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Summary:

Ohio; Appropriations; Gas Tax; General Obligation

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Credit Profile		
US\$84.155 mil GO hwy cap imp bonds ser W due 05/01/2035		
<i>Long Term Rating</i>	AAA/Stable	New
Ohio GO		
<i>Long Term Rating</i>	AA+/Stable	Affirmed
Ohio State Treasurer, Ohio		
State of Ohio, Ohio		
Ohio St Treasurer (Ohio) APPROP		
<i>Long Term Rating</i>	AA/Stable	Affirmed

Rating Action

S&P Global Rating assigned its 'AAA' long-term rating to Ohio's \$84.155 million 2020 series W general obligation (GO) highway capital improvement bonds, issued on behalf of the State Treasurer of Ohio. At the same time, S&P Global Ratings affirmed its 'AAA' rating, and stable outlook, on the state's parity debt outstanding. We also affirmed our 'AA+' long-term rating on the state's GO debt outstanding, our 'AA' long-term rating on Ohio's appropriation debt outstanding, and our 'AA-' rating on the state's tax credit bonds, issued by Columbus-Franklin County Finance Authority.

In addition, we affirmed our 'A-1+' short-term rating on Ohio's variable-rate demand obligations (VRDOs) outstanding, reflecting the short-term self-liquidity component of our 'AA/A-1+' dual rating on appropriation debt and our 'AA+/A-1+' dual rating on the GO debt outstanding.

The outlook on all long-term ratings is stable.

Security and use of proceeds

The state's highway user receipts (HURs) which Ohio's constitution defines as any fees, excises, and license taxes relating to the registration, operation, or use of vehicles on public highways or to fuels used for propelling those vehicles secure the bonds. In addition to the pledge of HURs, the bonds also have a full faith and credit pledge of Ohio (GO rating: AA+/Stable), excluding net state lottery proceeds. In our view, the HURs represent the stronger of the two security pledges, largely due to the very strong coverage levels and strong constitutional provisions that limit debt issuance and prohibit diversion of these revenues to be used for the state's general operations. In addition, the Ohio Constitution restricts HURs to highway uses and they cannot be used for non-highway obligations or uses.

We rate the bonds under our criteria, "Priority-Lien Tax Revenue Debt", published Oct. 22, 2018, which factors in both the strength and stability of the pledged revenues, as well as the general credit quality of the municipality where taxes are distributed and/or collected (the obligor's creditworthiness or "OC"). The priority-lien rating for the highway capital improvement bonds is tied to the OC for the state of Ohio.

Proceeds from the 2020 series W bonds will be used to finance the Ohio Department of Transportation's (ODOT) highway capital improvements and to pay the cost of issuance.

Credit overview

Constitutional provisions and protections of pledged user receipts underpin stability of GO highway capital improvement bonds

In our view, the state's constitution and bond provisions create a comprehensive framework for Ohio's highway capital improvement bonds. Ohio's Constitution (Section 5a of Article XII) prohibits the diversion of HURs to pledge as payment for debt obligations other than for payment of highway obligations, and these receipts are segregated from the general revenue fund of the state, including collection and deposits into the bond service fund, without further need for legislative appropriation. In addition, the constitution limits the total principal amount of GO highway capital improvement obligations to no more than \$1.2 billion, and the state is limited to issue no more than \$220 million per fiscal year, including previously authorized but unissued obligations. Furthermore, Ohio has covenanted that it shall maintain statutory authority to levy, collect, and apply statewide excises, taxes, and revenue that is sufficient to pay debt service when due.

Following the issuance of the 2020 series W highway bonds, the state will have approximately \$1.02 billion of GO highway capital improvement bonds outstanding. After the payment of debt service, excess HURs flow to specific operations permitted under state law, including administrative costs of levying these taxes, construction and maintenance of highway infrastructure, traffic enforcement, and hospitalization of indigent persons injured in motor vehicle accidents on public highways. In fiscal 2019, Ohio generated roughly \$3.05 billion from HURs, of which, motor fuel and use taxes accounted for roughly two-thirds of receipts and motor vehicle registration and license fees comprised the remaining one-third. Historically, these HURs have provided ample funding to meet annual debt service.

Therefore, key credit considerations of the 'AAA' rating include:

- A very strong statewide economic base with a population of over 11.7 million in 2019;
- Relatively consistent performance of Ohio's pledged revenues over time, which is in line with our view that nationwide gas taxes and motor vehicle registration and license fees have historically demonstrated low volatility;
- Very strong debt service coverage levels, which in our view, position the state well to manage short-term revenue deterioration across recessionary periods. This is combined with the state's rapid amortization of all highway capital improvement bonds within 15 years; and
- Constitutional limitations on the amount of total debt that can be issued under the highway capital improvement bond program and provisions that separate HURs from the state's general operating funds.

Environmental, social, and governance factors

We consider Ohio to have elevated social risks given demographic pressures of the state's aging prime working-age population and low replacement rates statewide. We believe these long-term social risks could hamper statewide economic growth forecasts and the demographic shift could meaningfully alter revenue and spending demands that weigh on the state's financial position. However, we believe Ohio historically strong management policy framework and economic diversification efforts will help manage this risk. Although temporary, we also believe the social risk

related to health and safety and COVID-19 may have an indirect impact on the state. At the same time, we view the state's environmental and governance risks as being in line with the sector, and Ohio has historically maintained a strong management and policy framework to respond to developing risks.

Stable Outlook

The stable outlook on these bonds mirrors the outlook on the state of Ohio. In addition, the stable outlook reflects S&P Global Ratings' view that coverage will remain very strong over the outlook horizon. We believe the broad pledge of statewide HURs supporting the bond program has been stable over time and this history of stability in combination with constitutional limitations for debt issuance will ensure that extremely strong debt service coverage levels will continue. However, while our outlook horizon is typically up to two years, given the fluid nature of developments relating to the direct and indirect financial and economic challenges of COVID-19 pandemic over the near-term, we will continue to actively assess the implications to Ohio's credit fundamentals over the outlook period.

Although not expected, given the linkage between these bonds and the state, a negative rating action or outlook revision on the state could also lead to a negative rating action or outlook revision on these bonds. Furthermore, downward pressure on the rating could result from materially weakened pledged revenue collections that affect debt service coverage or alterations to bond provisions that we believe weaken established legal protections.

Credit Opinion

Revenue volatility: Low

On a macro level, we consider gas tax revenues to have a low historical volatility assessment given the critical nature of gasoline for automobiles and other transportation. Nationwide gasoline sales have historically fluctuated less than total consumption of goods and services, even during severe economic downturns and price fluctuations, given the relative inelasticity of demand for motor fuel. We expect the statewide directives to protect public health and safety due to COVID-19 to have a near-term material effect on Ohio's fiscal 2020 and fiscal 2021 HURs (compared to budget estimates). Nevertheless, we view the second-order economic effects of social distancing measures and stay at home orders as a temporary disruption to pledged revenue collections, and we do not expect oil price variations in the medium term will affect our view of the volatility of gas tax revenue in aggregate. However, should permanent technological or social trends emerge that disrupt or weaken gasoline consumption, or changing fuel economy standards cause a shift market dynamics over the longer term, we could modify our view of revenue volatility.

HURs pledged to the bonds consist primarily of motor fuel and use taxes (approximately 67% of total revenues), while registration and license fees comprised about 33% of total revenues. Ohio's motor vehicle fuel tax is 38.5 cents per gallon, which is in line with the average rate for most contiguous states. Effective July 1, 2019, the state raised its motor vehicle fuel by 10.5 cents per gallon to the current rate and its diesel fuel tax 10 cents to 47 cents per gallon. At the onset of the fiscal 2020-2021 biennium, the state budgeted HURs at approximately \$3.9 billion. This reflected a first-year revenue increase of roughly \$800 million due to the change in the motor fuel and diesel tax rates.

HURs increased by an average annual rate of 2.3% over a 22-year period between 1997 and 2019. While these pledged revenues have exhibited some declines during recession periods, we believe that receipts rebounded over a relatively short recovery period. Since 2000, receipts declined just five times: by 3.7% in fiscal 2001, 3.5% in fiscal 2007, 4.7% in

fiscal 2009, 1.8% in fiscal 2012, and 0.09% in fiscal 2016. The state partly attributes these declines during these years to timing delays for reporting HURs. However, these timing changes were partially reflected in higher collection growth rates in the ensuing fiscal year, including growth of 4.9% in fiscal 2008, 0.35% in fiscal 2010, 5.1% in fiscal 2013, and 1.6% in fiscal 2017.

Due to restricted travel and economic activity in the state due to COVID-19, ODOT revised its biennial budget estimate to reflect a 12.9% and 8.6% decrease in HURs, respectively, for fiscal years 2020 and 2021. This revised forecast would result in approximately \$3.36 billion in receipts for fiscal 2020, and \$3.52 billion for fiscal 2021. ODOT's revisions project a 30% monthly decline to HURs through the last quarter of the state's fiscal year (March-June 2020) and a gradual normalization of receipts to the state's pre-COVID-19 budgeted levels through the first half of fiscal 2021. Based on S&P Global Economics' U.S. recessionary forecast, we currently view ODOT's projections to be reasonable. We generally expect the abrupt decline of the state's HURs to be over the short-term and that these resources, coupled with its full faith and credit pledge, will be sufficient to sustain its GO highway capital improvement bond obligations.

Coverage and liquidity: Very strong

In our view, coverage is very strong and has been so historically. Total pledged revenue for fiscal 2019 was \$3.05 billion, or an approximately 4.1% increase over the previous year. Since 2000, coverage has averaged 18.0x maximum annual debt service (MADS). Currently, we calculate fiscal 2019 MADS coverage at 20.0x (with MADS occurring in 2020). The state does not have any parity-debt issuances planned in the near term and the debt service schedule gradual declines between 2025 and 2035. While it is understood that the severity and duration of the current recession could negatively affect pledged revenues and temporarily weaken coverage, we believe coverage levels are likely to remain similar to very strong historical coverage exhibited over the last 20 years.

While there is no additional bonds test (ABT) for these obligations, we believe the lack of an ABT is mitigated by the state's constitutional protections of user receipts and limitations on the issuance of debt. The state's constitution limits total issuance to \$1.2 billion. It also prohibits annual issuance of more than \$220 million in principal (plus the principal amount of highway obligations that in any prior fiscal years could have been but were not issued within the \$220 million fiscal year limit). After the payment of debt service, excess HURs flow to specific operations permitted under state law, including administrative costs of levying these taxes, construction and maintenance of highway infrastructure, traffic enforcement, and hospitalization of indigent persons injured in motor vehicle accidents on public highways. Following the 2020 series W issuance, there is \$1.02 billion of highway capital improvement bonds outstanding.

While maximum maturity on the bonds cannot exceed 30 years, typically the state has amortized its bonds more rapidly. Currently, the bonds' debt service schedule retires approximately 80% of principal within 10 years and 100% of principal within 15 years.

Economic fundamentals: Very strong

The U.S. Census Bureau's population estimate for Ohio is 11.7 million as of 2019, making Ohio the seventh-most populous state in the nation. More than half of the state's residents reside in the Cleveland, Cincinnati, and Columbus metropolitan statistical areas. Ohio experienced relatively weak population growth over the past decade relatively

weak, averaging only 0.14% growth annually, well below the U.S. average of 0.68%. In addition, the state is made up of a larger dependent population than the nation at 64.6% for the state versus 62.5% for the nation, although this is at mitigated by a large and diverse statewide consumption base overall. Over the longer-term, however, outmigration trends could continue, particularly among young professionals aged 20-34, and is most prevalent in communities with a strong manufacturing presence such as Cleveland, Dayton, and Toledo.

Prior to the onset of the current recession, Ohio's economy experienced modest growth and the state's unemployment rate was 4.1% in 2019, which was slightly above the U.S. annual average (3.7%). As of March 2020, however, Ohio's unemployment rate ticked up to 5.5%, and the unemployment rate will likely to rise significantly as the state continues to measure the effects of the current recession. IHS Markit forecasts the state's employment levels to contract sharply by 4.4% in fiscal 2020 before recovering by a modest 0.3% in 2021. Ohio annual gross state product (GSP) is likely to experience a similar level of contraction relative to the U.S., according to IHS Markit, with a 2.7% decline in 2020 and a 3% increase in 2021.

Ohio has a population of 11.7 million. The state's per capita personal income is 94% of the national level.

Obligor linkage: Close

We view the highway capital improvement bonds as linked to Ohio's creditworthiness. While we consider the constitutional dedication of HURs for transportation purposes as providing some uplift, in our view, the collection and distribution of pledged revenues by the state itself expose the revenues to a degree of operating risk. For this reason, under our priority-lien criteria, we consider the linkage between the priority-lien pledge and Ohio to be close.

Ohio's Constitution and regulations established by law allow for continuous appropriation of HURs to the highway capital improvement bond service fund pledged to the bonds. Sufficient amounts shall be set aside, before any other distributions are made, to pay debt service due each year. The distribution of these receipts are not subject to biennial appropriation by the state legislature. Management reports that HURs are never co-mingled with the state's general revenue fund (GRF), and the state collects the pledged revenues and deposits them into dedicated funds. In addition, debt service for highway capital improvement bonds is included in the state's transportation budget rather than its GRF budget.

Ratings linkage to Ohio

We assess Ohio's general operations because we view overall creditworthiness as a key determinant of an obligor's ability to pay all of its obligations, including bonds secured by a special tax. Ohio has a long track record of proactive financial and budget management, including its implementation of frequent and timely budget adjustments over time to mitigate lower revenue.

COVID-19's ripple effects upend steady revenue performance, but Ohio expects planned expenditure reductions to balance fiscal 2020 budget

Ohio's April 2020 financial report shows the first full-month's effect of restricted economic activity and restrained consumer spending brought on by the public health response to COVID-19. Like many other states, Ohio experienced a steep decline in general revenue fund receipts. General revenue fund tax receipts were \$866.5 million (or 35.3%) below the April estimate and \$777 million (or 4%) below the state's year-to-date estimate. Personal income tax receipts accounted for the largest decrease, falling approximately \$635.7 million (or 50.5%) below the monthly estimate, and

\$675.7 (or 9.2%) under the fiscal year estimate. In our view, the effect of rising unemployment and furloughs that began in the second-half of March on withholdings and the postponement of personal income tax filings to July 15 are likely to pressure income tax receipts further and compound negative variances through the end of the current fiscal year. At the same time, monthly non-auto sales and use tax collections were approximately \$113.7 million (or 17.7%) below estimate for the month, fiscal year-to-date receipts fell below the budgeted estimate by 1.5%. Ohio's auto sales tax revenues declined by \$45.6 million (or 3.6%) below the budgeted estimate, indicating that the impact to auto sales were largely insulated in March 2020 due to a lag in sales tax remittance.

Based on its constitutional framework, the state is effectively precluded from ending a biennium in a deficit position. In response to the estimated revenue shortfall at fiscal year-end, the administration announced \$781.9 million in general revenue fund reductions for the remainder of the fiscal year. The state will reduce primary and secondary education appropriations by approximately \$355.5 million, of which roughly \$300 million will be cut from the foundation funding formula and student transportation for K-12 schools. In addition, the state's Medicaid (approximately \$212 million), higher education institutions (\$109.1 million), and other human services programs (\$54.7 million) will be reductions. Officials expect these cost measures will likely be sufficient to reestablish budgetary balance and it will not use BSF reserves or one-time measures.

The most recent general revenue fund cuts will be in addition to the cost savings measure that Ohio had implemented in March 2020, including reductions to non-essential expenditures. The state immediately froze hiring for most positions, pay increases and promotions for exempt and non-exempt staff, and suspended new contract services except those necessary for emergency services and COVID-19 response. In addition, state agencies had been directed to cut unnecessary spending up to 20% for the remainder of fiscal year 2020 and for fiscal year 2021. Based on the monthly financial report for April 2020, general revenue fund disbursements were \$336 million below estimate, reflecting savings from health and human services expenditures (\$116.9 million below estimate) and lower-than-budgeted property tax reimbursements (\$100.5 million), primary and secondary education (\$100.4 million), and general government (\$52.7 million). While Ohio has benefitted from lower Medicaid expenditures in recent biennia, in our view, the state will face new challenges in managing Medicaid expenditure growth over the fiscal 2020-2021 biennium. At approximately 46.1% (or an estimated \$2,271 per capita in fiscal 2019), Ohio's state-only share of Medicaid spending is among the highest of all U.S. states, and well above the sector median of 19.7%.

Through the first 10 months of the current fiscal year, general revenue fund Medicaid disbursements are approximately \$116.4 million (or nearly 1%) over estimate and \$629 million (or 5.1% over the previous fiscal year). Officials indicate that the Medicaid spending increase in response to COVID-19 and the second-order recessionary effects were reflected in April. Total enrollment increased to 2.92 million at the end of April 2020, approximately 101,000 individuals above estimate. The state expect the rise in Medicaid to continue over the next few months due to changes in federal rules for Medicaid eligibility in the federal COVID-19 relief packages. In our view, responsive budgetary measures in other program areas and the state's management of federal funds for Medicaid programs are likely to blunt the initial impact of potential revenue shortfalls and allow Ohio to shift resources to meet new expenditure demands, particularly if Medicaid expenditures increase as expected. We believe these actions are likely to alleviate the impact to its reserve balances and short-term liquidity.

Ohio has not yet revised the budget for the second half of the 2020-2021 fiscal biennium. However, the governor signed an executive order that requires the Office of Budget and Management (OBM), in consultation with the Department of Taxation, to provide an updated state tax revenue forecast for the remainder of the fiscal biennium by June 1, 2020. Concurrently, the executive order requires OBM to work with the Department of Medicaid, Department of Education, and the Department of Higher Education to identify cost containment measures for fiscal 2021. We will continue to monitor for updates to the state's tax revenue forecast and the depth of Ohio's cost containment measures implemented for fiscal 2021.

We consider the state's debt levels to be moderate with rapid amortization and a conservatively managed capital and debt program. Ohio's pension liabilities are average, in our view, and the state has implemented significant pension reform changes in recent years and made steady progress in funding other postemployment benefits (OPEB).

Based on the analytic factors we evaluate for states, we have assigned a total score of '1.6' to Ohio under our state ratings methodology, in which '1.0' is the strongest score and '4.0' the weakest. This score corresponds to a 'AA+' GO rating.

For more information, refer to our most recent full analysis, published Feb. 04, 2020.

Ohio's highway capital improvement bonds are eligible to be rated above the sovereign because we believe the state can maintain better credit characteristics than the U.S. in a stress scenario. Under our criteria "Ratings Above The Sovereign: Corporate And Government Ratings—Methodology And Assumptions" (published Nov. 19, 2013, on RatingsDirect), U.S. states are considered to have moderate sensitivity to country risk. State-derived revenues are the sole source of security on the bonds, and the institutional framework in the U.S. is predictable with significant state autonomy and flexibility.

Ratings Detail (As Of May 19, 2020)		
Ohio cultural & sports APPROP		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Ohio APPROP		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Ohio APPROP		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Ohio Gas Tax		
<i>Long Term Rating</i>	AAA/Stable	Affirmed
Ohio GO		
<i>Long Term Rating</i>	AAA/Stable	Affirmed
Ohio GO		
<i>Long Term Rating</i>	AAA/Stable	Affirmed
Ohio GO		
<i>Long Term Rating</i>	AA+/Stable	Affirmed
Ohio GO VRDBs		
<i>Long Term Rating</i>	AA+/A-1+/Stable	Affirmed

Ratings Detail (As Of May 19, 2020) (cont.)		
Ohio GO VRDBs		
<i>Long Term Rating</i>	AA+ / A-1+ / Stable	Affirmed
Ohio (Administrative Bldg Fd Projs) APPROP		
<i>Long Term Rating</i>	AA / Stable	Affirmed
Ohio (Administrative Bldg Fund Projs) APPROP		
<i>Long Term Rating</i>	AA / Stable	Affirmed
Ohio (Adult Correctional Bldg Fd Projs) APPROP		
<i>Long Term Rating</i>	AA / Stable	Affirmed
Ohio (Adult Correctional Bldg Fd Proj) APPROP		
<i>Long Term Rating</i>	AA / Stable	Affirmed
Ohio (Adult Correctional Bldg Fd Proj) APPROP		
<i>Long Term Rating</i>	AA / Stable	Affirmed
Ohio (Cultural & Sports Facs Bldg Fd Projs) APPROP		
<i>Long Term Rating</i>	AA / Stable	Affirmed
Ohio (Juvenile Correctional Building Fnd Projs) APPROP		
<i>Long Term Rating</i>	AA / Stable	Affirmed
Ohio (Juv Correctional Bldg Fd Projs) APPROP		
<i>Long Term Rating</i>	AA / Stable	Affirmed
Ohio (Mental Health Facs Imp Fd Projs) APPROP		
<i>Long Term Rating</i>	AA / Stable	Affirmed
Ohio (Mental Hlth Facs Imp Fnd Projs) APPROP		
<i>Long Term Rating</i>	AA / Stable	Affirmed
State of Ohio cap facs lease-approp bnds (Mental Health Facilities Improvement Fund Projects)		
<i>Long Term Rating</i>	AA / Stable	Affirmed
State of Ohio cap facs lease-approp rfdg bnds (Administrative Building Fund Projects)		
<i>Long Term Rating</i>	AA / Stable	Affirmed
State of Ohio cap facs lease-approp rfdg bnds (Adult Correctional Building Fund Projects)		
<i>Long Term Rating</i>	AA / Stable	Affirmed
State of Ohio cap facs lse approp bnds (Federally Taxable) (Admin Bldg Fd Proj) ser 2020C due 04/01/2023		
<i>Long Term Rating</i>	AA / Stable	Affirmed
State of Ohio cap facs lse approp bnds (Federally Taxable) (Admin Bldg Fd Proj) ser 2020D due 10/01/2036		
<i>Long Term Rating</i>	AA / Stable	Affirmed
State of Ohio cap facs lse approp bnds (Tax-Exempt) (Admin Bldg Fd Proj) ser 2020B due 04/01/2040		
<i>Long Term Rating</i>	AA / Stable	Affirmed
State of Ohio cap facs lse-approp bnds (Juvenile Correctional Building Fund Projs)		
<i>Long Term Rating</i>	AA / Stable	Affirmed
State of Ohio cap facs lse-approp bnds (Juvenile Correctional Building Fund Projs)		
<i>Long Term Rating</i>	AA / Stable	Affirmed
Columbus-Franklin Cnty Fin Auth, Ohio		
State of Ohio, Ohio		

Ratings Detail (As Of May 19, 2020) (cont.)		
Columbus-Franklin Cnty Fin Auth (Ohio) APPROP		
<i>Long Term Rating</i>	AA-/Stable	Affirmed
Columbus-Franklin Cnty Fin Auth (Ohio) APPROP		
<i>Long Term Rating</i>	AA-/Stable	Affirmed
Columbus-Franklin Cnty Fin Auth (Ohio) APPROP		
<i>Long Term Rating</i>	AA-/Stable	Affirmed
Ohio Bldg Auth, Ohio		
State of Ohio, Ohio		
Ohio Bldg Auth (Ohio) admin bldg APPROP		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Ohio Bldg Auth (Ohio) adult correctional APPROP		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Ohio Bldg Auth (Ohio) highway safety APPROP		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Ohio Bldg Auth (Ohio) juvenile correctional APPROP		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Ohio Bldg Auth (Ohio) (Admin Bldg Fd Proj) APPROP (AGM)		
<i>Unenhanced Rating</i>	AA(SPUR)/Stable	Affirmed
Ohio Bldg Auth (Ohio) (Adult Correctional Bldg Fd Projs) APPROP (MBIA) (National)		
<i>Unenhanced Rating</i>	AA(SPUR)/Stable	Affirmed
Ohio Dept of Admin Svc, Ohio		
State of Ohio, Ohio		
Ohio Dept of Adim Svcs (Ohio) (Multi-Agy Radio Comm) APPROP		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Ohio Dept of Admin Svc (Ohio) APPROP		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Ohio Dept of Admin Svc (Ohio) APPROP		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Ohio Dept of Admin Svc (Ohio) APPROP		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Ohio Dept of Admin Svc (Ohio) (Administrative Knowledge Sys) APPROP		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Ohio Dept of Admin Svc (Ohio) (Bureau of Criminal Investigation Records) APPROP		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Ohio Dept of Admin Svc (Ohio) (Enterprise Data Center Solutions) APPROP		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Ohio Dept of Admin Svc (Ohio) (State Taxation Accounting) APPROP		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Ohio Dept of Admin Svc (State of Ohio) (Enterprise Data Ctr Solutions)		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Ohio Dept of Admin Svc (State of Ohio) (Voting Sys Acquisition) APPROP		
<i>Long Term Rating</i>	AA/Stable	Affirmed

Ratings Detail (As Of May 19, 2020) (cont.)

Ohio Pub Facs Comm, Ohio

State of Ohio, Ohio

Ohio Pub Facs Comm (Ohio)

Long Term Rating AA+/Stable Affirmed

Ohio Pub Facs Comm (Ohio)

Long Term Rating AA+/Stable Affirmed

Ohio Pub Facs Comm (Ohio)

Long Term Rating AA+/Stable Affirmed

Ohio Pub Facs Comm (Ohio) GO

Long Term Rating AA+/Stable Affirmed

Ohio Pub Facs Comm (Ohio) GO

Long Term Rating AA+/Stable Affirmed

Ohio Pub Facs Comm (Ohio) GO

Long Term Rating AA+/Stable Affirmed

Ohio Pub Facs Comm (Ohio) GO

Long Term Rating AA+/Stable Affirmed

Ohio Pub Facs Comm (Ohio) GO

Long Term Rating AA+/Stable Affirmed

Ohio Pub Facs Comm (Ohio) GO

Long Term Rating AA+/Stable Affirmed

Ohio Pub Facs Comm (Ohio) GO

Long Term Rating AA+/Stable Affirmed

Ohio Pub Facs Comm (Ohio) GO

Long Term Rating AA+/Stable Affirmed

Ohio Pub Facs Comm (Ohio) GO VRDBs

Long Term Rating AA+/A-1+/Stable Affirmed

Ohio Pub Facs Comm (Ohio) GO

Long Term Rating AA+/Stable Affirmed

Ohio State Treasurer, Ohio

State of Ohio, Ohio

Ohio St Treasurer (Ohio) APPROP

Long Term Rating AA/Stable Affirmed

Ohio St Treasurer (Ohio) APPROP

Long Term Rating AA/Stable Affirmed

Ohio St Treasurer (Ohio) APPROP

Long Term Rating AA/Stable Affirmed

Ohio St Treasurer (Ohio) APPROP

Long Term Rating AA/Stable Affirmed

Ohio St Treasurer (Ohio) APPROP

Long Term Rating AA/Stable Affirmed

Ohio St Treasurer (Ohio) APPROP

Long Term Rating AA/A-1+/Stable Affirmed

Ohio St Treasurer (Ohio) APPROP

Long Term Rating AA/Stable Affirmed

Ratings Detail (As Of May 19, 2020) (cont.)

Ohio St Treasurer (Ohio) Gas Tax		
<i>Long Term Rating</i>	AAA/Stable	Affirmed
Ohio St Treasurer (Ohio) (Admin Bldg Fd Proj) APPROP		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Ohio St Treasurer (Ohio) (Admin Bldg Fd Proj) APPROP		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Ohio St Treasurer (Ohio) (Adult Correctional Bldg Fd Projs) APPROP		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Ohio St Treasurer (Ohio) (Adult Correctional Bldg Fd Proj) APPROP		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Ohio St Treasurer (Ohio) (Adult Correctional Bldg Fd Proj) APPROP		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Ohio St Treasurer (Ohio) (Cultural & Sports Facs Bldg Fd Projs)		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Ohio St Treasurer (Ohio) (Juvenile Correctional Bldg Fd Projs) APPROP		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Ohio St Treasurer (Ohio) (Juvenile Correctional Bldg Fd Projs) APPROP		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Ohio St Treasurer (Ohio) (Mental Hlth Facs Imp Fd Proj) APPROP		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Ohio St Treasurer (Ohio) (Mental Hlth Facs Imp Proj) APPROP		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Ohio St Treasurer (Ohio) (Mental Hlth Fac Imp Fd Proj) APPROP		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Ohio St Treasurer (Ohio) (Pks & Rec Imp Fd Projs) APPROP		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Ohio St Treasurer (Ohio) (Pks & Rec Imp Fd Proj) APPROP		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Ohio St Treasurer (Ohio) (Transp Bldg Fnd Projs) APPROP		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Ohio St Treasurer (Ohio) (Treasury Mgmt Sys Proj) APPROP		
<i>Long Term Rating</i>	AA/Stable	Affirmed

Many issues are enhanced by bond insurance.

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