Texas Water: Planning for More By Spencer Grubbs, Shannon Halbrook, Jessica Donald and Bruce Wright



One challenge springing from Texas' rapid growth is the increasing pressure it puts on our natural resources – especially water. Texas has a huge number of municipal, agricultural and industrial users all relying on limited sources of surface and groundwater.

As our population and economy continue to grow, the efficient management of this precious resource is becoming increasingly critical.

SUPPLY AND DEMAND

Water planners distinguish between water availability and water supply. Water availability refers to the amount of water in a source that can be withdrawn each year in a serious drought. Supply, on the other hand, represents the amount of that available water currently usable with existing infrastructure and under existing law and water agreements.

The Texas Water Development Board (TWDB) projects that in 2020, our state will have about 24.7 million acre-feet of available water, about half of it groundwater and half surface water. (An acre-foot is the volume of a sheet of water with an area of one acre and a depth of one foot.) Texas' water supply amounts to about 14.7 million acre-feet, 7.2 million acre-feet in the

ground and 7.5 million acre-feet representing surface

In 2016, Texas came close to using its entire annual supply, drawing about 14.2 million acre-feet. About 56 percent of that came from groundwater sources, while 42 percent was surface water; 2 percent came from the reuse of treated wastewater. Agricultural users and municipal water systems accounted for nearly 86 percent of the amount used in 2016 (55 percent and 31 percent, respectively). Other significant water users include manufacturers, power stations and oil and gas producers.

Nearly half of all Texas surface water used in 2016 went to municipal water systems (Exhibit 1). Municipal use fluctuates depending on weather conditions; as measured in gallons per capita daily (GPCD), Texas municipal use peaked at 173 GPCD during the 2011 **CONTINUED ON PAGE 3**

In 2016, Texas came close to using its entire annual water supply.

Water is essential to everyone's survival, but in Texas, it's also a perennial challenge. In this issue of Fiscal Notes, we discuss the planning and funding involved in meeting the state's water needs.



Texas has always been prone to drought, but as our population rises and our

economy becomes more complex, the potential effects of water shortages are becoming more dramatic. The Texas Water Development Board (TWDB) expects the state's water needs to rise by 87 percent through 2070; unless we conserve a lot more or develop new water sources, the state could face an annual shortfall in supplies of about 8.9 million acre-feet — or nearly 3 trillion gallons.

A lot of our water demand is driven by our fast-growing cities. The State Water Plan predicts that by 2070, municipal water demand will rise by 568 percent.

To help local and regional entities plan for their water needs, TWBD offers many low-cost financing options for infrastructure projects. Since its creation in 1957, the agency has provided nearly \$28 billion in financial assistance for water projects.

In 2013, Texas voters approved the state's most recent major water initiative, the State Water Implementation Fund for Texas (SWIFT), which should help provide about \$27 billion in loans for water projects over 50 years. The fund, invested by the Comptroller's Texas Treasury Safekeeping Trust Company, supports subsidized financing for projects put forward by the state's 16 regional water planning groups and incorporated in the State Water Plan.

The most recent iteration of the plan includes about 5,500 water management strategies for the next 50 years. Their costs are high, but inaction could cost even more; TWDB estimates that another severe drought could cost the state economy as much as \$73 billion in 2020, while eliminating hundreds of thousands of Texas jobs.

In this issue of Fiscal Notes, we examine what has been accomplished to address Texas' water needs and what more must be done. Tackling water needs is expensive, but the cost pales in comparison to the price of doing nothing.



Texas Comptroller of Public Accounts

Note: This issue of Fiscal Notes contains estimates and projections that are based on available information, assumptions and estimates as of the date of the forecasts upon which they are based. Assumptions involve judgments about future economic and market conditions and events that are difficult to predict. Actual results could differ from those predicted, and the difference could be material.

A Message from the Comptroller | REGIONAL SNAPSHOT ALAMO

The Alamo Region's estimated total population in 2017 was nearly 2.8 million, or approximately 10 percent of the state's total population. This is an increase of more than 14 percent (nearly 350,000 people) since the 2010 census.

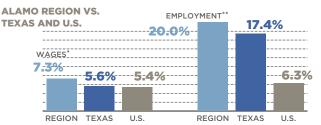
ALAMO REGION VS. TEXAS AND U.S., 2010-2017

REGION

JOBS & WAGE CHANGES, 2007-2017

In 2017, the Alamo Region accounted

for more than 9 percent of the state's total employment.



* Real rate of change

The Alamo Region added

more than 550,000 jobs between 2007 and 2017 and saw higher job growth than the state as a whole. Its concentration of high-paying, high-growth industries makes its economy distinctive.

REGIONAL RECEIPTS SUBJECT **TO SALES TAX 2007-2017**



Source: Texas Comptroller of Public Accounts

CONCLUSION

The Alamo Region is more diverse than the state, and every county is rowth are both slightly higher than the state average. High school education attainment is rising. The federal government, including the U.S. military, has a large footprint in the region. Businesses supporting the oil industry are highly concentrated in the Alamo region, and continue to make its economy robust.

THE ALAMO REGION IS ONE OF THE **COMPTROLLER'S 12 ECONOMIC REGIONS.**

To see a complete list of these regions, plus more in-depth county-by-county data, visit: comptroller.texas.gov/economy/economic-data/regions/

If you would like to receive paper copies of Fiscal Notes, contact us at fiscal.notes@cpa.texas.gov

^{*}Figures include private and public-sector employees with the exception of active-duty military personnel, railroad employees, religious institution employees and the self-employed. Sources: JobsEQ and U.S. Bureau of Labor Statistics



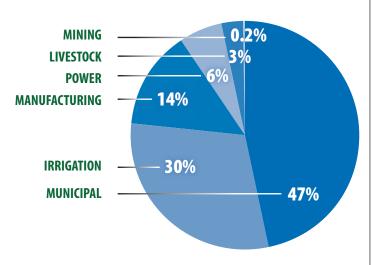


EXHIBIT 1

BY ECONOMIC SECTOR

Note: Total may not sum due to rounding Source: Texas Water Development Board

> drought, falling to 141 GPCD in 2016. Agriculture was the second-biggest user of surface water, claiming 33 percent of the total (30 percent for irrigation and 3 percent for watering livestock).

The vast majority of groundwater, by contrast, is used for agricultural irrigation (Exhibit 2). Municipal water systems were a distant second, with 18 percent of total use.

INFRASTRUCTURE

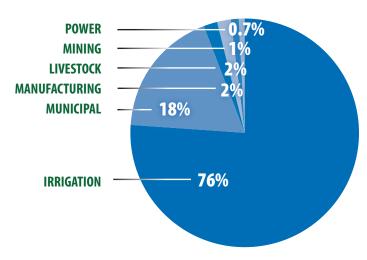
Texas' groundwater is stored just where the name implies. Its surface water, however, resides in 188 major reservoirs, 15 major river basins and eight coastal basins. Basins are regions drained by a river and its tributaries; reservoirs are large artificial lakes. (Texas has only one natural lake, Caddo Lake on the Texas-Louisiana border.)

There are two types of reservoirs: on-channel, created by damming rivers and restricting the downstream flow of water, as with the Highland Lakes chain in Central Texas; and off-channel, created by piping water from a river to an artificially constructed lake separate from the river itself, such as Wharton County's new Arbuckle Reservoir.

> 2011 was the single driest year in the state's recorded history.

EXHIBIT 2

GROUNDWATER USAGE IN TEXAS, 2016, BY ECONOMIC SECTOR



Note: Total may not sum due to rounding Source: Texas Water Development Board

According to TWDB, more than half of the state's available surface water, or 8.9 million acre-feet, comes from reservoirs. As of Jan. 31, 2019, the reservoirs collectively were 89.6 percent full; in the past year, their lowest point was 76.1 percent.

Because some parts of Texas typically are much drier than others, a common strategy to meet water needs is to transfer water between different river basins to supplement existing supplies. This practice, called interbasin transfer, involves moving water via canals or pipes. Some areas in Texas receive the majority of their water from interbasin transfers. As of 2014 (most recent available data), the state had more than 150 active interbasin transfer arrangements.

DRYING UP?

Texas was once described, in a quote generally attributed to an unnamed meteorologist in the 1920s, as "a land of perennial drought broken by the occasional devastating flood." Texas is rarely entirely free of drought, particularly in its arid western counties. The "drought of record," which TWDB uses as a benchmark for future disaster planning, lasted from 1950 to 1957. The years of 2010 through 2014 represented the second-worst Texas drought on record, with 2011 being the single driest year in the state's recorded history. Dry conditions in that year alone cost the state's agricultural sector an estimated \$7.6 billion, with significant effects in other industries ranging from timber to tourism.

Texas Water: Planning for More



Caddo Lake, on the Texas-Louisiana border

Droughts represent continuing challenges to a rapidly growing state with an economy dependent on reliable fresh water supplies for residential, commercial and agricultural use. But even in the absence of drought, water supply and usage must be planned for and closely monitored.

TWDB expects Texas' water supply and demand to diverge steadily over the next 50 years, resulting in a supply shortfall of about 8.9 million acre-feet per year by 2070. That's enough to cover all of Dallas County with 15 feet of water.

In the absence of new sources or additional conservation, the agency expects the state's water supply to fall by 11 percent from 2020 to 2070, from 15.2 million to 13.6 million acre-feet per year. The projected decline is due largely to an expected reduction in supplies from the Ogallala Aquifer, a huge source of agricultural water, and mandatory pumping restrictions on the Gulf Coast Aquifer, put into place to prevent further subsidence, the gradual sinking of surrounding land.

But population growth is likely to put the most urgent pressure on our water supplies. TWDB expects Texas' population to rise to 51 million by 2070, a 73 percent increase from its projection for 2020. This growth will be heavily concentrated in the state's urban centers, especially Dallas-Fort Worth and Houston, where municipal water use is expected to soar.

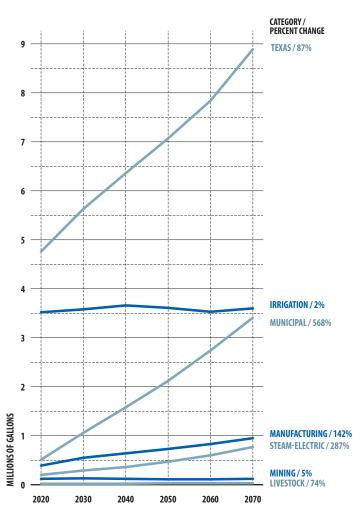
TWDB's State Water Plan (SWP) anticipates that municipal water need — the amount by which demand exceeds supply — will rise by 568 percent by 2070, leaving the state's cities in need of 3.4 million additional acre-feet of water in the absence of increased supplies or more restricted use (**Exhibit 3**). That's more than three times the entire storage capacity of the Hill Country's Lake Travis. In all, TWDB predicts the state's entire water need will rise by 87 percent through 2070.



Toledo Bend Reservoir, Texas' largest

EXHIBIT 3

PROJECTED STATE WATER NEED, 2020-2070 (IN ACRE-FEET)



Source: Texas Water Development Board

Meeting these challenges will require strategies to improve supply and reduce demand: conservation, the creation of new reservoirs, desalination and more.

STATE-REGIONAL PLANNING

Texas' rapid growth is escalating the need for communities and the state as a whole to protect current water supplies and make detailed plans for future usage.

In Texas, water supply planning has been a policy priority since the drought years of the 1950s. In 1957, the Legislature established TWDB as a state agency to provide financial and logistical assistance to local and regional water entities for long-term projects.

TWDB's top priority, the State Water Plan, is Texas' most comprehensive water supply planning tool. The agency's first formal SWP of 1961 focused on quantifying the state's surface and groundwater supplies and projecting future water needs through 1980. In 1997 — after another severe drought — the

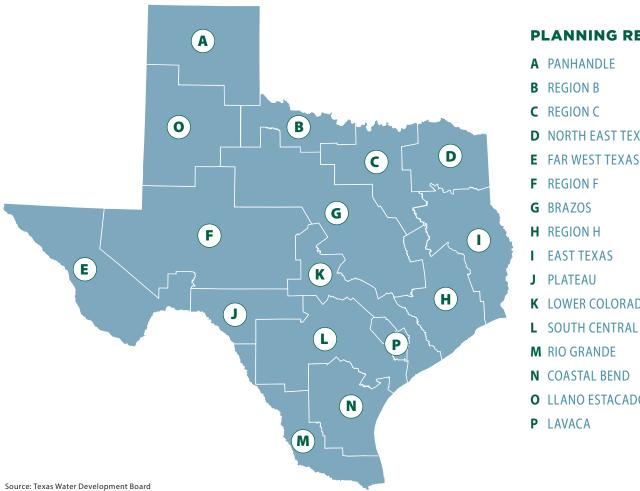
Texas' rapid growth is escalating the need to protect current water supplies and make detailed plans for future usage.

state water planning process was changed in several important ways. In that year, the Legislature required TWDB to establish regional water planning groups and to develop a comprehensive SWP every five years, based on the regional plans.

TWDB established 16 regional water planning groups (Exhibit 4), each charged with planning for drought conditions, evaluating future water demands and developing water management plans for its area. In 2002, TWDB developed the first SWP based on this "bottom-up" regional planning process.

EXHIBIT 4

TEXAS WATER PLANNING REGIONS



PLANNING REGIONS

- D NORTH EAST TEXAS

- **K** LOWER COLORADO
- L SOUTH CENTRAL TEXAS
- O LLANO ESTACADO

The impact of water shortages would echo throughout the state economy, affecting everything from power generation to the cattle business.

The 2017 SWP was the 10th and most recent plan, and the fourth based on the regional planning process. It lists about 5,500 recommended water management strategies to meet the needs of particular user groups (such as agriculture, cities and manufacturers) in each planning area during the next 50 years. The strategies fall into two broad categories: demand management — strategies reducing the requirement for additional water — and water supply — strategies to increase water supplies.

In the 2017 SWP, nearly 70 percent of the water management strategies fall under water supply, with the remainder representing demand management (Exhibit 5).

Water supply strategies generally fall into one of four subcategories in the 2017 SWP: surface water strategies (such as the construction of new reservoirs), reuse strategies (wastewater treatment and reuse), groundwater strategies (the construction of new water wells and the desalination of brackish groundwater) and seawater desalination.

Examples of demand management strategies in the 2017 SWP include irrigation conservation (through technological advances such as low-energy precision application systems that use less water and reduce evaporation) and municipal conservation (including measures such as mandatory low-flow plumbing and landscape watering restrictions).

In addition to water management strategies, the 2017 SWP lists about 2,500 water management strategy projects (WMSPs) involving new infrastructure. These include new major reservoirs and groundwater wells. The cost of all WMSPs across the 16 regional planning groups is estimated at \$63 billion over 50 years.

THE COST OF INACTION

That's an enormous amount of money — about two-thirds of the state's entire net general revenue for fiscal 2018. Yet the cost of doing nothing could be even higher.

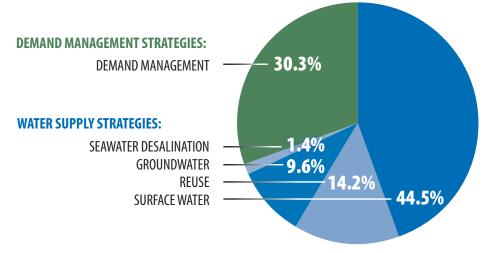
An adequate water supply is so essential that the impact of shortages would echo throughout the state economy, affecting everything from power generation to the cattle business. TWDB estimates that a future "drought of record" event could reduce the income of Texas businesses and individuals by \$73 billion in 2020 and more than \$151 billion in 2070, with accumulating impacts for each year of drought. It also could reduce Texas employment by 424,000 in 2020 and nearly 1.3 million in 2070.

Texas' water planning process, of course, is intended to ensure that we avoid the harshest consequences of the next — and inevitable — major drought. FN

For more information on Texas water planning, see the Texas Water Development Board's most recent State Water Plan at www.twdb.texas.gov/waterplanning/swp/2017.

EXHIBIT 5

SHARE OF RECOMMENDED WATER MANAGEMENT STRATEGIES BY WATER RESOURCE IN 2070



Source: Texas Water Development Board

Funding Water Infrastructure By Spencer Grubbs and Shannon Halbrook



Water infrastructure — dams, pipelines, reservoirs, desalination plants and more — can be tremendously expensive, and usually requires financing through some form of long-term borrowing.

The Texas Water Development Board (TWDB) offers a wide array of low-cost financing options for new infrastructure, or water management strategy projects (WMSPs), to help local and regional entities with all phases of their implementation, from planning and design to construction. Since 1957, TWDB has provided \$27.6 billion in financial assistance for water projects.

In the wake of the devastating drought of 2011, the Texas Legislature sought additional tools for funding water projects. In 2013, Texas voters approved a constitutional amendment creating the State Water Implementation Fund of Texas (SWIFT) and the State Water Implementation Revolving Fund of Texas (SWIRFT) to finance projects approved by one or more of the state's 16 regional water planning groups and included in the State Water Plan (SWP). At inception, the Legislature's goal for the funds was to provide about \$27 billion in loans for SWP projects over 50 years.

SWIFT AND SWIRFT

SWIFT offers financing support for low-interest loans provided by TWDB, with options such as extended repayment terms, repayment deferrals and incremental repurchase terms for projects with elements of state ownership. These loan structures are intended to provide an incentive to encourage water project sponsors (such as cities, counties and river authorities)

In the wake of the devastating drought of 2011, the Texas Legislature sought additional tools for funding water projects.

to enter the state water planning process and address growing water needs.

SWIFT was initially funded with \$2 billion from the state's Economic Stabilization Fund. Its investments are managed by the Texas Treasury Safekeeping Trust Company, an entity of the Texas Comptroller of Public Accounts. As of Jan. 31, 2019, SWIFT had a balance of nearly \$1.7 billion.

The SWIRFT, in turn, sells revenue bonds to generate the proceeds TWDB uses to provide SWIFT-subsidized loans to income-earning water projects. Revenue from projects supported by these loans is used to repay the bonds' interest and principal.

TWDB uses a scoring system to prioritize eligible WMSPs (those approved under an SWP water management strategy) for financial assistance. Under the system's criteria, the highest scores generally are given to projects that serve a large population, assist both urban and rural Texans and meet a high percentage of water users' needs. TWDB prioritizes potential projects annually, most recently in 2018.

Funding Water Infrastructure



BROOKE PAUP BOARD MEMBER. **TEXAS WATER DEVELOPMENT BOARD**

"While interested communities still need to apply for and meet all requirements of the SWIFT program, the low [loan] interest rates have served as an important incentive for communities across Texas," says TWDB Member Brooke Paup.

SWIFT PROJECTS PAST AND PRESENT

TWDB began offering SWIFT-subsidized loans in 2015, when 30 WMSPs received about \$3.9 billion. The latest round in 2018 provided six projects with about \$2 billion. In all, the program has provided nearly \$8.2 billion in financial

assistance to 54 projects from 38 different sponsors around the state (Exhibit 1). TWDB estimates that these



Construction on a water pipeline connecting East Texas water supplies with the DFW area.

SWIFT ASSISTANCE

The program provides three broad categories of financial assistance:

- 1. Low-interest loans: loans for WMSPs receive subsidized interest rates, with loan maturities ranging between 20 and 30 years.
- 2. Deferred obligations: repayment of loan principal and interest can be deferred for eight years or until construction is completed.
- 3. Board participation: TWDB assumes an ownership interest in the "excess" capacity of a project being built to accommodate greater future demand; the state's share may be incrementally repurchased by the project sponsor. Financing terms vary but are generally for 34 years.

EXHIBIT 1

SWIFT FUNDING COMMITMENTS, 2015-2018

YEAR	FUNDED PROJECTS*	FUNDING COMMITMENTS
2015	30	\$3,899,485,000
2016	11	759,255,000
2017	7	1,552,775,000
2018	6	1,955,800,000
TOTAL	54	\$8,167,315,000

* Note: Projects are counted only once even if they have received multiple funding commitments.

Source: Texas Water Development Board

sponsors will save almost \$845 million in debt service over the life of their current obligations, compared to financing available in the open market.

NOTABLE SWIFT PROJECTS

2015: The largest project receiving SWIFT-subsidized loans in 2015 was the Northeast Water Purification Plant expansion in Humble near Houston. Its purpose was to increase surface water supplies through additional treatment of water from the Luce Bayou Interbasin Transfer. The overall project included five individual WMSPs in the state's Region H water planning area, each with its own sponsor. In all, the sponsors received nearly \$1.3 billion in TWDB loans for planning, design and construction. In 2018, this project received an additional \$528.9 million and is now in the construction phase, with completion expected in January 2025. The plant expansion is projected to provide an additional 358,000 acre-feet in water supplies

2016: The city of Austin received more than \$80 million in SWIFT-subsidized loans for the planning, design and construction of an advanced water-meter infrastructure to reduce water losses due to old metering technology. The project is expected to provide 6,105 acre-feet in additional water supplies when completed in September 2023.

when fully implemented.

2017: TWDB loaned the Brushy Creek Regional Utility Authority in Cedar Park nearly \$17 million for the planning, design, acquisition and construction of a regional facility to ensure sufficient water supplies for the cities of Cedar Park, Leander and Round Rock. In 2018, the project received an additional \$15.7 million from TWDB and is now in pre-construction, with completion expected in June 2021. The project should provide about 14,500 acre-feet in additional water supplies.

2018: The city of McAllen received \$6.9 million in SWIFT-subsidized loans to purchase water rights for municipal and industrial use. The project should be completed in September 2019 and will provide 3,000 acre-feet of water.

OTHER FINANCIAL ASSISTANCE PROGRAMS

TWDB also manages several other financial assistance programs, both state and federal, for water projects that may or may not be included in the SWP (Exhibit 2). The revolving funds are supported with revenue bonds while the remainder are funded by general obligation bonds.

The programs include the federal Clean Water State Revolving Fund and Drinking Water State Revolving Fund, which offer below-market loans to public or private entities, as well as principal forgiveness — that is, a waiver of some or all of the outstanding principal balance on a loan — for eligible disadvantaged communities or "green" projects. The former supports wastewater collection and treatment, while the latter

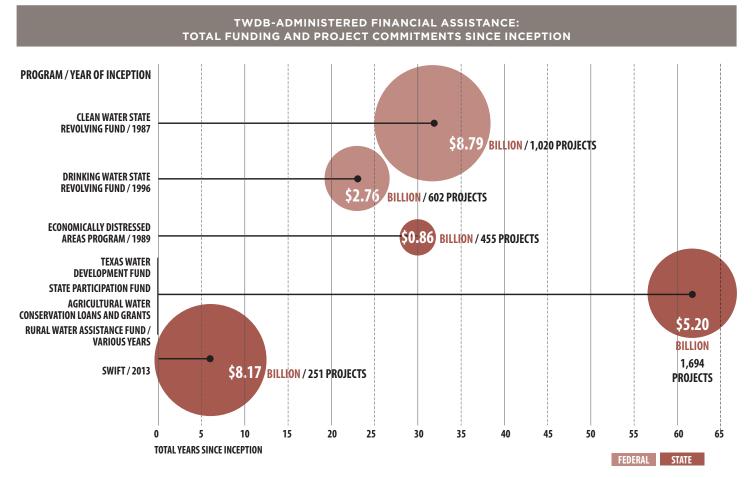


SWIFT-funded improvements to an agricultural irrigation system in Hidalgo County

REVENUE BONDS VS. GENERAL OBLIGATION BONDS

Revenue bonds are tied to specific projects intended to generate revenue to repay the bondholders. General obligation bonds are not necessarily tied to specific projects and are backed by the "full faith and credit" of the issuing government, with bondholders typically repaid through tax revenue.

EXHIBIT 2



Source: Texas Water Development Board and U.S. Environmental Protection Agency

SWIFT has brought an unprecedented amount of support for water projects in a very short time.

provides loans for water treatment, infrastructure and source-water preparation and protection.

The Economically Distressed Areas Program offers financial assistance for areas of low median income where water and sewer connections do not exist or do not meet state standards. The program helps with planning, land acquisition, design and construction on new or improved supply, collection or treatment facilities.

The Texas Water Development Fund offers support to state political subdivisions and nonprofit water-supply corporations for water supply, wastewater and flood control projects.

The State Participation Program is open to any state political subdivision that can sponsor construction of a new water supply, wastewater or flood control project. In this program, the state assumes temporary ownership interest in a project to allow the local authority to build at a scale that will accommodate future needs. The local authority must fund the percentage required by current needs, while the state may assume up to 80 percent of the cost of new supply projects and up to 50 percent for other projects.

Agricultural Water Conservation Grants and Loans are offered to government agencies or political subdivisions that support agricultural irrigation conservation programs, projects and strategies.

The Rural Water Assistance Fund helps small rural utilities and counties without an urban area of more than 50,000 residents. It offers assistance for well and pumping projects, desalination, storage, water treatment and quality enhancement.

Other TWDB assistance includes grants for flood protection planning, early warning systems and flood response strategies; loans to fund the creation and startup of new groundwater conservation districts; and grants to help regional water planning authorities develop their plans.



View of the Northeast Water Purification Plant expansion project in Humble

SWIFT, however, has brought an unprecedented amount of support in a very short time. As Exhibit 2 indicates, only the Clean Water State Revolving Fund has provided more support for water projects in Texas, and that program has been in place for more than 30 years.

"The SWIFT program has been a tremendous success," Paup says. "This funding is benefiting communities and projects of all sizes. Perhaps most important of all, projects supported by SWIFT will create approximately 1.5 million acre-feet of new water supply in Texas when they are completed." FN

For more information on SWIFT, visit www.twdb.texas. gov/financial/programs/swift/index.asp.

State Revenue Watch

This table presents data on net state revenue collections by source. It includes most recent monthly collections, year-to-date (YTD) totals for the current fiscal year and a comparison of current YTD totals with those in the equivalent period of the previous fiscal year.

These numbers were current at press time. For the most current data as well as downloadable files, visit comptroller.texas.gov/ transparency.

Note: Texas' fiscal year begins on Sept. 1 and ends on Aug. 31.

Notes: Totals may not add due to rounding. Excludes local funds and deposits by certain semi-independent agencies.

Includes certain state revenues that are deposited in the State Treasury but not appropriated.

NET STATE REVENUE — All Funds Excluding Trust

(AMOUNTS IN THOUSANDS)

Monthly and Year-to-Date Collections: Percent Change From Previous Year

Tax Collections by Major Tax	MARCH 2019	YEAR TO DATE: TOTAL	YEAR TO DATE: CHANGE FROM PREVIOUS YEAR
SALES TAX	\$2,615,481	\$19,459,137	7.93%
PERCENT CHANGE FROM MARCH 2018	8.98%	, , , , , ,	
MOTOR VEHICLE SALES AND RENTAL TAXES	398,814	2,885,607	-0.47%
PERCENT CHANGE FROM MARCH 2018	3.75%		
MOTOR FUEL TAXES	285,608	2,138,742	2.10%
PERCENT CHANGE FROM MARCH 2018	3.26%	2/120/112	
FRANCHISE TAX	180,330	-4,958	-96.83%
PERCENT CHANGE FROM MARCH 2018	18.28%		
OIL PRODUCTION TAX	276,430	2,143,959	22.50%
PERCENT CHANGE FROM MARCH 2018	0.22%		
INSURANCE TAXES	579,439	1,524,039	4.76%
PERCENT CHANGE FROM MARCH 2018	10.21%	1,021,000	
CIGARETTE AND TOBACCO TAXES	104,509	759,811	6.64%
PERCENT CHANGE FROM MARCH 2018	-7.13%	122/211	312.77
NATURAL GAS PRODUCTION TAX	145,370	1,072,768	27.61%
PERCENT CHANGE FROM MARCH 2018	8.35%	.,2,, 00	27.0.75
ALCOHOLIC BEVERAGES TAXES	106,603	771,928	7.35%
PERCENT CHANGE FROM MARCH 2018	5.79%		7.5575
HOTEL OCCUPANCY TAX	49,034	338,181	5.79%
PERCENT CHANGE FROM MARCH 2018	4.44%	330,101	3., 7,0
UTILITY TAXES ¹	632	222,366	10.71%
PERCENT CHANGE FROM MARCH 2018	148.73%		
OTHER TAXES ²	16,857	153,684	13.72%
PERCENT CHANGE FROM MARCH 2018	0.56%	.55/60 1	1317270
TOTAL TAX COLLECTIONS	\$4,759,105	\$31,465,263	8.50%
PERCENT CHANGE FROM MARCH 2018		+5.,.05,205	0.0070
	7.51%		
Revenue By Source	7.51% MARCH 2019	YEAR TO DATE: TOTAL	YEAR TO DATE CHANGE FROM PREVIOUS YEAR
•	MARCH 2019	TOTAL	CHANGE FROM PREVIOUS YEAR
TOTAL TAX COLLECTIONS	MARCH 2019 \$4,759,105		CHANGE FROM
TOTAL TAX COLLECTIONS PERCENT CHANGE FROM MARCH 2018	MARCH 2019 \$4,759,105 7.51%	**************************************	CHANGE FROM PREVIOUS YEA 8.50%
TOTAL TAX COLLECTIONS PERCENT CHANGE FROM MARCH 2018 FEDERAL INCOME	MARCH 2019 \$4,759,105 7.51% 3,298,560	TOTAL	CHANGE FROM PREVIOUS YEA
PERCENT CHANGE FROM MARCH 2018 PERCENT CHANGE FROM MARCH 2018 PERCENT CHANGE FROM MARCH 2018	MARCH 2019 \$4,759,105 7.51% 3,298,560 12.45%	\$31,465,263 24,677,978	CHANGE FROM PREVIOUS YEA 8.50% 2.92%
PERCENT CHANGE FROM MARCH 2018 FEDERAL INCOME PERCENT CHANGE FROM MARCH 2018 LICENSES, FEES, FINES AND PENALTIES	MARCH 2019 \$4,759,105 7.51% 3,298,560 12.45% 410,976	**************************************	CHANGE FROM PREVIOUS YEA 8.50%
PERCENT CHANGE FROM MARCH 2018 FEDERAL INCOME PERCENT CHANGE FROM MARCH 2018 LICENSES, FEES, FINES AND PENALTIES PERCENT CHANGE FROM MARCH 2018	MARCH 2019 \$4,759,105 7.51% 3,298,560 12.45% 410,976 -5.87%	\$31,465,263 24,677,978 3,859,404	CHANGE FROM PREVIOUS YEA 8.50% 2.92% 1.76%
PERCENT CHANGE FROM MARCH 2018 FEDERAL INCOME PERCENT CHANGE FROM MARCH 2018 LICENSES, FEES, FINES AND PENALTIES PERCENT CHANGE FROM MARCH 2018 STATE HEALTH SERVICE FEES AND REBATES ³	MARCH 2019 \$4,759,105 7.51% 3,298,560 12.45% 410,976 -5.87% 312,096	\$31,465,263 24,677,978	CHANGE FROM PREVIOUS YEA 8.50% 2.92%
PERCENT CHANGE FROM MARCH 2018 FEDERAL INCOME PERCENT CHANGE FROM MARCH 2018 LICENSES, FEES, FINES AND PENALTIES PERCENT CHANGE FROM MARCH 2018 STATE HEALTH SERVICE FEES AND REBATES ³ PERCENT CHANGE FROM MARCH 2018	MARCH 2019 \$4,759,105 7.51% 3,298,560 12.45% 410,976 -5.87% 312,096 -29.28%	\$31,465,263 24,677,978 3,859,404 4,196,376	CHANGE FROM PREVIOUS YEA 8.50% 2.92% 1.76% -15.25%
TOTAL TAX COLLECTIONS PERCENT CHANGE FROM MARCH 2018 FEDERAL INCOME PERCENT CHANGE FROM MARCH 2018 LICENSES, FEES, FINES AND PENALTIES PERCENT CHANGE FROM MARCH 2018 STATE HEALTH SERVICE FEES AND REBATES ³ PERCENT CHANGE FROM MARCH 2018 NET LOTTERY PROCEEDS ⁴	MARCH 2019 \$4,759,105 7.51% 3,298,560 12.45% 410,976 -5.87% 312,096 -29.28% 217,514	\$31,465,263 24,677,978 3,859,404	CHANGE FROM PREVIOUS YEAR 8.50% 2.92% 1.76%
Revenue By Source TOTAL TAX COLLECTIONS PERCENT CHANGE FROM MARCH 2018 FEDERAL INCOME PERCENT CHANGE FROM MARCH 2018 LICENSES, FEES, FINES AND PENALTIES PERCENT CHANGE FROM MARCH 2018 STATE HEALTH SERVICE FEES AND REBATES ³ PERCENT CHANGE FROM MARCH 2018 NET LOTTERY PROCEEDS ⁴ PERCENT CHANGE FROM MARCH 2018 LAND INCOME	MARCH 2019 \$4,759,105 7.51% 3,298,560 12.45% 410,976 -5.87% 312,096 -29.28% 217,514 10.26%	TOTAL \$31,465,263 24,677,978 3,859,404 4,196,376 1,521,529	CHANGE FROM PREVIOUS YEA 8.50% 2.92% 1.76% -15.25%
PERCENT CHANGE FROM MARCH 2018 FEDERAL INCOME PERCENT CHANGE FROM MARCH 2018 LICENSES, FEES, FINES AND PENALTIES PERCENT CHANGE FROM MARCH 2018 STATE HEALTH SERVICE FEES AND REBATES ³ PERCENT CHANGE FROM MARCH 2018 NET LOTTERY PROCEEDS ⁴ PERCENT CHANGE FROM MARCH 2018 LAND INCOME	MARCH 2019 \$4,759,105 7.51% 3,298,560 12.45% 410,976 -5.87% 312,096 -29.28% 217,514 10.26% 165,974	\$31,465,263 24,677,978 3,859,404 4,196,376	CHANGE FROM PREVIOUS YEA 8.50% 2.92% 1.76% -15.25%
PERCENT CHANGE FROM MARCH 2018 PERCENT CHANGE FROM MARCH 2018 PERCENT CHANGE FROM MARCH 2018 LICENSES, FEES, FINES AND PENALTIES PERCENT CHANGE FROM MARCH 2018 STATE HEALTH SERVICE FEES AND REBATES ³ PERCENT CHANGE FROM MARCH 2018 NET LOTTERY PROCEEDS ⁴ PERCENT CHANGE FROM MARCH 2018 LAND INCOME PERCENT CHANGE FROM MARCH 2018	MARCH 2019 \$4,759,105 7.51% 3,298,560 12.45% 410,976 -5.87% 312,096 -29.28% 217,514 10.26% 165,974 -0.81%	TOTAL \$31,465,263 24,677,978 3,859,404 4,196,376 1,521,529 1,378,665	CHANGE FROM PREVIOUS YEA 8.50% 2.92% 1.76% -15.25% 18.95% 24.74%
PERCENT CHANGE FROM MARCH 2018 PERCENT CHANGE FROM MARCH 2018 PERCENT CHANGE FROM MARCH 2018 LICENSES, FEES, FINES AND PENALTIES PERCENT CHANGE FROM MARCH 2018 STATE HEALTH SERVICE FEES AND REBATES ³ PERCENT CHANGE FROM MARCH 2018 NET LOTTERY PROCEEDS ⁴ PERCENT CHANGE FROM MARCH 2018 LAND INCOME PERCENT CHANGE FROM MARCH 2018 LINTEREST AND INVESTMENT INCOME	MARCH 2019 \$4,759,105 7.51% 3,298,560 12.45% 410,976 -5.87% 312,096 -29.28% 217,514 10.26% 165,974 -0.81% 416,850	TOTAL \$31,465,263 24,677,978 3,859,404 4,196,376 1,521,529	CHANGE FROM PREVIOUS YEA 8.50% 2.92% 1.76% -15.25%
PERCENT CHANGE FROM MARCH 2018	MARCH 2019 \$4,759,105 7.51% 3,298,560 12.45% 410,976 -5.87% 312,096 -29.28% 217,514 10.26% 165,974 -0.81% 416,850 10.75%	TOTAL \$31,465,263 24,677,978 3,859,404 4,196,376 1,521,529 1,378,665 1,480,611	CHANGE FROM PREVIOUS YEA 8.50% 2.92% 1.76% -15.25% 18.95% 24.74% 37.27%
PERCENT CHANGE FROM MARCH 2018 PERCENT CHANGE FROM MARCH 2018 PERCENT CHANGE FROM MARCH 2018 LICENSES, FEES, FINES AND PENALTIES PERCENT CHANGE FROM MARCH 2018 STATE HEALTH SERVICE FEES AND REBATES ³ PERCENT CHANGE FROM MARCH 2018 NET LOTTERY PROCEEDS ⁴ PERCENT CHANGE FROM MARCH 2018 LAND INCOME PERCENT CHANGE FROM MARCH 2018 INTEREST AND INVESTMENT INCOME PERCENT CHANGE FROM MARCH 2018 INTEREST AND INVESTMENT INCOME PERCENT CHANGE FROM MARCH 2018 SETTLEMENTS OF CLAIMS	MARCH 2019 \$4,759,105 7.51% 3,298,560 12.45% 410,976 -5.87% 312,096 -29.28% 217,514 10.26% 165,974 -0.81% 416,850 10.75% 5,293	TOTAL \$31,465,263 24,677,978 3,859,404 4,196,376 1,521,529 1,378,665	CHANGE FROM PREVIOUS YEA 8.50% 2.92% 1.76% -15.25% 18.95% 24.74%
PERCENT CHANGE FROM MARCH 2018 PERCENT CHANGE FROM MARCH 2018 PERCENT CHANGE FROM MARCH 2018 LICENSES, FEES, FINES AND PENALTIES PERCENT CHANGE FROM MARCH 2018 STATE HEALTH SERVICE FEES AND REBATES ³ PERCENT CHANGE FROM MARCH 2018 NET LOTTERY PROCEEDS ⁴ PERCENT CHANGE FROM MARCH 2018 LAND INCOME PERCENT CHANGE FROM MARCH 2018 INTEREST AND INVESTMENT INCOME PERCENT CHANGE FROM MARCH 2018 SETTLEMENTS OF CLAIMS PERCENT CHANGE FROM MARCH 2018	MARCH 2019 \$4,759,105 7.51% 3,298,560 12.45% 410,976 -5.87% 312,096 -29.28% 217,514 10.26% 165,974 -0.81% 416,850 10.75% 5,293 -13.71%	TOTAL \$31,465,263 24,677,978 3,859,404 4,196,376 1,521,529 1,378,665 1,480,611 491,162	CHANGE FROM PREVIOUS YEA 8.50% 2.92% 1.76% -15.25% 18.95% 24.74% 37.27% 0.36%
PERCENT CHANGE FROM MARCH 2018 PERCENT CHANGE FROM MARCH 2018 PERCENT CHANGE FROM MARCH 2018 LICENSES, FEES, FINES AND PENALTIES PERCENT CHANGE FROM MARCH 2018 STATE HEALTH SERVICE FEES AND REBATES ³ PERCENT CHANGE FROM MARCH 2018 NET LOTTERY PROCEEDS ⁴ PERCENT CHANGE FROM MARCH 2018 LAND INCOME PERCENT CHANGE FROM MARCH 2018 INTEREST AND INVESTMENT INCOME PERCENT CHANGE FROM MARCH 2018 SETTLEMENTS OF CLAIMS PERCENT CHANGE FROM MARCH 2018 SETTLEMENTS OF CLAIMS PERCENT CHANGE FROM MARCH 2018	MARCH 2019 \$4,759,105 7.51% 3,298,560 12.45% 410,976 -5.87% 312,096 -29.28% 217,514 10.26% 165,974 -0.81% 416,850 10.75% 5,293 -13.71% 5,895	TOTAL \$31,465,263 24,677,978 3,859,404 4,196,376 1,521,529 1,378,665 1,480,611	CHANGE FROM PREVIOUS YEA 8.50% 2.92% 1.76% -15.25% 18.95% 24.74% 37.27%
PERCENT CHANGE FROM MARCH 2018 PERCENT CHANGE FROM MARCH 2018 PERCENT CHANGE FROM MARCH 2018 LICENSES, FEES, FINES AND PENALTIES PERCENT CHANGE FROM MARCH 2018 STATE HEALTH SERVICE FEES AND REBATES ³ PERCENT CHANGE FROM MARCH 2018 NET LOTTERY PROCEEDS ⁴ PERCENT CHANGE FROM MARCH 2018 LAND INCOME PERCENT CHANGE FROM MARCH 2018 INTEREST AND INVESTMENT INCOME PERCENT CHANGE FROM MARCH 2018 SETTLEMENTS OF CLAIMS PERCENT CHANGE FROM MARCH 2018 SETTLEMENTS OF CLAIMS PERCENT CHANGE FROM MARCH 2018 SECHEATED ESTATES PERCENT CHANGE FROM MARCH 2018	MARCH 2019 \$4,759,105 7.51% 3,298,560 12.45% 410,976 -5.87% 312,096 -29.28% 217,514 10.26% 165,974 -0.81% 416,850 10.75% 5,293 -13.71% 5,895 -28.45%	TOTAL \$31,465,263 24,677,978 3,859,404 4,196,376 1,521,529 1,378,665 1,480,611 491,162	CHANGE FROM PREVIOUS YEA 8.50% 2.92% 1.76% -15.25% 18.95% 24.74% 37.27% 0.36% 30.76%
PERCENT CHANGE FROM MARCH 2018 STATE HEALTH SERVICE FEES AND REBATES PERCENT CHANGE FROM MARCH 2018 LICENSES, FEES, FINES AND PENALTIES PERCENT CHANGE FROM MARCH 2018 STATE HEALTH SERVICE FEES AND REBATES PERCENT CHANGE FROM MARCH 2018 NET LOTTERY PROCEEDS PERCENT CHANGE FROM MARCH 2018 LAND INCOME PERCENT CHANGE FROM MARCH 2018 INTEREST AND INVESTMENT INCOME PERCENT CHANGE FROM MARCH 2018 SETTLEMENTS OF CLAIMS PERCENT CHANGE FROM MARCH 2018 ESCHEATED ESTATES PERCENT CHANGE FROM MARCH 2018 ESCHEATED ESTATES PERCENT CHANGE FROM MARCH 2018 SCHEATED ESTATES PERCENT CHANGE FROM MARCH 2018 SALES OF GOODS AND SERVICES	MARCH 2019 \$4,759,105 7.51% 3,298,560 12.45% 410,976 -5.87% 312,096 -29.28% 217,514 10.26% 165,974 -0.81% 416,850 10.75% 5,293 -13.71% 5,895 -28.45% 25,809	TOTAL \$31,465,263 24,677,978 3,859,404 4,196,376 1,521,529 1,378,665 1,480,611 491,162	CHANGE FROM PREVIOUS YEA 8.50% 2.92% 1.76% -15.25% 18.95% 24.74% 37.27% 0.36%
PERCENT CHANGE FROM MARCH 2018 PERCENT CHANGE FROM MARCH 2018 PERCENT CHANGE FROM MARCH 2018 LICENSES, FEES, FINES AND PENALTIES PERCENT CHANGE FROM MARCH 2018 STATE HEALTH SERVICE FEES AND REBATES ³ PERCENT CHANGE FROM MARCH 2018 NET LOTTERY PROCEEDS ⁴ PERCENT CHANGE FROM MARCH 2018 LAND INCOME PERCENT CHANGE FROM MARCH 2018 INTEREST AND INVESTMENT INCOME PERCENT CHANGE FROM MARCH 2018 SETTLEMENTS OF CLAIMS PERCENT CHANGE FROM MARCH 2018 ESCHEATED ESTATES PERCENT CHANGE FROM MARCH 2018 ESCHEATED ESTATES PERCENT CHANGE FROM MARCH 2018 SALES OF GOODS AND SERVICES PERCENT CHANGE FROM MARCH 2018	MARCH 2019 \$4,759,105 7.51% 3,298,560 12.45% 410,976 -5.87% 312,096 -29.28% 217,514 10.26% 165,974 -0.81% 416,850 10.75% 5,293 -13.71% 5,895 -28.45% 25,809 6.68%	TOTAL \$31,465,263 24,677,978 3,859,404 4,196,376 1,521,529 1,378,665 1,480,611 491,162 115,164	CHANGE FROM PREVIOUS YEA 8.50% 2.92% 1.76% -15.25% 18.95% 24.74% 37.27% 0.36% 30.76%
PERCENT CHANGE FROM MARCH 2018 PERCENT CHANGE FROM MARCH 2018 PERCENT CHANGE FROM MARCH 2018 LICENSES, FEES, FINES AND PENALTIES PERCENT CHANGE FROM MARCH 2018 STATE HEALTH SERVICE FEES AND REBATES ³ PERCENT CHANGE FROM MARCH 2018 NET LOTTERY PROCEEDS ⁴ PERCENT CHANGE FROM MARCH 2018 LAND INCOME PERCENT CHANGE FROM MARCH 2018 INTEREST AND INVESTMENT INCOME PERCENT CHANGE FROM MARCH 2018 SETTLEMENTS OF CLAIMS PERCENT CHANGE FROM MARCH 2018 SECHEATED ESTATES PERCENT CHANGE FROM MARCH 2018 ESCHEATED ESTATES PERCENT CHANGE FROM MARCH 2018 SALES OF GOODS AND SERVICES PERCENT CHANGE FROM MARCH 2018 SALES OF GOODS AND SERVICES PERCENT CHANGE FROM MARCH 2018	MARCH 2019 \$4,759,105 7.51% 3,298,560 12.45% 410,976 -5.87% 312,096 -29.28% 217,514 10.26% 165,974 -0.81% 416,850 10.75% 5,293 -13.71% 5,895 -28.45% 25,809 6.68% 525,228	TOTAL \$31,465,263 24,677,978 3,859,404 4,196,376 1,521,529 1,378,665 1,480,611 491,162	CHANGE FROM PREVIOUS YEA 8.50% 2.92% 1.76% -15.25% 18.95% 24.74% 37.27% 0.36% 30.76%
PERCENT CHANGE FROM MARCH 2018 STATE HEALTH SERVICE FEES AND REBATES PERCENT CHANGE FROM MARCH 2018 LICENSES, FEES, FINES AND PENALTIES PERCENT CHANGE FROM MARCH 2018 STATE HEALTH SERVICE FEES AND REBATES PERCENT CHANGE FROM MARCH 2018 NET LOTTERY PROCEEDS PERCENT CHANGE FROM MARCH 2018 LAND INCOME PERCENT CHANGE FROM MARCH 2018 INTEREST AND INVESTMENT INCOME PERCENT CHANGE FROM MARCH 2018 SETTLEMENTS OF CLAIMS PERCENT CHANGE FROM MARCH 2018 ESCHEATED ESTATES PERCENT CHANGE FROM MARCH 2018 ESCHEATED ESTATES PERCENT CHANGE FROM MARCH 2018 ESCHEATED ESTATES PERCENT CHANGE FROM MARCH 2018 SCALES OF GOODS AND SERVICES	MARCH 2019 \$4,759,105 7.51% 3,298,560 12.45% 410,976 -5.87% 312,096 -29.28% 217,514 10.26% 165,974 -0.81% 416,850 10.75% 5,293 -13.71% 5,895 -28.45% 25,809 6.68%	TOTAL \$31,465,263 24,677,978 3,859,404 4,196,376 1,521,529 1,378,665 1,480,611 491,162 115,164	CHANGE FROM PREVIOUS YEAR 8.50% 2.92% 1.76% -15.25% 18.95% 24.74% 37.27% 0.36% 30.76%

¹ Includes public utility gross receipts assessment, gas, electric and water utility tax and gas utility pipeline tax.

² Includes taxes not separately listed, such as taxes on oil well services, coin-operated amusement machines, cement and combative sports admissions as well as refunds to employers of certain welfare recipients.

³ Includes various health-related service fees and rebates that were previously in "license, fees, fines and penalties" or in other non-tax revenue categories.

⁴ Gross sales less retailer commission and the smaller prizes paid by retailers.



Texas Comptroller of Public Accounts Communications and Information Services Division 111 E. 17th St., Suite 301, Austin, TX 78774-0100

FIRST-CLASS MAIL PRESORTED US POSTAGE PAID AUSTIN TX PERMIT NO. 1411

GLENN HEGAR

Texas Comptroller of Public Accounts

Fiscal Notes is one of the ways the Comptroller's office strives to assist taxpayers and the people of Texas. The newsletter is a by-product of the Comptroller's constitutional responsibilities to monitor the state's economy and to estimate state government revenues.

Fiscal Notes also provides a periodic summary of the financial statements for the state of Texas.

Articles and analysis appearing in *Fiscal Notes* do not necessarily represent the policy or endorsement of the Texas Comptroller of Public Accounts. Space is devoted to a wide variety of topics of Texas interest and general government concern.

Fiscal Notes is not copyrighted and may be reproduced. The Texas Comptroller of Public Accounts would appreciate credit for material used and a copy of the reprint.

FIELD OFFICES

Find a list of all Comptroller field offices at $\underline{comptroller.texas.gov/about/contact/locations.php}.$

ONLINE SUBSCRIPTIONS, RENEWALS OR CANCELLATIONS of Fiscal Notes may be entered at comptroller.texas.gov/economy/fiscal-notes

Send questions or comments to fiscal.notes@cpa.texas.gov

HOW TO REACH US

Contact the Communications and Information Services Division at 800-252-5555 (VOICE), 512-463-4226 (FAX).

OR WRITE Fiscal Notes, Texas Comptroller of Public Accounts Communications and Information Services Division 111 E. 17th St., Suite 301, Austin, TX 78774-0100

In compliance with the Americans with Disabilities Act, this document is available in a reader-friendly format at $\underline{comptroller.texas.gov/economy/fiscal-notes}.$

> Texas Comptroller of Public Accounts Publication #96-369

> > APRIL 2019