114	
122	SGR Reserve - Madill ROW & Signals Maintenance					57,415		
123	Cotton Belt Preventive Maintenance					35,281		
124	Madill Bridges Replacement				4,300	30,000		
125	SGR Reserve - PTC Refurbish / Replacement					19,227	9,613	
126	Bi-Level & Cab Car Overhauls				4,000	15,603	7,802	
127	FY19 DFW Track Maintenance					11,083	6,293	
128	SGR Reserve - Intelligent Transportation Systems (ITS)					10,793	5,397	
129	Madill Bridge Additional Funding					9,500		



Exhibit 19
FY 2019 Capital/Non-Operating Project Budget List (in Thousands) (Cont.)

#	PROJECT NAME	Expansion/ Enhancement Projects	State of Good Repair	Other	2019	20 Year Total	External Funding	Operating Expense/ (Savings)
COMMUTER RAIL (continued)								
130	DFW Track MOW				\$9,478	\$9,478	\$5,381	\$0
131	SGR Reserve - Facility Maintenance					8,483	4,241	
132	Obsession Bridge				3,207	8,207		
133	Locomotive Overhaul (2) F59PHI				5,000	5,302	3,493	
134	Valley View to W. Irving Double Tracking				7,500	7,500	3,190	
135	MP 640.4 Inwood Bridge				1,900	1,900		
136	FY18 DFW Bridge Panel Replacement				1,800	1,800	900	
137	TRE Fleet Cameras for Loco, Cab Cars and Coaches				650	1,300	650	
138	TRE Repaint Existing Fleet					1,050	525	
139	Cameras for TRE Station Platforms					550		
140	SGR Reserve - TRE Passenger Amenities					500		
141	DFW Realign Control Point 217					500		
142	FY19 DFW Turnout (TO) Replacement					460	261	
143	FY19 DFW Bridge Panel Replacement					417	237	
144	TRE Maintenance Facility Security				282	282	141	
145	FY19 DFW Crossing Replacement				256	256	145	
146	TRE Fleet Camera Installation				250	250	125	
147	SGR Reserve - Infrastructure Technology					184	92	
148	Raising Union Station Platform Track 4				80	80		
149	Project Cashflow Timing Adjustments				-8,569	-355		
	Expansion/ Enhancement Projects				111,741	1,135,555	193,863	20,699
	State of Good Repair				30,135	532,776	205,201	0
	Other				0	0	0	0
	Total Commuter Rail				\$141,876	\$1,668,331	\$399,064	\$20,699
LRT								
150	Second Downtown Rail Line (D2)				\$5,349	\$1,405,734	\$300,000	\$3,093
151	Red & Blue Line Platform Extensions				5,391	113,414	118,590	
152	Loop 12 Station					12,000	12,000	
153	Carpenter Ranch Station				6,100	11,800	8,800	
154	CCTV - 163 SLRVs				2,000	7,306		
155	FY16 21 APCs for Fleet 52				800	800		
156	Project Cashflow Timing Adjustments				-4,060	-4,034		
157	SGR Reserve - LRVs Replacement					711,436		
158	SGR Reserve - Right-Of-Way & Track					82,200		
159	SGR Reserve - LRV Capital Maintenance Program					61,935		
160	SGR Reserve - TVM Model Replacement					51,163		
161	SGR Reserve - Intelligent Transportation Systems (ITS)					44,349		
162	SGR Reserve - LRT Passenger Amenities					39,546		
163	WSA-Central Business District (CBD) Rail Replacement				10,000	33,000		
164	SGR Reserve - Uninterrupted Wayside Signal Power Systems					31,500		
165	SGR Reserve - Traction Electrification System (TES)					23,451		
166	SGR Reserve - Communications					22,093		
167	SGR Reserve - Central Rail Ops Facility					15,187		
168	LRV Capital Programs FY18-FY27				3,349	15,029		
169	SGR Reserve - Hi-Rail NRV Replacement					11,283		
170	LRV HVAC Upgrade Project - 115 Cars				3,256	10,256		11
171	Uninterrupted Wayside Signal Power Systems				3,650	9,250		
172	SGR Reserve - North West Rail Ops Facility					7,833		
173	SGR Reserve - Signals					4,550		
174	TES - Starter System TPSS Rectifier Replacement				4,464	4,464		
175	COMMS SONET System Replacement				2,800	4,300		
176	PA-LED Lighting Retrofit for DART LRT Facilities				2,531	3,946		-888
177	Comm SCADA Control System Upgrade				600	3,600		



Exhibit 19
FY 2019 Capital/Non-Operating Project Budget List (in Thousands) (Cont.)

#	PROJECT NAME	Expansion/ Enhancement Projects	State of Good Repair	Other	2019	20 Year Total	External Funding	Operating Expense/ (Savings)
LRT (continued)								
178	LED Destination Signs on 48 LRVs					\$3,403	\$0	\$0
179	Fare Barrier Improvements at West End Station				1,000	3,000		
180	TES Overhead Catenary Wire Machine				770	2,770		
181	TRK Plasser American Tamper Replacement #6019				765	2,765		
182	Interior Electronic Display Message Sign on 48 LRVs					2,747		
183	Pedestrian Connections at Victory Station				600	1,600		
184	SGR Reserve - Infrastructure Technology					1,441		
185	SGR Reserve - Anti-Graffiti Window Film, LRVs					1,181		
186	COMMs W. Oak Cliff LRT Line Fiber Install					1,054		
187	US75 LRT Bridge				1,000	1,000		
188	SGR Reserve - Equipment Replacement - Police					835		
189	SGR Reserve - Emergency Power Upgrade at CROF					724		
190	Trk Presidio Crossover Replacement				633	633		
191	DFW Airport Station Customer Amenities				530	530		
192	2nd Avenue Grade Crossing Safety Improvements					500		
193	TES - TPSS Structural, Civil, and Safety Enhancement					457		
194	COMMs Luminator UPS Systems Replacement					366		
195	East and West End Elevators CROF S&I Building				358	358		
196	Storm Drainage Improvements at G-1 Line Section R				350	350		
197	Track Grade Crossing Rubber Panel Replacement					328		
198	PA Rail Facilities Concrete Replacement FY18				281	281		
199	PA Rail Station Rehab (SGR) City Place/Tunnel					261		
200	One set of portable LRV 15 Ton Lifts for NWROF				259	259		
201	Tunnel Facility Uninterruptible Power Supply					227		
202	SIG Uninterrupted Power Supply Unit Replacements					141		
203	Track Electrification Systems (TES) Portable Generators				140	140		
204	C-CAR Reconfiguration - Prioritizing for Mobility				104	104		63
205	Rail Station Rehab Forest Lane				87	87		
206	SIG - Fiberoptic Test/Troubleshooting Equipment				80	80		
207	TES Truck Mounted Height & Stagger Gauge				69	69		
208	COMMs Exacom Voice Recorder System Upgrade				38	38		
209	COMMs Optical Time Domain Reflectometer (OTDR)				14	14		
210	Project Cashflow Timing Adjustments				-7,800	-3,147		
	Expansion/ Enhancement Projects				15,579	1,547,021	439,390	3,093
	State of Good Repair				29,930	1,214,968	0	-814
	Other				0	0	0	0
	Total LRT				\$45,509	\$2,761,989	\$439,390	\$2,279
STREETCAR								
211	Dallas Central Streetcar Link				\$766	\$96,194	\$48,000	\$3,200
212	Northern Streetcar Extension				4,600	4,600	4,600	
213	Vehicle Maintenance Program SGR - Reserve				0	1,211		
	Expansion/ Enhancement Projects				\$5,366	\$100,794	\$52,600	\$3,200
	State of Good Repair				0	1,211	0	0
	Other				0	0	0	0
	Total Streetcar				\$5,366	\$102,005	\$52,600	\$3,200
MOBILITY MANAGEMENT								
214	SGR Reserve - Paratransit Ops Facility (Senate St.)				\$127	\$5,511	\$0	\$0
215	Senate Street Men's Restroom Renovation				170	170		
	Expansion/ Enhancement Projects				0	0	0	0
	State of Good Repair				297	5,681	0	0
	Other				0	0	0	0
	Total Mobility Management				\$297	\$5,681	\$0	\$0



Exhibit 19
FY 2019 Capital/Non-Operating Project Budget List (in Thousands) (Cont.)

#	PROJECT NAME	Expansion/ Enhancement Projects	State of Good Repair	Other	2019	20 Year Total	External Funding	Operating Expense/ (Savings)
NON-OPERATING								
216	Asset Studies & Assessment Reserve				\$0	\$5,716	\$0	\$0
217	Transit System Plan Regional Server Rpl. - SGR Reserve				0	9,253		
218	Capital Service Planning Reserve					1,000		
219	TxDOT funded from FTA				10,000	20,000		
220	FY19 Capital Planning					1,500		
221	Transit Oriented Development (TOD) FY19					274		
222	Design Plan & Construction Review/Mgmt. at Mockingbird					1,050		
223	Regional On-Board Survey					850		
224	FY17 Capital Planning				500	500		
225	Community Garden				62	62		
226	HQ Relocation study				470	470		
227	2040 Transit System Plan				826	826		
	Expansion/ Enhancement Projects				0	0	0	0
	State of Good Repair				0	0	0	0
	Other				11,858	41,501	0	0
	Total Non-Operating				\$11,858	\$41,501	\$0	\$0
ROAD IMPROVEMNET								
228	City of Dallas (PASS Program)				\$2,000	\$4,000	\$0	\$0
229	City of Garland (PASS Program)				1,000	2,000		
230	TSM Street Repair SGR - Reserve				1,000	9,200		
231	City of Dallas (TSM Program)				1,000	4,000		
232	City of Garland (TSM Program)				1,203	1,203		
233	TSM Street Repair other Cities				1,580	2,480		
234	Grant for Transit Related Improvement Program (TRIP)				2,289	16,025		
235	Highland Park (TRIP)				826	6,330		
236	University Park -TRIP				920	7,048		
237	Glenn Heights - TRIP				116	890		
238	Cockrell Hill - TRIP				76	584		
	Expansion/ Enhancement Projects				0	0	0	0
	State of Good Repair				12,011	53,761	0	0
	Other				0	0	0	0
	Total Road Improvement				\$12,011	\$53,761	\$0	\$0
	Expansion/ Enhancement Projects				155,775	2,813,657	703,717	37,002
	State of Good Repair				111,200	3,320,655	284,791	-1,497
	Other				12,353	42,694	0	2
	TOTAL CAPITAL & NON-OPERATING				\$279,328	\$6,177,006	\$988,508	\$35,507
	CAPITAL PLANNING & DEVELOPMENT & START-UP				\$12,200	\$304,154	\$0	\$0
	GRAND TOTAL				\$291,528	\$6,481,160	\$988,508	\$35,507



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, 2018, DART will have approximately \$3.21 billion in bonds outstanding, as well as \$125 million in CP.

Debt Program Implementation

Commercial Paper – DART will retire all currently outstanding commercial paper by 2022, but will issue \$227 million (will be paid by long-term debt in 2026) during the next five 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 2.75% 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 debt. 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 \$2.3 billion in support of the Program of Interrelated Projects (Core Capacity Program), the Cotton Belt, and other capital projects. Beyond that, \$700 million of debt is planned between 2024 and 2028 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.

Exhibit 20
FY 2019 Financial Plan Debt Assumptions

Description	Commercial Paper (CP)		Long-Term Debt (LTD)	
	FY 2019	Future	FY 2019	Future
Term	Rolling for up to 7 years	Rolling for up to 11 years	None	Up to 39 years
Interest rates + fees	3.50%	2.93%-3.50%	None	5.00% -5.50% Fixed
Principal Repayment	\$30M	All outstanding (Self-Liquidity) CP will be retired by 2022	None	Multiple Debt Structures***
Net CP* / Total Long-Term Debt issued**	(\$3M)	\$293M	\$91M	\$3.0B
End of Year - Maximum debt outstanding	\$107M	\$400M	\$3.3B	\$6.2B
Year of maximum debt outstanding	FY 2029	FY 2029	n/a	FY 2029-2038
Cash reserves required?	Yes	Yes	No	No
Uninsured Debt Rating assumed	A-1+/P-1	A-1+/P-1	AA+/Aa2	AA+/Aa2

*The amounts shown on this line related to commercial paper issuance are net numbers and do not include retirement and re-issuance. The long-term debt amounts shown on this line are gross issuances.

**Amounts shown are for issuances between 2019 and 2038 and are shown at par value

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. Unfortunately, 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 2017, the expected subsidy was reduced by a total of \$9.9 million. These reductions are scheduled to last for a total of 12 years. Projecting future reductions based on the 2017 reduction percentage of 6.9%, an additional \$14.7 million of anticipated subsidy will not be received. That results in a total estimated subsidy reduction of \$24.6 million over the 12-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 2019 Financial Plan. Interest expense payments are shown net of the (BABs) subsidy, thus showing only DART’s net interest cost.

Exhibit 21
FY 2019 Financial Plan Principal and Interest Payments (in Millions)

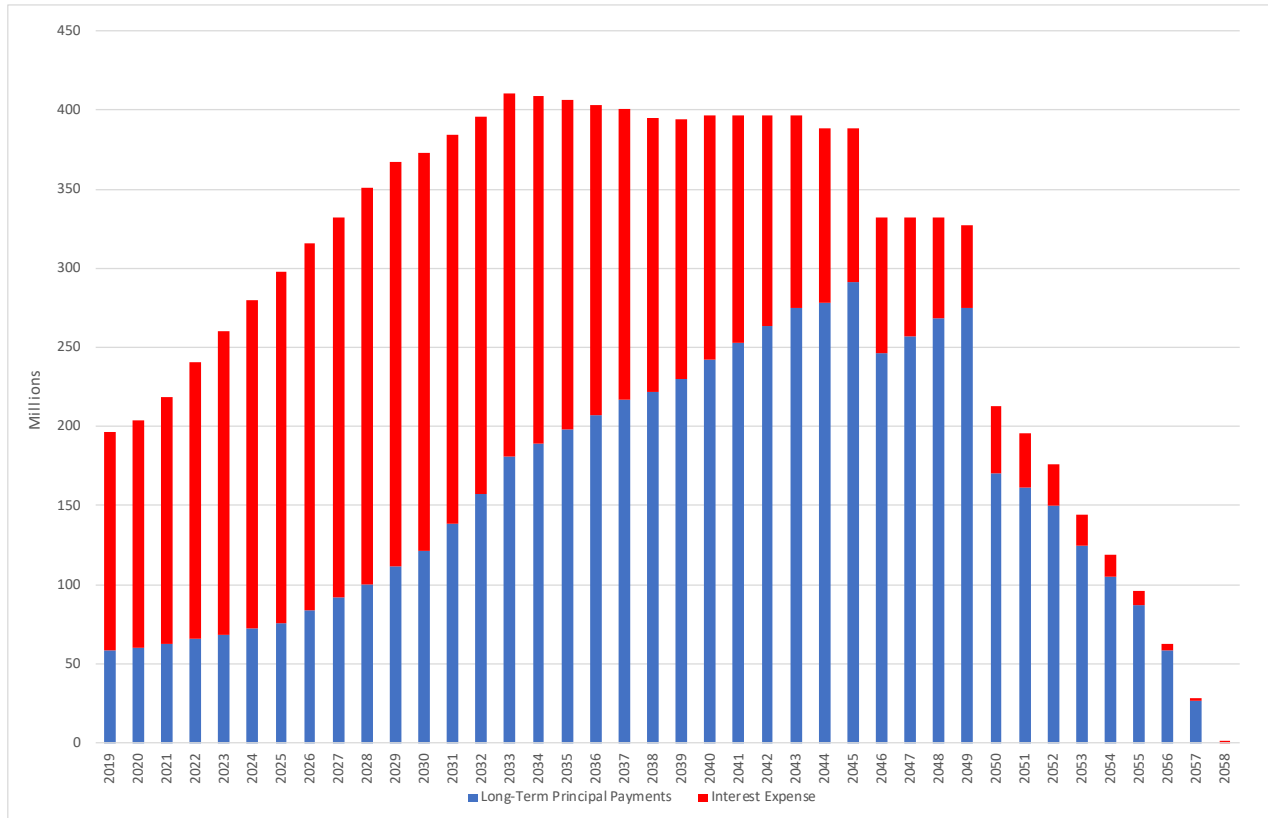




Exhibit 22 shows the interest rate assumptions contained in the FY 2019 Financial Plan.

Exhibit 22
Interest Rate Assumptions 2019 – 2038

Year	Commercial Paper Rate	30-Year Fixed Rate Bonds	Interest Income rate
2019	2.93%	5.00%	2.75%
2020	3.50%	5.00%	3.50%
2021	3.50%	5.00%	4.20%
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%

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 115 in the Reference Section. Exhibit 116 is a history of DART’s long-term bond issuance credit ratings. Exhibit 117 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.

Exhibit 23
 FY 2019 Financial Plan 20-Year Balance Sheet
 (in Millions – Inflated Dollars)

Line	Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
	ASSETS										
	CURRENT ASSETS										
1	Cash and cash equivalents & Investments	\$654.5	\$568.6	\$640.7	\$657.8	\$654.1	\$653.7	\$647.3	\$555.1	\$515.4	\$474.8
2	Sales taxes receivable	109.3	109.3	113.7	119.4	126.5	132.9	138.2	142.3	142.4	148.2
3	Transit revenue receivable, net	3.0	3.0	3.0	3.2	3.3	3.7	3.7	3.8	3.9	4.0
4	Due from other governments	16.8	15.2	29.2	22.6	20.4	8.8	10.0	10.0	9.4	9.4
5	Material and supplies inventory	40.4	41.6	42.8	44.1	45.4	46.9	48.4	48.4	49.9	51.4
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	\$826.9	\$740.7	\$832.4	\$850.0	\$852.8	\$848.8	\$850.6	\$762.7	\$724.0	\$690.7
8	Notes Receivable & Investment in Joint Venture	\$13.9	\$12.8	\$9.4	\$6.9	\$5.1	\$3.8	\$2.8	\$2.0	\$1.5	\$1.1
9	Property, Plant & Equipment, Net	4,369.5	4,394.7	4,764.7	5,205.8	5,515.2	5,642.7	5,846.2	5,830.2	5,983.3	6,018.2
10	Restricted Assets held to pay Capital Lease Liabilities	116.2	118.7	121.2	123.6	8.5	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
12	Investments in managed HOV lane agreements	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6
13	Deferred Outflows of Resources	41.0	40.0	38.9	37.9	37.0	36.0	35.1	34.3	33.4	32.6
14	TOTAL ASSETS AND DEFERRED OUTFLOWS	\$5,381.5	\$5,320.7	\$5,780.5	\$6,238.2	\$6,432.5	\$6,545.3	\$6,748.7	\$6,643.1	\$6,756.0	\$6,756.5
	LIABILITIES AND EQUITY										
	CURRENT LIABILITIES										
15	Accounts payable and accrued liabilities	\$150.1	\$216.1	\$247.8	\$236.4	\$216.1	\$187.4	\$204.4	\$167.8	\$201.7	\$184.2
16	Commercial Paper notes payable	107.0	125.0	163.0	209.0	227.0	227.0	347.0	240.0	300.0	350.0
17	Current portion of Long-term Debt Payable	58.3	60.0	62.7	65.4	68.4	72.7	75.4	84.0	92.0	100.1
18	Local Assistance Program payable	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	Retainage payable	22.5	36.2	56.6	59.5	51.0	38.8	34.9	29.4	27.7	30.2
20	Unearned Revenue & Other Liabilities	116.2	118.7	121.2	123.6	8.5	0.0	0.0	0.0	0.0	0.0
21	TOTAL CURRENT LIABILITIES	\$454.2	\$556.0	\$651.3	\$694.0	\$571.0	\$525.9	\$661.7	\$521.1	\$621.5	\$664.5
22	Senior Lien Sales Tax Revenue Bonds Payable	\$3,243.6	\$3,479.0	\$3,927.1	\$4,332.5	\$4,664.2	\$4,941.5	\$5,106.1	\$5,249.1	\$5,407.1	\$5,506.9
23	Net Pension Liability	56.4	53.4	49.9	45.9	41.4	36.4	30.8	24.8	17.8	10.3
24	Capital Lease Liabilities	73.1	53.6	42.1	40.4	37.5	36.1	34.7	33.3	31.9	30.4
25	TOTAL LIABILITIES AND DEFERRED INFLOWS	\$3,827.2	\$4,141.9	\$4,670.4	\$5,112.8	\$5,314.0	\$5,539.8	\$5,833.3	\$5,828.3	\$6,078.2	\$6,212.2
26	NET ASSETS (EQUITY)	\$1,554.3	\$1,178.8	\$1,110.1	\$1,125.4	\$1,118.5	\$1,005.5	\$915.4	\$814.8	\$677.8	\$544.4
27	TOTAL LIABILITIES & NET ASSETS	\$5,381.5	\$5,320.7	\$5,780.5	\$6,238.2	\$6,432.5	\$6,545.3	\$6,748.7	\$6,643.1	\$6,756.0	\$6,756.5



Exhibit 23
FY 2019 Financial Plan 20-Year Balance Sheet
 (in Millions) (continued)

Line	Description	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
	ASSETS										
	CURRENT ASSETS										
1	Cash and cash equivalents & Investments	\$424.4	\$428.3	\$468.2	\$448.9	\$428.2	\$431.4	\$393.7	\$401.7	\$413.4	\$488.1
2	Sales taxes receivable	155.6	164.9	173.2	180.1	185.5	185.5	192.9	202.6	214.7	225.4
3	Transit revenue receivable, net	4.4	4.5	4.6	4.6	4.7	5.3	5.3	5.4	5.5	5.6
4	Due from other governments	8.3	8.3	8.3	8.6	8.3	8.3	8.3	8.3	10.1	10.1
5	Material and supplies inventory	52.9	54.5	56.2	57.8	59.6	61.4	63.2	65.1	67.1	69.1
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	\$648.6	\$663.5	\$713.3	\$703.1	\$689.3	\$694.8	\$666.4	\$686.1	\$713.8	\$801.3
8	Notes Receivable & Investment in Joint Venture	\$0.8	\$0.6	\$0.4	\$0.3	\$0.2	\$0.2	\$0.1	\$0.1	\$0.1	\$0.1
9	Property, Plant & Equipment, Net	5,837.2	5,623.9	5,404.0	5,226.6	5,028.4	4,807.7	4,620.0	4,401.3	4,325.8	4,272.4
10	Restricted Assets 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
12	Investments in managed HOV lane agreements	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6
13	Deferred Outflows of Resources	31.8	31.1	30.3	29.6	28.9	28.3	27.6	27.0	26.4	25.8
14	TOTAL ASSETS AND DEFERRED OUTFLOWS	\$6,532.3	\$6,333.0	\$6,162.0	\$5,973.5	\$5,760.8	\$5,544.8	\$5,328.0	\$5,128.4	\$5,079.9	\$5,113.5
	LIABILITIES AND EQUITY										
	CURRENT LIABILITIES										
15	Accounts payable and accrued liabilities	\$148.8	\$146.2	\$148.5	\$159.6	\$160.0	\$160.0	\$169.8	\$167.9	\$198.1	\$206.4
16	Commercial Paper notes payable	400.0	400.0	400.0	350.0	300.0	250.0	150.0	50.0	0.0	0.0
17	Current portion of Long-term Debt Payable	111.7	121.8	138.7	157.6	181.1	189.3	198.2	207.4	216.9	221.6
18	Local Assistance Program payable	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	Retainage payable	17.2	7.5	6.1	7.8	9.0	7.8	8.6	8.9	13.8	20.9
20	Unearned Revenue & Other Liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	TOTAL CURRENT LIABILITIES	\$677.7	\$675.5	\$693.4	\$675.0	\$650.2	\$607.1	\$526.6	\$434.3	\$428.8	\$448.9
22	Senior Lien Sales Tax Revenue Bonds Payable	\$5,395.2	\$5,273.4	\$5,134.7	\$4,977.1	\$4,796.0	\$4,606.6	\$4,408.4	\$4,201.0	\$3,984.0	\$3,762.5
23	Net Pension Liability	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	Capital Lease Liabilities	29.0	27.6	26.2	24.8	23.4	22.0	20.6	19.2	17.8	16.4
25	TOTAL LIABILITIES AND DEFERRED INFLOW	\$6,104.2	\$5,976.5	\$5,854.3	\$5,676.9	\$5,469.6	\$5,235.7	\$4,955.6	\$4,654.4	\$4,430.6	\$4,227.7
26	NET ASSETS (EQUITY)	\$428.2	\$356.5	\$307.6	\$296.6	\$291.2	\$309.1	\$372.4	\$473.9	\$649.2	\$885.7
27	TOTAL LIABILITIES & NET ASSETS	\$6,532.3	\$6,333.0	\$6,162.0	\$5,973.5	\$5,760.8	\$5,544.8	\$5,328.0	\$5,128.4	\$5,079.9	\$5,113.5

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 had a balance of approximately \$12.2 million on September 30, 2018.

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 Capital Projects Reserve account. The Financial and Capital Projects Reserve 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 Capital Reserve.



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. DART has also reserved \$15 million of local funds to pay for costs that might be incurred before federal grant approval. Once the grant is approved, any unused funds will be released from this encumbrance.

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.

Capital Reserves (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 Capital Projects Reserve. The balance in that reserve as of September 30, 2018 will be approximately \$7.3 million. Any excess sales tax revenues over the FY 2018 budget will be added to this reserve on or before December 31, 2018. Note that the approved FY 2018 Financial Plan reflected the use of these \$20 million funds for the acceleration of the Cotton Belt 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 2019 Financial Plan, the minimum value of Unrestricted Cash is \$62.6 million, occurring in 2036. 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 \$393.7 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 2019 Financial Plan, the lowest external coverage value is 2.51 in 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 2019 Financial Plan meets this standard for all years, with a minimum value of 1.15 in 2027 and 2028. Exhibits 24 and 25 compare the projected annual values of the internal and external coverage ratios from the FY 2018 Plan to those in the FY 2019 Plan. The reduced coverage ratios in the later years are primarily a result of new debt service for D2.

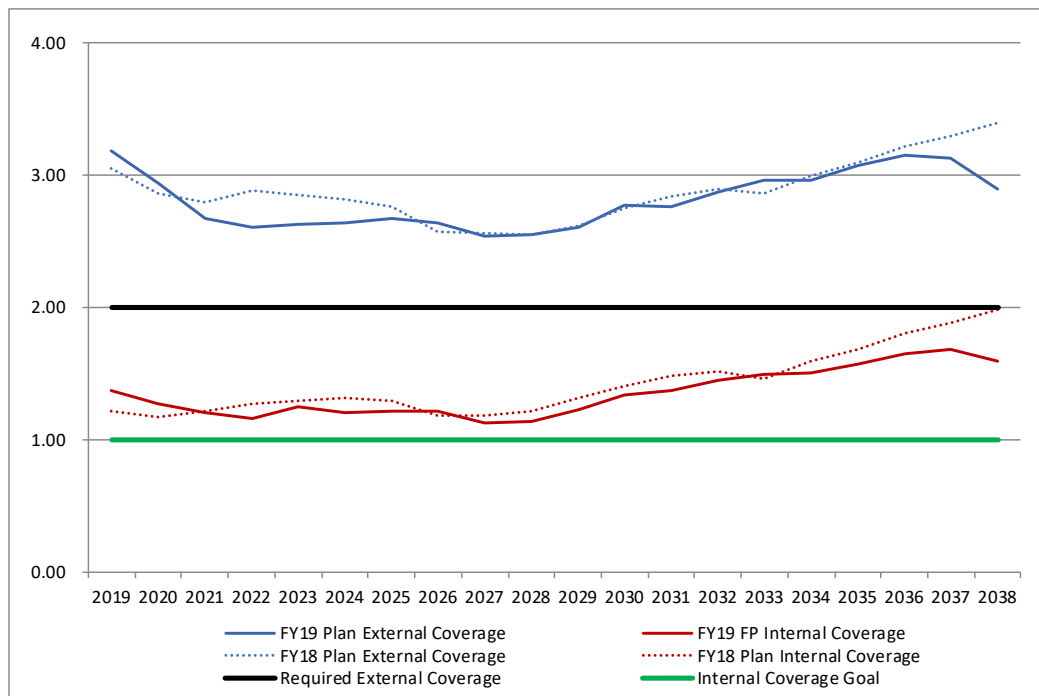




Exhibit 24
Projected Coverage Ratio Comparison

Year	FY18 FP		FY19 FP		Variance	
	External Coverage	Internal Coverage	External Coverage	Internal Coverage	External Coverage	Internal Coverage
2019	3.05	1.22	3.25	1.44	0.20	0.22
2020	2.86	1.17	3.14	1.35	0.28	0.18
2021	2.79	1.21	3.06	1.39	0.27	0.18
2022	2.89	1.27	2.92	1.32	0.04	0.05
2023	2.86	1.29	2.88	1.38	0.02	0.10
2024	2.82	1.32	2.79	1.31	(0.03)	(0.01)
2025	2.76	1.30	2.76	1.30	(0.01)	(0.00)
2026	2.57	1.18	2.67	1.26	0.10	0.08
2027	2.57	1.18	2.53	1.15	(0.03)	(0.04)
2028	2.55	1.21	2.51	1.15	(0.05)	(0.06)
2029	2.62	1.32	2.52	1.22	(0.10)	(0.10)
2030	2.75	1.41	2.64	1.31	(0.11)	(0.10)
2031	2.84	1.48	2.68	1.36	(0.16)	(0.11)
2032	2.89	1.51	2.70	1.39	(0.19)	(0.12)
2033	2.87	1.46	2.67	1.38	(0.20)	(0.08)
2034	2.99	1.59	2.67	1.38	(0.32)	(0.22)
2035	3.10	1.68	2.78	1.44	(0.32)	(0.24)
2036	3.22	1.80	2.92	1.55	(0.30)	(0.25)
2037	3.30	1.89	3.09	1.68	(0.20)	(0.20)
2038	3.40	1.98	3.29	1.83	(0.11)	(0.15)

Exhibit 25





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.

Capital Reserve Fund

The investment goal of capital preservation and liquidity is primary for this fund to meet unplanned capital project funding requirements. 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 2018 and FY 2019.





**Exhibit 26
Cashflows by Fund
(in Thousands)**

	Operating	Financial Reserve	Capital Reserve	Insurance	Platform	Cotton Belt	Irving ILA	RTR	Streetcar	Toyota	Debt Service	Total
Beginning Balance (10/1/2017)	\$460,415	\$50,001	\$23,651	\$12,200	\$61,086	\$0	\$0	\$1,627	\$4,293	\$854	\$111,723	\$725,850
Sources of Funds												
Sales Taxes	399,185										193,785	592,970
Operating Revenues	129,638											129,638
Draws from Grants	92,642											92,642
Investment Earnings	6,184	672	333	142	1,330	88	16	13	12	15	1,443	10,248
BABS Reimbursement											28,406	28,406
Transfers into Fund	3,971	0	3,635	485	0	16,000	3,200	0	0	0	15,000	42,291
Total Fund Sources	\$631,620	\$672	\$3,968	\$627	\$1,330	\$16,088	\$3,216	\$13	\$12	\$15	\$238,634	\$896,195
Uses of Funds												
Operating Expenses	554,637											554,637
Capital Expenditures	111,846											111,846
Interest Expense (excl BABS)											164,269	164,269
Principal Payment											55,936	55,936
CP Paydown											15,000	15,000
Other Expenditures	37	(37)	(1)		246			(2)			1,616	1,859
Transfers Out	20,072	620	16,000	626	0	0	0	135	3,985	11		41,449
Total Fund Uses	\$686,592	\$583	\$15,999	\$626	\$246	\$0	\$0	\$133	\$3,985	\$11	\$236,821	\$944,996
Ending Balance (9/30/18)	\$405,443	\$50,090	\$11,620	\$12,201	\$62,170	\$16,088	\$3,216	\$1,507	\$320	\$858	\$113,536	\$677,049
Sources of Funds												
Sales Taxes	424,275										197,161	621,436
Operating and Other Revenues	122,723											122,723
Draws from Grants	167,808											167,808
Investment Earnings	12,595	1,495	280	360	1,474	489	0	0	0	18	1,676	18,387
BABS Reimbursement											28,574	28,574
Long-term Debt Issuance	90,922											90,922
Commercial Paper Issuance	27,000											27,000
Transfers into Fund	7,251	0	1,495	0	0	4,100	0	0	0	0	45,000	57,846
Total Fund Sources	\$852,574	\$1,495	\$1,775	\$360	\$1,474	\$4,589	\$0	\$0	\$0	\$18	\$272,411	\$1,134,696
Uses of Funds												
Operating Expenses	544,266											544,266
Capital Expenditures	291,520											291,520
Interest Expense (excl BABS)											161,871	161,871
Principal Payment											58,291	58,291
CP Paydown											45,000	45,000
Other Expenditures	0	0	0	0	0	0	0	0	0	0	3,700	3,700
Transfers Out	45,000	1,495	4,100	360	5,391	0	0	500	150	500		57,496
Total Fund Uses	\$880,786	\$1,495	\$4,100	\$360	\$5,391	\$0	\$0	\$500	\$150	\$500	\$268,863	\$1,162,145
Projected Ending Balance (9/30/19)	\$377,231	\$50,090	\$9,295	\$12,201	\$58,253	\$20,677	\$3,216	\$1,007	\$170	\$376	\$117,084	\$649,600

Exhibit 27 provides an illustration of the flow regarding cashflow.

Exhibit 27
Cashflow Chart

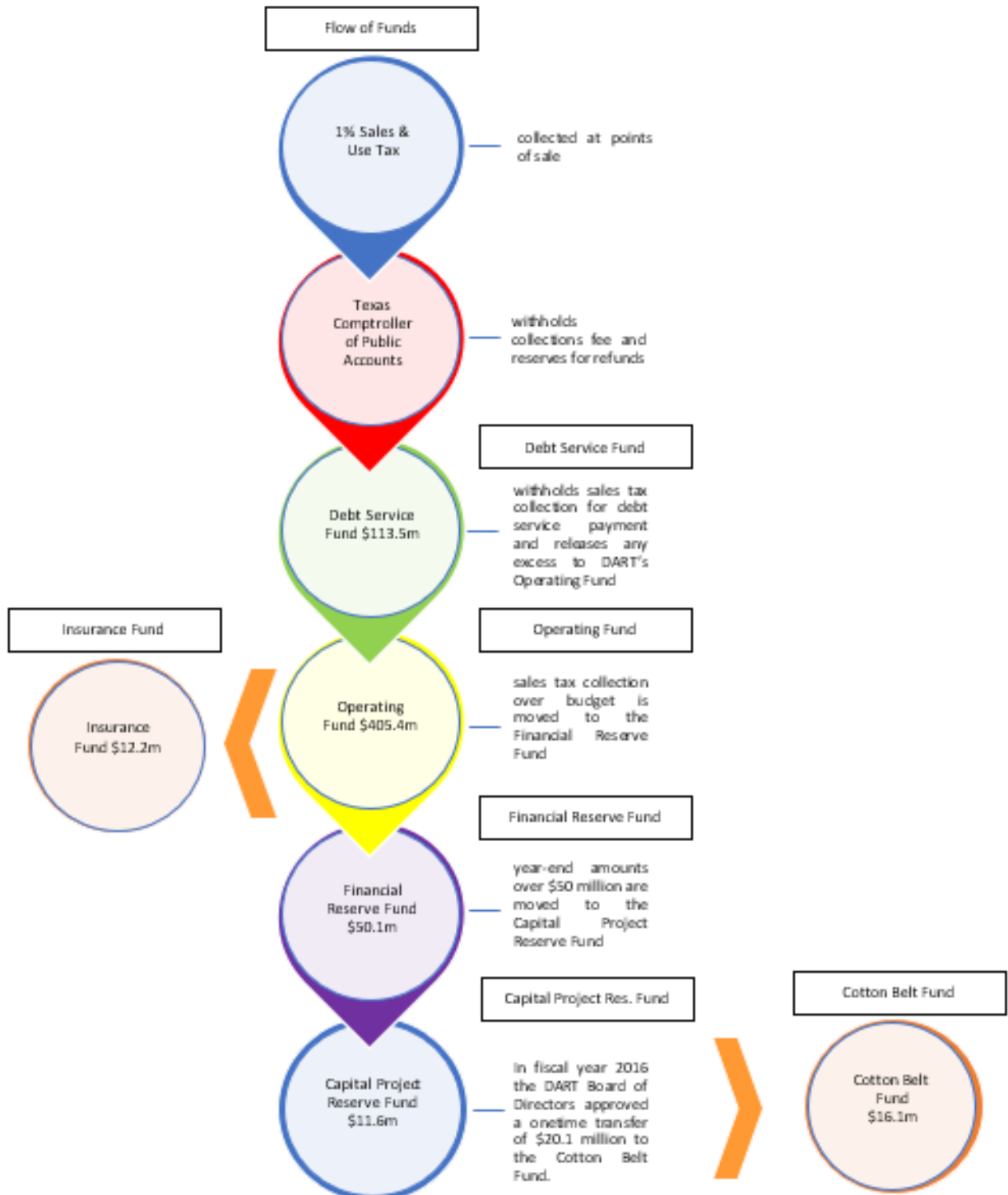
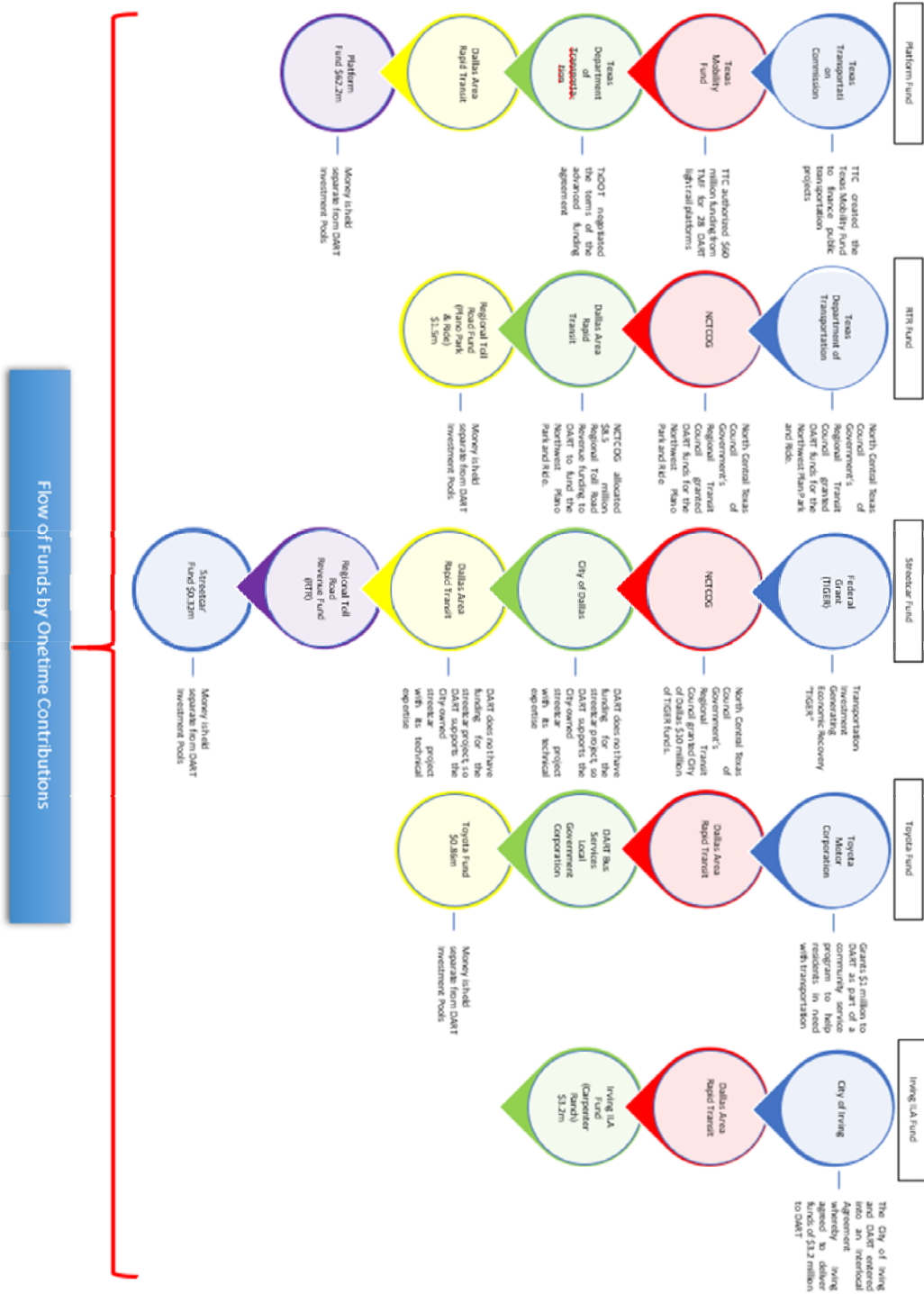


Exhibit 27 (Cont.)
Cashflow Chart





MAJOR FINANCIAL PLAN ASSUMPTIONS

Sources of Funds


- The FY 2019 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 and are projected to be over budget again in FY 2018. 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.com, LLC (the world's largest online retailer), beginning on July 1, 2012, based on a settlement agreement between Amazon and the State Comptroller. DART expects to conclude FY 2018 with \$599.6 million in sales tax receipts. That would equate to 5.8% growth over FY 2017 receipts and 5.7% average annual growth over the last seven years. The FY 2019 Financial Plan calls for a growth rate of 4.75% (over projected FY 2018 receipts) in FY 2019 and a zero-growth year in FY 2020. 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 143 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.

In general, the fare increase represents a 20% price increase except midday passes increase only 25¢, from \$1.75 to \$2.00. Also, two-hour passes will expand to passes that are good from start of service until noon and from noon until end of service. DART will re-introduce single-ride fare for bus service at \$2.50 (the price of a two-hour pass today). Most of the fare changes were effective in August 2018.

- 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:
 - Bus Ridership is projected to be relatively flat for 2019 and grow slightly in each of the next five years (average rate of 1.4%). Because of the fare increase scheduled in August 2018, a loss in ridership would normally be projected for that year. But as mentioned earlier, DART has built \$10 million in additional annual bus service into the Plan beginning in FY 2019 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 expected loss in ridership due to the fare increase is expected to be offset by the gains from the additional service.

- Another factor which might impact ridership totals is the installation of Automatic Passenger Counters (APCs) on the bus fleet over the next several years. There is a strong suspicion that bus ridership is actually higher than we are reporting, but we just aren't capturing it. The use of APCs was found to be much more accurate than manual counting and boosted reported ridership by 15% when they were implemented on the Light Rail system.
 - Light Rail Ridership (including Streetcar) is projected to grow by an average of 1.8% per year over the next five years. This incorporates the negative impact of the fare increase and slow growth thereafter.
 - TRE ridership for 2019 is expected to remain at 1.7 million passengers currently projected for 2018. Beyond that, average annual growth is 1.3% per year once the impact of the 2019 fare increase is factored in.
 - Paratransit ridership is expected to increase by 2.0% over the life of the FY 2019 Financial Plan. FY 2019 ridership levels are projected at 854,300.
 - 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 expected to increase 24% from a projected 720,000 passenger trips in FY 2018 to 890,000 in FY 2019, then 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 has been increasing interest rates slowly. Assuming no recession hits, small upward increases are anticipated each year. DART projects an interest income rate of approximately 2.75% for FY 2019 (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 slowly until they reach 4.2% in 2021, but then drop to 3.90% until 2036, with 3.85% thereafter..
 - DART expects to receive \$90.1 million in Federal Formula allocations for Capital Preventive Maintenance, Fixed Guideway Modernization, Bus & Bus Facilities, Transit Enhancement and Security project funds in 2019. 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 Cotton Belt in 2022. Funding lags two years so DART anticipates an increase of \$2.3 million in formula funds for Cotton Belt operations that begin in 2022.



- Congestion Mitigation/Air Quality (CMAQ) or Texas Mobility Funds (TMF) in the amount of \$10.9 million is programmed to be received in FY 2019 and another \$1.3 million in 2020. No additional CMAQ or TMF funds are included in the Financial Plan beyond 2021. 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 10% of DART's \$6.48 billion 20-year capital program. Beyond already existing discretionary grants, DART has assumed mainly the following federal participation in future programs:
 - \$406.6 million is assumed to be received between 2019 and 2023 for the Program of Interrelated Projects (Core Capacity Program);
 - \$139.3 million for Cotton Belt Rail scheduled to be received between 2019 and 2022;
 - \$16.4 million for bus purchases in 2019. All future bus purchases are conservatively assumed to be 10% grant-funded. These future grants total \$77.0 million over the life of the Plan; and
 - \$4.8 million on various other capital projects.
- \$81.8 million in other external capital contributions over the next five years, including:
 - \$55.9 million from Trinity Metro for their contribution to TRE capital programs (\$206.8 million over the life of the Plan);
 - \$4.6 million for Downtown Streetcar projects;
 - \$20.8 million to fund the Loop 12 and Carpenter Ranch in-fill stations on the Orange Line;
 - \$5 million Addison contribution to the Cotton Belt project;
 - \$2.8 million per year in Tax Increment Financing (TIF) and Value Capture revenues along the Cotton Belt corridor beginning in 2022. These sources will be used to support operations, maintenance, and debt service for the Cotton Belt. They are expected to generate \$30.3 million between 2024 and 2035.

Uses of Funds

Operating Expenses

- DART's operating budget is \$544.3 million in FY 2019, the same as the FY 2019 projected budget that was included in the approved FY 2018 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 \$181.5 million (32.4%) in 2019 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 2019 than in FY 2018. 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 228 in the current budget. The FY 2019 Financial Plan remains authorized for 225 vanpools throughout the life of the Plan. This program has historically covered approximately 95% of its costs with vanpool user fees and support from the NCTCOG which DART expects to continue. DART's contribution is primarily provided through administration and coordination of the program.
- DART will make \$10.0 million in contributions in FY 2019 to the Defined Benefit Pension Plan. This plan has been closed since 1988 and because of this, DART's investments within the Pension Plan will need to 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 has seen a significantly lower increase. As a result, the FY 2019 budget includes approximately \$1 million more in healthcare costs than were in the FY 2018 budget. On January 1, 2018, DART implemented a new strategic approach to Health Care. Based on preliminary results, it is likely that the new approach is moving toward "bending the cost curve downward" and could have a positive impact on DART's 20-year financial plan.

Capital & Non-Operating Expenditures

- The FY 2019 Financial Plan includes service along the Cotton Belt corridor in the northern part of the DART Service Area. As proposed, 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 the TEX Rail project which is currently under construction by Trinity Metro (formerly known as the Fort Worth Transportation Authority). This line will run from downtown Fort Worth to DFW Airport starting in late 2018 or early 2019. Long-term, this will allow for a single-seat ride from Plano all the way to Fort Worth. Service along the Cotton Belt is scheduled to begin in 2022. Current plans call for single-track operation with sidings and passing tracks. Headways would be 30 minutes in the peak periods.
- DART's process of replacing its entire bus fleet was completed in FY 2017. There will also be a procurement for 41 new buses for service expansion in FY2019. 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 \$3.3 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 commercial paper by 2022, but will issue \$227 million during the next five years (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 a self-liquidity program. That \$400 million is scheduled to be repaid between 2032 and 2037.
- \$1.77 billion in debt is scheduled to be issued between 2019 and 2023 in support of the Program of Interrelated Projects, the Cotton Belt 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.
- 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 5.4% for the next several years before slowly declining to 4.5% 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 Cotton Belt), 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 will significantly impact operations.

An area of significant opportunity to increase sales tax receipts relates to sales taxes on residential utilities within the DART Service Area. Our service area cities have the option of receiving sales taxes on residential gas and electricity, but DART does not have that same opportunity. Currently, every city in the service area with the exception of Cockrell Hill does so and as such, the amount each city receives for its one-cent sales tax exceeds what DART receives for its one cent. It is estimated that DART would realize a \$20 to \$25 million annual benefit from such sales taxes, and may pursue this as part of future legislative efforts. Any attempt to pass such a tax increase would surely be met with stiff opposition.

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 2019 Plan includes \$80.6 million in annual allocations for each year and an additional \$2.3 million annually from the Cotton Belt 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 the light rail system 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 (\$568.8 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 Cotton Belt. If this funding is not received for these projects, they will 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 \$37.7 million in the mid-2020s, \$3.4 million in 2032 and \$36.0 million in 2037/2038.

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 appear to 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 2019 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 2019 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 2019 Annual Budget. This portion of our document is organized as follows:

- Overview
- Budget Basis and Process (pages 101 and 102)
- Strategic Priorities – which frame our budget decisions (pages 103 through 140)
- Financial Summary and Discussion (“Inside the Numbers”) – which enumerates the FY 2019 amounts for operating expenses, capital and nonoperating costs, and debt service (pages 141 through 158)

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 2019 Budget incorporates the following amounts:

Operating	\$544,265,823
Capital & Non-Operating	291,519,681
Debt Service	197,160,834
Total FY 2019 Annual Budget	\$1,032,946,338

The FY 2019 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 2019 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 70, in the *Twenty-Year Financial Plan Section* of this document. The list reflects a key strength in the Plan of funding to keep the system in a state of good repair. Notable capital projects in the FY 2019 Plan include a



“Customer-facing initiatives while responsibly meeting operating cost challenges”



program of interrelated projects to increase the core capacity of DART's service, and the development of rail service along the Cotton Belt corridor in the northern part of the DART Service Area.

The FY 2019 budget projects continued economic expansion and therefore growth in employment, ridership, and sales tax receipts. 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 2019 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 Cotton Belt 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 103 through 140. 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 141, by the amounts for operating expenses, capital and nonoperating costs, and debt service, in the FY 2019 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.

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

To shape and influence customer behavior, it is critical that we understand how they feel about and experience our brand.

Every year, DART conducts a customer satisfaction survey to measure brand health. The goals of the survey are to identify any significant shifts in brand perception among consumer subgroups, and to understand the drivers of customer satisfaction.

About 5,800 riders participated in the 2017 survey conducted May 6 to July 3. From this survey, we know that six factors drive customer perception:

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

Specifically, the 2017 survey revealed the following:

- 90% of our riders believe DART service is better or the same as last year.
- 81% of our riders are satisfied with our service and 86% will continue riding DART.
- 77% see DART as a good value for the money.
- Overall satisfaction among age 35 and older increased from 88% to 89%.
- Overall satisfaction among Hispanic riders increased 5 points to 88%.
- Overall satisfaction among choice riders increased 6 points to 87%.

This survey was completed prior to DART implementing significant safety and security enhancements, which include more uniformed presence across the system and a new incident reporting app – DART Say Something. To date, DART has conducted three safety and security surveys (November 2017, February 2018 and June 2018).

The survey helps determine if there is any significant shift in perception with regards to safety and security. The agency surveyed corporate pass holders and DART staff, most of whom are regular DART riders.

In the June 2018 survey, 52% of corporate pass holders reported seeing more uniformed presence on the DART system – an increase from 20% in the November 2017 survey.

Further, 67% of DART staff reported seeing more uniformed presence, up from 19% in November 2017.

With these types of surveys, DART can analyze any measurable changes and adjust strategy accordingly.

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 2019 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 – Starting in FY 2015, 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. Based upon Board and community feedback, DART will perform additional work on development of a Transit Service Plan during FY 2019. This Service Plan will be incorporated into the Agency’s 2040 Transit System Plan. The Plan will identify a phased strategy for improving the bus network that may be implemented over a 20-year period.

In FY 2016 through FY 2018, a series of bus service improvements were implemented based upon research from the COA. During FY 2018, the DART Board implemented a large number of service improvements, including:

- 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 on Demand 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 begins in August.
- Schedule adjustments aimed at improved off-peak on time performance.



DART will receive delivery of 41 new transit buses in FY 2019 which will support another major bus service expansion, currently slated for August 2019. Anticipated improvements in FY 2019 include:

- 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 pilot GoLink zones. Should the service be successful, we expect to propose conversion of all remaining On-Call zones to GoLink operation.

Overall annualized cost of the bus improvements in FY 2018 and FY 2019 is anticipated to exceed \$12.5 million.

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

Improved Service Reliability, Timeliness, and Service Connections – Over the past several years DART implemented a series of bus and rail schedule changes designed to improve average on-time performance. DART incorporated \$2.4 million in increased bus service that was implemented in stages during 2017 and an additional \$3.0 million in FY 2018. Throughout FY 2018 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. The current financial plan includes \$5 million for additional improvements in FY 2019.

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? ®”, “Where’s My Bus? ®” and “Where’s My DART Stop? ®”. New mobile tools were introduced in FY 2018 with Go Pass 2.0 adding Mobility on Demand enhancements.

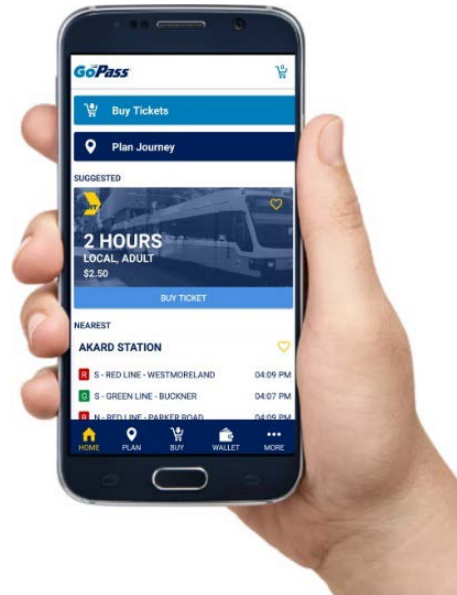
Customers traveling on the Trinity Railway Express (TRE) or the DCTA A-train benefit from mobile websites developed by DART staff. Riders can plan a region-wide trip on DART, TRE, Trinity Metro, and DCTA routes using the DART mobile website. DART’s mobile site, m.DART.org/ was updated in August 2014 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 [GoPass® app](#) in May 2018. Enhanced features such as real-time trip planning and an integrated map, as well as a new design and easier navigation, enhances our customers' experience.

The new cash-to-mobile option on GoPass is in line with our vision and goal to reduce cash handling within the DART system. At hundreds of DFW area retail locations, cash-paying customers can load value onto their GoPass app account using cash. Customers then use that stored value, held in a digital wallet within the app, to purchase tickets for DART, Trinity Railway Express, Trinity Metro or Denton County Transportation Authority.



Future enhancements to the app may include more seamless integration with ride-sharing services, including bikes and shared vehicles.

Since the app launched five years ago, it has been downloaded more than 730,000 times and has generated 4.9 million tickets sold.

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 will be 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 DART.org.

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

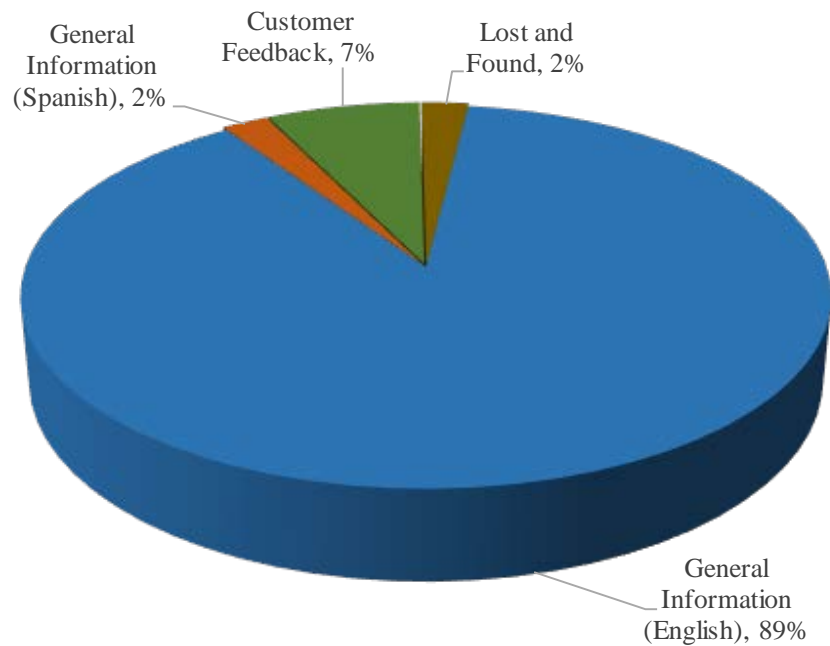
Customer contacts are identified as belonging to one of three categories: (see Exhibit 28)

- 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 28
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

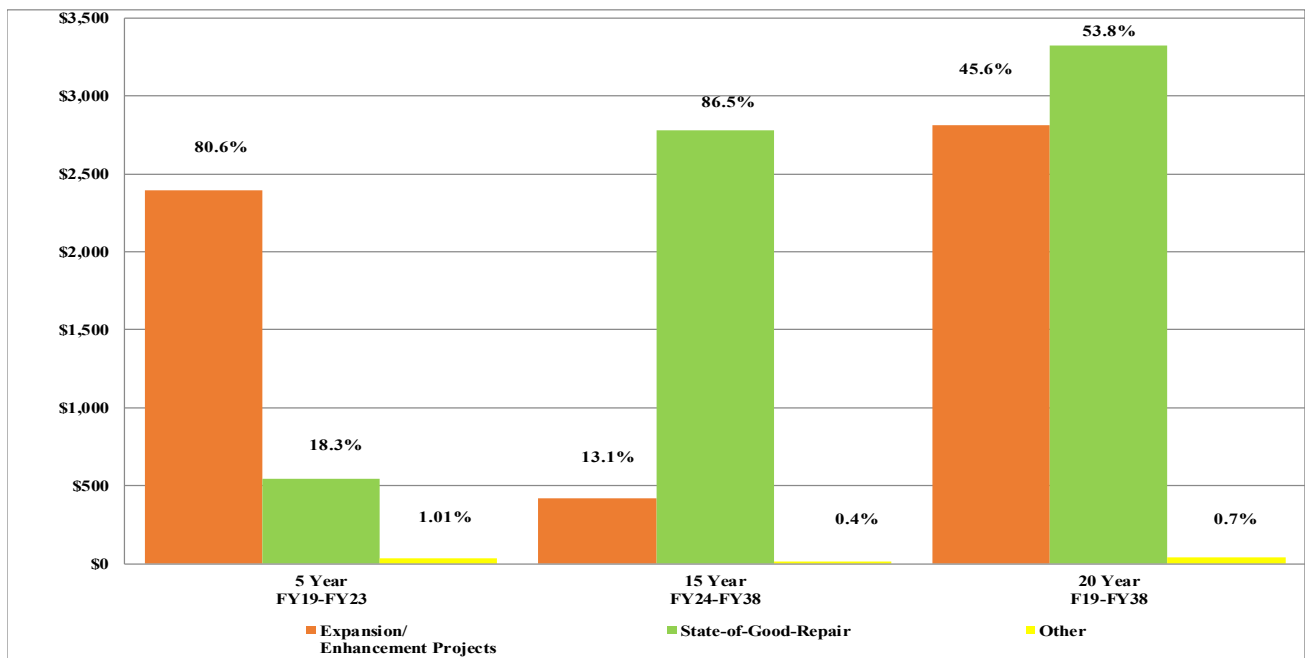
The Twenty-Year Financial Plan demonstrates DART has the financial capacity to meet the Agency Transit System Plan commitments and to continue the programmed levels of bus, rail, and other transportation services, based on current information and assumptions.

The FY 2019 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 29 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 29
Capital/Non-Operating 20-Year Program by Category (in Millions)



The capital expenditures included in the FY 2019 capital/non-operating budget total \$291.5 million as shown on page 157 in this section.

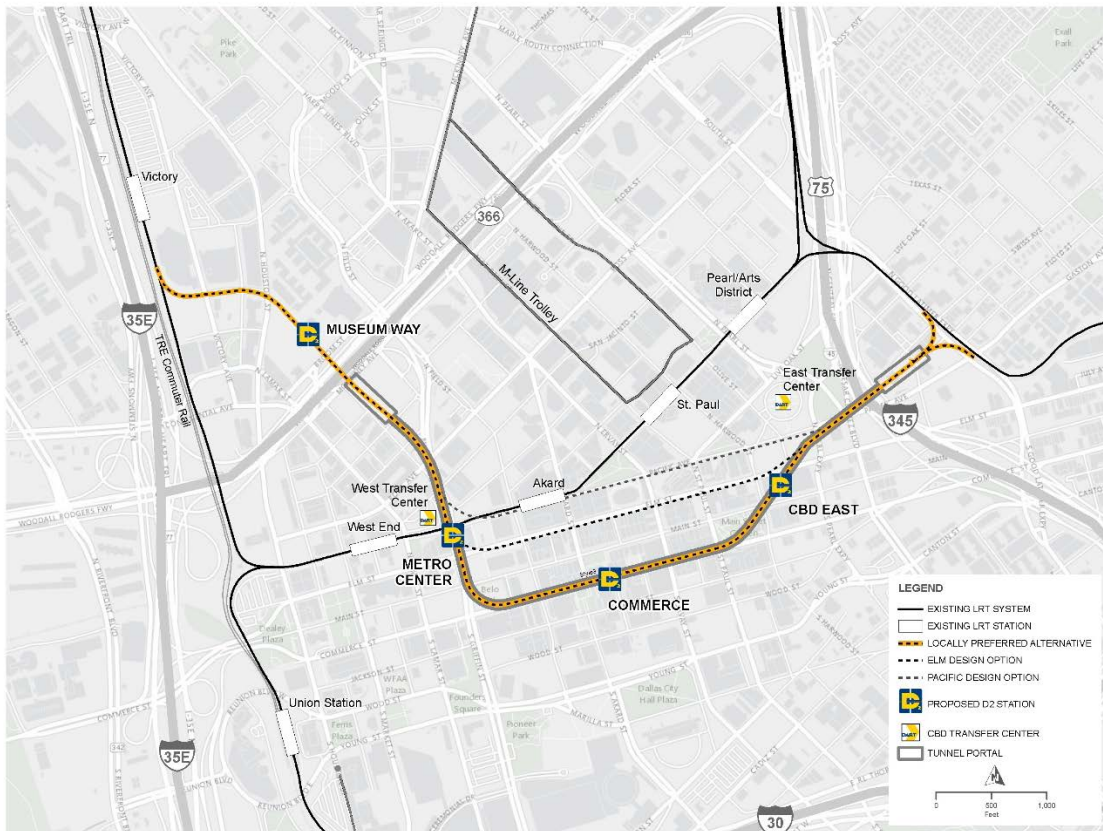
Light Rail Transit (LRT) System

The extension of the Blue Line (SOC-3) to the University of North Texas-Dallas (UNT) Campus opened in October 2016, bringing the LRT system to 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) and Red and Blue Line LRT platform modifications. An alternatives analysis for D2 was completed in summer 2015 and culminated with the selection of a Locally Preferred Alternative (LPA). In summer 2016, there were increasing concerns with the mostly at-grade D2 alignment. Based on DART Board of Directors and City Council direction in October 2016, DART initiated refinement of D2 as a subway project. In September 2017, both the Dallas City Council and the DART Board of Directors unanimously approved the new LPA D2 subway project. Exhibit 30 illustrates the refined LPA for the D2 subway.

Exhibit 30

Dallas CBD Second Light Rail Alignment (D2) Subway Refined Locally Preferred Alternative (September 2017)





D2 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, 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 2019 Financial Plan reflects funding for D2, platform modifications, and the central streetcar link. The Locally Preferred Alternative (LPA) shown on the previous page is subject to change as the project moves forward during the FTA Capital Investment Grant Program. DART submitted a refined LPA to FTA in September 2017, and reinitiated preliminary engineering and preparation of a Supplement Draft Environmental Impact Study (EIS) in FY 2018.

Exhibit 31 provides historical and prospective data on light rail expansion projects.

Exhibit 31
LRT Revenue Service Dates

Corridor	Line	From	To	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 System Subtotal				20.0	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
Red/Blue Line Extension 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
Northwest 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
Southeast 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	
Total Miles/Stations in Operation*				93.0	64	

*Total miles includes approximately 0.75 miles of pocket track.

Objective - DART has identified an operational problem with some of our recently constructed facilities. Specifically, twelve (12) of the stations for the Light Rail Transit (LRT) system and one (1) P&R bus center lot do not have restroom facilities available for operators. This was creating an undue burden for operators during normal daily operations; therefore, DART initiated a feasibility study in 2016 and completed final design and PS&E package for procurement. DART Board approved a contract in 2017 to expand and build these essential Crew rooms facilities to make it available to operators on DART Bus Routes. Total project cost is approximately \$3M and construction schedule calls for completion by the end of 2018.



Completed Parkland Medical Station

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, Trinity Metro, proposed TEX Rail, 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 Service, Inc. This contract included an option for Trinity Metro's proposed TEX Rail commuter rail line.

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 and continuing in FY 2018, 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 is in the process of conducting or preparing to conduct studies 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. Cities in Collin County will follow during FY 2018. Proposals for future transit services for Mesquite were presented to the DART Board of Directors during the third quarter of FY 2018.

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 (DMWBEs)

DART's DMWBE 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 132 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.

In fiscal years 2016 and 2017, DART established annual Agency goals of 30% and 31% 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% participation, respectively. 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. 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, 482 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

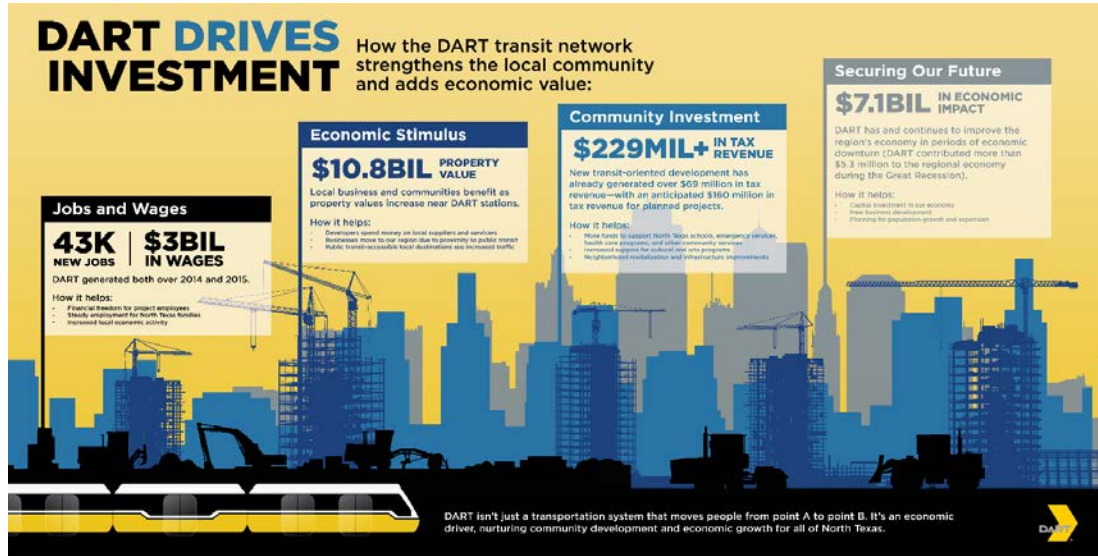
The economic impact of DART on the regional economy has been significant, exceeding \$10.8 billion, according to a study by the University of North Texas (UNT). The study, published in May 2017, looked at public and private transit-oriented development along the light rail corridor from 1999 to 2015. 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, 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 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 (www.DART.org/economicdevelopment) 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.



DART DRIVES INVESTMENT How the DART transit network strengthens the local community and adds economic value:

Jobs and Wages

43K NEW JOBS | **\$3BIL IN WAGES**

DART generated both over 2014 and 2015.

How it helps:

- Provides resources for project employees
- Steady employment for North Texas families
- Increased local economic activity

Economic Stimulus

\$10.8BIL PROPERTY VALUE

Local business and communities benefit as property values increase near DART stations.

How it helps:

- Developers spend money on local suppliers and services
- Businesses move to our region due to proximity to public transit
- Public transit-accessible hour distributions see increased traffic

Community Investment

\$229MIL+ IN TAX REVENUE

New transit-oriented development has already generated over \$69 million in tax revenue—with an anticipated \$160 million in tax revenue for planned projects.

How it helps:

- State funds to support North Texas schools, emergency services, health care programs, and other community services
- Increased support for national job site programs
- Neighborhood revitalization and infrastructure improvements

Securing Our Future


\$7.1BIL IN ECONOMIC IMPACT

DART has and continues to improve the region's economy in periods of economic downturn (DART contributed more than \$8.3 billion to the regional economy during the Great Recession).

How it helps:

- Capital investment in our economy
- New business development
- Planning for population growth and expansion

DART isn't just a transportation system that moves people from point A to point B. It's an economic driver, nurturing community development and economic growth for all of North Texas.





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

Streetcar Service Expansion – In 2015, DART completed work on two separate streetcar projects. The first phase of 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 the streetcar service was primarily funded by a \$23 million Transportation Investment Generating Economic Recovery (TIGER) grant. The City of Dallas is the owner of the original streetcar line, and of the extension further into Oak Cliff to the Bishop Arts District which opened in August 2016. DART designed and constructed this extension to Zang and Davis on the border of the Bishop Arts District. Construction funding was provided by 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. Conceptual design is complete for a northern 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, near St. Paul Station.

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 will be implemented for installation of amenities and pads. 67 bus shelters, 67 shelter pads, and 67 free-standing lights will be installed in FY 2019.



New Downtown Light Rail Alignment (D2) – Please see the discussion of this item on page 114, earlier in this section.

Comprehensive Operations Analysis – Please see the discussion of this item on page 106, earlier in this section.

Area Service Reviews and Service Changes – Over the past several years, the Comprehensive Operations Analysis (COA) has reviewed the entire bus system as a part of efforts to develop a new 2040 Transit System Plan. This COA reviewed each DART route in detail, culminating in a series of recommendations for bus service changes that can be implemented over the next 10-15 years. A draft Service Plan has now been prepared that details potential service improvements and the DART Board has authorized a public hearing and has approved some of these changes. Major improvements began in FY 2016 continued through FY 2018, with additional improvements proposed for FY 2019.

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 2019.

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 (9) zip codes in four (4) cities that would benefit from this type of service. These funds have been made available to DART and service is expected to begin in these identified areas in FY 2019.

Cotton Belt Corridor – DART owns 54 miles of the Cotton Belt 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 TEX Rail project, which proposes to use the segment of the Cotton Belt west of DFW Airport, and continue south into downtown Fort Worth to the existing TRE Intermodal Transportation Center and the T&P Station. The project is anticipated to initiate service at the end of 2018 or early 2019. Plans include a future extension into southwest Fort Worth.

In support of the Cotton Belt 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 will be complete in FY 2019. As currently defined, the project will consist of new single at-grade track with passing sidings and up to eleven new stations. The corridor will be designed and constructed to accommodate a future double-track configuration.

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.

Mesquite service began operation in March 2012 with a single weekday route connecting Mesquite's Hanby Stadium to Lawnview Station on the Green Line. This agreement which was anticipated to end at the end of December 2014 was extended for an additional three years in a unique joint venture between STAR Transit, which provided the buses and drivers, and DART. During this additional three years, DART worked with Mesquite to complete the required service plan to guide improvements within the City of Mesquite. Mesquite has expressed some interest in exploring creation of a second route and the possibility of moving forward with an operating plan. An extension was approved in 2015 which extended the service contract through 2017. During FY 2018, DART and Mesquite are discussing potential extension of current service through FY 2019.

In addition to Mesquite, the Cities of Allen, Fairview, and Wylie, as well as the Best Southwest cities, including Cedar Hill, DeSoto, Duncanville, and Lancaster, are interested in developing service plans to explore potential transit opportunities in the near and long-term.



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 2019, 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 Capital 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 Capital (HC) function strives to provide maximum support and responsiveness to employees who are critical to DART's operational needs and programs. The DART Human Capital department embraces contemporary business practices and functions as a business facilitator of efficient and effective delivery systems and programs.

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

- Implement Human Capital "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 Capital 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 Capital services. This will be accomplished through the extensive use of partnerships and direct consultation with functional leaders on Human Capital deliverables, such as: succession planning, workforce planning, career development, and total compensation and professional skill-enhancing programs

Top Opportunities in Human Capital in FY 2019

Human Capital is committed to organizational effectiveness that requires Human Capital deliverables and programming to be accomplished with a sense of urgency. Human Capital 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 Capital will encourage open, honest dialogue that promotes mutual respect, understanding, conflict resolution, idea sharing, learning, and growth. Human Capital is



committed to an atmosphere which motivates DART employees to engage with Human Capital for information, problem solving, and learning opportunities.

- 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 Capital 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 Capital 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 2019, Human Capital 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 32 is a sample of the DLM scorecard from the Third Quarter, FY 2018, showing performance as a percentage of goals for Peer Group 1.

For example, 100% performance on Miles Between Service Calls for South Oak Cliff indicates that the actual number of Miles Between Service Calls was either at or above the targeted mileage for the quarter.



Exhibit 32
Division Level Measurement (DLM) Program
FY 2018, Third Quarter

Category	East Dallas		Northwest		South Oak Cliff		Rail	
	Actual	Percent to	Actual	Percent to Target	Actual	Percent to	Actual	Percent to
On-Time Performance	84.1%	100.00%	82.7%	100.00%	83.4%	100.00%	93.5%	99.5%
Complaints/100K Passengers ^[1]	27.1	79.26%	29.9	79.16%	28.5	87.37%	N/A	69.09%
Complaints/100k Passengers - Rail	N/A	N/A	N/A	N/A	N/A	N/A	3.4	67.90%
Complaints/100K Passengers - WSA	N/A	N/A	N/A	N/A	N/A	N/A	0.7	70.27%
Unsched. Absences (Maint.)	11.75	100.00%	13.33	91.62%	15.18	80.46%	10.61	98.48%
Unsched. Absences (Oper.)	18.87	73.58%	18.75	74.07%	16.52	84.08%	24.09	71.41%
Unsched. Absences (WSA)	N/A	N/A	N/A	N/A	N/A	N/A	11.03	81.23%
Late Pullouts	14	100.00%	34	66.99%	23	70.59%	2.00	100.00%
MDBSC - Mechanical - Large Bus	14,330	100.00%	15,344	100.00%	19,635	100.00%	N/A	N/A
MDBSC - Mechanical - SMART Bus	7,787	N/A	9,069	N/A	N/A	N/A	N/A	N/A
Miles Between Service Calls - LRT	N/A	N/A	N/A	N/A	N/A	N/A	26,108	98.52%
Miles Between Service Calls - Street Car	N/A	N/A	N/A	N/A	N/A	N/A	5,200	N/A
Accidents/100k Miles	2.30	97.70%	2.42	92.98%	3.14	71.59%	N/A	N/A
Sfty Violations/100k Sched. Trn Mi.	N/A	N/A	N/A	N/A	N/A	N/A	1.44	68.06%
Ridership/Average Weekday	31,609	76.52%	30,936	97.00%	27,951	98.19%	93,231	92.23%
Unit Cost Per Hour	\$40.26	100.00%	\$44.94	100.00%	\$58.21	94.89%	\$70.88	96.71%
Unit Cost Per Mile	\$1.83	78.07%	\$1.60	100.00%	\$1.63	93.92%	\$3.190	100.00%
Overall Average for Quarter		90.51%		90.18%		87.02%		87.02%

[1] - 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 could 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 new 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, 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 input to City of Dallas new ATC and maintain a network to monitor and detect issues with the

DART detection system. City of Dallas is also working on a business continuity in the event TSP systems housed at headquarters are unavailable. DART Intelligent Transportation Systems (ITS) is working on simulation project for the study of three-car trains impact during normal business and special events on the transitway in the CBD.

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 will have 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 will also add 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.

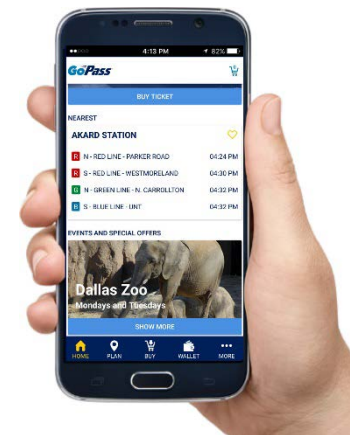


Comprehensive Payment System (CPS) – DART entered into a multi-year agreement with Vix Technology, a system integration firm, in August 2015 to streamline DART’s fare payment environment by utilizing new innovative technologies. The goal of this project is to find convenient and easy-to-understand methods 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 over 900 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 Enhancement (GoPass 2.0) – 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. These new mobile ticketing system enhancements will include upgraded interfaces with Uber, Lyft, taxi providers, and other ride-sourcing services, and will further enhance the previous app offerings and improve the way in which customers pay their fares. GoPass 2.0 will introduce a quicker loading speed to the platform as well as deliver real-time trip planning, provide direct customer feedback in the app, set up auto load for pass products, provide system maps, and allow customers to purchase mobile tickets with cash via a retail solution (PayNearMe). The first phase of the enhanced mobile ticketing platform was implemented in the second quarter of FY 2018 and will continue with future phases in FY 2019.



Sandbox Mobility On-Demand (MOD) – In FY 2018, DART introduced two new services: micro-transit and dynamic carpooling. These services are powered by technology and paid for in part by \$1.2 million in federal funding.

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.

The agency is in the early stages of a pilot test of GoPool. DART is working with companies in target areas to assess if it is a viable mobility solution for their employees.

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 on Demand (MOD) Sandbox program overseen by the Federal Transit Administration (FTA).

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 team-based 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.
- *Route Monitoring Task Force* – This formal staff task force addresses service issues involving planning, scheduling, and transit operations. It meets monthly and offers a forum for operations employees to speak to issues with routes and schedules. Representatives from Service Planning & Scheduling review and report back on progress. The group also reviews major planning initiatives from an operating perspective and includes operators appointed by each operating division, plus representatives from Service Planning & Scheduling, Bus, Rail, and Mobility Management.
- *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.
- *New Fare Technology Committee* – This cross-functional committee will focus on implementing 21st Century fare technology which may dramatically change how people obtain fare media and pay for their transit service.
- *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 rail track. The Railroad Management Division of the Commuter Rail Department is responsible for management of DART-owned commuter rail lines (55 miles), active freight lines (155 miles) 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 TRE Corridor and other active freight lines. Revenues for the TRE corridor are projected at \$3.1 million for FY 2019. 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 33 provides a summary of actual and projected revenue from all activities for FY 2012 through FY 2019 (projected), excluding oil and gas leases which is shown in Exhibit 34.

Exhibit 33
Railroad Management Revenue
(in Millions)

Fiscal Year	TRE	DART	Total
2012	2.9	1.9	4.8
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 (Projected)	3.1	2.6	5.7
2019 (Projected)	3.0	2.6	5.6
Total (Actual & Projected)	\$24.0	\$18.3	\$42.3

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 2016 were \$50,395, FY 2018 is projected to be \$100,000, and FY 2019 is projected at \$100,000.

Lease royalty and bonus revenues from FY 2012 through FY 2019 are shown in Exhibit 33.

Exhibit 34
Oil & Gas Lease Agreements
(in Thousands)

Fiscal Year	Amount
2012	\$145.5
2013	328.5
2014	455.6
2015	50.4
2016	200.0
2017	106.6
2018 (Projected)	100.0
2019 (Projected)	100.0
Total (Actual & Projected)	\$1,486.6



Budget Structure

Three major components comprise the agency’s FY 2019 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 103), 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 35 provides a summary view of the FY 2019 Annual Budget. The Agency’s overall budget increased by \$50.8 million (5.2 %) from FY 2018. The FY 2019 Operating Expense budget is \$544.3 million, an increase over the FY 2018 Operating Expense budget of \$21.2 million (4.1%). The Capital and Nonoperating budget are increasing by \$26.3 million (9.9%). The Debt Service budget is increasing by \$3.3 million (1.7%).

Exhibit 35
FY 2019 Annual Budget
(in Millions)

FY17 Actuals	Category	FY18 Budget	FY19 Proposed Budget	\$ Variance	% Variance
\$474.1	Operating	\$523.0	\$544.3	\$21.2	4.1%
167.9	Capital	265.3	291.5	26.3	9.9%
190.8	Debt Service	193.8	197.2	3.3	1.7%
\$832.8	Total Expenditures	\$982.1	\$1,032.9	\$50.8	5.2%

Inside the Numbers

Revenue Factors

Total sources of funds as shown at Exhibit 36 are projected at \$1,053.7 million, \$195.2 million (22.7%) higher than the FY 2018 Budget. The increase is mainly driven by \$90.9M in long-term debt issuances and \$27.0M in commercial paper issuances due to the Cotton Belt corridor alignment. Increases in sales taxes of \$34.2 million are driven by a higher expectation of sales tax receipts and higher interest rates due to an increasingly growing U.S. economy. Additional information about Sources of Funds over the next 20 years can be found in the *Financial Plan* Section.

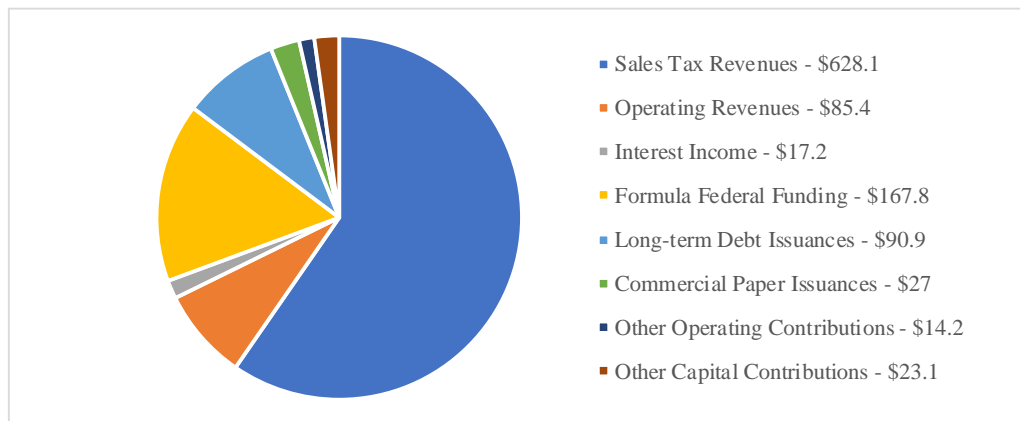
Exhibit 36
Sources of Funds
(in Millions)

FY17 Actuals	Category	FY18 Budget	FY19 Budget	\$ Variance	% Variance
\$566.6	Sales Tax Revenues	\$593.9	\$628.1	\$34.2	5.8%
79.6	Operating Revenues	82.2	85.4	3.2	3.9%
5.5	Interest Income	7.5	17.2	9.7	129.8%
78.2	Formula Federal Funding	145.8	167.8	22.1	15.1%
0.0	Long-term Debt Issuances	0.0	90.9	90.9	0.0%
(30.0)	Commercial Paper Issuances	0.0	27.0	27.0	0.0%
16.9	Other Operating Contributions*	14.2	14.2	(0.0)	(0.1%)
4.4	Other Capital Contributions	15.0	23.1	8.2	54.5%
\$721.2	Total Sources of Funds	\$858.5	\$1,053.7	\$195.2	22.7%

* This includes sale of RDC of \$2.7 million

Exhibit 37 provides a view of the sources of funds and the percentages of the total.

Exhibit 37
Breakdown of FY 2018 Sources of Funds
(\$ in Millions)



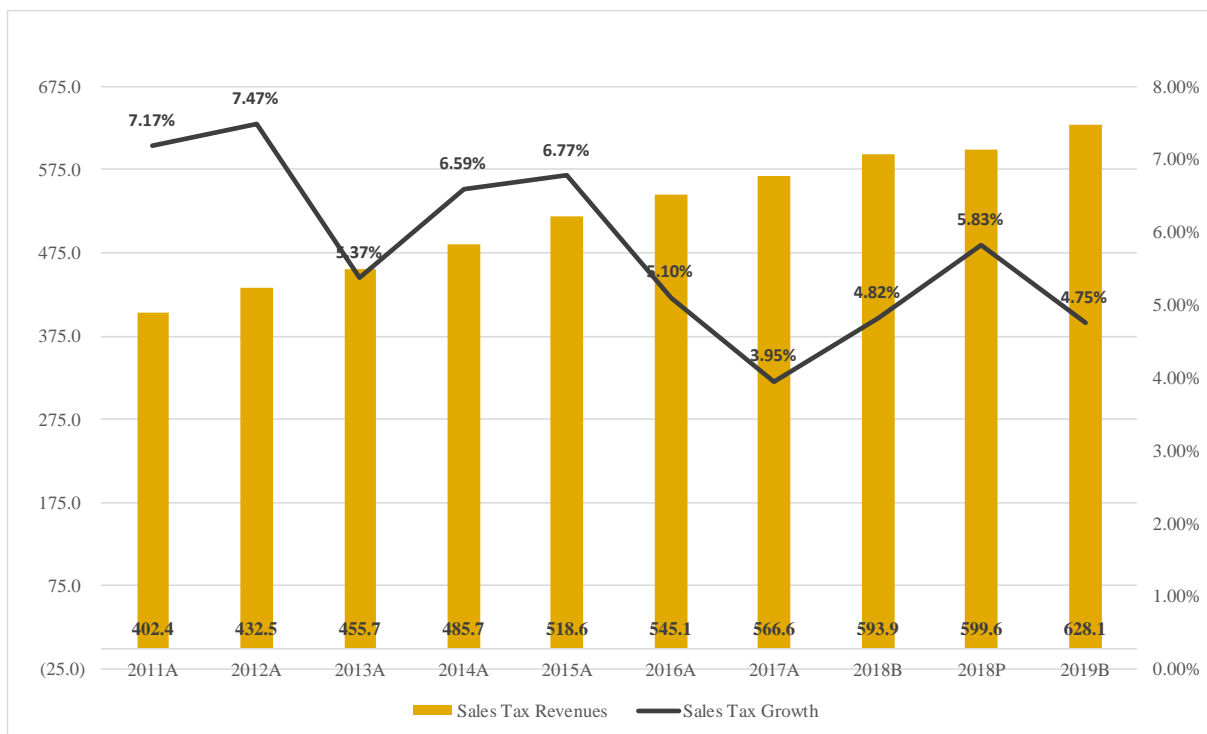


Sales Tax Revenues represent 60% of total sources of funds for FY 2019 and is the largest source of revenue for the Agency. A ten-year history of sales tax receipts by month is included at Exhibit 113 in the *Reference Section*.

The sales tax projections contained in the FY 2019 Budget are \$34.2 million higher than the FY 2018 budget. This represents a 5.8% increase from the FY 2018 budget, and 4.8% from FY 2018 projected receipts.

Exhibit 38 shows the year-over-year growth of sales tax from FY 2011 Actual through FY 2019 Budget in terms of both dollars and percentages. More discussion of future sales taxes is included in the *Financial Plan Section*.

Exhibit 38
Sales Tax Data, Historical and Projected
(in Millions)



The category of Operating Revenues totals \$85.4 million for FY 2019, a \$3.2 million (3.9%) increase from FY 2018. The primary cause of the growth is increased ridership driven from bus service improvements, and the fare increase that will have the first full year impact in FY 2019.

Interest income is projected to increase by \$9.7 million (129.8%) from FY 2018 due to rising interest rates caused by a strong U.S. economy.

The Federal Funds line item includes both Formula and Discretionary Federal Funding. This line item is programmed to increase by \$22.1 million and represents 16% 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.

Long-term Debt Issuances is projected to increase by \$90.9 million due to funding for the Cotton Belt.

The Commercial Paper Issuances is projected to increase by \$27 million due to funding for the Cotton Belt.

Other Operating Contributions is flat year-over-year.

Other Capital Contributions is projected to increase by \$8.2 million (54.5%) due to increased contributions for Trinity Metro, Dallas Streetcar Extension, and Irving In-Fill Stations.

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 FY 2019 operating budget includes a net increase of 68 salaried positions and 91 bus and light rail operators. The position reconciliation can be found in Exhibit 42 on page 149.

The following assumptions were used to develop the FY 2019 Operating Budget:

- Salary and Wage Assumptions
 - 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.
- Benefits Assumptions
 - DART is undergoing healthcare program restructuring to combat rising healthcare costs, focusing on increased accountability of cost and quality of care by providers. This is reflected in the FY 2019 budget.
 - 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).



- Purchased Transportation Contract Rates
 - Trinity Railway Express services are provided through a 10-year contract with Herzog Transit Services, Inc. FY 2019 is the fourth 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).

- Service Levels
 - Bus: DART will see continued bus service enhancements in FY 2019 as a result of our recent Comprehensive Operations Analysis. There will be 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 2019 service levels are unchanged from FY 2018.
 - Streetcar: FY 2019 service levels are unchanged from FY 2018.
 - 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 TEX Rail project, which is scheduled to open late 2018 or early 2019.
 - General Mobility: The General Mobility program consists mainly of vanpool services. The maximum number of vanpools is 225 for FY 2019.

- Reserves
 - Funding in the amount of approximately \$700,000 is included in the FY 2019 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 39 shows DART's operating expenses by department for the fiscal years 2017 – 2019.

Exhibit 39
FY 2017 – FY 2019 Departmental Expense Comparison
(in Thousands)

FY 2017 Actuals	Department	FY 2018 Budget	FY 2019 Proposed Budget
\$2,601	Executive Admin & Safety	\$4,117	\$6,294
8,564	Deputy Executive Director	10,095	10,889
384,468	EVP Customer Care/Svc Delivery	401,492	415,031
54,544	EVP Business Solutions & Innovations	61,421	60,833
40,531	EVP Growth & Regional Svcs	45,511	47,405
5,167	Board Directs	5,996	6,179
6,143	Agency-Wide Benefits Allocation/Initatives	3,219	9,834
\$502,019	Total Departmental Expenses	\$531,852	\$556,466
(\$8,589)	Capital P&D and Startup	(\$8,802)	(\$12,200)
\$493,430	Total Operating Expenses	\$523,049	\$544,266



Operating Budget Highlights

DART's Operating Expense increased over the FY 2018 budget by \$21.2 million (4.1%) to \$544.3 million. Employee compensation, in the form of Salaries and Wages (\$265.3 million) and Benefits (\$122.1 million), comprised 69.6% of the total operating budget. The third largest element of the operating budget is Purchased Transportation at 10.6% (\$58.9 million).

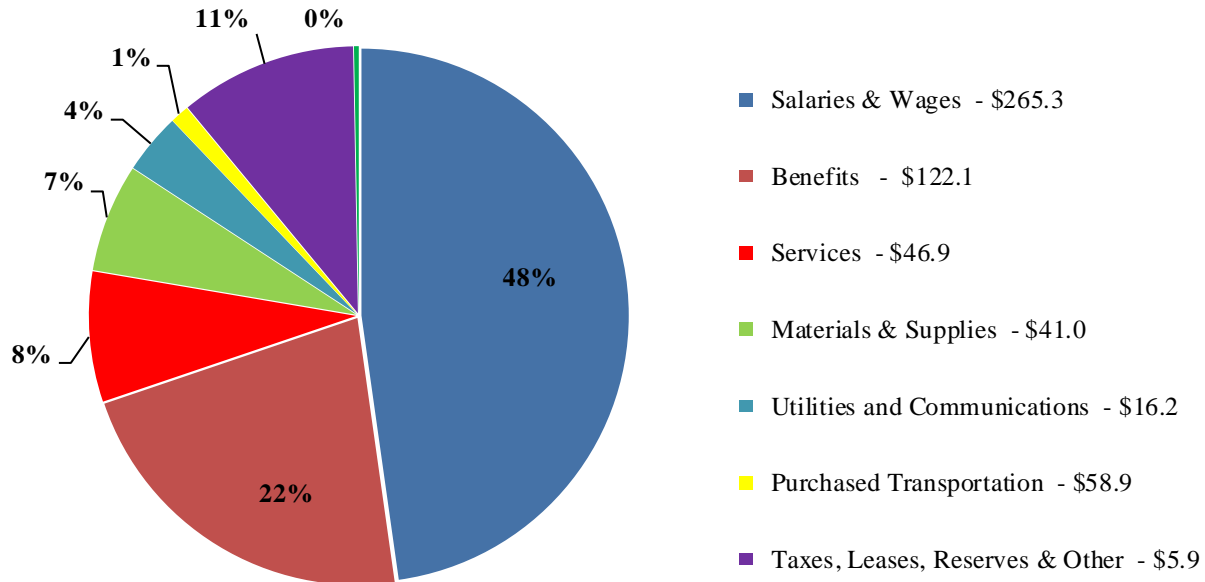
Exhibit 40 displays the Operating Expense budget by object classification and includes FY 2017 actual amounts, FY 2018 budget, and the FY 2019 budget. More detail by department can be found in the *Organizational Units Section*.

Exhibit 40
Operating Expenses by Object Classification
(in Thousands)

Object Classification	FY18 Budget	FY 2018 Projected	FY19 Budget	\$ Variance	% Variance
Salaries & Wages	\$254.1	\$252.8	\$265.3	\$11.3	4.4%
Benefits	117.2	105.5	122.1	\$5.0	4.3%
Services	41.9	38.9	46.9	\$5.0	11.9%
Materials & Supplies	34.8	39.5	41.0	\$6.2	17.9%
Utilities and Communications	19.4	19.9	16.2	(\$3.2)	(16.5%)
Purchased Transportation	56.9	57.5	58.9	\$2.0	3.5%
Taxes, Leases, Reserves & Other	7.5	10.4	5.9	(\$1.7)	(22.1%)
Sub-Total (All Expenses)	\$531.9	\$524.5	\$556.5	\$24.6	4.6%
Capital P&D	(8.8)	(8.7)	(12.2)	(\$3.4)	38.7%
Total Operating Expenses	\$523.0	\$515.8	\$544.3	\$21.2	4.1%

Exhibit 41 illustrates the operating budget, showing the amounts and relative proportions of each component.

Exhibit 41
 FY 2019 Operating Expenses by Component
 (in Millions)



Please note that the expenses totaled in Exhibit 39 above exceed the operating budget by \$12.2 million. This is the amount of departmental expenses classified as Capital Planning & Development costs (Capital P&D).

Salaries and Wages – The FY 2019 Salaries and Wages budget is \$265.3 million, a \$11.3 million (4.4%) increase over the FY 2018 budget.

In the *Salaries and Wages* line item, there is a 3% pool for compensation increases programmed in the FY 2019 budget. Additional headcount in Bus Operations in support of service level improvements are also reflected in the FY 2019 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 42 shows a reconciliation of the positions between FY 2018 and FY 2019. Total authorized positions have increased by a net of 124. The description of these position changes follows the exhibit.

Exhibit 42
Budgeted Positions

Full-Time Salaried Employees						
FY 2017	Department	Approved FY 2018	Reorg / Mods	Eliminated	New Positions	FY 2019
4	Department of the President	4				4
12	Safety Department	12	2			14
	External Relations	-	15			15
95	Finance	94			2	96
4	Deputy Executive Director	5	1		1	7
5	Government Relations	5				5
20	Diversity & Economic Opp.	20				20
25	Human Capital	25	1			26
165	Total President & Deputy ED	165	19	-	3	187
64	Marketing & Communications	64		(13)		51
33	Procurement	33	2			35
74	Technology	74	1		4	79
171	Total Business Solutions & Innovation	171	3	(13)	4	165
34	EVP Customer Care/Service Delivery	5	3			8
	Materials Management	30				30
367	DART Police	368	35		26	429
55	Mobility Management Services	55				55
215	Light Rail Operations	215		(13)		202
236	Bus Operations	236		(88)		148
	Engineering	-	53			53
	Training, Communication and Tech	-	43			43
907	Total EVP Customer Care & Svc. Delivery	909	134	(101)	26	968
15	Commuter Rail	15				15
28	Planning & Development	28				28
38	Rail Program Development	39				39
10	Rail Planning	10				10
91	Total EVP Growth & Regional Dev	92	-	-	-	92
5	Board Support	5				5
9	Internal Audit	9				9
20	Legal	20				20
34	Total Board Directs	34	-	-	-	34
11	Unassigned Positions	13		(10)		3
1,379	Total Salaried	1,384	156	(124)	33	1,449
Full-Time Hourly Employees						
FY 2017	Department	Approved FY 2018	Reorg / Mods	Eliminated	New Positions	FY 2019
20	Finance	20				20
58	Marketing & Communications	58				58
78	Total Business Solutions & Innovation	78	-	-	-	78
769	Light Rail Operations	756	(268)			488
191	Rail Operators	214				214
49	Materials Management	49				49
	Bus Operations					
1,226	Bus Operators	1,291			91	1,382
44	Non Operator	44	268			312
2,279	Total EVP Customer Care & Svc. Delivery	2,354	-	-	91	2,445
2,357	Total Hourly	2,432	-	-	91	2,523
3,736	Grand Total Full-Time Employees	3,816	156	(124)	124	3,972



Following is a description of the position changes that were shown in Exhibit 42:

- EVP Customer Care/Svc Delivery has a net increase of 117 positions.
 - Bus Operations added 91 additional Bus Operators for the FY 2019 increased bus service and to fulfill Optimal Operator Calculation aimed at reducing no-pullout instances due to lack of available operators
 - DART Police increased their workforce 26 headcount; which includes Police officers, Fare Enforcement officers, and support staff.

Please note: Funding for 5 new requested positions has been included in the Agency Initiatives line item of the budget, but the President/Executive Director has not given final approval on these 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 2019 Benefits budget is \$122.1 million, a \$5.0 million (4.3%) increase from the FY 2018 budget, as shown below in Exhibit 43.

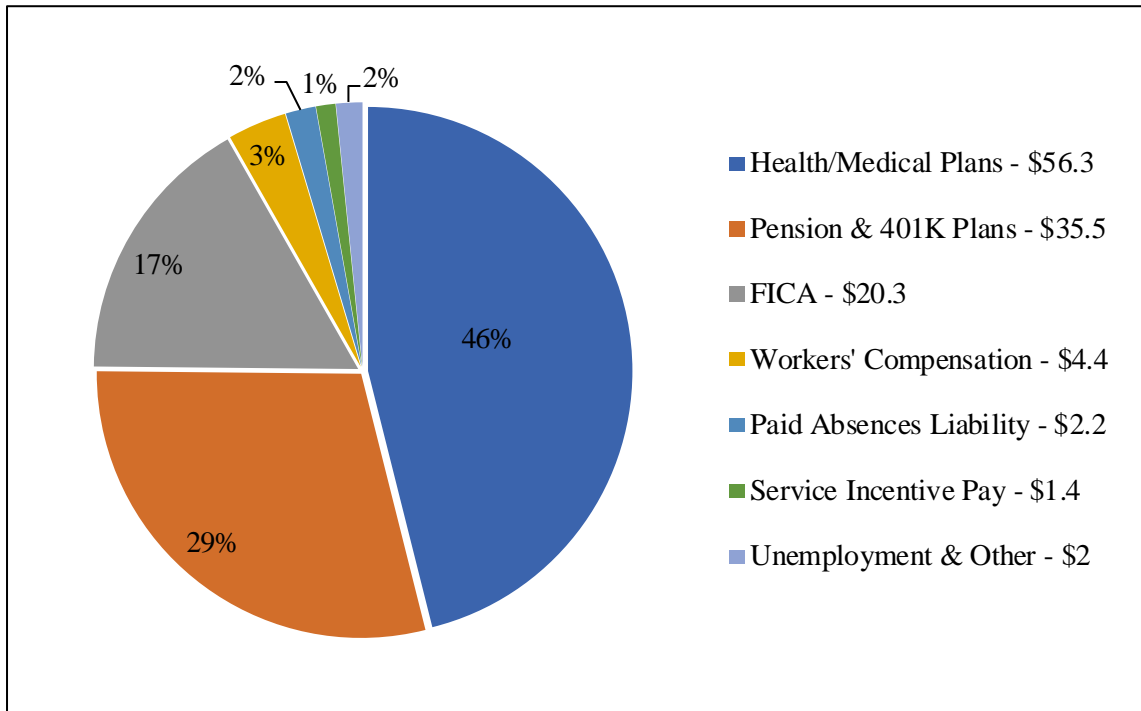
Exhibit 43
Benefits Expenses by Type
(in Thousands)

FY17 Actuals	Object Classification	FY18 Budget	FY19 Proposed Budget	\$ Variance	% Variance
\$53,863	Health/Medical Plans ^[1]	\$55,288	\$56,288	\$1,000	1.8%
31,779	Pension & 401K Plans	34,421	35,498	1,077	3.1%
17,676	FICA	19,459	20,298	839	4.3%
2,428	Workers' Compensation	2,400	4,400	2,000	83.3%
2,236	Paid Absences Liability	2,240	2,240	0	0.0%
1,273	Service Incentive Pay	1,448	1,448	0	0.0%
1,430	Unemployment & Other	1,895	1,961	65	3.4%
\$110,684	Total Benefits	\$117,151	\$122,132	\$4,982	4.3%

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

Exhibit 44 is an overview of the percentage of expenditure to major components within the Benefits category for the FY 2019 budget.

Exhibit 44
Benefits Budget by Component
(in Millions)



- *Health, Life, and Disability* 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. The FY 2019 increased \$2 million over the FY 2018 due to the cancellation of the Workers' Compensation 504 Plan.



Services – The FY 2019 Services budget of \$46.9 million represents 8.4% of the total agency budget. This is an increase of \$5 million (11.9%) over the FY 2018 budget. Security Services show the largest dollar value increase at \$1.7 million (77.1%)

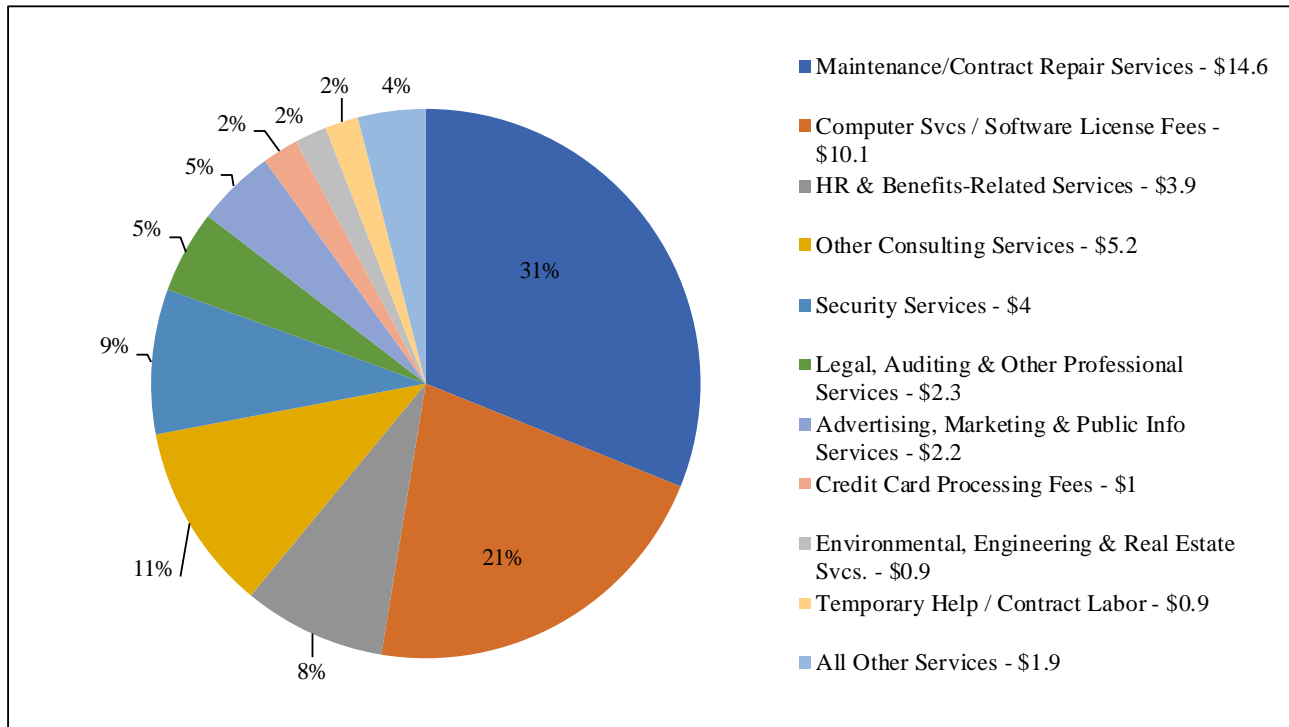
Exhibit 45 details the Services component of the budget.

Exhibit 45
Services Expenses by Type
(in Thousands)

FY17 Actuals	Object Classification	FY18 Budget	FY19 Proposed Budget	\$ Variance	% Variance
\$12,236	Maintenance/Contract Repair Services	\$13,997	\$14,598	\$601	4.3%
6,047	Computer Svcs / Software License Fees	9,068	\$10,085	1,017	11.2%
3,605	HR & Benefits-Related Services	3,668	\$3,939	271	7.4%
3,499	Other Consulting Services	4,562	\$5,183	621	13.6%
2,588	Security Services	2,260	\$4,001	1,741	77.1%
1,410	Legal, Auditing & Other Professional Services	1,726	\$2,289	562	32.6%
2,213	Advertising, Marketing & Public Info Services	1,929	\$2,161	232	12.0%
982	Credit Card Processing Fees	1,001	\$1,001	(0)	(0.0%)
811	Environmental, Engineering & Real Estate Svcs.	744	\$878	134	18.0%
901	Temporary Help / Contract Labor	938	\$924	(13)	(1.4%)
814	All Other Services	2,028	\$1,868	(161)	(7.9%)
\$35,104	Total Services	\$41,921	\$46,927	\$5,005	11.9%

Exhibit 46 illustrates the composition of the Services line item of the budget.

Exhibit 46
 FY 2019 Services Budget by Component
 (in millions)



Materials and Supplies – The budget for *Materials and Supplies* increased year-over-year by \$6.2 million (17.9%).

- Vehicle Repair Parts have decreased by \$5.2 million (32.5%).
- The Vehicle Repair Parts decrease was partially offset by increases year-over-year in every other category in Materials & Supplies.

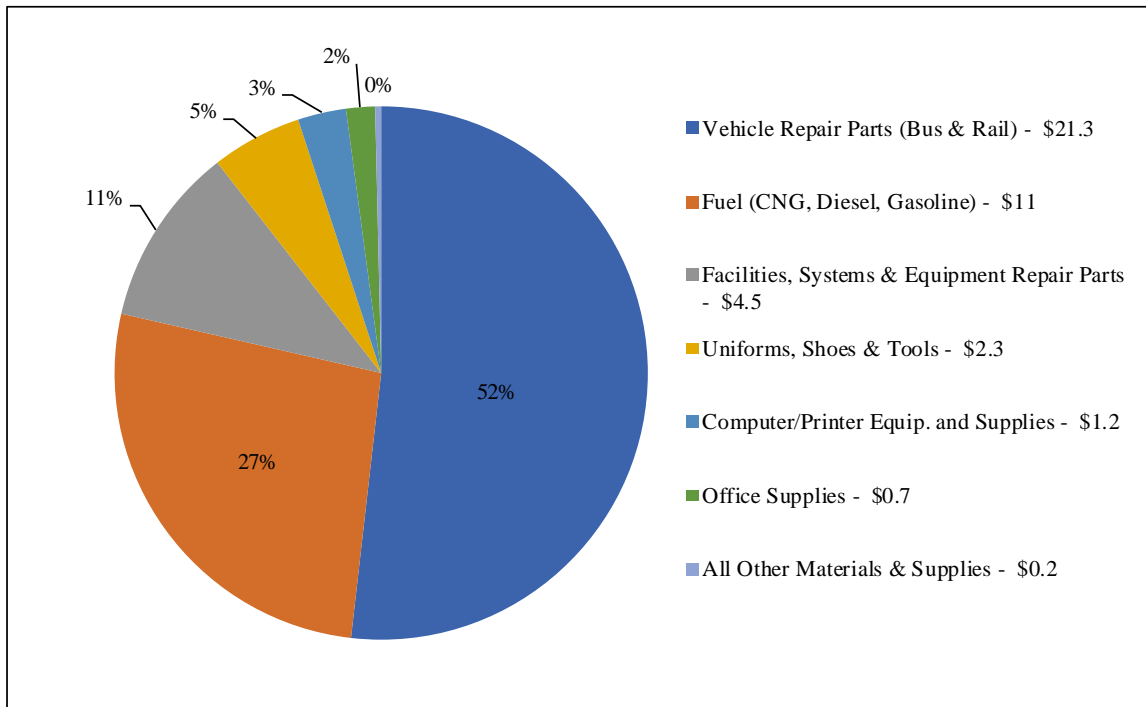
Exhibits 47 and 48 provide details about the Materials & Supplies component of the budget.



Exhibit 47
Materials & Supplies Expenses by Type
 (in Thousands)

FY17 Actuals	Object Classification	FY18 Budget	FY19 Proposed Budget	\$ Variance	% Variance
\$20,969	Vehicle Repair Parts (Bus & Rail)	\$16,054	\$21,266	\$5,212	32.5%
10,643	Fuel (CNG, Diesel, Gasoline)	10,246	10,987	740	7.2%
4,225	Facilities, Systems & Equipment Repair Parts	4,332	4,472	140	3.2%
1,823	Uniforms, Shoes & Tools	2,175	2,253	77	3.6%
874	Computer/Printer Equip. and Supplies	1,102	1,202	99	9.0%
523	Office Supplies	766	719	(47)	(6.1%)
179	All Other Materials & Supplies	136	150	13	9.9%
\$39,236	Total Materials & Supplies	\$34,812	\$41,047	\$6,236	17.9%

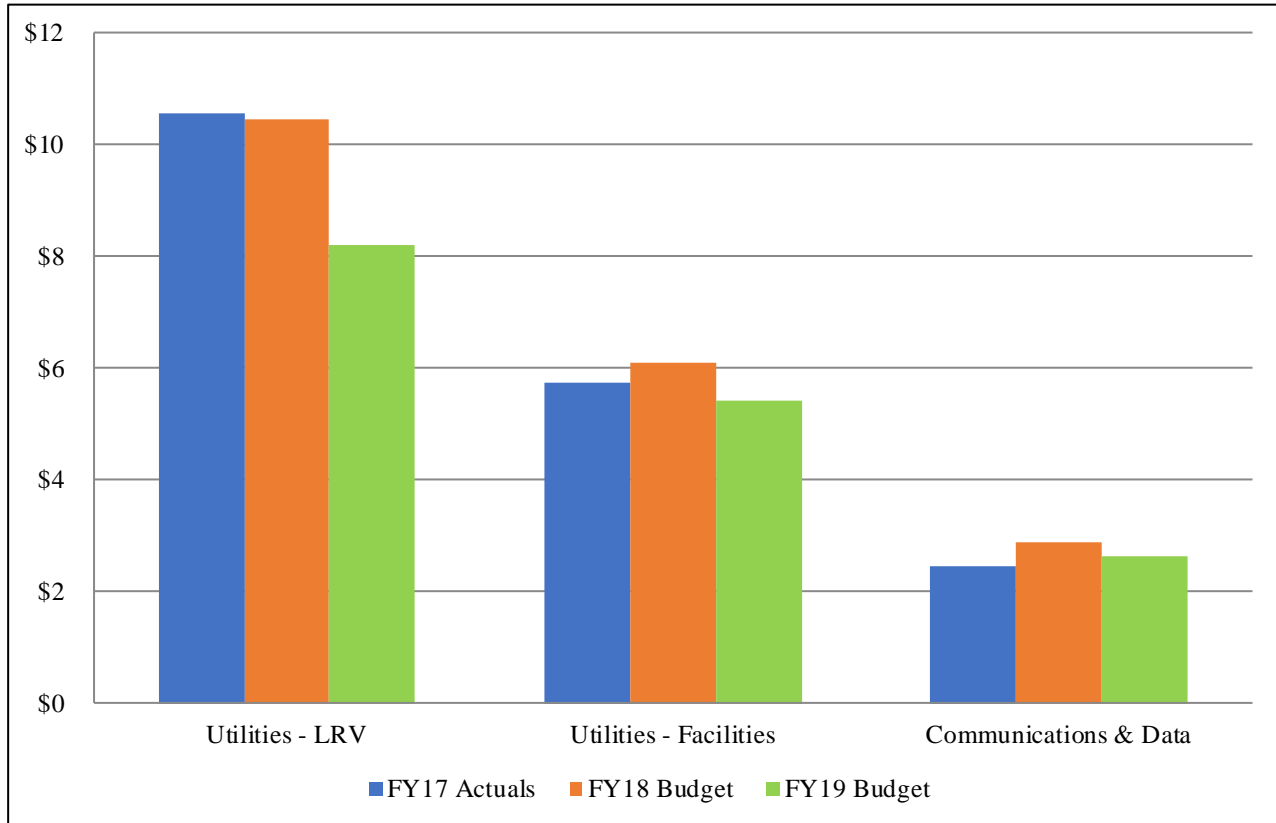
Exhibit 48
FY 2019 Materials & Supplies Budget by Component
 (in Millions)



Utilities and Communications – 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 2019 is \$16.2 million, a 16.5% decrease year over year. This category represents 2.9% of the total Agency’s operating budget.

Exhibit 49 compares the Utilities & Communications expenses over the last three years.

Exhibit 49
 FY 2019 Utilities & Communications Expense Comparison
 (in Millions)



Claims and Insurance – 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.

Purchased Transportation – These services are purchased through a third party to provide transportation services for DART. The budget for this category increased by \$2.0 million (3.5%) in the FY 2019 budget over FY 2018 due to increases in contract rates and service levels.

Exhibit 50 compares Purchased Transportation expenses between FY 2017 and FY 2019.



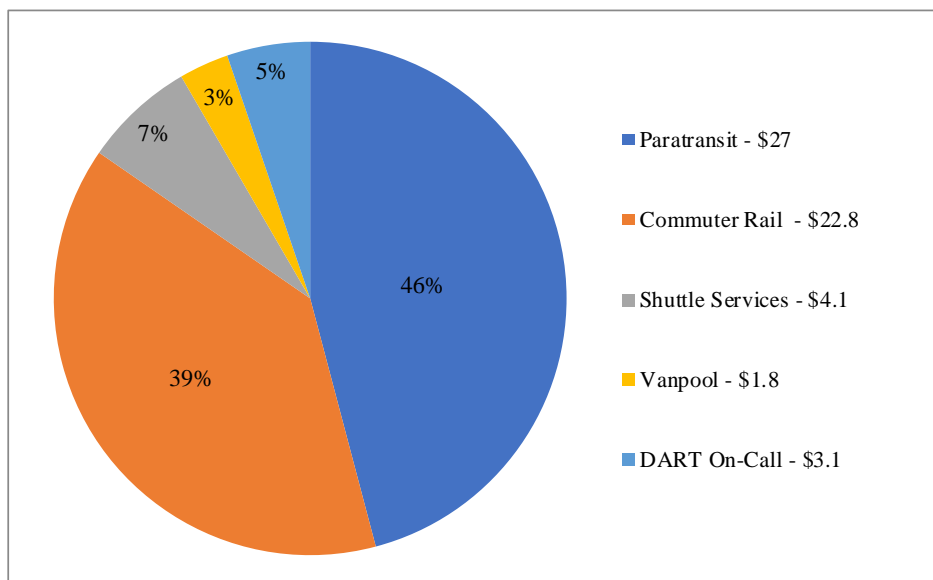
Exhibit 50
Purchased Transportation Expenses by Type
 (in Thousands)

FY17 Actuals	Object Classification	FY18 Budget	FY19 Proposed Budget	\$ Variance	% Variance
\$24,617	Paratransit	\$26,325	\$27,032	\$707	2.7%
20,611	Commuter Rail	22,770	22,820	50	0.2%
4,158	Shuttle Services	4,651	4,128	(523)	(11.3%)
1,663	Vanpool	1,788	1,849	61	3.4%
1,377	DART On-Call	1,400	3,091	1,691	120.8%
\$52,427	Total Purchased Transportation	\$56,935	\$58,920	\$1,985	3.5%

- Paratransit contract costs increased by \$0.7 million (2.7%) because of both slight contract rate increases and projected increase in demand for trips.
- Trinity Railway Express costs remain basically the same as FY 2018 at \$22.8 million.
- Shuttle Services decreased by \$0.5 million (11.3%) primarily due to new Mobility on Demand (MOD) service.

Exhibit 51 highlights the components of the Purchased Transportation category.

Exhibit 51
FY 2019 Purchased Budget by Component
 (in Millions)





Capital and Non-Operating Budget

Exhibit 52 is a summary of the Capital and Non-Operating Project Expenditures from FY 2017-FY 2019, 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 70 in the *Financial Plan Section*.

Exhibit 52
Capital & Non-Operating Project Expenditure Comparison
(in Thousands)

FY17 Actuals	Category	FY18 Budget	FY19 Proposed Budget	\$ Variance
\$102,252	Total Capital Projects	\$237,314	\$255,451	\$18,137
8,589	Capital Planning & Development	8,802	12,200	3,398
0	Start-up	0	0	0
1,399	Non-Operating	3,613	11,858	8,245
\$112,240	Sub-Total Capital / Non-Operating	\$249,729	\$279,509	\$29,780
<i>Road Improvements</i>				
0	PASS Program	\$5,000	\$3,000	(\$2,000)
0	TSM (General & Street Repair Program)	7,274	4,783	(2,491)
0	Transit Related Improvement Program	3,263	4,228	964
\$0	Sub-total Road Improvements	\$15,537	\$12,011	(\$3,526)
\$112,240	Total Capital & Non-Op./Road Imp.	\$265,266	\$291,520	\$26,254
\$58	LAP/CMS Program*	\$0	\$0	\$0
\$112,298	Total Capital & Non-Op./Road Imp./LAP/CMS Program	\$265,266	\$291,520	\$26,254
* Please note that although no further funds are being allocated to these programs, funds allocated in prior years may be expended.				



Debt Service Budget

The FY 2019 Debt Service Budget is shown below in Exhibit 53. Additional information on DART’s Debt Program can be found in the *Financial Plan Section* on beginning on page 76.

Exhibit 53
Debt Service Expense Comparison
(in Millions)

Description	FY 2018 Budget	FY19 Proposed	Variance
Long-Term Debt Interest Expense**	\$135.90	\$135.20	(\$0.7)
Commercial Paper Program Expenses	1.5	3.2	1.7
Financial Advisor and Other Fees	0.5	0.5	0.0
Total Expenses	\$137.9	\$138.9	\$1.0
Principal Repayments - Bonds*	\$55.9	\$58.3	\$2.4
Total Debt Service Budget	\$193.8	\$197.2	\$3.3

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

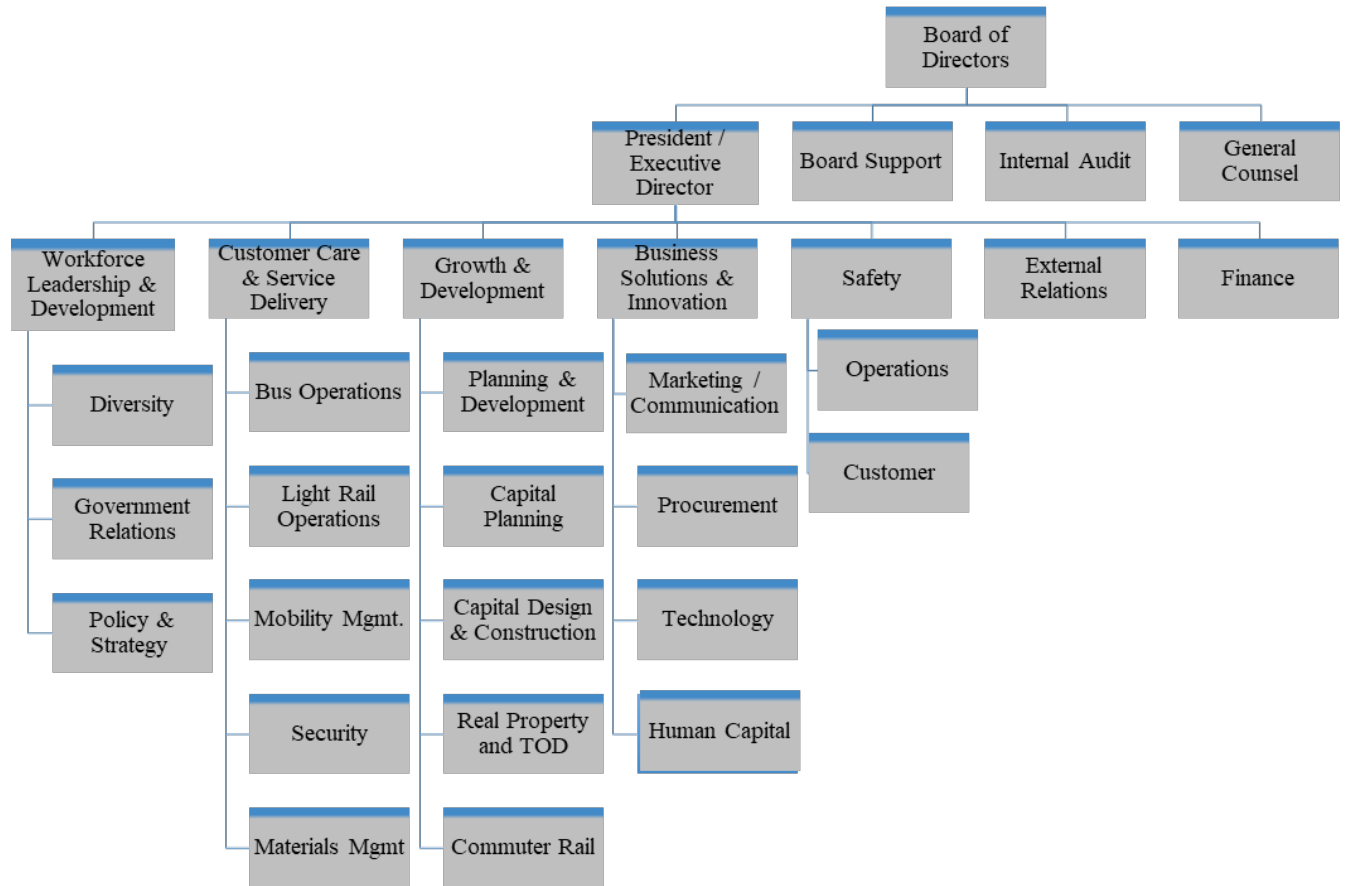
**Includes Buid-America Bons (BABs) interest expense net of 32% federal subsidy.

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”).



Customer Care & Service Delivery

Providing effective, efficient, safe, secure service.

- 5 Star Service Program
- Bus Operations Division
- Light Rail Operations Division
- Engineering
- Training and Technology
- Materials Management
- Mobility Management
- System Police and Security

Workforce & Customer Safety

Providing a structure for a safe transportation network for customers and citizens of the DART Service Area, and the safest work environment for employees, customers, and people on DART property and construction sites.

- Operations
- Customers

Growth/Regional Development

Planning & Development of the overall system.

- Planning & Development
- Capital Planning
- Capital Design & Construction
- Commuter Rail and Railroad Management
- Real Property and Transit Oriented Development (TOD)

Business Solutions & Innovation

Maximizing Agency resources through innovative technology, dynamic marketing, effective procurement, and engaging talent management.

- Technology
- Marketing & Communications
- Procurement
- Human Capital

Workforce Leadership & Development

Providing effective leadership.

- Diversity & Labor Services
- Office of Policy & Strategy
- Government Relations

Finance

Providing astute fiscal management.

- Accounting
- Business Planning & Analysis
- Revenue
- Risk Management
- Treasury

External Relations

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

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.

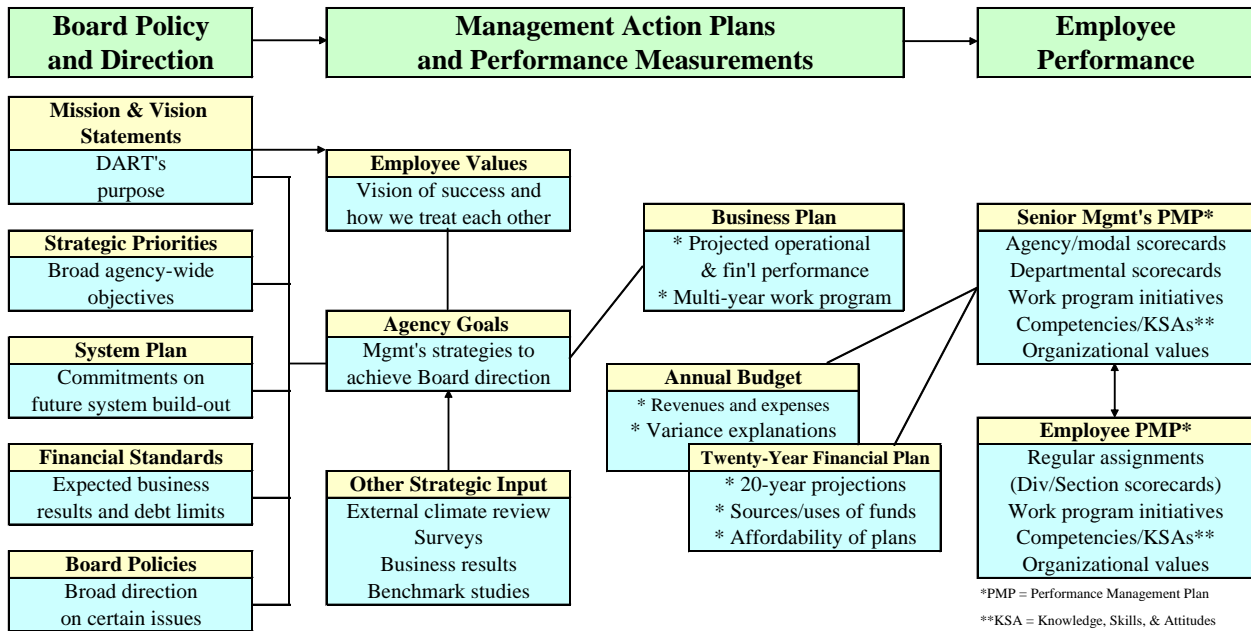
The **Office of Board Support** provides administrative support to the Board of Directors. The primary functions of this office are: to disseminate information, in a variety of formats, to each Board member; to assist in handling Board member requests; coordination of Board/Committee meeting materials; 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 2019 Operating Budget and positions by department are shown in the *FY 2019 Annual Budget* section, in Exhibits 39, 40 and 42.

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 54. 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 54
DART's Strategic Alignment Structure



Mission Statement – 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.

DART 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...

Board Strategic Priorities – 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

DART Organizational Values – The Agency’s values statement is:

DART employees value being:

- Focused on Our Customers
 - ✓ We are dedicated to meeting our customers’ needs.
 - ✓ We strive for continuous improvement.
 - ✓ We deliver quality.

- Committed to Safety and Security
 - ✓ 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
 - ✓ We demonstrate a high regard for each other.
 - ✓ We are committed to innovation and learning from our experiences.
 - ✓ We hold ourselves accountable.
 - ✓ We coach, reinforce, and recognize employees.
 - ✓ We foster an environment promoting diversity of people and ideas.

- Good Stewards of the Public Trust
 - ✓ We responsibly use public funds and property.
 - ✓ We maintain open communication with customers and stakeholders.
 - ✓ We respect the environment.
 - ✓ We strive to mitigate risk.
 - ✓ We demand integrity and honesty.

Strategic Plan – 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 2019 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, DART.org.

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 351 in the *Reference Section* of this document.

The measurements in Exhibit 55 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.



Exhibit 55
DART's Strategic Measurements

Strategic Priority	Examples of Key Leading Indicators	Examples of Key Lagging Indicators
<ul style="list-style-type: none"> • Continually improve service and safety experiences and perceptions for customers and the public 	<ul style="list-style-type: none"> • On-time performance • Accidents per 100k miles • Complaints per 100k passengers • Call Center service levels 	<ul style="list-style-type: none"> • Ridership • Passengers per mile/hour • Customer satisfaction surveys • Passenger revenues • Passengers per mile/hour
<ul style="list-style-type: none"> • Optimize and preserve (state of good repair) the existing transit system 	<ul style="list-style-type: none"> • Revenue miles/hours • Average system speed • Timely replacement of assets • Mean distance between service calls 	<ul style="list-style-type: none"> • Ridership • Customer satisfaction surveys
<ul style="list-style-type: none"> • Optimize DART's influence in regional transportation planning 	<ul style="list-style-type: none"> • News clippings and other media • Actual schedule vs. plan for system expansion • Complaints/Commendations 	<ul style="list-style-type: none"> • Completion of Transportation System Plan commitments • Joint development created • Regional funding
<ul style="list-style-type: none"> • Expand DART's transportation system to serve cities inside and outside the current service area 	<ul style="list-style-type: none"> • Actual schedule vs. plan for system expansion • Revenue miles/hours 	<ul style="list-style-type: none"> • Number of arrangements to provide service to cities outside the current service area • Ridership
<ul style="list-style-type: none"> • Pursue excellence through employee engagement, development, and well-being 	<ul style="list-style-type: none"> • Employee verbal feedback • Number of grievances • Corrective disciplinary actions • Retention/Absenteeism • Operator lost-time claims • Unscheduled absences 	<ul style="list-style-type: none"> • Employee satisfaction survey
<ul style="list-style-type: none"> • Innovate to improve levels of service, business processes, and funding 	<ul style="list-style-type: none"> • Passenger revenues • Advertising and other revenues • Federal Funding • Cycle time/process measurements • Project implementation vs. plan • Benchmark comparisons • Deadhead ratio • Pay-to-platform ratio 	<ul style="list-style-type: none"> • Ridership • Subsidy per passenger • Administrative ratio • Sales taxes for operations • Unused financing capacity



DART Key Performance Indicators

DART’s Scorecard of Key Performance Indicators (KPIs) is shown in Exhibit 56. Fiscal years 2016 and 2017 indicate actual values. Fiscal Year 2018 Third Quarter represents the four-quarter rolling period ending June 30, 2018. Fiscal Years 2018 and 2019 are the target values for those years.

Exhibit 56
DART Scorecard of Key Performance Indicators (KPIs)

Indicators	FY16A	FY17A	FY18 Qtr 3	FY18B	FY19B
Ridership Performance					
Total Agency Ridership (M)	67.2	65.8	63.4	67.8	63.4
Fixed-Route Ridership (M)	65.6	64.4	62.0	66.2	61.7
Ridership - Bus (M)	33.7	32.1	30.9	33.0	30.6
Ridership - LRT (M)	29.8	30.1	29.1	31.0	29.0
Ridership - TRE (M)	2.1	2.1	2.1	2.1	2.0
Ridership - Paratransit (000s)	810.3	795.7	768.4	863.4	854.3
Ridership - Vanpool (000s)	792.0	674.6	610.6	720.4	889.8
Efficiency Measures					
Subsidy Per Passenger - Total System	\$5.90	\$6.36	\$6.68	\$6.50	\$7.20
Subsidy Per Passenger - Fixed-Route	\$5.53	\$5.98	\$6.27	\$6.10	\$6.80
Subsidy Per Passenger - Bus	\$6.19	\$6.90	\$7.13	\$7.12	\$8.28
Subsidy Per Passenger - LRT	\$4.54	\$4.68	\$5.01	\$4.89	\$5.11
Subsidy Per Passenger - TRE	\$9.00	\$10.63	\$11.10	\$8.03	\$8.89
Subsidy Per Passenger - Paratransit	\$41.15	\$41.47	\$44.23	\$42.99	\$44.97
Subsidy Per Passenger - Vanpool	\$0.36	\$0.54	\$0.92	(\$0.21)	\$0.30
Farebox Recovery Ratio - Fixed-Route	15.3%	13.3%	13.6%	13.6%	19.0%
Farebox Recovery Ratio - Bus	12.3%	12.1%	12.0%	10.5%	9.8%
Farebox Recovery Ratio - LRT	16.6%	16.2%	15.5%	15.4%	17.7%
Farebox Recovery Ratio - TRE	27.6%	21.4%	15.8%	29.5%	29.6%
Administrative Ratio	9.5%	9.2%	9.5%	8.9%	8.8%
Service Quality					
On-Time Performance - Fixed Route	89.9%	90.4%	91.0%	90.5%	91.0%
On-Time Performance - Bus	79.2%	79.3%	82.0%	80.0%	83.0%
On-Time Performance - LRT	92.5%	92.1%	92.4%	94.0%	93.0%
On-Time Performance - TRE	97.9%	98.5%	98.5%	97.0%	97.0%
Customer Satisfaction					
Complaints Per 100,000 Passengers - Fixed-Route	41.3	34.1	35.1	36.8	37.7
Complaints Per 100,000 Passengers - Bus	57.1	60.2	53.6	57.0	57.0
Complaints Per 100,000 Passengers - LRT	22.4	16.6	17.8	17.5	19.5
Complaints Per 100,000 Passengers - TRE	5.2	4.4	3.1	5.5	5.5
Complaints Per 1,000 Trips - Paratransit	4.1	3.9	3.5	3.0	3.0
Safety					
Accidents Per 100,000 Miles - Fixed-Route	1.95	1.92	1.94	1.93	1.93
Accidents Per 100,000 Miles - Bus	2.51	2.32	2.29	2.30	2.30
Accidents Per 100,000 Train Miles - LRT	0.45	0.52	0.73	0.35	0.35
Accidents Per 100,000 Miles - TRE ^[1]	0.37	0.66	0.19	1.00	1.00

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

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, and Mobility Management/Paratransit services, as well as Materials Management, Police and Emergency Management, and the following two new departments, Engineering and Training, Communications Control & Technology. This change looks to improve transparency, performance and a better alignment with support functions. This will also establish a framework more in line with contemporary transit agency approaches. This cost-neutral realignment became effective April 28, 2017. The departmental costs shown in the Business Plan document retain the former structure to enable comparison to prior years. Future financial schedules will be restated with new structure. 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 seventh 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 initiatives this year are:

- Implement recommendations presented by the 5 Star Review Committee in 2018.
- Measure the cultural change of the 5 Star Service Program corporate wide.
- Complete the redesign of the 5 Star Service Program website.
- Conduct orientation sessions for the implementation of a corporate recognition program.

Ongoing 5 Star Service Program projects:

- Customer Experience Officers (CEOs) are 5 Star Program champions in their respective work departments. The 2019-2020 CEO class will begin the application and selection process by December 2018.
- Continuous Improvement Teams (CIT) are problem-solving groups that include approximately 10-20 employees at any given time, selected by departments to solve technical problems, improve processes, or create new ways to improve working relationships within the agency or with the agency's customers. Nineteen teams have implemented their projects. Several new project teams will be identified in 2019.

The new Practicing, Leading and Serving (PLS) course implemented last year will be expanded to include employees throughout the agency.

- The Culture Change Management Series is a schedule of two guest speakers per year. The program has been a huge success with employees. Speakers have included representatives from Disney, Southwest Airlines, and Interstate Batteries, corporate culture change agents, as well as college professors from across the country.
- 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 five components:

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



Bus Operations

DART endeavors to improve the quality, efficiency, and effectiveness of the bus system. A more detailed description of long-term strategies for improving bus service is contained in Section 6.3 of DART's 2030 Transit System Plan.

Bus Operations

This division is responsible for daily operations of fixed-route bus service on 127 directly-operated bus routes, serving approximately 115,000 daily passenger trips. The Division employs 1,260 bus operators and 88 supervisory and administrative staff operating out of three geographically dispersed operating facilities. Bus Operations is responsible for the delivery of safe, reliable, and courteous service to DART's customers and is measured based on the following metrics: accidents per 100,000 miles, on-time performance, and complaints per 100,000 passengers.

Bus Operations is responsible for assuring the availability of qualified and trained operators to meet daily service requirements, assuring daily deployment of service to fill all runs, on-going operator performance management, timekeeping and payroll pre-processing as well as communications with, recognition of, and motivation of employees.

Bus Maintenance

This division is responsible for the repair, maintenance, and upkeep of all operating facilities and approximately 649 fixed-route buses, and 740 support vehicles/equipment. It includes bus maintenance service facilities at the East Dallas, South Oak Cliff, and Northwest facilities; a non-revenue vehicle maintenance facility; and repair of the materials management main warehouse and the mobility management operating facility.

- Bus Maintenance Services – 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, which includes air compressors, vehicle lifts, pumps, vehicle washers, service stations, and other structures.
- Central Support – The Central Support section is divided into two units; Body Support and Bus Central Support:
 - Bus Central Support is responsible for scheduled bus maintenance, rebuilding major and small vehicle components, providing major campaign modification support, and capital program support for the DART-operated bus fleet. This unit 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) Services – The Non-Revenue Vehicle (NRV) Services section is responsible for preventive maintenance, corrective maintenance, campaigns, fleet modifications, servicing, new vehicle make ready, retired vehicle disposal, and 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, which includes air compressors, vehicle lifts, pumps, and other structures.

Bus Scorecard – Key Performance Indicators – Exhibit 57 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 2016 and 2017 indicate actual values. Fiscal Year 2018 Third Quarter represents the four-quarter rolling period ending June 30, 2018. The numbers in the columns for fiscal years 2018 and 2019 are the target values for those years.

Exhibit 57
Bus Scorecard – Key Performance Indicators

Indicators	FY16A	FY17A	FY18 Qtr 3	FY18B	FY19B
Customer Quality					
Ridership (M)	33.7	32.1	30.9	33.0	30.6
Revenue Miles (M)	25.0	25.0	25.1	25.1	25.1
Passengers per Mile	1.35	1.28	1.23	1.32	1.22
Farebox Recovery Ratio	12.3%	12.1%	12.0%	10.5%	9.8%
Complaints per 100K Passengers	57.1	60.2	53.6	57.0	57.0
On Time Performance	79.2%	79.3%	82.0%	80.0%	83.0%
Mean Distance Between Service Calls	9,977	10,325	9,959	12,220	12,220
Veh. Accidents Per 100K Miles	2.51	2.32	2.29	2.30	2.30

Indicators	FY16A	FY17A	FY18 Qtr 3	FY18B	FY19B
Financial Efficiency					
Expenses - Fully Allocated (M)	\$244.3	\$258.1	\$255.8	\$275.2	\$286.4
Revenues (M)	\$35.6	\$36.5	\$35.8	\$33.8	\$32.9
Net Subsidy (M)	\$208.6	\$221.6	\$220.0	\$241.4	\$253.5
Subsidy Per Passenger	\$6.19	\$6.90	\$7.13	\$7.31	\$8.28
Cost Per Revenue Mile	\$9.77	\$10.31	\$10.18	\$10.84	\$11.43

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 2019 with enhanced data provided by the radio system and the associated AVL and Computer-Aided Dispatch (CAD) subsystems. The new 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 2019, the CAD/AVL system will be used to improve the reliability of connections, so that a bus departure can be held for a few minutes to allow a late-running connecting bus to arrive. This use of the system will help reduce one of the more frustrating events for riders – missed connections. Additionally, DART Technology staff is working with Trapeze, the firm that provides DART's AVL software, to develop a system for coordinating connections between buses and trains. In 2018, Bus Operations implemented an On-Time Performance (OTP) Recognition Program to encourage and support operator focus on improving on-time performance. This development will continue into 2019.

The use of Automatic Passenger Counters (APC) on trains and buses supports the collection of real-time ridership as well as schedule performance by stop. Bus APC units have been installed on more than 150 buses as part of the radio system implementation and are providing more accurate passenger counts and runtime data to support planning and scheduling decisions. Additional APC equipment was installed in FY 2018 to permit passenger counts to be estimated from the APC counts rather than farebox data. The installations on remaining buses will occur in 2019. The current software improvements have significantly improved the analysis of CAD/AVL and APC data to obtain more accurate schedule running time information.

Increased OTP management will include bus control dispatch monitoring of the service, to include stop performance, garage pull-out times and more involvement of the bus field supervisors. This initiative will be supported by leveraging more data provided using various technology.

Additional OTP initiatives include:

- Deploy new reports and reporting tools to Bus Field Supervisors to improve on-time performance and reduce customer complaints
- Develop and implement bus bridge/disruption training and exercises/drills
- Real time management of the service utilizing Transit Master
- Leverage technology to ensure OTP compliance is improving
- Operator acknowledgement of their performance on a periodic basis to include daily, weekly and monthly communication to them

Fatigue Management –Fully implemented in 2018, 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. DART Management has been working with ATU, Local 1338, to develop plans to introduce a pilot program for operators of full-size buses, as well as to provide a mandatory rest period of nine hours between work days.

Revenue Vehicle Fuel Transition Program – DART’s fixed-route and mobility management bus fleets have undergone a transition to compressed natural gas (CNG). In FY 2011, the Agency awarded a contract for up to 459 new 30-foot/40-foot heavy-duty low-floor buses; 123 new 26-foot medium-duty low-floor buses; and a multi-year Mobility Management Services contract to replace the current fleet of liquefied natural gas (LNG) and clean-diesel vehicles. The first new buses began service in FY 2013, and the full fleet conversion was completed in FY 2017.

CNG Refueling Facilities – Four compressed natural gas fueling stations are now in operation; one station is located at each bus division, and one is at the Paratransit operating facility.

Fuel Costs – Fuel and energy are major cost drivers in the delivery of DART services. DART continues to focus on stabilizing the cost for the different types of fuels used in delivering our services by using hedges and forward delivery contracts when advantageous.

In FY 2017, DART completed its transition to CNG fuel, dramatically reducing its consumption of diesel fuel and correspondingly reducing the need for a diesel fuel hedge.

In 2010, DART entered into a fixed-price contract for delivery of natural gas fuel from 2013 through 2020 to be used for DART’s new fleet of CNG buses and Paratransit vehicles. The transition to CNG (along with this contract) was projected to save \$190 million (as compared to diesel fuel) in operating expenses through 2029, but if natural gas prices continue to remain low, DART will save millions of dollars above and beyond that projection. DART is in the process of locking in favorable pricing at least through 2025.

Service Efficiency – The continued use of the Trapeze Blockbuster® software will enable Planning and Scheduling staff to prepare more efficient operator assignment packages. The software utilizes sophisticated algorithms to identify the most efficient operator work assignments. This software also has the ability to generate many alternative packages of run cuts in a short amount of time, allowing management to select the package that achieves the best outcome.

DART Innovative Services

DART On-Call is provided in areas that do not meet service-planning, ridership, and efficiency standards for traditional fixed-route service. Use of demand response vans instead of larger buses operating on a defined schedule continues to provide savings to the agency. DART currently has eight On-Call zones throughout the service area, including: Farmers Branch, Glenn Heights, Lakewood, Lake Highlands, North Dallas, North Central Plano, Park Cities, and Rowlett. All zones now have midday service, including the Park Cities On-Call zone, and the Glenn Heights zone. Additional On-Call zones are being considered based upon DART's Comprehensive Operational Analysis. DART expanded the On-Call program to include two additional zones in Plano and three new zones in southern Dallas. These On-Call services will be an integral component of the DART Federal Shared Mobility Technology grant and pilot test that was implemented in FY 2018. The Shared Mobility Grant Pilot Test uses the GoPass 2.0 Mobile apps to integrate non-traditional transit services like Uber and Lyft, as well as taxi and bike share into areas without significant traditional transit service.

Flex, a variation of the On-Call approach, has been in operation for several years. Flex combines aspects of conventional fixed-route service with the demand-response characteristics of On-Call. Passengers may choose to board Flex buses at regular stops along a designated path. Passengers also have the option of requesting pick-ups and drop-offs in a zone around the designated path.



Flex has been incorporated into the expanded service delivery modifications and is operated by DART personnel. On-Call service will continue to be operated by MV Transportation, Inc. (MV). MV will also schedule customer-requested deviations for the Flex trips.

Activity Center Shuttles

Shuttle services developed in partnership with employers and major activity centers are another cost-reducing way for DART to provide improved access to the transit network. Under the Board's Site Specific Shuttle Policy, DART provides up to 50% funding for these shuttle services with employers or major activity centers providing the remainder of the service cost. DART has existing shuttle agreements with Southern Methodist University, UT Southwestern Medical Center, DFW International Airport, McKinney Avenue Transit Authority, Texas Instruments, Medical City-Dallas, the City of Richardson (Galatyn Shuttle), Parkland Hospital, and Baylor University Medical Center.

Exhibit 58 is an overview of the uses of the funds and allocated operating positions for the Bus mode.

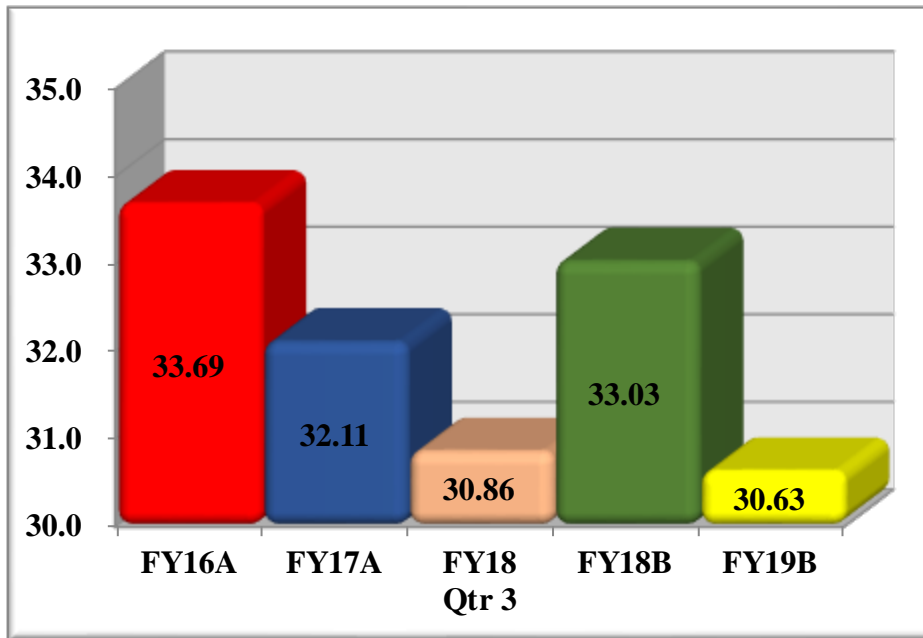
Exhibit 58
Bus Overview

Overview	FY16A	FY17A	FY18B	FY19B
Allocated Operating Expenses (M)	\$244.3	\$258.1	\$275.2	\$286.4
Capital Expenditures (M)*	\$48.4	\$49.8	\$34.8	\$36.5

* These amounts are the actual or budgeted capital for this mode only and do NOT include an allocation of Agency-wide capital.

Exhibit 59 highlights Bus Ridership. Fiscal years 2016 and 2017 indicate actual values. Fiscal years 2018 and 2019 indicate actual values. Fiscal Year 2018 Third Quarter represents the four-quarter rolling period ending June 30, 2018. Fiscal Years 2018 and 2019 are the target values for those years

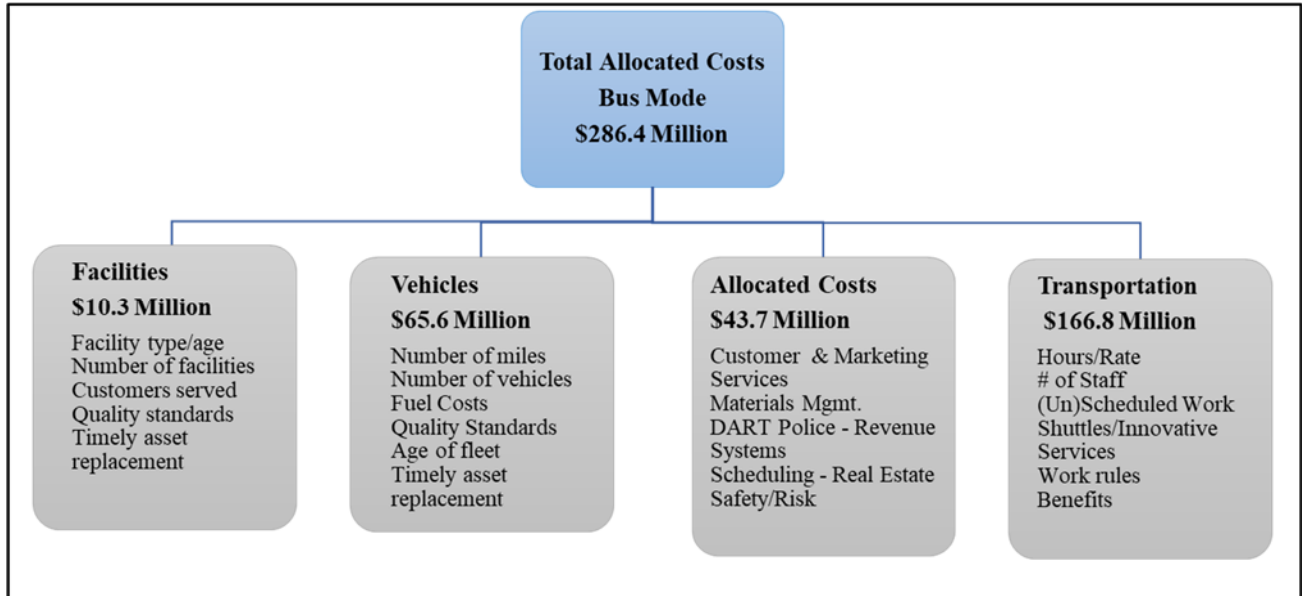
Exhibit 59
Bus Ridership (in Millions)



Please see pages 319-320 in the *Reference Section* for a discussion of ridership trends.

Exhibit 60 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 \$166.8 million, or 58.2% of the cost.

Exhibit 60
FY 2019 Bus Cost Model



Light Rail Operations

Light Rail Operations organization includes Rail Operations, Rail Control Center, Rail Fleet Maintenance, Rail Central Support and Ways, Structures and Amenities. This organization has a budget of \$123 million with a total of 904 employees. In FY 2019, 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 2019, the goals of the organization are to improve service delivery, customer service, performance and training.

Rail Operations

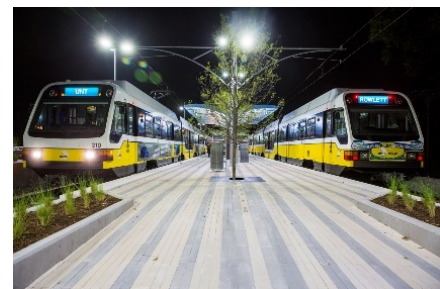
Rail Operations has a team of salaried and hourly personnel. The management team is comprised of 202 salaried exempt and non-exempt positions and the hourly staff totals 702 positions (maintenance and rail operators). The management team has responsibility for the oversight of service delivery, personnel assignments, scheduling, monitoring, analysis and evaluating operator performance and compliance related to rules and procedures.

A key factor in improving customer satisfaction is On Time Performance (OTP). In 2019, staff plans to increase OTP by establishing several different practices:

- Data analysis and evaluation of success measures, deviations, failures and trends.
- Meetings will be held weekly with stakeholder departments to establish 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.
- Supervisors will increase OTP monitoring for compliance where trains are running early/late.

The department is also focused on improving the customer experience in 2019. The following approaches will be used to increase customer satisfaction:

- Supervisor visibility, interaction and communication with passengers on trains and platforms.
- A new technology tool will be used to monitor Supervisor engagement at the stations as a point of contact for customer feedback and complaints.
- Improve communication to passengers during service disruptions, provide alternative options, when applicable and restore service as quickly as possible.
- Establish periodic meeting with Customer Service to review customer complaints and increase the use of video to validate customer incidents and complaints.



- Implement new procedures using the Vehicle Business System (VBS) to aid in providing accurate data for the agency.
- Re-evaluate KPI categories to determine if the established metrics and goals associated are accurate.

Rail Operations will also concentrate on providing a 5 Star Service culture for employees and customers. The department will enhance employee training, recognition 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 2019 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 will attend 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 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.

- Light Rail Maintenance – 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.

Vehicle Central Support (Rail) – 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. Bus/Rail support groups will continue bus, light rail and streetcar campaigns through 2019.

Rail Train Control Center

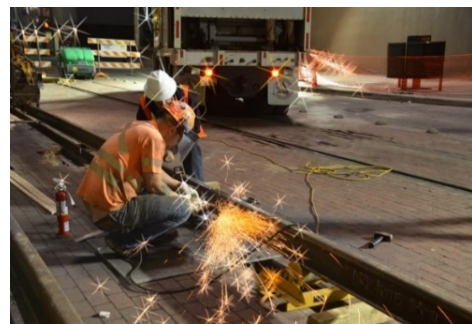
The Train Control Center maintains and controls train and streetcar movement along the alignment and responds to Traction Electrification System issues. It also provides an integrated environment for communicating and coordinating onboard travelers' information announcements and message boards of DART bus services. Control Center initiatives for FY 2019 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:

- Track and Right-of-Way – 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.



- Passenger Amenities/Facility Services – 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.

- *Traction Electrification Systems* – 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.
- *Signal Systems* – 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.
- *Communication & Control Systems* – 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*.

Light Rail Scorecard – Key Performance Indicators

Exhibit 61 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 2016 and 2017 indicate actual values. Fiscal Year 2018 Third Quarter represents the four-quarter rolling period ending June 30, 2018. The numbers in the columns for fiscal years 2018 and 2019 are the target values for those years.

Exhibit 61
Light Rail Scorecard – Key Performance Indicators

Indicators	FY16A	FY17A	FY18 Qtr 3	FY18B	FY19B
Customer Quality					
Ridership (M) ^[1]	29.8	30.1	29.1	31.0	29.0
Revenue Miles (M)	10.3	10.4	10.5	10.4	10.4
Passengers per Mile	2.93	2.90	2.76	2.99	2.80
Farebox Recovery Ratio	16.6%	16.2%	15.5%	15.4%	17.7%
Complaints per 100K Passengers	22.4	16.6	17.8	17.5	19.5
On Time Performance	92.5%	92.1%	92.4%	94.0%	93.0%
Mean Distance Between Service Calls	30,011	19,836	19,999	26,500	21,000
Veh. Accidents Per 100K Train Miles	0.45	0.52	0.73	0.35	0.35
Financial Efficiency					
Expenses - Fully Allocated (M)	\$164.7	\$170.9	\$175.1	\$176.0	\$183.1
Revenues (M)	\$29.3	\$29.7	\$29.4	\$30.7	\$34.7
Net Subsidy (M)	\$135.4	\$141.2	\$145.7	\$145.3	\$148.3
Subsidy Per Passenger	\$4.54	\$4.68	\$5.01	\$4.68	\$5.11
Cost Per Revenue Mile	\$16.05	\$16.43	\$16.61	\$16.95	\$17.65

Fatigue Management – 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 62 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 62
LRT Overview

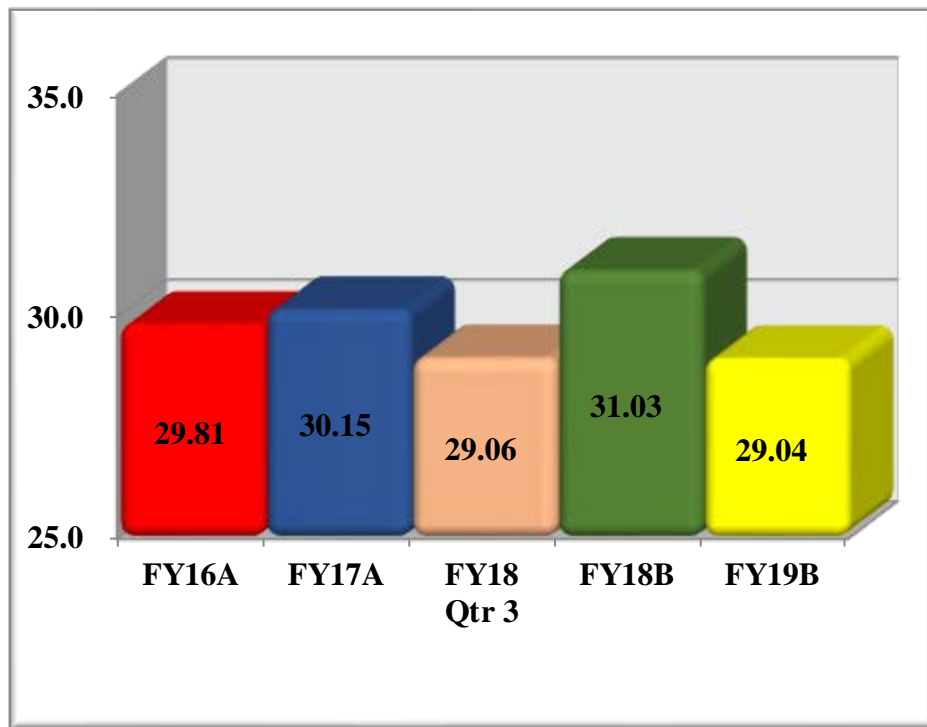
Overview	FY16A	FY17A	FY18B	FY19B
Allocated Operating Expenses (M)	\$164.7	\$170.9	\$176.0	\$183.1
Capital Expenditures (M)*	\$116.3	\$10.0	\$79.5	\$29.8

* These amounts are the actual or budgeted capital for this mode only and do NOT include an allocation of Agency-wide capital.

LRT Ridership

Exhibit 63 highlights LRT Ridership. Fiscal years 2016 and 2017 indicate actual values. Fiscal years 2018 and 2019 indicate actual values. Fiscal Year 2018 Third Quarter represents the four-quarter rolling period ending June 30, 2018. Fiscal Years 2018 and 2019 are the target values for those years.

Exhibit 63
LRT Ridership
(in Millions)



Please see pages 276-277 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

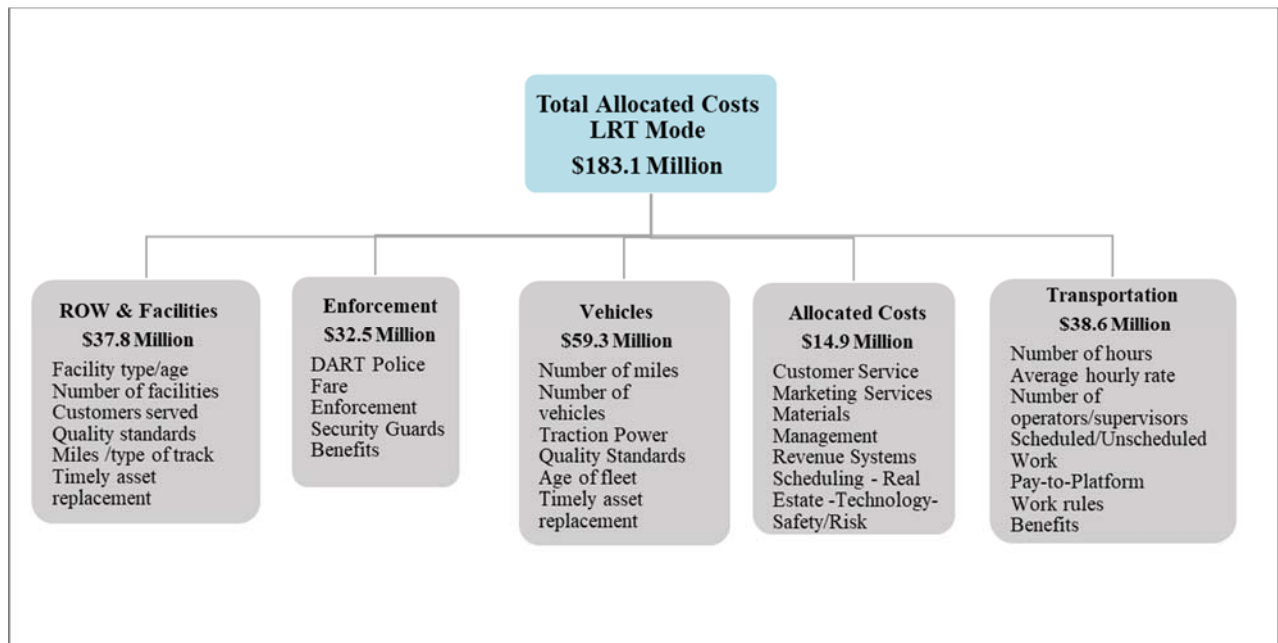
five years is \$0.692/kwh. This is below our current price of electricity and well within the Parameters Resolution approved by the Board on May 24, 2016, which established a maximum price of \$0.085/kwh. This price lock represents a \$14.8 million savings versus the cost contained in the FY 2016 Financial Plan.

LRT Cost Model

Exhibit 64 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 \$59.3 million, or 31.7% of the cost.

Exhibit 64
FY 2019 Light Rail Cost Model



Engineering

This department provides engineering and technical support services to the Operations divisions. Additionally, it supports the Agency’s mobility services for compliance with the equipment maintenance requirements of the contract, and provides liaison and oversight project management support for all systems integration or changes to the passenger amenities, operating facilities, right-of-way, vehicles, and equipment. New units added and/or transferred to the Operations Engineering Department are a result of the transportation and maintenance reorganization: Standards, Performance & Monitoring [SPM], Asset Management [AM], and Operations Support Services [OSS] (formerly Fleet Services Support).

This change looks to improve transparency, performance and a better alignment with support functions. This will also establish a framework more in line with contemporary transit agency approaches. This cost-neutral realignment became effective April 28, 2017.

This business plan will provide the guideline for resource allocation to improve performance and maintain compliance in five areas. These areas are at the core of the Operations mission and will allow a clear functional direction for the Engineering sections in their service delivery and staff development. These areas are:

- ✓ Asset Availability
- ✓ Asset Management
- ✓ Regulatory Compliance
- ✓ Customer Initiatives
- ✓ Safe Workplace

Function/ Responsibilities

- **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.



As mentioned in the list item above, 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.

- 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, sub-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 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 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.



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 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.

- 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.



- **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 operations and facilities.



Namely:

- CNG Fuel for Natural Gas Buses
- CNG Fueling Station Maintenance Contract Services
- Tire Leasing Services
- Pest Control Services
- LRV Cleaning Services
- Trash Pickup & Disposal Services
- Janitorial Cleaning Services
- Uniform Rental Services
- Facility HVAC Parts & Emergency Services
- NRV Fuel Management Services
- Batteries Management Contract Services
- Bus Towing Services
- Vehicle Registration (Stickers) Services
- Water Utilities Contract Services
- Facility Natural Gas (Atmos Energy) – Heating

- **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.

- **Asset Management (AM)** – 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 (Operations-related). Additionally, under the Enterprise Asset Management (EAM) 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.

- 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 updates thereof. Performance and QA Compliance Audits are included within the responsibilities, along with activities to Monitor Trends, Produce Reports, and Dashboard Management. Included under this section is the Quality Assurance (formerly under Bus Operations) unit that joined the Engineering team mid-October 2017. This unit will be aligned under the SPM section. This QA group was comprised of a Project Manager, an Analyst; and up to 10 temporary Service Assessment Specialist (Mystery Riders). They have relocated from Bus Operations and are now housed on the 1st floor in the Engineering Operations (Fleet) Services Support area.



Functional Responsibilities includes:

- Report / Data production of SmartDrive & DriveCam recordings as requested by Legal, Trial Board, and Others.
- Department liaison for providing requested data for Video (Incident Investigations and Other Management-related requests, etc.)
- Provide responses to DART Open Records Requests (ORRs), where applicable
- Employee assessments upon Management’s Requests
- Agency Surveys, as requested.
- Researches customer complaints that are escalated to Operations SMT from the Board Meetings and any Bus Operator on-time performance data requests from Others as required, that show a continuous pattern received from customers to the divisions.
- Utilization of Trapeze, which has two major programs:
 - Route Manager – comprises of DART route planning aspect
 - Transit Master – Transit Master (FX) is the playback, after the fact, of bus tracking.

FY2019 Strategic Goals & Objectives

- | | | |
|------------------------------|---|---|
| • Safety & Security Measures | ↔ | • Enhance Customer Focus |
| • On-Time Performance | ↔ | • Reduce Service Interruptions |
| • State-of-Good Repair | ↔ | • Increase Service Reliability |
| • New Service | ↔ | • Increase Service & Customer Retention |

FY 2019 Major Initiatives / Strategic Priorities

- 2019 New Low Floor CNG Bus Procurement – During FY 2018, the DART Board implemented additional service improvements in March 2018, including new routes and improved frequency on a series of bus routes. DART will receive delivery of 41 new transit buses in FY 2019 which will support another major bus service expansion, currently slated for August 2019.
 - ✓ *Vehicle Deliveries Target: Third Quarter FY2019*
- LRV & Bus Passenger Seat Retrofit -- DART Bus and LRV Fleet passenger seat upholstery replacement project. The current passenger seats in the Bus and LRV are covered in the same cloth upholstery material and are subjected to excessive wear, discoloration, waste and bio-hazard contamination. The objective is to replace the cloth upholstery with a durable vinyl or plastic seat to reduce the possibility of accidentally sitting in soiled seats and provide 5 Star Service to our customers.
 - ✓ *Support Pilot Installs Target: Fourth Quarter FY 2019*
- LRV Electronic LED Destination Retrofit -- The exterior end and side roller curtain destination signs need to be replaced with LED or LCD destination signs. The electronic signs greatly improve reliability and reduce maintenance costs. Obsolescence of the sign controllers and extensive maintenance challenges with the roller curtain signs will require replacement to meet state of good repair expectations and provide 5 Star Service to our customers.
 - ✓ *Support Pilot Installs (Fleet 54) Target: Fourth Quarter FY 2019*
- LRV Replacement / End-of-Life Extension Plan – Finalize strategic plan to Replace or Rehab oldest 95 LRVs. Replace existing LRVs with NEW and/or extend life for another 15-yrs thru End-of-Life Extension Program [EOLEP] under Vehicle Long-term SGR.
 - ✓ *Publish Plan Target: First Quarter FY 2019*
- Renewable Natural Gas (RNG) Contract Implementation (Fuel Costs Savings) – Fuel and energy are major cost drivers in the delivery of DART services. DART continues to focus on stabilizing the cost for the different types of fuels used in delivering our services by using hedges and forward delivery contracts when advantageous. DART is in the process of locking in favorable RNG pricing at least through 2025 to be used to fuel DART's revenue fleet of CNG vehicles.
 - ✓ *Execute Implementation Target: Second Quarter FY 2019*
- Quality Assurance (under SPM) Program Refinement Plan – Third-Party contract for refined QA scope inclusive of operator safe operation, timeliness, driver conduct, vehicle quality, and customer satisfaction. Essential scope activities: inspect vehicles for compliance, perform on-street monitoring, conduct mystery rider activities, inspect facilities and garages, and perform maintenance audits. Functional responsibilities include: Ensure data integrity; Develop reports; and Facilitate corrective action plans.
 - ✓ *Complete Implementation of Refined Plan Target: Fourth Quarter FY 2019*



- LED Lighting Installations (LRT Outlying Stations) -- Implement environmental design improvements to enhance security at DART facilities. Redesign of outlying station with incorporation of LED lighting.
 - ✓ *Complete Next Phase of Installations (30% or 25 locations) Target: Fourth Quarter FY 2019*
- Transit Signal Priority -- Provide engineering & technical support for FY 2019 Transit Signal Priority Project
 - ✓ *Pilot Installation Completion Target: Third Quarter FY 2019*

Personnel within the Engineering Department are located at 4209 Main Street, the Central and Northwest Rail Operating Facilities [CROF & NWROF] and each of the other Bus Operating facilities at Northwest, East Dallas and South Oak Cliff. These facilities include offices, classrooms, fluids and engineering test labs, and tool and warranty material storage/processing areas. Personnel also work offsite on extended assignment for vehicle inspection and acceptance; and other technical assessment activities.

Bus, Rail, Maintenance Training and Technology

This department was created due to the operations reorganization in April 2017. The reorganization realigned units from the former Transportation Department. The units include the consolidation of bus, rail, maintenance, and control center training programs. The technology section is a new function.

Training

This section primarily serves to ensure adequate training for all bus, rail and maintenance employees on systems and vehicles. 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 – operation skills, safety, collision avoidance, and customer service.

Training initiatives for 2019 include:

- Two-day Phase II refresher training for bus operators
- New certification process for Bus Operator Instructors
- New “train the trainer” programs for bus/rail instructors
- Maintenance and Operator training for new (Proterra) electric buses
- New farebox training for all bus operators
- Revise re-certification programs for rail operators
- Rail field supervisor and rail controllers for annual certification
- New employee bus and rail operator training

Technology Initiatives

This section is in the process of developing a technology unit to review and provide recommendations for various technologies and technological projects within operations.

Technology initiatives for 2019 include:

- Review existing Bus and Train Control Center applications for recommendations and improvements (OCC Log, Work Request, Trapeze, TransitMaster)
- Develop tools to analyze data for service disruptions, staffing, and equipment needs
- Use live camera feeds to monitor street car for efficiency

Materials Management

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 14,300 various parts valued at over \$40 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 Senior AVP, Materials Management directs the overall activities of the department and reports directly to the Executive Vice President/Chief Operations Officer.

The *Materials Management Planning (Administration)* section provides fiscal and administrative support and is responsible for inventory planning activities to support Bus and Rail 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 78 parts contracts and recovery administration activities.

The *Materials Management Receiving and Distribution* section is located in Irving, Texas at the Pioneer Warehouse. The Distribution Center is responsible for receiving all parts from the vendors and daily re-stocking the satellite locations.

The *Warehousing and Distribution* 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 right parts are available and can be issued to the mechanics when they are requested.

During FY 2019, Materials Management will be working to improve the availability of parts for the agency. To achieve this, Materials Management will be working to automate warehouses, improving our relations with our vendors, and setting and achieving goals that will ensure that we do not have a bus or train down due to not having the part available when needed.

- *Automation of Warehouses* – As part of the Asset Management Program, we are working to update the warehouses and take advantage of available technology. To increase the accuracy and efficiency of our inventory and increase our storage capacity, Materials Management has acquired Vertical Lift Machines (VLMs) which were installed in FY 2018 in the main warehouse and in one of our satellite locations. These machines will aid in improving the working conditions for our employees by storing the equipment vertically and then by delivering the parts to a table height platform for the employees to retrieve it. The VLM's will also allow DART to consolidate all our small to medium parts in one area of the warehouse(s) thus creating additional space that we will use to store large bulky parts.



- *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 a contact that we can call when we have buses or trains down due to DART not having that part in stock.

Materials Management Key Performance Indicators (KPIs) are presented in scorecard format in Exhibit 65.

These KPIs measure our success towards achieving the goal of providing effective, efficient, safe, and secure transportation service. Fiscal years 2016 and 2017 indicate actual values. Fiscal Year 2018 Third Quarter represents the four-quarter rolling period ending March 31, 2018. Fiscal Years 2018 and 2019 are the target values for those years

Exhibit 65
Materials Management Scorecard – Key Performance Indicators

Indicators	FY15	FY16	FY17	FY18 Qtr. 3
Buses Down for Parts (Stocked) - Average Per Day	100.0%	78.4%	100%	100%
LRV's Down for Parts (Stocked) - Average Per Day	100.0%	100.0%	100%	100%
Parts Availability %	100.0%	100.0%	100%	99.9%
Inventory Accuracy %	99.9%	99.9%	99.7%	99.8%

System Police & Security

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 Agency endeavors to maintain a safe and peaceful environment for its customers and employees. The following are the goals of the DART Police Department:

- 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 (CCTV) coverage at transit facilities, park and rides, and DART facilities.
- 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 table top 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.

The *Administrative Services* Section provides day-to-day services for internal customers, employees, and external customers. These services are provided through the following areas:

- *Budget* – The Police Department's budget is monitored to ensure fiscal responsibility. Monthly updates of the department's expenditures are provided to the department head. Purchase proposals are evaluated for need.
 - In FY 2018, we budgeted for the hiring of additional fare enforcement officers. Additionally, our solicitation and award of grant funds resulted in the procurement of rifle ballistic vests for our sworn officers.
 - In FY 2019, we seek to continue executing funds for security upgrades at DART facilities.



- Records – 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 in 2018 was the conversion from Uniform Crime Reporting (UCR) to the National Incident Based Reporting System (NIBRS).

Exhibit 66
Police Records Section Transactions

	Offense Reports	Accidents Reports	Open Records & Internal Requests	Citations
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	2,792	442	668	15,234

- Quartermaster – 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.
 - In FY 2018, our quartermaster section was able to facilitate the installation of needed police equipment for our vehicle fleet, enhancing our police officers’ ability to provide more efficient and effective service to customers.

The Field Operations Bureau 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:

- Rail Operations – 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, criminal 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.



- Patrol Operations – 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.
- Special Operations 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.



- In March 2018, the department implemented a new personnel deployment that put 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.
- Our goal for FY19 is to 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.
- The Operations Support Bureau 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.
- Criminal Investigations (CID) - 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.
 - In the first half of FY 2018, our CID division filed over 400 cases with the respective county district attorneys for disposition with a 98% positive adjudication.
 - A main element of this division's goals for FY 2019 include meeting the district attorney's goal of reducing processing times for misdemeanor cases by 25%.
- Emergency Preparedness 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 2018, the division augmented DART's safety and security goals by prioritizing CPTED surveys for funding, hiring and deploying additional security officers on trains. Emergency Preparedness also completed one full-scale, four regional, and two internal "all hazards" exercises.



- This division’s goals for 2019 include conducting three full-scale, two regional, and three internal all-hazards exercises as well as scheduled completion of a new access system DART-wide.
- Special Services 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 2018, the Hiring and Recruiting section was able to fill all 29 vacant police officer positions for the first time in the department’s history. The section streamlined the hiring process, conducted hiring orientations and identified “target rich” recruitment areas, universities and military job fairs for increased applicant pools.
 - This section’s goal for 2019 is to fill all budgeted vacancies within FY 2019.
 - 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 2018, 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 2019 is to continue preparing new officers, fare enforcement officer, and civilians for the ever-changing policing environment.

Public Safety Technology Division: 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 700-square mile service area. The section is comprised of seven (7) public safety technicians, eleven (11) Telecommunicators and eight (8) camera monitors. Our Officers operate multiple types of technology to complete daily duties, from in-car camera systems to mobile data computers.



- Public Safety Technology (PST) 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 2018, the section launched the deployment of a customer safety and security phone app, “See Something - Say Something” and installed CCTV Cameras at the following bus shelters; 912 Commerce Street and Rosa Parks Plaza in the Dallas Central Business District.



Figure 1 - ELERTS



Figure 1 - 912 Commerce St



Figure 3 - Rosa Parks



Figure 4 - LRV "C" Car

Public Safety Technology continues seeking technology that enhance safety and security of DART assets that provide quicker identification of problems on buses, trains and around our stations. We are reviewing ways to use video analytics to search for and identify people, criminal activity and determine passenger density during service disruptions and special events.

- Police Telecommunications (Police Dispatch) 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)

The Department of Mobility Management Services provides accessible, origin-to-destination and curb-to-curb 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.

A new business model was implemented in FY 2013 to increase efficiency and decrease the overall cost to operate paratransit services. This model enhances operational performance, customer service, and contract compliance. Several key changes in the new model were the outsourcing of the reservations, scheduling, and dispatching functions, as well as fleet ownership. Mobility Management Services continues to maintain responsibility for field supervision, contract compliance, rider eligibility, outreach, travel orientation and training, coordinated transportation services, administration, the Fixed-Route Reduced Fare Program for Persons with Disabilities, and management of DART's On-Call, GoLink, Mesquite Compass, and UTD Shuttle services.

DART contracts with MV Transportation, Inc. (MV) to provide, operate, and maintain a fleet of 80 Starcraft vehicles through 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.

Paratransit Services Scorecard – Key Performance Indicators

Exhibit 67, on the following page, 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. The numbers in the columns for fiscal years 2016 and 2017 indicate actual values. Fiscal Year 2018 Third Quarter represents the four-quarter rolling period ending June 30, 2018. Fiscal Years 2018 and 2019 are the target values for those years.



Exhibit 67
Paratransit Scorecard – Key Performance Indicators

Indicators	FY16A	FY17A	FY18 Qtr 3	FY18B	FY19B
Customer Quality					
Actual Ridership (000)	810	796	768	863	854
Actual Trips (000)	749	732	746	774	781
On Time Performance	89.2%	89.1%	89.0%	95.0%	95.0%
Preventable Accidents Per 100K Miles	0.5	0.4	0.4	2.0	2.0
Percentage of Trips Completed	99.8%	99.8%	99.8%	99.0%	99.0%
Passenger Canceled Trips Ratio	21.3%	22.6%	22.9%	20.0%	20.0%
Passenger No Shows Ratio	2.7%	3.0%	3.1%	4.0%	4.0%
Complaints Per 1K Trips	4.14	3.90	3.50	3.00	3.00
Service Level - Scheduling (3 minutes)	90.4%	97.5%	93.3%	95.0%	95.0%
Service Level - Scheduling (5 minutes)	94.8%	97.6%	96.6%	99.0%	99.0%
Service Level - Where's My Ride (3 minutes)	95.8%	94.8%	93.5%	95.0%	95.0%
Service Level - Where's My Ride (5 minutes)	99.3%	98.8%	98.0%	99.0%	99.0%
Certified Riders	12,026	12,244	12,015	12,611	12,408
Indicators	FY16A	FY17A	FY18 Qtr 3	FY18B	FY19B
Financial Efficiency					
Expenses - Fully Allocated (M)	\$35.58	\$35.22	\$36.18	\$39.56	\$41.25
Revenues (M)	\$2.23	\$2.22	\$2.19	\$2.45	\$2.83
Net Subsidy (M)	\$33.35	\$33.00	\$33.99	\$37.11	\$38.42
Subsidy Per Trip	\$44.52	\$45.10	\$45.58	\$47.95	\$49.19
Subsidy Per Passenger	\$41.15	\$41.47	\$44.23	\$42.99	\$44.97

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 requires 95% of calls to be answered within 3 minutes and 99% of calls to be answered within 5 minutes. MV is also required to meet an On-Time Performance target of 95%. The current target for complaints under this contract is 3 per 1,000 passenger trips. MV struggled to reach several of the established goals in the first year they operated the service (FY 2013). However, considerable improvements have been made since then. The complaints statistic reported in the Business Plan is inclusive of all complaints received related to the Department of Mobility Management Services. For contract compliance purposes however, only those complaints for which MV Transportation is responsible are counted.

Exhibit 68 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.

Exhibit 68
Paratransit Overview

Overview	FY16A	FY17A	FY18B	FY19B
Allocated Operating Expenses (M)	\$35.6	\$35.2	\$39.6	\$41.2
Capital Expenditures (M)*	\$0.5	\$0.0	\$0.3	\$0.3

** These amounts are the actual or budgeted capital for this mode only and do NOT include an allocation of Agency-wide capital.*

Paratransit Ridership

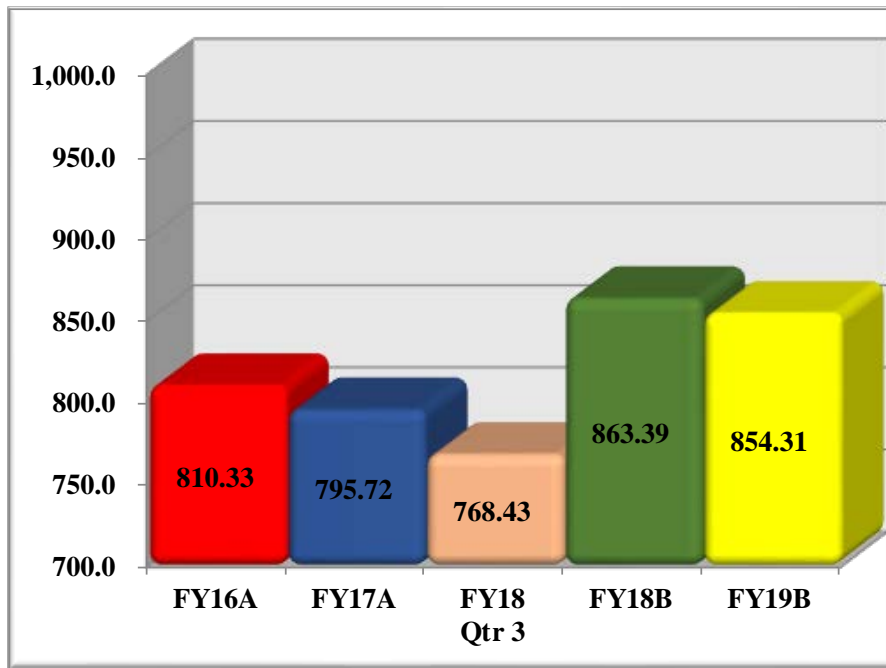
One of Mobility Management’s goals is to increase efficiency while delivering excellent customer service. The service delivery model implemented in FY 2013 consists of both dedicated and non-dedicated vehicles as well as a diverse fleet mix.

The 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.



Exhibit 69 highlights Paratransit ridership. Fiscal years 2016 and 2017 indicate actual values. Fiscal Year 2018 Third Quarter represents the four-quarter rolling period ending June 30, 2018. Fiscal Years 2018 and 2019 are the target values for those years.

Exhibit 69
Paratransit Ridership
(in Thousands)



Major Highlights/Initiatives

DART Mobility Management Services strives to improve coordination of services and sharing of resources.

Travel Ambassador Program and Other Community Training Options – The goals of the Travel 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. Travel 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 clients with disabilities requiring more intensive and detailed assistance. Customers that have gone through the Travel 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 Travel Ambassador Program also offers group training for human service agencies and other trainers through a train-the-trainer program.

The Travel Ambassador program was implemented in FY 2013. For those riders transitioning to fixed-route services, Mobility Management Travel 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 Travel Ambassador Program is open to the general public, not just Paratransit riders.

During its inaugural year, the Travel Ambassador Program successfully trained 22 individuals and 5 groups to use DART fixed-route services. As of May 2018, 511 individuals and 110 groups have been trained. DART anticipates that this program will continue to grow, and an even larger percentage of people will participate in FY 2019.

Regional Transportation Information/Database – 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.

Paratransit Eligibility and Travel Training Program – 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 2019 is projected to be approximately 12,408. This represents a 94.24% increase from the number of certified riders at the end of FY 2017. This increase reflects the overall population growth and general aging in the DART Service Area. As of May 2018, approximately 12,037 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.

Orientation and Mobility Training: 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.

Paratransit Productivity

Productivity – KPIs for productivity include on-time performance, missed trip ratios, 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 implemented in FY 2013 greatly reduced the strain on resources and is returning trips to more tolerable travel times with improved on-time performance.

Manage No-Shows and Cancellations – 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 2019, 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.

Vehicle Business System – A Vehicle Business System (VBS) is installed in all Paratransit vehicles. The wireless communication system allows optimal utilization of revenue vehicles through GPS-based vehicle tracking and improved communications.

Lyft Pilot Program – 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. After the first eight weeks of the pilot, almost 2,000 trips have been performed with 74 participants. As of the end of May 2018, over 40,000 trips have been conducted by over 100 participants on the pilot program. The pilot is anticipated to continue through the end of the current contract on September 30, 2019. MMS foresees incorporating TNCs into the new Request for Proposal and researching possible cost savings opportunities that this service could provide going forward.

Purchased Transportation Contract

The current purchased transportation contract with MV Transportation began on October 1, 2012 and runs through September 30, 2019. Mobility Management Services is currently in the process of developing a Request for Proposal (RFP) for the future purchased transportation contract that will start on October 1, 2019. This contract will harness the power of updated technology and hopes to provide a single, integrated technology platform that all of the department's programs can work from. This future model envisions a broker 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. The entire platform will connect through DART’s GoPass program to enable mobile payments, as well as other functionality.

Paratransit Costs and Subsidy Per Passenger

Exhibit 70 compares Paratransit cost and net subsidy actual results for FY 2016 through FY 2017 with budget and projections for FY 2018 through FY 2023. 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 70
Paratransit Net Subsidy Comparison

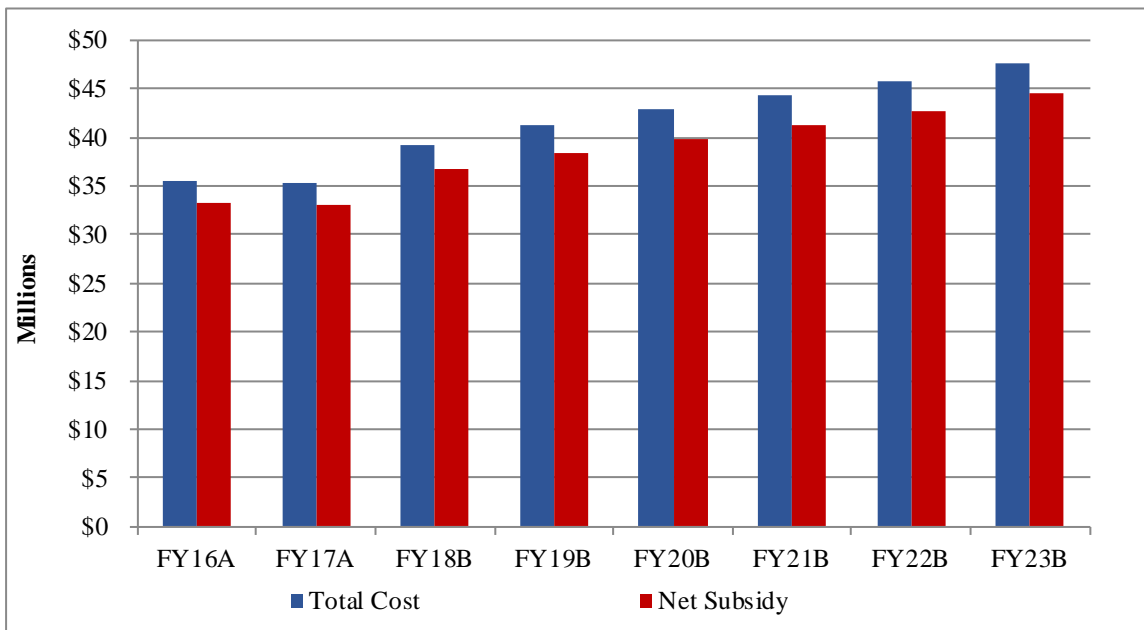
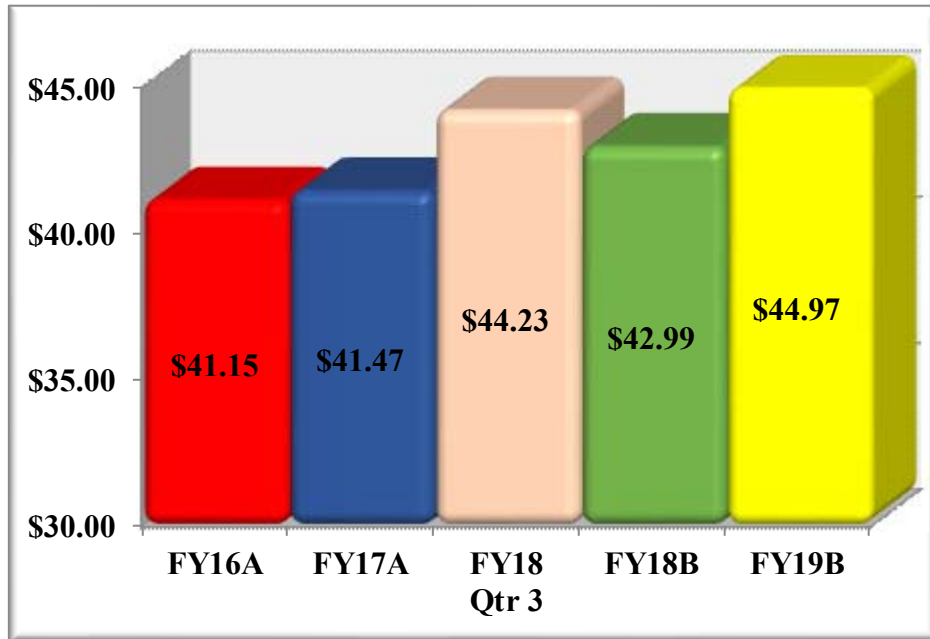


Exhibit 71 highlights Paratransit Subsidy per Passenger. Fiscal years 2016 and 2017 indicate actual values. Fiscal Year 2018 Third Quarter represents the four-quarter rolling period ending June 30, 2017. Fiscal Years 2018 and 2019 are the target values for those years.

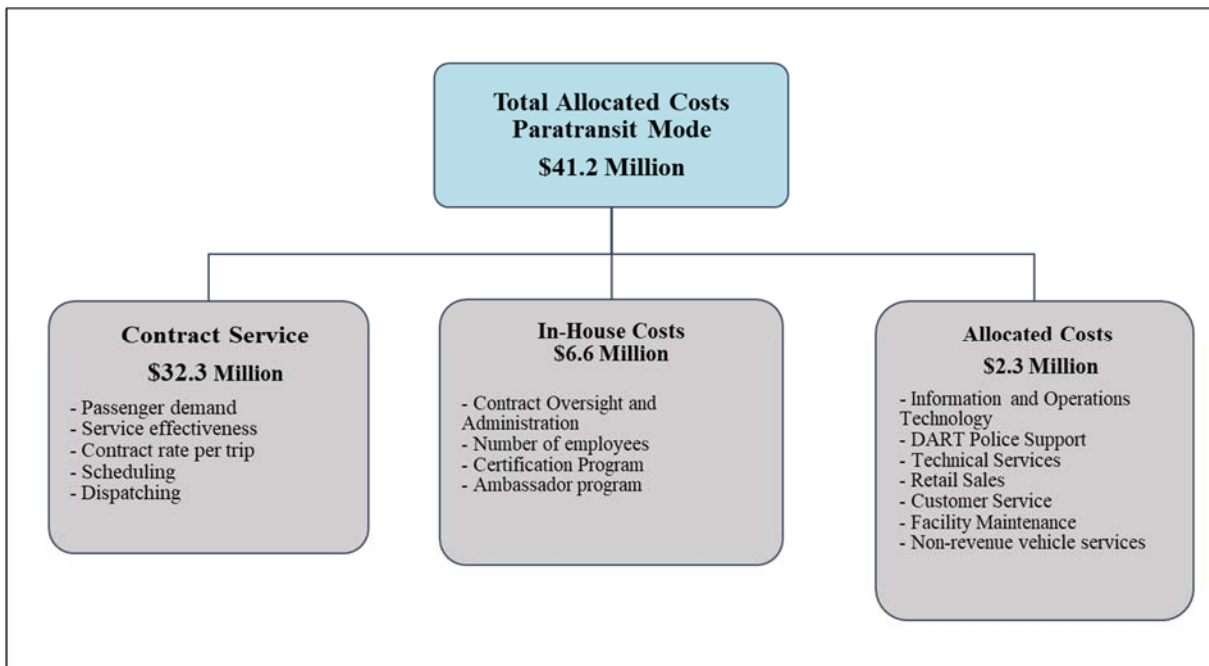
Exhibit 71
Paratransit Subsidy per Passenger



Paratransit Cost Model

Exhibit 72 is the Paratransit Cost Model. 78.3% (\$32.3 million) of modal costs are contract services costs.

Exhibit 72
FY 2019 Paratransit Cost Model





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Workforce & Customer Safety

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 73 shows the results of Bus Accidents per 100,000 miles for FY 2016 through August 2018.

Exhibit 73
Bus Accidents per 100,000 Miles

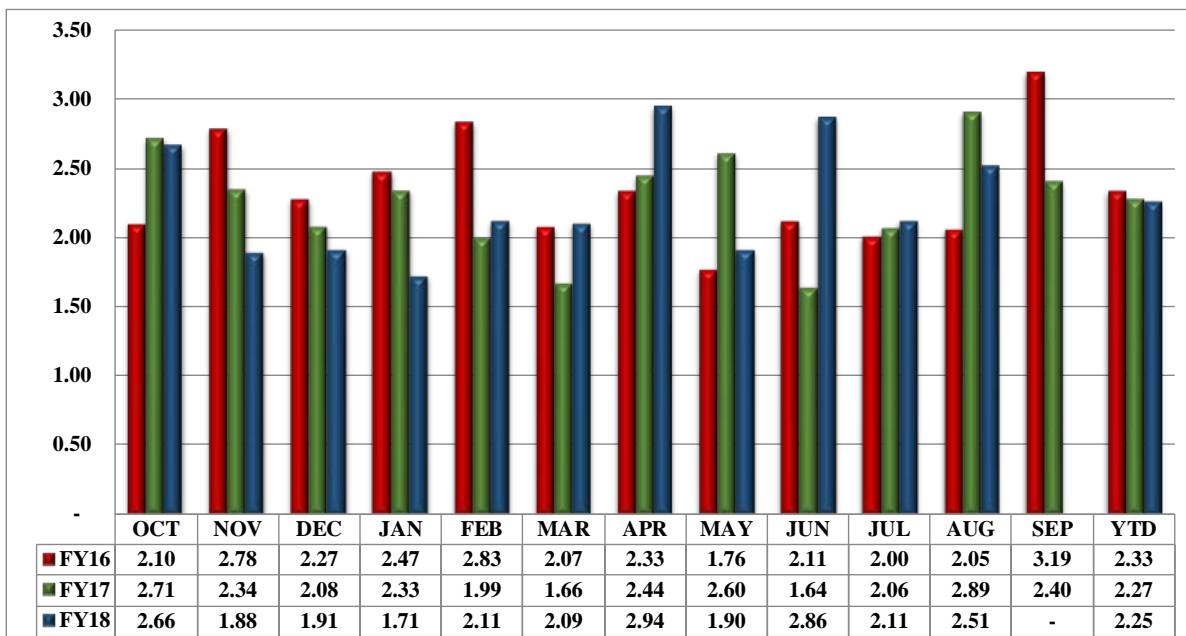
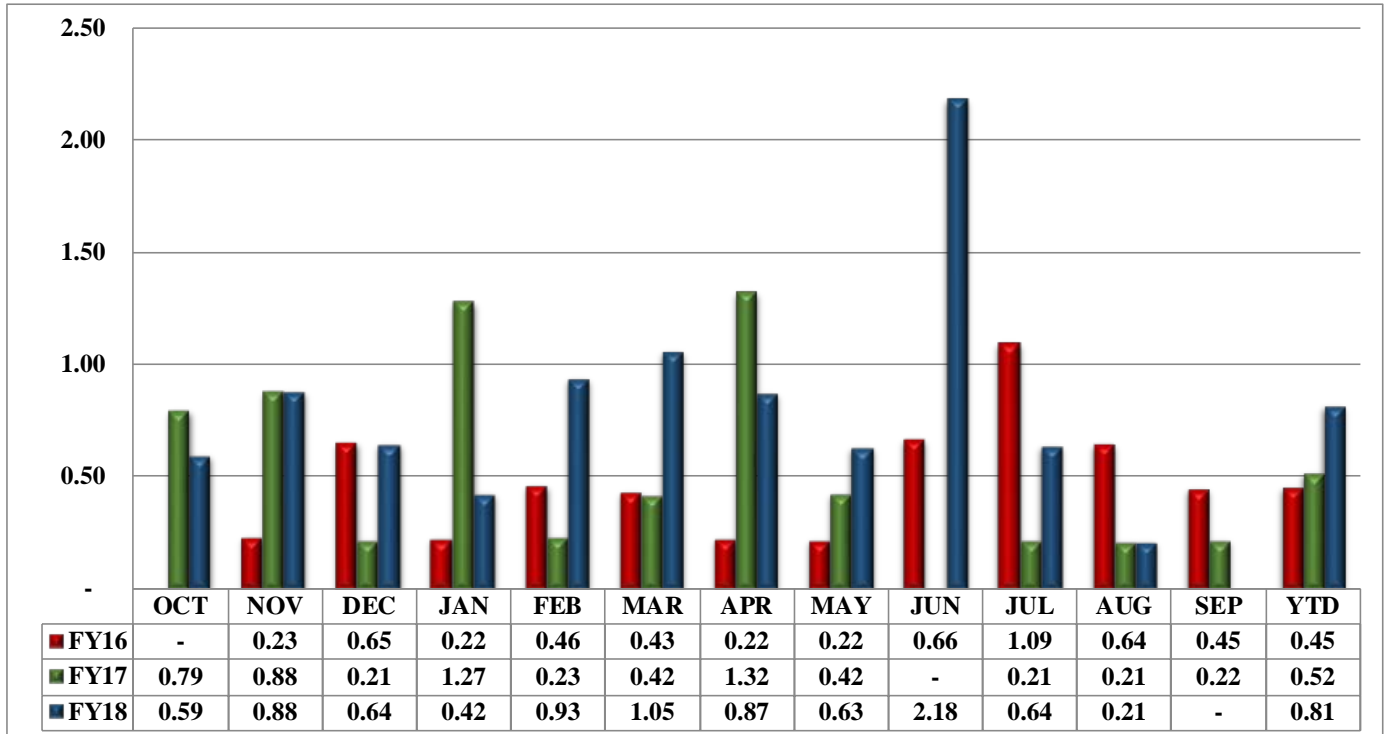


Exhibit 74 shows the history of Rail Accidents per 100,000 Train Miles for FY 2016 through August 2018.

Exhibit 74
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 75 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 75
 Construction Safety

DART Construction Safety Program			
	LRT Starter System	LRT Phase I	LRT Phase II & III (to date)
Total Man-Hours Worked	8,115,525	6,372,080	18,165,223
Total "Recordable" Accidents	982	321	144
Total "Lost Time" Accidents	271	46	37
Total "Cost" per Man-Hour	\$1.31	\$0.58	\$0.34
Program Costs	\$900 M	\$900 M	\$1.9 B
Construction Costs	\$500-\$600 M	\$500-\$600 M	\$1.5 B

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 2019 includes the following programs and projects:

Integrated Corridor Management (ICM) – 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.

Bus Shelter Project –The workplan for FY 2018 was a standard program of 50 shelters, 70 benches, and 40 free-standing light projects. During FY 2019, DART will award its on-street passenger amenities contract. As part of this contract, 70 benches, 70 free-standing lights, 70 bus shelters and 3 smart shelters will be installed in FY 2019.

Reserved Parking Program – Out of concern for the ability of service area residents to find close-in parking at Parker Road Station, DART established a follow-up Reserved Parking Program at Parker Road. This new program began in April 2014 and continues today.

A total of 828 parking spaces were reserved for service area residents with a valid DART resident permit. Another 1,231 spaces at Parker Road are open to all users. Eligibility for the program requires verification of service area residency and verification of vehicle ownership, and residence permits issued under the former Paid Parking program are accepted. Station Concierges at Parker Road issue the reserved parking permits, and DART Police provide enforcement.

During FY 2016 through FY 2018, the program was evaluated to measure compliance. Compliance was found to be good, but the evaluation also found that fewer reserved spaces were needed. During FY 2016, the number of spaces reserved for residents of DART cities was reduced to 628. This change provided unused spaces to be available for non-service area customers unable to find space at Parker Road. The reserved resident program will continue in FY 2019.

During FY 2018 a concern for the ability of service area residents to find close-in parking at Rowlett Station led to a similar Reserved Parking Program at the Parker Road Station for the 750 spaces in Rowlett. Initially DART staff verified and registered residents for stickers, with the City of Rowlett assuming registration responsibility after the program began. Enforcement is done by the Volunteers in Patrol (VIP) group which is under the direction of the Rowlett Police Department, with DART's financial assistance to purchase VIP uniforms and supplies.

After an initial adjustment to re-balance the number of spaces dedicated to reserved parking, and an informational campaign and outreach before and after rebalancing, parking allocations were efficiently distributed with very few complaints after the summer of 2018.

Regional Service Policies and Operations – 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. 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.

Plano Ride Program – 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.

DART Rides Program – 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.

Service Standards – 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 will form the backbone for a number of other service planning efforts in FY 2019.

Transit Service Plan – During FY 2019 DART will work 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.

Area Service Reviews and Service Changes – 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.



On-Time Performance Project – 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.

Legacy Area Transportation Study – 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.

Downtown Shuttle – 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, downtown-related media outlets, regular customers, conventioners, and special event stakeholders such as hotel concierges. In FY 2019, D-Link stakeholders agreed to pursue the implementation of an on-demand 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 76 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 2016 and 2017 indicate actual values. Fiscal Year 2018 Third Quarter represents the four-quarter rolling period ending June 30, 2018. The numbers in the columns for fiscal years 2018 and 2019 are the target values for those years.

Exhibit 76
Vanpool Scorecard – Key Performance Indicators

Indicators	FY16A	FY17A	FY18 Qtr 3	FY18B	FY19B
Customer Quality					
Ridership (000)	792.0	674.6	610.6	720.4	889.8
Number of Vanpools	185	181	177	265	225

Indicators	FY16A	FY17A	FY18 Qtr 3	FY18B	FY19B
Financial Efficiency					
Expenses - Fully Allocated (M)	\$1.99	\$1.88	\$1.86	\$2.07	\$2.13
Revenues (M)	\$1.70	\$1.52	\$1.30	\$2.21	\$1.86
Net Subsidy (M)	\$0.29	\$0.36	\$0.56	(\$0.14)	\$0.27
Subsidy Per Passenger	\$0.36	\$0.54	\$0.92	(\$0.19)	\$0.30

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 2018. 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 77 is an overview of the uses of the funds and allocated operating positions for the Vanpool mode of service.

Exhibit 77
Vanpool Overview

Overview	FY16A	FY17A	FY18B	FY19B
Allocated Operating Expenses (M)	\$2.0	\$1.9	\$2.1	\$2.1
Capital Expenditures (M)*	\$0.0	\$0.0	\$0.0	\$0.0

* 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 78 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 78
General Mobility & Road Improvement Programs
(in Millions)

Program	FY15A	FY16A	FY17A	FY18B	FY19B
LAP/CMS	\$0.6	\$0.6	\$0.1	\$0.0	\$0.0
Transit Pass	\$0.0	\$0.0	\$0.0	\$5.0	\$3.0
TSM (includes street repair)	\$0.0	\$0.5	\$0.0	\$7.3	\$4.8
Transit Related Improvement (TRIP)	\$0.5	\$0.0	\$0.0	\$3.3	\$4.2
Total	\$1.1	\$1.1	\$0.1	\$15.5	\$12.0

Local Assistance Program/Congestion Management System (LAP/CMS) – 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 79 reflects the LAP/CMS payable to each service area city. The timing of the draw-downs is dependent upon the request of the service area cities with remaining balances.

Exhibit 79
LAP/CMS Program – Remaining Balances

Service Area City	6/30/18 LAP/CMS Balance	6/30/18 LAP/CMS Committed Amount
Addison	\$306,497	\$306,497
Carrollton	247,299	247,299
Dallas County	23,235	0
Glenn Heights	65	0
Irving	50,000	50,000
Total	\$627,096	\$603,796

Transit Principal Arterial Street System (PASS) – 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.

Transit Related Improvement Program (TRIPS) – 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.

Transportation System Management (TSM) – 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.

Intelligent Transportation Systems (ITS) – 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.

Pathfinder Signage Plan – 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.

Crew Room Projects – 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 pre-fabricated 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
- Cotton Belt 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 2040 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 2040 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 2040 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.

Systems Engineering – 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.

Facilities Engineering – 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.

Construction Management – 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.

Contract Administration – 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

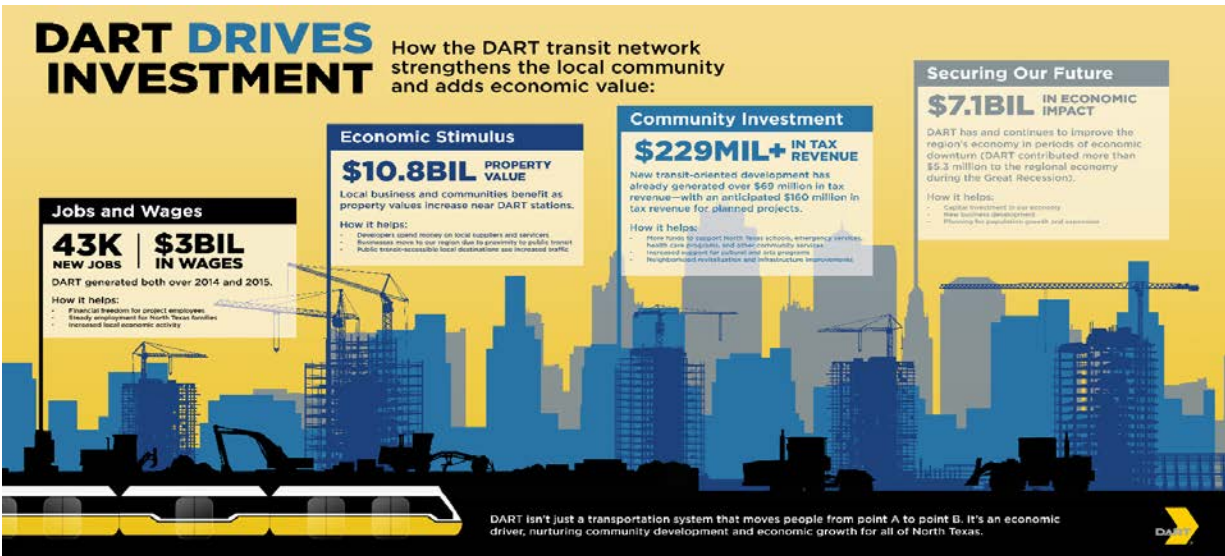
The economic impact of DART on the regional economy has been significant, exceeding \$10.8 billion, according to a study by the University of North Texas (UNT). The study, which was published in May 2017, looked at public and private transit-oriented development along the light rail corridor between 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 ¼ 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 ¼ 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 80 highlights Commuter Rail – TRE’s Key Performance Indicators (KPIs) presented in scorecard format. The numbers in the columns for fiscal years 2016 and 2017 indicate actual values. Fiscal Year 2018 Third Quarter represents the four-quarter rolling period ending June 30, 2018. The numbers in the columns for fiscal years 2018 and 2019 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.

Exhibit 80
Commuter Rail – TRE Scorecard (System wide)
Key Performance Indicators

Indicators	FY16A	FY17A	FY18 Qtr 3	FY18B	FY19B
Customer Quality					
Ridership (M)	2.1	2.1	2.1	2.1	2.0
Revenue Car Miles (M)	1.6	1.6	1.9	1.7	1.7
Passengers Per Revenue Car Mile	1.30	1.29	1.08	1.25	1.19
Revenue Train Hours (000)	17.5	25.6	26.1	25.5	25.5
Farebox Recovery Ratio	27.6%	21.4%	15.8%	29.5%	29.6%
On Time Performance	97.9%	98.5%	98.5%	97.0%	97.0%
Complaints per 100K Passengers	5.2	4.4	3.1	5.5	5.5
Accidents Per 100K Train Miles - TRE ^[1]	0.37	0.66	0.19	1.00	1.00

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

Indicators	FY16A	FY17A	FY18 Qtr 3	FY18B	FY19B
Financial Efficiency					
Expenses - Fully Allocated (M) ^[2]	\$30.02	\$30.11	\$30.47	\$30.20	\$31.41
Revenues (M)	\$11.53	\$7.81	\$7.94	\$15.53	\$13.37
Net Subsidy (M)	\$18.49	\$22.31	\$22.53	\$17.14	\$18.03
Subsidy Per Passenger	\$9.00	\$10.63	\$11.10	\$8.03	\$8.89
Cost Per Revenue Car Mile	\$19.01	\$18.47	\$15.82	\$14.85	\$18.36

[2] Fully allocated expenses and revenues for FY17B and FY18B include overhead from Trinity Metro.

TRE Fuel Hedge – A fuel hedge was put in place starting in May 2015 and will run through the end of FY 2020. Exhibit 81 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.

Exhibit 81
Fuel Hedge Costs by Fiscal Year

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 82 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.

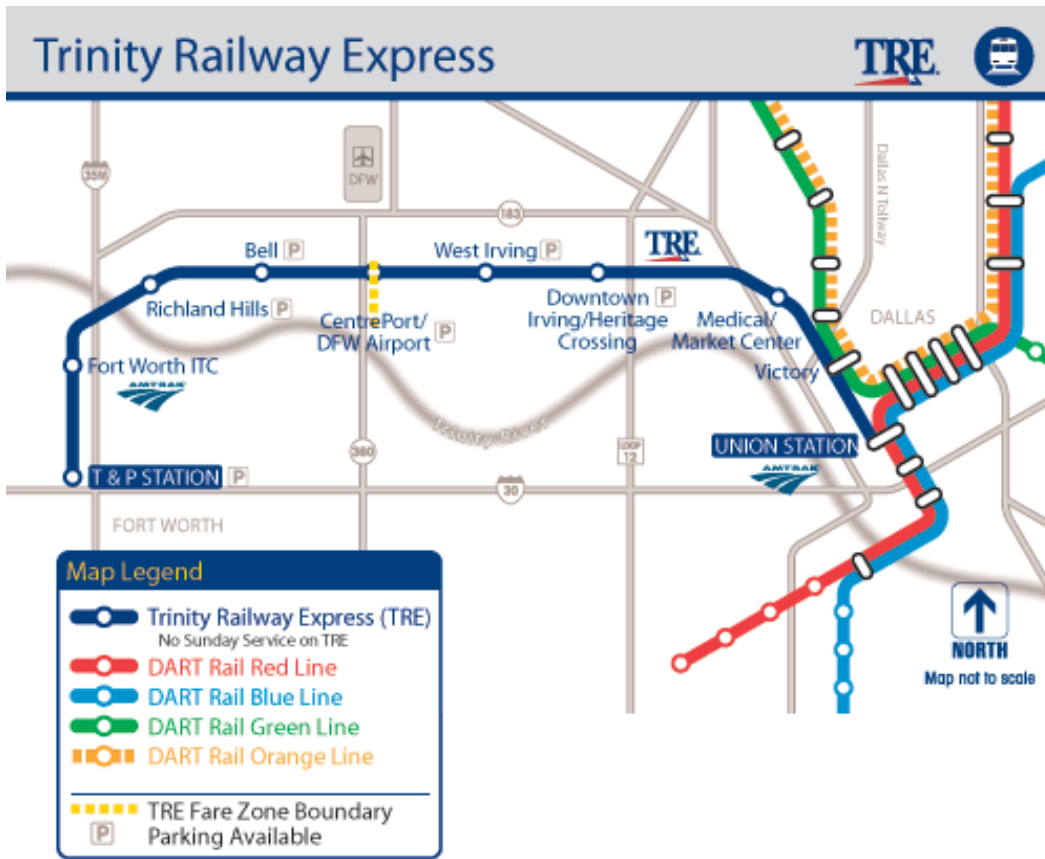
Exhibit 82
Commuter Rail Overview

Overview	FY16A	FY17A	FY18B	FY19B
Allocated Operating Expenses (M)	\$30.0	\$30.1	\$30.2	\$31.4
Capital Expenditures (M)*	\$7.1	\$12.6	\$87.7	\$62.5

* These amounts are the actual or budgeted capital for this mode only and do NOT include an allocation of Agency-wide capital.

Exhibit 83 is a map that includes the TRE Corridor.

Exhibit 83
Trinity Railway Express Corridor



TRE Ridership and Subsidy Per Passenger

Exhibit 84 graphically depicts actual and budgeted TRE ridership and Exhibit 85 depicts TRE subsidy per passenger. In both exhibits, Fiscal Years 2016, and 2017 indicate the actual values, Fiscal Year 2018 Third Quarter represents the four-quarter rolling period ending June 30, 2018, while figures for Fiscal Years 2018 and 2019 represent the target for those years.

Exhibit 84
TRE Ridership
(in Millions)

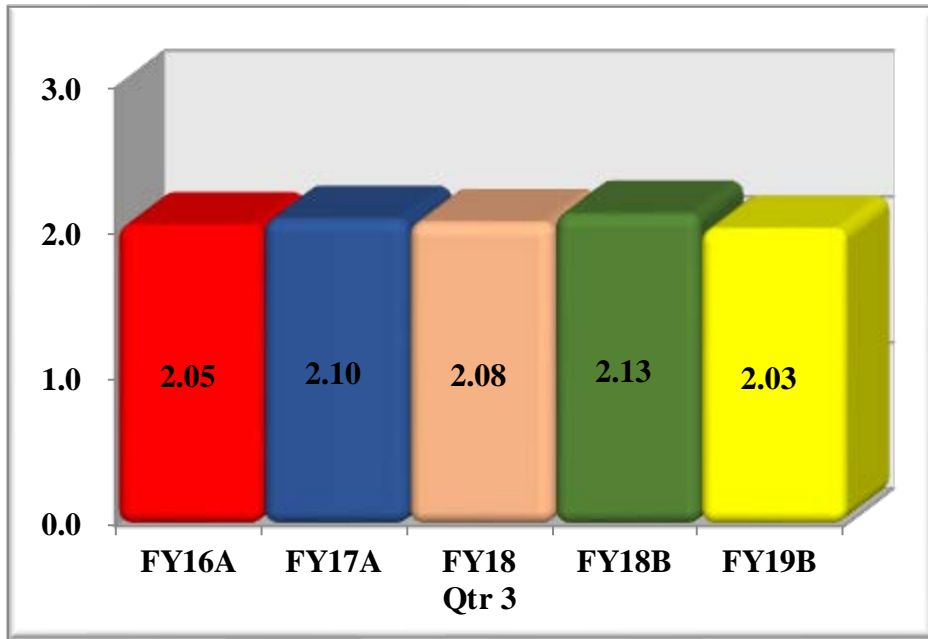
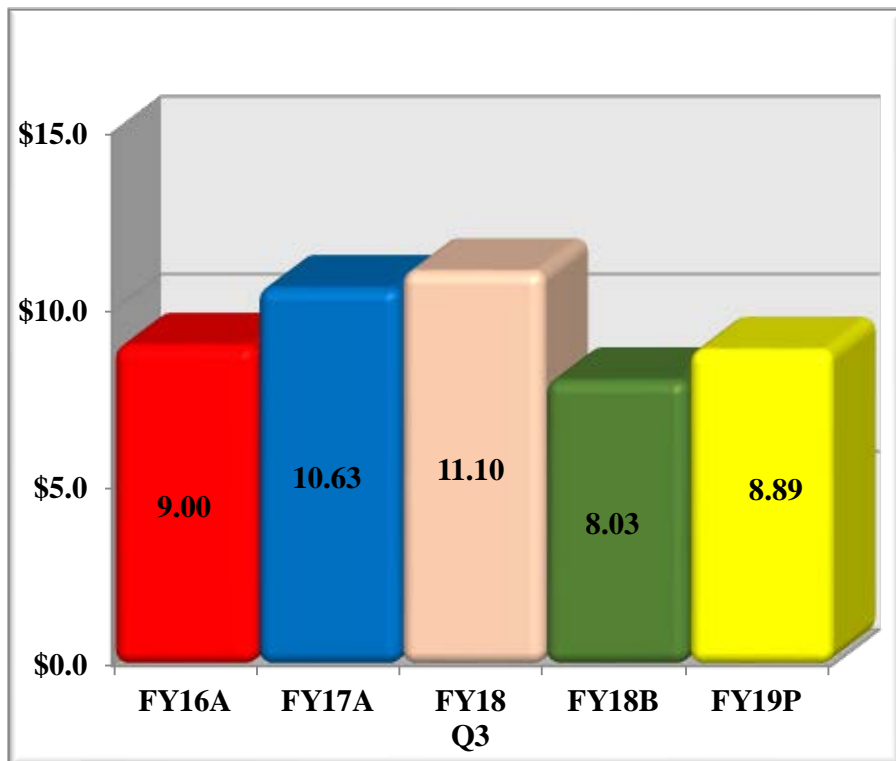


Exhibit 85
TRE Subsidy Per Passenger



Subsidy Per Passenger – 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 that is expected to boost ridership by 4-5%. 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 223 for more information on this program.

Revenue Contributions from the Mid-Cities – 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.

Weekday and Weekend Service Expansion – 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.

Ensure Service Quality – 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 2017. 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 FY 2018 Strategic Priorities section below. 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 Cotton Belt corridor.

- Contract operation – 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.
- Service – 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.
- Operating Fleet – 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.
- Sharing of Costs – 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 2018. Except for employees that are 100% dedicated to TRE, DART, and Trinity Metro separately absorb their own staff, administrative, and station maintenance costs.
- Madill Subdivision – 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.

Departmental Emphasis on Strategic Priorities – 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:

- Operations and Maintenance Contract – 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
 - 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 TEX Rail Corridor estimated to be in revenue service in December 2018. The agencies are exploring opportunities of cost for contractor positions that may be shared by the two services.

- Positive Train Control (PTC) – 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 TEX Rail 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.

- 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 (Obsession and Inwood) have been designed and will undergo construction beginning FY 2018; 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 the Trinity River Bridge in Tarrant County will be at final design in FY 2018.
- Next Train Customer Communication System – 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 includes 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.

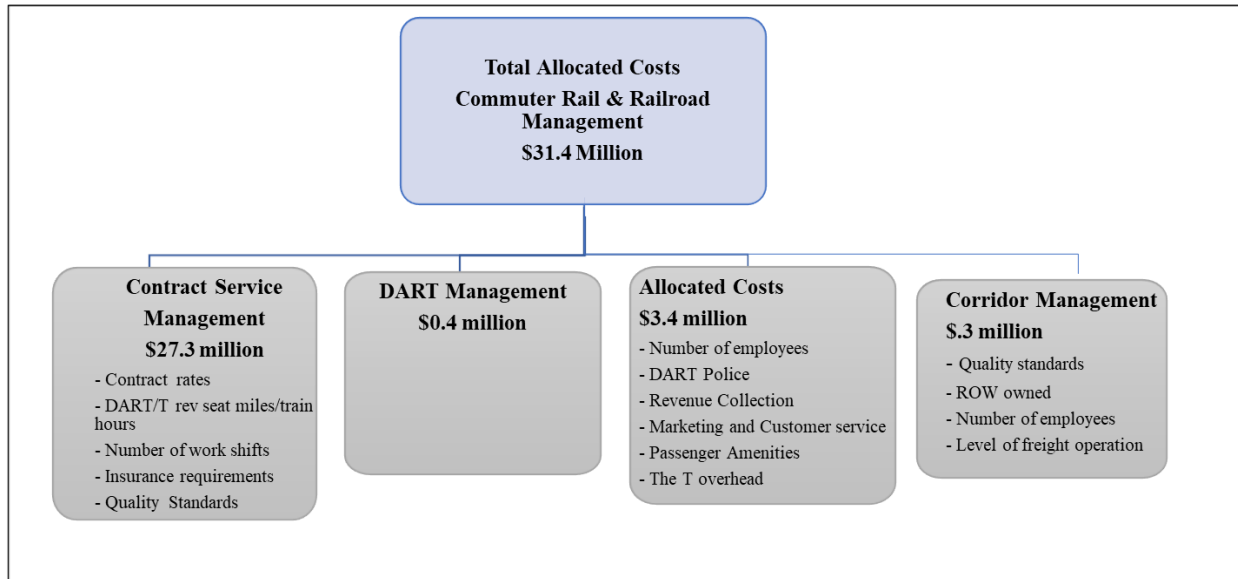


- Valley View Double-Tracking – This project upgrades the existing TRE line by double-tracking 1.5 miles between the Dallas/Tarrant County Line and the existing siding west of West Irving Station. A new bridge will also be constructed over Bear Creek. This project was tied to the TEX Rail and Amtrak 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.
- Vehicle Maintenance – 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.
- Vehicle Expansion – 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.

Cotton Belt Corridor – DART owns 54 miles of the Cotton Belt 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 TEX Rail project, which proposes to use the segment of the Cotton Belt west of DFW Airport, and continue south into downtown Fort Worth to the existing TRE Intermodal Transportation Center and the T&P Station. The project is anticipated to initiate service by the end of 2018. Plans include a future extension into southwest Fort Worth.

Exhibit 86 is the Commuter Rail and Railroad Management Cost Model. Costs are divided between Commuter Rail and Railroad Management divisions of the Department.

Exhibit 86
Commuter Rail Cost Model



Business Solutions & Innovation

The Business Solutions & Innovation organizational unit maximizes Agency resources through dynamic marketing, innovative technology, effective procurement, and engaging talent management. The Executive Vice President/Chief Administrative Officer has oversight of Human Capital, Technology Department, Marketing & Communications Department, and the Procurement Department. The Executive Vice President/Chief Administrative Officer, reports to DART’s President/Executive Director.

Human Capital Department

The Human Capital department responds to operational demands and programs by working to ensure the right person is in the right job at the right time. Human Capital strives to provide best-in-class human resource services and is uniquely positioned to utilize contemporary human capital business practices in order to provide efficient and timely human capital services and programs to the employees of DART. The Vice President of Human Capital directs the overall activities of the department.

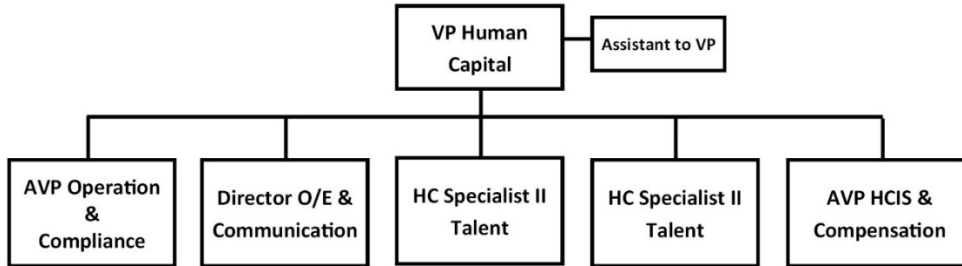
Human Capital will take ownership for the resolution of people issues, assess situations, and create change models to help facilitate and guide relevant Human Capital programming. Human Capital will also provide guidance for performance management and eliminate barriers to success by providing services and resources which will enhance each individual employee’s contribution to the success of DART. Human Capital will demonstrate the interdependencies between business success and “living the DART values” while measuring operational progress against critical success factors. During FY 2017 Human Capital developed a Mission, Vision and Values to guide the department’s decisions through FY 2018 and beyond.

Exhibit 87

<hr/> Vision <hr/>	
<p>The vision of DART Human Capital is 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.</p>	
<hr/> Mission <hr/>	
<p>The mission of DART Human Capital is 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 experience to our customers now and in the future.</p>	
<hr/> Values <hr/>	
<p>Integrity – We are committed to do the right thing</p> <ul style="list-style-type: none"> I will perform my work and deal with others honestly, fairly, and ethically I will treat others with dignity and respect I will respect the confidentiality of information entrusted to me I will conduct myself in a professional manner and model organizational values 	<p>Accountability - We are accountable for our actions</p> <ul style="list-style-type: none"> I will hold myself accountable for my decisions and actions; I will keep my promises I will attack problems and processes, not people I will actively engage in discussions and commit to decisions once they are made I will involve others in processes and plans that affect them I will personally commit to the success and well-being of my teammates
<p>Deliver Timely and Accurate Results – We have a sense of urgency to getting tasks done in a timely and accurate manner</p> <ul style="list-style-type: none"> I will communicate and set very clear and measurable goals, objectives, milestones and plans I will work with others as a team to accomplish results and win I will have a “can do” (positive) attitude and drive to get the job done I will make the tough calls in order to overcome obstacles or challenges to job completion 	<p>Innovation – We pursue innovation and continuous improvement of service and program content</p> <ul style="list-style-type: none"> I will identify and understand the HC challenges and requirements at DART to more clearly define the problems that need to be resolved I will challenge the status quo and work proactively to develop new perspectives when problem-solving I will seek to identify novel approaches for completing work assignments more effectively or efficiently I will continually learn about new ideas and best HC practices that could be applied in my work environment

The responsibilities of the Human Capital department are categorized in the following organizational structure: Talent Acquisition (recruiting), Operation & Compliance (Benefits Administration), Organizational Effectiveness (training) and HCIS & Compensation. These four areas address the entire life cycle of each employee and are organized as follows:

Exhibit 88
Functions and Overview of Human Capital Team



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 recruitment process starts with the checking to assure that the position is an active budgeted position and that the job description is updated. The recruitment process includes these pieces: identifying screening criteria, developing questions, identifying a diverse panel of interviewers and identifying advertising sources. Once EEO has reviewed the requisition the position is posted. 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 who might be interested in jobs with DART.

Once a position closes, the unit spends time screening the pool of applications and begins to identify the best qualified candidates. The pool of qualified candidates is submitted to the department’s hiring official for selection for interviews. Once interviews have been held and selections are made, a candidate is selected for hire. Prior to a final offer, an extensive background check is conducted to assure the candidate is eligible for hire.

We want DART to be known as an employer of choice.

Operation & Compliance Benefits Administration

DART's Human Capital Benefits Administration facilitates the process of establishing, maintaining, and managing benefits for over 3,700 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, keeping track of information such as the date hired, marital status, number of dependents, total hours worked, and attendance records. The programs offered by DART provides comprehensive coverage, considering special employee needs, part-time and temporary hires, as well as adherence to the changes in 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 responsible for providing excellent customer service and quality benefits plans, investigates new benefits programs, explore opportunities to improve existing programs, and supervise benefits administration, as well as design employee benefit plans and provide analytical and technical support in the delivery of the benefit programs.

The Director of Benefits serves as primary contact for plan vendors and third-party administrators while coordinating transfer of data to external contacts for services, premiums and plan administration. The Benefits Administration section evaluates and revises internal processes to reduce costs and increase efficiency. They also document and maintain administrative procedures for assigned benefits processes as well as ensure compliance with applicable government regulations.

The Benefits Administration section provides customer service support to internal employees and external customers. They develop communication tools to enhance understanding of the company's benefits package as well as design and distribute materials for benefits orientations, open enrollment and summary plan descriptions.

People Center

The People Center, DART's Human Capital Call Center, reports to the Director of Benefits. Its primary goal is to make available through phone call or walk-ins, information, assistance and counseling on Human Capital 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 HC processes and procedures.

The People Center also administrates a robust Wellness Program "Total Health" at DART and plans wellness events for the entire agency.

In 2018 the People Center implemented an enhanced phone call tree. The implementation of the phone call tree provides enhanced service to employees by allowing them 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. We are also able to leverage the assistance of Human Capital staff during peak volume periods.

Retirement & Pension Plans Section

DART employs 265 individuals over the age of 65, 1,110 between the ages of 55 and 65 and another 1,234 over the age of 45. More than 2,600 (73% of the DART workforce) are within 15 years of the normal retirement date in DART pension and retirement plans. HC 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 DART colleagues as they prepare to enter a new phase of life and to assure DART has plans that meet our colleagues needs.

The Team works closely with our retirement plan administrators, including Vanguard, Northern Trust and ICMA-RC. Our focus is on leveraging each vendors service model to provide DART employees with outstanding benefits and to improve the overall efficiency of our retirement plans. Part of this effort includes identifying and implementing industry best practices in all our retirement benefit services and activities. Out of this initiative the Team has recommended and implemented:

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 our Defined Benefit Plans Actuarial group
4. Posting of all Plan Documents, SPD's and IRS plan qualification letters on both DARTnet and DART.org

The Manager of Retirement/Pensions also serves as the secretary to both of the retirement and pension Boards (the Defined Benefit Plan and the Defined Contribution Plan).

Organizational Effectiveness Section

Organizational Effectiveness (OE) works to support employee engagement, development and well-being at DART. The department functions are centered around process improvements, employee development, and the delivery of quality customer service to Agency employees. The department 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. In FY 2017, 393 new hires participated in new hire orientation. 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.

Supervisory DART, Management DART, and Executive DART are the leadership development programs managed by Organizational Effectiveness. Supervisory DART is a 24-week supervisor certification program delivered in partnership with the Dallas County Community College District. In FY 2017, seventy-five (75) employees selected via a competitive application process, participated in Supervisory DART. Management DART and Executive DART are year-long leadership development programs delivered in partnership with the SMU Cox School of Business.

The OE Learning & Development participated in the support of the agency-wide 5 Star program by spearheading the rollout of the 5 Star Service initiative on the Administrative side of DART.

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.

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, 360-assessment and feedback.

Promising talent from local high schools and colleges/universities across the U.S. participate in the DART Summer Intern Program. In FY18, 45 students participated.

Internal 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, DARTnet, is regularly updated with various news posts throughout the normal course of business. The Human Capital 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 Capital Information Systems & Compensation

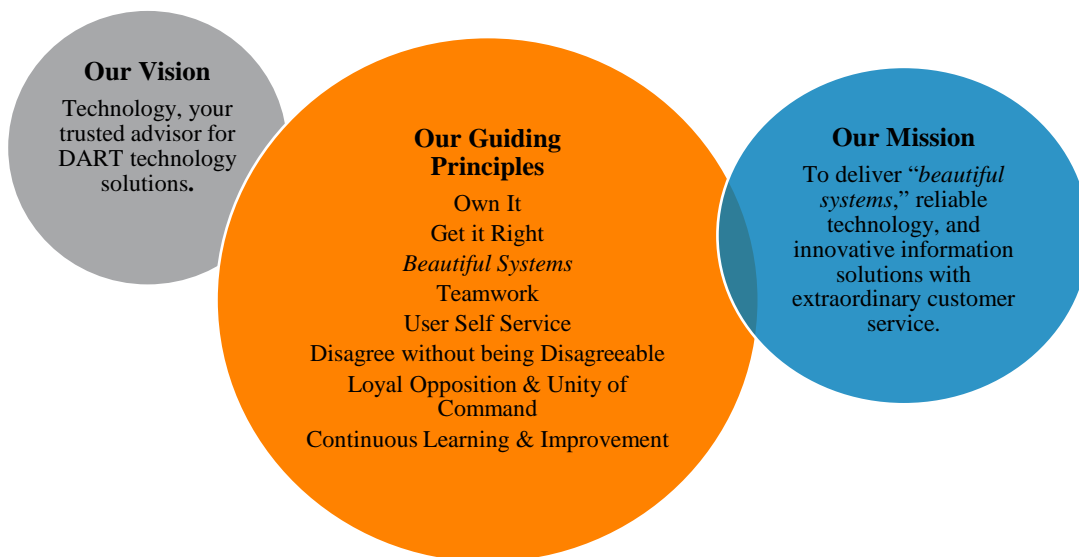
HCIS (Human Capital Information Systems) and Compensation are the backbone of technical, analytical and business process improvements of Human Capital. This unit consults on process improvements and maintains employee information and data integrity for the Agency. The HCIS unit produces reports from data maintained in Lawson, the Agency's employee data system.

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.

Technology Department

The Technology Department delivers innovation in partnership with other departments 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 directs the overall activities of the department. Exhibit 89 below provides the vision, mission and guiding principles for the department.

Exhibit 89
Vision, Mission, and Guiding Principles



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 goals. This is accomplished through data and operational integration and consistency across diverse applications and therefore, business processes at DART. Ultimately the goal is to support and enable the business.

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 to many of the technology projects throughout the agency working together with our business partners to successfully complete the goals of the agency and provide value to our customers. The department's focus is to increase the value added to our customers and their satisfaction with technology products and services.

Technology Strategy

Strategically, DART is transitioning technology solutions to cloud 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 solutions when a SaaS solution does not exist or is impractical. DART is well positioned to take advantage of cloud solutions because of 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 replacing before their migration to cloud can begin.

Technology processes are maturing, and new processes and tools are being implemented with our continual 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 Universal Payment Platform, Mobility on Demand, Virtual and Artificial Reality, and Converged Networks.

In addition, DART Technology has identified short-term goals and objectives that are not tactical but 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 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 reduction 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 eliminating 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 IT staffing model, which needs to change to support 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 variable as DART starts paying based on consumption
- DART’s belief that they need full control

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.

Accomplishments

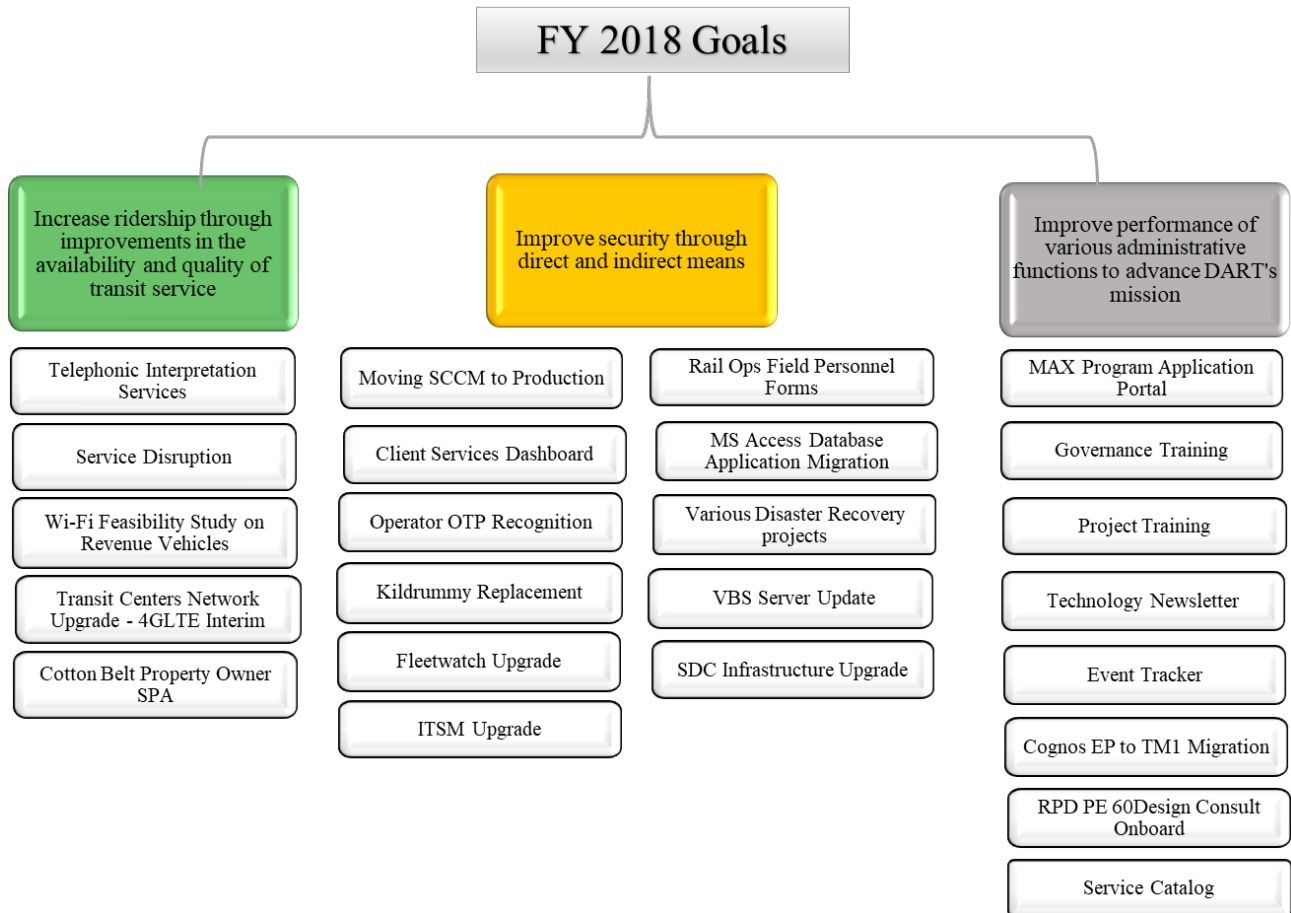
The past two years have been demanding for the department including projects, maintenance of current systems, replacement of devices throughout the agency and recruiting talent. In 2017, we completed 24 projects for the agency in addition to “keeping the lights on”. Exhibit 90 is an illustration of the results for FY 2017 and how they related to accomplishing the Agency goals.

Exhibit 90
Results for FY 2017



FY 2018 continues to show developments in delivery of the services the department offers and the systems we continue to improve upon. Exhibit 91 is an illustration of the current results through May 2018 and how they relate to the Agency goals.

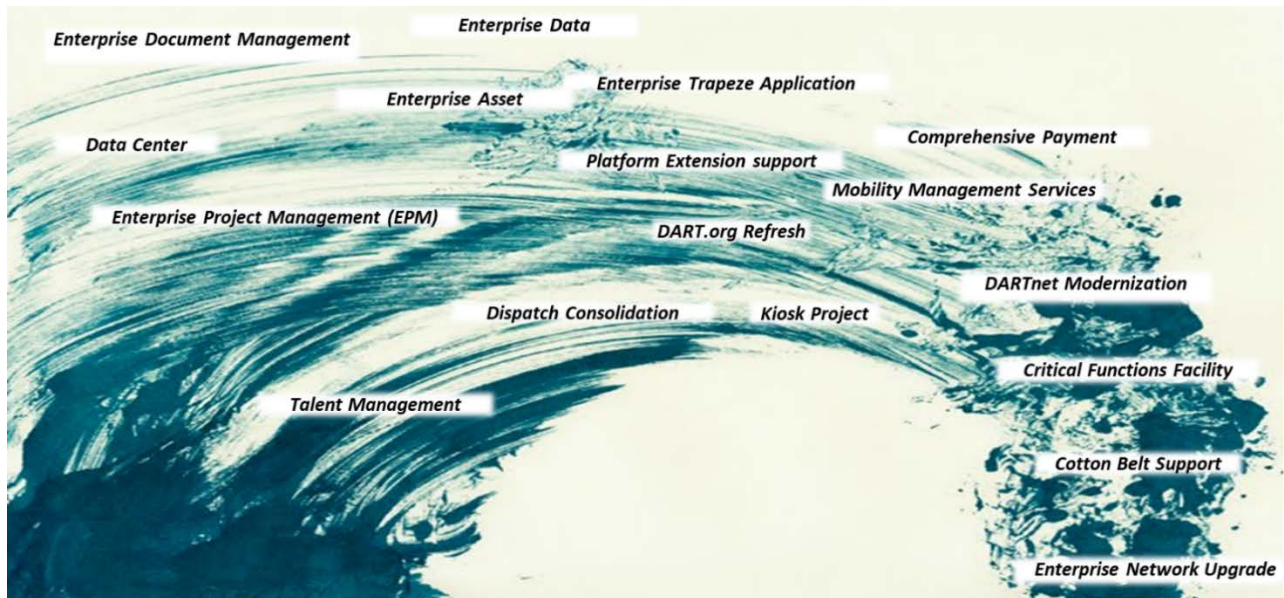
Exhibit 91
Results for FY 2018



The Road Ahead

The demand for Technology services has increased over the past several years and over the next 18–36 months there are several transformative applications slated for execution. The solutions in many cases will be vendor sourced packages with broad functional capability. The department will collaborate extensively with the business departments to drive parts of the projects. Exhibit 92 illustrates FY 2019 major programs / projects.

Exhibit 92
FY 2019 Major Programs / Projects



Technology Department Projects represented in the FY 2019 Agency Goals

- *Enterprise Asset Management – EAM* – Implement asset management software enterprise wide to be used in managing state of good repair of all DART assets and materials inventory.
- *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.

- *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.

- *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.
- *Core Human Capital & Talent Management System (HCM & TMS)* - Lawson V10 will reach end of life in 2020 while it is already showing substantial process limitations impacting Human Capital's ability to perform efficiently as well as engaging the workforce actively.

This project is a two-phase project: Phase I: Upgrade or replace HCM core application with cloud-based state of the art scalable solution supporting Human Capital business requirements. Phase II: Deploy integrated module to support Human Capital 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.

- *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.

Other major projects impacting the Agency

- *Enterprise Datawarehouse – EDW* - Develop a framework that consumes data from across multiple systems in the agency, integrates and prepares it for end-user consumption via available reporting solutions. Ensure data quality and integrity is maintained.
- *Enterprise Agency and Department Reporting and Dashboards* - Work with the business units to create a template dashboard using themes common to all departments e.g., Financials, Employee Management

- *Enterprise Trapeze Application Upgrade* - To advance application performance and future scalability perform an upgrade to the 22 Trapeze modules and underlying databases.
- *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:
 - Utilize contemporary software which incorporates industry best practices, platforms and records information management governance and framework.
 - 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.

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

President/CEO chartered the DART Cyber Security Governance Council in February 2017. The Council is presided by the EVP Business Solutions & Innovation/Chief Administration Officer, vice chaired by the CIO; the CEO acts as the Executive Advisor. The AVP/CISO - Information Network Security 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.



The Council will develop security best practices for all DART business and operations dependent technology with the goal to ensure that critical infrastructure and sensitive information is protected. They will work to develop an exemplary cybersecurity conscious workforce that protects technology resources from increasing threats and develop strategies and solutions that ensure that DART leads in areas of cybersecurity at a state and national level.

Data Governance Council

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.



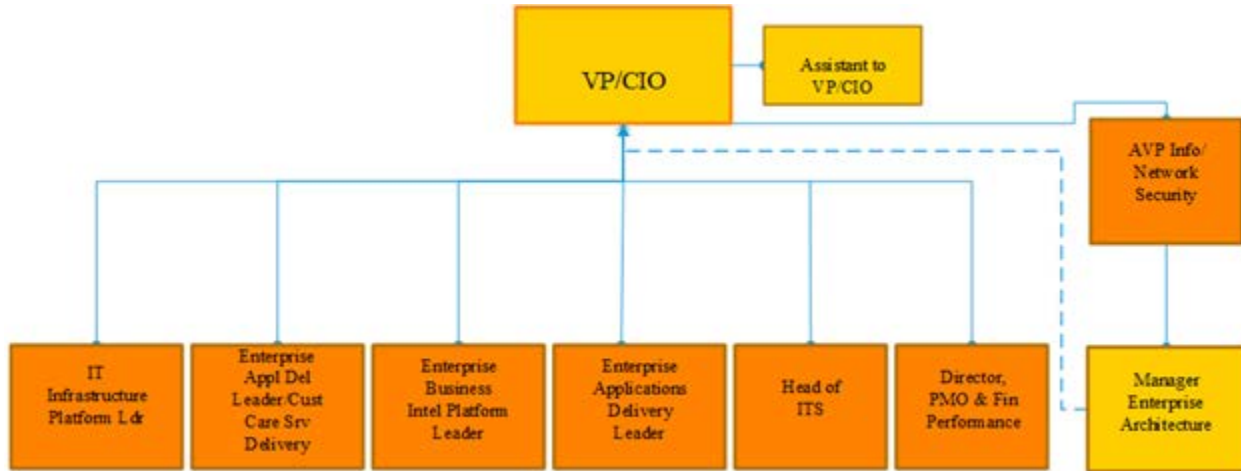
These definitions will be stored in a data dictionary which will contain details of each element from a technical and functional perspective. The committee will serve as a common ground to communicate and coordinate data related issues and will make recommendations to senior management regarding significant issues that have broad implications.

SharePoint Governance and Deployment

Create an effective agency-wide collaboration service through implementation of Microsoft SharePoint. The SharePoint Governance Plan will be a guidebook outlining the administration, maintenance, standards, responsibilities, guidelines, processes and support of our environments. The Governance Committee will be formed to assist with decisions on the roadmap, evaluating objectives, and defining roles and responsibilities.

Functions and overview of the Team

Exhibit 93
 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 DART's 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.

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.

Intelligent Transportation Systems (ITS) (systems for improved safety and responsiveness):

The 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.

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 (DARTnet), as well as DART's public web site, DART.org.

EA supports DART in all Technology needs by providing Customer Relationship Managers (CRM). This 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.
- Fleet Watch – System that controls the fueling of the bus fleet with Compressed Natural Gas (CNG).
- DART.org – Public-facing site of DART
- DARTnet.org – 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
 - 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.

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 consist 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.

Marketing and Communications Department

The Marketing and Communications Department (Marketing & Communications) assists in meeting and/or exceeding agency goals by establishing itself as the customer expert and advocate.

Through this focus, Marketing & Communications strives to enhance the customer experience across the agency by:

- Affecting and enhancing the customer interface of projects throughout the agency.
- Driving positive brand perception and awareness among customers and key stakeholders through advertising, promotions, communications, and event-specific participation.

Marketing has four main objectives:

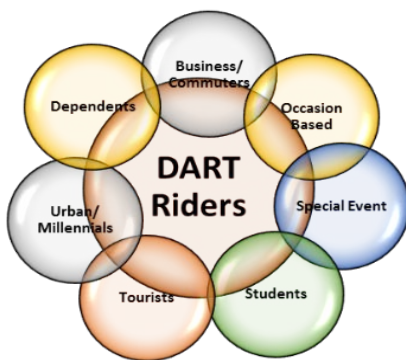
1. Enhance brand relevance, as measured in the customer satisfaction survey.
2. Increase ridership as measured by rider counts and revenue, and against the specific identified consumer segments.
3. Grow revenue from both farebox and non-farebox revenue sources.
4. Support and provide expertise regarding both internal and external customer-facing activities that may involve positioning, awareness driving, product improvement, sales, and brand activation.

For FY 2019, Marketing & Communications will support the following initiatives:

- “Go” platform, which encompasses:
 - Launch of the GoPass[®] 2.0 app, a new version of the original GoPass app that rolled out in 2013.
 - GoPass Tap card, a new reloadable fare payment card.
 - GoPass mobility services, which includes integration of micro-transit, transportation network company, bike share, and carpooling services.
- Fare restructure, which includes new fare products, new pricing structure and integration with the GoPass platform.
- Improved customer connectivity through the deployment of interactive kiosks at all light rail stations and other key locations, Wi-Fi on buses and trains, and cellular service in the Cityplace/Uptown tunnel.



- Capital development projects, including:
 - Electric bus rollout.
 - D2 Subway: Dallas Central Business District (CBD) Second Light Rail Alignment.
 - Cotton Belt regional rail service.
 - Platform extensions on the Red and Blue lines.
- Continued agency rebranding to heighten public awareness of DART and encourage ridership and engagement. This includes leveraging the “empowering discovery” brand positioning, continued marketing efforts behind the “DARTable” campaign, revised DART.org website, and digital/social media strategy execution.



Most notably, the Marketing and Communications Department will focus on establishing insights to our distinct DART rider segments by developing consumer personas and better defining their customer journey. This effort will provide the agency a deeper understanding of the customers’ needs, wants, pain points and disconnects as they interface with DART, and enable the agency to take a more focused and intelligent approach to drive ridership within these rider segments.

Go Services – One of the most critical projects for FY 2019 is the rollout of the new comprehensive fare payment system (CFPS) under the GoPass[®] banner. The GoPass mobile app, which launched in September 2013, has had over 500,000 downloads and sold more than 3.3 million tickets. The CFPS – through a redesigned mobile app; a new stored-value fare payment card; and a backend management system – will help minimize the use of cash.



Marketing will have a critical role in driving awareness and adoption of the new fare payment options, while also communicating the important benefits and features.

The GoPass 2.0 app launched May 2018, and the GoPass Tap card will begin rolling out with a soft launch in September 2018. An official launch is planned for November 2018.

Marketing & Communications will drive awareness of the two ticketing products, and strive to change consumer behavior on usage, purchases and validation through awareness, events, campaigns, education and advertising.

Along with the comprehensive payment system roll-out, Marketing & Communications also will support a fare restructure that includes:

- Fare increases on certain products.
- New fare product introductions.
- Deletion of other fare mediums.

To maintain and grow ridership through FY 2019, it will be imperative that marketing and communications efforts highlight the benefits to the customer, clearly communicate the changes, and encourage adoption of the new fare options.

Interactive Kiosks – Marketing & Communications will further leverage the “empowering discovery” positioning through a plan to deploy 350-500 interactive kiosks across the DART Light Rail System and to other key locations.



The kiosks will provide interactive wayfinding, information on local attractions, DART information and local advertising. Additionally, the kiosks will provide proximity-based Wi-Fi and include GoPass Tap card validation capabilities.

This kiosk effort will support the agency’s goal to drive ridership by making DART easier to use, informative, and part of our riders’ lifestyles through technology.

Special Events – Marketing & Communications is increasing its level of engagement with events and venues in the North Texas area. The department is working with the region’s convention and visitor bureaus (CVBs), hospitality and hotel associations and organizations, and respective city event coordinators to be more aware of events taking place within the DART Service Area.

In June 2018, Marketing & Communications, assisted by the Technology department, rolled out a new event tracking program that will provide the agency with a common repository for events as various departments receive event information from key stakeholders, such as the Dallas CVB and service-area cities.

The remaining consumer programs scheduled for FY 2019 are of a strategic nature and include focusing on corporate and student sales, sponsorship and advertising revenue sales, enhancement of customer service analytics, and a more aggressive digital/social media strategy.

Customer Service

DART’s Customer Service division, which is part of the Marketing and Communications Department, receives approximately 1.25 million calls annually from riders and potential riders requesting information regarding DART services, primarily bus and rail operations.

The DART Customer Information Center is open every day of the year except Thanksgiving and Christmas Day. Lost & Found, located at DART Headquarters, is open Monday-Friday,

8 a.m. 5 p.m. and closed on holidays. Customers may contact Customer Service for lost-and-found items in person, by phone, or via DART.org.

Customer Service is responsible for quantifying customer contacts through the development of the Customer Feedback Report. This information allows management to focus on improving our services. Customer service call-in and interaction data provides the agency with a more granular and immediate understanding of the needs of our customers. Through analysis and aggregation of customer service data, DART identifies the breadth and depth of opportunities.

Customer service interactions fall into three categories:

- General information (trip planning, events, promotions, advertisements, and DART initiatives).
- Customer care/feedback (requests, commendations, suggestions and concerns)
- Lost & Found.



Digital/Social Media Strategy – DART Marketing and Communications’ digital/social media strategy supports the agency’s goals of increasing ridership, revenue and brand regard through a multimedia approach that uses articles, photography, video and graphics to shape the narrative about DART, change perceptions and influence behavior.

Through DART’s social media channels that include Facebook, Twitter, Instagram and YouTube, and the digital blog DART Daily, Marketing & Communications informs target audiences of relevant news and information and amplifies key marketing messages to ensure they reach and resonate with customer segments.

To help the agency measure how DART is performing in the digital space, the department has contracted with a social media analytics company. Specifically, social media analytics help measure the volume of online conversations, how people are feeling about DART, who’s talking about the agency, and what they are saying. With this information, Marketing & Communications will be better able to craft messages that drive engagement.

Likewise, Marketing & Communications will redesign DART’s blog, DART Daily, to be more reflective of DART's brand identity and incorporate industry best practices in search engine marketing and content optimization.

Consumers today turn to blogs and social media to stay “in the know,” and DART Daily is an opportunity for the agency to shape the narrative about DART and humanize/elevate its brand. The new layout will be more consumer- and search-engine-friendly, and thus be more dynamic and appealing to readers.

Procurement Department

The Procurement Department is responsible for purchasing all materials and supplies, purchased transportation, services including construction, etc. used by the agency, with the specific exceptions of 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 and informal solicitations exceeding \$50,000 in value; receipt and evaluation of bids/offers; preparation of required reports and analyses; preparation of contracts below, and proposed awards in excess of

established thresholds for Board approval. After award, they are responsible for contract administration, resolution of disputes, and all actions necessary to close out contracts (including terminations for default or for the convenience of the Agency).

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 services and construction, operations and maintenance, capital projects and energy contracts. This Division also provides cost and price analysis support for the Department.

Strategic Sourcing Division

The Strategic Sourcing Division consists of three sections responsible for operational, maintenance, capital acquisitions, information technology, program outsourcing and business services 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 vendors regarding vendor 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.

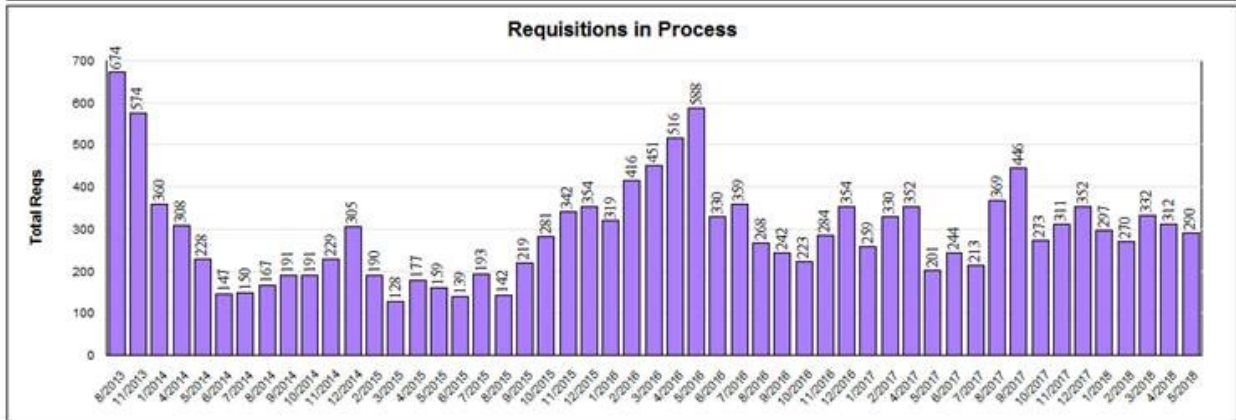
Policy support includes coordination with internal and external audit/review teams, updating policies and procedures, responding to public record requests, and other activities. The team also provides cost and price analysis in support of all major acquisitions.

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 original expiration date
- 90% of contract extensions to Board 180 days or more before expiration date
- 90% customer satisfaction
- 85% supplier 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

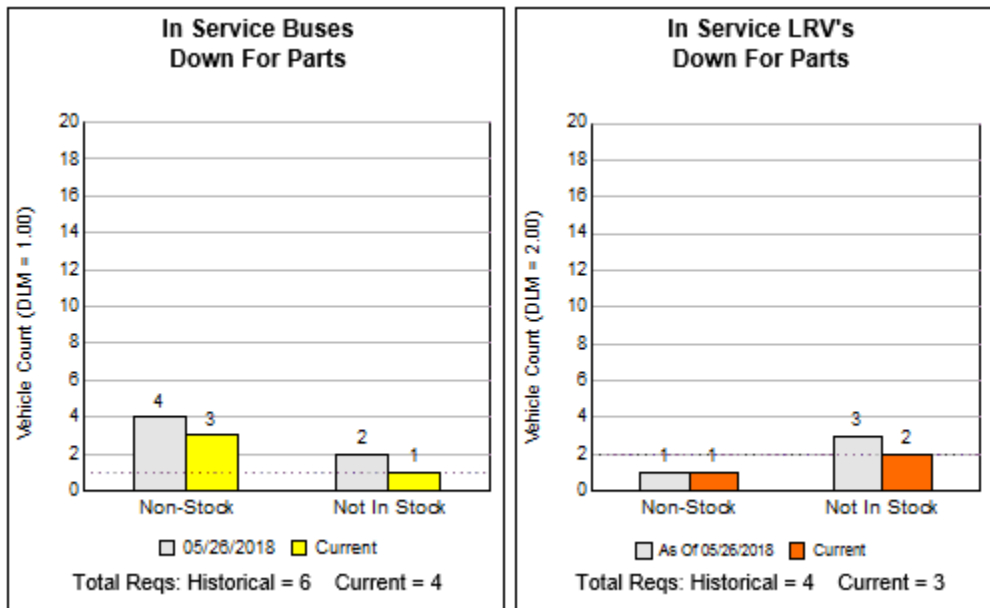
Exhibit 94 illustrates a reduction in transactions as a result of consolidating purchase activity under contracts and automating the delivery order process.

Exhibit 94
Requisitions in Process



DART and Procurement Department management receive an Executive Dashboard and a Procurement Dashboard on a daily basis. The dashboards identify measurements toward Key Performance Indicators (KPIs) on a weekly basis. Exhibit 95 shows the number of bus and light rail vehicles (LRVs) that are down for parts on a weekly basis.

Exhibit 95
Buses and LRVs Down for Parts



Workforce Leadership & Intergovernmental Relations

The Deputy Executive Director has oversight of Governmental Relations, Diversity, and Office of Policy and Strategy departments. The Deputy Executive Director reports to DART's President/Executive Director and is the management liaison for the Board's Administrative Committee for departmental matters.

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.

- *Civil Rights* 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.
- *Diversity and EEO* 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.
- *Employee and Labor Relations* is responsible for developing and managing DART's Personnel Manuals, assisting employees and management through the alternative dispute resolution process, conducting training to improve communications between employees and management, investigating formal and informal complaints, processing and resolving general grievances and complaints, coordinating disciplinary and corrective actions, coordinating Trial Board and Management Appeal Hearings, tracking and monitoring general grievances and complaints, ensuring adherence to labor policies, and working with employees and unions regarding labor and employee issues.

- *Outreach and Training* 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.

Office of Policy and Strategy

The Office of Policy and Strategy was created in FY 2014 to provide agency-wide coordination and consistent management of policies and related processes. The Vice President, Policy and Strategy, directs the overall activities of the Office.

Strategic Planning – 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.

In FY 2019, the Office of Policy and Strategy will continue to refine processes to ensure that strategic planning, tracking, reporting, and revision is timely completed in meaningful ways. In support of the Strategic Plan, the Office will design, develop, lead, and facilitate projects and teams that plan, communicate, and implement strategic initiatives that are aligned with or that need to be brought into alignment with DART's Strategic Plan.

Policy Analysis, Review and Coordination – 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.

Support for Strategic Initiatives – The Office of Policy and Strategy 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.

Records Management – Responsibility for records management as contemplated by Board Policy is under the leadership of the Office of Policy and Strategy. Key activities in FY 2019 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.

Exhibit 96 illustrates the KPIs tracked for Financial Reporting.

Exhibit 96
Financial Reporting KPIs

<i>Key Performance Indicators</i>	FY 2015	FY 2016	FY 2017	Q3 FY 2018
<i>Monthly Close/On-Time Percentage (Avg. 5 days)</i>	90%	90%	100%	100%
<i>Number of Financial Statements Issued</i>	36	40	41	32
<i>Financial Statement Issuance/On-Time Percentage</i>	100%	100%	100%	100%
<i>Clean Opinion on Audited Financials</i>	100%	100%	100%	100%
<i>Received GFOA Certificate of Achievement for Excellence in Reporting</i>	Yes	Yes	Yes	N/A

The Payroll Section is responsible for ensuring that all employees are paid accurately, timely, and in compliance with DART policies and state and federal regulations. This section is also responsible for ensuring that all statutory and non-statutory deductions are made, filing of employee-related taxes, W-2 issuance, and maintaining employee payment records and reports required by DART 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 97 highlights the KPIs for the Payroll section:

Exhibit 97

Payroll Processing				
Key Performance Indicator	FY2015	FY2016	FY2017	Q3 FY 2018
Number of out-of-cycle checks	929	749	1,058	853
Total number of checks	104,713	109,492	108,638	80,830
Percent on time statutory reporting	100%	100%	100%	100%
Service requests volume	3,579	3,201	3,337	3,019
Average service request turn-around time in days	11.2	7.8	5.5	6.2

The Accounts Payable section includes vendor payment and administration of the corporate card program. This section is responsible for ensuring that vendor payments are made accurately, timely, and in compliance with DART payment policies and the prompt payment act, invoice payment resolution, the escheatment process, and 1099 issuance. Accounts Payable is also responsible for the DART Corporate Card program including the administrative functions.

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 98 and 99 highlight KPIs for the Accounts Payable section.

Exhibit 98
Accounts Payable Payments Processed

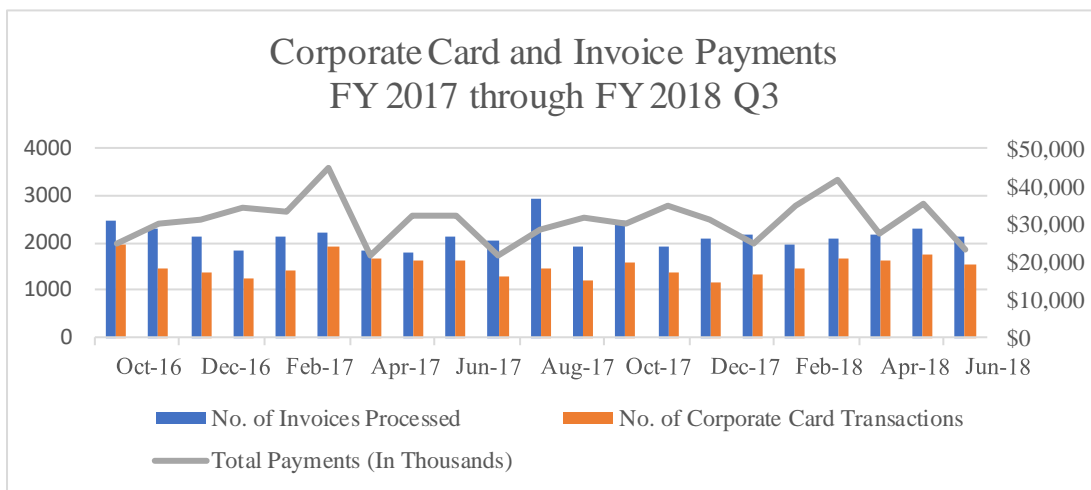
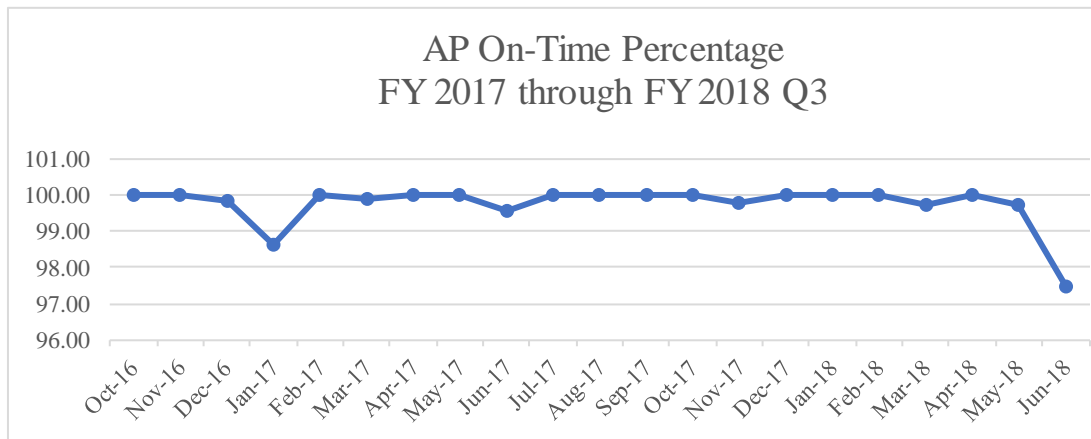


Exhibit 99
Accounts Payable On-Time Payments Record



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 2019 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

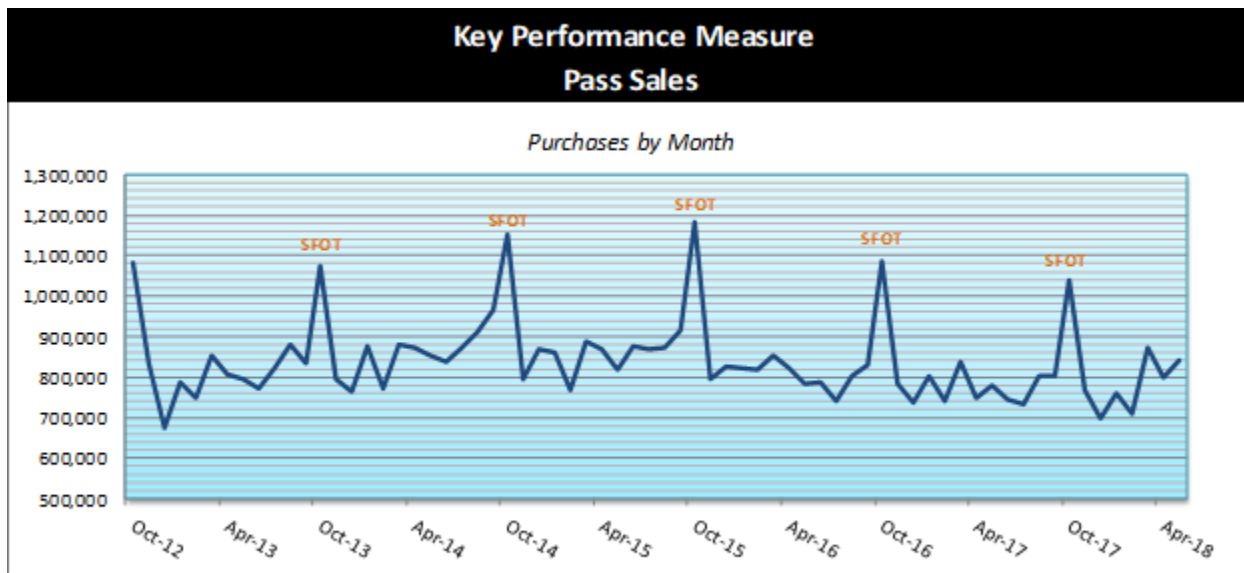
Revenue Division

This division consists of Revenue Administration and Revenue Systems.

Revenue Administration 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 100 shows the fare media purchases by month from October 2012 to April 2018.

Exhibit 100
Fare Media Purchases by Month



SFOT - State Fair of Texas

The Revenue Systems 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

The Revenue Systems 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 personnel investigate 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 101 is an example of the Division Level Measurements for the revenue technicians assigned to TVM service and fare equipment maintenance personnel.

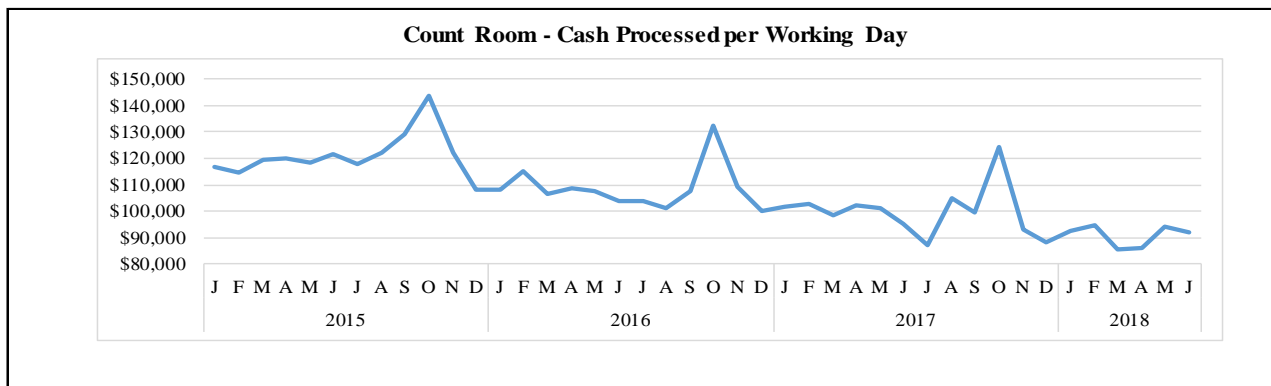
Exhibit 101
Division Level Measurement Scorecard – Revenue – TVM

2018 Goals					2018 Results			
Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4
11.42	11.42	11.42	11.42	Complaints/100k Passengers	10.63	10.20	9.47	
10.43	10.43	10.43	10.43		Unscheduled Absences (Per Person Annually)	21.14	7.46	11.09
105,904	98,148	101,082	100,371	Average Weekday Ridership - Rail	98,691	86,502	93,231	
99.24%	99.24%	99.24%	99.24%	% TVMs In Service	96.67%	97.11%	96.59%	
3,212	3,212	3,212	3,212	Service Calls Completed	3,187	2,507	2,595	
184	184	184	184	PMIs Completed	200	135	197	

2018 Goals					2018 Results			
Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4
314	287	286	287	Complaints	279	227	225	
2,754,146	2,516,838	2,506,371	2,515,911	Ridership - Rail	2,588,763	2,233,066	2,373,466	
17.39	17.39	17.39	17.39	Unsched. Absences 8 Hr. Days	31.29	11.80	16.21	
20	20	20	20	Employees	19	19	19	
3,212	3,212	3,212	3,212	Service Calls Completed	3,187	2,507	2,595	
184	184	184	184	PMIs Completed	200	135	197	

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 102).

Exhibit 102
Count Room Productivity



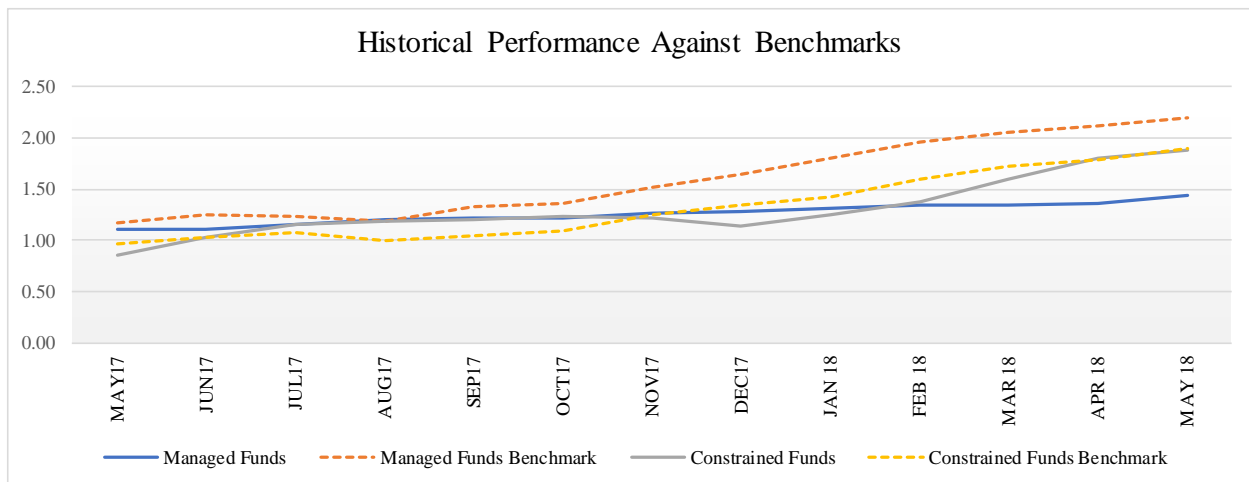
Treasury Division

This division has responsibility for cash and investment management, debt management, and securing and monitoring grants.

The Treasury Division maintains strict compliance with the Texas Public Funds Investment Act (PFIA) and DART Board resolutions for allowable investment types, qualitative ratings, and both weighted average maturities and maximum individual maturities by actively managing the various portfolios. All available cash proceeds are invested at all times and exceed the benchmark yields for all investment categories. PFIA compliance is monitored through an extensive series of reports prepared daily, monthly, and quarterly. 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 produced by the Treasury Division.

Treasury staff also maintains tight controls over all cash held by the depository bank or any other institution holding funds on DART’s behalf. They maintain strict compliance with debt covenants, make all debt payments on time, and stay informed on industry changes resulting from economic factors or actions by Congress. See Exhibit 103 for an example of the information tracked by the Treasury Division.

Exhibit 103
Fund Yields



The Division's Grants Section handles all federal, state, and miscellaneous sources of funding and ensures compliance with the regulations associated with each. 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 Section takes the lead on all external audits of federal and state funds and coordinates the responses to requests for information. Employees in this section also track expenditures that are funded by bond issuances, commercial paper, and designated funding sources such as the operations and maintenance of the Dallas Streetcar.



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).
- 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 Medical Compliance Section 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 Risk Management 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.

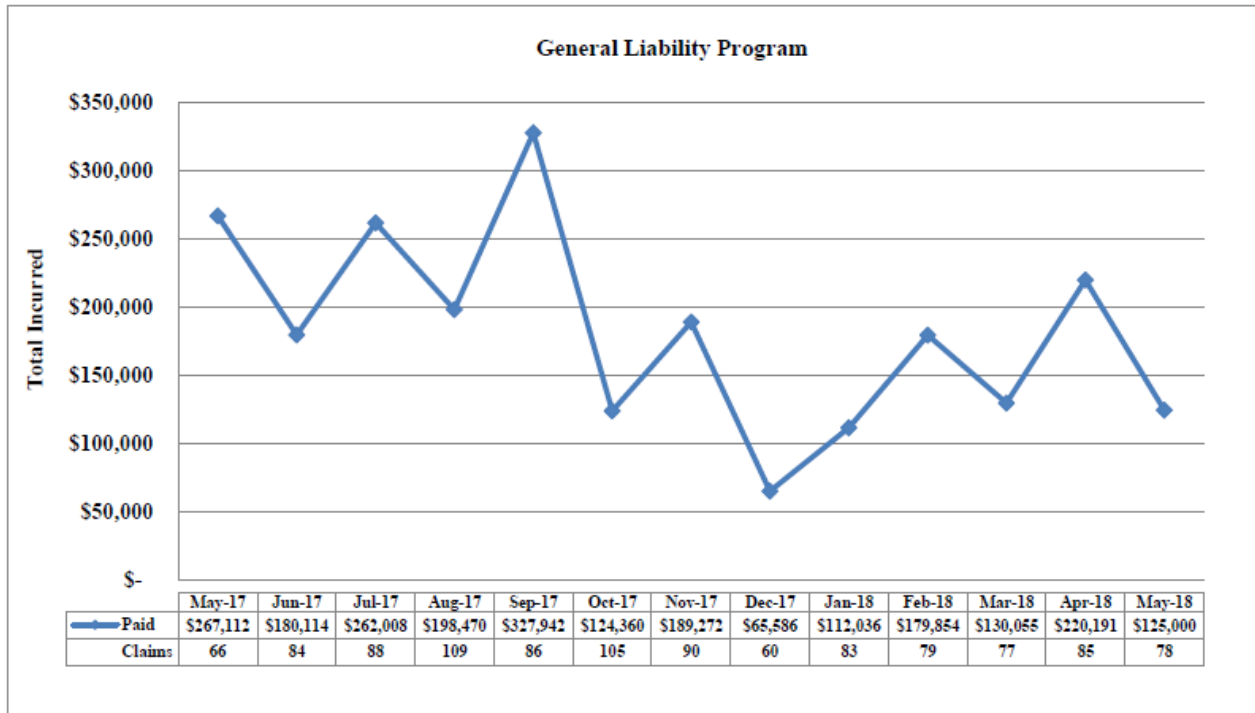
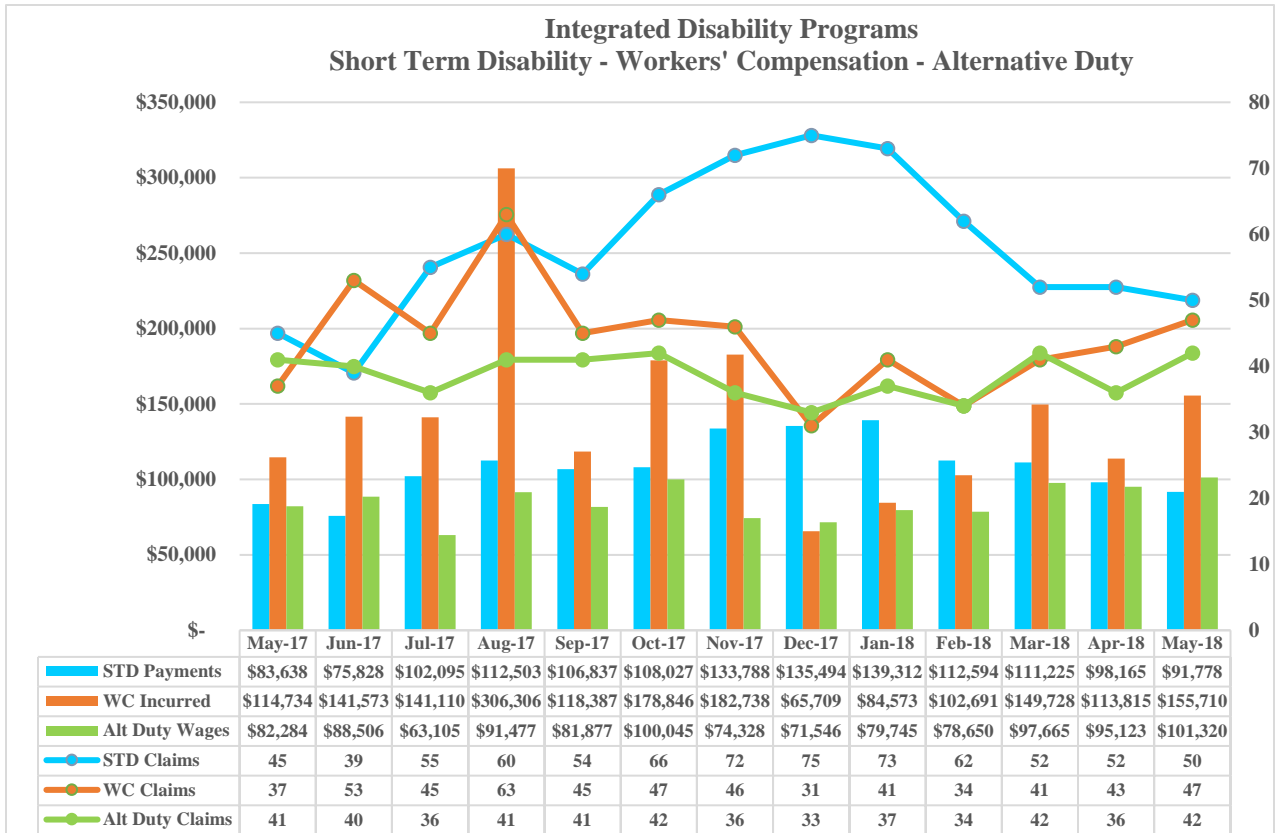
The Division’s primary objectives are to:

- 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 of the cost of damage to property and injuries to employees by responsible third parties,
- supporting hiring initiatives and DOT requirements, and
- equitable risk allocation mechanisms to ensure that the Agency’s cost of risk stays within industry norms.



Exhibits 104, on the following page, illustrates the rolling annual trends for short term disability and general liability.

Exhibit 104
Rolling Annual Trends Short Term Disability and General Liability





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Reference

A. BUSINESS PLAN DEVELOPMENT

Purpose of Business Plan

The FY 2019 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 2019 Annual Budget, the FY 2019 Twenty-Year Financial Plan, the Transit System Plan, and the Agency's Strategic Plan. The draft resolutions shown in Exhibit 108 approve the funding levels for the FY 2019 Annual Budget and at Exhibit 109 approve the FY 2019 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 105 highlights the business planning, compilation, and approval process used at DART.

Exhibit 105
Business Plan Development Schedule

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

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.

Capital Budgeting – 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

Annual Budget – 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.

Twenty-Year Financial Plan – 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.

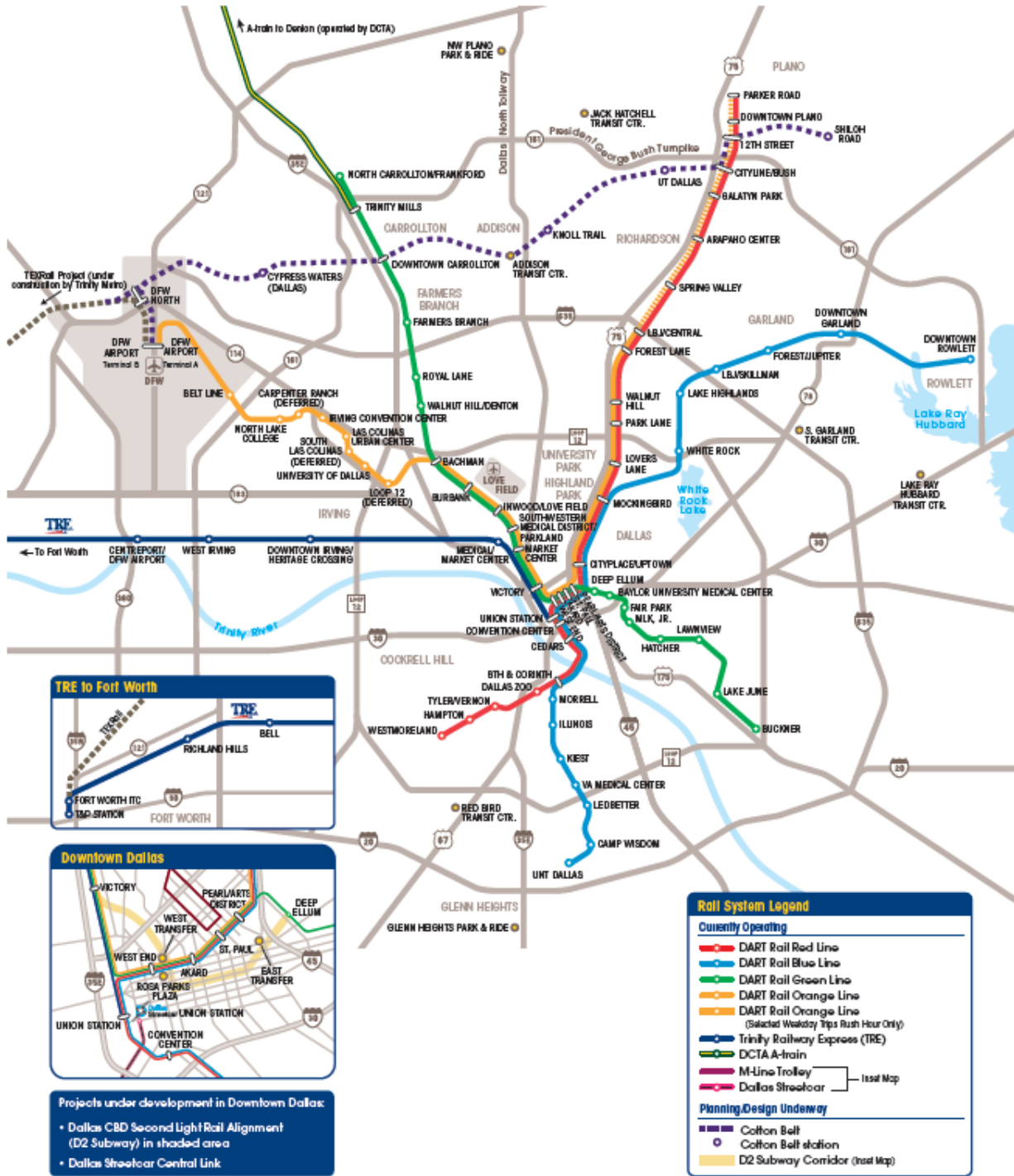
Service Plan and Transit System Plan – DART has a Service Plan and a Transit System Plan. The Service Plan is required by DART's legislation and describes, in legal terms, where DART's facilities and rail alignments are physically located. DART's Transit System Plan is a long-range planning tool that 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.

2030 Transit System Plan (TSP) – 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 2040 Transit System Plan currently under development.

Exhibit 106 is the map of DART Current and Future Services.

Exhibit 106

DART Current and Future Rail Services



REV SEP 2018

2040 Transit System Plan – 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 2040 Plan along with any new projects that may be identified. The Draft 2040 Plan is expected to be approved by the Board in FY 2018 and will be a financially constrained plan. A Final 2040 Plan will be presented to the Board of Directors following Board approval to distribute the plan for public and stakeholder comment.

Program of Interrelated Projects (Core Capacity) – Three projects that will increase core capacity and maximize the overall capacity of the existing DART light rail system within the Dallas central business district (CBD) were incorporated in DART’s Twenty-Year Financial Plan beginning in FY 2015. These projects are:

- Platform extensions for the twenty-eight oldest stations in the light rail system along the Red and Blue lines to accommodate three-car trains;
- The second downtown light rail alignment (known as D2), for which a locally preferred alternative (LPA) was adopted in September 2015. Given recent support for a subway alignment, DART undertook alignment refinement in FY 2017 and a refined subway LPA was approved in September 2017; and
- Extension of the Dallas streetcar system through the CBD, linking the Oak Cliff and McKinney Avenue streetcar lines.

Cotton Belt – The FY 2016 Financial Plan included the development of rail service along the Cotton Belt corridor from Plano, through the North Dallas area, to DFW Airport. This service will connect with DART’s Green Line in Carrollton and the Red Line in Plano. Service was programmed to begin in 2035, but several regional sources of funds and scope modifications allowed for the FY 2017 Financial Plan to accelerate revenue service along the Cotton Belt Corridor to 2022. This plan requires confirmation of external funding sources and obtaining environmental clearance. DART has initiated an environmental impact statement and preliminary engineering to support this implementation timeline. Many communities through which the Cotton Belt rail corridor passes have expressed a strong support for an earlier service date.

Quarterly Operating and Financial Performance Reports – 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, DART.org.

Exhibit 107
Interrelationship of System Plan with Other Documents

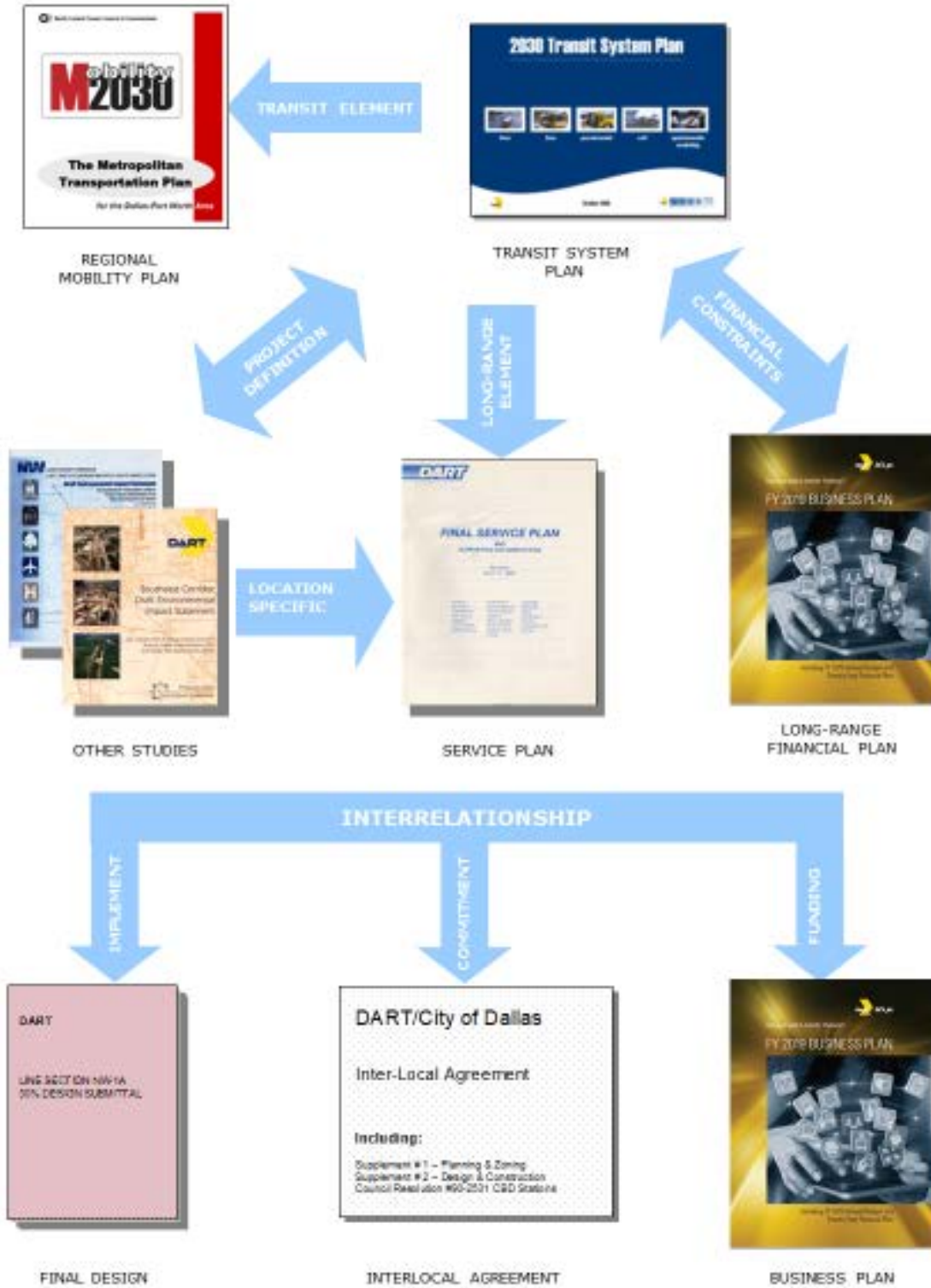


Exhibit 108

180102



RESOLUTION
of the
DALLAS AREA RAPID TRANSIT BOARD
(Executive Committee)

RESOLUTION**Approval of Fiscal Year (FY) 2019 Annual Budget**

WHEREAS, on May 8, 2018 (Resolution No. 180040), 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 2019 Annual Budget; and

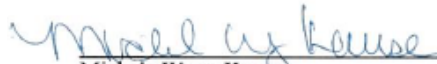
WHEREAS, the Board has been briefed on the assumptions used to prepare the FY 2019 Annual Budget; and

WHEREAS, the proposed FY 2019 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 2019 Annual Budget is approved in the amount of \$1,032,946,338.

Annual Operating Budget	\$544,265,823
Capital Budget	291,519,681
Debt Service Budget	197,160,834
Total FY 2019 Annual Budget	\$1,032,946,338

Approval of Fiscal Year (FY) 2019 Annual Budget

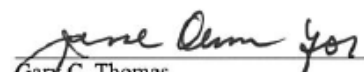

Michele Wong Krause
Secretary


Sue S. Bauman
Chair

APPROVED AS TO FORM:

ATTEST


Gene Gamez
Interim General Counsel


Gary C. Thomas
President/Executive Director

September 18, 2018
Date

Exhibit 109

180103



RESOLUTION
of the
DALLAS AREA RAPID TRANSIT BOARD *RESOLUTION*
(Executive Committee)

Approval of Fiscal Year (FY) 2019 Twenty-Year Financial Plan

WHEREAS, on May 8, 2018 (Resolution No. 180040), 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 2019 Twenty-Year Financial Plan; and

WHEREAS, all Financial Standards have been met in the compilation of the FY 2019 Twenty-Year Financial Plan; and

WHEREAS, the Board has been briefed on the assumptions used to prepare the FY 2019 Twenty-Year Financial Plan; and

WHEREAS, the proposed FY 2019 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 2019 Twenty-Year Financial Plan as shown in Exhibit 1 is approved.


Michele Wong Krause
Secretary

APPROVED AS TO FORM:


Gene Gamez
Interim General Counsel


Sue S. Bauman
Chair

ATTEST:


Gary C. Thomas
President/Executive Director

September 18, 2018
Date

The FY 2019 Twenty-year Financial is shown on pages 28 and 29 as Exhibit 9 in this document.

B. FINANCIAL POLICIES

Board Policies – 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.

Financial Standards – 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 112 highlights which Financial Standards correlate with the major sources and uses of cash included in the Annual Budget and Twenty-Year Financial Plan.

Exhibit 110

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 111
FY 2019 Financial Standards
Resolution No. 180040

FY 2019 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 2019 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.

FY 2019 Financial Standards – General (cont.)

- 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.
- 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. Once the \$50 million maximum balance is reached, all interest from the reserve and all future sales tax collections that exceed the budget will be placed into a Capital Project Reserve to help ensure that DART can meet its capital program commitments. 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 2019 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. Management shall use a consistent methodology for computing net administrative costs and direct costs. The administrative ratio (administrative costs minus administrative revenues divided by direct costs) may not increase for two consecutive years and shall not be higher than 12.0%.
- 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.

FY 2019 Financial Standards – Business Planning Parameters (cont'd)

- 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 contracts are awarded to determine if the assumptions are reasonable. Non-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 2019 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 "AA" 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 112 shows the linkages between DART's Financial Standards and its financial information.

Exhibit 112
Relationship of Financial Standards to
Sources and Uses of Cash

Description	Where Covered
<u>Sources of Cash</u>	
Sales Taxes	FS-B1
Operating Revenue	FS-B2
Federal Funding	FS-B10
Debt	FS-D1 to D7
<u>Uses of Cash</u>	
<u>Operating Budget</u>	
Fixed Route Service	FS-B3 & B4
Administrative Costs	FS-B6
Total Expenses	FS-B5
<u>Capital Budget</u>	
Gen. Mobility-Road Improvements	FS-B7
Start-up/Capital Planning Costs	FS-B8
Capital Projects	FS-B8, FS-B9
<u>Net Debt Service Budget</u>	FS-D1 to D7
Cash Reserves	FS-G5 & G7
Working Cash Requirement	FS-G6



C. SALES TAX

Exhibits 113 and 114 provide sales tax information for DART and for the cities within DART’s Service Area.

Exhibit 113
Sales Tax History, FY 2008 – FY 2018
(in Millions)

	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18
Oct	\$31.4	\$30.2	\$28.7	\$29.0	\$33.3	\$35.4	\$38.0	\$41.3	\$42.2	\$43.3	\$46.7
Nov	31.6	27.3	26.6	30.2	31.7	32.1	36.3	38.1	40.4	43.3	46.7
Dec	44.8	43.5	41.7	43.0	46.1	47.8	50.2	55.9	57.5	59.7	60.2
Jan	31.4	27.2	28.3	29.1	30.8	35.5	35.0	38.4	40.3	43.5	44.9
Feb	29.5	27.0	25.8	27.5	31.8	32.9	36.1	37.0	39.8	42.1	42.3
Mar	37.9	35.8	36.7	39.7	39.5	41.1	44.5	49.5	51.8	53.7	57.2
Apr	32.0	29.7	29.0	31.9	33.4	35.8	39.2	41.8	41.9	42.9	47.5
May	33.9	29.6	29.7	31.1	33.9	37.9	36.8	39.6	42.7	47.0	50.9
Jun	41.6	37.3	37.3	39.5	40.9	43.0	44.7	50.1	51.9	52.2	54.6
Jul	33.3	28.8	27.8	33.3	37.2	36.5	39.7	39.3	42.3	43.6	
Aug	31.4	27.7	28.7	29.6	34.8	36.0	40.1	39.8	44.3	45.1	
Sep	37.4	33.4	35.3	38.4	39.1	41.7	45.2	47.9	50.0	50.2	
FY Total	\$389.1	\$416.1	\$377.6	\$375.5	\$402.4	\$432.5	\$455.7	\$485.8	\$545.1	\$566.5	\$451.0



Exhibit 114
Sales Tax Collections by City Since Inception (\$000s)

(January 1984 - June 2018)								
FISCAL YEAR	DART	ADDISON	BUCKINGHAM*	CARROLLTON	COCKRELL HILL	DALLAS	FARMERS BRANCH	GARLAND
Yrs. 1984 to 1999	\$3,429,800	\$89,685	\$1,407	\$152,503	\$941	\$1,986,023	\$128,229	\$172,391
2000	373,781	9,430	0	17,995	37	201,494	13,660	17,138
2001	357,883	9,060	0	17,584	45	193,830	11,793	16,763
2002	325,545	8,186	0	15,833	35	176,904	10,172	15,673
2003	311,818	8,074	0	16,139	45	165,809	9,046	15,150
2004	332,396	8,546	0	17,207	67	176,897	9,411	15,704
2005	341,757	8,733	0	17,528	65	177,708	9,686	16,148
2006	370,519	8,765	0	18,361	165	190,406	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	12,944	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 YTD	450,978	12,429	0	29,762	353	223,057	10,592	20,630
TOTAL	11,259,443	281,568	1,407	570,764	4,598	5,973,648	348,489	543,921
% of 2018		2.76%	0.00%	6.60%	0.08%	49.46%	2.35%	4.57%
% of Total		2.50%	0.01%	5.07%	0.04%	53.05%	3.10%	4.83%
FISCAL YEAR	GLENN HEIGHTS	HIGHLAND PARK	IRVING	PLANO	RICHARDSON*	ROWLETT	UNIVERSITY PARK	COPPELL/ FLOWER MOUND
Yrs. 1984 to 1999	\$698	\$16,724	\$341,255	\$299,315	\$200,017	\$13,744	\$23,836	\$2,991
2000	102	1,488	41,643	43,639	23,175	1,789	2,191	0
2001	113	1,517	37,480	43,893	21,441	2,232	2,131	0
2002	112	1,459	34,078	41,556	17,186	2,406	1,947	0
2003	133	1,422	32,652	41,899	17,197	2,491	1,761	0
2004	158	1,557	34,630	45,208	18,402	2,825	1,782	0
2005	125	1,743	36,805	46,826	19,577	3,342	3,471	0
2006	175	1,857	39,697	53,949	18,831	6,560	2,810	0
2007	198	2,012	41,717	56,365	21,171	5,574	2,800	0
2008	221	2,250	47,195	59,440	21,480	5,498	2,902	0
2009	208	2,122	43,870	52,547	21,239	5,264	2,690	0
2010	237	2,240	41,005	54,756	23,174	5,780	2,858	0
2011	333	2,418	45,300	59,389	23,112	5,443	3,247	0
2012	353	2,769	45,852	67,616	23,722	4,662	3,118	0
2013	398	2,814	50,191	66,404	25,556	5,154	3,210	0
2014	436	3,272	54,525	71,695	28,481	5,395	3,639	0
2015	493	3,351	60,124	73,711	29,757	5,732	3,833	0
2016	506	3,466	62,225	76,055	31,767	6,471	3,871	0
2017	517	3,360	63,792	79,350	34,763	6,656	4,053	0
2018 YTD	419	3,119	48,681	66,799	26,623	5,159	3,354	0
TOTAL	5,891	60,617	1,197,234	1,393,014	643,678	101,607	75,398	2,989
% of 2018	0.09%	0.69%	10.79%	14.81%	5.90%	1.14%	0.74%	0
% of Total	0.05%	0.54%	10.63%	12.37%	5.72%	0.90%	0.67%	0.03%

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 115 is DART's Annual Debt Service Schedule as of September 30, 2018.

Exhibit 115
DART Annual Debt Service Schedule

 Debt Service Schedule*				
Fiscal Year	Principal	Interest	BABS Reimbursement	Total Net Debt Service
FY19	\$ 58,291,473	\$ 161,871,104	\$ (28,451,773)	\$ 191,710,804
FY20	59,974,081	159,274,053	(28,451,773)	190,796,361
FY21	62,688,511	156,552,516	(28,451,773)	190,789,254
FY22	65,449,816	153,793,258	(28,451,773)	190,791,301
FY23	68,358,050	150,878,775	(28,451,773)	190,785,052
FY24	72,683,270	147,499,949	(30,200,537)	189,982,682
FY25	73,710,533	143,891,938	(29,666,216)	187,936,255
FY26	76,734,899	140,312,954	(29,109,750)	187,938,103
FY27	79,126,429	136,534,062	(28,530,210)	187,130,281
FY28	82,450,186	132,611,470	(27,926,666)	187,134,990
FY29	86,286,235	128,275,249	(27,298,079)	187,263,405
FY30	90,399,642	123,499,639	(26,643,411)	187,255,870
FY31	94,750,477	118,473,533	(25,961,621)	187,262,389
FY32	99,303,809	113,209,333	(25,251,563)	187,261,579
FY33	103,994,712	107,769,151	(24,512,088)	187,251,775
FY34	108,498,260	102,129,313	(23,741,938)	186,885,635
FY35	113,589,531	96,228,106	(22,939,855)	186,877,782
FY36	118,753,602	90,239,389	(22,121,945)	186,871,046
FY37	124,045,557	84,119,780	(21,288,174)	186,877,163
FY38	124,245,479	77,848,562	(19,985,127)	182,108,914
FY39	128,403,454	71,441,105	(18,197,365)	181,647,194
FY40	135,404,571	64,627,927	(16,345,026)	183,687,472
FY41	140,728,921	57,371,140	(14,425,788)	183,674,273
FY42	146,266,600	49,831,759	(12,437,276)	183,661,083
FY43	152,067,702	41,961,791	(10,366,317)	183,663,176
FY44	149,822,329	33,956,357	(8,209,613)	175,569,073
FY45	156,090,582	25,837,003	(5,974,372)	175,953,213
FY46	104,697,567	19,123,810	(4,261,324)	119,560,053
FY47	108,768,394	13,871,496	(3,091,443)	119,548,447
FY48	113,008,172	8,413,812	(1,882,892)	119,539,092
FY49	112,330,000	2,816,190	(634,398)	114,511,792
	\$ 3,210,922,845	\$ 2,914,264,524	\$ (623,261,860)	\$ 5,501,925,508

*Table does not include projected commercial paper expenditures

Exhibit 116 is a list of DART's long-term bond issuance credit ratings:

Exhibit 116
Long-Term Bond Credit Ratings

	Standard & Poor's Rating Services	Moody's Investors Services	Fitch Ratings
Series 2007	AA+	Aa2	AA-
Series 2008	AA+	Aa2	AA-
Series 2009	AAA	Aa2	No rating sought
Series 2010	AA+	Aa2	No rating sought
Series 2012	AA+	Aa2	No rating sought
Series TIFIA	AA+	Aa2	No rating sought
Series 2014	AA+	Aa2	No rating sought
Series 2015	AA+	Aa2	No rating sought
Series 2016A	AA+	Aa2	No rating sought
Series 2016B	AA+	Aa2	No rating sought

Exhibit 117 shows DART's weighted average interest rate on long-term debt as of September 30, 2018.

Exhibit 117
Weighted Average Interest Rate

Series	All-In Rate At Issue	Remaining Principal	Final Pmnt Date
Bond Principal Outstanding & Rates			
2007	4.492%	\$ 118,395,000	12/1/2032
2008	4.973%	\$ 9,400,000	12/1/2018
2009A	3.957%	\$ 18,765,000	12/1/2018
2009B *	4.010%	\$ 829,615,000	12/1/2044
2010A	2.740%	\$ 57,230,000	12/1/2023
2010B *	3.260%	\$ 729,390,000	12/1/2048
2012	3.513%	\$ 116,490,000	12/1/2042
2012A	2.910%	\$ 100,877,845	12/1/2047
2014A	3.215%	\$ 367,370,000	12/1/2036
2014B	3.921%	\$ 46,555,000	12/1/2043
2015	2.090%	\$ 105,405,000	12/1/2027
2016A	3.780%	\$ 482,530,000	12/1/2048
2016B	2.912%	\$ 228,900,000	12/1/2038
Weighted Average	3.517%	\$ 3,210,922,845	

* Build America Bonds subject to federal subsidy changes.

**E. FARES****DART Fare Collection**

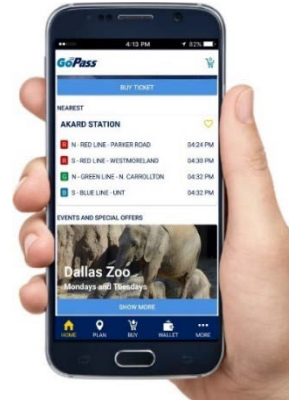
DART entered into an interlocal agreement with the City of Dallas to manage and operate the public transportation services known as Dallas Transit System (DTS), empowering the DART Board to establish fares for any and all services provided. On September 18, 1983, the interim DART Board called for a public 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 118. DART's current fare structure is shown at Exhibit 119.

Exhibit 118
DART Fare Structure History

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.

Mobile Ticketing (GoPassSM)

DART has successfully implemented a mobile ticketing product called GoPass that permits customers to purchase tickets and download them to their phones, obtain trip plans and status of buses and trains, and receive information about area events – even combine the purchase of a transit pass to the purchase of tickets for those events! The mobile application (GoPass) developed by Danish software vendor Unwire represents the first step towards a cashless fare solution for the Dallas/Fort Worth region. This mobile ticketing application allows riders to buy tickets in advance at their convenience using a web-enabled mobile phone, avoiding the need to deposit cash into a farebox or use a ticket vending machine to purchase tickets. GoPass went live in September 2013.



Passengers are able to purchase tickets for DART Rail and buses, Trinity Metro buses, Denton County Transportation Authority buses and rail, and the Trinity Railway Express (TRE). GoPass also includes a trip planning feature which allows customers the ability to plan their trips in the palm of their hand while also taking advantage of special events and offers occurring near transit facilities. The application permits users to buy bundled tickets such as an admissions ticket to the State Fair of Texas with a transit pass to the venue. GoPass has since deployed annual and semester passes for corporate, college, and university clients.

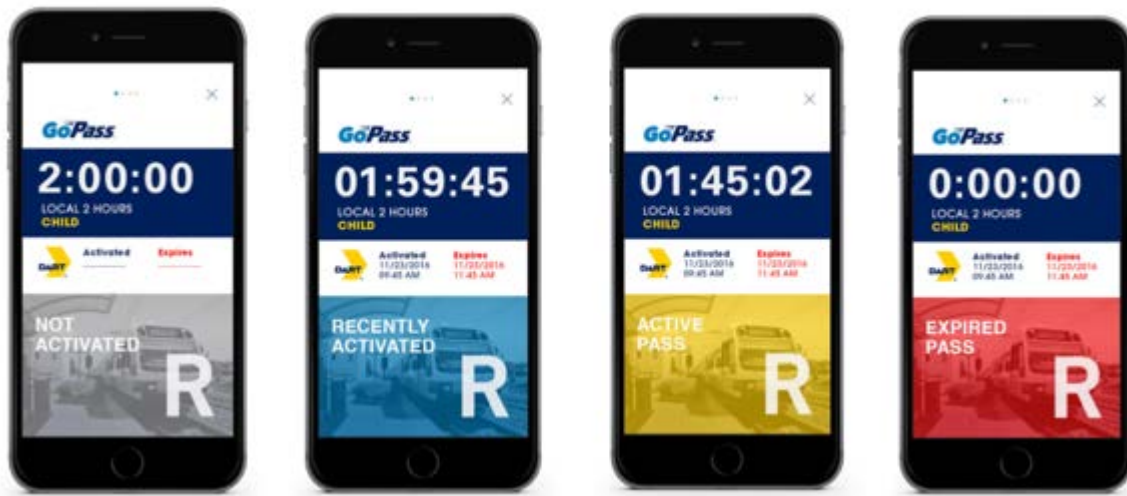


In addition to product features, the mobile application provides invaluable means for checking and validating various fares. Each ticket on the mobile phone displays a color-coded image indicating the validity of the ticket allowing bus operators and fare enforcement personnel a more precise means for checking fares. A barcode also appears on the back side of the ticket for scanning. A validator will be installed on buses and at platforms in the near future to assist with authenticating tickets with ease.

Payment System

DART has partnered with Vix Technologies, a system integration firm, in August 2015 to develop a better payment system utilizing new innovative technologies that permits customers to obtain and purchase fare media which is convenient and easy to understand.

This new system incorporates an account-based approach which utilizes best practices in the consumer and fare payment sectors. This electronic payment infrastructure will use third-party produced and distributed contactless payment cards. DART has contracted with PayNearMe to provide the retail distribution. PayNearMe has developed a retail network of hundreds of outlets in the region, for customers to purchase and reload the payment cards for use in the new account-based system. PayNearMe has joined with 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. The system began operation in August 2018. Future capabilities include the use of contactless bank cards and near field communication (NFC) enabled devices.



In May 2018, DART implemented enhanced mobile ticketing capabilities (GoPass 2.0), as part of a larger platform being developed by Vix Technology (see below). GoPass 2.0 features quicker loading speed, includes a system map, and allows customers to purchase mobile tickets with cash at hundreds of retail outlets (in partnership with PayNearMe – see below). Continuous improvements to the GoPass app will include real-time trip planning, upgraded and expanded interfaces with Uber, Lyft, taxi providers, and other on-demand services, as well as bike-share, scooter-share, and future mobility options. The roadmap of future enhancements includes direct customer feedback in the app, autoload capability for pass products, and additional payment options.

Proposed FY 2019 Fare Structure Amendment

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.

Fares: In general, the fare increase represents a 20% price increase except midday passes increase only 25¢, from \$1.75 to \$2.00. Also, two-hour passes will expand to passes that are good from start of service until noon and from noon until end of service. DART will re-introduce single-ride fare for bus service at \$2.50 (the price of 2-hour pass today). Generally, the new fare became effective August 2018.

New Payment System: The new payment system will include 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 will have 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 will deduct 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 will keep 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 119 shows the current fare structure.

Exhibit 119
DART Fare Structure
Effective – March 1, 2018 or as Indicated

Section 1: Product Fare Schedule

	<u>Effective Date</u>
	<u>August 1, 2018</u>
<u>Single Ride (1) (available only on bus)</u>	
Local	\$2.50
Reduced Fare	1.25
Regional	N/A
 <u>Single Ride - Paratransit</u>	 <u>March 1, 2019</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
 <u>A.M./P.M. (2)</u>	 <u>August 1, 2018</u>
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
<u>Two-Hour (replaced with A.M./P.M. Aug. 2018)</u>	



Exhibit 119 (Cont.)
 DART Fare Structure
 Effective – March 1, 2018 or as Indicated

Local	N/A
Regional	N/A
Reduced Fare (5)	N/A

Day

Local	6.00
Regional	12.00
Reduced (5)	3.00

Regional Day Pass Book of 10

	<u>Nov. 1, 2018</u>
Regional – Book of 10 (7)	36.00

Parenthetical numbers 1 through 8 refer to the footnotes following this schedule.

Section 1: Product Fare Schedule (cont.)

Effective Date
August 1, 2018

Week (not available after August 2018)

Local	N/A
Regional	N/A

Month

Local	\$96.00
Regional	192.00
Reduced Fare (5)	48.00
Lone Star – Local (8)	48.00
Lone Star – Regional (8)	96.00

March 1, 2019

Paratransit	\$112.00
-------------	----------

Annual

August 1, 2018

Local	\$960.00
Regional	1,920.00
Senior (regional)	576.00
Corporate – Local	720.00
Corporate – Regional	1,440.00



Exhibit 119 (cont'd)
DART Fare Structure
Effective – March 1, 2018 or as Indicated

Section 1: Product Fare Schedule (cont.)

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	192.00

System (Replaced with contract-based pricing. See #6 in Section 4 – Special Programs)

Two-Hour	N/A
Day – Local	N/A
Day – Regional	N/A
Month	N/A
Upgrade	N/A

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. Valid Monday through Friday only until March 1, 2018, full week thereafter.

Exhibit 119 (cont.)
DART Fare Structure
Effective – March 1, 2018 or as Indicated

Section 1: Product Fare Schedule (cont.)

- 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., Monday through Friday until August 1, 2018, then full week thereafter.
- 7. Regional Day Pass Book of 10 is available only to government, alternative schools, and non-profit 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. Replaced with DART contactless payment cards November 1, 2018, 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.

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.

Exhibit 119 (cont.)
 DART Fare Structure
 Effective – March 1, 2018 or as Indicated

Section 2: Free Fares (cont.)

- 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.)
- l) 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 Central Business District	Indefinite
Dallas Streetcar	Streetcar service between Dallas Union Station and Dallas Bishop Arts district	Indefinite
Love Link	Bus service connection from Dallas Love Field to DART Inwood/Love Field Station	Free service terminates upon implementation of DART contactless payment cards November 1, 2018.

Exhibit 119 (cont.)
DART Fare Structure
Effective – March 1, 2018 or as indicated

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, on-line, 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.

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 for GoPass, DART cards for fixed route service, and DART cards for Paratransit service is scheduled to become available no sooner than July 2018, August 2018, and March 2019, respectively.

Exhibit 119 (cont.)
DART Fare Structure
Effective – March 1, 2018 or as Indicated

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.

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 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%

Exhibit 119 (cont.)
DART Fare Structure
Effective – March 1, 2018 or as Indicated

Section 4: Special Programs (cont.)

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.
- 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.

Exhibit 119 (cont.)
DART Fare Structure
Effective – March 1, 2018 or as Indicated

Section 4: Special Programs (cont.)

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 120 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.

**Exhibit 120
Revenue by Fare Type Analysis**

Type of Fare	FY 2017 Actual Units	ACTUAL Actual Revenue	FY 2018 Actual Units	Projected Actual Revenue	FY 2019 Actual Units	Estimated Actual Revenue
Single Fare						
Local	-	\$ -	-	\$ -	-	\$ -
System	-	-	-	-	-	-
Regional	-	-	-	-	-	-
Reduced	-	-	-	-	-	-
Single Ride - Bus					867,408	2,168,520
Paratransit (book of ten)	31,328	939,840	24,894	746,807	24,571	859,869
Total Single Fare	31,328	\$ 939,840	24,894	\$ 746,807	891,979	\$ 3,028,389
AM/PM						
Local			-	\$ -	5,454,659	\$ 17,481,484
Regional			-	-	79,365	491,980
Reduced			-	-	1,266,388	1,899,583
Mesquite			-	-	85	318
High School			-	-	234,366	351,550
College/Trade			-	-	191,112	286,668
Total AM/PM			-	\$ -	7,225,976	\$ 20,511,583
2-Hour						
Local	3,785,876	\$ 9,464,689	3,465,091	\$ 8,662,728	-	\$ -
Regional	40,606	203,030	42,014	210,072	-	-
Reduced	730,510	913,138	659,382	824,228	-	-
Mesquite	194	679	67	234	-	-
High School	254,173	317,717	192,832	241,040	-	-
College/Trade	110,035	137,544	96,477	120,596	-	-
Total 2-Hour	4,921,394	\$ 11,036,796	4,455,863	\$ 10,058,898	-	\$ -
Midday						
Local	886,013	\$ 1,550,523	729,489	\$ 1,276,607	710,036	\$ 1,420,250
Regional	3,603	12,611	3,687	12,904	3,588	14,356
Total Midday	889,616	\$ 1,563,134	733,176	\$ 1,289,510	713,625	\$ 1,434,606
Day Passes						
Local	3,030,139	\$ 15,150,695	2,741,677	\$ 13,708,387	2,021,656	\$ 12,129,938
System	-	-	-	-	-	-
Regional	39,645	396,450	49,638	496,376	36,602	439,221
Reduced	981,883	2,454,708	846,428	2,116,070	624,139	1,872,416
High School	127,901	319,753	100,004	250,010	73,741	221,223
College/Trade	147,986	369,965	130,160	325,401	95,978	287,933
Mesquite	319	2,233	38	267	28	197
Vouchers (book of ten)	63,481	1,904,430	48,684	1,460,518	47,386	1,705,885
Total Day Passes	4,391,354	\$ 20,598,233	3,916,630	\$ 18,357,030	2,899,529	\$ 16,656,813
7-Day Passes						
Local	84,372	\$ 2,109,300	80,827	\$ 2,020,681	0	\$ -
System	-	-	-	-	-	-
Regional	689	34,450	571	28,554	0	0
Total 7-Day Passes	85,061	\$ 2,143,750	81,398	\$ 2,049,234	-	\$ -
Monthly Passes						
Local	111,121	\$ 8,889,680	107,888	\$ 8,631,051	105,011	\$ 10,081,068
System	-	-	-	-	-	-
Regional	2,450	392,000	2,308	369,342	2,247	431,391
Reduced	29,934	1,197,360	30,664	1,226,546	29,846	1,432,606
Mesquite	60	6,000	74	7,392	72	7,195
Lone Star - Local	29	1,160	44	1,745	42	2,038
Lone Star - Regional	4	160	14	553	13	1,291
High School	20,589	823,560	24,366	974,624	23,716	1,138,361
College/Trade	4,966	198,640	1,678	67,113	1,633	78,388
Total Monthly Passes	169,153	\$ 11,508,560	167,035	\$ 11,278,366	162,581	\$ 13,172,338
Annual Passes						
Local	172	\$ 61,301	146	\$ 119,128	142	\$ 136,422
System	-	-	-	-	-	-
Regional	7	3,002	5	7,867	5	9,344
Senior	109	16,840	0	0	0	0
Corporate Programs	13,528	9,351,303	12,584	9,123,773	12,248	9,780,377
Total Annual Passes	13,816	\$ 9,432,446	12,735	\$ 9,250,767	12,395	\$ 9,926,144
Other Programs						
Secondary/College Decals	36,288	\$ 2,029,085	47,395	\$ 1,141,471	46,131	\$ 1,362,348
Special Events	30,053	150,265	22,054	110,270	21,466	128,795
Total Other Programs	66,341	\$ 2,179,350	69,449	\$ 1,251,741	67,597	\$ 1,491,143
Total Pass Sales	10,568,063	59,402,110	9,461,180	\$ 54,282,354	11,973,682	\$ 66,221,015
Without Paratransit Coupons	10,536,735	\$ 58,462,270	9,436,287	\$ 53,535,547	11,949,111	\$ 65,361,146



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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 121 shows the revenue service dates for all of DART's LRT line segments.

Exhibit 121
LRT Revenue Service Dates

Corridor	Line	From	To	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 System Subtotal				20.0	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
Extension 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
Northwest 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
Southeast 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	
Total Miles/Stations in Operation*				93.0	64	

*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).

Bus ridership was trending down in FY 2018 by approximately 5.7%. The impact of expected gains from March service improvements had not occurred at the point this analysis was prepared, but looking ahead to FY 2019, these gains should help to somewhat offset losses resulting from the fare increases planned for August. Ridership should continue to increase slowly over the next several years with other service improvements. During FY 2019, DART will be implementing 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

LRT Ridership was trending down for FY 2018 by approximately 5.5%. 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 122, 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 123, 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 15% 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.

Exhibit 122
LRT Manual Counting

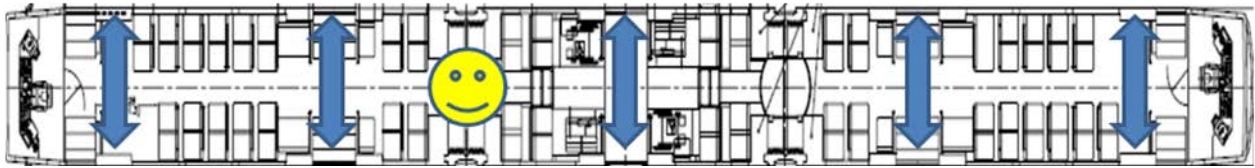


Exhibit 123
APCs



Commuter Rail (TRE) Ridership

TRE Ridership for FY 2018 was trending down by approximately 2.5%. Continued development around several stations is anticipated to further increase ridership. 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.



**Exhibit 124
Number of Employees by Function**

**DALLAS AREA RAPID TRANSIT
NUMBER OF EMPLOYEES BY FUNCTION
LAST TEN FISCAL YEARS**

FUNCTION	Fiscal Year									
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Transport Operations										
Bus Operations	1,534	1,539	1,537	1,451	1,487	1,522	1,470	1,511	1,556	1,576
Commuter Rail Operations	15	16	14	13	14	14	11	14	14	14
HOV Lane Operations*	71	69	67	63	63	55	3	-	-	-
Light Rail Operations	192	225	272	266	313	292	298	285	308	323
Paratransit Operations	67	71	67	64	63	59	55	59	60	64
Vanpool Operations	2	2	2	2	2	2	2	2	2	2
Total	1,881	1,922	1,959	1,859	1,942	1,944	1,839	1,871	1,940	1,979
Maintenance										
Vehicle Maintenance	609	626	695	657	630	738	733	710	722	701
Non-vehicle Maintenance	197	214	282	303	342	270	302	297	286	317
Total	806	840	977	960	972	1,008	1,035	1,007	1,008	1,018
Public Safety and Fare Enforcement	189	221	309	309	319	340	352	336	326	322
Operations Total	2,876	2,983	3,245	3,128	3,233	3,292	3,226	3,214	3,274	3,319
Administrative	433	447	435	398	359	369	353	352	374	386
Total	3,309	3,430	3,680	3,526	3,592	3,661	3,579	3,566	3,648	3,705

* HOV Lane is managed and operated by Texas Department of Transportation starting from October 1, 2013.

Note – Number of employees presented here is actual head count of full-time, temporary and part-time employees at the end of each fiscal year.

Source: DART's personnel data



Exhibit 125
Level of Service – Average Weekday

DALLAS AREA RAPID TRANSIT
LEVEL OF SERVICE - ANNUAL
LAST TEN FISCAL YEARS

	Fiscal Year									
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
PASSENGERS (RIDERSHIP)										
Bus	44,752,343	42,517,272	37,693,438	36,971,366	38,378,872	37,937,209	37,383,043	36,366,269	33,521,239	31,951,162
Light Rail	19,437,603	18,965,249	17,799,186	22,302,390	27,653,893	29,471,890	29,458,289	29,841,000	29,762,161	29,993,849
Commuter Rail*	2,717,162	2,738,856	2,432,174	2,388,407	2,252,140	2,092,782	2,283,895	2,173,653	2,054,001	2,097,999
Demand Response	910,157	1,038,686	1,135,997	1,140,165	1,141,015	832,271	468,964	396,672	334,880	339,483
Demand Response-Taxi	-	-	-	-	-	-	376,174	471,177	562,000	529,783
Vanpool	697,050	880,678	924,600	985,046	1,033,042	946,976	892,966	576,804	515,880	514,893
	68,514,315	66,140,741	59,985,395	63,787,374	70,458,962	71,281,128	70,863,331	69,825,575	66,750,161	65,427,169
REVENUE MILES										
Bus	27,781,344	27,547,241	27,323,659	25,727,585	27,144,101	27,250,680	26,785,827	27,343,486	27,501,704	27,557,587
Light Rail	5,250,953	5,007,225	4,941,155	6,897,909	7,560,914	9,123,662	9,262,430	9,721,956	9,829,532	10,244,288
Commuter Rail*	1,565,010	1,292,607	1,239,709	1,142,577	1,109,867	1,144,466	1,152,029	1,153,406	1,164,706	1,630,259
Demand Response	8,109,876	7,818,699	8,458,570	8,638,492	8,813,149	4,198,696	2,939,099	2,373,541	1,986,108	2,184,726
Demand Response-Taxi	-	-	-	-	-	3,357,344	4,144,030	4,975,169	5,614,299	5,513,890
Vanpool	2,750,115	3,294,533	3,505,934	3,816,639	3,919,736	3,632,332	3,426,983	2,695,134	3,061,242	3,087,735
	45,457,298	44,960,305	45,469,027	46,223,202	48,547,767	48,707,180	47,710,398	48,262,692	49,157,591	50,218,485
REVENUE HOURS										
Bus	2,028,437	2,021,031	2,009,486	1,953,954	2,010,240	2,100,705	2,077,637	2,148,462	2,159,309	2,174,863
Light Rail	244,033	235,160	248,127	348,543	381,882	451,717	453,951	468,421	473,059	491,854
Commuter Rail*	54,743	56,156	49,836	47,440	48,247	49,496	49,789	49,720	49,554	72,469
Demand Response	441,543	455,030	513,131	521,623	529,754	501,626	223,948	185,498	157,192	215,791
Demand Response-Taxi	-	-	-	-	-	-	241,078	276,047	328,413	308,413
Vanpool	67,076	80,354	87,648	95,416	97,993	90,808	85,675	69,437	80,758	80,844
	2,835,832	2,847,731	2,908,228	2,966,976	3,068,116	3,194,352	3,132,078	3,197,585	3,248,513	3,344,234
PASSENGERS PER REVENUE MILE										
Bus	1.61	1.54	1.38	1.44	1.41	1.39	1.40	1.33	1.22	1.16
Light Rail	3.70	3.79	3.60	3.23	3.66	3.23	3.18	3.07	3.03	2.93
Commuter Rail*	1.74	2.12	1.96	2.09	2.03	1.83	1.88	1.76	1.76	1.29
Demand Response	0.11	0.13	0.13	0.13	0.13	0.20	0.16	0.17	0.17	0.16
Demand Response-Taxi	-	-	-	-	-	-	0.09	0.09	0.10	0.10
Vanpool	0.25	0.27	0.26	0.26	0.26	0.26	0.26	0.21	0.17	0.17
	1.51	1.47	1.32	1.38	1.45	1.46	1.49	1.45	1.36	1.30
PASSENGERS PER REVENUE HOUR										
Bus	22.06	21.04	18.76	18.92	19.09	18.06	17.99	16.93	15.52	14.69
Light Rail	79.65	80.65	71.73	63.99	72.41	65.24	64.89	63.71	62.91	60.98
Commuter Rail*	49.63	48.77	48.80	50.35	46.68	42.28	45.87	43.72	41.45	28.95
Demand Response	2.06	2.28	2.21	2.19	2.15	1.66	2.09	2.14	2.13	1.57
Demand Response-Taxi	-	-	-	-	-	-	1.56	1.71	1.71	1.72
Vanpool	10.39	10.96	10.55	10.32	10.54	10.43	10.42	8.31	6.39	6.37
	24.16	23.23	20.63	21.50	22.96	22.31	22.63	21.84	20.55	19.56
Operating expense**	\$393,261	\$401,822	\$437,221	\$449,894	\$452,935	\$462,697	\$468,113	\$465,830	\$492,474	\$506,133

* Commuter Rail service information shown here includes information reported to the National Transit Database by both DART and The Fort Worth Transportation Authority.

**Operating expense does not include depreciation and amortization, interest expense and non-operating expenses.

Source: National Transit Database

Exhibit 126
Ridership

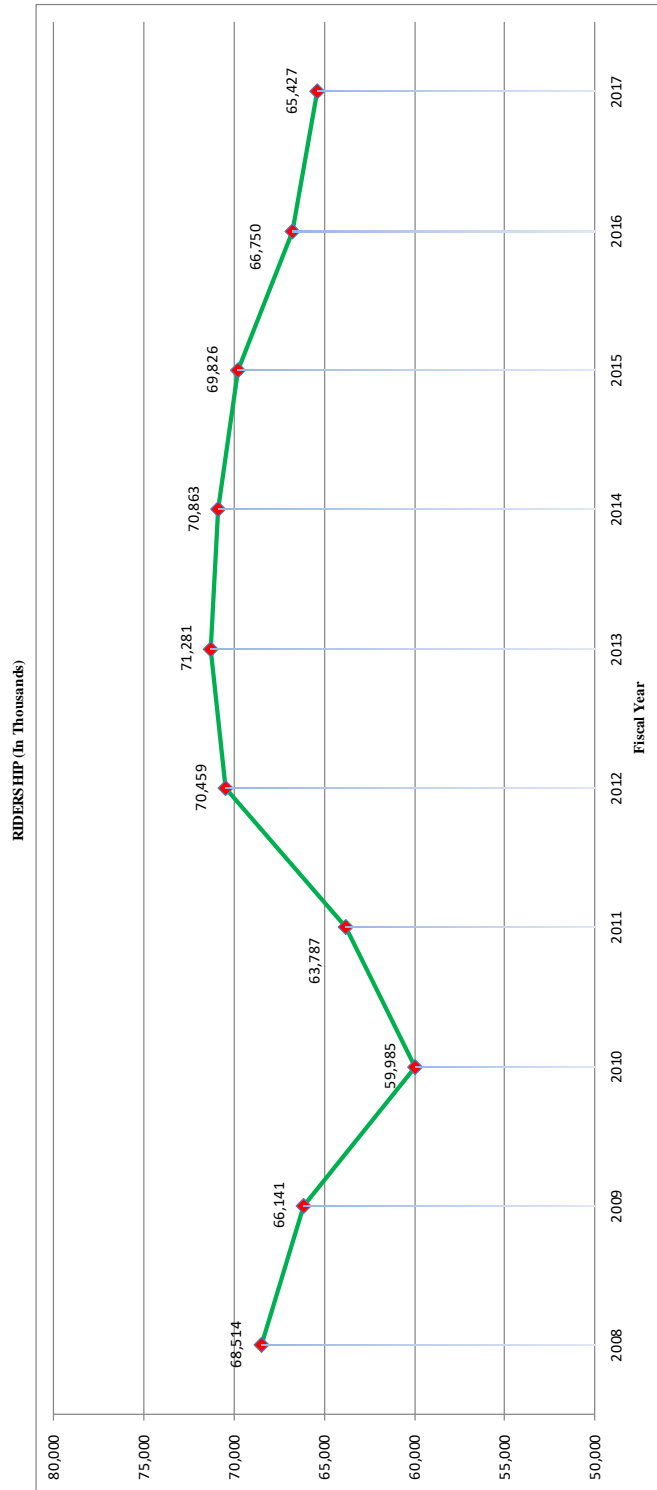




Exhibit 127
Revenue Miles

DALLAS AREA RAPID TRANSIT
REVENUE MILES
LAST TEN FISCAL YEARS

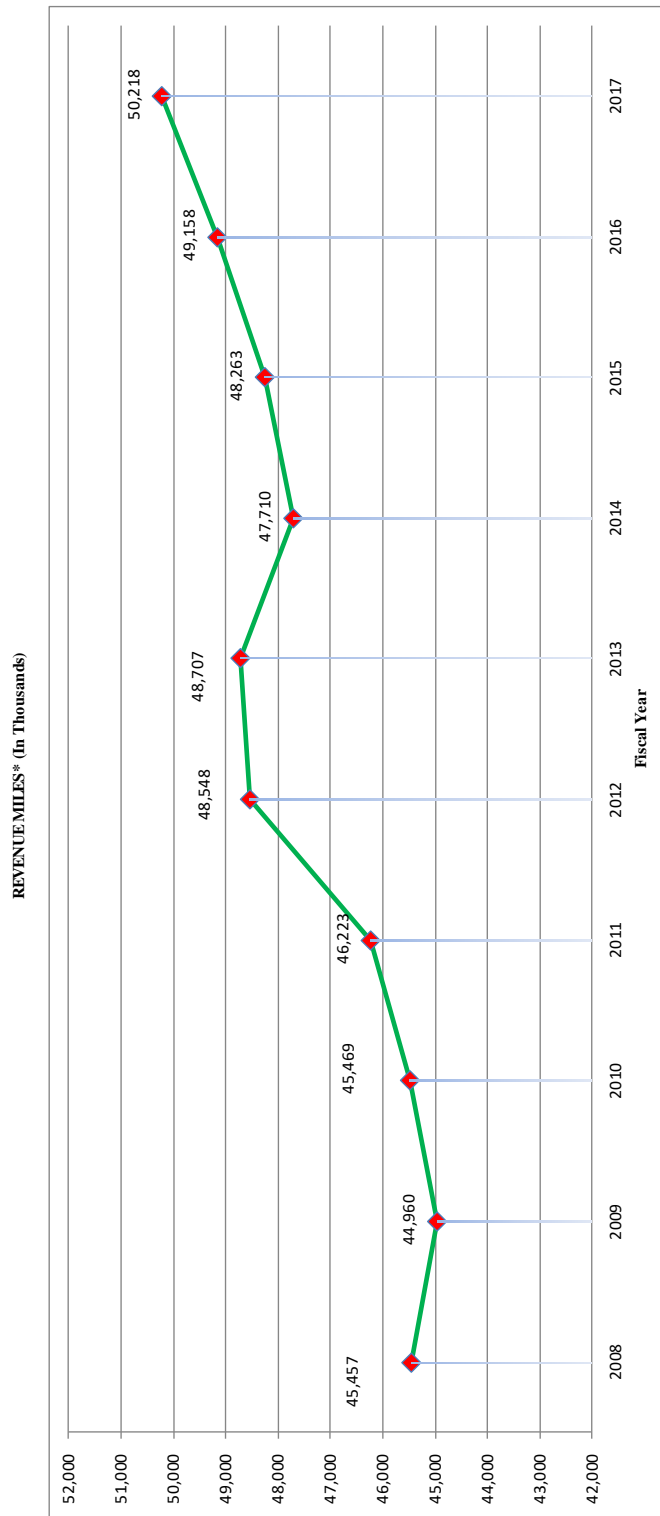


Exhibit 128
Revenue Hours

DALLAS AREA RAPID TRANSIT
REVENUE HOURS
LAST TEN FISCAL YEARS

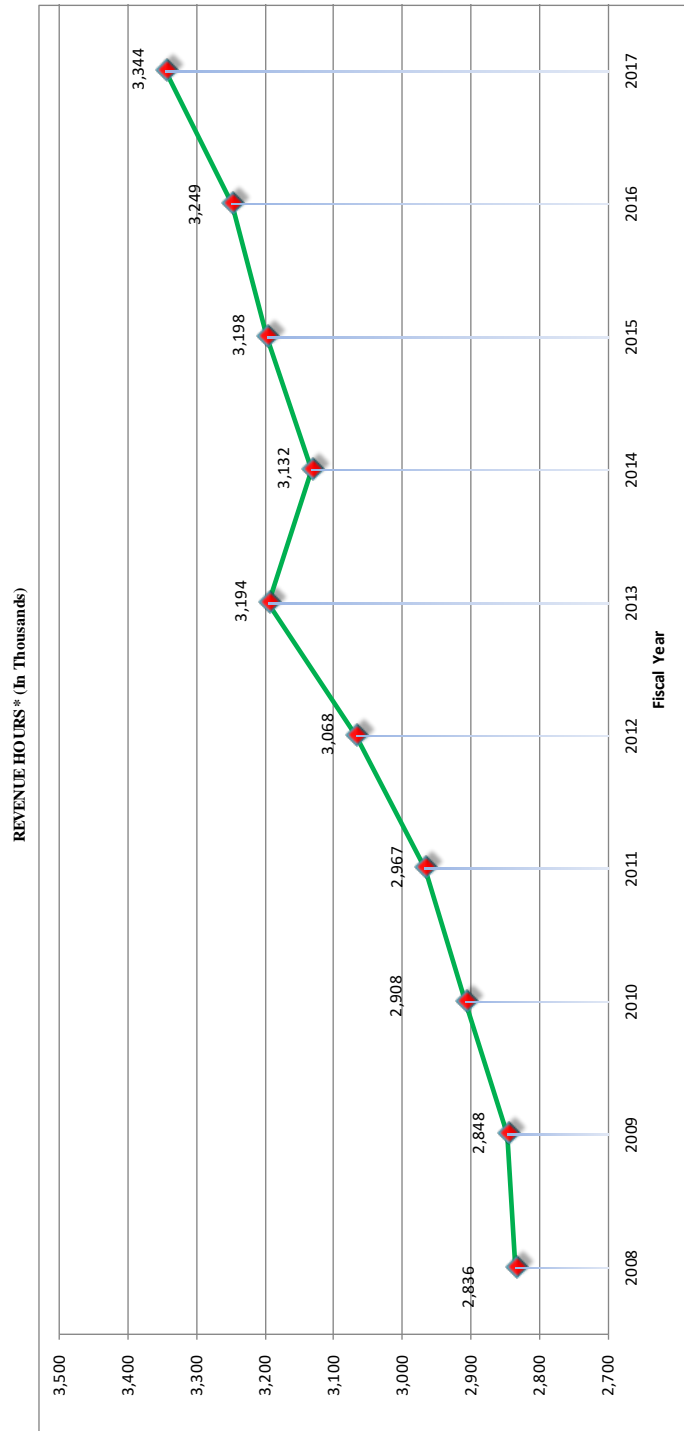




Exhibit 129
 Passenger Fare Revenue and Ridership

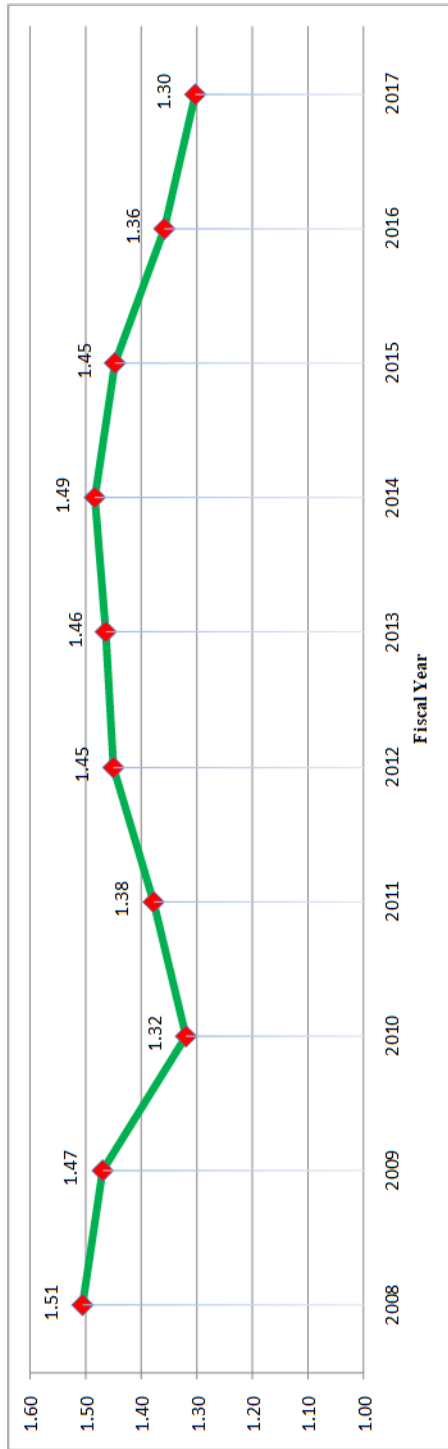
DALLAS AREA RAPID TRANSIT
 PASSENGER FARE REVENUE AND RIDERSHIP
 LAST TEN FISCAL YEARS (Amounts in Thousands)

	Fiscal Year									
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Passenger revenues(1)										
Bus	\$28,141	\$31,214	\$29,236	\$27,826	\$28,245	\$32,525	\$37,133	\$32,564	\$30,834	\$29,005
Light Rail	9,453	13,557	13,041	13,140	\$17,788	17,962	20,435	27,905	26,387	27,596
Commuter Rail	1,284	1,954	1,926	8,027	\$8,036	6,044	6,880	9,478	9,383	8,140
Demand Response	1,807	1,921	1,976	2,493	\$2,506	2,465	2,154	1,149	1,021	838
Demand Response-Taxi	-	-	-	-	-	-	-	922	1,213	1,421
Vanpool	430	311	533	595	\$754	813	967	996	787	749
Total	\$41,115	\$48,957	\$46,712	\$52,081	\$57,329	\$59,809	\$67,569	\$73,014	\$69,625	\$67,749
Ridership (2)										
Bus	44,690	44,752	42,517	37,693	36,971	38,379	37,937	37,383	36,366	33,521
Light Rail	17,893	19,438	18,965	17,799	22,302	27,654	29,472	29,458	29,841	29,762
Commuter Rail	2,475	2,717	2,739	2,432	2,388	2,252	2,093	2,284	2,173	2,054
Demand Response	822	910	1,039	1,136	1,140	1,141	832	469	397	335
Demand Response-Taxi	-	-	-	-	-	-	-	376	471	562
Vanpool	492	697	881	925	985	1,033	947	893	577	515
Total	66,372	68,514	66,141	59,985	63,786	70,459	71,281	70,863	69,825	66,749
Average fare per passenger (3)	\$0.62	\$0.71	\$0.71	\$0.87	\$0.90	\$0.85	\$0.95	\$1.03	\$1.00	\$1.01
Average fare per passenger, Transit Industry - all agencies (4)	\$1.04	\$1.27	\$1.07	\$1.11	\$1.17	\$1.22	\$1.31	\$1.40	\$1.46	N/A

Exhibit 130
Passengers per Revenue Mile and Revenue Hour

DALLAS AREA RAPID TRANSIT
PASSENGERS PER REVENUE MILE AND REVENUE HOUR
LAST TEN FISCAL YEARS

PASSENGERS PER REVENUE MILE



PASSENGERS PER REVENUE HOUR

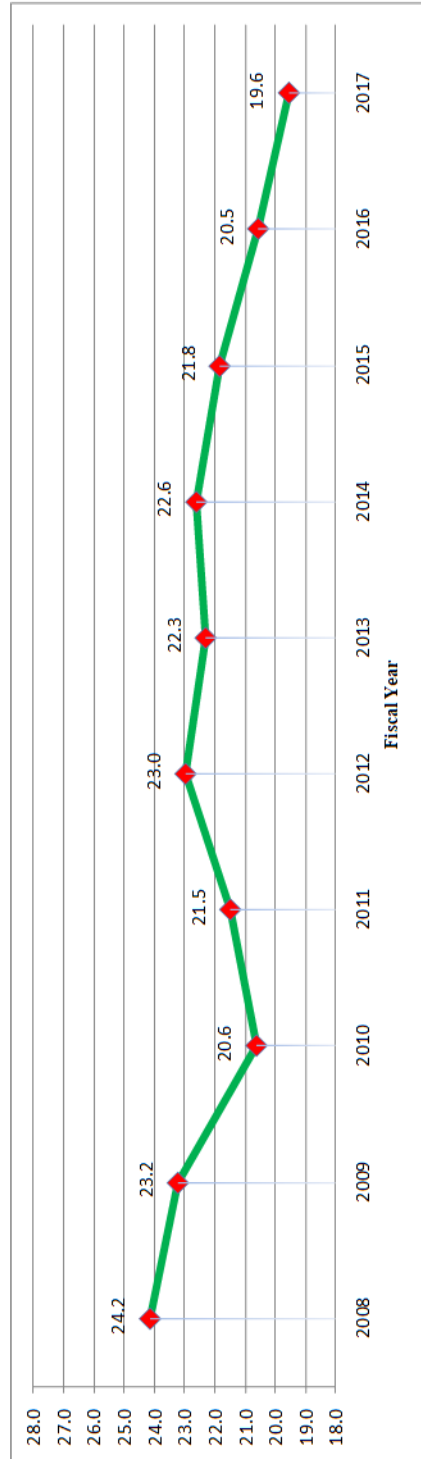




Exhibit 131
Number of Vehicles and Operating Facilities

DALLAS AREA RAPID TRANSIT
NUMBER OF VEHICLES AND OPERATING FACILITIES
LAST TEN FISCAL YEARS

	Fiscal Year									
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Number of vehicles available for service ¹										
Bus	728	663	663	658	629	650	861	744	648	580
Light Rail	115	115	122	163	163	163	163	163	163	162
Commuter Rail	36	36	44	47	35	35	35	32	32	32
Demand Response	209	209	209	209	209	175	165	107	96	96
Demand Response-Taxi	-	-	-	-	-	-	79	125	-	115
Vanpool	145	175	178	200	215	204	190	229	190	208
Total	1,233	1,198	1,216	1,277	1,251	1,227	1,493	1,400	1,129	1,193
Number of vehicles operated during weekday ¹										
Bus	564	564	556	507	509	527	544	535	533	530
Light Rail	85	84	76	77	78	102	103	105	104	107
Commuter Rail	19	19	18	18	18	18	23	18	18	23
Demand Response	184	190	190	186	186	148	148	92	106	96
Demand Response-Taxi	-	-	-	-	-	-	79	115	-	115
Vanpool	129	162	173	190	196	183	183	162	175	186
Total	981	1,019	1,013	978	987	978	1,080	1,027	936	1,057
Operating Facilities ²										
Bus	3	3	3	3	3	3	3	3	3	3
Number of operating garages	15	15	15	15	15	15	15	15	15	14
Number of transit centers	11,961	12,322	12,500	12,500	12,500	12,500	11,973	11,973	11,973	11,973
Light Rail	45	45	48	48	72	77	85	85	85	93
Miles of tracks	35	35	39	39	55	58	61	62	62	64
Number of stations	1	1	1	1	2	2	2	2	2	2
Number of operating garages	34	34	34	34	34	34	34	34	34	34
Commuter Rail	10	10	10	10	10	10	10	10	10	10
Miles of tracks	1	1	1	1	1	1	1	1	1	1
Number of stations	1	1	1	1	1	1	1	1	1	1
Demand Response	1	1	1	1	1	1	1	1	1	1
Number of operating garages	1	1	1	1	1	1	1	1	1	1

Sources:

1) National Transit Database

2) Quarterly Performance Reports for the 4th quarter of each fiscal year and internal records.



Exhibit 132
Cost of Capital Assets

DALLAS AREA RAPID TRANSIT COST OF CAPITAL ASSETS LAST TEN FISCAL YEARS (Amounts in Thousands)										
	Fiscal 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	1,753,739	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

Source: Annual financial statements



**Exhibit 133
Transit Agency Comparison (2016 NTD)**

Transit Agency Comparison (2016 NTD)

Metric	Dallas (DART)	Boston (MBTA)	Denver (RTD)	Houston (METRO)	Los Angeles (LACMTA)	Philadelphia (SEPTA)	Portland (TRIMET)	San Diego (MTS)	St. Louis (METRO)
Service Area (Sq.Mi.)	698	3,244	2,342	1,306	1,513	839	592	720	558
Service Area Population	2,380,530	3,109,308	2,920,000	4,298,000	8,626,817	3,816,641	1,660,804	2,462,707	1,566,004
Annual Vehicles Revenue Miles (In Thousands)									
Bus	27,500	24,417	36,759	43,003	76,160	40,669	21,629	20,037	18,469
Heavy Rail	N/A	23,247	N/A	N/A	6,885	17,265	N/A	N/A	N/A
Commuter Rail	1,165	23,533	1,664	N/A	N/A	19,334	164	N/A	N/A
Light Rail	9,830	6,500	11,355	3,421	13,747	3,307	8,856	8,674	6,250
Demand Response	7,600	17,829	10,979	18,475	N/A	11,310	7,612	4,634	5,345
Annual Vehicles Revenue Hours (In Thousands)									
Bus	2,159	2,378	2,823	3,172	7,702	4,069	1,916	1,817	1,382
Heavy Rail	N/A	1,522	N/A	N/A	316	932	N/A	N/A	N/A
Commuter Rail	50	785	75	N/A	N/A	916	7,550	N/A	N/A
Light Rail	473	703	674	302	663	388	616	493	266
Demand Response	486	1,274	695	1,132	N/A	1,101	539	260	303
Annual Unlinked Trips (In Thousands)									
Bus	33,521	126,462	73,252	67,292	320,870	188,985	61,793	52,190	27,701
Heavy Rail	N/A	174,517	N/A	N/A	46,004	101,884	N/A	N/A	N/A
Commuter Rail	2,054	33,831	4,317	N/A	N/A	36,188	457	N/A	N/A
Light Rail	29,762	64,538	11,356	18,532	62,086	25,767	40,198	39,615	15,778
Demand Response	897	2,188	1,186	1,929	N/A	1,792	1,065	632	568
Fixed Guideway Directional Route Miles									
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	94.2	41.8	171.9	82.9	118.9	108.4	91.1
Vehicles Available/Operated for Maximum Service									
Bus	648/533	989/840	1,047/873	1,429/1,001	2,380/1,935	1,454/1,204	685/560	620/502	394/321
Heavy Rail	N/A	432/336	N/A	N/A	104/70	369/284	N/A	N/A	N/A
Commuter Rail	45/23	480/421	66/18	N/A	N/A	404/339	6.0/4.0	N/A	N/A
Light Rail	163/104	219/156	172/140	76/54	196/161	159/121	143/116	130/97	80/58
Operating Expenses (In Thousands)									
Bus	\$243,666	\$442,676	\$324,232	\$383,420	\$1,101,126	\$642,570	\$259,012	\$156,250	\$156,794
Heavy Rail	N/A	\$353,373	N/A	N/A	\$140,453	\$197,092	N/A	N/A	N/A
Commuter Rail	\$27,969	\$403,655	\$46,715	N/A	N/A	\$267,844	\$7,899	N/A	N/A
Light Rail	\$178,416	\$186,022	\$104,625	\$61,233	\$318,210	\$70,949	\$128,643	\$75,516	\$79,589
Demand Response	\$37,046	\$102,005	\$45,379	\$49,418	N/A	\$56,376	\$38,302	\$19,043	\$25,330
Fare Revenue (In Thousands)									
Bus	\$29,005	\$100,095	\$81,754	\$55,667	\$256,677	\$180,870	\$68,746	\$54,308	\$29,571
Heavy Rail	N/A	\$222,241	N/A	N/A	\$35,790	\$107,113	N/A	N/A	N/A
Commuter Rail	\$8,849	\$198,331	\$5,667	N/A	N/A	\$151,908	\$540	N/A	N/A
Light Rail	\$27,596	\$82,501	\$43,808	\$5,685	\$47,807	\$29,109	\$49,060	\$41,113	\$16,782
Demand Response	\$2,259	\$6,005	\$4,952	\$1,967	N/A	\$6,128	\$8,408	\$2,493	\$2,610

SOURCE: 2016 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 quarter-mile¹ 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 Percent Change in Total Property Values (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.

Table 2: Average Percent Change in Occupancy & Rental Rates (1994 – 1998)								
	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: Changes in Gross Retail Sales, Dallas CBD (1996 – 1998, \$\$ 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).

The authors found that new investment with close proximity to DART stations had a total value of \$3.3 billion. The stations with the highest values in this report, Park Lane, Las Colinas and Mockingbird, continue to see investment and reinvestment to this day. Table 4A details these top three stations as well as the total impact of development near DART stations.

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.

Table 5: Potential Fiscal Impacts of Existing & Proposed TOD	
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
Total 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)	
<i>Description</i>	<i>Impact</i>
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		
<i>Description</i>	<i>2009</i>	<i>2014</i>
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).

Table 8: Estimated 2013 Property Values and Tax Contributions					
Property Type	Est. Value of All Properties		Est. Tax Contributions		Tax
	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 significant⁵ 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		
<i>Variables</i>	<i>Marginal Effect</i>	<i>P</i>
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 data on these regional trade flows and reports its findings annually.

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	
<i>Station</i>	<i>Project Name</i>
Irving Convention Center	Irving Convention Center
Mockingbird	Bush Library
Galatyn Park	Eisemann Center
Cedars	DCCCD District Office 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 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				
<i>Impact Type</i>	<i>Employment</i>	<i>Labor Income</i>	<i>Value Added</i>	<i>Output</i>
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		
<i>Description</i>	<i>Total State and Local Tax</i>	<i>Total Federal Tax</i>
Employee Compensation	\$1,342,609	\$112,220,297
Proprietor Income	N/A	\$10,570,114
Tax on Production and 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
* Includes state and local sales and use taxes, property taxes, and license and permit fees. Source: IMPLAN	

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, mixed-use 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 Residential, 2014 – 2015	
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
<small>* Includes state and local sales and use taxes, property taxes, and license and permit fees. Source: IMPLAN</small>	

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
<small>* Includes state and local sales and use taxes, property taxes, and license and permit fees. Source: IMPLAN</small>	

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.^{6 7} 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	Impact
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
* Includes state and local sales and use taxes, property taxes, and license and permit fees. Source: IMPLAN	

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	\$1,855,297,812
Employment	30,281
State and Local Taxes*	\$153,738,452
<small>* Includes state and local sales and use taxes, property taxes, and license and permit fees. Source: IMPLAN</small>	

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	
Description	Impact
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
<small>* Includes state and local sales and use taxes, property taxes, and license and permit fees. Source: IMPLAN</small>	

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 134 provides general information about DART.

Exhibit 134
DART Fast Facts

Agency Overview		
15 Board Members	FY 2017 sales tax revenue \$566.6 million	16-county region population – 6.5 million (2010 Census)
13 participating cities providing 1 cent sales tax	700 square mile Service Area	3,816 budgeted employees for FY 2017
	Service Area population 2.3 million (2010 census)	Contracted service with Mesquite
Ridership		
Mode	FY17 Annual	FY17 Average Weekday
Bus	32.1 million	108,100
Light Rail	30.0 million	97,200
Commuter Rail	2.1 million	7,400
Paratransit	800,800	2,770
Vanpool	675,000 (185 Vanpools)	2,700
Total System	65.7 million	218,170
Operations and Performance (FY17)		
<u>Fixed Route Revenue Miles</u>	<u>Service Quality: On-Time Performance</u>	<u>Subsidy per Passenger</u>
Annual Bus Revenue Miles – 27,565,509	Bus – 80.4%	Subsidy per Passenger – Total System – \$6.36
Annual LRT Revenue Car Miles – 10,244,288	LRT – 92.1%	Subsidy per Passenger – Fixed Route – \$5.98
Annual Commuter Rail Revenue Car Miles – 1,630,259	TRE – 98.5%	
Annual Demand Response Revenue Miles – 7,695,618		



Exhibit 134
DART Fast Facts (cont'd)

Fleet Overview		
Bus/Paratransit	Light Rail	Commuter Rail
476 NABI (CNG) Buses Vehicle length: 30 feet and 40 feet Capacity: Up to 37 seats	163 Kinkisharyo Super LRVs Vehicle length: 123'8" Capacity: 94 seated/274 crush (165 peak per DART policy)	9 TRE locomotives Vehicle length: 58'2"
12 NABI (Diesel) Suburban Buses Vehicle length: 40 feet Capacity: 41 seats		17 bi-level coaches Vehicle length: 85 feet Capacity: 152 seats 8 bi-level cab cars Vehicle length: 85 feet Capacity: 132 to 138 seats
115 Arboc Buses (CNG) Vehicle length: 26 feet Capacity: 17 seats	Paratransit 80 Starcraft Vehicle length: 22 feet Capacity: 6-10 seated / 2-3 wheelchair Non-dedicated fleet of 116 Braun Entervans	Streetcar 4 Dual-Mode Brookville Equipment Corporation Vehicle length: 66' 5" Capacity: 36 seats
46 New Flyer (CNG) Vehicle Length: 26 Feet Capacity: 39		
Facilities		
Bus	Light Rail	Commuter Rail
11,271 bus stops	64 stations – 52 at-grade; 9 aerial; 1 tunnel	10 stations (5 in DART Service Area)
1,229 shelters, 56 enhanced shelters, 1,442 benches	2 operations & maintenance facilities	1 operations & maintenance facility
	Streetcar 6 Streetcar Sheltered Stations	Administration Agency Headquarters DART Police Headquarters
3 operations & maintenance facilities		
Infrastructure		
<ul style="list-style-type: none"> 93 LRT miles, (3.2 miles in tunnel) 	<ul style="list-style-type: none"> 33.8 TRE Miles 	<ul style="list-style-type: none"> 2.5 Streetcar Miles
Budget (FY18)		Efficiency Measures (FY18)
\$523.0M Operating Budget	Farebox Recovery:	Subsidy per Passenger:
\$265.3M Capital Budget	Bus – 10.3%	Bus – \$7.31
\$193.8M Debt Service Budget	LRT – 16.0%	LRT – \$4.68
	CR – 29.4%	CR – \$8.03
\$566.6M Sales Tax Budget	Fixed Route Total – 13.7%	Paratransit – \$42.99
		Vanpool – \$0.19

Exhibit 134
DART Fast Facts (cont'd)

Rail Expansion Program
Future projects in planning or design: Red/Blue Line platform modifications Cotton Belt Regional Rail Project D2 Subway Second CBD Alignment Dallas Streetcar Central Link Dallas Streetcar Loop – Extension 2
Economic and Fiscal Impacts
DART capital spending on rail expansion from FY 2003 – FY 2017 resulted in: Boosting regional economic activity by almost \$8.8 billion Supporting more than 63,700 person-years of employment – an average of approximately 4,250 jobs per year for 15 years Increasing total state and local government revenues by \$281 million Existing, under construction and planned developments around DART stations total \$10.8 billion

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 134 contains population and employment breakdown by city.

Exhibit 135
Service Area Population and Employment

City	Population 2010 Census	Population 2018 NCTCOG Forecast	% Population Change	Employment 2010 Census
Addison	13,056	15,760	21%	54,500
Carrollton	119,097	132,330	11%	77,600
Cockrell Hill	4,193	4,170	-1%	750
Dallas	1,197,816	1,286,380	7%	1,158,500
Farmers Branch	28,616	31,560	10%	119,000
Garland	226,876	236,030	4%	107,000
Glenn Heights	11,278	11,680	4%	1,350
Highland Park	8,564	8,520	-1%	2,500
Irving	216,390	237,490	10%	219,500
Plano	259,841	281,390	8%	135,400
Richardson	99,223	110,140	11%	120,500
Rowlett	56,199	58,830	5%	11,200
University Park	23,068	22,890	-1%	9,700
Total Service Area	2,264,217	2,437,170	8%	2,017,500
16-County NCTCOG Region	6,539,950	7,390,080	13%	4,006,300

Sources: 2010 Census and North Central Texas Council of Governments (NCTCOG) 2018 population estimates.

I. GLOSSARY/ACRONYMS

Exhibit 136 Glossary of Terms/Definitions

Accessible – 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.

Accessible Service – 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.

Accidents per 100,000 Miles – 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.

$$\text{Calculation} = [(Vehicle\ Accidents / Actual\ Mileage) * 100,000]$$

Accounting Basis -- 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.

Accrual Method of Accounting – 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).

ADA (The Americans with Disabilities Act of 1990) – 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.

ADA Paratransit Service – Non-fixed-route paratransit service utilizing vans and small buses to provide pre-arranged trips to and from specific locations within the service area to certified participants in the program.

Administrative Ratio – 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.

$$\text{Calculation} = [(Administrative\ Costs - Administrative\ Revenues) / (Direct\ Costs + Start-up\ Costs)]$$

Ambulatory Disabled – 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.

American Recovery and Reinvestment Act (ARRA) – 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.

Arbitrage – Investment earnings representing the difference between interest paid on bonds and the interest earned on the investments made using bond proceeds.

Exhibit 136
Glossary of Terms/Definitions (cont'd)

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)

Average Weekday Ridership – 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.

Capital – Funds that finance construction, renovation, and major repair projects or the purchase of machinery, equipment, buildings, and land.

Capital Expenditure – 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.

Major Capital Transit Investment Program – 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.

Car Mile or Vehicle Mile – A single bus, rapid transit car, light rail vehicle, or commuter rail car traveling one mile.

CAFR – Comprehensive Annual Financial Report. It includes audited financial statements, financial notes, and related materials.

CMAQ – Congestion Mitigation and Air Quality. A federal program to fund transportation projects that will contribute to the attainment of national ambient air quality standards.

Certified Riders – 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.

Complaints per 100,000 Passengers – 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]*

Exhibit 136
Glossary of Terms/Definitions (cont'd)

Cost per Revenue Mile – 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.

$$\text{Calculation} = [\text{Total Operating Expenses} / \text{Revenue Miles}]$$

Crimes against persons – 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.

$$\text{Calculation} = [\text{Crimes Against Persons} / \text{Total Incidents}]$$

Crimes against property – Monitoring provides an overview of the safety of our customer's property. Management's objective is to reduce this ratio.

$$\text{Calculation} = [\text{Crimes Against Property} / \text{Total Incidents}]$$

Debt Service – 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.

Farebox Recovery Ratio – the proportion of operating cost that is generated by passenger fares.

$$\text{Calculation} = [\text{Modal Farebox Revenue} / \text{Modal Operating Expense}]$$

Farebox Revenue – All revenue from the sale of passenger tickets, passes, or other instruments of fare payment.

Fares – The amount charged to passengers for use of various services.

Exhibit 136
Glossary of Terms/Definitions (cont'd)

FAST Act – Fixing America’s Surface Transportation Act - FAST Act was signed into law in December 2015 to provide funding for surface transportation.

FEMA – Federal Emergency Management Agency – 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.

FTA (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.

Fixed-Route Service – 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.

Full-Time Equivalent – 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.

General Operating Account – 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.

Grants – 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.

Exhibit 136
Glossary of Terms/Definitions (cont'd)

Labor Expenditure – The cost of wages and salaries (including overtime) to employees for the performance of their work.

Line Item – 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*.

Maintenance Expenditure – Expenditures for labor, materials, services, and equipment used to repair and service transit and service vehicles and facilities.

Mean Distance Between Service Calls – 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.

$$\text{Calculation} = [\text{Total Miles Operated} / \text{Total \# of Service Calls}]$$

New Starts Program – 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.

Obligations – 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.

$$\text{Calculation} = [(\# \text{ Scheduled Trips Sampled} - \# \text{ of Times Early or Late}) / \text{Total \# of Scheduled Trips Sampled}]$$

Operating Budget – The planning of revenue and expenditures for a given period of time to maintain daily operations.

Off-Peak – Non-rush hour time periods.

Operating Revenues – 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.

Exhibit 136
Glossary of Terms/Definitions (cont'd)

Paratransit Service – 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.

$$\text{Calculation} = [\# \text{ of Canceled Trips} / \text{Total} \# \text{ of Scheduled Trips}]$$

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.

$$\text{Calculation} = [\# \text{ of No Shows} / \text{Total} \# \text{ of Scheduled Trips}]$$

Passengers per Hour – Actual – The total number of Paratransit passengers actually carried, divided by the total hours of revenue service. Management's objective is to increase this number.

$$\text{Calculation} = [\text{Actual Passenger Boardings} / \text{Revenue Hours}]$$

Passengers per Hour - Scheduled – The total number of Paratransit passengers scheduled per hour of revenue service. Management's objective is to increase this number.

$$\text{Calculation} = [\text{Scheduled Passenger Boardings} / \text{Revenue Hours}]$$

Passengers per Mile – 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.

$$\text{Calculation} = [\text{Passenger Boardings} / \text{Revenue Miles}]$$

Peak Period – Morning or evening rush hour.

Percentage of Trips Completed – 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.

$$\text{Calculation} = [(\# \text{ of Actual Trips} - \# \text{ of Trips Missed}) / \# \text{ of Actual Trips}]$$

Principal – The amount borrowed or the amount still owed on a loan, separate from the interest.

Reduced Fares – 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.

Repurchase Agreement – A money-market transaction in which one party sells securities to another while agreeing to repurchase those securities at a later date.

Exhibit 136
Glossary of Terms/Definitions (cont'd)

Reserves – 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.

Revenue Bond – A bond on which debt service is payable solely from a restricted revenue source (or sources)—for example sales tax revenues.

Revenue Car Miles – 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]*

Revenue Miles or Hours – 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.

Reverse Commute – City-to-suburb commute. This phrase refers to the fact that most riders commute from the suburbs to the city.

Ridership – 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*.

Sales Taxes for Operating Expenses – 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]

Service Hours – 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.

Service Levels – 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)

Exhibit 136
Glossary of Terms/Definitions (cont'd)

Start-Up Costs – 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).

State of Good Repair (SGR) – Capital investment in infrastructure maintenance in order to improve the condition of current transit facilities and provide safe, reliability service.

Subscription Service – 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.

Subsidy per Passenger – 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.

$$\text{Calculation} = [(\text{Operating Expenses} - \text{Operating}) / \text{Passenger Boardings}]$$

Total Vehicle Miles – The sum of all miles operated by passenger vehicles, including mileage when no passengers are carried.

Transit Asset Management (TAM) – Measurement of the condition of capital assets such as equipment, rolling stock, infrastructure, and facilities.

Transit-Oriented Development (TOD) – Mixed-use development of residential, commercial, and retail uses within walking distance of a transit station or bus route.

Transit Signal Priority – 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.

TIGER (Transportation Investment Generating Economic Recovery) – 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.

Unlinked Trip – 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*.

Vanpool – 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.

Vehicle Revenue Mile – Vehicle mile during which the vehicle is in revenue service (i.e., picking up and/or dropping off passengers).

Yield to worst – 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.

Exhibit 137 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)
APTA	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
B	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

Exhibit 137 Acronyms

CNG	Compressed Natural Gas
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

Exhibit 137 Acronyms

EOY	End of Year
EPA	Environmental Protection Agency
EVP	Executive Vice President
FAA	Federal Aviation Administration
FAST	Fixing America's Surface Transportation Act
FE	Fleet Engineering
FPGA	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
FWTA	Fort Worth Transportation Authority (now known as Trinity Metro)
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
HMO	Health Maintenance Organization
HOT	High-Occupancy/Tolling (lanes)
HOV	High Occupancy Vehicle (lane)
HQ	Headquarters
HRA	Health Reimbursement Account

Exhibit 137 Acronyms

HVAC	Heating, Ventilation, Air Conditioning
IACP	International Association of Chiefs of Police
ICM	Integrated Corridor Management
IH	Interstate Highway
ILA	Interlocal Agreement
IMA	Information Management & Analytics
IRV	Irving
IT	Information Technology
ITC	Intermodal Transportation Center
ITIL	IT Infrastructure Library
ITP	Integrated Test Plan
ITS	Intelligent Transportation System
IVR	Interactive Voice Response
JHA	Jurisdictions Having Authority
JV	Joint Venture
K	Thousands
kHz	Kilohertz
KPI	Key Performance Indicator(s)
kWh	Kilowatt Hour
LAN	Local Area Network
LAP/CMS	Local Assistance Program/Congestion Management System
LBJ	“Lyndon B. Johnson” Freeway
LCD	Liquid Crystal Display
LED	Light Emitting Diode
LEED	Leadership in Energy and Environmental Design
LGC	Local Government Corporation
LNG	Liquefied Natural Gas
LPA	Locally Preferred Alternative
LPIS	Locally Preferred Investment Study
LRT	Light Rail Transit
LRV	Light Rail Vehicle
LRWPP	Light Railway Worker Protection Plan
LT or LTD	Long-Term Debt or Long-Term Disability
M	Millions
MAP-21	Moving Ahead for Progress in the 21st Century
MATA	McKinney Avenue Transit Authority
MAX	Metro Arlington Express

Exhibit 137 Acronyms

MBE	Minority-Owned Business Enterprise
MDC	Mobile Data Computer
MDT	Mobile Data Terminal
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

Exhibit 137 Acronyms

OC	Oak Cliff
OCC	Operations Control Center
OCIP	Owner-Controlled Insurance Program
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
PMOC	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
PTO	Paid Time Off
PTP	Pay-to-Platform
Q	Quarter
R	Registration (mark)
RDC	Rail Diesel Car
RFI	Request for Information
RFID	Radio Frequency Identification

Exhibit 137 Acronyms

RITA	Research and Innovative Technology Administration
RMS	Records Management System
ROTC	Refresher Operator Training Class
ROW	Right-of-Way
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	Short-Term (debt)

Exhibit 137 Acronyms

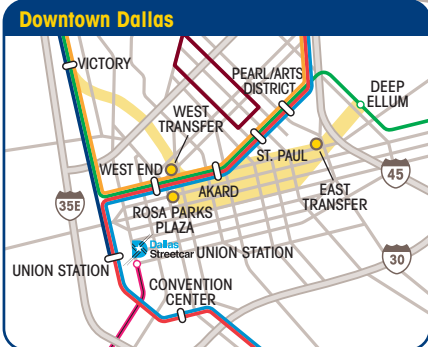
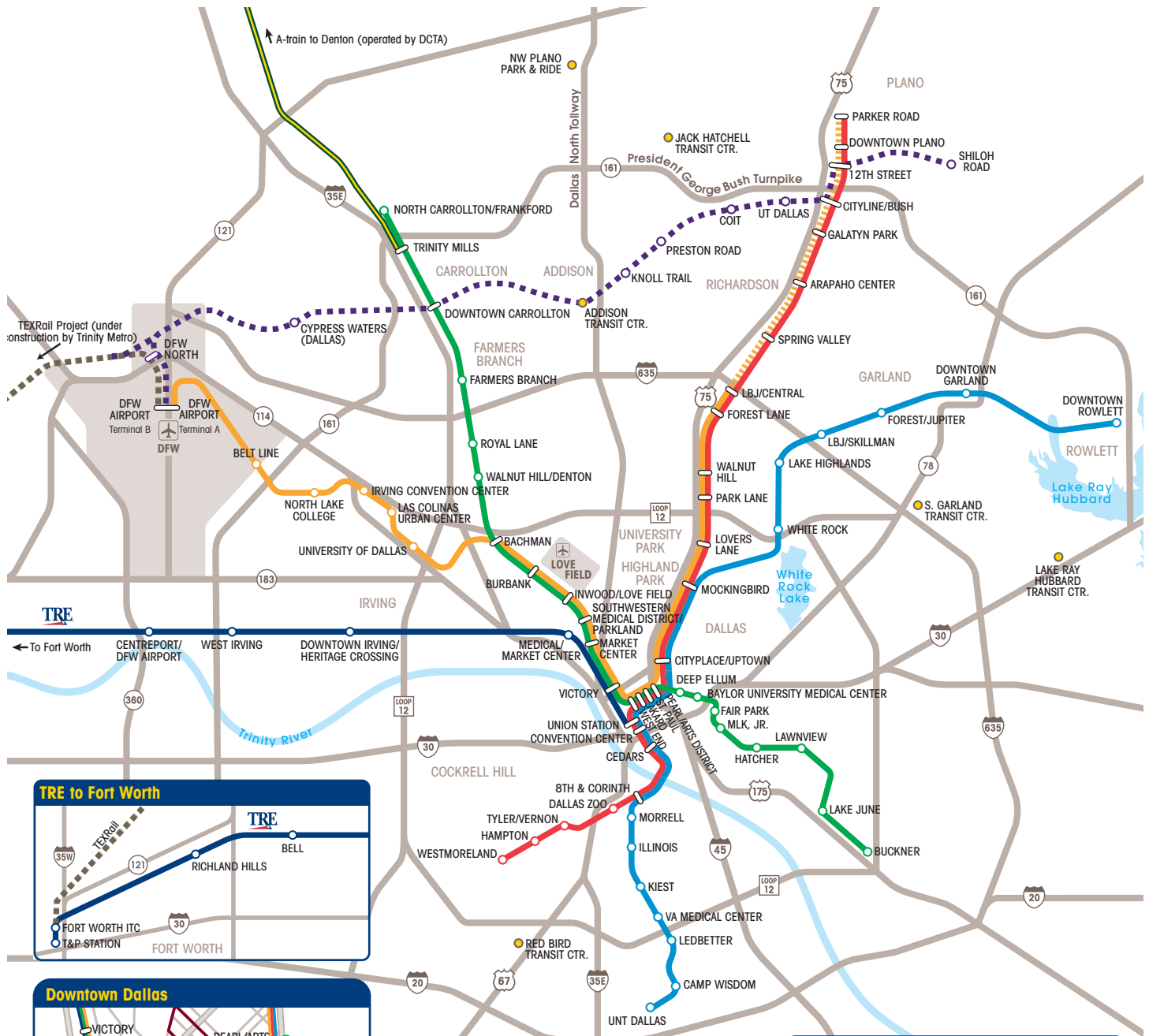
STD/FMLA	Short-Term Disability/Family Medical Leave Act
STP/MM	Surface Transportation Program/Metropolitan Mobility
SU	Start-Up
T&P	Texas & Pacific Station
TBD	To be determined
TC	Transit Center
TCEQ	Texas Commission on Environmental Quality
TCIC	Texas Criminal Information Center
TDM	Transportation Demand Management
TES	Traction Electrification System
TIFIA	Transportation Infrastructure Finance and Innovation Act
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



Exhibit 137
Acronyms

VIPER	Visible Intermodal Protection Response
VMB	Variable Message Boards
VoIP	Voice over Internet Protocol
VP	Vice President
VRDN	Variable Rate Demand Note
WAN	Wide-Area Network
WBE	Women-Owned Business Enterprise
WSA	Ways, Structures & Amenities
XPB	X-Press Booking
ZEV	Zero Emission Vehicles

CURRENT AND FUTURE SERVICES



- Projects under development in Downtown Dallas:**
- Dallas CBD Second Light Rail Alignment (D2 Subway) in shaded area
 - Dallas Streetcar Central Link

Rail System Legend

Currently Operating

- DART Rail Red Line
- DART Rail Blue Line
- DART Rail Green Line
- DART Rail Orange Line
- DART Rail Orange Line (Selected Weekday Trips Rush Hour Only)
- Trinity Railway Express (TRE)
- DCTA A-train
- M-Line Trolley
- Dallas Streetcar

Planning/Design Underway

- Cotton Belt
- Proposed Cotton Belt station
- D2 Corridor (Inset Map)

DALLAS AREA RAPID TRANSIT
P.O. BOX 660163
DALLAS, TX 75266



let's go.