



Report on Texas Bridges

As of September 2014



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**Prepared by the Bridge Division
Texas Department of Transportation**

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Executive Summary

This report describes Texas’ publicly owned vehicular bridges and their condition as of September 2014. It describes bridges categorized by location either on or off the state highway system. It also describes the condition of Texas bridges in terms of sufficiency: bridges in good or better condition, structurally deficient bridges, functionally obsolete bridges, and substandard-for-load-only bridges.

This report outlines the funding sources and eligibility requirements of the Highway Bridge Program for on- and off-system bridges. It also illustrates TxDOT strategies to plan, build, use, maintain, and manage key state resources to ensure that Texas bridges are of high quality, cost-efficient, and safe.

In August 2001, TxDOT adopted a goal that within 10 years at least 80 percent of the bridges in Texas would be in good or better condition. TxDOT met this goal one year ahead of time. As Figures ES-1 and ES-2 illustrate, the percentage of bridges in good or better condition has continued to climb steadily over the past 10 years. As of September 2014, 81.8 percent, or 43,368 of the 53,018 bridges in Texas, had achieved a “good or better” rating.

Percentage of “Good or Better” Texas Bridges, 2004 - 2014

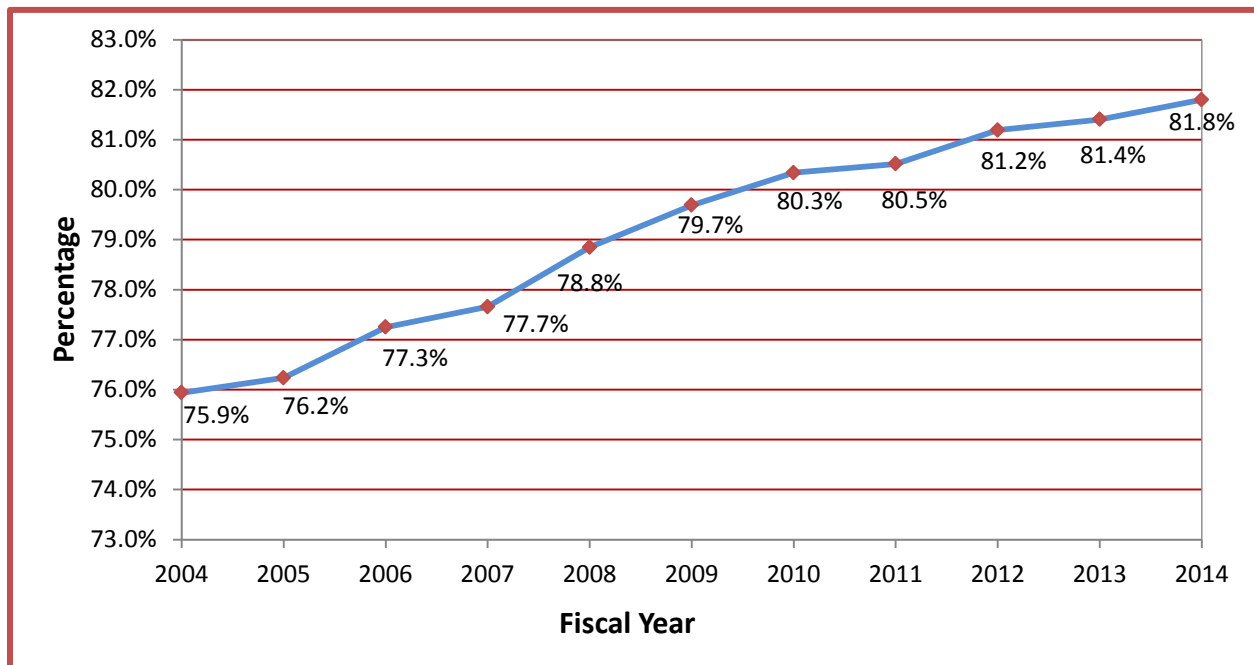


Figure ES-1.

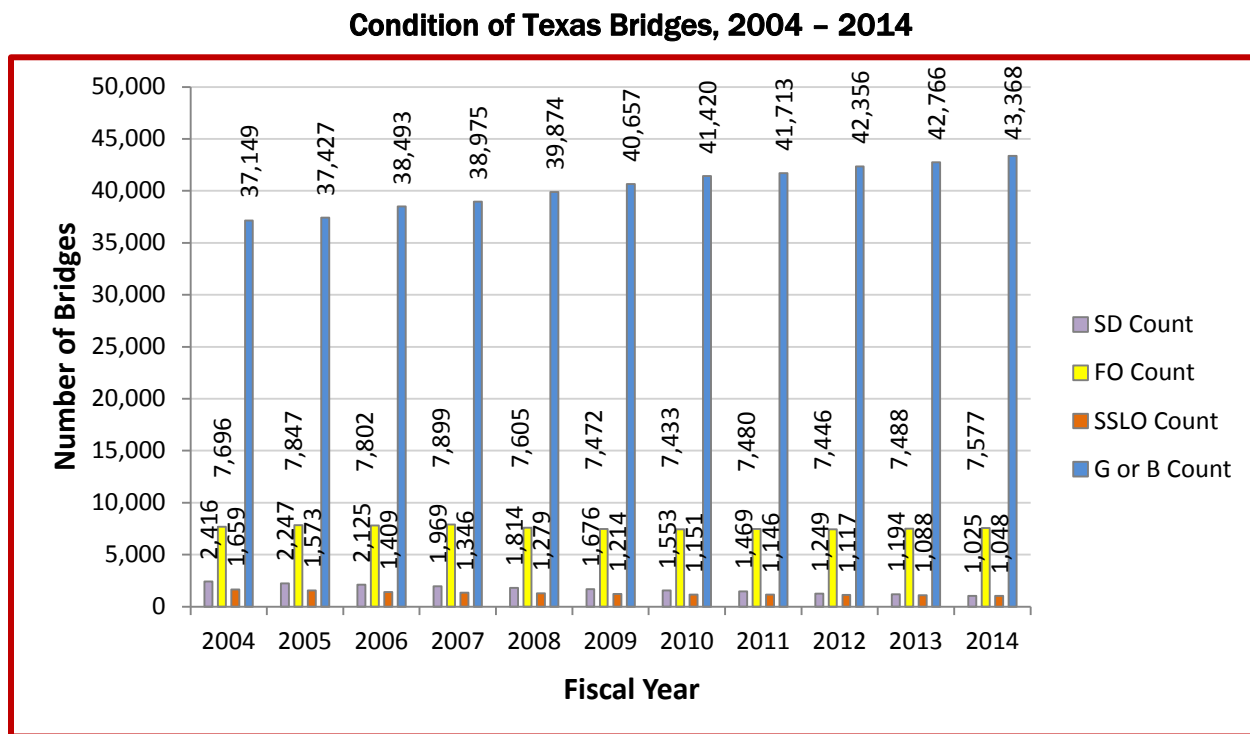


Figure ES-2.

Contracting and Funds Spent

TxDOT spent a total of \$658.3 million in FY 2014 for on-system bridge maintenance, bridge replacement and rehabilitation, and construction of new-location bridges. These funds were distributed as follows:

- \$261 million (40%) for on-system new location
- \$358.4 million (54%) for on-system replacement/rehabilitation
- \$38.9 million (6%) for on-system maintenance

TxDOT spent a total of \$49.3 million in FY 2014 for off-system bridge replacement and rehabilitation, and construction of new-location bridges. These funds were distributed as follows:

- \$31.2 million (63%) for off-system replacement/rehabilitation
- \$18.1 million (37%) for new location

Challenges and Solutions

Despite maintaining the largest bridge inventory in the nation, Texas has fewer cars driving on structurally deficient bridges than any other state. TxDOT will continue to work with communities and local, state and federal leaders to remain a national leader in bridge safety and cost-effectiveness, and to bring solid solutions to the infrastructure challenges that lie ahead.

Chapter 1 – Overview

Introduction

The safety of the traveling public is the Texas Department of Transportation's (TxDOT's) number one priority. Texas enjoys a reputation as a national leader in bridge safety. Our state's bridge system connects communities and allows citizens to experience a quality of life unique to Texas.

Despite maintaining the largest U.S. bridge inventory, with over 53,018 bridges for public vehicular traffic,¹ Texas has the third-lowest percentage of structurally deficient bridges in the nation.² This success is due, in part, to the Highway Bridge Program (HBP), which ensures that bridges are funded, designed, and maintained at the highest level of quality and as cost-effectively as possible.

Texas faces unprecedented mobility demands as the state's population continues to grow at a rapid pace. At the same time, new developments in the energy economy have caused large-truck traffic to increase. These factors have tremendous impact on the state's infrastructure and funding needs. TxDOT stands ready to take on these challenges. We are committed to developing innovative solutions and exploring new and more efficient technologies to make sure that Texas bridges are not only safe, but also best in class.

The Texas Transportation Commission has developed a plan to meet these challenges. On June 26, 2014, the Commission adopted the TxDOT 2015 – 2019 Strategic Plan. It outlines the agency's mission, values, goals, objectives, budgetary performance measures, strategies and planning information that will direct the department over the next five years.

Mission

Work with others to provide safe and reliable transportation solutions for Texas.

Goals

- Maintain a safe system
- Address congestion
- Connect Texas communities
- Become a best-in-class state agency

¹ 2013 Better Roads Bridge Inventory. <http://www.betterroads.com/category/bridge-inventory>

² The Fix We're In For: The State of Our Nation's Bridges 2013. Transportation for America. An analysis of data from the Federal Highway Administration's 2013 National Bridge Inventory. <http://t4america.org/docs/bridgereport2013/2013BridgeReport.pdf>

Purpose

This report describes the condition of all publicly owned vehicular bridges in Texas at the end of FY 2014. It provides the following information:

- Chapter 2—Characteristics of Texas bridges, categorized by location on or off the state highway system and by age.
- Chapter 3—Condition of the bridges and changes from the preceding report.
- Chapter 4—Funding background and definitions.
- Chapter 5—Outlook for the future of Texas bridges based on their attributes and conditions. Summaries of progress made toward TxDOT's bridge goals during the preceding reporting period and our plan for staying on course.

Past reports from 2001 – 2014 are available on the TxDOT website at <http://www.txdot.gov/government/reports/texas-bridges.html>.

This report was first published in 2001 in response to a new measure established by Texas Transportation Commissioner John W. Johnson to increase safety for the traveling public. This new measure required that within ten years, or by September 2011, at least 80% of the bridges in Texas be in good or better condition.³

As the 2001 – 2012 reports illustrate, TxDOT met its goal one year ahead of time to have 80 percent of bridges in good or better condition. In addition, we are consistently eliminating on-system structurally deficient bridges from our inventory.

Data Sources

TxDOT maintains inspection information on each publicly owned vehicular bridge in the Bridge Inspection Database, a repository of information on the characteristics of the bridges and their conditions. It provides the source of data for descriptions of bridges in this report. The database identifies each bridge by its National Bridge Inventory (NBI) number and is updated continually based on biennial safety inspections.

TxDOT uses an automated information system—the Design and Construction Information System (DCIS)—for planning, programming, and developing projects. DCIS tracks information by work descriptions, funding requirements, and dates for proposed activities. DCIS also provides the source of information for project construction bids.

These resources provide a wealth of information about Texas bridges. In addition, TxDOT continually evaluates bridge information needs and is currently developing new ways to collect and retrieve data.

³ Texas Transportation Commission's Transportation Working Group, "Texas Transportation Partnerships: Connecting You to the World," August 2001.

Chapter 2 – Characteristics of Texas Bridges

Terms

Distinctive characteristics of publicly owned vehicular bridges include the following:

- *On-system or off-system:* On-system bridges are located on the designated state highway system, are maintained by TxDOT, and are typically funded with a combination of federal and state or state-only funds. Off-system bridges are not part of the designated state highway system and are under the direct jurisdiction of the local government such as a county, city, other political subdivision of the state, or special district with authority to finance a highway improvement project. This report classifies bridges as either on- or off-system.
- *Age:* This report classifies bridges by age according to significant historic changes in design criteria governing widths and live loads. Live loads are the moving weights placed on a bridge, not including the weight of the structure itself.

Age

Older bridges require special maintenance and additional resources for bridge replacement and rehabilitation. In addition, on-system Texas bridges built after 1900 can be classified by significant changes in the design criteria that governed their construction:

- **Built before 1950:** Bridges generally designed for less than the current state legal load.
- **Built between 1950 and 1970:** Bridges generally required to accommodate the minimum design load or higher recommended by the American Association of State Highway and Transportation Officials, but may be narrower than their approach roadways. A number of these bridges are too narrow to meet current requirements. (Required bridge load capacity is described in detail in TxDOT's [Bridge Inspection Manual](#).)
- **Built after 1970:** Bridges generally required to accommodate the minimum design load or higher recommended by the American Association of State Highway and Transportation Officials, and must be at least as wide as their approach roadways.

Between 1950 and 1970, many new-location on-system bridges were built as the interstate system developed and the state highway system expanded. However, since 1970 the number of off-system bridges has increased at a faster rate. This is because additional new off-system roads and bridges are being built as many of the metropolitan and urban areas of Texas experience rapid growth. Tables 2-1, 2-2, and 2-3 show characteristics of bridges by age groupings.

Age Distribution of Texas Bridge Population in FY 2004: Number of Bridges and Percent of Total by Year Constructed

Year Built	On-System	Off-System	Total	Percent of Total
Before 1950	6,917	2,751	9,668	20%
1950 - 1970	14,008	3,756	17,764	36%
After 1970	11,362	10,126	21,488	44%
Total	32,287	16,633	48,920	100%

Table 2-1.

Age Distribution of Texas Bridge Population in FY 2014: Number of Bridges and Percent of Total by Year Constructed

Year Built	On-System	Off-System	Total	Percent of Total
Before 1950	6,425	1,812	8,237	16%
1950 - 1970	12,182	2,888	15,070	28%
After 1970	16,285	13,426	29,711	56%
Total	34,892	18,126	53,018	100%

Table 2-2.

Change in Number of Bridges by Year Built, FY 2004 to FY 2014

Year Built	Number of Bridges in 2004	Number of Bridges in 2014	Change in Number of Bridges
Before 1950	9,668	8,237	-1,431
1950 - 1970	17,764	15,070	-2,694
After 1970	21,488	29,711	8,223
Total Number of Bridges	48,920	53,018	4,098

Table 2-3.

As seen in the tables above, older bridges are being replaced with new structures. This is evidenced by the fact that as of FY 2014, 56 percent of all Texas bridges were built after 1970.

Chapter 3 – Condition of Texas Bridges

Terms

This report characterizes the condition of bridges as follows:

- **Good or better (GB) structure:** A good or better structure meets current federal and Texas requirements. It is not structurally deficient, functionally obsolete, or sub-standard for load only. Desirable change in good or better structures from year to year is reflected by positive numbers, showing an increase in sufficient structures.
- **Structurally deficient (SD) structure:** A bridge is classified by the Federal Highway Administration (FHWA) as structurally deficient if it meets any of the following criteria:
 - It has an extreme restriction on its load-carrying capacity.
 - It has deterioration severe enough to reduce its load-carrying capacity beneath its original as-built capacity.
 - It is closed.
 - It is frequently over-topped during flooding, creating severe traffic delays.
- **Functionally obsolete (FO) structure:** A bridge is classified by the FHWA as functionally obsolete if it fails to meet its design criteria in any one of the following areas:
 - Deck geometry
 - Load-carrying capacity
 - Vertical or horizontal clearances
 - Approach roadway alignment

In this report, structures that are both functionally obsolete and structurally deficient are counted only as structurally deficient.

- **Sub-standard for load only (SSLO) structure:** A bridge is considered sub-standard for load only if it is not classified as structurally deficient or functionally obsolete, but has a load capacity less than the maximum load permitted by state law. It has not deteriorated or has not deteriorated severely enough to reduce its load capacity beneath its original as-built capacity, but its original as-built capacity was not designed to carry current legal loads. A sub-standard for load only structure is load-posted or recommended for load posting.
- **Load-posted bridge:** A bridge that is load-posted has a safe load capacity less than the state legal load, and its load capacity is communicated by signs at the bridge site. (Note: Certain vehicles, identified in Chapter 622 of the Texas Transportation Code, that exceed posted load capacity can legally use load-posted bridges.)
- **Land-locking bridge:** This report classifies a bridge as land-locking if it restricts traffic into an area because of load limitations or closures and no other public road into the area is capable of supporting legal loads. These bridges are load-posted or closed.

Bridge Conditions

In August 2001, TxDOT adopted a goal that within 10 years at least 80 percent of the bridges in Texas would be in good or better condition. TxDOT met this goal one year ahead of time, and as Figures 3-1 and 3-2 illustrate, the percentage of bridges in good or better condition has continued to climb steadily over the past 10 years. As of September 2014, 81.8 percent, or 43,368 of the 53,018 bridges in Texas had achieved a “good or better” rating.

Percentage of "Good or Better" Texas Bridges, 2004 – 2014

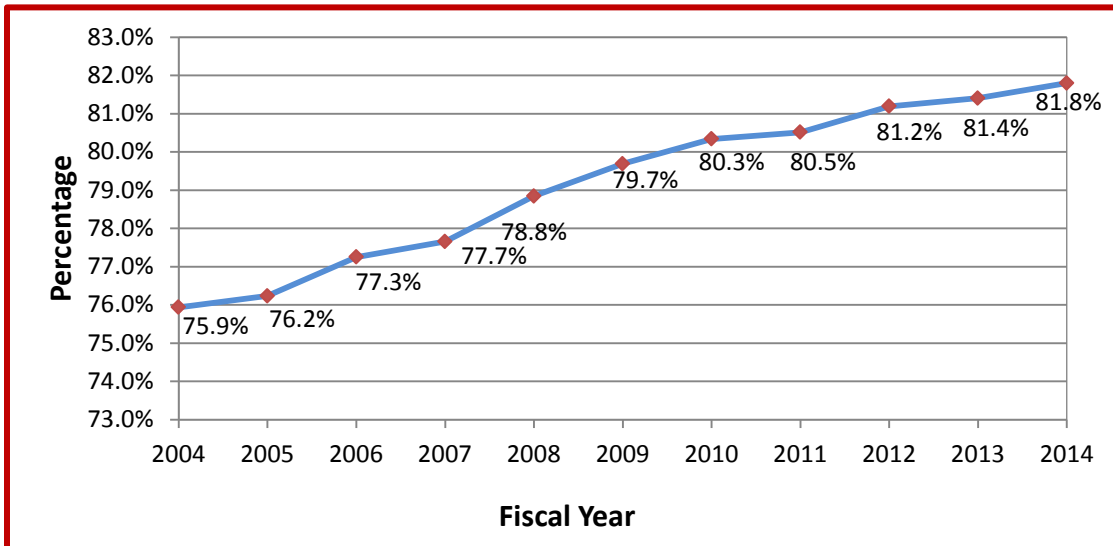


Figure 3-1.

Condition of Texas Bridges, 2004 – 2014

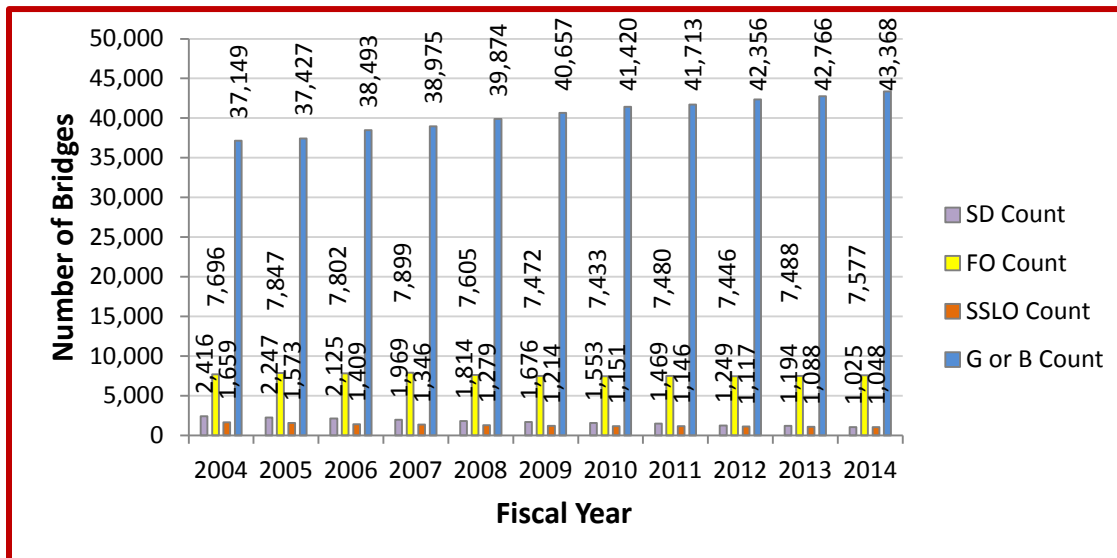


Figure 3-2.

Change in Bridge Conditions Over Time

From 2004 – 2014, the number of on- and off-system Texas bridges increased as shown in Figure 3-3. We have the largest bridge inventory in the nation, with 53,018 bridges. During the same time period, Table 3-1 and Figure 3-4 illustrate a steady decrease in the number of bridges that were structurally deficient or sub-standard for load only, and a slight increase in the number of functionally obsolete bridges during the same time period.

Total Count of On- and Off-System Texas Bridges, 2004 – 2014

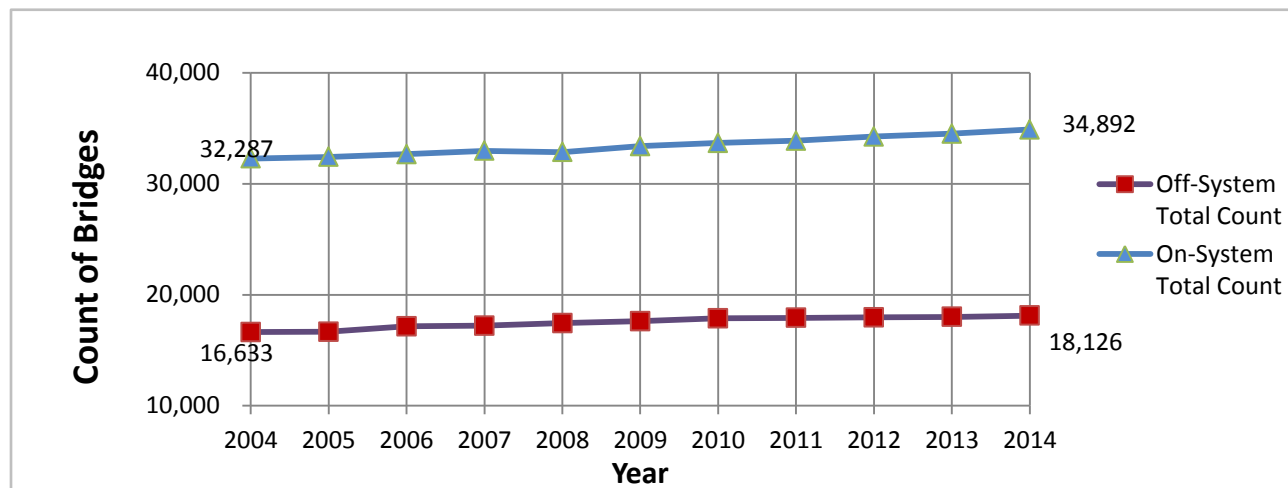


Figure 3-3.

SD, FO, and SSLO Bridges, 2004 – 2014

Year	Off-System Total Count	Off-System SD	Off-System FO	Off-System SSLO	On-System Total Count	On-System SD	On-System FO	On-System SSLO
2004	16,633	1851	3808	1508	32,287	565	3888	151
2005	16,676	1719	3885	1449	32,423	528	3962	124
2006	17,155	1642	3851	1304	32,674	483	3951	105
2007	17,211	1548	3912	1240	32,978	421	3987	106
2008	17,454	1460	3922	1180	32,862	346	3836	99
2009	17,626	1347	3915	1124	33,393	329	3557	90
2010	17,878	1248	3962	1057	33,679	305	3471	94
2011	17,925	1178	4028	1055	33,883	291	3452	91
2012	17,969	1025	4003	1023	34,255	258	3365	92
2013	18,015	973	4025	1007	34,521	221	3462	81
2014	18,126	832	4091	966	34,892	193	3486	82

Table 3-1.

SD, FO, and SSLO Bridges from 2004 – 2014

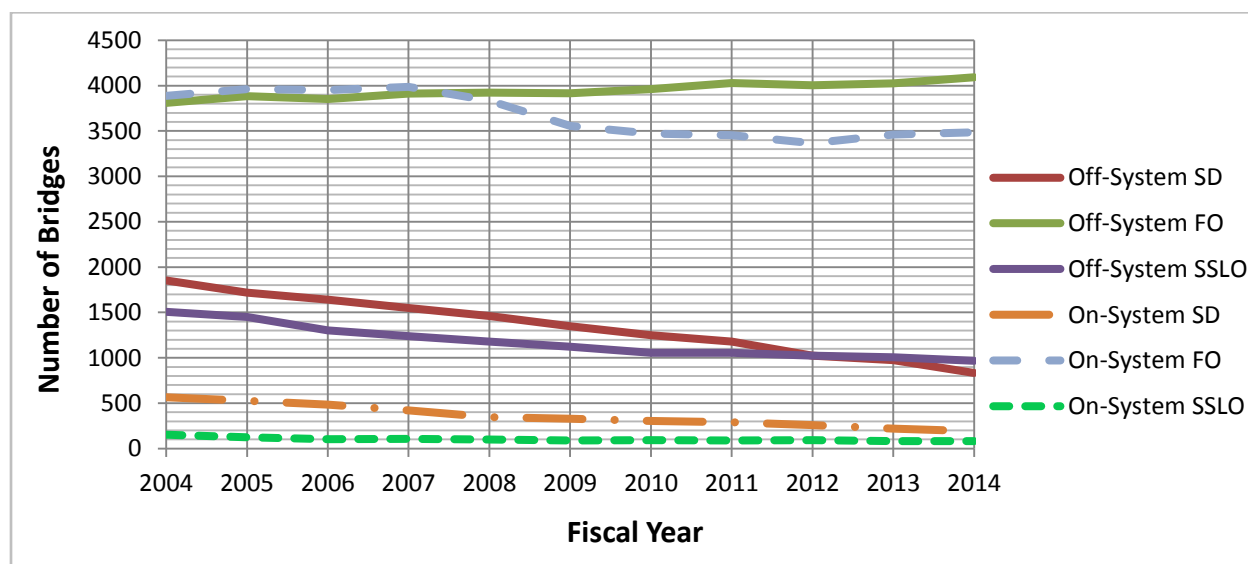


Figure 3-4.

Load-Posted and Closed Bridges

Included within the categories of SD, FO, and SSLO bridges are load-posted and closed bridges. Totals as of September 2014 are shown in Table 3-2. Please note that the count of load-posted and closed bridges is included in the count of non-sufficient bridges above.

Number of Bridges Load-Posted, Closed, or Recommended for Posting or Closure as of September 2014

	On-System Bridges	Off-System Bridges
Total number of bridges closed to traffic or recommended for closure	25	99
Total number of bridges load-posted or recommended for load posting	180	2,261

Table 3-2.

Local governments are legally required to comply with a TxDOT bridge inspector’s request to load-post an off-system bridge. Federal law requires that load-posting signs be installed within 90 days of a change in status indicating deficiency of an on-system bridge and within 180 days of a change in status indicating deficiency of an off-system bridge. The process of posting an off-system bridge may take several months. First, TxDOT inspects the bridge, analyzes the inspection data, and makes a formal posting recommendation. Then, the local government acknowledges the request and arranges for fabrication of appropriate signs. To assist in this process and at the request of the local government, TxDOT will supply the signs and make them available to the local government for installation.

Local governments are encouraged but not legally required to comply with a request to close an off-system bridge. To encourage compliance, TxDOT uses its Participation-Waived Project/Equivalent Match Project (PWP/EMP) program, described in Chapter 4, to encourage compliance by local governments with recommendations for posting or closing off-system bridges. Local governments cannot participate in the PWP/EMP program until TxDOT confirms compliance with all requests to post or close off-system bridges in their jurisdiction.

Land-Locking Bridges

Land-locking bridges limit the movement of legal loads into an area by imposing load restrictions or by being closed. TxDOT identifies a bridge or combination of bridges as land-locking only if no other public road into the area—and it must be a public road shown on a map maintained by TxDOT—is capable of supporting legal loads.

Chapter 621 of the Texas Transportation Code establishes the minimum load that unposted Texas bridges must be able to carry. Bridges unable to support that minimum load must be load-posted to protect them and the people who travel them from possible harm. The minimum load is the same as the state legal load. In general, the maximum gross load on a truck cannot exceed 80,000 pounds, the maximum load on tandem axles cannot exceed 34,000 pounds, and the maximum load on any single axle cannot exceed 20,000 pounds.

However, vehicles exceeding posted limits may use load-posted bridges under certain conditions. Pursuant to current Texas law, a carrier may obtain for a fee an annual weight tolerance permit. The permit allows for the transport of excess loads on a land-locking bridge if the bridge provides the only public vehicular access to or from the permittee's origin or destination. In addition, certain vehicles identified in Chapter 622 of the Texas Transportation Code that exceed posted load capacity but have a weight-tolerance permit also can legally use load-posted bridges. Examples include vehicles transporting concrete, timber, agricultural products, recyclable materials, or power poles, as well as vehicles with idle reduction systems. These exceptions can be found in Sections 622.012, 622.0435, 622.131, 622.133, and 622.955.

Vehicles that exceed posted limits but have a weight tolerance permit may legally use land-locking bridges. However, the use of land-locking bridges for excess loads increases the risk of damage to the bridge. The size, number, and weight of trucks on Texas roads and bridges are increasing, while at the same time, the bridge infrastructure is aging. Looking ahead, TxDOT will need to seek long-term solutions and funding to ensure the rehabilitation or replacement of load-posted and land-locking bridges in order to accommodate growing traffic demands.

Chapter 4 – Funding

MAP-21

MAP-21, the Moving Ahead for Progress in the 21st Century Act (P.L. 112-141), was signed into law by President Barack Obama on July 6, 2012. Funding surface transportation programs at over \$105 billion for fiscal years 2013 and 2014, MAP-21 is the first highway authorization enacted since 2005. The text and additional information on MAP-21 are available on the [FHWA's website](#).

MAP-21 restructures core highway formula programs. Activities carried out under some existing formula programs, including the Highway Bridge Program, are incorporated into the following new core formula program structure:

- National Highway Performance Program (NHPP)
- Surface Transportation Program (STP)
- Congestion Mitigation and Air Quality Improvement Program (CMAQ)
- Highway Safety Improvement Program (HSIP)
- Railway-Highway Crossings (set-aside from HSIP)
- Metropolitan Planning

While the previous federal Highway Bridge Program now has been incorporated into another core formula—NHPP—as of the writing of this report, TxDOT continues to administer the HBP as a state program, following the same rules and conditions as previously set out. The federal dollars under MAP-21 will continue to provide funding to enable states to improve the condition of their highway bridges through replacement, rehabilitation, systematic preventive maintenance and inspection.

Unified Transportation Program

The TxDOT Unified Transportation Program (UTP) is a 10-year plan approved by the Texas Transportation Commission to guide transportation project development and construction. It contains 12 different categories of funding. Category 6 of the UTP is dedicated to bridge replacement and rehabilitation.

Terms

This report uses the following terms to describe eligibility for funding of bridge projects under the state Highway Bridge Program (HBP):

Category 6 on-system bridge projects: This is a classification of replacement or rehabilitation work on structurally deficient or functionally obsolete *on-system* bridges that have a sufficiency rating of 80 or less and are, therefore, eligible for specific funding support under the HBP.

Category 6 off-system bridge projects: This is a classification of replacement or rehabilitation work on structurally deficient or functionally obsolete *off-system* bridges that have a sufficiency rating of 80 or less and are, therefore, eligible for specific funding support under the HBP.

Programmed project: A programmed project is a project that has been identified as eligible for funding (for example, under HBP), prioritized using specific TxDOT and federal criteria, and listed in the current UTP as being authorized for letting to contract. Programmed projects are scheduled for letting of construction bids for a specific fiscal year.

Sufficiency rating: This is a numerical evaluation established by the FHWA. It measures a bridge's structural adequacy and safety, serviceability and functional obsolescence, and essentiality for traffic service. The higher the number, the more sufficient the bridge. The rating is used to determine whether a bridge project is eligible for HBP rehabilitation or replacement. A bridge must be structurally deficient or functionally obsolete and have a sufficiency rating less than 80 to be eligible for the HBP. A sufficiency rating of 80 or less is required to qualify for rehabilitation, and a sufficiency rating of less than 50 is required to qualify for replacement. A structurally deficient bridge with a sufficiency rating between 50 and 80 may qualify for replacement if justified by engineering or economic analysis. The lower the number, the higher the priority.

Highway Bridge Program Funding

TxDOT administers the state HBP by selecting bridge projects for funding according to various eligibility criteria, including but not limited to structural deficiency and functional obsolescence. Once eligible projects are identified, the structurally deficient and functionally obsolete bridges are ordered by sufficiency rating and included in the program list until available funding is exhausted. Finally, the projects are authorized using the UTP or, in its absence, by Commission Minute Order.

On-System Bridge Projects Authorized to be Awarded Contracts

TxDOT authorized the following classes of on-system bridge projects to be awarded contracts in FY 2012 through FY 2014:

- HBP-funded projects (UTP Category 6-on-system)
- Replacement and rehabilitation projects not funded under HBP (that is, these bridges are not necessarily structurally deficient or functionally obsolete, and the projects are funded under other funding categories)
- New-location bridge projects funded under other categories of funding

Off-System Bridge Projects Authorized to be Awarded Contracts

The following classes of off-system bridge projects were funded in FY 2012 through FY 2014:

- HBP-funded project (UTP Category 6-off-system)
- Replacement and rehabilitation projects not funded under HBP (that is, these bridges are not necessarily structurally deficient or functionally obsolete)
- New-location bridge projects not funded with Category 6 funds.

PWP/EMP Program

In FY 2001, TxDOT initiated its Participation-Waived Project/Equivalent-Match Project (PWP/EMP) program to allow a local government to waive its 10% cost participation requirement in an HBP off-system bridge project if it agrees to use an equivalent dollar amount to improve other deficient structures in its jurisdiction.⁴ In addition to HBP-programmed bridges, EMP work may be performed on bridge structures that are not part of the National Bridge Inventory.

Other Funding Resources for Off-System Bridge Work

Texas provides additional resources for local governments to facilitate the improvement of off-system bridges, and those resources include the following:

- The [State Infrastructure Bank \(SIB\)](#) is a revolving account in the State Highway Fund from which TxDOT may award loans to local governments to fund eligible transportation projects.
- TxDOT's Economically Disadvantaged Counties (EDC) Program allows TxDOT to adjust a county's matching funds requirements after evaluating the local government's ability to meet the requirement. TxDOT also allows a county participating in the EDC program to use its adjusted participation amount in lieu of all or part of its cost participation in the PWP/EMP program. More information on this program is available in TxDOT's [Bridge Project Development Manual](#) and in TxDOT's [Transportation Planning Manual](#).

Summary of FY 2014 Funds Spent on On- and Off-System Bridges

Figures 4-1 and 4-2 show the distribution of money spent in FY 2014 for the maintenance, replacement and rehabilitation, and construction of new-location on- and off-system bridges,

⁴ A November 2001 amendment to the PWP/EMP program expanded the safety-improvement types of work that may be classified as EMP projects and allowed local governments to receive EMP credit for work performed in geographically adjacent governmental units.

respectively.⁵ As noted previously, state funds are not used for the maintenance of off-system bridges.

Distribution of Funds Spent on On-System Bridges in FY 2014 (\$658.3 M Total)

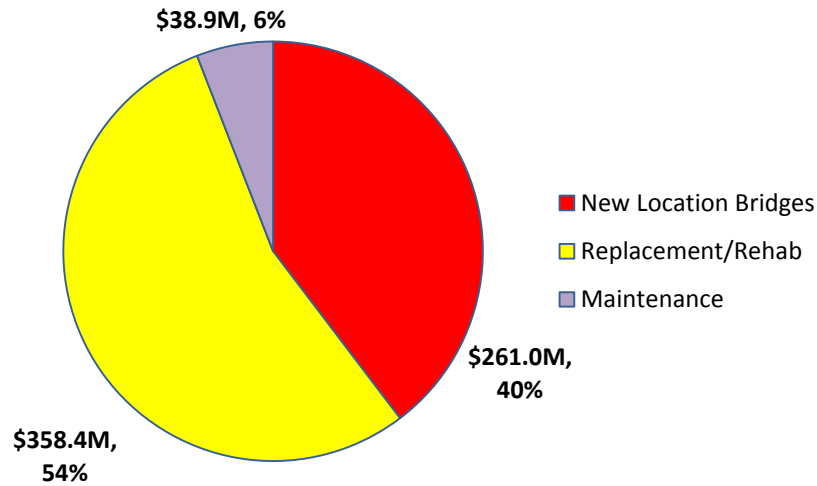


Figure 4-1.

Distribution of Funds Spent on Off-System Bridges in FY 2014 (\$49.3 M Total)

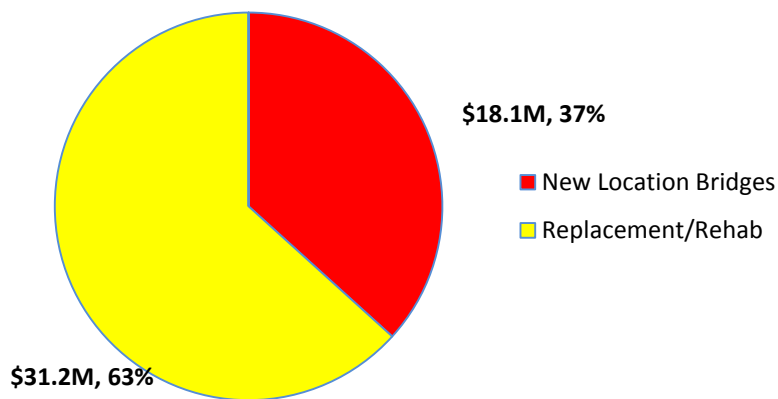


Figure 4-2.

⁵ Totals reflect letting costs of bridge items only. They do not include costs for approach roadway work, traffic control, removal of existing bridge, or other non-structural items.

Chapter 5 – Meeting the Challenges

Bridge Condition Success

In August 2001, TxDOT adopted a goal that within 10 years, or by the end of 2011, at least 80% of the bridges in Texas would be in good or better condition. Additionally, TxDOT adopted a goal to accelerate the upgrade and elimination of structurally deficient on-system bridges.

TxDOT met its goal one year ahead of time to have 80% of bridges in good or better condition, with 80.5% of Texas bridges in good or better condition in 2010. That percentage continued to rise, reaching 81.4% in 2013 and climbing to 81.8% in 2014. In addition, TxDOT has made steady, consistent progress toward eliminating on-system structurally deficient bridges. The number has dropped from 565 in 2004, to 193 in 2014, despite the fact that the overall inventory of on-system bridges has increased during that time from 32,287 to 34,892. The number of structurally deficient off-system bridges has decreased at an even greater rate—from 1851 to 832—during the same time period.

As a result of meeting and surpassing these goals, only 2% of Texas' bridges are structurally deficient. This ranks Texas #3 in the nation among states with the smallest percentages of structurally deficient bridges.

Current Challenges

Population Growth and Mobility Demands

TxDOT faces unprecedented population growth and mobility demands: Texas has experienced a 27% increase in population since 2000 and is one of the most rapidly growing states in the country.⁶ At the same time, economic expansion in the energy sector is placing wear and tear on roads and bridges at a more rapid rate than ever before. The number of oversize-overweight permits issued from 2011 – 2014 increased by 41.5% and was largely attributable to energy-sector activities.⁷

An additional challenge is the need to invest in the state's aging transportation infrastructure. Many bridges, for example, were built between 1950 and 1970 as the interstate system developed and the state highway system expanded. In July 2010, Texas Transportation Chair Deirdre Delisi reconvened the 2030 Committee, which had previously issued a report in 2009 outlining the state's transportation infrastructure and mobility needs. Building on its earlier research, in 2011 the 2030 Committee issued a [report](#) entitled

⁶ U.S. Census Bureau, 2000 and 2010 Census. <http://www.census.gov/prod/cen2010/briefs/c2010br-01.pdf>
State and County Quick Facts, 2013 Texas population. <http://quickfacts.census.gov/qfd/states/48000.html>

⁷ Texas Department of Motor Vehicles, Motor Carrier Division: Texas Permitting and Routing Optimization System (TxPROS).

It's About Time: Investing in Transportation to Keep Texas Economically Competitive, which forecast alternative levels of service for four elements of the Texas transportation system—including bridges—and determined the economic effects of under-investing in the system. According to the report, the cost to repair the backlog of deficient bridges will increase from \$3 billion in 2010 to \$7 billion in 2035.

If not addressed through additional funding, the pace of growth and change could threaten to reverse the steady improvement in bridge conditions that Texas has enjoyed since 2004. One indicator is that despite having the third-lowest percentage of structurally deficient bridges in the nation, in 2013 Texas ranked #14 among all states with the smallest combined percentage of SD and functionally obsolete (FO) bridges.⁸ This is largely attributable to FO bridges and the fact that the population is growing faster than the rate at which FO bridges can be replaced or improved.

Load-Posted Bridges

Currently there are 180 on-system and 2,261 off-system bridges that are load posted or have been recommended for load posting. While these structures are safe, they are incapable of carrying the state legal loads. These bridges have been load posted because it is impractical to close them from a mobility standpoint, and because TxDOT lacks funds to replace or rehabilitate them. While these 2,441 bridges make up less than 5% of all bridges in the state, they represent approximately \$1.2 billion in needed funding.

While many of these bridges are rated as Structurally Deficient or Functionally Obsolete, thereby making them eligible for the Highway Bridge Program, nearly half of them are Substandard for Load Only, which are not eligible. Eighty-two on-system and 966 off-system bridges fall into this category. The estimate to replace or rehabilitate these bridges to carry state legal loads exceeds \$442 million. There currently are no dedicated funding mechanisms available to TxDOT to address these needs.

Load-posted bridges restrict commerce, since many vehicles have to take alternate routes in order to avoid traversing them. The presence of load-posted bridges on a given route often impacts school bus routes and the availability of emergency services.

Land-Locking Bridges

Vehicles that exceed posted limits but have a weight-tolerance permit may legally use land-locking bridges. However, the use of land-locking bridges for excess loads increases the risk of damage to the bridge. The size, number, and weight of trucks on Texas roads and bridges is increasing, while at the same time, the bridge infrastructure is aging. TxDOT will need to

⁸ The Federal Highway Administration's 2013 National Bridge Inventory.
<http://www.fhwa.dot.gov/bridge/nbi/no10/county.cfm>

seek long-term solutions and funding to ensure the rehabilitation or replacement of load-posted and land-locking bridges in order to accommodate traffic demands.

Looking Ahead

Texas faces enormous and rapidly increasing transportation needs, with no quick and easy solutions to meet them. Demand is outpacing funding. Factors including inflation, a growing population, an aging infrastructure, and more fuel-efficient vehicles—which provide environmental benefits but result in less revenue from the motor fuel tax—are pushing current funding sources to their limits.

TxDOT will continue to maximize the use of funds made available for bridge preservation and replacement. The agency also will continue to explore, develop and implement creative programs to improve Texas bridges. In addition, TxDOT is committed to using all of the financial tools made available to it by the Texas Legislature in order to meet its goals. Going forward, TxDOT's bridge programs and work will support the goals and priorities of the [TxDOT 2015 – 2019 Strategic Plan](#). The forthcoming [Texas Transportation Plan 2040](#) and [Texas Freight Mobility Plan](#) will serve as additional roadmaps. TxDOT continually monitors its performance against the principles, measures and goals set out in this report. We will continue to work together with the Legislature and local governments to maximize efficiencies and use all the financial tools available to improve the bridges in Texas and ensure the safety of the traveling public.

Appendix A – Map of Texas Counties with TxDOT Districts

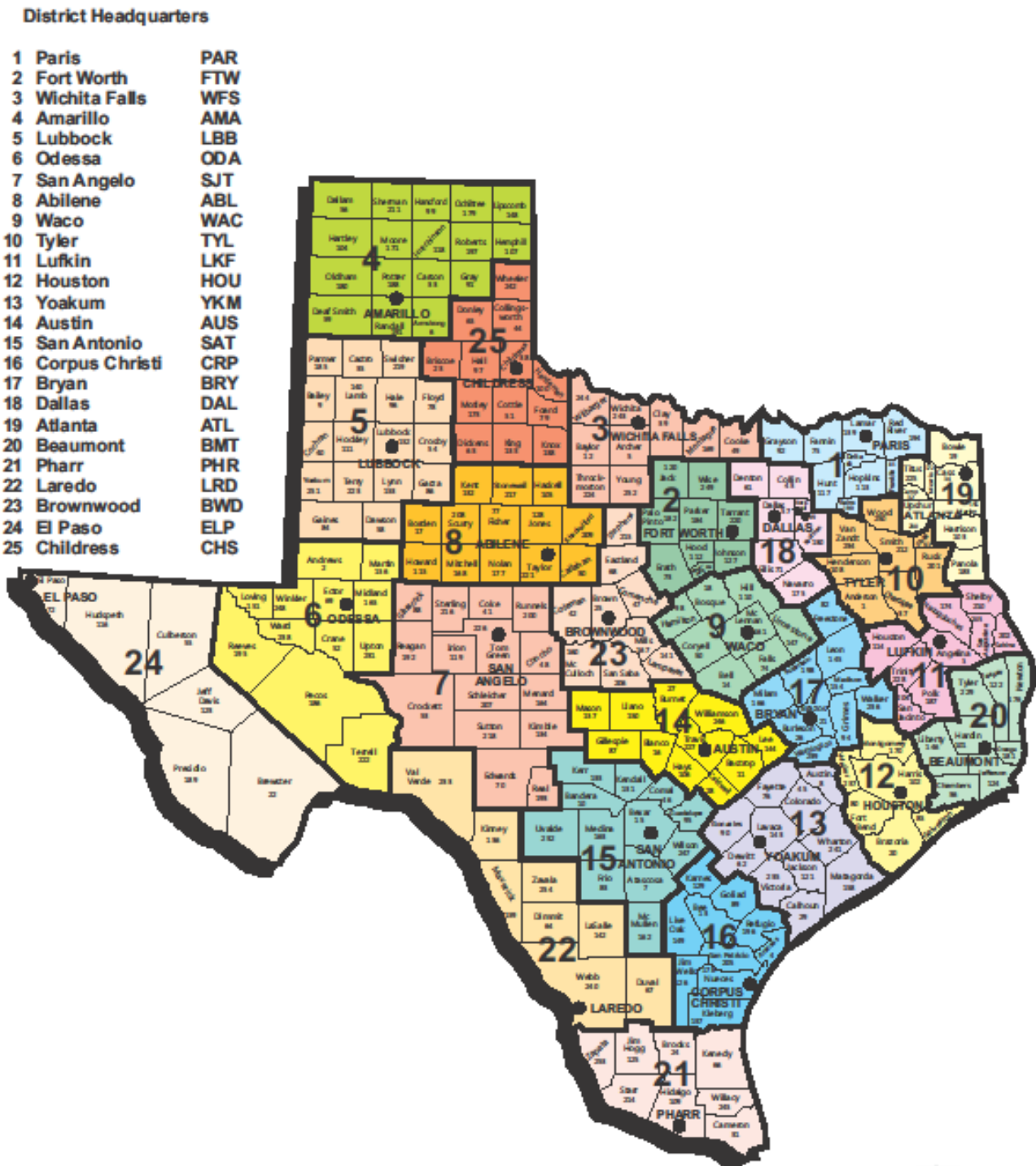


Figure A-1. Map of Texas Counties with TxDOT Districts

Appendix B – Condition of On-System Bridges by TxDOT District and County as of September 2014

Number of Bridges by Condition							
District Name	County	Total Bridges On System	On- System SD	On- System FO	On- System SSLO	Number of On- System Good or Better Bridges	On- System Percent Good or Better
Abilene							
	Borden	49	0	1	1		
	Callahan	138	1	3	0		
	Fisher	78	0	6	2		
	Haskell	67	0	3	0		
	Howard	109	1	21	0		
	Jones	117	0	2	1		
	Kent	25	0	1	0		
	Mitchell	116	2	21	3		
	Nolan	131	1	12	0		
	Scurry	96	1	10	0		
	Shackelford	67	0	1	2		
	Stonewall	35	0	0	0		
	Taylor	324	3	36	0		
	<i>District Total</i>	1352	9	117	9	1217	90.0%
Amarillo							
	Armstrong	11	0	0	0		
	Carson	33	0	2	0		
	Dallam	22	0	1	0		
	Deaf Smith	22	0	4	0		
	Gray	58	0	5	0		
	Hansford	30	0	3	0		
	Hartley	16	0	0	0		
	Hemphill	31	0	0	0		
	Hutchinson	40	0	1	0		
	Lipscomb	36	1	0	0		
	Moore	24	1	1	0		
	Ochiltree	24	0	3	0		
	Oldham	51	0	1	0		
	Potter	162	3	20	0		
	Randall	81	1	11	0		
	Roberts	21	0	0	1		
	Sherman	25	0	0	0		
	<i>District Total</i>	687	6	52	1	628	91.4%

Number of Bridges by Condition							
District Name	County	Total Bridges On System	On-System SD	On-System FO	On-System SSLO	Number of On-System Good or Better Bridges	On-System Percent Good or Better
Atlanta							
	Bowie	256	0	10	0		
	Camp	36	0	0	0		
	Cass	132	0	1	0		
	Harrison	211	0	8	0		
	Marion	46	1	5	0		
	Morris	49	0	2	0		
	Panola	129	0	0	0		
	Titus	99	0	12	0		
	Upshur	131	0	4	0		
	District Total	1089	1	42	0	1046	96.1%
Austin							
	Bastrop	131	2	9	0		
	Blanco	55	0	10	4		
	Burnet	82	0	16	2		
	Caldwell	152	2	8	2		
	Gillespie	92	0	13	0		
	Hays	122	0	19	0		
	Lee	66	0	14	1		
	Llano	76	2	8	0		
	Mason	75	2	7	0		
	Travis	724	3	124	0		
	Williamson	442	2	41	0		
	District Total	2017	13	269	9	1726	85.6%
Beaumont							
	Chambers	118	1	7	0		
	Hardin	118	0	4	0		
	Jasper	134	2	8	0		
	Jefferson	281	7	34	0		
	Liberty	151	2	3	1		
	Newton	115	1	10	0		
	Orange	110	3	8	0		
	Tyler	74	1	7	0		
	District Total	1101	17	81	1	1002	91.0%
Brownwood							
	Brown	127	0	2	0		
	Coleman	106	0	5	0		

Number of Bridges by Condition							
District Name	County	Total Bridges On System	On-System SD	On-System FO	On-System SSLO	Number of On-System Good or Better Bridges	On-System Percent Good or Better
	Comanche	116	2	11	1		
	Eastland	170	0	8	2		
	Lampasas	76	1	3	1		
	McCulloch	93	0	4	1		
	Mills	53	0	1	2		
	San Saba	69	0	4	0		
	Stephens	83	1	4	1		
	District Total	893	4	42	8	839	94.0%
Bryan							
	Brazos	207	0	19	0		
	Burleson	75	0	12	0		
	Freestone	117	0	23	0		
	Grimes	118	1	16	0		
	Leon	131	1	10	0		
	Madison	103	0	21	0		
	Milam	126	4	15	0		
	Robertson	97	1	11	0		
	Walker	118	0	11	1		
	Washington	101	0	10	0		
	District Total	1193	7	148	1	1037	86.9%
Childress							
	Briscoe	14	0	0	0		
	Childress	67	0	1	0		
	Collingsworth	46	0	5	0		
	Cottle	56	0	6	1		
	Dickens	60	0	1	0		
	Donley	60	0	2	0		
	Foard	49	2	1	1		
	Hall	89	1	3	1		
	Hardeman	54	0	2	0		
	King	40	0	0	0		
	Knox	44	0	0	0		
	Motley	41	0	2	0		
	Wheeler	86	1	2	2		
	District Total	706	4	25	5	672	95.2%

Number of Bridges by Condition							
District Name	County	Total Bridges On System	On-System SD	On-System FO	On-System SSLO	Number of On-System Good or Better Bridges	On-System Percent Good or Better
Corpus Christi							
	Aransas	17	1	0	0		
	Bee	109	2	4	2		
	Goliad	82	2	7	1		
	Jim Wells	144	0	10	0		
	Karnes	103	0	17	1		
	Kleberg	53	0	2	1		
	Live Oak	203	0	14	0		
	Nueces	328	1	28	2		
	Refugio	107	2	7	0		
	San Patricio	186	2	6	0		
	<i>District Total</i>	1332	10	95	7	1220	91.6%
Dallas							
	Collin	416	1	75	4		
	Dallas	1605	8	419	1		
	Denton	466	7	81	1		
	Ellis	457	1	76	0		
	Kaufman	380	0	50	0		
	Navarro	235	1	28	0		
	Rockwall	54	0	13	0		
	<i>District Total</i>	3613	18	742	6	2847	78.8%
El Paso							
	Brewster	91	0	1	0		
	Culberson	134	0	1	0		
	El Paso	463	3	76	0		
	Hudspeth	130	0	8	0		
	Jeff Davis	134	0	12	0		
	Presidio	73	0	3	0		
	<i>District Total</i>	1025	3	101	0	921	89.9%
Fort Worth							
	Erath	122	0	1	0		
	Hood	60	0	5	0		
	Jack	76	0	3	2		
	Johnson	244	1	23	1		
	Palo Pinto	182	1	3	2		
	Parker	163	3	6	1		

Number of Bridges by Condition							
District Name	County	Total Bridges On System	On-System SD	On-System FO	On-System SSLO	Number of On-System Good or Better Bridges	On-System Percent Good or Better
	Somervell	26	0	3	0		
	Tarrant	1233	5	171	0		
	Wise	132	0	8	0		
	District Total	2238	10	223	6	1999	89.3%
Houston							
	Brazoria	323	2	15	0		
	Fort Bend	265	0	19	0		
	Galveston	197	4	27	0		
	Harris	1796	14	440	0		
	Montgomery	265	2	7	0		
	Waller	123	0	7	1		
	District Total	2969	22	515	1	2431	81.9%
Laredo							
	Dimmit	72	0	8	0		
	Duval	117	0	0	0		
	Kinney	36	0	2	0		
	Lasalle	109	0	4	0		
	Maverick	96	0	2	0		
	Val Verde	97	0	7	0		
	Webb	265	0	18	0		
	Zavala	71	0	8	0		
	District Total	863	0	49	0	814	94.3%
Lubbock							
	Bailey	4	0	0	0		
	Castro	10	0	1	0		
	Cochran	0	0	0	0		
	Crosby	12	0	0	0		
	Dawson	3	0	0	0		
	Floyd	10	0	2	0		
	Gaines	0	0	0	0		
	Garza	48	0	1	0		
	Hale	45	0	5	0		
	Hockley	3	0	0	0		
	Lamb	11	0	0	0		
	Lubbock	219	1	27	0		
	Lynn	5	0	2	0		

Number of Bridges by Condition							
District Name	County	Total Bridges On System	On-System SD	On-System FO	On-System SSLO	Number of On-System Good or Better Bridges	On-System Percent Good or Better
	Parmer	21	0	0	0		
	Swisher	66	0	1	0		
	Terry	5	0	0	0		
	Yoakum	0	0	0	0		
	District Total	462	1	39	0	422	91.3%
Lufkin							
	Angelina	109	0	7	2		
	Houston	97	0	5	0		
	Nacogdoches	128	1	19	3		
	Polk	118	2	8	0		
	Sabine	63	0	2	0		
	San Augustine	72	1	7	0		
	San Jacinto	51	0	5	0		
	Shelby	102	1	5	0		
	Trinity	58	0	5	0		
	District Total	798	5	63	5	725	90.9%
Odessa							
	Andrews	1	0	0	0		
	Crane	18	0	0	0		
	Ector	113	1	5	0		
	Loving	4	0	0	0		
	Martin	14	1	0	0		
	Midland	97	1	5	0		
	Pecos	466	1	1	0		
	Reeves	208	1	5	0		
	Terrell	53	0	0	0		
	Upton	39	0	0	0		
	Ward	54	0	3	0		
	Winkler	1	0	0	0		
	District Total	1068	5	19	0	1044	97.8%
Paris							
	Delta	68	1	4	1		
	Fannin	163	3	12	0		
	Franklin	50	0	2	0		

Number of Bridges by Condition							
District Name	County	Total Bridges On System	On-System SD	On-System FO	On-System SSLO	Number of On-System Good or Better Bridges	On-System Percent Good or Better
	Grayson	263	0	32	0		
	Hopkins	175	5	15	0		
	Hunt	311	1	19	3		
	Lamar	178	5	16	2		
	Rains	34	1	0	0		
	Red River	119	4	1	6		
	District Total	1361	20	101	12	1228	90.2%
Pharr							
	Brooks	43	0	0	0		
	Cameron	241	0	15	0		
	Hidalgo	240	1	21	0		
	Jim Hogg	29	0	2	0		
	Kenedy	17	0	0	0		
	Starr	50	0	0	0		
	Willacy	61	0	2	0		
	Zapata	37	0	4	0		
	District Total	718	1	44	0	673	93.7%
San Angelo							
	Coke	82	0	1	0		
	Concho	67	1	1	0		
	Crockett	159	1	2	0		
	Edwards	26	0	1	0		
	Glasscock	18	0	0	0		
	Irion	50	0	0	0		
	Kimble	146	0	9	0		
	Menard	61	0	0	0		
	Reagan	28	0	0	0		
	Real	28	0	6	0		
	Runnels	115	0	13	1		
	Schleicher	28	0	0	0		
	Sterling	52	0	2	0		
	Sutton	90	0	4	0		
	Tom Green	262	0	21	0		
	District Total	1212	2	60	1	1149	94.8%
San Antonio							
	Atascosa	151	0	6	0		
	Bandera	56	0	11	0		

Number of Bridges by Condition							
District Name	County	Total Bridges On System	On-System SD	On-System FO	On-System SSLO	Number of On-System Good or Better Bridges	On-System Percent Good or Better
	Bexar	1262	0	178	0		
	Comal	137	0	11	0		
	Frio	126	0	11	0		
	Guadalupe	237	1	10	0		
	Kendall	80	0	11	0		
	Kerr	142	2	12	0		
	McMullen	53	0	0	0		
	Medina	161	0	8	0		
	Uvalde	94	1	7	0		
	Wilson	97	0	11	0		
	<i>District Total</i>	2596	4	276	0	2316	89.2%
Tyler							
	Anderson	111	1	3	0		
	Cherokee	120	0	5	0		
	Gregg	137	0	15	0		
	Henderson	166	1	7	0		
	Rusk	162	1	2	0		
	Smith	249	1	16	0		
	Van Zandt	172	0	13	0		
	Wood	104	2	12	0		
	<i>District Total</i>	1221	6	73	0	1142	93.5%
Waco							
	Bell	383	0	43	1		
	Bosque	113	1	6	1		
	Coryell	135	0	8	1		
	Falls	158	0	6	0		
	Hamilton	81	0	2	0		
	Hill	232	3	12	2		
	Limestone	132	0	1	0		
	McLennan	422	0	51	2		
	<i>District Total</i>	1656	4	129	7	1516	91.5%
Wichita Falls							
	Archer	94	1	1	0		
	Baylor	51	0	4	0		
	Clay	121	2	10	0		
	Cooke	138	1	9	0		

Number of Bridges by Condition							
District Name	County	Total Bridges On System	On-System SD	On-System FO	On-System SSLO	Number of On-System Good or Better Bridges	On-System Percent Good or Better
	Montague	99	0	3	0		
	Throckmorton	45	0	0	0		
	Wichita	305	1	37	0		
	Wilbarger	118	2	12	2		
	Young	84	0	2	0		
	<i>District Total</i>	1055	7	78	2	968	91.8%
Yoakum							
	Austin	110	1	7	0		
	Calhoun	77	2	1	0		
	Colorado	151	0	17	0		
	Dewitt	149	1	7	0		
	Fayette	231	2	15	0		
	Gonzales	232	1	27	1		
	Jackson	125	1	0	0		
	Lavaca	127	0	8	0		
	Matagorda	87	1	4	0		
	Victoria	203	2	8	0		
	Wharton	175	3	9	0		
	<i>District Total</i>	1667	14	103	1	1549	92.9%
	<i>Statewide On-System Total</i>	34892	193	3486	82	31131	89.2%

Table B-1.

Appendix C – Condition of Off-System Bridges by TxDOT District and County as of September 2014

Number of Bridges by Condition							
District Name	County	Total Bridges Off System	Off-System SD	Off-System FO	Off-System SSLO	Number of Off-System Good or Better Bridges	Off-System Percent Good or Better
Abilene							
	Borden	3	0	0	0	3	
	Callahan	19	5	1	1	12	
	Fisher	74	22	15	10	27	
	Haskell	13	0	2	0	11	
	Howard	9	0	1	0	8	
	Jones	50	2	6	4	38	
	Kent	8	1	1	4	2	
	Mitchell	25	3	3	1	18	
	Nolan	36	1	6	8	21	
	Scurry	43	2	0	3	38	
	Shackelford	11	2	1	2	6	
	Stonewall	16	1	0	3	12	
	Taylor	85	1	13	4	67	
	District Total	392	40	49	40	263	67.1%
Amarillo							
	Armstrong	1	1	0	0	0	
	Carson	2	0	2	0	0	
	Dallam	0	0	0	0	0	
	Deaf Smith	5	0	0	4	1	
	Gray	24	6	4	1	13	
	Hansford	10	0	1	2	7	
	Hartley	0	0	0	0	0	
	Hemphill	4	0	0	0	4	
	Hutchinson	12	0	0	2	10	
	Lipscomb	3	0	0	0	3	
	Moore	2	0	0	2	0	
	Ochiltree	8	0	0	3	5	
	Oldham	0	0	0	0	0	
	Potter	22	1	4	0	17	
	Randall	6	0	1	0	5	
	Roberts	1	0	0	0	1	
	Sherman	5	0	0	0	5	

Number of Bridges by Condition							
District Name	County	Total Bridges Off System	Off-System SD	Off-System FO	Off-System SSLO	Number of Off-System Good or Better Bridges	Off-System Percent Good or Better
	<i>District Total</i>	105	8	12	14	71	67.6%
Atlanta							
	Bowie	56	0	14	0	42	
	Camp	4	0	0	0	4	
	Cass	12	0	2	0	10	
	Harrison	45	2	5	4	34	
	Marion	12	1	2	0	9	
	Morris	21	0	6	4	11	
	Panola	16	0	10	0	6	
	Titus	45	2	4	0	39	
	Upshur	8	0	1	0	7	
	<i>District Total</i>	219	5	44	8	162	74.0%
Austin							
	Bastrop	100	3	19	3		
	Blanco	6	0	1	2		
	Burnet	26	1	2	1		
	Caldwell	46	5	7	3		
	Gillespie	36	3	11	2		
	Hays	49	2	3	0		
	Lee	74	0	19	1		
	Llano	9	2	2	0		
	Mason	11	2	4	4		
	Travis	654	0	117	7		
	Williamson	504	5	44	5		
	<i>District Total</i>	1515	23	229	28	1235	81.5%
Beaumont							
	Chambers	16	0	2	3		
	Hardin	43	1	2	5		
	Jasper	44	0	13	0		
	Jefferson	158	2	39	2		
	Liberty	40	3	11	1		
	Newton	42	7	4	6		
	Orange	60	5	17	3		
	Tyler	58	3	8	2		

Number of Bridges by Condition							
District Name	County	Total Bridges Off System	Off-System SD	Off-System FO	Off-System SSLO	Number of Off-System Good or Better Bridges	Off-System Percent Good or Better
	<i>District Total</i>	461	21	96	22	322	69.8%
Brownwood							
	Brown	95	13	15	11		
	Coleman	42	0	6	7		
	Comanche	98	12	12	12		
	Eastland	63	4	7	8		
	Lampasas	15	0	3	0		
	McCulloch	26	1	4	3		
	Mills	15	4	0	3		
	San Saba	20	2	2	3		
	Stephens	33	4	7	5		
	<i>District Total</i>	407	40	56	52	259	63.6%
Bryan							
	Brazos	127	1	12	1		
	Burleson	48	8	7	9		
	Freestone	52	4	8	4		
	Grimes	95	8	36	8		
	Leon	31	1	5	7		
	Madison	25	7	8	5		
	Milam	54	4	14	4		
	Robertson	43	4	4	4		
	Walker	30	2	2	1		
	Washington	121	2	29	5		
	<i>District Total</i>	626	41	125	48	412	65.8%
Childress							
	Briscoe	4	0	0	0		
	Childress	24	1	1	2		
	Collingsworth	19	1	1	1		
	Cottle	25	0	2	0		
	Dickens	12	4	1	0		
	Donley	13	0	2	2		
	Foard	11	2	1	2		
	Hall	29	2	0	1		
	Hardeman	23	2	0	4		
	King	5	0	1	0		

Number of Bridges by Condition							
District Name	County	Total Bridges Off System	Off-System SD	Off-System FO	Off-System SSLO	Number of Off-System Good or Better Bridges	Off-System Percent Good or Better
	Knox	7	1	1	0		
	Motley	8	0	1	0		
	Wheeler	18	1	2	4		
	District Total	198	14	13	16	155	78.3%
Corpus Christi							
	Aransas	3	0	1	1		
	Bee	23	1	9	2		
	Goliad	43	2	4	3		
	Jim Wells	33	4	3	4		
	Karnes	38	3	5	0		
	Kleberg	2	1	0	0		
	Live Oak	16	6	2	3		
	Nueces	159	5	11	2		
	Refugio	28	2	6	2		
	San Patricio	51	3	5	2		
	District Total	396	27	46	19	304	76.8%
Dallas							
	Collin	519	0	109	2		
	Dallas	1360	9	472	12		
	Denton	277	4	53	7		
	Ellis	183	5	62	18		
	Kaufman	49	5	14	3		
	Navarro	94	10	19	13		
	Rockwall	14	0	0	2		
	District Total	2496	33	729	57	1677	67.2%
El Paso							
	Brewster	7	0	0	1		
	Culberson	1	0	0	0		
	El Paso	222	1	28	69		
	Hudspeth	1	0	0	0		
	Jeff Davis	0	0	0	0		
	Presidio	1	0	1	0		
	District Total	232	1	29	70	132	56.9%
Fort Worth							

Number of Bridges by Condition							
District Name	County	Total Bridges Off System	Off-System SD	Off-System FO	Off-System SSLO	Number of Off-System Good or Better Bridges	Off-System Percent Good or Better
	Erath	74	2	15	5		
	Hood	23	1	0	1		
	Jack	60	2	11	9		
	Johnson	127	0	13	5		
	Palo Pinto	56	5	8	3		
	Parker	160	5	18	21		
	Somervell	2	0	0	0		
	Tarrant	1021	24	311	12		
	Wise	128	7	19	7		
	District Total	1651	46	395	63	1147	69.5%
Houston							
	Brazoria	286	13	36	24		
	Fort Bend	379	12	95	34		
	Galveston	123	5	15	7		
	Harris	1905	22	892	23		
	Montgomery	181	6	32	8		
	Waller	63	8	2	8		
	District Total	2937	66	1072	104	1695	57.7%
Laredo							
	Dimmit	2	0	0	0		
	Duval	2	0	0	0		
	Kinney	2	0	0	0		
	Lasalle	25	0	3	7		
	Maverick	26	0	2	3		
	Val Verde	12	2	4	0		
	Webb	98	2	35	0		
	Zavala	1	0	0	0		
	District Total	168	4	44	10	110	65.5%
Lubbock							
	Bailey	0	0	0	0		
	Castro	0	0	0	0		
	Cochran	0	0	0	0		
	Crosby	4	2	1	0		
	Dawson	0	0	0	0		
	Floyd	1	0	0	1		

Number of Bridges by Condition							
District Name	County	Total Bridges Off System	Off-System SD	Off-System FO	Off-System SSLO	Number of Off-System Good or Better Bridges	Off-System Percent Good or Better
	Gaines	0	0	0	0		
	Garza	1	1	0	0		
	Hale	2	1	1	0		
	Hockley	0	0	0	0		
	Lamb	0	0	0	0		
	Lubbock	8	1	1	0		
	Lynn	0	0	0	0		
	Parmer	5	0	0	0		
	Swisher	4	2	0	0		
	Terry	0	0	0	0		
	Yoakum	0	0	0	0		
	District Total	25	7	3	1	14	56.0%
Lufkin							
	Angelina	58	3	11	5		
	Houston	94	15	24	18		
	Nacogdoches	114	2	27	2		
	Polk	93	30	21	10		
	Sabine	29	5	4	1		
	San Augustine	23	7	1	8		
	San Jacinto	23	0	0	0		
	Shelby	75	20	13	5		
	Trinity	22	1	0	7		
	District Total	531	83	101	56	291	54.8%
Odessa							
	Andrews	0	0	0	0		
	Crane	0	0	0	0		
	Ector	28	0	0	0		
	Loving	0	0	0	0		
	Martin	0	0	0	0		
	Midland	20	0	3	1		
	Pecos	3	1	0	0		
	Reeves	5	1	1	1		
	Terrell	0	0	0	0		
	Upton	0	0	0	0		
	Ward	0	0	0	0		
	Winkler	0	0	0	0		

Number of Bridges by Condition							
District Name	County	Total Bridges Off System	Off-System SD	Off-System FO	Off-System SSLO	Number of Off-System Good or Better Bridges	Off-System Percent Good or Better
	<i>District Total</i>	56	2	4	2	48	85.7%
Paris							
	Delta	28	5	6	4		
	Fannin	147	24	36	20		
	Franklin	25	2	4	1		
	Grayson	251	5	50	9		
	Hopkins	71	12	13	3		
	Hunt	141	7	7	3		
	Lamar	131	12	25	4		
	Rains	18	0	6	1		
	Red River	47	4	4	4		
	<i>District Total</i>	859	71	151	49	588	68.5%
Pharr							
	Brooks	7	2	0	1		
	Cameron	108	5	9	7		
	Hidalgo	171	8	31	10		
	Jim Hogg	0	0	0	0		
	Kenedy	0	0	0	0		
	Starr	13	0	3	1		
	Willacy	58	4	1	0		
	Zapata	0	0	0	0		
	<i>District Total</i>	357	19	44	19	275	77.0%
San Angelo							
	Coke	18	0	4	4		
	Concho	4	0	0	1		
	Crockett	0	0	0	0		
	Edwards	0	0	0	0		
	Glasscock	0	0	0	0		
	Irion	0	0	0	0		
	Kimble	3	0	1	1		
	Menard	3	2	1	0		
	Reagan	0	0	0	0		
	Real	0	0	0	0		
	Runnels	45	6	14	9		
	Schleicher	5	0	0	1		

Number of Bridges by Condition							
District Name	County	Total Bridges Off System	Off-System SD	Off-System FO	Off-System SSLO	Number of Off-System Good or Better Bridges	Off-System Percent Good or Better
	Sterling	2	2	0	0		
	Sutton	2	0	1	0		
	Tom Green	39	0	6	3		
	District Total	121	10	27	19	65	53.7%
San Antonio							
	Atascosa	25	0	1	2		
	Bandera	11	0	4	0		
	Bexar	913	13	191	5		
	Comal	37	0	9	0		
	Frio	16	2	1	1		
	Guadalupe	43	0	4	2		
	Kendall	25	3	4	0		
	Kerr	27	0	12	0		
	McMullen	4	0	0	0		
	Medina	46	3	8	1		
	Uvalde	7	0	0	0		
	Wilson	34	0	11	3		
	District Total	1188	21	245	14	908	76.4%
Tyler							
	Anderson	61	10	14	3		
	Cherokee	71	2	23	8		
	Gregg	76	2	11	1		
	Henderson	31	1	13	1		
	Rusk	107	1	10	2		
	Smith	144	14	13	19		
	Van Zandt	76	11	19	6		
	Wood	13	1	2	0		
	District Total	579	42	105	40	392	67.7%
Waco							
	Bell	209	6	42	5		
	Bosque	34	4	4	2		
	Coryell	27	2	2	4		
	Falls	155	31	17	20		
	Hamilton	39	8	7	3		
	Hill	149	16	15	16		

Number of Bridges by Condition							
District Name	County	Total Bridges Off System	Off-System SD	Off-System FO	Off-System SSLO	Number of Off-System Good or Better Bridges	Off-System Percent Good or Better
	Limestone	150	26	47	14		
	McLennan	250	7	47	20		
	<i>District Total</i>	1013	100	181	84	648	64.0%
Wichita Falls							
	Archer	29	1	2	6		
	Baylor	10	6	0	1		
	Clay	12	2	1	2		
	Cooke	141	2	14	13		
	Montague	128	3	38	7		
	Throckmorton	8	1	0	0		
	Wichita	91	2	20	8		
	Wilbarger	34	3	2	7		
	Young	27	2	4	0		
	<i>District Total</i>	480	22	81	44	333	69.4%
Yoakum							
	Austin	101	7	6	0		
	Calhoun	23	4	4	0		
	Colorado	94	2	7	5		
	Dewitt	115	4	17	7		
	Fayette	135	8	57	17		
	Gonzales	57	8	9	2		
	Jackson	40	4	9	2		
	Lavaca	137	6	58	5		
	Matagorda	101	6	5	8		
	Victoria	121	7	28	6		
	Wharton	190	30	10	35		
	<i>District Total</i>	1114	86	210	87	731	65.6%
	<i>Statewide Off-System Total</i>	18126	832	4091	966	12237	67.5%

Table C-1.

