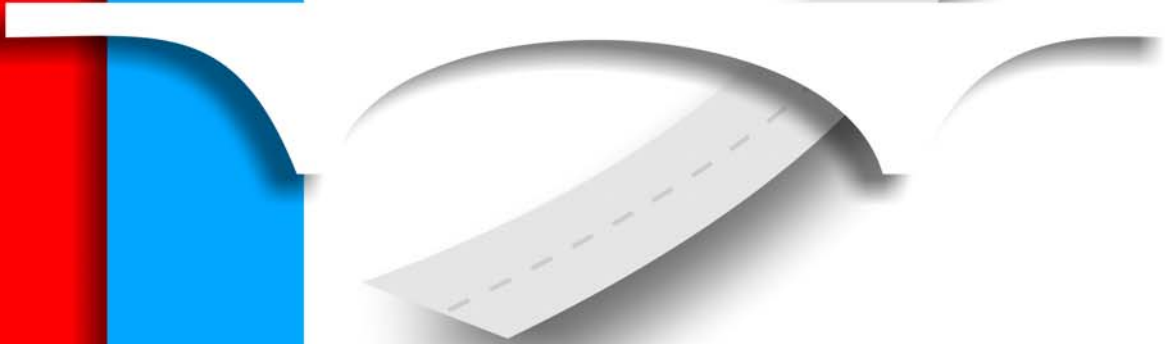




# Report on Texas Bridges



as of September 2006



**Report on**

**Texas Bridges**

**as of September 2006**

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

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## Report on Texas Bridges as of September 2006

### Executive Summary

This report describes Texas publicly owned vehicular bridges and their condition as of September 2006 based on information in the Bridge Inspection Database, the Unified Transportation Program (UTP) planning document, and the Design and Construction Information System (DCIS). 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: sufficient bridges (bridges in good or better condition), structurally deficient bridges, functionally obsolete bridges, and sub-standard-for-load-only bridges.

This report tracks the progress toward TxDOT's goals to:

- Make 80% of Texas bridges in good or better condition by September 2011; and
- Eliminate structurally deficient on-system bridges.

This and previous reports show the following progress toward these two goals:

#### **Goal – Make 80% of Texas Bridges in Good or Better Condition by September 2011**

FY 2001 – 70% of bridges in good or better condition FY 2002 – 71% of bridges in good or better condition FY 2003 – 75% of bridges in good or better condition FY 2004 – 76% of bridges in good or better condition FY 2006 – 77% of bridges in good or better condition
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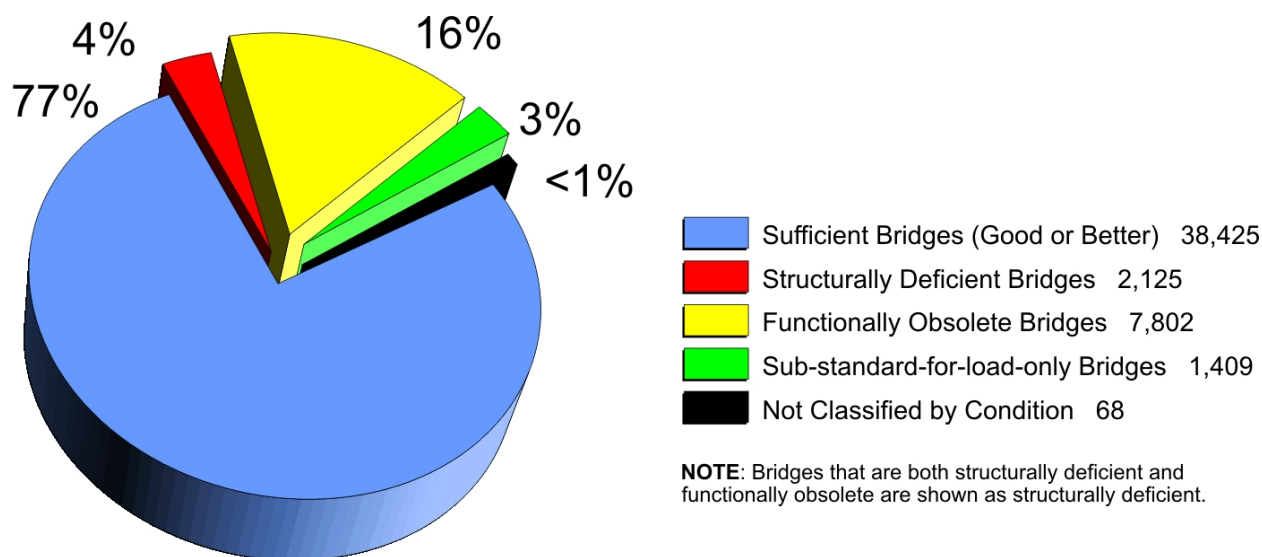
#### **Goal – Eliminate Structurally Deficient On-System Bridges**

FY 2001 – 763 structurally deficient, on system bridges FY 2002 – 693 structurally deficient, on system bridges FY 2003 – 645 structurally deficient, on system bridges FY 2004 – 565 structurally deficient, on system bridges FY 2006 – 483 structurally deficient, on system bridges
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This report also illustrates TxDOT strategies to plan, build, use, maintain, and manage key state resources to ensure that Texas bridges meet the goals identified by the Texas Transportation Commission:

- Reduce congestion
- Enhance safety
- Expand economic opportunity
- Improve air quality, and
- Increase the value of our transportation assets

In September, 2006, Texas had 49,829 bridges. Their condition at that time is shown by the following figure (same as Figure 3-2).



**Figure ES-1. Condition of Texas Bridges by Count in September 2006 (49,829 Total)**

From FY 2004 through FY 2006, the number of sufficient (good or better) bridges increased by 1,351—443 more on-system bridges and 908 additional off-system bridges.

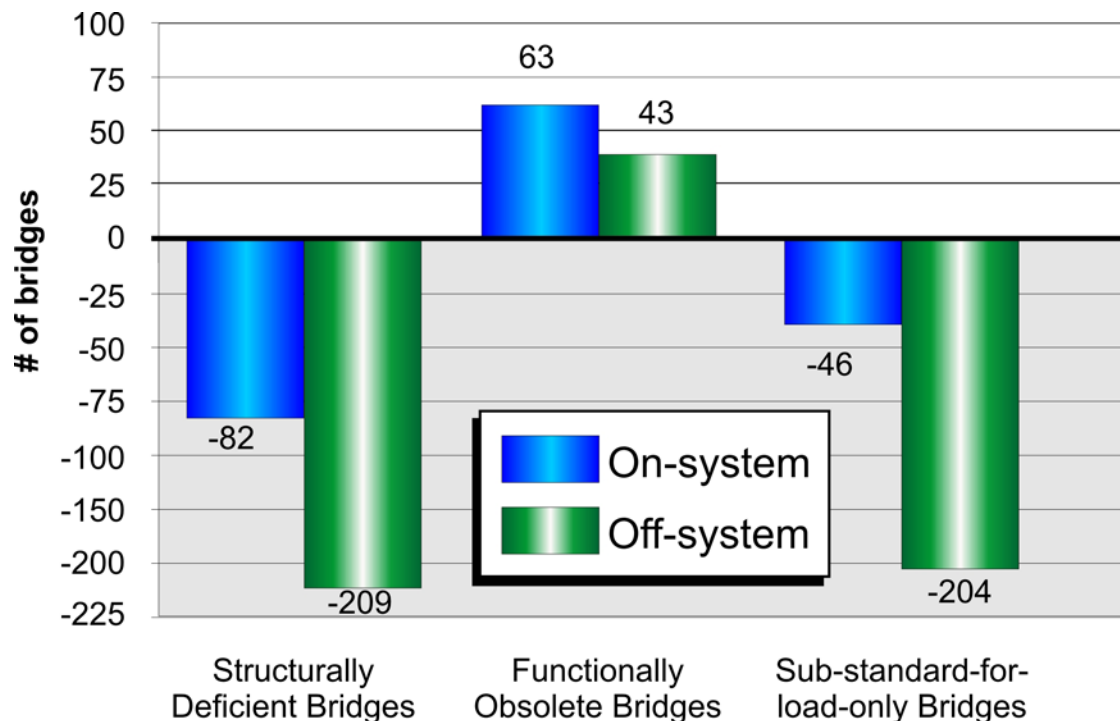
Although the number of sufficient bridges in Texas increased from FY 2004 through FY 2006 by 1,351, new-location bridges accounted for 909 of that number. However, the percentage of sufficient bridges has increased steadily—from 70% in September 2001 to 71% in September 2002, to 75% in September 2003, to 76% in September 2004 and to 77% in September 2006.

Of the non-sufficient bridges in Texas, the period from FY 2004 through FY 2006 produced a net improvement of 435 bridges, as shown by the negative numbers in the following table. This improvement encompassed 65 more on-system and 370 more off-system bridges that changed from non-sufficient to sufficient.

**Table ES-1. Change in Condition of Non-sufficient Bridges from FY 2004 to FY 2006**

Condition	Change On-system	Change Off-system	Total Change
Structurally Deficient	- 82	-209	-291
Functionally Obsolete	+63	+ 43	+ 106
Sub-standard for load only	- 46	- 204	- 250
Total Change	-65	- 370	- 435

Change in the condition of non-sufficient Texas bridges from FY 2004 through FY 2006 is also shown in the following figure (same as Figure 3-5).



**Figure ES-2. Change in Condition of Non-sufficient Bridges from FY 2004 through FY 2006**

During FY 2006, Texas contracted projects to address 195 structurally deficient bridges and 86 functionally obsolete bridges for a total of 281 deficient or obsolete bridges. To achieve the goals to make at least 80% of Texas bridges good or better and to accelerate the upgrade of all structurally deficient on-system bridges, TxDOT and local governments will continue to work effectively to meet these challenges:

- 483 structurally deficient on-system bridges and 955 additional bridges classified as structurally deficient, functionally obsolete, or sub-standard for load only in September 2006, for a total of 1,438 must be improved. This is an average of 288 structurally deficient on-system and other non-sufficient bridges per year over the next five years.
- Bridges that will become structurally deficient, functionally obsolete, or sub-standard for load only in the coming years must also be improved. Over 54% of the bridges have been in service for more than 36 years. Increasing traffic volumes, heavier vehicle weights, and an aging infrastructure are increasing the need for additional funds and resources for maintenance, rehabilitation, and replacement of Texas bridges.

As of September 2006, Texas must upgrade 288 structurally deficient on-system and other non-sufficient bridges each year to reach its goals of at least 80% of Texas bridges in good or better condition and no structurally deficient on-system bridges by September 2011. TxDOT is developing an automated system to facilitate the management of on- and off-system bridges. This new technology, known as the Bridge Management Information System (BMIS), will allow

TxDOT to track the condition of Texas bridges at a level of detail and frequency required to prioritize funding and ensure that those bridges with the greatest need are given the highest priority.

The following programs made funds available or facilitated upgrades of non-sufficient bridges:

- Highway Bridge Program (HBP)—TxDOT has administered this Federal Highway Administration (FHWA) program since its beginning in 1970 when it was known as the Highway Bridge Replacement and Rehabilitation Program (HBRRP). Initial funding participation requirements for both on- and off-system bridges were 80% federal and 20% local; however, in 1995 TxDOT initiated a change in participation requirements for off-system bridges to pay half of the local government's share (80% federal, 10% state, 10% local). This program provided funding for 190 structurally deficient and 71 functionally obsolete bridges that were contracted in FY 2006, for a total of 261 of the 281 deficient or obsolete bridges that were awarded contracts during this period.
- State Infrastructure Bank (SIB)—Effective September 1997, this revolving account in the State Highway Fund allows TxDOT to award loans to local governments to support eligible transportation projects. The overall goal of the SIB program is to provide innovative financing methods that will add to the list of options available to communities to assist them in meeting their infrastructure needs. The SIB program allows borrowers to access capital funds at or lower than current market interest rates. The Texas Transportation Commission, TxDOT's governing body, has approved 42 loans totaling more than \$253.4 million from the SIB program. The loans have helped leverage more than \$1.81 billion in transportation projects in Texas.
- Economically Disadvantaged Counties (EDC) Program—Effective January 1998, this 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 10% cost participation in the Participation-Waived Project/Equivalent-Match Project (PWP/EMP) program.
- PWP/EMP Program—Effective August 2000, this program revised local participation requirements to allow 100% federal/state funding of a TxDOT-programmed participation-waived project (PWP) in cases where the local government agrees to perform structural improvement work on other equivalent-match-project (EMP) deficient bridges with a dollar amount at least equal to their normal 10% project match. State design standards apply to the PWPs while the EMP design standards are determined by the local governments based on local needs and standards.
- Simplified local government participation—Effective August 2000, TxDOT provided that when the local government elects to participate in the cost of a TxDOT-programmed bridge, instead of being responsible for 10% of actual costs, the local government is now responsible for 10% of the estimated project cost at the time the agreement with TxDOT is signed. The local government no longer participates in subsequent overruns in costs of program-eligible project items unless it lets and manages the project.

However, Texas is facing enormous and rapidly increasing transportation needs. Increases in population, vehicles and travel in the state have placed unprecedented demands on an under-invested system.

The Texas Transportation Commission has developed a plan to meet these demands and it is based on five goals: reduce congestion, enhance safety, expand economic opportunity, improve air quality and increase the value of our transportation assets. In order to reach these goals, TxDOT will use all financial options available to build projects; will empower local and regional leaders to solve local and regional transportation problems; and will increase competition to reduce costs and demand consumer driven answers to our transportation problems.

Texas has a bright transportation future and TxDOT will continue to work with communities and local, state and federal leaders to ensure that our state leads the nation in the safety and quality of our transportation infrastructure.





## Chapter 1 – Overview

**Introduction.** Texas’ mobility needs are significant. This is because the Texas transportation system has not kept pace with the needs of a rapidly increasing population. In addition, over the next twenty-five years, Texas’ population will increase an additional 64%, the use of roads will increase an additional 214%, but the state road capacity will grow only an additional 6%.<sup>1</sup>

The Texas Transportation Commission has developed a plan to meet these needs and it is focused on five goals:

- Reduce congestion
- Enhance safety
- Expand economic opportunity
- Improve air quality, and
- Increase the value of our transportation assets

As a precursor to this plan, in August 2001, Texas Transportation Commissioner John W. Johnson established a new measure 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.<sup>2</sup>

As part of the September 2001 evaluation of Texas bridges, TxDOT adopted an additional goal to accelerate the upgrade of all structurally deficient on-system bridges, giving highest priority to critically deficient bridges, in an effort to eliminate more quickly all structurally deficient on-system bridges.

The TxDOT Bridge Division tracks progress toward these goals in a report on the condition of publicly owned vehicular bridges:

- *Report on Texas Bridges as of September 2001*—Baseline information showing the state of the bridges at the end of FY 2001.
- *Report on Texas Bridges as of September 2002*—Information showing the state of the bridges at the end of FY 2002.
- *Report on Texas Bridges as of September 2003*—Information showing the state of the bridges at the end of FY 2003.
- *Report on Texas Bridges as of September 2004*—Information showing the state of the bridges at the end of FY 2004. At this time it was determined to publish the report biennially.
- *Report on Texas Bridges as of September 2006*—Information showing the state of the bridges at the end of FY 2006 – this report.

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<sup>1</sup> Texas Department of Transportation, “The Texas Transportation Challenge,” May 2006, available at [http://www.dot.state.tx.us/publications/government\\_business\\_enterprises/challenge.pdf](http://www.dot.state.tx.us/publications/government_business_enterprises/challenge.pdf).

<sup>2</sup> Texas Transportation Commission’s Transportation Working Group, “Texas Transportation Partnerships: Connecting You to the World,” August 2001.

These reports show the following progress toward these two goals:

Goal – make 80% of bridges in Texas in good or better condition:

FY 2001 – 70% of bridges in good or better condition  
 FY 2002 – 71% of bridges in good or better condition  
 FY 2003 – 75% of bridges in good or better condition  
 FY 2004 – 76% of bridges in good or better condition  
 FY 2006 – 77% of bridges in good or better condition

Goal – eliminate structurally deficient on-system bridges:

FY 2001 – 763 structurally deficient, on system bridges  
 FY 2002 – 693 structurally deficient, on system bridges  
 FY 2003 – 645 structurally deficient, on system bridges  
 FY 2004 – 565 structurally deficient, on system bridges  
 FY 2006 – 483 structurally deficient, on system bridges

As this shows, TxDOT is well on its way to meeting these goals and will continue to effectively implement our plan until these goals are fully met or exceeded.

This report also illustrates TxDOT strategies to plan, build, use, maintain and manage key state resources to ensure that Texas bridges meet objectives from the TxDOT Strategic Plan 2005-2009<sup>3</sup>:

- Reliable mobility
- Improved safety
- System preservation
- Accelerated project delivery
- Economic vitality

**Purpose.** This report describes the condition of all publicly owned vehicular bridges in Texas at the end of FY 2006. 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.
- Chapters 4 and 5—Status of funding and letting of bridge projects at the end of FY 2006.
- Chapter 6—Concerns for the future of Texas bridges based on their attributes and conditions.
- Chapter 7—Summaries of progress made toward TxDOT’s bridge goals during the preceding reporting period and our plan for staying on course.

**Data Sources.** TxDOT maintains its inspection information on each publicly owned vehicular bridge in the electronic Bridge Inspection Database. This database is a repository of information on the characteristics of the bridges and their conditions, and it provides the source of data for

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<sup>3</sup> Texas Department of Transportation, Strategic Plan 2005-2009, available at [ftp://ftp.dot.state.tx.us/pub/txdot-info/lao/strategic\\_plan2005.pdf](ftp://ftp.dot.state.tx.us/pub/txdot-info/lao/strategic_plan2005.pdf).

descriptions of bridges in this report. The database identifies each bridge by its National Bridge Inventory (NBI) number and is updated continually based on safety inspections.

TxDOT uses the Unified Transportation Program (UTP), a ten-year planning document, to guide and control project development. It identifies Texas projects scheduled to be let for construction bids and is typically updated and re-issued yearly. The UTP provides the source of data for funding information in this report.

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 provides the source of information on letting for construction bids of the projects described in this report.

These databases 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.

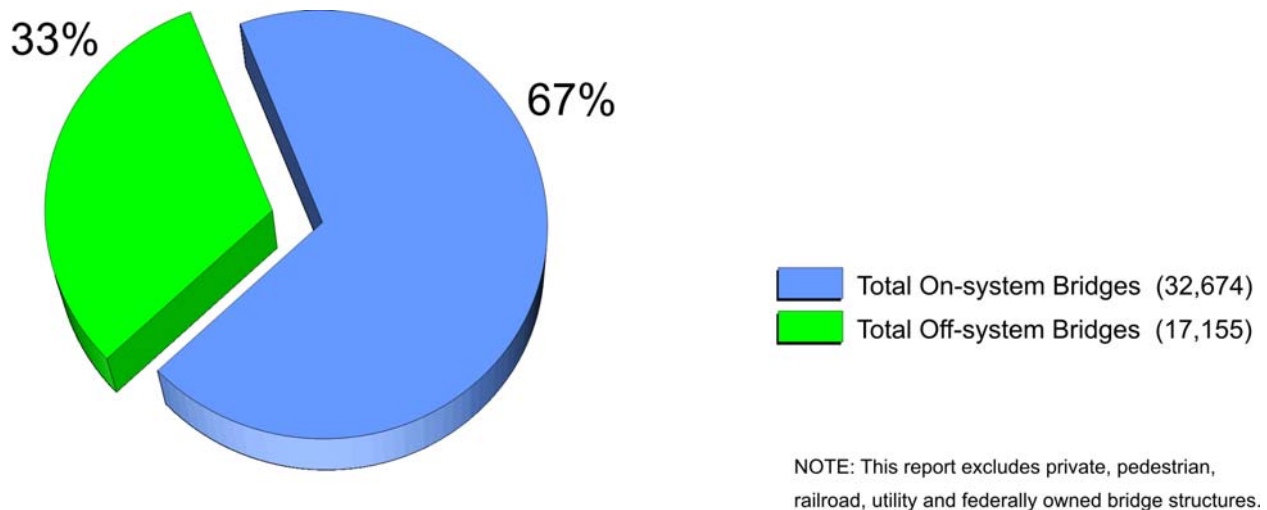


## Chapter 2 – Characteristics of Texas Bridges

**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 administered 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 by their location 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. In the few cases where accumulated data for a structure does not identify age, this report categorizes the age as “Not Classified.”

**On- and Off-system Bridges.** Texas has approximately 40% more bridges than any other state. The following figure shows the number of on- and off-system bridges in Texas.



**Figure 2-1. Count of On- and Off-system Texas Bridges (49,829 Total)**

In September 2006, Texas had 32,674 on-system bridges and 17,155 off-system bridges, for a total of 49,829 publicly owned vehicular bridges. This constitutes 909 more bridges than in September 2004. As shown in the following table, most of the bridges added during FY 2004 through FY 2006—522 of them—are off-system bridges.

**Table 2-1. Count of On- and Off-system Bridges**

	<b>On-system</b>	<b>Off-system</b>	<b>Total</b>
Bridges in Sept. 2006	32,674	17,155	<b>49,829</b>
Bridges in Sept. 2004	32,287	16,633	<b>48,920</b>
Change as of FY 2006	+387	+522	<b>+909</b>

**Age.** The correlation between the age of bridges and their need for special maintenance predicts the need for resources to support 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* at <ftp://ftp.dot.state.tx.us/pub/txdot-info/gsd/manuals/ins.pdf>.)
- 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 or higher, and must be at least as wide as their approach roadways.

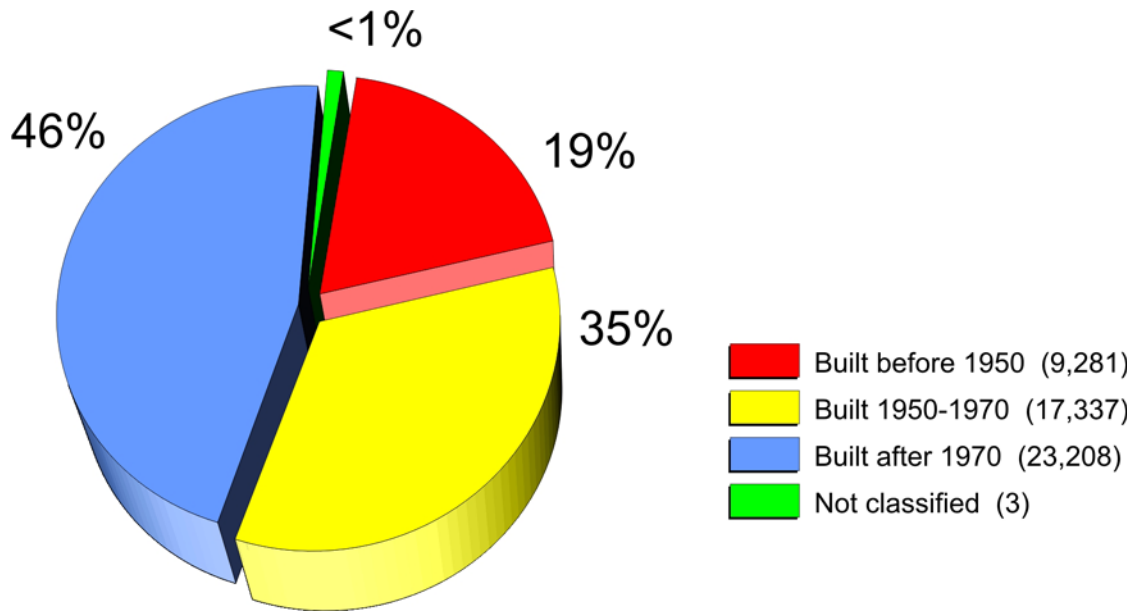
Between 1950 and 1970, many new-location on-system bridges were built as the interstate system developed and the state highway system expanded. The number of on-system bridges built during this time was more than triple the number of off-system bridges built.

However, since 1970 the number of off-system bridges has increased at a much 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 exponential growth.

The following table and figures show bridges by age groupings.

**Table 2-2. Age of Bridges in FY 2006**

Age	On-system	Off-system	Total
Built before 1950	6,813	2,468	9,281
Built 1950-1970	13,784	3,553	17,337
Built after 1970	12,076	11,132	23,208
Not Classified	1	2	3
<b>Total</b>	<b>32,674</b>	<b>17,155</b>	<b>49,829</b>



**Figure 2-2. Age of On- and Off-system Texas Bridges in FY 2006 (49,829 Total)**

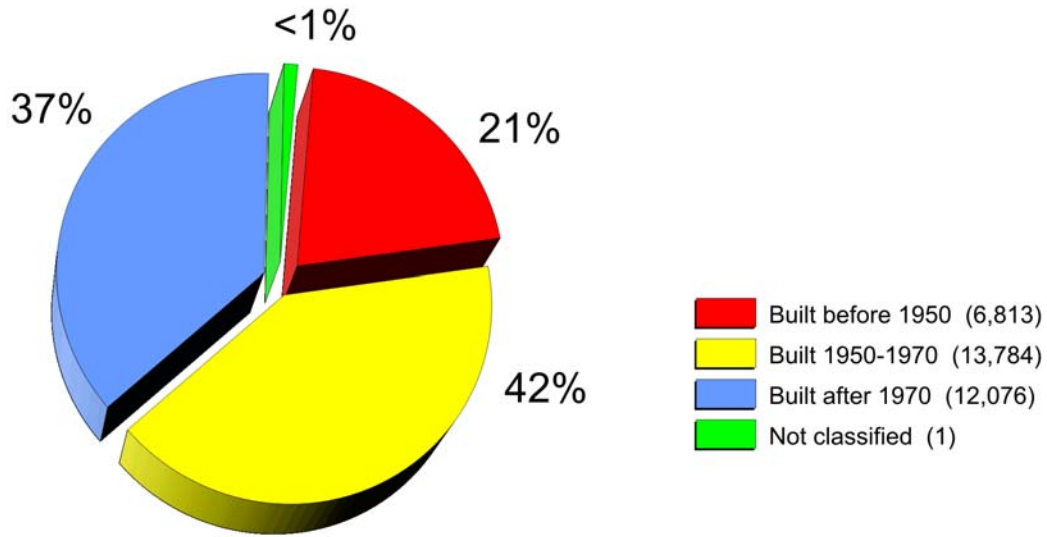


Figure 2-3. Age of On-system Bridges in FY 2006 (32,674 Total)

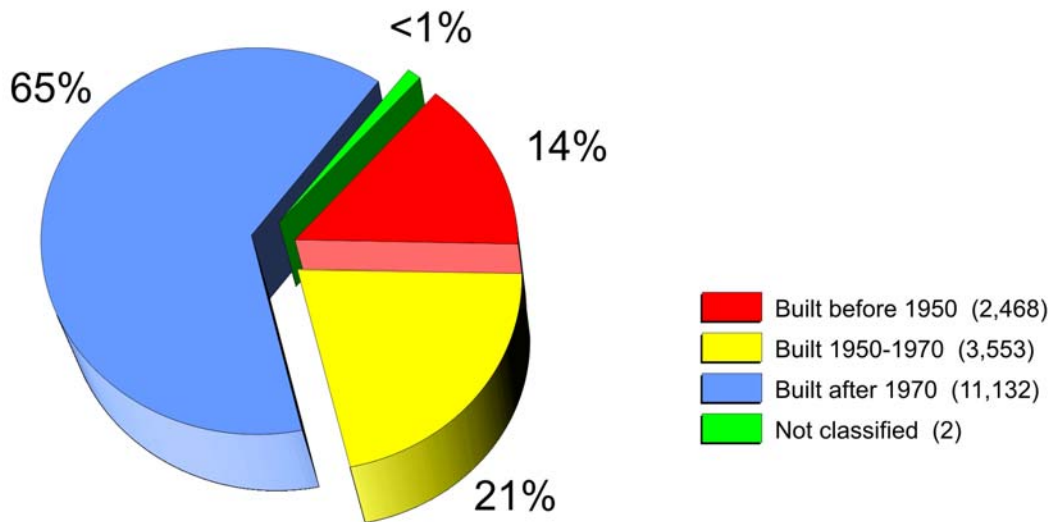


Figure 2-4. Age of Off-system Bridges in FY 2006 (17,155 Total)



The following table shows the change in age of Texas bridges from FY 2004 to FY 2006.

**Table 2-3. Change in Age of Bridges from September 2004 to September 2006**

Age	As of Sept. 2004	As of Sept. 2006	Change
<b>On-system Bridges</b>			
▪ Built before 1950	6,917	6,813	-104
▪ Built 1950-1970	14,008	13,784	-224
▪ Built after 1970	11,362	12,076	+714
<b>Off-system Bridges</b>			
▪ Built before 1950	2,751	2,468	-283
▪ Built 1950-1970	3,756	3,553	-203
▪ Built after 1970	10,126	11,132	+1006

As seen in the table above, older bridges are being replaced with new structures. This is evidenced by the fact that as of FY 2006, more than 46% of all Texas bridges were built after 1970.

Timber is not as durable or strong under certain circumstances as other bridge materials. As a result, TxDOT has not built on-system timber bridges for more than 50 years and many on-system timber bridges are reaching the end of their service life. For these reasons, TxDOT targets on-system timber bridges for replacement by bridges with more durable materials.

In September 2001, Texas had a total of 279 on-system timber bridges. In September 2002, Texas had 11 fewer. In September 2003, Texas had another 34 fewer. In September 2004, Texas had another 28 fewer and in 2006, Texas another 32 fewer as shown in the following table.

**Table 2-4. On-system Timber Bridges by District**

District	FY 2001 Bridge Count	FY 2002 Bridge Count	FY 2003 Bridge Count	FY 2004 Bridge Count	FY 2006 Bridge Count
Abilene	0	0	0	0	0
Amarillo	21	20	18	17	16
Atlanta	40	37	28	17	17
Austin	8	8	8	7	5
Beaumont	18	18	17	15	14
Brownwood	1	1	0	0	0
Bryan	11	11	7	6	6
Childress	4	4	3	3	3
Corpus Christi	32	32	35	35	30
Dallas	34	29	29	29	29
El Paso	0	0	0	0	0
Fort Worth	7	7	1	0	0
Houston	5	5	5	5	5
Laredo	1	1	1	1	1
Lubbock	2	2	2	2	2
Lufkin	50	50	44	36	21
Odessa	1	1	1	2	1
Paris	7	6	5	4	2
Pharr	3	3	3	3	2

<b>District</b>	<b>FY 2001 Bridge Count</b>	<b>FY 2002 Bridge Count</b>	<b>FY 2003 Bridge Count</b>	<b>FY 2004 Bridge Count</b>	<b>FY 2006 Bridge Count</b>
San Angelo	0	0	0	0	0
San Antonio	4	4	2	2	2
Tyler	2	2	0	0	0
Waco	5	5	4	2	1
Wichita Falls	1	0	0	0	0
Yoakum	22	22	20	20	17
<b>Total</b>	<b>279</b>	<b>268</b>	<b>234</b>	<b>206</b>	<b>174</b>

### Chapter 3 – Condition of Texas Bridges

**Terms.** This report characterizes the condition of bridges as follows:

- *Sufficient structure (good or better):* A sufficient structure meets current federal and Texas requirements and is in good or better condition. To be classified in good or better condition, a bridge is not structurally deficient, functionally obsolete, or sub-standard for load only. Desirable change in sufficient structures from year to year is reflected by positive numbers, showing an increase in sufficient structures.
- *Non-sufficient structure:* A non-sufficient structure is structurally deficient, functionally obsolete, or sub-standard for load only. Desirable change in non-sufficient structures from year to year is reflected by negative numbers, showing a decrease in non-sufficient structures.
- *Structurally deficient 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.
- *Critically deficient structure:* A bridge is classified by TxDOT as critically deficient if it is structurally deficient and in most need of attention.
- *Functionally obsolete 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 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 bridges:* This report classifies a bridge as land-locking if it restricts traffic into an area because of load limitations or closures. These bridges are load-posted.

Categories of bridge conditions overlap. For example, a bridge that is structurally deficient is not necessarily load-posted, and a bridge that is load-posted is not necessarily classified as structurally deficient. The following figure shows a conceptual overlap of the categories.

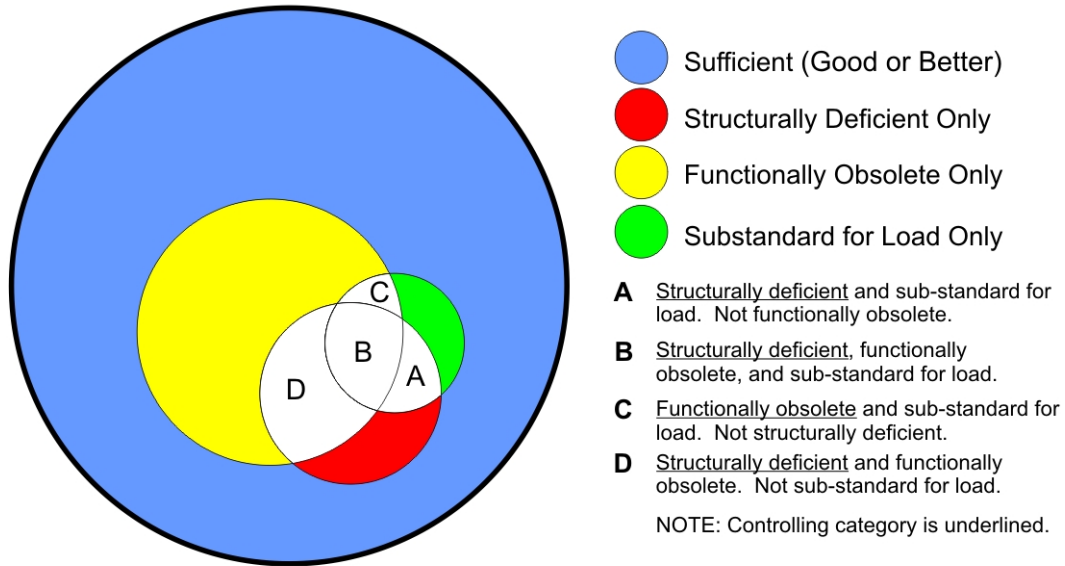


Figure 3-1. Categories of Bridge Conditions

**Condition of Bridges.** The following figures show the condition of Texas bridges as of September 2006.

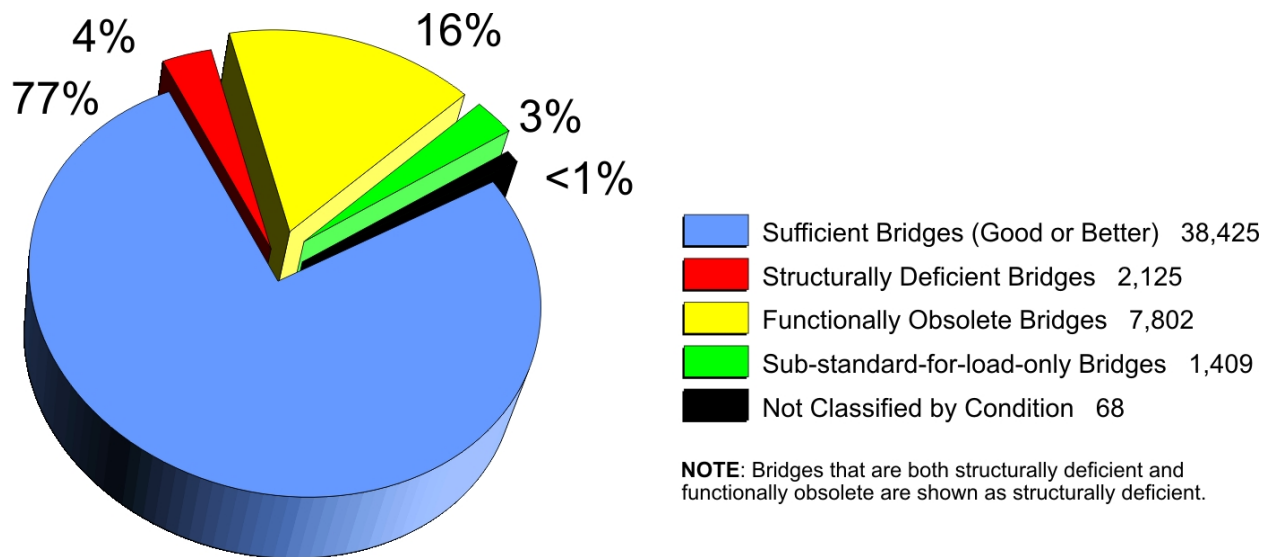


Figure 3-2. Condition of Texas Bridges by Count in September 2006 (49,829 Total)

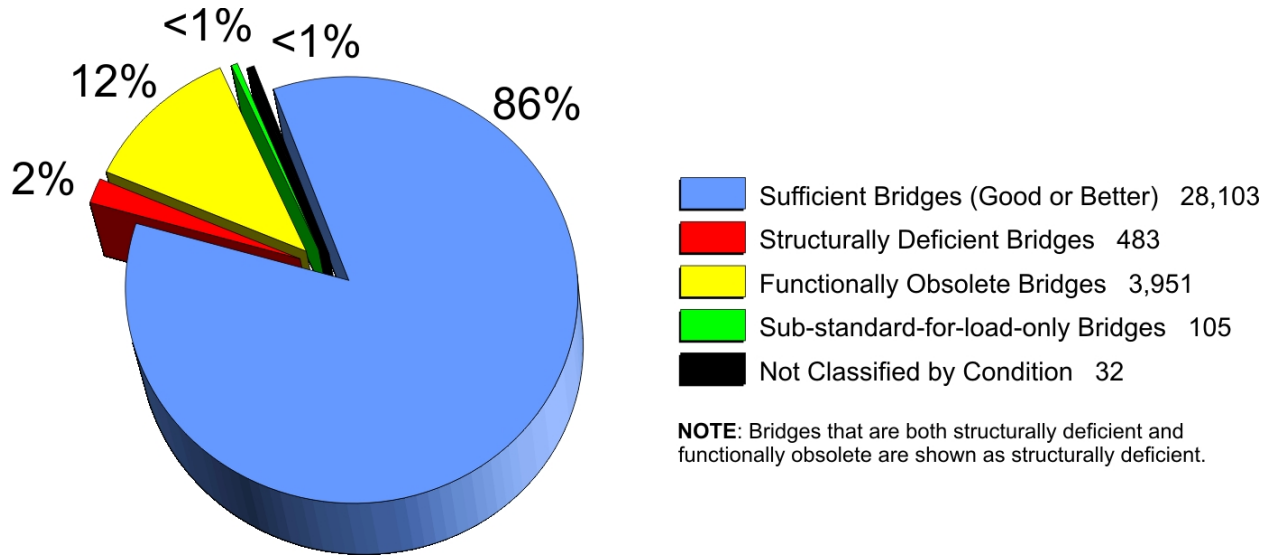


Figure 3-3. Condition of On-system Bridges by Count in September 2006 (32,674 Total)

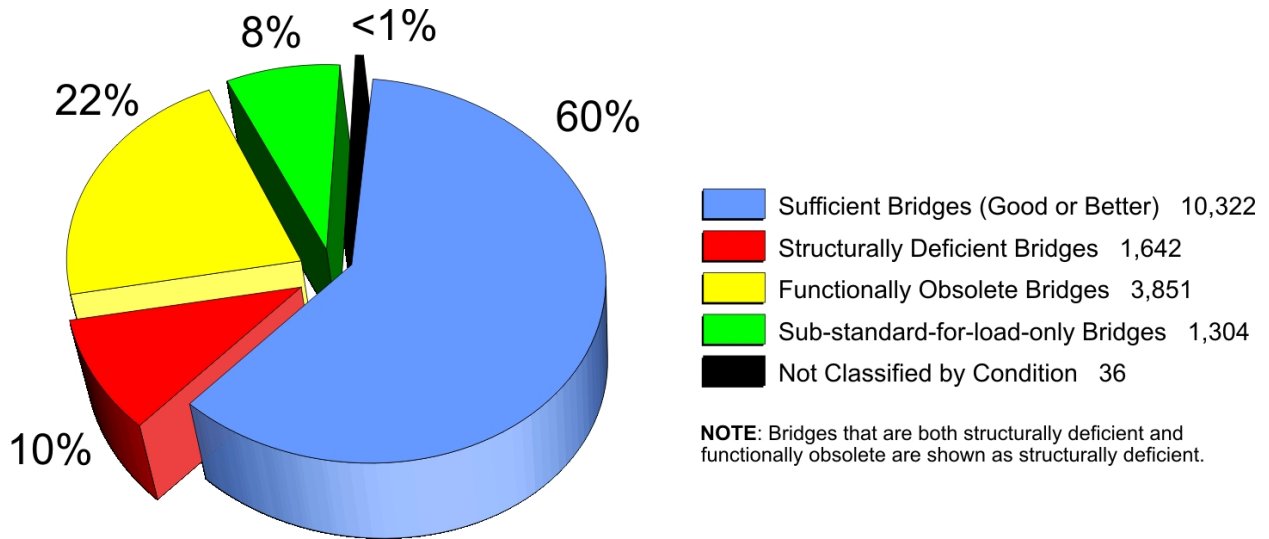


Figure 3-4. Condition of Off-system Bridges by Count in September 2006 (17,155 Total)

**Sufficient Bridges (Good or Better).** In September 2006, a total of 38,425 of the state's 49,829 bridges were classified as good or better: 28,103 on-system and 10,322 off-system. This means more than 77% of Texas' bridges meet or exceed all state and federal safety requirements. By comparison, in September 2004, a total of 37,074 of the state's bridges were classified as good or better: 27,660 on-system and 9,414 off-system. This constitutes a statewide increase of 1,351 good or better bridges for this reporting period.

**Structurally Deficient Bridges.** In September 2006, a total of 2,125 of the state's bridges were structurally deficient: 483 on-system and 1,642 off-system. By comparison, in September 2004, a total of 2,416 bridges were structurally deficient: 565 on-system and 1,851 off-system. This constitutes a statewide decrease of 291 in structurally deficient bridges for this reporting period.

**Functionally Obsolete Bridges.** In September 2006, a total of 7,802 of the state's bridges were functionally obsolete: 3,951 on-system and 3,851 off-system. By comparison, in September 2004, a total of 7,696 of the state's bridges were functionally obsolete: 3,888 on-system and 3,808 off-system. This constitutes a statewide increase of 106 in functionally obsolete bridges for this reporting period.

The increase in the number of functionally obsolete bridges is primarily due to the increase in the average daily traffic and the ability of the structure to carry the increased number of vehicles, not a deteriorated ability to carry load or weight.

**Sub-Standard for Load Only Bridges.** In September 2006, a total of 1,409 of the state's bridges were sub-standard for load only: 105 on-system and 1,304 off-system. By comparison, in September 2004, a total of 1,659 of Texas' bridges were sub-standard for load only: 151 on-system and 1,508 off-system. This constitutes a statewide decrease of 250 in sub-standard for load only bridges for this reporting period.

It is important to note that sub-standard for load only structures are not recognized as non-sufficient structures by the FHWA and therefore are not eligible for HBP funds. TxDOT categorizes sub-standard for load only structures as non-sufficient because they are load-posted and therefore could impede the safe passage of school buses and emergency and commercial vehicles.

TxDOT tracks both on and off-system bridges by TxDOT district and by county. TxDOT has twenty-five districts within the state. Please see Appendix A for a map of Texas counties overlaid with TxDOT districts. Also, please see the two tables in Appendix B that reflect the condition of on and off-system bridges by TxDOT district and by county as of September, 2006.

**Change in Condition of Bridges.** The following figure summarizes the change in condition of non-sufficient bridges from FY 2004 to FY 2006. It reflects a steady decrease in the number of bridges that are structurally deficient or sub-standard for load only, and a slight increase in the number of functionally obsolete bridges. Again, the increase in the number of functionally obsolete bridges primarily is due to the increased volume of traffic, not to the structure's weight or load capacity.

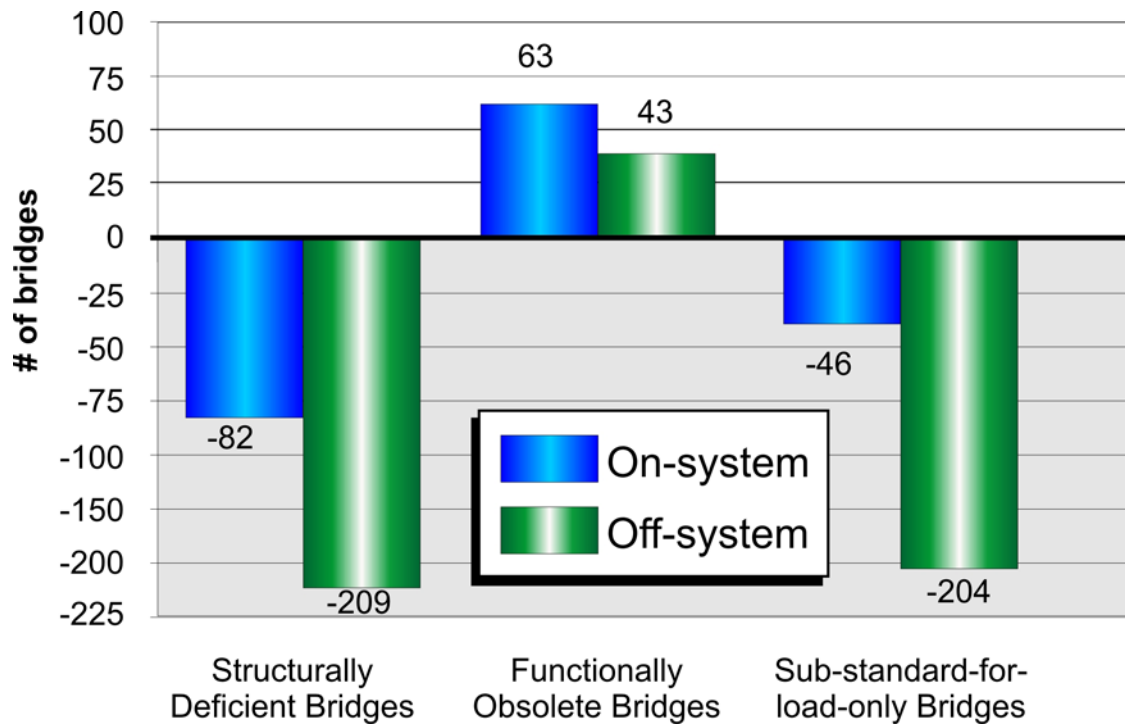


Figure 3-5. Change in Condition of Non-Sufficient Bridges from FY 2004 through FY 2006

**Load Posted and Closed Bridges.** Included within the categories of non-sufficient bridges are load-posted and closed bridges. As shown in the following table, in September 2006 Texas had 340 load-posted, 12 closed and 28 recommended for posting or closure on-system bridges. Also in September 2006, Texas had 3,066 load-posted, 171 closed and 358 recommended for posting or closure off-system bridges. Please note, the count of load posted and closed bridges is included in the count of non-sufficient bridges above and is not in addition to those numbers.

Table 3-1. Load Posted and Closed Bridges as of September 2006

District	On-system Bridges			Off-system Bridges		
	Posted	Closed	Recommended for Posting/Closure	Posted	Closed	Recommended for Posting/Closure
Abilene	22	0	0	115	10	26
Amarillo	5	0	0	32	1	1
Atlanta	14	0	1	27	8	8
Austin	22	2	1	75	21	1
Beaumont	2	0	0	93	5	0
Brownwood	16	0	0	111	3	0
Bryan	10	0	2	188	4	25
Childress	34	0	0	62	4	0
Corpus Christi	18	2	5	58	5	0

District	On-system Bridges			Off-system Bridges		
	Posted	Closed	Recommended for Posting/Closure	Posted	Closed	Recommended for Posting/Closure
Dallas	58	0	11	235	28	0
El Paso	1	2	0	80	1	0
Fort Worth	10	4	2	217	15	5
Houston	1	0	0	297	12	30
Laredo	3	0	1	57	4	0
Lubbock	0	0	0	4	0	3
Lufkin	11	0	0	222	3	0
Odessa	1	0	1	2	1	0
Paris	27	0	0	205	11	34
Pharr	2	1	0	26	6	3
San Angelo	4	0	1	24	3	9
San Antonio	3	1	0	83	6	18
Tyler	8	0	2	122	0	58
Waco	51	0	0	320	11	107
Wichita Falls	7	0	0	133	3	0
Yoakum	10	0	1	278	6	30
<b>Total</b>	<b>340</b>	<b>12</b>	<b>28</b>	<b>3066</b>	<b>171</b>	<b>358</b>

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 of this report, to encourage compliance by local governments with recommendations for posting or closure of off-system bridges. Local governments cannot participate in the PWP/EMP program until TxDOT confirms their compliance with all requests to post or close off-system bridges in their jurisdiction.

**Land-Locking Bridges.** Also included within the categories of non-sufficient bridges are land-locking bridges. The Texas Transportation Code establishes the minimum load that unposted Texas bridges must be able to carry. Bridges unable to safely support that minimum load must be load-posted to protect them and the people who travel them from possible harm. This minimum load is the state legal load. In general, the maximum gross load on any truck cannot exceed 80,000 lbs., the maximum load on any tandem axles cannot exceed 34,000 lbs., and the maximum load on any single axle cannot exceed 20,000 lbs.



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 also can legally use load-posted bridges. Some examples include vehicles transporting concrete, timber, agricultural products or power poles.

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. As shown in the following table, in September 2006 Texas had 80 land-locking on-system bridges and 773 land-locking off-system bridges. Again, please note, the count of land-locking bridges is included in the count of non-sufficient bridges above and is not in addition to those numbers.

**Table 3-2. Land-locking Bridges as of September 2006**

<b>District</b>	<b>On-system Land-locking Bridges</b>	<b>Off-system Land-locking Bridges</b>
Abilene	0	21
Amarillo	0	4
Atlanta	9	10
Austin	6	12
Beaumont	1	16
Brownwood	2	16
Bryan	5	64
Childress	7	8
Corpus Christi	0	13
Dallas	24	46
El Paso	0	12
Fort Worth	1	39
Houston	0	106
Laredo	0	49
Lubbock	0	0
Lufkin	5	73
Odessa	0	2
Paris	5	37
Pharr	0	6
San Angelo	0	8
San Antonio	0	14
Tyler	0	28
Waco	13	100
Wichita Falls	2	31
Yoakum	0	58
<b>Total</b>	<b>80</b>	<b>773</b>

Vehicles that exceed posted limits but have a weight tolerance permit may legally use land-locking bridges. However, use of land-locking bridges for excess loads increases the risk of damage to the bridge. TxDOT began tracking information about land-locking bridges in March 2001 and gives special consideration to programming bridge projects that include land-locking bridges.

## Chapter 4 – Funding

**SAFETEA-LU.** On August 10, 2005, President George W. Bush signed the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). SAFETEA-LU authorizes the federal surface transportation programs for highways, highway safety, and transit for the 5-year period 2005-2009. Under SAFETEA-LU the Highway Bridge Replacement and Rehabilitation Program (HBRRP) became known more simply as the Highway Bridge Program (HBP). (SAFETEA-LU Sections 1101(a)(3) and 1114. The text and additional information on SAFETEA-LU are available at <http://www.fhwa.dot.gov/safetealu/index.htm>.)

HBP provides funding to enable states to improve the condition of their highway bridges through replacement, rehabilitation, and systematic preventive maintenance. The HBP is administered by the TxDOT Bridge Division.

**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 structures replacement and rehabilitation, including bridges.

**Terms.** This report uses the following terms to describe eligibility for funding of bridge projects under the 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 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.
- *TEBSS:* This is a numerical evaluation established by TxDOT. The Texas Eligible Bridge Selection System (TEBSS) provides a formula using scores for bridge attributes to help prioritize bridge replacement and rehabilitation projects to ensure that the most needy bridges

are addressed first throughout the state. A TEBSS score is a rating of 0 through 100. The higher the number, the higher the priority.

**HBP Funding.** A limited amount of HBP funds is apportioned to the states from FHWA for the specific purpose of replacing or rehabilitating structurally deficient or functionally obsolete bridges on public highways, roads, and streets. The program applies to deficient existing structures of bridge definition and classification that carry highway vehicular traffic. HBP funds can be used for both on-system and off-system bridges. However, as mentioned in Chapter 3 in greater detail, HBP funds are not available for sub-standard for load only bridges.

TxDOT administers the HBP in Texas as follows:

1. Selects bridge projects for funding according to FHWA eligibility criteria.
2. Orders them using TEBSS and the following prioritization system:
  - Priority 1 – Critically deficient structurally deficient land-locking bridges
  - Priority 2 – Remaining critically deficient structurally deficient bridges
  - Priority 3 – Structurally deficient land-locking bridges
  - Priority 4 – Remaining structurally deficient bridges
  - Priority 5 – Functionally obsolete land-locking bridges
  - Priority 6 – Remaining functionally obsolete bridges
3. Authorizes the projects using the UTP.

The following tables show HBP projects that were programmed for FY 2006–2016. (Note that bridge projects may include more than one bridge.)

**Table 4-1. HBP Projects with Funding Allocated as of September 2006**

Program Period	On-system Projects	Off-system Projects	Total
2006-2016	1085	1650	2735

**Table 4-2. HBP Funds Allocated for Projects as of September 2006**

Program Period	On-system Programmed Amount	Off-system Programmed Amount	Total
2006-2016	\$2,331.46 M	\$765.95 M	\$3,097.41 M

**On-system Bridge Projects Authorized to Be Let for Construction Bids.** TxDOT authorized the following classes of on-system bridge projects to be let in FY 2006:

- 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

The following table shows HBP on-system bridge projects authorized to be let in TxDOT districts in FY 2006, with historical information on FY 2004 provided for comparison.

**Table 4-3. On-System HBP Projects Authorized to Be Let, by District**

District	2004	2006	District	2004	2006
Abilene	3	10	Laredo	0	1
Amarillo	4	3	Lubbock	0	0
Atlanta	8	7	Lufkin	16	7
Austin	10	12	Odessa	0	0
Beaumont	1	8	Paris	3	3
Brownwood	0	3	Pharr	1	1
Bryan	2	2	San Angelo	1	1
Childress	1	8	San Antonio	2	39
Corpus Christi	1	7	Tyler	4	1
Dallas	11	20	Waco	1	6
El Paso	0	0	Wichita Falls	2	5
Fort Worth	9	21	Yoakum	4	8
Houston	9	5	<b>Total</b>	<b>93</b>	<b>178</b>

**Off-System Bridge Projects Authorized to Be Let for Construction Bids.** The following classes of off-system bridge projects were funded in FY 2006:

- 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

The following table shows HBP off-system bridge projects authorized to be let in TxDOT districts in FY 2006, with historical information on FY 2004 provided for comparison.

**Table 4-4. Off-System HBP Projects Authorized to Be Let, by District**

District	2004	2006	District	2004	2006
Abilene	16	15	Laredo	0	5
Amarillo	0	4	Lubbock	0	0
Atlanta	9	15	Lufkin	6	4
Austin	20	15	Odessa	0	0
Beaumont	4	14	Paris	7	24
Brownwood	3	12	Pharr	10	4
Bryan	2	8	San Angelo	0	0
Childress	5	1	San Antonio	3	24
Corpus Christi	8	3	Tyler	1	5
Dallas	5	17	Waco	0	11
El Paso	0	0	Wichita Falls	12	18
Fort Worth	29	11	Yoakum	8	1
Houston	5	1	<b>Total</b>	<b>153</b>	<b>212</b>

**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.<sup>4</sup> 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 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. More information on the SIB is available at [http://www.dot.state.tx.us/services/finance/sib\\_overview.htm](http://www.dot.state.tx.us/services/finance/sib_overview.htm).
- 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* at <ftp://ftp.dot.state.tx.us/pub/txdot-info/gsd/manuals/bpd.pdf> and in TxDOT's *Transportation Planning Manual* at <ftp://ftp.dot.state.tx.us/pub/txdot-info/gsd/manuals/pln.pdf>.

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<sup>4</sup> 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 perform EMP work in geographically adjacent governmental units.

## Chapter 5 – Letting for Construction Bids

**Terms.** This report uses the following terms to describe letting of bridge projects:

- *Let project:* A let project is one that has been programmed and one for which TxDOT has solicited sealed bids from contractors for work on a highway project and has awarded a contract.
- *National Bridge Inventory (NBI):* The NBI is a database of information supplied by the states and maintained by the FHWA about bridges located on public roads.
- *New-location bridges:* These are bridges built in a location where a bridge did not previously exist.

**On-system Bridge Projects Let in FY 2006.** The following table shows on-system bridges in HBP projects let in TxDOT districts in FY 2006, with historical information on FY 2004 provided for comparison. Please note that HBP does not provide funding for new location bridges, so that information is not included in this table.

**Table 5-1. On-system Bridges in HBP Projects Let, by District**

District	Bridges		District	Bridges	
	2004	2006		2004	2006
Abilene	1	8	Laredo	0	1
Amarillo	4	0	Lubbock	0	0
Atlanta	5	11	Lufkin	10	7
Austin	9	14	Odessa	0	4
Beaumont	0	3	Paris	3	9
Brownwood	0	3	Pharr	1	3
Bryan	3	3	San Angelo	1	0
Childress	0	2	San Antonio	0	9
Corpus Christi	1	9	Tyler	4	6
Dallas	6	18	Waco	3	6
El Paso	0	0	Wichita Falls	2	4
Fort Worth	7	13	Yoakum	4	8
Houston	5	4	<b>Total</b>	<b>69</b>	<b>145</b>

The following table shows on-system bridges in non-HBP projects let in TxDOT districts in FY 2006, with historical information on FY 2004 provided for comparison. Please note that this table does include information for new location bridges.

**Table 5-2. On-system Bridges in Non-HBP Projects Let, by District**

District	2004		2006	
	New-location Bridges	Repl./Rehab.	New-location Bridges	Repl./Rehab.
Abilene	12	3	3	9
Amarillo	2	2	0	7
Atlanta	2	1	20	11
Austin	32	4	7	6
Beaumont	6	7	2	10
Brownwood	0	1	1	4
Bryan	10	4	17	1

District	2004		2006	
	New-location Bridges	Repl./Rehab.	New-location Bridges	Repl./Rehab.
Childress	11	1	0	2
Corpus Christi	6	7	21	9
Dallas	49	18	31	15
El Paso	9	15	0	37
Fort Worth	17	12	7	10
Houston	52	47	24	19
Laredo	0	6	4	1
Lubbock	1	5	1	0
Lufkin	3	1	1	6
Odessa	0	0	3	4
Paris	3	0	4	2
Pharr	6	36	7	17
San Angelo	2	0	2	1
San Antonio	16	22	42	22
Tyler	1	2	6	2
Waco	7	7	12	17
Wichita Falls	3	2	10	8
Yoakum	2	20	11	34
<b>Total</b>	<b>252</b>	<b>223</b>	<b>236</b>	<b>254</b>

The following table shows the condition of on-system bridges that were removed or rehabilitated in FY 2006.

**Table 5-3. On-system Bridges Removed or Rehabilitated in FY 2006**

Condition	HBP Funded	Non-HBP Funded	Total No. of Rem./Rehab. Bridges	Percent of Repl./Rehab. Bridges
Structurally Deficient	59	4	63	31%
Functionally Obsolete	56	13	69	34%
Not Structurally Deficient or Functionally Obsolete	1	71	72	35%
<b>Total</b>	<b>116</b>	<b>88</b>	<b>204</b>	<b>100%</b>

The following table shows funding levels and the number of on-system bridges in projects let in FY 2006.

**Table 5-4. On-system Bridges in Bridge Projects Let in FY 2006**

	HBP-funded Repl./Rehab.		Non-HBP Repl./Rehab.		Non-HBP New-location		Total
		% of Total		% of Total		% of Total	
Funding for Bridge Projects Let	\$198.2 M	22%	\$290.9 M	33%	\$403.0 M	45%	\$892.1 M
Number of Bridges in Projects Let	145	23%	254	40%	236	37%	635
Number of Bridge Projects Let	112	35%	117	37%	87	28%	316



For on-system bridge construction in FY 2006—which included rehabilitation, replacement, and new-location bridges, 37% of the bridges addressed (down from 46% in FY 2004) were new-location bridges. Of the money spent on bridge construction in FY 2006, 45% (down from 49% in FY 2004) was used for new-location bridges.

**On-system Bridge Maintenance Projects Awarded in FY 2006.** In FY 2006, maintenance (including preventive maintenance) funds for on-system bridges came from two sources:

- **TxDOT Statewide Maintenance Expenditures:** In FY 2006, TxDOT spent \$30.3 million on funding for bridge maintenance. This constituted 3.38% of TxDOT’s \$898.5 million statewide maintenance expenditures. In FY 2004, funding for bridge maintenance constituted 2.3% of TxDOT’s \$820.7 million statewide maintenance expenditures.
- **TxDOT Construction Letting:** In FY 2006, TxDOT let to construction \$20.2 million in contracts for bridge maintenance. This constituted .40% of the \$5.4 billion in construction letting. In FY 2004, funding for bridge maintenance constituted 1.4% of the \$4.15 billion in construction letting.

**Summary of FY 2006 Funds Spent on On-system Bridges.** The following figure shows the distribution of money spent in FY 2006 for on-system bridge maintenance, bridge replacement and rehabilitation, and construction of new-location bridges.

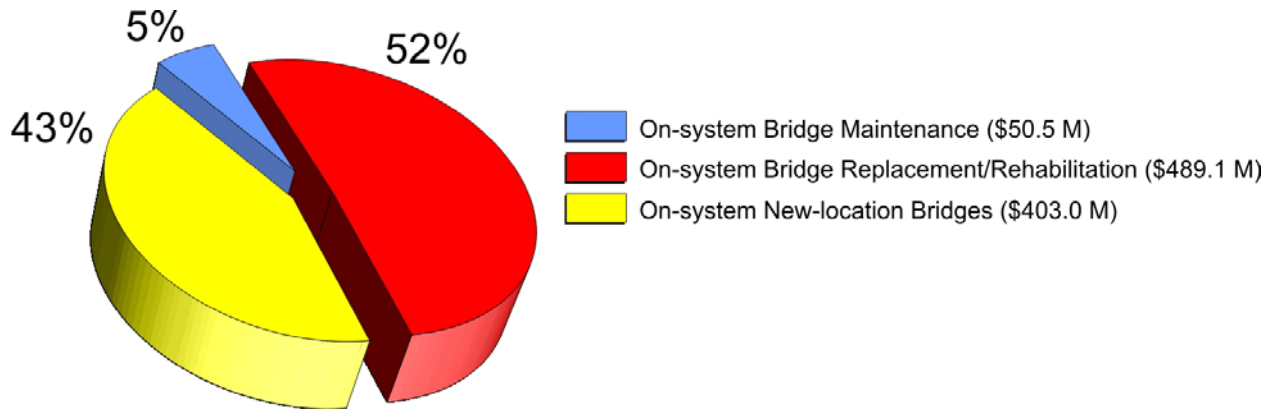


Figure 5-1. Distribution of Funds Spent on On-system Bridges in FY 2006 (\$942.60 M Total)

**Off-system Bridge Projects Let in FY 2006.** The following table shows off-system bridges in HBP projects let in TxDOT districts in FY 2006, with historical information on FY 2004 provided for comparison. Again, please note that HBP does not provide funding for new location bridges, so that information is not included in this table.

Table 5-5. Off-system Bridges in HBP Projects Let, by District

District	Bridges		District	Bridges	
	2004	2006		2004	2006
Abilene	14	3	Laredo	0	3
Amarillo	1	0	Lubbock	0	0
Atlanta	9	1	Lufkin	5	4
Austin	16	9	Odessa	0	0
Beaumont	5	6	Paris	24	22

District	Bridges		District	Bridges	
	2004	2006		2004	2006
Brownwood	3	3	Pharr	9	3
Bryan	2	2	San Angelo	0	0
Childress	5	2	San Antonio	1	2
Corpus Christi	8	7	Tyler	1	3
Dallas	5	24	Waco	0	3
El Paso	0	0	Wichita Falls	12	11
Fort Worth	23	17	Yoakum	8	10
Houston	2	11	<b>Total</b>	<b>153</b>	<b>146</b>

The following table shows off-system bridges in non-HBP bridge projects let in TxDOT districts in FY 2006, with historical information on FY 2004 provided for comparison. Please note that this table does include funding information for new location bridges.

Except for the HBP, TxDOT has limited authority to fund locally owned bridge projects. However, some projects may be selected for construction off the state highway system on roadways with a sufficient functional classification (greater than a local road or rural minor collector). These projects are funded under UTP Category 11, District Discretionary.

**Table 5-6. Off-system Bridges in Non-HBP Projects Let, by District**

District	2004		2006	
	New-location Bridges	Repl./Rehab.	New-location Bridges	Repl./Rehab.
Abilene	0	0	0	0
Amarillo	0	0	1	0
Atlanta	0	0	0	0
Austin	0	1	1	0
Beaumont	0	0	0	0
Brownwood	0	0	0	0
Bryan	0	0	0	0
Childress	0	0	0	0
Corpus Christi	0	0	0	0
Dallas	0	3	2	0
El Paso	0	0	4	0
Fort Worth	0	0	0	0
Houston	2	0	2	2
Laredo	0	0	0	0
Lubbock	1	0	0	0
Lufkin	0	0	0	0
Odessa	0	0	0	1
Paris	0	4	0	0
Pharr	0	0	0	1
San Angelo	0	0	0	0
San Antonio	5	2	3	0
Tyler	0	0	0	0
Waco	0	0	0	0
Wichita Falls	0	0	0	0
Yoakum	0	0	0	0
<b>Total</b>	<b>8</b>	<b>10</b>	<b>13</b>	<b>4</b>

The following table shows the condition of off-system bridges that were removed or rehabilitated in FY 2006.

**Table 5-7. Off-system Bridges Removed or Rehabilitated in FY 2006**

Condition	HBP Funded	Non-HBP Funded	Total No. of Rem./Rehab. Bridges	Percent of Repl./Rehab. Bridges
Structurally Deficient	131	1	132	89%
Functionally Obsolete	15	2	17	11%
Not Structurally Deficient or Functionally Obsolete	0	0	0	0%
<b>Total</b>	<b>146</b>	<b>3</b>	<b>149</b>	<b>100%</b>

The following table shows funding levels and the number of off-system bridges in projects let in FY 2006.

**Table 5-8. Off-system Bridges in Projects Let in FY 2006**

	HBP-funded		Non-HBP Repl./Rehab.		Non-HBP New-location		Total
		% of Total		% of Total		% of Total	
Funding for Bridge Projects Let	\$52.0 M	63%	\$3.4 M	4%	\$26.9 M	33%	\$82.3 M
Number of Bridges in Projects Let	146	90%	4	2%	13	8%	163
Number of Bridge Projects Let	146	92%	4	3%	8	5%	158

**FY 2006 PWP/EMP Option.** TxDOT's Participation-Waived Project/Equivalent-Match Project (PWP/EMP) program was initiated by TxDOT in FY 2001. The program allows a local government to waive its 10% cost participation requirement in an off-system bridge project if it agrees to use an equivalent dollar amount to improve other deficient structures in its jurisdiction or the jurisdiction of a geographically adjacent or overlapping governmental unit. The project on which the local participation requirement is waived is referred to as the participation-waived project (PWP), and the project(s) to be performed by the local government in return for the participation waiver is referred to as the equivalent-match project(s) (EMP).

The following table shows PWP/EMP activity in FY 2006 by TxDOT district.

**Table 5-9. PWP/EMP Projects in FY 2006 by District**

Districts	Number of PWP Agreements Executed	Number of EMP Projects	Number of EMP Projects on NBI	Dollars Waived for PWP Projects	Number of PWP Projects Let
Abilene	8	17	1	\$180,323	0
Amarillo	0	0	0	\$0	0
Atlanta	17	34	0	\$404,309	0
Austin	1	1	0	\$50,400	0
Beaumont	3	12	3	\$179,235	0
Brownwood	8	39	0	\$231,016	3

Districts	Number of PWP Agreements Executed	Number of EMP Projects	Number of EMP Projects on NBI	Dollars Waived for PWP Projects	Number of PWP Projects Let
Bryan	9	11	9	\$476,665	0
Childress	13	66	0	\$409,761	1
Corpus Christi	0	0	0	\$0	0
Dallas	1	1	0	\$20,974	1
El Paso	0	0	0	\$0	0
Fort Worth	5	5	5	\$2,252,300	0
Houston	40	8	7	\$2,912,833	0
Laredo	0	0	0	\$0	0
Lubbock	0	0	0	\$0	0
Lufkin	3	10	4	\$39,703	0
Odessa	0	0	0	\$0	0
Paris	11	43	1	\$134,665	0
Pharr	0	0	0	\$0	0
San Angelo	0	0	0	\$0	0
San Antonio	21	30	5	\$958,316	1
Tyler	9	15	13	\$306,648	2
Waco	15	26	17	\$756,581	0
Wichita Falls	27	48	2	\$596,045	0
Yoakum	15	47	4	\$598,771	0
<b>Total</b>	<b>206</b>	<b>413</b>	<b>71</b>	<b>\$10,508,545</b>	<b>8</b>

The complete 2006 PWP/EMP Annual Report is attached as Appendix C, and includes as attachments outcomes of the program since it was initiated in 2001.

## Chapter 6 – Bridge Needs

**Goals.** In August 2001, TxDOT adopted a goal that within ten years, or by September 2011, at least 80% of the bridges in Texas would be in good or better condition. Additionally, TxDOT has adopted a goal to accelerate the upgrade of all structurally deficient on-system bridges, giving highest priority to critically deficient bridges, in order to eliminate all structurally deficient on-system bridges.

To achieve these goals, TxDOT must improve all existing structurally deficient on-system bridges, improve the other bridges that are currently non-sufficient, and plan improvement of bridges that will become non-sufficient within this goal period.

As discussed earlier in Chapter 3, this report classifies Texas bridges as sufficient and non-sufficient. Sufficient bridges meet all state and federal safety standards. Non-sufficient bridges are classified by FHWA as structurally deficient or functionally obsolete and may qualify for HBP funding. In addition, TxDOT developed a third category of non-sufficient bridges known as sub-standard for load only. However, because this category is in addition to those recognized by FHWA, they do not qualify for HBP funding.

- Bridges not structurally deficient, functionally obsolete, or sub-standard for load only are classified as sufficient.
- Classifications of structurally deficient and functionally obsolete are based on National Bridge Inspection Standards (NBIS) criteria.
- States vary in the loads they allow on bridges, and bridges that fail to meet Texas load limits and are not structurally deficient or functionally obsolete are classified as sub-standard for load only. A sub-standard-for-load-only structure is load-posted or recommended for load-posting.

**Condition of Existing Bridges.** Of Texas' 49,829 bridges, 38,425 — 77%, up from 76% in FY 2004—were in good or better condition in September 2006.

Of all on-system bridges in September 2006, 86% were in good or better condition, the same percentage as in September 2004, and 60% of all off-system bridges were in good or better condition, up from 57% in September 2004, as shown in the following table. While the percentage of sufficient on-system bridges appears to remain flat from September 2004 to September 2006, the total number of on-system sufficient bridges actually increased by 443.

**Table 6-1. Sufficient Bridges (Good or Better)**

Bridge	2004	2006	Change	2004	2006	Change
On-system Bridges	27,660	28,103	+443	86%	86%	0%
Off-system Bridges	9,414	10,322	+908	57%	60%	3%
Total	37,074	38,425	+1,351	--	--	--

The total number of Texas bridges increased by 909 from FY 2004 to FY 2006, as shown in Table 2-1. As shown in Tables 6.1 and 6.2, the total number of sufficient bridges increased by 1,351 during FY 2004 to FY 2006 and the total number of non-sufficient bridges decreased by 435 during this same time period.

In Texas as of September 2006, only 4% of all bridges are structurally deficient, 16% are functionally obsolete and 3% are sub-standard for load only. The following table summarizes the change in condition of non-sufficient bridges from FY 2004 to FY 2006, detailed in Figure 3-5.

**Table 6-2. Overall Change in Condition of Non-sufficient Bridges by Count**

Condition	September 2004	September 2006	Change
Structurally Deficient	2,416	2,125	-291
Functionally Obsolete	7,696	7,802	+106
Sub-standard for Load Only	1,659	1,409	-250
Total	11,771	11,336	-435

As shown in Tables 5-3 and 5-7, during FY 2006 in all funding categories TxDOT let to construction work to upgrade to sufficient 63 on-system structurally deficient bridges and 132 off-system structurally deficient bridges. TxDOT also let to construction work to upgrade to sufficient 69 on-system functionally obsolete bridges and 17 off-system functionally obsolete bridges.

**Challenges for Achieving the 80%-Good-or-Better-by-2011 Goal.** Structurally deficient bridges present potential strength issues; functionally obsolete bridges present potential for traffic flow problems; and sub-standard-for-load-only bridges pose issues for traffic flow and economic development. Texas has an aging transportation infrastructure that includes bridges that were not designed for today's loads and volume of traffic. Traffic volumes are increasing, and trucks are heavier today than many bridges were designed to support. TxDOT is addressing these challenges aggressively and creatively, however, and remains committed to enhancing the safety of Texas' bridges.

In September 2001, 70% of Texas bridges were in good or better condition. In September 2002, this number increased to 71%; in September 2003, 75%; in September 2004, 76%; and in September 2006, 77% of Texas bridges were in good or better condition. This pattern of improvement shows TxDOT is making steady and consistent progress toward its goal to have 80% of Texas bridges in good or better condition by FY 2011.

At the September 2006 bridge inventory of 49,829 total bridges in Texas, the 80% goal is equivalent to having 39,863 good or better bridges in Texas. The difference in the FY 2006 inventory of good or better bridges and the goal is 1,438 bridges. TxDOT has approximately

five years (FY 07-11) remaining to reach this goal. Therefore, TxDOT must bring to a level of good or better at least 288 non-sufficient bridges per year as shown in Table 6-3 below.

**Table 6-3. Bridges that Must Be Improved to Make 80% of Texas Bridges In Good or Better Condition by September 2011**

Current Bridge Inventory	49,829
80% of Current Bridge Inventory	39,863
Bridges Currently Good or Better	38,425
All Currently Structurally Deficient On-system Bridges	483
No. of Additional Bridges to Be Improved over 5 Years to Reach 80%-Good-or-Better Goal	1,438
Average Number of Bridges/Year to Be Improved over 5 Years to Reach 80%-Good or-Better Goal	288

**Challenges for Eliminating All Structurally Deficient On-system Bridges.** In September 2000, Texas had 758 structurally deficient on-system bridges. During FY 2001 the inventory of structurally deficient on-system bridges actually increased by 5, and in September 2001 Texas had 763 structurally deficient on-system bridges. The inventory of structurally deficient on-system bridges has gradually decreased since 2001. In September 2002 Texas had 693 structurally deficient on-system bridges; in September 2003, 645; in September 2004, 565; and in September 2006, 483. Again, TxDOT is making steady and consistent progress toward its goals.

**Bridge Resources Needed.** TxDOT will continue to maximize the use of funds made available under HBP. The agency also will continue to explore, develop and implement creative programs to facilitate the improvement of Texas bridges, such as the PWP/EMP and EDC programs. 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.

Also, developments in technology will play a critical role in increasing our efficiencies to get the most from our limited transportation funding. Access to information about Texas bridges is essential for effective planning and monitoring. TxDOT is developing an automated system to facilitate the management of on- and off-system bridges. The Bridge Management Information System (BMIS), which will be based on AASHTO's bridge management software, Pontis, will allow TxDOT to store and process bridge inspection data, bridge photographs, bridge reports, and other bridge information in a relational database. Information retrieval will be possible in a variety of textual and graphical formats. The retrieved information will facilitate assessment of implications of project decisions, understanding impact of alternative bridge management strategies, forecasting preventive maintenance, and evaluation of bridge performance over time. Information retrieval will be quick, and retrieved information will be easily shared and available in user-friendly formats. This system is much needed and will greatly increase efficiency of bridge administration. This system is especially necessary to allow tracking of the condition of Texas bridges at a level of detail and frequency required to facilitate prioritization of funding to ensure that those bridges with the greatest need are given the highest priority. BMIS will better

equip TxDOT to meet the challenges inherent to reaching and exceeding our goals for improving Texas bridges.

However, Texas is facing enormous and rapidly increasing transportation needs, with no quick and easy solutions to meet them. Demand is outpacing funding and transfers of transportation dollars to non-transportation projects has left Texas with a funding shortage that must be addressed.

**The Bigger Picture.** During the past 25 years, federal leadership has distributed transportation funds with little regard for population shifts among states. Although the Interstate Highway System was essentially completed by the late 1980s, Congress has continued to transfer massive amounts of federal transportation funds from high growth states to low growth states. The federal government has transferred more than \$7 billion in federal gas taxes paid by Texans to other states' transportation needs. That is money Texas will never get back.

Congress currently transfers up to 13% of every Texas federal gas tax dollar to other states. To generate enough cash to expand our transportation system as needed, those transfers would have to end. At the same time, Texas would have to receive transfers from other states equal to 80% of its federal gas tax payments or essentially a 180% return on its federal gas tax payments over the next 25 years. That does not include maintenance and other costs. Congress is not going to take federal transportation funds away from 49 other states to help Texas. In other words, Congress is not going to solve Texas' problem.

Given other challenges in federal and state government, TxDOT also cannot expect leaders to take funds away from other areas of government or raise taxes in the future to address this problem. Texans need to look beyond traditional resources to find new solutions to meet the Texas transportation challenge and the Texas Transportation Commission has developed a plan to do that.

The Commission's plan calls for the faster completion of transportation projects and is based on five goals:

- Reduce congestion.
- Enhance safety.
- Expand economic opportunity.
- Improve air quality.
- Increase the value of transportation assets.

The plan is based on four strategies:

- Use all financial options to build transportation projects. The Governor and the Legislature have authorized new revenue tools, including safety bonds, the Texas Mobility Fund, toll equity, and toll debt, to build postponed projects. TxDOT is using these new revenue tools and leveraging existing tax collections using public debt to build projects sooner at a lower cost. TxDOT is inviting the private sector to participate in financing our transportation projects. TxDOT is matching private sector capital with public sector capital to pay for long term solutions.



- Empower local and regional leaders to solve local and regional transportation problems. New financial options at the local and regional level include the use of pass-through toll financing, the creation of Regional Mobility Authorities, and the stability of the Texas Metropolitan Mobility Plan. To protect the public's interest, TxDOT is connecting measurable results with defined authority to plan and approve transportation projects. TxDOT is separating planning and execution of local projects, regional projects, and state projects. TxDOT is reaching out to local and regional leaders to be our partners in this effort.
- Increase competitive pressure to drive down the cost of transportation projects. The Comprehensive Development Agreement project delivery method is being used to encourage cost effective solutions to long term transportation problems. TxDOT is implementing processes to encourage more competition among companies that already do business with the department. With new financial options available, TxDOT is inviting firms to relocate to Texas and compete for TxDOT projects.
- Demand consumer-driven decisions that respond to traditional market forces. New mobility opportunities are found through the Rail Relocation Fund, optional toll lanes and toll roads, and consumer-friendly commuter rail systems. TxDOT is making its asset investment decisions based on short term, mid term, and long term solutions. TxDOT is considering transportation solutions other than roads and highways. TxDOT is giving consumers a choice.

TxDOT 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.



## Chapter 7 – Meeting the Challenges

**Priorities.** To meet its goals to have at least 80% of Texas bridges in good or better condition by September 2011 and to accelerate the elimination of all structurally deficient on-system bridges, TxDOT is working to improve non-sufficient bridges to sufficient status. TxDOT's primary focus is on accelerating the upgrade of all structurally deficient on-system bridges, giving highest priority to critically deficient bridges in an effort to eliminate all structurally deficient on-system bridges.

The number and condition of Texas bridges change constantly, affecting estimates for work needed to achieve goals. TxDOT will continue its assessment of work needed in the coming years to meet its goals to have no structurally deficient on-system bridges and to have at least 80% of Texas bridges in good or better condition.

**Plan.** TxDOT developed a plan to improve Texas bridges and meet its goals. The basic steps of the plan are:

- Develop and distribute a report to identify progress toward achieving the goals.  
*Status:* This report serves that purpose.
- Use the report to adjust the resources each year as needed.  
*Status:* Data compiled during development of each issue of this report is used to prioritize projects for on-system HBP bridge work according to the following:
  - Priority 1 – Critically deficient structurally deficient land-locking bridges
  - Priority 2 – Remaining critically deficient structurally deficient bridges
  - Priority 3 – Structurally deficient land-locking bridges
  - Priority 4 – Remaining structurally deficient bridges
  - Priority 5 – Functionally obsolete land-locking bridges
  - Priority 6 – Remaining functionally obsolete bridges
- Produce completed bridge plans, specifically targeting those structurally deficient on-system bridges that are critically deficient, that will be available to substitute for delayed HBP projects.  
*Status:* TxDOT's Bridge Division and districts continue to target these bridges for plan development.
- Produce completed bridge plans, targeting structurally deficient bridges that will be available to substitute for delayed HBP projects.  
*Status:* TxDOT's Bridge Division, with support from the Bridge Division bridge design consultant pool, continues to work with districts to develop a backlog of projects to substitute for delayed HBP projects.
- Develop a process to substitute HBP projects for those that are delayed for letting to construction in order to contract 100 percent of HBP program funds on the 12-month HBP letting schedule each fiscal year.  
*Status:* TxDOT's Bridge Division is working with the districts to schedule HBP projects in the first eight months of each fiscal year to allow sufficient time to substitute for projects that are delayed to letting.

- Use other categories of funding in addition to HBP funds to achieve the goals.  
*Status:* TxDOT's Bridge Division and districts continue to emphasize using additional categories of funding for bridge replacement and rehabilitation.
- Standardize additional bridge elements and make them available on the Internet in order to simplify design, speed construction, and lower costs.  
*Status:* During this reporting period, TxDOT revised culvert and drainage standard drawings, updated standard drawings for prestressed concrete I-beam details, issued new miscellaneous bridge standard drawings, revised standard drawings for rail anchorage details, and issued new steel beam standard drawings.
- Increase the use of cluster contracts that address two or more deficient bridges within a reasonable geographical area. This will lower overall design and construction costs.  
*Status:* TxDOT's Bridge Division and districts continue to emphasize using cluster contracts.
- Use maintenance funds to address on-system bridge problems that result in low condition ratings to prevent non-structurally deficient on-system bridges from becoming structurally deficient.  
*Status:* TxDOT distributed \$50.5 million for on-system bridge maintenance in FY 2006.

**Staying on Course.** TxDOT continually monitors its performance against the measures and goals set out in this report.

Each element of TxDOT's plan to improve bridges contributes to the broader agency goals. Improving or replacing functionally obsolete bridges will help reduce congestion. Eliminating structurally deficient bridges will increase safety. Reducing the number of non-sufficient bridges will increase mobility, leading to expanded economic opportunity and improved air quality. And finally, investing in the maintenance of the state's bridges will increase the value of its transportation assets.

TxDOT is committed to dedicating resources, increasing efficiencies and maximizing funding opportunities to reach these goals.

### Appendix A – Map of Texas Counties with TxDOT Districts

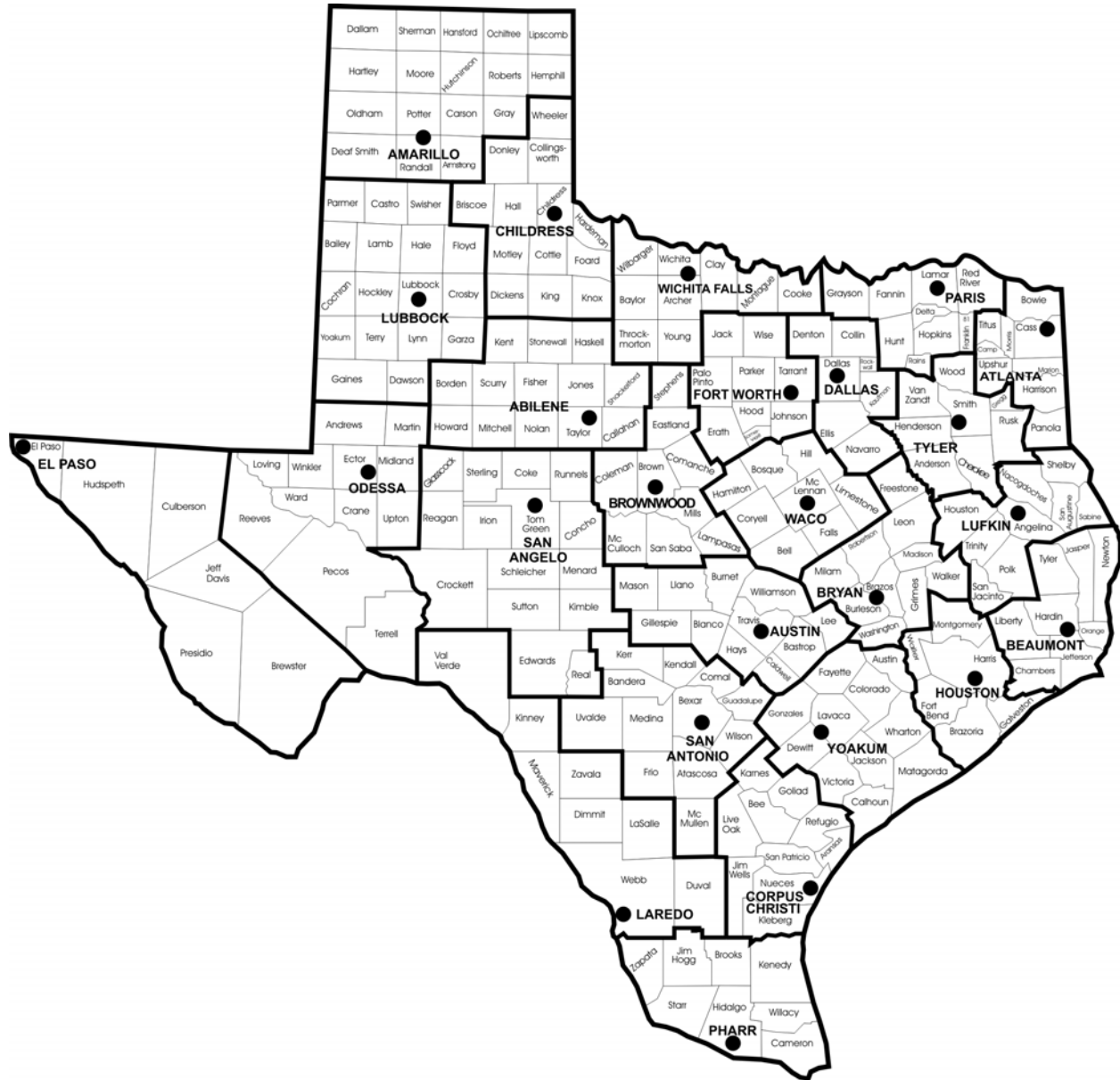


Figure A-1. Map of Texas Counties with TxDOT Districts



**Appendix B – Tables of the condition of on and off-system bridges by TxDOT District and County as of September, 2006.**

**Table B-1. Condition of On-system Bridges by TxDOT District and County in September 2006**

District Name	County	Good or Better	Structurally Deficient	Functionally Obsolete	Sub-Standard for Load Only	Total	Percent Good or Better
<b>Abilene</b>							
	Borden	46	1	1	1	49	
	Callahan	132	2	1	0	135	
	Fisher	70	0	4	3	77	
	Haskell	57	0	3	0	60	
	Howard	90	0	19	0	109	
	Jones	114	0	2	1	117	
	Kent	22	2	1	0	25	
	Mitchell	91	1	20	4	116	
	Nolan	101	7	21	0	129	
	Scurry	81	1	13	0	95	
	Shackelford	63	1	2	2	68	
	Stonewall	32	2	1	0	35	
	Taylor	268	7	47	0	322	
	<b>Total</b>	<b>1167</b>	<b>24</b>	<b>135</b>	<b>11</b>	<b>1337</b>	<b>87%</b>
<b>Amarillo</b>							
	Armstrong	11	0	0	0	11	
	Carson	30	0	2	0	32	
	Dallam	20	0	1	0	21	
	Deaf Smith	16	3	3	0	22	
	Gray	50	3	4	1	58	
	Hansford	27	0	3	0	30	
	Hartley	17	0	0	0	17	
	Hemphill	30	1	0	0	31	
	Hutchinson	36	3	1	0	40	
	Lipscomb	34	1	1	0	36	
	Moore	20	1	2	0	23	
	Ochiltree	19	4	1	0	24	
	Oldham	48	0	3	0	51	
	Potter	134	4	20	0	158	
	Randall	67	4	9	0	80	
	Roberts	21	0	0	0	21	
	Sherman	25	0	0	0	25	
	<b>Total</b>	<b>605</b>	<b>24</b>	<b>50</b>	<b>1</b>	<b>680</b>	<b>89%</b>
<b>Atlanta</b>							
	Bowie	215	2	22	0	239	
	Camp	29	3	6	0	38	

	Cass	124	3	1	0	128	
	Harrison	185	10	17	0	212	
	Marion	40	1	5	0	46	
	Morris	45	2	2	0	49	
	Panola	119	3	8	0	130	
	Titus	75	1	20	0	96	
	Upshur	118	1	10	0	129	
	Total	950	26	91	0	1067	89%
<b>Austin</b>							
	Bastrop	106	0	19	0	125	
	Blanco	42	0	12	1	55	
	Burnet	49	1	27	2	79	
	Caldwell	67	6	20	2	95	
	Gillespie	71	1	19	0	91	
	Hays	74	2	30	0	106	
	Lee	43	1	19	1	64	
	Llano	62	11	3	0	76	
	Mason	66	2	7	0	75	
	Travis	388	8	133	0	529	
	Williamson	227	13	72	6	318	
	Total	1195	45	361	12	1613	74%
<b>Beaumont</b>							
	Chambers	88	4	20	0	112	
	Hardin	106	1	11	0	118	
	Jasper	111	3	21	0	135	
	Jefferson	212	9	53	0	274	
	Liberty	124	3	9	0	136	
	Newton	93	1	19	0	113	
	Orange	93	3	12	0	108	
	Tyler	56	2	16	0	74	
	Total	883	26	161	0	1070	83%
<b>Brownwood</b>							
	Brown	124	0	2	0	126	
	Coleman	103	0	2	0	105	
	Comanche	94	1	20	0	115	
	Eastland	160	1	6	1	168	
	Lampasas	71	0	3	1	75	
	McCulloch	87	0	3	1	91	
	Mills	51	0	2	0	53	
	San Saba	66	0	1	2	69	
	Stephens	73	2	7	1	83	
	Total	829	4	46	6	885	94%
<b>Bryan</b>							
	Brazos	155	0	17	0	172	



	Burleson	59	0	10	0	69	
	Freestone	94	4	19	0	117	
	Grimes	106	1	11	0	118	
	Leon	115	3	8	0	126	
	Madison	86	0	16	0	102	
	Milam	107	1	18	0	126	
	Robertson	76	0	13	0	89	
	Walker	101	3	9	1	114	
	Washington	83	4	10	0	97	
	Total	982	16	131	1	1130	87%
<b>Childress</b>							
	Briscoe	13	1	0	0	14	
	Childress	65	1	0	1	67	
	Collingsworth	44	1	1	0	46	
	Cottle	45	5	1	3	54	
	Dickens	51	7	2	0	60	
	Donley	59	1	1	0	61	
	Foard	44	3	1	1	49	
	Hall	85	2	1	1	89	
	Hardeman	50	2	0	1	53	
	King	32	4	0	0	36	
	Knox	35	2	0	0	37	
	Motley	37	5	2	0	44	
	Wheeler	82	2	0	2	86	
	Total	642	36	9	9	696	92%
<b>Corpus Christi</b>							
	Aransas	16	0	1	0	17	
	Bee	96	0	8	2	106	
	Goliad	69	0	3	0	72	
	Jim Wells	129	0	6	0	135	
	Karnes	88	0	14	1	103	
	Kleberg	46	2	2	1	51	
	Live Oak	184	1	14	0	199	
	Nueces	284	5	34	1	324	
	Refugio	93	2	10	2	107	
	San Patricio	147	2	7	0	156	
	Total	1152	12	99	7	1270	91%
<b>Dallas</b>							
	Collin	240	1	83	3	327	
	Dallas	907	10	442	1	1360	
	Denton	332	5	86	1	424	
	Ellis	360	4	81	0	445	
	Kaufman	277	9	84	1	371	
	Navarro	195	3	32	4	234	

	Rockwall	36	0	18	0	54	
	Total	2347	32	826	10	3215	73%
<b>El Paso</b>							
	Brewster	88	0	3	0	91	
	Culberson	132	0	2	0	134	
	El Paso	339	2	78	0	419	
	Hudspeth	125	0	5	0	130	
	Jeff Davis	120	2	12	0	134	
	Presidio	70	0	3	0	73	
	Total	874	4	103	0	981	89%
<b>Fort Worth</b>							
	Erath	110	4	4	0	118	
	Hood	53	0	3	0	56	
	Jack	66	6	2	2	76	
	Johnson	168	11	26	0	205	
	Palo Pinto	172	2	2	2	178	
	Parker	137	7	11	1	156	
	Somervell	18	3	3	0	24	
	Tarrant	849	36	158	0	1043	
	Wise	105	8	12	0	125	
	Total	1678	77	221	5	1981	85%
<b>Houston</b>							
	Brazoria	252	1	20	0	273	
	Fort Bend	206	3	21	0	230	
	Galveston	155	1	31	0	187	
	Harris	1203	3	385	0	1591	
	Montgomery	241	0	14	0	255	
	Waller	113	0	11	0	124	
	Total	2170	8	482	0	2660	82%
<b>Laredo</b>							
	Dimmit	68	0	3	0	71	
	Duval	114	3	0	0	117	
	Kinney	31	0	5	0	36	
	Lasalle	105	0	4	0	109	
	Maverick	68	2	6	0	76	
	Val Verde	76	1	6	0	83	
	Webb	232	0	9	0	241	
	Zavala	65	1	5	0	71	
	Total	759	7	38	0	804	94%
<b>Lubbock</b>							
	Bailey	4	0	0	0	4	
	Castro	9	0	1	0	10	
	Cockran	0	0	0	0	0	
	Crosby	12	0	0	0	12	

	Dawson	3	0	0	0	3	
	Floyd	8	0	2	0	10	
	Gaines	0	0	0	0	0	
	Garza	48	0	0	0	48	
	Hale	39	0	6	0	45	
	Hockley	3	0	0	0	3	
	Lamb	10	0	1	0	11	
	Lubbock	153	0	35	0	188	
	Lynn	3	0	2	0	5	
	Parmer	21	0	0	0	21	
	Swisher	62	0	4	0	66	
	Terry	5	0	0	0	5	
	Yoakum	0	0	0	0	0	
	Total	380	0	51	0	431	88%
<b>Lufkin</b>							
	Angelina	89	3	9	1	102	
	Houston	81	1	16	0	98	
	Nacogdoches	106	3	11	5	125	
	Polk	104	8	7	0	119	
	Sabine	61	0	2	0	63	
	San Augustine	67	2	3	0	72	
	San Jacinto	44	0	4	0	48	
	Shelby	86	10	5	0	101	
	Trinity	53	4	0	0	57	
	Total	691	31	57	6	785	88%
<b>Odessa</b>							
	Andrews	0	0	0	0	0	
	Crane	18	0	0	0	18	
	Ector	98	0	11	0	109	
	Loving	4	0	0	0	4	
	Martin	14	0	0	0	14	
	Midland	83	0	4	0	87	
	Pecos	462	0	1	0	463	
	Reeves	197	3	8	0	208	
	Terrell	53	0	0	0	53	
	Upton	39	0	0	0	39	
	Ward	50	1	3	0	54	
	Winkler	1	0	0	0	1	
	Total	1019	4	27	0	1050	97%
<b>Paris</b>							
	Delta	55	2	6	1	64	
	Fannin	140	2	20	0	162	
	Franklin	45	0	5	0	50	
	Grayson	210	3	36	0	249	

	Hopkins	145	3	24	0	172	
	Hunt	247	1	39	4	291	
	Lamar	146	4	22	4	176	
	Rains	32	0	2	0	34	
	Red River	102	2	5	6	115	
	Total	1122	17	159	15	1313	85%
<b>Pharr</b>							
	Brooks	29	0	0	0	29	
	Cameron	196	2	21	0	219	
	Hidalgo	196	0	20	0	216	
	Jim Hogg	28	0	1	0	29	
	Kenedy	15	0	0	0	15	
	Starr	45	1	3	0	49	
	Willacy	48	0	2	0	50	
	Zapata	33	0	4	0	37	
	Total	590	3	51	0	644	92%
<b>San Angelo</b>							
	Coke	81	0	1	0	82	
	Concho	67	0	0	0	67	
	Crockett	154	2	3	0	159	
	Edwards	24	0	1	0	25	
	Glasscock	18	0	0	0	18	
	Irion	49	0	1	0	50	
	Kimble	135	0	7	0	142	
	Menard	58	1	0	0	59	
	Reagan	28	0	0	0	28	
	Real	21	0	5	0	26	
	Runnels	99	0	13	2	114	
	Schleicher	27	0	1	0	28	
	Sterling	55	0	0	0	55	
	Sutton	87	0	3	0	90	
	Tom Green	239	0	16	1	256	
	Total	1142	3	51	3	1199	95%
<b>San Antonio</b>							
	Atascosa	137	0	8	0	145	
	Bandera	43	0	12	0	55	
	Bexar	1001	3	199	0	1203	
	Comal	102	1	18	0	121	
	Frio	112	0	13	0	125	
	Guadalupe	175	1	16	0	192	
	Kendall	67	0	13	0	80	
	Kerr	112	9	15	0	136	
	McMullen	53	0	0	0	53	
	Medina	143	0	6	0	149	

	Uvalde	68	2	8	0	78	
	Wilson	79	2	12	0	93	
	Total	2092	18	320	0	2430	86%
<b>Tyler</b>							
	Anderson	104	2	5	0	111	
	Cherokee	113	0	7	0	120	
	Gregg	109	1	20	0	130	
	Henderson	140	0	9	0	149	
	Rusk	146	1	6	0	153	
	Smith	180	2	17	1	200	
	Van Zandt	152	2	16	0	170	
	Wood	76	1	21	0	98	
	Total	1020	9	101	1	1131	90%
<b>Waco</b>							
	Bell	314	1	50	1	366	
	Bosque	99	1	10	2	112	
	Coryell	113	0	14	2	129	
	Falls	139	3	10	0	152	
	Hamilton	75	0	5	1	81	
	Hill	215	5	17	4	241	
	Limestone	117	4	4	2	127	
	McLennan	336	3	74	2	415	
	Total	1408	17	184	14	1623	87%
<b>Wichita Falls</b>							
	Archer	91	0	1	0	92	
	Baylor	38	1	0	0	39	
	Clay	114	3	3	1	121	
	Cooke	123	5	10	0	138	
	Montague	91	5	3	0	99	
	Throckmorton	42	3	0	0	45	
	Wichita	256	6	33	0	295	
	Wilbarger	105	3	9	2	119	
	Young	82	1	1	0	84	
	Total	942	27	60	3	1032	91%
<b>Yoakum</b>							
	Austin	89	0	15	0	104	
	Calhoun	72	1	3	0	76	
	Colorado	130	1	20	0	151	
	Dewitt	142	0	5	0	147	
	Fayette	214	0	16	0	230	
	Gonzales	202	6	24	1	233	
	Jackson	118	2	6	0	126	
	Lavaca	106	1	12	0	119	
	Matagorda	75	0	12	0	87	

	Victoria	188	0	11	0	199	
	Wharton	160	2	13	0	175	
	Total	1496	13	137	1	1647	91%
<b>Totals</b>		<b>28135</b>	<b>483</b>	<b>3951</b>	<b>105</b>	<b>32674</b>	

District Name	County	Good or Better	Structurally Deficient	Functionally Obsolete	Sub-Standard for Load Only	Total	Percent Good or Better
<b>Abilene</b>							
	Borden	46	1	1	1	49	
	Callahan	132	2	1	0	135	
	Fisher	70	0	4	3	77	
	Haskell	57	0	3	0	60	
	Howard	90	0	19	0	109	
	Jones	114	0	2	1	117	
	Kent	22	2	1	0	25	
	Mitchell	91	1	20	4	116	
	Nolan	101	7	21	0	129	
	Scurry	81	1	13	0	95	
	Shackelford	63	1	2	2	68	
	Stonewall	32	2	1	0	35	
	Taylor	268	7	47	0	322	
	Total	1167	24	135	11	1337	87%
<b>Amarillo</b>							
	Armstrong	11	0	0	0	11	
	Carson	30	0	2	0	32	
	Dallam	20	0	1	0	21	
	Deaf Smith	16	3	3	0	22	
	Gray	50	3	4	1	58	
	Hansford	27	0	3	0	30	
	Hartley	17	0	0	0	17	
	Hemphill	30	1	0	0	31	
	Hutchinson	36	3	1	0	40	
	Lipscomb	34	1	1	0	36	
	Moore	20	1	2	0	23	
	Ochiltree	19	4	1	0	24	
	Oldham	48	0	3	0	51	
	Potter	134	4	20	0	158	
	Randall	67	4	9	0	80	
	Roberts	21	0	0	0	21	
	Sherman	25	0	0	0	25	
	Total	605	24	50	1	680	89%
<b>Atlanta</b>							
	Bowie	215	2	22	0	239	
	Camp	29	3	6	0	38	

	Cass	124	3	1	0	128	
	Harrison	185	10	17	0	212	
	Marion	40	1	5	0	46	
	Morris	45	2	2	0	49	
	Panola	119	3	8	0	130	
	Titus	75	1	20	0	96	
	Upshur	118	1	10	0	129	
	Total	950	26	91	0	1067	89%
<b>Austin</b>							
	Bastrop	106	0	19	0	125	
	Blanco	42	0	12	1	55	
	Burnet	49	1	27	2	79	
	Caldwell	67	6	20	2	95	
	Gillespie	71	1	19	0	91	
	Hays	74	2	30	0	106	
	Lee	43	1	19	1	64	
	Llano	62	11	3	0	76	
	Mason	66	2	7	0	75	
	Travis	388	8	133	0	529	
	Williamson	227	13	72	6	318	
	Total	1195	45	361	12	1613	74%
<b>Beaumont</b>							
	Chambers	88	4	20	0	112	
	Hardin	106	1	11	0	118	
	Jasper	111	3	21	0	135	
	Jefferson	212	9	53	0	274	
	Liberty	124	3	9	0	136	
	Newton	93	1	19	0	113	
	Orange	93	3	12	0	108	
	Tyler	56	2	16	0	74	
	Total	883	26	161	0	1070	83%
<b>Brownwood</b>							
	Brown	124	0	2	0	126	
	Coleman	103	0	2	0	105	
	Comanche	94	1	20	0	115	
	Eastland	160	1	6	1	168	
	Lampasas	71	0	3	1	75	
	McCulloch	87	0	3	1	91	
	Mills	51	0	2	0	53	
	San Saba	66	0	1	2	69	
	Stephens	73	2	7	1	83	
	Total	829	4	46	6	885	94%
<b>Bryan</b>							
	Brazos	155	0	17	0	172	

	Burleson	59	0	10	0	69	
	Freestone	94	4	19	0	117	
	Grimes	106	1	11	0	118	
	Leon	115	3	8	0	126	
	Madison	86	0	16	0	102	
	Milam	107	1	18	0	126	
	Robertson	76	0	13	0	89	
	Walker	101	3	9	1	114	
	Washington	83	4	10	0	97	
	Total	982	16	131	1	1130	87%
<b>Childress</b>							
	Briscoe	13	1	0	0	14	
	Childress	65	1	0	1	67	
	Collingsworth	44	1	1	0	46	
	Cottle	45	5	1	3	54	
	Dickens	51	7	2	0	60	
	Donley	59	1	1	0	61	
	Foard	44	3	1	1	49	
	Hall	85	2	1	1	89	
	Hardeman	50	2	0	1	53	
	King	32	4	0	0	36	
	Knox	35	2	0	0	37	
	Motley	37	5	2	0	44	
	Wheeler	82	2	0	2	86	
	Total	642	36	9	9	696	92%
<b>Corpus Christi</b>							
	Aransas	16	0	1	0	17	
	Bee	96	0	8	2	106	
	Goliad	69	0	3	0	72	
	Jim Wells	129	0	6	0	135	
	Karnes	88	0	14	1	103	
	Kleberg	46	2	2	1	51	
	Live Oak	184	1	14	0	199	
	Nueces	284	5	34	1	324	
	Refugio	93	2	10	2	107	
	San Patricio	147	2	7	0	156	
	Total	1152	12	99	7	1270	91%
<b>Dallas</b>							
	Collin	240	1	83	3	327	
	Dallas	907	10	442	1	1360	
	Denton	332	5	86	1	424	
	Ellis	360	4	81	0	445	
	Kaufman	277	9	84	1	371	
	Navarro	195	3	32	4	234	



	Rockwall	36	0	18	0	54	
	Total	2347	32	826	10	3215	73%
<b>El Paso</b>							
	Brewster	88	0	3	0	91	
	Culberson	132	0	2	0	134	
	El Paso	339	2	78	0	419	
	Hudspeth	125	0	5	0	130	
	Jeff Davis	120	2	12	0	134	
	Presidio	70	0	3	0	73	
	Total	874	4	103	0	981	89%
<b>Fort Worth</b>							
	Erath	110	4	4	0	118	
	Hood	53	0	3	0	56	
	Jack	66	6	2	2	76	
	Johnson	168	11	26	0	205	
	Palo Pinto	172	2	2	2	178	
	Parker	137	7	11	1	156	
	Somervell	18	3	3	0	24	
	Tarrant	849	36	158	0	1043	
	Wise	105	8	12	0	125	
	Total	1678	77	221	5	1981	85%
<b>Houston</b>							
	Brazoria	252	1	20	0	273	
	Fort Bend	206	3	21	0	230	
	Galveston	155	1	31	0	187	
	Harris	1203	3	385	0	1591	
	Montgomery	241	0	14	0	255	
	Waller	113	0	11	0	124	
	Total	2170	8	482	0	2660	82%
<b>Laredo</b>							
	Dimmit	68	0	3	0	71	
	Duval	114	3	0	0	117	
	Kinney	31	0	5	0	36	
	Lasalle	105	0	4	0	109	
	Maverick	68	2	6	0	76	
	Val Verde	76	1	6	0	83	
	Webb	232	0	9	0	241	
	Zavala	65	1	5	0	71	
	Total	759	7	38	0	804	94%
<b>Lubbock</b>							
	Bailey	4	0	0	0	4	
	Castro	9	0	1	0	10	
	Cockran	0	0	0	0	0	
	Crosby	12	0	0	0	12	

	Dawson	3	0	0	0	3	
	Floyd	8	0	2	0	10	
	Gaines	0	0	0	0	0	
	Garza	48	0	0	0	48	
	Hale	39	0	6	0	45	
	Hockley	3	0	0	0	3	
	Lamb	10	0	1	0	11	
	Lubbock	153	0	35	0	188	
	Lynn	3	0	2	0	5	
	Parmer	21	0	0	0	21	
	Swisher	62	0	4	0	66	
	Terry	5	0	0	0	5	
	Yoakum	0	0	0	0	0	
	Total	380	0	51	0	431	88%
<b>Lufkin</b>							
	Angelina	89	3	9	1	102	
	Houston	81	1	16	0	98	
	Nacogdoches	106	3	11	5	125	
	Polk	104	8	7	0	119	
	Sabine	61	0	2	0	63	
	San Augustine	67	2	3	0	72	
	San Jacinto	44	0	4	0	48	
	Shelby	86	10	5	0	101	
	Trinity	53	4	0	0	57	
	Total	691	31	57	6	785	88%
<b>Odessa</b>							
	Andrews	0	0	0	0	0	
	Crane	18	0	0	0	18	
	Ector	98	0	11	0	109	
	Loving	4	0	0	0	4	
	Martin	14	0	0	0	14	
	Midland	83	0	4	0	87	
	Pecos	462	0	1	0	463	
	Reeves	197	3	8	0	208	
	Terrell	53	0	0	0	53	
	Upton	39	0	0	0	39	
	Ward	50	1	3	0	54	
	Winkler	1	0	0	0	1	
	Total	1019	4	27	0	1050	97%
<b>Paris</b>							
	Delta	55	2	6	1	64	
	Fannin	140	2	20	0	162	
	Franklin	45	0	5	0	50	
	Grayson	210	3	36	0	249	

	Hopkins	145	3	24	0	172	
	Hunt	247	1	39	4	291	
	Lamar	146	4	22	4	176	
	Rains	32	0	2	0	34	
	Red River	102	2	5	6	115	
	Total	1122	17	159	15	1313	85%
<b>Pharr</b>							
	Brooks	29	0	0	0	29	
	Cameron	196	2	21	0	219	
	Hidalgo	196	0	20	0	216	
	Jim Hogg	28	0	1	0	29	
	Kenedy	15	0	0	0	15	
	Starr	45	1	3	0	49	
	Willacy	48	0	2	0	50	
	Zapata	33	0	4	0	37	
	Total	590	3	51	0	644	92%
<b>San Angelo</b>							
	Coke	81	0	1	0	82	
	Concho	67	0	0	0	67	
	Crockett	154	2	3	0	159	
	Edwards	24	0	1	0	25	
	Glasscock	18	0	0	0	18	
	Irion	49	0	1	0	50	
	Kimble	135	0	7	0	142	
	Menard	58	1	0	0	59	
	Reagan	28	0	0	0	28	
	Real	21	0	5	0	26	
	Runnels	99	0	13	2	114	
	Schleicher	27	0	1	0	28	
	Sterling	55	0	0	0	55	
	Sutton	87	0	3	0	90	
	Tom Green	239	0	16	1	256	
	Total	1142	3	51	3	1199	95%
<b>San Antonio</b>							
	Atascosa	137	0	8	0	145	
	Bandera	43	0	12	0	55	
	Bexar	1001	3	199	0	1203	
	Comal	102	1	18	0	121	
	Frio	112	0	13	0	125	
	Guadalupe	175	1	16	0	192	
	Kendall	67	0	13	0	80	
	Kerr	112	9	15	0	136	
	McMullen	53	0	0	0	53	
	Medina	143	0	6	0	149	

	Uvalde	68	2	8	0	78	
	Wilson	79	2	12	0	93	
	Total	2092	18	320	0	2430	86%
<b>Tyler</b>							
	Anderson	104	2	5	0	111	
	Cherokee	113	0	7	0	120	
	Gregg	109	1	20	0	130	
	Henderson	140	0	9	0	149	
	Rusk	146	1	6	0	153	
	Smith	180	2	17	1	200	
	Van Zandt	152	2	16	0	170	
	Wood	76	1	21	0	98	
	Total	1020	9	101	1	1131	90%
<b>Waco</b>							
	Bell	314	1	50	1	366	
	Bosque	99	1	10	2	112	
	Coryell	113	0	14	2	129	
	Falls	139	3	10	0	152	
	Hamilton	75	0	5	1	81	
	Hill	215	5	17	4	241	
	Limestone	117	4	4	2	127	
	McLennan	336	3	74	2	415	
	Total	1408	17	184	14	1623	87%
<b>Wichita Falls</b>							
	Archer	91	0	1	0	92	
	Baylor	38	1	0	0	39	
	Clay	114	3	3	1	121	
	Cooke	123	5	10	0	138	
	Montague	91	5	3	0	99	
	Throckmorton	42	3	0	0	45	
	Wichita	256	6	33	0	295	
	Wilbarger	105	3	9	2	119	
	Young	82	1	1	0	84	
	Total	942	27	60	3	1032	91%
<b>Yoakum</b>							
	Austin	89	0	15	0	104	
	Calhoun	72	1	3	0	76	
	Colorado	130	1	20	0	151	
	Dewitt	142	0	5	0	147	
	Fayette	214	0	16	0	230	
	Gonzales	202	6	24	1	233	
	Jackson	118	2	6	0	126	
	Lavaca	106	1	12	0	119	
	Matagorda	75	0	12	0	87	

	Victoria	188	0	11	0	199	
	Wharton	160	2	13	0	175	
	Total	1496	13	137	1	1647	91%
<b>Totals</b>		<b>28135</b>	<b>483</b>	<b>3951</b>	<b>105</b>	<b>32674</b>	

\*The total number of good or better bridges in Table B-1 includes 32 bridges herein identified as unclassified.

**Table B-2. Condition of Off-system Bridges by TxDOT District and County in September 2006**

District Name	County	Good or Better	Structurally Deficient	Functionally Obsolete	Sub-Standard for Load Only	Total	Percent Good or Better
<b>Abilene</b>							
	Borden	3	0	0	0	3	
	Callahan	7	4	2	6	19	
	Fisher	14	38	11	14	77	
	Haskell	10	1	2	0	13	
	Howard	8	0	0	2	10	
	Jones	34	4	4	5	47	
	Kent	1	2	1	4	8	
	Mitchell	15	4	2	4	25	
	Nolan	19	4	1	11	35	
	Scurry	33	3	0	7	43	
	Shackelford	4	4	1	2	11	
	Stonewall	10	3	1	3	17	
	Taylor	61	5	13	3	82	
	<b>Total</b>	<b>219</b>	<b>72</b>	<b>38</b>	<b>61</b>	<b>390</b>	<b>56%</b>
<b>Amarillo</b>							
	Armstrong	0	0	0	1	1	
	Carson	0	0	2	0	2	
	Dallam	0	0	0	0	0	
	Deaf Smith	1	0	2	4	7	
	Gray	13	4	5	3	25	
	Hansford	6	2	1	1	10	
	Hartley	0	0	0	0	0	
	Hemphill	2	4	1	0	7	
	Hutchinson	8	2	1	2	13	
	Lipscomb	2	1	0	0	3	
	Moore	1	0	0	1	2	
	Ochiltree	5	0	0	0	5	
	Oldham	0	0	0	0	0	
	Potter	13	0	2	0	15	
	Randall	4	1	1	0	6	
	Roberts	0	1	0	0	1	
	Sherman	5	0	0	0	5	
	<b>Total</b>	<b>60</b>	<b>15</b>	<b>15</b>	<b>12</b>	<b>102</b>	<b>59%</b>
<b>Atlanta</b>							
	Bowie	35	10	12	0	57	
	Camp	2	0	0	0	2	
	Cass	10	1	1	0	12	
	Harrison	31	8	6	5	50	

	Marion	7	2	2	1	12	
	Morris	8	4	9	0	21	
	Panola	6	0	10	0	16	
	Titus	26	16	5	0	47	
	Upshur	8	0	0	0	8	
	Total	133	41	45	6	225	59%
<b>Austin</b>							
	Bastrop	72	11	14	2	99	
	Blanco	5	0	1	0	6	
	Burnet	14	1	3	2	20	
	Caldwell	34	7	9	1	51	
	Gillespie	13	3	12	3	31	
	Hays	10	2	6	0	18	
	Lee	52	4	15	1	72	
	Llano	5	2	2	0	9	
	Mason	1	3	5	3	12	
	Travis	416	2	115	2	535	
	Williamson	304	11	26	5	346	
	Total	926	46	208	19	1199	77%
<b>Beaumont</b>							
	Chambers	10	1	1	6	18	
	Hardin	27	3	8	3	41	
	Jasper	17	7	15	1	40	
	Jefferson	101	9	41	4	155	
	Liberty	23	5	8	4	40	
	Newton	18	7	9	5	39	
	Orange	39	2	14	4	59	
	Tyler	25	9	9	11	54	
	Total	260	43	105	38	446	58%
<b>Brownwood</b>							
	Brown	66	7	16	6	95	
	Coleman	29	6	6	2	43	
	Comanche	52	18	13	13	96	
	Eastland	42	12	7	4	65	
	Lampasas	11	1	3	2	17	
	McCulloch	17	1	5	4	27	
	Mills	8	2	1	3	14	
	San Saba	12	6	3	0	21	
	Stephens	20	1	7	5	33	
	Total	257	54	61	39	411	63%
<b>Bryan</b>							
	Brazos	85	6	9	3	103	
	Burleson	20	8	9	12	49	
	Freestone	8	17	11	8	44	

	Grimes	45	13	22	8	88	
	Leon	13	2	6	12	33	
	Madison	3	7	8	11	29	
	Milam	29	7	15	3	54	
	Robertson	19	14	4	4	41	
	Walker	18	4	0	5	27	
	Washington	73	14	23	7	117	
	Total	313	92	107	73	585	54%
<b>Childress</b>							
	Briscoe	2	2	0	0	4	
	Childress	19	3	0	1	23	
	Collingsworth	11	4	1	3	19	
	Cottle	19	1	4	0	24	
	Dickens	5	6	1	0	12	
	Donley	8	5	1	1	15	
	Foard	7	0	1	3	11	
	Hall	16	8	0	2	26	
	Hardeman	13	6	0	4	23	
	King	3	1	1	0	5	
	Knox	2	2	0	2	6	
	Motley	5	3	0	1	9	
	Wheeler	11	1	1	4	17	
	Total	121	42	10	21	194	62%
<b>Corpus Christi</b>							
	Aransas	1	0	1	0	2	
	Bee	16	1	6	2	25	
	Goliad	34	0	7	1	42	
	Jim Wells	23	3	3	5	34	
	Karnes	26	9	3	0	38	
	Kleberg	1	0	0	1	2	
	Live Oak	1	7	4	4	16	
	Nueces	120	9	10	6	145	
	Refugio	22	0	4	1	27	
	San Patricio	41	4	5	1	51	
	Total	285	33	43	21	382	75%
<b>Dallas</b>							
	Collin	357	7	82	3	449	
	Dallas	873	24	481	10	1388	
	Denton	147	32	55	7	241	
	Ellis	77	21	58	20	176	
	Kaufman	20	4	9	15	48	
	Navarro	24	24	25	21	94	
	Rockwall	5	0	0	2	7	
	Total	1503	112	710	78	2403	63%



<b>El Paso</b>							
	Brewster	6	0	1	1	8	
	Culberson	1	0	0	0	1	
	El Paso	117	3	25	64	209	
	Hudspeth	1	0	0	0	1	
	Jeff Davis	0	0	0	0	0	
	Presidio	0	1	1	0	2	
	Total	125	4	27	65	221	57%
<b>Fort Worth</b>							
	Erath	41	17	13	6	77	
	Hood	18	0	4	0	22	
	Jack	24	9	16	13	62	
	Johnson	90	1	10	4	105	
	Palo Pinto	33	14	7	3	57	
	Parker	97	13	22	25	157	
	Somervell	1	1	0	0	2	
	Tarrant	641	34	270	9	954	
	Wise	64	28	20	15	127	
	Total	1009	117	362	75	1563	65%
<b>Houston</b>							
	Brazoria	118	73	43	36	270	
	Fort Bend	176	12	75	44	307	
	Galveston	71	6	11	8	96	
	Harris	925	23	792	29	1769	
	Montgomery	119	18	30	11	178	
	Waller	35	9	2	18	64	
	Total	1444	141	953	146	2684	54%
<b>Laredo</b>							
	Dimmit	1	0	1	0	2	
	Duval	2	0	0	0	2	
	Kinney	2	0	0	0	2	
	Lasalle	14	2	0	11	27	
	Maverick	16	4	2	2	24	
	Val Verde	4	0	5	0	9	
	Webb	36	2	38	4	80	
	Zavala	1	1	0	0	2	
	Total	76	9	46	17	148	51%
<b>Lubbock</b>							
	Bailey	0	0	0	0	0	
	Castro	0	0	0	0	0	
	Cochran	0	0	0	0	0	
	Crosby	1	2	1	0	4	
	Dawson	0	0	0	0	0	
	Floyd	0	0	0	1	1	

	Gaines	0	0	0	0	0	
	Garza	0	1	0	0	1	
	Hale	0	0	1	1	2	
	Hockley	0	0	0	0	0	
	Lamb	0	0	0	0	0	
	Lubbock	6	0	0	0	6	
	Lynn	0	0	0	0	0	
	Parmer	5	0	0	0	5	
	Swisher	2	2	0	0	4	
	Terry	0	0	0	0	0	
	Yoakum	0	0	0	0	0	
	Total	14	5	2	2	23	61%
<b>Lufkin</b>							
	Angelina	46	6	3	4	59	
	Houston	33	12	15	34	94	
	Nacogdoches	78	6	29	3	116	
	Polk	26	30	18	21	95	
	Sabine	11	11	3	4	29	
	San Augustine	2	13	1	8	24	
	San Jacinto	19	2	1	2	24	
	Shelby	26	37	10	11	84	
	Trinity	11	5	0	5	21	
	Total	252	122	80	92	546	46%
<b>Odessa</b>							
	Andrews	0	0	0	0	0	
	Crane	0	0	0	0	0	
	Ector	26	0	0	0	26	
	Loving	0	0	0	0	0	
	Martin	0	0	0	0	0	
	Midland	17	0	3	0	20	
	Pecos	2	1	0	0	3	
	Reeves	2	1	1	1	5	
	Terrell	0	0	0	0	0	
	Upton	0	0	0	0	0	
	Ward	0	0	0	0	0	
	Winkler	0	0	0	0	0	
	Total	47	2	4	1	54	87%
<b>Paris</b>							
	Delta	16	9	1	4	30	
	Fannin	36	47	37	24	144	
	Franklin	17	3	2	1	23	
	Grayson	185	12	47	12	256	
	Hopkins	37	14	11	7	69	
	Hunt	77	47	3	4	131	

	Lamar	81	24	16	6	127	
	Rains	10	2	5	1	18	
	Red River	14	25	4	4	47	
	Total	473	183	126	63	845	56%
<b>Pharr</b>							
	Brooks	6	0	1	0	7	
	Cameron	77	4	10	2	93	
	Hidalgo	108	6	28	4	146	
	Jim Hogg	0	0	0	0	0	
	Kennedy	0	0	0	0	0	
	Starr	3	3	3	0	9	
	Willacy	48	7	1	3	59	
	Zapata	0	0	0	0	0	
	Total	242	20	43	9	314	77%
<b>San Angelo</b>							
	Coke	9	3	3	5	20	
	Concho	3	1	0	1	5	
	Crockett	0	0	0	0	0	
	Edwards	0	0	0	0	0	
	Glasscock	0	0	0	0	0	
	Irion	0	0	0	0	0	
	Kimble	2	0	1	1	4	
	Menard	0	2	1	0	3	
	Reagan	0	0	0	0	0	
	Real	0	0	0	0	0	
	Runnels	15	8	15	7	45	
	Schleicher	4	1	0	0	5	
	Sterling	0	2	0	0	2	
	Sutton	2	0	0	0	2	
	Tom Green	31	1	6	2	40	
	Total	66	18	26	16	126	52%
<b>San Antonio</b>							
	Atascosa	11	6	1	3	21	
	Bandera	7	1	3	0	11	
	Bexar	652	7	182	8	849	
	Comal	17	4	10	0	31	
	Frio	6	4	7	0	17	
	Guadalupe	28	1	5	3	37	
	Kendall	12	4	6	0	22	
	Kerr	11	1	15	0	27	
	McMullen	0	1	2	1	4	
	Medina	18	7	13	4	42	
	Uvalde	6	0	0	0	6	
	Wilson	19	7	4	6	36	

	Total	787	43	248	25	1103	71%
<b>Tyler</b>							
	Anderson	26	6	13	13	58	
	Cherokee	37	5	13	15	70	
	Gregg	63	2	10	2	77	
	Henderson	19	0	6	6	31	
	Rusk	78	1	11	15	105	
	Smith	82	7	17	31	137	
	Van Zandt	31	13	27	11	82	
	Wood	10	2	2	0	14	
	Total	346	36	99	93	574	60%
<b>Waco</b>							
	Bell	151	5	43	5	204	
	Bosque	21	5	4	4	34	
	Coryell	15	5	2	3	25	
	Falls	52	57	23	37	169	
	Hamilton	18	13	3	4	38	
	Hill	54	38	22	43	157	
	Limestone	32	54	48	19	153	
	McLennan	134	24	50	44	252	
	Total	477	201	195	159	1032	46%
<b>Wichita Falls</b>							
	Archer	9	6	4	9	28	
	Baylor	4	4	0	1	9	
	Clay	7	2	1	1	11	
	Cooke	95	12	17	13	137	
	Montague	74	12	30	11	127	
	Throckmorton	7	1	0	0	8	
	Wichita	59	7	18	6	90	
	Wilbarger	15	16	0	9	40	
	Young	13	8	5	0	26	
	Total	283	68	75	50	476	59%
<b>Yoakum</b>							
	Austin	59	18	9	11	97	
	Calhoun	12	7	3	2	24	
	Colorado	71	9	8	7	95	
	Dewitt	75	12	20	7	114	
	Fayette	49	8	62	13	132	
	Gonzales	23	28	6	5	62	
	Jackson	21	11	11	3	46	
	Lavaca	61	6	60	6	133	
	Matagorda	77	3	3	16	99	
	Victoria	71	4	31	7	113	
	Wharton	121	17	10	46	194	

	Total	640	123	223	123	1109	58%
Totals		10358	1642	3851	1304	17155	

\*The total number of good or better bridges in Table B-2 includes 36 bridges herein identified as unclassified.

## Appendix C - FY 2006 PWP/EMP Annual Report

**Background.** On July 27, 2000, an amendment to 43 TAC Section 15.55 relating to changes in the local funding requirements of Category 6 projects received final approval by the Commission, and became effective August 20, 2000. This rule change instituted what has come to be referred to as the department's Participation-Waived Project (PWP) program. An additional amendment to this rule that became effective on November 14, 2001 expanded the types of work that qualified for this program and made the program more flexible.

The usual federal-state-local government cost participation percentages required on off-system bridge projects is 80-10-10. However, the August 2000 amendment to Article 15.55 provided that the 10 percent local government cost participation could be waived if the local government agreed to use an equivalent dollar-amount to improve other deficient structures under its jurisdiction. The project on which the 10-percent local cost participation is waived is referred to as the "participation-waived" project, while the project(s) to be performed by the local government in return for the waiver is referred to as the "equivalent-match" project(s) (EMP). The November 2001 amendment expanded the types of work that qualify for equivalent-match projects to include safety related work and clarified the type of structures on which this work could be performed to include low water crossings. It also allowed local governments to perform EMP work in geographically adjacent governmental units.

The participation-waived projects must be Construct or Develop authorized in the Unified Transportation Program Category 6. For the purposes of this program, eligible structures for address under equivalent-match projects not only include those meeting the Federal Highway Administration (FHWA) bridge definition that are deficient-classified, but also include mainlane cross-drainage structures and low water crossings that do not meet the FHWA bridge definition but are deficient. The equivalent-match bridge or mainlane cross-drainage structure must be classified as deficient, or be weight-restricted for school buses.

This program has expanded the number of local governments participating in our off-system bridge program and has provided many other local governments with the incentive to increase their participation. Through the equivalent-match projects, many structures that had deficiencies but which were not programmed in our off-system bridge program have been scheduled for improvements which will increase their safety and efficiency. Overall, the program has resulted in accelerating the rate at which structurally deficient and functionally obsolete off-system bridges are improved throughout the state.

The following report presents a summary of the PWP program for FY 2006. These PWP/EMP reports are issued annually and provide information on both the current fiscal year's results and the cumulative results of the program up to the time of this report.

The Bridge Division maintains a complete database containing all participation-waived projects and their associated equivalent-match projects, by district. The database includes dates for the lettings of PWP projects, both the required and actual completion dates for the EMP projects, and an indication of any EMP projects that are currently overdue or have been overdue in the past. The districts provide information for these dates annually during the month of November.

**FY 2006 Summary.** For FY 2006, 17 of the 25 districts executed participation-waived off-system bridge project agreements, for a total of 206 participation-waived projects and 413 equivalent-match projects. Cost estimates for the 206 participation-waived projects total \$110.82M with total local participation of \$10.55M, of which \$10.51M has been waived.

Of the 413 equivalent-match projects having a \$13.43M total estimated cost, 71 (17%) are on the National Bridge Inventory (NBI) for an estimated cost of \$8.24M, and 342 (83%) are local projects not on the NBI for an estimated cost of \$5.19M.

Of the 413 equivalent-match projects, 330 (80%) are on school bus routes. Of the 71 equivalent-match projects on the NBI, 68 (96%) are on school bus routes. Of the 342 local projects not on the NBI, 262 (77%) are on school bus routes.

Of the 206 participation-waived projects with agreements executed in FY 2006, 8 (4%) have been let to contract. Of the 413 associated equivalent-match projects, 68 (17%) have been completed.

**Update on Activity Since Initiation in FY 2001.** Since the program was initiated in FY 2001, 21 of the 25 districts have executed participation-waived off-system bridge project agreements, for a total of 1,076 participation-waived projects and 1,814 equivalent-match projects. Cost estimates for the 1,076 participation-waived projects total \$379.73M with total local participation of \$37.68M, of which \$34.88M has been waived.

Of the 1,814 equivalent-match projects having a \$47.06M total estimated cost, 505 (28%) are on the National Bridge Inventory (NBI) for an estimated cost of \$28.47M, and 1,309 (72%) are local projects not on the NBI for an estimated cost of \$18.59M.

Of the 1,814 equivalent-match projects, 1,473 (81%) are on school bus routes. Of the 505 equivalent-match projects on the NBI, 429 (85%) are on school bus routes. Of the 1,309 local projects not on the NBI, 1,044 (80%) are on school bus routes.

Of the 1,076 participation-waived projects with agreements executed since the initiation of the program in FY 2001, 647 (60%) have been let to contract. Of the 1,814 associated equivalent-match projects, 1,014 (56%) have been completed.

Of the 1,814 equivalent-match projects associated with agreements executed since the initiation of the program in FY 2001, 20 (1%) are currently overdue for completion within the allowable 3 years after the contract award of the associated participation-waived project.

#### **Attachments to Appendix C:**

**Attachment A** – FY 2001 Summary of Participation Waived Project Information

**Attachment B** – FY 2002 Summary of Participation Waived Project Information

**Attachment C** – FY 2003 Summary of Participation Waived Project Information

**Attachment D** – FY 2004 Summary of Participation Waived Project Information

**Attachment E** – FY 2005 Summary of Participation Waived Project Information

**Attachment F** – FY 2006 Summary of Participation Waived Project Information

**Attachment G** – Cumulative Summary of PWP/EMP Projects

**Attachment H** – Summary of PWP/EMP Projects

**Attachment I** – Summary of PWP/EMP \$ Amounts

**Attachment J** – Off-System Bridge Inventory 1999-2005

Questions concerning the participation-waived project program may be addressed to Michael S. O'Toole, P.E., Director of Project Development in the Bridge Division, at telephone number (512) 416-2240.



**Attachment A to Appendix C  
FY 2001 Summary of Participation Waived Project Information**

District	No. of PWPs	No. of EMPs	EMPs on NBI	EMP (NBI) on School Bus Rt.	EMP (nonNBI) on School Bus Rt.	Total PWP Project Estimates	Total Local Participation Amounts	\$ Amt for EMP (NBI)	\$ Amt for EMP (nonNBI)	Total \$ Waived for PWPs	PWP Projects Let to Contract	EMP Projects Completed	EMP Projects Overdue
(08) ABL	3	5	5	0	0	\$832,221	\$80,012	\$87,000	\$0	\$80,012	3	1	2
(04) AMA	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	0	0	0
(19) ATL	16	11	0	0	11	\$3,884,939	\$324,579	\$0	\$305,077	\$265,786	16	5	0
(14) AUS	7	12	8	7	3	\$4,826,055	\$1,291,019	\$937,283	\$86,866	\$358,098	6	12	1
(20) BMT	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	0	0	0
(23) BWD	7	35	0	0	32	\$1,621,000	\$162,100	\$0	\$171,603	\$162,100	6	31	4
(17) BRY	9	10	9	9	1	\$2,225,345	\$214,373	\$212,888	\$6,300	\$196,856	8	8	1
(25) CHS	21	53	5	2	9	\$3,314,922	\$263,432	\$36,875	\$256,064	\$245,919	17	42	0
(16) CRP	5	1	1	1		\$1,077,700	\$107,770	\$117,473	\$0	\$107,770	2	1	0
(18) DAL	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	0	0	0
(24) ELP	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	0	0	0
(02) FTW	38	41	39	38	2	\$12,681,197	\$1,212,476	\$1,392,900	\$30,400	\$1,136,258	35	24	6
(12) HOU	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	0	0	0
(22) LRD	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	0	0	0
(05) LBB	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	0	0	0
(11) LKF	12	55	5	3	47	\$3,888,034	\$323,831	\$127,860	\$220,167	\$303,852	12	32	2
(06) ODA	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	0	0	0
(01) PAR	33	34	15	14	19	\$4,625,571	\$401,394	\$273,550	\$116,664	\$385,704	33	23	4
(21) PHR	4	1	1	1	0	\$991,497	\$46,818	\$37,796	\$0	\$37,795	4	1	0
(07) SJT	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	0	0	0
(15) SAT	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	0	0	0
(10) TYL	6	5	5	4	0	\$2,425,634	\$168,005	\$167,338	\$0	\$163,505	6	3	0
(09) WAC	8	11	11	10	0	\$3,063,000	\$306,300	\$289,800	\$0	\$244,358	8	11	0
(03) WFS	21	25	5	5	20	\$4,174,114	\$417,420	\$135,225	\$427,451	\$367,653	18	17	4
(13) YKM	25	39	19	11	16	\$8,103,029	\$810,262	\$714,084	\$160,055	\$752,139	24	32	3
<b>Totals</b>	<b>215</b>	<b>338</b>	<b>128</b>	<b>105</b>	<b>160</b>	<b>\$57,734,258</b>	<b>\$6,129,791</b>	<b>\$4,530,072</b>	<b>\$1,780,647</b>	<b>\$4,807,805</b>	<b>198</b>	<b>243</b>	<b>27</b>

**Attachment B to Appendix C  
FY 2002 Summary of Participation Waived Project Information**

District	No. of PWP's	No. of EMP's	EMP's on NBI	EMP(NBI) on School Bus Rt.	EMP(nonNBI) on School Bus Rt.	Total PWP Project Estimates	Total Local Participation Amounts	\$ Amt for EMP (NBI)	\$ Amt for EMP (nonNBI)	Total \$ Amount Waived for PWP's	PWP Projects Let to Contract	EMP Projects Completed	EMP Projects Overdue
(08) ABL	10	14	10	1	0	\$2,153,544	\$206,442	\$236,398	\$33,232	\$200,190	10	7	0
(04) AMA	3	22	17	15	4	\$7,815,081	\$781,508	\$304,055	\$485,000	\$780,475	3	10	0
(19) ATL	1	1	0	0	1	\$227,215	\$22,721	\$0	\$18,020	\$18,020	0	0	0
(14) AUS	22	31	5	1	19	\$7,035,845	\$703,583	\$651,189	\$487,709	\$701,711	18	15	0
(20) BMT	1	6	0	0	6	\$663,243	\$66,324	\$0	\$64,241	\$61,734	1	0	0
(23) BWD	14	79	0	0	43	\$3,698,600	\$322,560	\$0	\$388,294	\$322,560	13	38	0
(17) BRY	15	18	11	12	6	\$5,848,217	\$451,848	\$383,435	\$76,886	\$398,307	8	14	0
(25) CHS	11	28	3	3	21	\$1,391,500	\$139,150	\$26,600	\$122,400	\$139,150	10	0	0
(16) CRP	17	8	5	5	3	\$4,010,378	\$401,039	\$505,617	\$67,522	\$401,039	12	3	0
(18) DAL	17	7	6	5	1	\$3,945,054	\$394,507	\$437,928	\$33,000	\$360,932	3	0	0
(24) ELP	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	0	0	0
(02) FTW	33	33	32	30	3	\$11,392,846	\$1,139,285	\$1,190,700	\$71,600	\$1,124,135	19	11	4
(12) HOU	2	2	1	1	1	\$1,149,500	\$114,950	\$114,103	\$358,000	\$114,950	1	1	0
(22) LRD	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	0	0	0
(05) LBB	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	0	0	0
(11) LKF	6	10	3	1	7	\$993,377	\$80,165	\$41,480	\$45,279	\$80,165	2	2	0
(06) ODA	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	0	0	0
(01) PAR	26	36	15	15	21	\$4,795,498	\$450,978	\$382,913	\$88,701	\$437,251	12	33	2
(21) PHR	2	1	1	1	0	\$530,550	\$16,977	\$33,000	\$0	\$16,977	2	1	0
(07) SJT	1	1	1	1	0	\$563,850	\$56,385	\$57,000	\$0	\$56,385	1	0	0
(15) SAT	4	10	1	1	9	\$3,808,741	\$380,875	\$70,516	\$310,400	\$356,875	3	0	0
(10) TYL	5	12	12	12	0	\$2,677,350	\$248,457	\$304,702	\$0	\$248,457	5	11	0
(09) WAC	14	40	26	18	14	\$7,422,466	\$742,246	\$675,250	\$124,069	\$699,496	12	21	0
(03) WFS	21	30	1	1	29	\$3,094,420	\$309,442	\$54,078	\$265,273	\$290,548	15	15	1
(13) YKM	14	26	5	4	12	\$4,190,446	\$419,045	\$242,500	\$180,553	\$382,709	14	16	0
<b>Totals</b>	<b>239</b>	<b>415</b>	<b>155</b>	<b>127</b>	<b>200</b>	<b>\$77,407,721</b>	<b>\$7,448,487</b>	<b>\$5,711,464</b>	<b>\$3,220,179</b>	<b>\$7,192,066</b>	<b>164</b>	<b>197</b>	<b>7</b>

**Attachment C to Appendix C  
FY 2003 Summary of Participation Waived Project Information**

District	No. of PWP's	No. of EMP's	EMP's on NBI	EMP(NBI) on School Bus Rt.	EMP(nonNBI) on School Bus Rt.	Total PWP Project Estimates	Total Local Participation Amounts	\$ Amt for EMP (NBI)	\$ Amt for EMP (nonNBI)	Total \$ Amount Waived for PWP's	PWP Projects Let to Contract	EMP Projects Completed	EMP Projects Overdue
(08) ABL	9	20	2	0	10	\$2,066,909	\$206,691	\$8,200	\$282,825	\$198,572	9	2	0
(04) AMA	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	0	0	0
(19) ATL	3	5	0	0	4	\$1,402,078	\$140,208	\$0	\$145,950	\$140,208	0	0	0
(14) AUS	3	4	1	1	3	\$1,432,029	\$143,203	\$38,200	\$89,800	\$106,663	0	0	0
(20) BMT	5	7	3	3	3	\$2,444,745	\$185,731	\$101,042	\$122,940	\$185,731	1	2	0
(23) BWD	6	47	0	0	41	\$1,911,000	\$191,100	\$0	\$192,542	\$191,100	6	0	0
(17) BRY	6	8	5	5	3	\$1,613,320	\$157,775	\$125,452	\$28,286	\$143,770	5	5	0
(25) CHS	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	0	0	0
(16) CRP	13	13	2	1	7	\$3,234,690	\$323,466	\$541,550	\$526,356	\$323,466	4	11	0
(18) DAL	28	11	9	9	2	\$7,973,392	\$797,339	\$584,730	\$173,769	\$678,965	5	3	0
(24) ELP	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	0	0	0
(02) FTW	4	4	4	3	0	\$7,776,200	\$3,687,673	\$981,500	\$0	\$777,610	1	0	0
(12) HOU	14	7	6	6	1	\$6,048,190	\$604,819	\$967,500	\$83,000	\$599,079	1	0	0
(22) LRD	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	0	0	0
(05) LBB	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	0	0	0
(11) LKF	3	13	2	0	7	\$863,416	\$59,820	\$29,660	\$31,595	\$59,820	0	0	0
(06) ODA	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	0	0	0
(01) PAR	20	27	2	2	25	\$2,750,436	\$275,044	\$64,375	\$220,124	\$275,044	0	27	0
(21) PHR	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	0	0	0
(07) SJT	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	0	0	0
(15) SAT	2	2	0	0	2	\$743,875	\$74,388	\$0	\$95,000	\$63,818	0	0	0
(10) TYL	2	3	2	2	1	\$623,256	\$62,326	\$44,500	\$18,300	\$62,326	0	3	0
(09) WAC	3	12	3	3	8	\$1,207,850	\$120,785	\$61,053	\$59,210	\$112,785	1	3	0
(03) WFS	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	0	0	0
(13) YKM	12	9	2	2	7	\$2,710,283	\$271,028	\$108,500	\$268,000	\$269,297	5	2	0
<b>Totals</b>	<b>133</b>	<b>192</b>	<b>43</b>	<b>37</b>	<b>124</b>	<b>\$44,801,669</b>	<b>\$7,301,396</b>	<b>\$3,656,262</b>	<b>\$2,337,697</b>	<b>\$4,188,254</b>	<b>38</b>	<b>58</b>	<b>0</b>

**Attachment D to Appendix C  
FY 2004 Summary of Participation Waived Project Information**

District	No. of PWP's	No. of EMP's	EMP's on NBI	EMP(NBI) on School Bus Rt.	EMP (nonNBI) on School Bus Rt.	Total PWP Project Estimates	Total Local Participation Amounts	\$ Amt for EMP (NBI)	\$ Amt for EMP (nonNBI)	Total \$ Amount waived for PWP's	PWP Projects Let to Contract	EMP Projects Completed	EMP Projects Overdue
(08) ABL	1	1	0	0	1	\$130,001	\$9,115	\$0	\$10,500	\$7,620	1	0	0
(04) AMA	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	0	0	0
(19) ATL	3	6	0	0	6	\$1,631,084	\$141,437	\$0	\$149,300	\$141,437	0	0	0
(14) AUS	4	8	1	1	7	\$1,555,486	\$155,549	\$720,000	\$66,293	\$155,549	0	0	0
(20) BMT	4	19	1	1	12	\$1,351,734	\$83,931	\$2,300	\$133,552	\$79,286	2	0	0
(23) BWD	3	15	0	0	13	\$572,000	\$57,200	\$0	\$58,154	\$57,200	2	0	0
(17) BRY	10	37	9	8	28	\$3,315,555	\$331,558	\$402,307	\$49,010	\$331,558	0	6	0
(25) CHS	1	1	0	0	1	\$171,360	\$17,136	\$0	\$17,410	\$17,136	0	0	0
(16) CRP	6	13	1	1	5	\$1,787,760	\$178,778	\$49,462	\$130,845	\$178,778	0	0	0
(18) DAL	16	6	4	3	2	\$6,507,973	\$650,798	\$705,234	\$1,393,600	\$646,702	0	0	0
(24) ELP	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	0	0	0
(02) FTW	19	21	19	9	2	\$7,871,340	\$787,134	\$819,900	\$61,000	\$764,562	3	3	0
(12) HOU	11	2	2	2	0	\$4,527,215	\$452,723	\$730,000	\$0	\$452,723	0	0	0
(22) LRD	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	0	0	0
(05) LBB	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	0	0	0
(11) LKF	4	5	1	1	4	\$1,218,800	\$89,230	\$23,000	\$69,250	\$89,230	0	0	0
(06) ODA	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	0	0	0
(01) PAR	65	70	12	12	58	\$7,787,847	\$677,787	\$334,217	\$447,928	\$676,178	0	24	0
(21) PHR	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	0	0	0
(07) SJT	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	0	0	0
(15) SAT	1	1	0	0	1	\$1,224,850	\$122,484	\$0	\$110,500	\$110,484	1	0	0
(10) TYL	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	0	0	0
(09) WAC	6	6	5	5	1	\$3,115,590	\$311,559	\$222,377	\$113,400	\$311,559	0	0	0
(03) WFS	13	25	5	5	20	\$2,482,012	\$248,202	\$134,487	\$124,299	\$248,202	0	5	0
(13) YKM	10	8	7	7	1	\$2,750,000	\$275,000	\$270,000	\$78,000	\$275,000	0	0	0
<b>Totals</b>	<b>177</b>	<b>244</b>	<b>67</b>	<b>55</b>	<b>162</b>	<b>\$48,000,607</b>	<b>\$4,589,621</b>	<b>\$4,413,284</b>	<b>\$3,013,041</b>	<b>\$4,543,204</b>	<b>9</b>	<b>38</b>	<b>0</b>

**Attachment E to Appendix C  
FY 2005 Summary of Participation Waived Project Information**

District	No. of PWP's	No. of EMP's	EMP's on NBI	EMP(NBI) on School Bus Rt.	EMP (nonNBI) on School Bus Rt.	Total PWP Project Estimates	Total Local Participation Amounts	\$ Amt for EMP (NBI)	\$ Amt for EMP (nonNBI)	Total \$ Amount waived for PWP's	PWP Projects Let to Contract	EMP Projects Completed	EMP Projects Overdue
(08) ABL	5	7	1	0	4	\$1,050,160	\$105,016	\$41,000	\$78,210	\$105,016	1	0	0
(04) AMA	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	0	0	0
(19) ATL	10	14	0	0	14	\$2,536,265	\$241,214	\$0	\$246,798	\$241,214	0	0	0
(14) AUS	19	19	3	4	13	\$8,658,995	\$750,839	\$369,778	\$1,476,331	\$750,839	5	8	0
(20) BMT	8	13	8	8	2	\$3,593,489	\$257,731	\$135,500	\$130,085	\$258,031	3	0	0
(23) BWD	8	50	0	0	36	\$2,744,000	\$258,751	\$0	\$268,116	\$258,751	7	0	0
(17) BRY	2	4	4	4	0	\$981,650	\$98,165	\$99,300	\$0	\$98,165	0	2	0
(25) CHS	1	7	0	0	0	\$200,597	\$20,059	\$0	\$20,500	\$20,059	1	0	0
(16) CRP	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	0	0	0
(18) DAL	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	0	0	0
(24) ELP	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	0	0	0
(02) FTW	6	9	3	3	6	\$2,769,530	\$249,453	\$135,000	\$143,800	\$249,453	2	1	0
(12) HOU	7	10	7	7	3	\$9,995,205	\$999,521	\$1,571,673	\$27,600	\$999,521	0	1	0
(22) LRD	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	0	0	0
(05) LBB	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	0	0	0
(11) LKF	7	37	1	1	36	\$1,414,200	\$117,203	\$6,925	\$144,329	\$117,203	4	0	0
(06) ODA	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	0	0	0
(01) PAR	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	0	0	0
(21) PHR	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	0	0	0
(07) SJT	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	0	0	0
(15) SAT	3	8	0	0	8	\$3,110,960	\$311,096	\$0	\$330,920	\$306,655	1	0	0
(10) TYL	5	5	4	4	1	\$2,802,585	\$685,096	\$138,889	\$83,695	\$213,301	4	3	0
(09) WAC	2	5	4	3	0	\$487,350	\$48,735	\$44,665	\$4,725	\$48,735	0	0	0
(03) WFS	16	23	4	4	19	\$3,898,319	\$389,831	\$72,757	\$341,717	\$389,831	0	9	0
(13) YKM	12	12	5	2	1	\$4,394,326	\$439,433	\$209,730	\$180,910	\$390,250	0	7	0
<b>Totals</b>	<b>111</b>	<b>223</b>	<b>44</b>	<b>40</b>	<b>143</b>	<b>\$48,637,631</b>	<b>\$4,972,143</b>	<b>\$2,825,217</b>	<b>\$3,477,736</b>	<b>\$4,447,024</b>	<b>28</b>	<b>31</b>	<b>0</b>

**Attachment F to Appendix C**  
**FY 2006 Summary of Participation Waived Project Information**

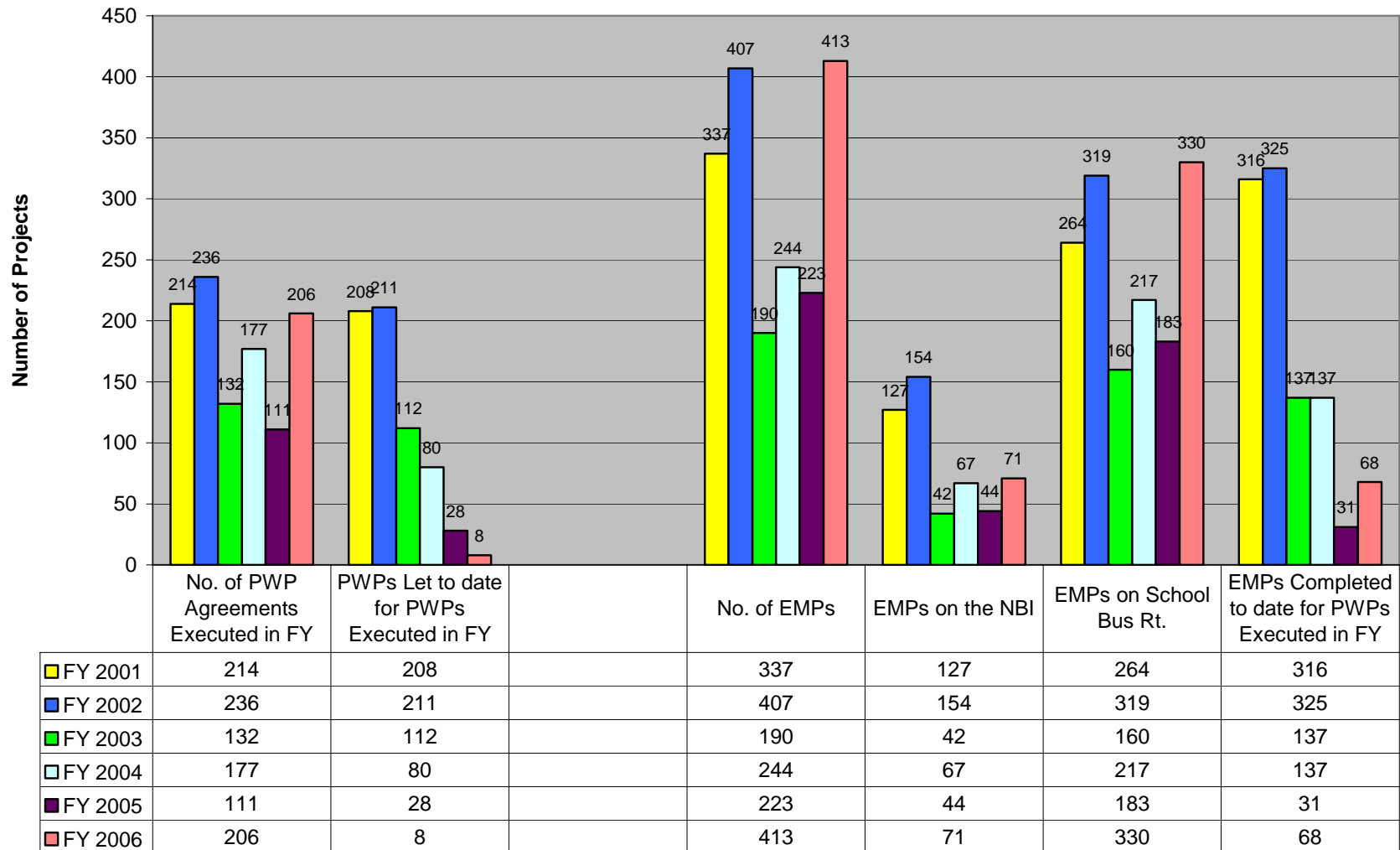
District	No. of PWP's	No. of EMP's	EMP's on NBI	EMP(NBI) on School Bus Rt.	EMP (nonNBI) on School Bus Rt.	Total PWP Project Estimates	Total Local Participation Amounts	\$ Amt for EMP (NBI)	\$ Amt for EMP (nonNBI)	Total \$ Amount waived for PWP's	PWP Projects Let to Contract	EMP Projects Completed	EMP Projects Overdue
(08) ABL	8	17	1	1	0	\$1,904,643	\$180,323	\$30,000	\$159,010	\$180,323	0	0	0
(04) AMA	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	0	0	0
(19) ATL	17	34	0	0	32	\$4,419,989	\$404,309	\$0	\$418,207	\$404,309	0	0	0
(14) AUS	1	1	0	0	1	\$504,000	\$50,400	\$0	\$54,750	\$50,400	0	0	0
(20) BMT	3	12	3	3	9	\$2,185,818	\$179,235	\$90,878	\$124,438	\$179,235	0	0	0
(23) BWD	8	39	0	0	34	\$2,410,396	\$231,016	\$0	\$266,387	\$231,016	3	0	0
(17) BRY	9	11	9	8	1	\$4,766,650	\$476,665	\$463,900	\$53,500	\$476,665	0	7	0
(25) CHS	13	66	0	0	17	\$4,411,472	\$409,761	\$0	\$421,880	\$409,761	1	0	0
(16) CRP	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	0	0	0
(18) DAL	1	1	0	0	1	\$522,428	\$52,243	\$0	\$20,974	\$20,974	1	0	0
(24) ELP	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	0	0	0
(02) FTW	5	5	5	4	0	\$22,523,000	\$2,252,300	\$2,418,000	\$0	\$2,252,300	0	0	0
(12) HOU	40	8	7	7	1	\$29,128,330	\$2,912,833	\$3,785,408	\$71,000	\$2,912,833	0	0	0
(22) LRD	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	0	0	0
(05) LBB	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	0	0	0
(11) LKF	3	10	4	4	6	\$844,800	\$39,703	\$30,500	\$12,136	\$39,703	0	0	0
(06) ODA	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	0	0	0
(01) PAR	11	43	1	1	42	\$2,810,971	\$134,665	\$30,122	\$104,640	\$134,665	0	0	0
(21) PHR	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	0	0	0
(07) SJT	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	0	0	0
(15) SAT	21	30	5	5	25	\$10,622,007	\$958,316	\$213,179	\$896,009	\$958,316	1	11	0
(10) TYL	9	15	13	13	2	\$3,066,485	\$306,648	\$326,865	\$22,390	\$306,648	2	4	0
(09) WAC	15	26	17	16	10	\$8,192,106	\$756,581	\$607,188	\$1,559,440	\$756,581	0	6	0
(03) WFS	27	48	2	2	46	\$6,378,920	\$596,045	\$105,905	\$514,773	\$596,045	0	25	0
(13) YKM	15	47	4	4	35	\$6,126,826	\$612,683	\$137,600	\$485,840	\$598,771	0	15	0
<b>Totals</b>	<b>206</b>	<b>413</b>	<b>71</b>	<b>68</b>	<b>262</b>	<b>\$110,818,841</b>	<b>\$10,553,726</b>	<b>\$8,239,545</b>	<b>\$5,185,374</b>	<b>\$10,508,545</b>	<b>8</b>	<b>68</b>	<b>0</b>

**Attachment G to Appendix C**  
**Cumulative Summary of Participation Waived Project Information**

	No. of PWP	No. of EMP	EMP on NBI	EMP(NBI) on School Bus Rt.	EMP(nonNBI) on School Bus Rt.	Total PWP Project Estimates	Total Local Participation Amounts	\$ Amt for EMP (NBI)	\$ Amt for EMP (nonNBI)	Total \$ Amount waived for PWP	PWP Projects Let to Contract	EMP Projects Completed	EMP Projects Overdue
FY2001	FY2001	214	337	127	104	160	\$57,164,008	\$6,072,766	\$4,470,072	\$1,780,647	\$4,756,240	208	316
FY2002	FY2002	236	407	154	126	193	\$75,886,571	\$7,296,372	\$5,680,964	\$2,834,679	\$7,055,551	211	325
FY2003	FY2003	132	190	42	36	124	\$39,084,206	\$4,076,268	\$2,838,262	\$2,301,697	\$3,585,714	112	137
FY2004	FY2004	177	244	67	55	162	\$48,135,003	\$4,712,492	\$4,413,284	\$3,013,041	\$4,531,679	80	137
FY2005	FY2005	111	223	44	40	143	\$48,637,631	\$4,972,143	\$2,825,217	\$3,477,736	\$4,443,424	28	31
FY2006	FY2006	206	413	71	68	262	\$110,818,841	\$10,553,726	\$8,239,545	\$5,185,374	\$10,508,545	8	68
<b>TOTAL</b>	<b>TOTAL</b>	<b>1,076</b>	<b>1,814</b>	<b>505</b>	<b>429</b>	<b>1,044</b>	<b>\$379,726,260</b>	<b>\$37,683,767</b>	<b>\$28,467,344</b>	<b>\$18,593,174</b>	<b>\$34,881,153</b>	<b>647</b>	<b>1,014</b>

**Attachment H to Appendix C**

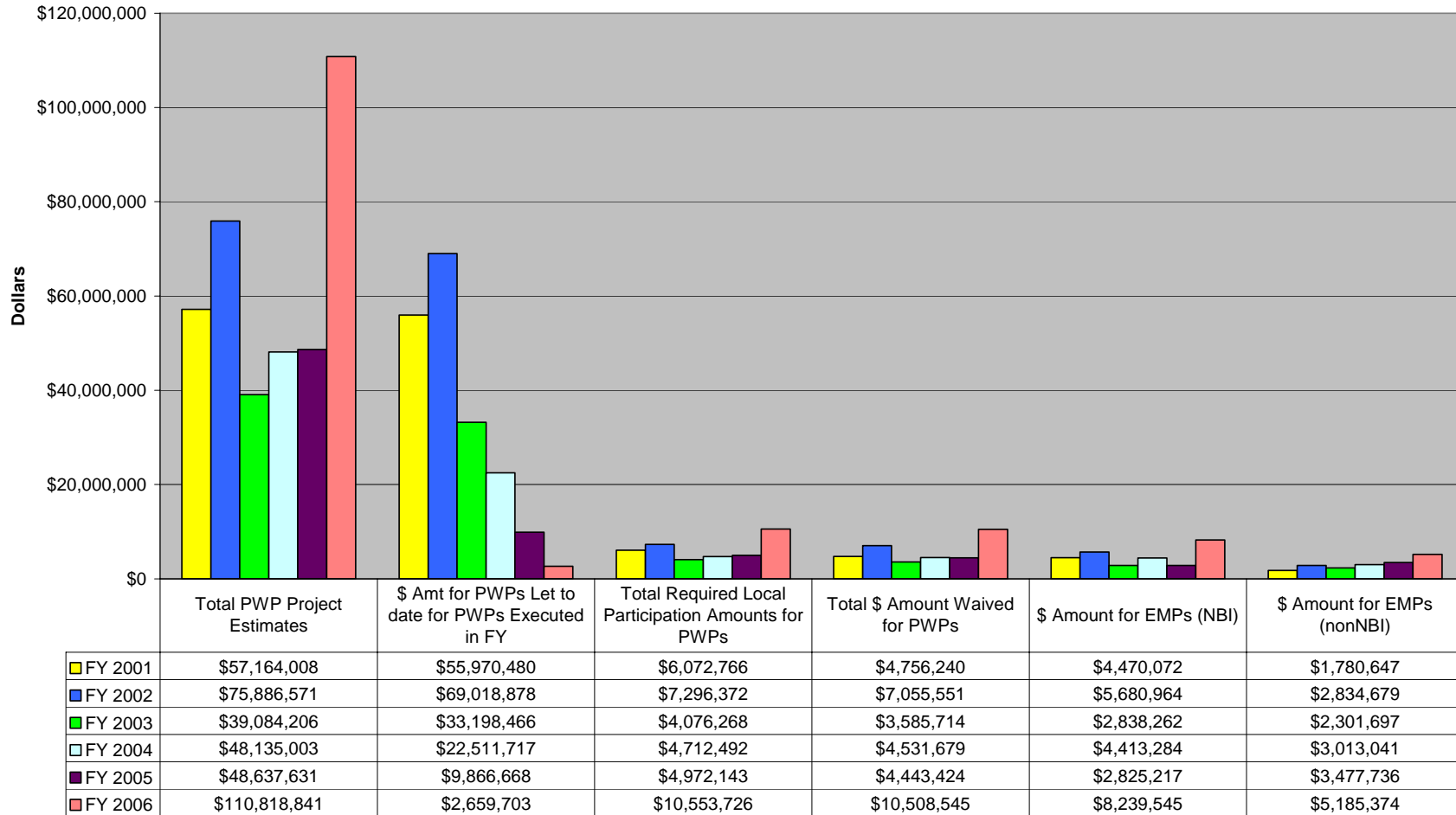
**Summary of PWP/EMP Projects**





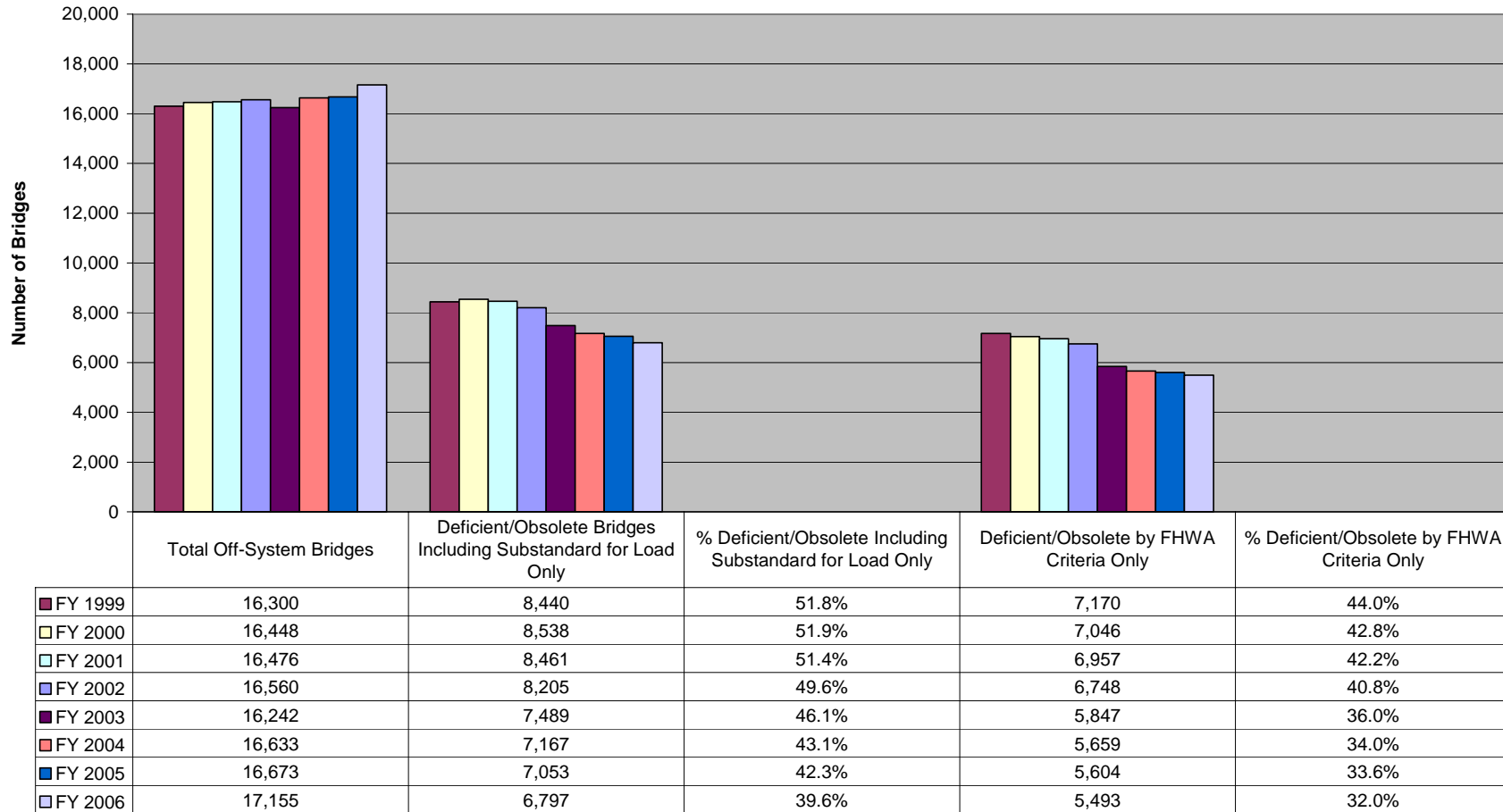
Attachment I to Appendix C

Summary of PWP/EMP \$ Amounts



**Attachment J to Appendix C**

**Off-System Bridge Inventory FY1999-FY2006  
(based on Sept. Pocket Facts)**









Texas Department of Transportation  
Bridge Division