

9.0 FINANCIAL ANALYSIS

The metropolitan transportation plan (MTP) is required to be fiscally constrained, which is to say, the projected aggregate cost of programmed projects must not exceed the amount of funding that is reasonably expected to be available for transportation improvements. If the future is the great unknown, future public funding for infrastructure is the great unknowable. Local governments have become heavily dependent on the Federal government for the resources necessary to build and maintain their transportation systems. And while the Federal government replenishes its funds by claiming a share of the take every time a driver stops to pump fuel into his or her vehicle, there is no guarantee regarding what portion of those tax receipts will be spent on building or maintaining roads. Unlike social entitlement programs, there is no long-term locked-in commitment to the nation's transportation system. Funding for streets, highways and bridges—as well as public transit, bicycle paths, railroad crossing protection devices, and other expenditures related to the safety and mobility of the traveling public—is entirely dependent on periodic legislative action by the United States Congress to adopt a transportation funding bill. The terms and conditions of such legislation change as often as a new act is required to reauthorize programs state and local governments have come to depend on to meet their transportation needs. Recognizing that the future terms and conditions of bills debated in Congress are ultimately unfathomable, it is nevertheless possible to make an educated guess based on the admittedly risk-fraught assumption that the future will resemble the past. Having offered that disclaimer, the results of the financial analysis briefly described below provide numbers for use in programming long-range plan improvements that meet the principal criterion of fiscal constraint: They represent funding amounts that one can *reasonably expect* to be realized.

9.1 HISTORICAL FUNDING ANALYSIS

While metropolitan planning organizations (MPOs) take different approaches to the task of forecasting how much funding can reasonably be expected from Federal, state and local sources, Gulf Regional Planning (GRPC) has always proceeded in this endeavor by assuming that expenditures over the next 20 years or so will probably be consistent with the spending that has occurred in the previous decade or two. The Mississippi Department of Transportation (MDOT) has facilitated this approach by providing comprehensive data regarding projects funded in part with state or Federal contributions. For the present financial analysis, MDOT furnished a database listing all transportation expenditures in Hancock, Harrison and Jackson counties during the 15-year period from 1999 through 2013, the base year for development of the 2040 MTP.

Total spending for transportation improvements amounted to more than \$1.493 billion in actual dollars (see Table 9-1). In order to convert that amount to monetary terms consistent with the 2013 value of the dollar, inflation factors derived from the *Consumer Price Index* were applied to the project costs for each past year (U. S. Department of Labor, Bureau of Labor Statistics 2015). The inflation-adjusted total for the 15-year analysis period exceeded \$1.748 billion. Of that total more than 83 percent went to construction

projects--\$1.461 billion in 2013 real-dollar terms--and 62 percent of all construction funds were expended on new bridges. Virtually all of the \$906 million (in 2013 dollars) spent for new spans went for the construction of bridges to carry U. S. Highway 90 (US 90) across the Bay of Saint Louis and the Bay of Biloxi, replacing the structures destroyed by Hurricane Katrina in 2005. That represented nearly 52 percent of all transportation spending, including expenditures for facilities and equipment, maintenance and non-roadway-related items. Roadway construction costs represented another 24 percent of all spending, totaling \$347 million. The remaining construction costs were distributed among new interchanges, roadway widening and overlay projects, bicycle and pedestrian facilities and intersection improvements.

Table 9-1:

MISSISSIPPI GULF COAST TRANSPORTATION FUNDING BY CATEGORY OF EXPENDITURE: 1999-2013

CATEGORY	TOTAL EXPENDITURE (1)	ADJUSTED TOTAL EXPENDITURE (2)	AVERAGE ANNUAL EXPENDITURE (1)	ADJUSTED AVG ANNUAL EXPENDITURE (2)	PCT OF TOTAL
Bicycle and Pedestrian Facilities	\$9,980,314	\$12,106,704	\$665,354	\$807,114	0.69
Bridge Construction	\$760,759,430	\$906,080,239	\$50,717,295	\$60,405,349	51.81
Interstate/Interchange	\$59,095,495	\$59,624,900	\$3,939,700	\$3,974,993	3.41
Intersection Improvements	\$1,300,992	\$1,492,667	\$86,733	\$99,511	0.09
Road Construction	\$347,026,075	\$420,969,714	\$23,135,072	\$28,064,648	24.07
Roadway Widening and Overlay	\$53,685,218	\$61,038,987	\$3,579,015	\$4,069,266	3.49
TOTAL CONSTRUCTION	\$1,231,847,525	\$1,461,313,210	\$82,123,168	\$97,420,881	83.57
Lighting and Safety	\$15,194,363	\$18,099,282	\$1,012,958	\$1,206,619	1.04
Traffic Signals	\$23,357,455	\$27,393,932	\$1,557,164	\$1,826,262	1.57
Roadside Improvements	\$10,405,098	\$12,431,719	\$693,673	\$828,781	0.71
TOTAL FACILITIES/EQUIPMENT	\$48,956,917	\$57,924,933	\$3,263,794	\$3,861,662	3.31
Bridge Maintenance and Repair	\$24,329,154	\$26,949,597	\$1,621,944	\$1,796,640	1.54
Road Maintenance/Reconstruction	\$168,542,363	\$180,746,057	\$11,236,158	\$12,049,737	10.34
TOTAL MAINTENANCE	\$192,871,517	\$207,695,654	\$12,858,101	\$13,846,377	11.88
Facilities (Non-Roadway)	\$19,595,119	\$21,772,917	\$1,306,341	\$1,451,528	1.25
TOTAL NON-ROADWAY-RELATED	\$19,595,119	\$21,772,917	\$1,306,341	\$1,451,528	1.25
TOTAL ALL CATEGORIES	\$1,493,271,078	\$1,748,706,714	\$99,551,405	\$116,580,448	100.00

(1) Actual amounts expended (in current-year dollars).

(2) Real dollars (adjusted for inflation to 2013 base year).

Source: Mississippi Department of Transportation; calculations by Neel-Schaffer, Inc.

Road and bridge maintenance accounted for nearly 12 percent of all money spent—\$192 million. Expenditures for facilities and equipment—street lighting and safety improvements, traffic signals, and roadside or right-of-way enhancements such as rest stops, visitor centers and landscaping—totaled close to \$49 million. Another \$19 million-plus went to non-roadway-related projects.

In order to establish a basis for projecting the amounts that would be available for use in each of the three plan stages (2016-2020, 2021-2030, 2031-2040) the categorized costs were annualized. This yielded an average annual overall expenditure of \$99.55 million for the period from 1999 through 2013. Converting this total to 2013 dollars resulted in an average annual expenditure of \$116.58 million. Of that total more than \$97 million related to construction projects, including \$60 million for bridges and \$28 million for roads.

A further effort to distinguish between state and local projects revealed that, during the historical period studied, approximately 96.7 percent of all transportation expenditures were for state-sponsored projects: \$1.444 billion compared to \$48.92 million for local projects (see Table 9-2). Adjusting the categorical subtotals for inflation resulted in 2013 real-dollar amounts of \$1.694 billion for state-sponsored improvements and \$54.67 million for projects completed under local jurisdiction.

Converting these jurisdictional totals to average annual figures revealed that MDOT spent more than \$96 million a year on projects in the Mississippi Gulf Coast Metropolitan Planning Area (MPA) (see Table 9-3). Local project expenditures averaged \$3.26 million per year. Updating the categorical subtotals to 2013 dollars produced estimated annual expenditures of nearly \$113 million for state-sponsored projects and about \$3.64 million for local improvements.

9.2 PROJECTED FUTURE FUNDING

Federal funding for local projects is provided through the Surface Transportation Program (STP) managed by the Federal Highway Administration (FHWA). STP funds are allocated among the states on a formula apportionment basis for administration by the state department of transportation (DOT). The state DOT is authorized to make use of one-half of the apportioned funds at its own discretion. The other half must be distributed among three groups of recipients: Urbanized areas with population equal to or exceeding 200,000; urban areas with population less than 200,000; and rural areas. Funds may be used for improvements on any Federal-Aid System (FAS) route. FAS routes include National Highway System (NHS) facilities and all other roads that are eligible to receive Federal-aid funding, including functionally classified collectors and arterials in urban areas. The MPO is responsible for the allocation of an urban area's apportionment to specific projects. The program provides 80 percent of the required funding for a project, leaving 20 percent to be furnished by the local sponsor.

MDOT has asserted (in the *Statewide Transportation Improvement Program: Fiscal Year 2015-2019*), "While it is probably reasonable to assume that the levels of state and federal funding for transportation projects in the years ahead will be generally consistent with amounts which have been made available in

**Table 9-2:
MISSISSIPPI GULF COAST TRANSPORTATION FUNDING BY TYPE OF PROJECT
AND JURISDICTIONAL RESPONSIBILITY (1999-2013)**

CATEGORY	1999-2013 EXPENDITURE		
	STATE	LOCAL	TOTAL
Bicycle and Pedestrian Facilities	\$7,024,532	\$2,955,782	\$9,980,314
Bridge Construction	\$760,759,430	\$0	\$760,759,430
Interchange Construction	\$59,095,495	\$0	\$59,095,495
Intersection Improvements	\$1,300,992	\$0	\$1,300,992
Road Construction	\$335,331,616	\$11,694,459	\$347,026,075
Roadway Widening and Overlay	\$53,685,218	\$0	\$53,685,218
TOTAL CONSTRUCTION	\$1,217,197,285	\$14,650,241	\$1,231,847,525
ADJUSTED TOTAL (2013 Dollars)	\$1,443,933,956	\$17,379,253	\$1,461,313,210
Lighting and Safety	\$13,835,037	\$1,359,326	\$15,194,363
Traffic Signals	\$21,053,946	\$2,303,509	\$23,357,455
Roadside Improvements	\$10,405,098	\$0	\$10,405,098
TOTAL EQUIPMENT AND FACILITIES	\$45,294,081	\$3,662,835	\$48,956,916
ADJUSTED TOTAL (2013 Dollars)	\$53,591,133	\$4,333,800	\$57,924,933
Bridge Maintenance and Repair	\$24,329,154	\$0	\$24,329,154
Road Maintenance	\$137,930,297	\$30,612,066	\$168,542,363
TOTAL MAINTENANCE	\$162,259,451	\$30,612,066	\$192,871,517
ADJUSTED TOTAL (2013 Dollars)	\$174,730,739	\$32,964,914	\$207,695,654
Facilities (Non-Roadway)	\$19,595,119	\$0	\$19,595,119
TOTAL NON-ROADWAY-RELATED	\$19,595,119	\$0	\$19,595,119
ADJUSTED TOTAL (2013 Dollars)	\$21,772,917	\$0	\$21,772,917
TOTAL ALL CATEGORIES	\$1,444,345,936	\$48,925,142	\$1,493,271,078
ADJUSTED TOTAL (2013 Dollars)	\$1,694,028,746	\$54,677,968	\$1,748,706,714

Source: Mississippi Department of Transportation; Neel-Schaffer, Inc.

the past, local funding presents a much more complex and less easily resolved picture.” The problem with the STP has never been a lack of adequate Federal funding; rather it has been the difficulty of securing the local commitment of matching funds. MDOT also notes, “At the same time, the massive infusion of state and federal assistance for emergency repairs in the wake of [Hurricane Katrina] has somewhat skewed the historical data, making it necessary to consider not just near-term conditions but to adopt a longer perspective on past investment in transportation infrastructure and operations.”

**Table 9-3:
 MISSISSIPPI GULF COAST AVERAGE ANNUAL TRANSPORTATION FUNDING
 BY TYPE OF PROJECT AND JURISDICTIONAL RESPONSIBILITY (1999-2013)**

CATEGORY	AVERAGE ANNUAL FUNDING		
	STATE	LOCAL	TOTAL
Bicycle and Pedestrian Facilities	\$468,302	\$197,052	\$665,354
Bridge Construction	\$50,717,295	\$0	\$50,717,295
Interstate/Interchange Construction	\$3,939,700	\$0	\$3,939,700
Intersection Improvements	\$86,733	\$0	\$86,733
Road Construction	\$22,355,441	\$779,631	\$23,135,072
Roadway Widening and Overlay	\$3,579,015	\$0	\$3,579,015
TOTAL CONSTRUCTION	\$81,146,486	\$976,683	\$82,123,168
ADJUSTED TOTAL (2013 Dollars)	\$96,262,264	\$1,158,617	\$97,420,881
Lighting and Safety	\$922,336	\$90,622	\$1,012,958
Traffic Signals	\$1,403,596	\$153,567	\$1,557,164
Roadside Improvements	\$693,673	\$0	\$693,673
TOTAL EQUIPMENT AND FACILITIES	\$3,019,605	\$244,189	\$3,263,794
ADJUSTED TOTAL (2013 Dollars)	\$3,572,742	\$288,920	\$3,861,662
Bridge Maintenance and Repair	\$1,621,944	\$0	\$1,621,944
Road Maintenance	\$9,195,353	\$2,040,804	\$11,236,158
TOTAL MAINTENANCE	\$10,817,297	\$2,040,804	\$12,858,101
ADJUSTED TOTAL (2013 Dollars)	\$11,648,716	\$2,197,661	\$13,846,377
Facilities (Non-Roadway)	\$1,306,341	\$0	\$1,306,341
TOTAL NON-ROADWAY-RELATED	\$1,306,341	\$0	\$1,306,341
ADJUSTED TOTAL (2013 Dollars)	\$1,451,528	\$0	\$1,451,528
TOTAL ALL CATEGORIES	\$96,289,729	\$3,261,676	\$99,551,405
ADJUSTED TOTAL (2013 Dollars)	\$112,935,250	\$3,645,198	\$116,580,448

Source: Mississippi Department of Transportation; Neel-Schaffer, Inc.

The huge expenditures required to replace the Highway 90 bridges represented a one-time emergency infusion of funds that cannot be expected to recur on a regular basis. Therefore those costs were eliminated from further consideration in developing the forecast of future funding availability. Moreover, in forecasting short-term funding for local projects, the historical data were set aside in favor of amounts included in the current fiscally constrained Statewide Transportation Improvement Program (STIP).

Table 9-4:
PROGRAMMED FUNDING FOR LOCAL PROJECTS: FISCAL YEARS 2015-2019

SOURCE	BASE ANNUAL AMOUNT		
	Federal	Local	Total
Surface Transportation Program (less set-asides)	\$3,650,000	\$912,500	\$4,562,500
Safety Projects (set-aside)	\$500,000	\$0	\$500,000
Bicycle, Pedestrian and Transit Projects (set-aside)	\$500,000	\$125,000	\$625,000
MPO Studies/Projects (set-aside)	\$400,000	\$100,000	\$500,000
Transportation Alternatives Program	\$300,000	\$75,000	\$375,000
TOTAL	\$5,350,000	\$1,212,500	\$6,562,500
SOURCE	TOTAL AMOUNT		
	Federal	Local	Total
Surface Transportation Program (less set-asides)	\$33,151,320	\$4,562,500	\$37,713,820
Safety Projects (set-aside)	\$3,187,000	\$0	\$3,187,000
Bicycle, Pedestrian and Transit Projects (set-aside)	\$2,500,000	\$625,000	\$3,125,000
MPO Studies/Projects (set-aside)	\$2,000,000	\$500,000	\$2,500,000
Transportation Alternatives Program	\$1,500,000	\$375,000	\$1,875,000
TOTAL	\$42,338,320	\$6,062,500	\$48,400,820

Note: Total for Surface Transportation Program (less set-asides) includes \$14,901,320 in carryover funds.

Total for Safety Projects (set-aside) includes \$687,000 in carryover funds.

Source: Mississippi Department of Transportation (2014), Statewide Transportation Improvement Program: 2015-2019.

The STIP assumes an annual allocation of \$5,050,000 in STP funds and \$300,000 in Transportation Alternatives Program (TAP) funding for the Mississippi Gulf Coast (see Table 9-4). Local match of \$1,212,500 makes for a programmed annual total of \$6,562,500. In addition, the total amount available for transportation projects during the five-year period covered by the STIP includes \$14,901,320 in carryover funds for STP projects and \$687,000 in carryover funds for safety projects. The overall amount available for transportation projects during the current period (2015-2019) is \$48,400,820. The assumption was made that this same amount would be available for the five-year period from 2016 through 2020. Furthermore, it was assumed that the current set-asides for safety projects and alternative transportation improvements (\$500,000 each), and for MPO studies and other unspecified uses (\$400,000), would be continued. The Transportation Policy Committee (TPC) for the Mississippi Gulf Coast MPO has committed 10 percent of its annual allotment of STP funds for projects designed to enhance the safety of individuals traveling by all modes in the area. The TPC has committed an equal amount for improvements that facilitate travel by bicycle, on foot or by transit. These funds are in addition to those that local governments can tap under the Transportation Alternatives Program (TAP).

The TAP was authorized under Section 1122 of the *Moving Ahead for Progress in the 21st Century Act* (MAP-21). Section 1122 reserves two percent of the total amount authorized for apportionment to the states from the Highway Trust Fund Highway Account each fiscal year. Permitted uses include on- and off-road pedestrian and bicycle facilities; infrastructure projects for improving non-driver access to public transportation and for enhancing personal mobility; community improvement activities; environmental mitigation; recreational trails; safe routes to school; and projects for planning, designing or constructing roadways largely located within the right-of-way limits of former Interstate Highway System facilities or other divided highways. The TAP apportionment for each state includes separate amounts for urban areas with population greater than 200,000; for those with population greater than 5,000 but less than 200,000; and for areas with 5,000 or fewer residents. The Gulfport Urbanized Area (UZA), with 2010 population of 208,948, receives an annual apportionment of TAP funds. Local governments located in the Pascagoula UZA, which had a 2010 population of 50,428, have to request TAP funding from the account for urban areas with less than 200,000 residents administered by MDOT.

MDOT assumed a three percent per annum increase in capital and operating expenses in estimating project costs for improvements to state-maintained facilities. Federal regulations contain an explicit requirement that project costs be expressed not in real dollars but in “year of expenditure dollars.” These might better be labeled “unreal dollars” since they have no basis in reality. The collapse of oil prices has left state DOTs strapped for cash and called into question the assumption of never-ending monetary inflation. Nevertheless, the requirement that “future dollars” be used in estimating project costs stands and must be met. In order to project the availability of future funding for transportation improvements in a manner consistent with the requirement for fiscal constraint, the average annual expenditure amounts previously developed for the base year (2013) were first updated to 2015 dollars, assuming an annual inflation rate of one percent. The same rate was then applied to all succeeding years from 2016 through 2040 in order to calculate the projected availability of funds for all categories and sub-categories of transportation improvements in the short-term (2016-2020), intermediate (2021-2030) and long-range (2031-2040) planning periods. This resulted in the following projected totals for the three stages of the long-range transportation plan (see tables 9-5, 9-6 and 9-7):

- 2016-2020 \$ 256,811,419
- 2021-2035 \$ 553,590,961
- 2031-2040 \$ 611,508,825

These totals include all potential expenditures for transportation-related improvements. The following amounts are projected to be available for maintenance projects:

	<u>Bridge Maintenance</u>	<u>Road Maintenance</u>	<u>Total Maintenance</u>
2016-2020	\$ 8,523,403	\$ 59,046,630	\$ 67,570,033
2021-2030	\$ 18,373,323	\$ 127,282,816	\$ 145,656,139
2031-2040	\$ 20,295,579	\$ 140,599,414	\$ 160,894,993

Table 9-5:

MISSISSIPPI GULF COAST PROJECTED TRANSPORTATION FUNDING BY CATEGORY OF EXPENDITURE: STAGE 1 (2016-2020)

CATEGORY	AVERAGE ANNUAL EXPENDITURE		2016-2020 PROJECTED EXPENDITURE					TOTAL
	(2013 \$\$)	(2015 \$\$)	2016	2017	2018	2019	2020	
Bicycle and Pedestrian	\$665,354	\$678,661	\$685,448	\$692,302	\$699,225	\$706,218	\$713,280	\$3,496,474
Interstate/Interchange	\$3,974,993	\$4,054,493	\$4,095,038	\$4,135,988	\$4,177,348	\$4,219,122	\$4,261,313	\$20,888,808
Road Improvements	\$26,800,819	\$27,336,835	\$27,610,204	\$27,886,306	\$28,165,169	\$28,446,821	\$28,731,289	\$140,839,788
<i>Total Construction</i>	\$31,441,166	\$32,069,990	\$32,390,690	\$32,714,596	\$33,041,742	\$33,372,160	\$33,705,881	\$165,225,069
Lighting, Safety, Signals	\$2,570,121	\$2,621,524	\$2,647,739	\$2,674,216	\$2,700,958	\$2,727,968	\$2,755,248	\$13,506,129
Roadside Improvements	\$693,673	\$707,547	\$714,622	\$721,768	\$728,986	\$736,276	\$743,639	\$3,645,291
<i>Total Equipment and Facilities</i>	\$3,263,794	\$3,329,070	\$3,362,361	\$3,395,985	\$3,429,944	\$3,464,244	\$3,498,886	\$17,151,420
Bridge Maintenance and Repair	\$1,621,944	\$1,654,382	\$1,670,926	\$1,687,636	\$1,704,512	\$1,721,557	\$1,738,773	\$8,523,403
Road Maintenance	\$11,236,158	\$11,460,881	\$11,575,490	\$11,691,244	\$11,808,157	\$11,926,238	\$12,045,501	\$59,046,630
<i>Total Maintenance</i>	\$12,858,101	\$13,115,263	\$13,246,416	\$13,378,880	\$13,512,669	\$13,647,795	\$13,784,273	\$67,570,033
Facilities (Non-Roadway)	\$1,306,341	\$1,332,468	\$1,345,793	\$1,359,251	\$1,372,843	\$1,386,572	\$1,400,437	\$6,864,896
<i>Total Facilities (Non-Roadway)</i>	\$1,306,341	\$1,332,468	\$1,345,793	\$1,359,251	\$1,372,843	\$1,386,572	\$1,400,437	\$6,864,896
TOTAL								\$256,811,419

Table 9-6:

MISSISSIPPI GULF COAST PROJECTED TRANSPORTATION FUNDING BY CATEGORY OF EXPENDITURE: STAGE 2 (2021-2030)

CATEGORY	AVG ANN EXPENDITURE (2013 \$)	2020 PROJECTED EXPENDITURE	2021-2025 PROJECTED EXPENDITURE					5-YEAR SUBTOTAL
			2021	2022	2023	2024	2025	
Bicycle and Pedestrian	\$665,354	\$713,280	\$720,413	\$727,617	\$734,893	\$742,242	\$749,664	\$3,674,829
Interstate/Interchange	\$3,974,993	\$4,261,313	\$4,303,926	\$4,346,965	\$4,390,435	\$4,434,339	\$4,478,683	\$21,954,349
Road Improvements	\$26,800,819	\$28,731,289	\$29,018,602	\$29,308,788	\$29,601,876	\$29,897,894	\$30,196,873	\$148,024,032
<i>Total Construction</i>	\$31,441,166	\$88,038,521	\$34,042,940	\$34,383,370	\$34,727,204	\$35,074,476	\$35,425,220	\$173,653,210
Lighting, Safety, Signals	\$2,570,121	\$2,755,248	\$2,782,800	\$2,810,628	\$2,838,734	\$2,867,122	\$2,895,793	\$14,195,078
Roadside Improvements	\$693,673	\$743,639	\$751,075	\$758,586	\$766,172	\$773,833	\$781,572	\$3,831,238
<i>Total Equipment and Facilities</i>	\$3,263,794	\$3,498,886	\$3,533,875	\$3,569,214	\$3,604,906	\$3,640,955	\$3,677,365	\$18,026,315
Bridge Maintenance and Repair	\$1,621,944	\$1,738,773	\$1,756,160	\$1,773,722	\$1,791,459	\$1,809,374	\$1,827,467	\$8,958,183
Road Maintenance	\$11,236,158	\$12,045,501	\$12,165,956	\$12,287,615	\$12,410,492	\$12,534,596	\$12,659,942	\$62,058,602
<i>Total Maintenance</i>	\$12,858,101	\$13,784,273	\$13,922,116	\$14,061,337	\$14,201,951	\$14,343,970	\$14,487,410	\$71,016,784
Facilities (Non-Roadway)	\$1,306,341	\$1,400,437	\$1,414,442	\$1,428,586	\$1,442,872	\$1,457,301	\$1,471,874	\$7,215,074
<i>Total Facilities (Non-Roadway)</i>	\$1,306,341	\$1,400,437	\$1,414,442	\$1,428,586	\$1,442,872	\$1,457,301	\$1,471,874	\$7,215,074

TOTAL (5 Years) \$269,911,384

CATEGORY	AVG ANN EXPENDITURE (2013 \$)	2025 PROJECTED EXPENDITURE	2026-2030 PROJECTED EXPENDITURE					5-YEAR SUBTOTAL
			2026	2027	2028	2029	2030	
Bicycle and Pedestrian	\$665,354	\$749,664	\$757,161	\$764,733	\$772,380	\$780,104	\$787,905	\$3,862,282
Interstate/Interchange	\$3,974,993	\$4,478,683	\$4,523,470	\$4,568,705	\$4,614,392	\$4,660,535	\$4,707,141	\$23,074,242
Road Improvements	\$26,800,819	\$30,196,873	\$30,498,842	\$30,803,830	\$31,111,869	\$31,422,987	\$31,737,217	\$155,574,746
<i>Total Construction</i>	\$31,441,166	\$92,529,370	\$35,779,473	\$36,137,268	\$36,498,640	\$36,863,627	\$37,232,263	\$182,511,270
Lighting, Safety, Signals	\$2,570,121	\$2,895,793	\$2,924,751	\$2,953,998	\$2,983,538	\$3,013,374	\$3,043,508	\$14,919,169
Roadside Improvements	\$693,673	\$781,572	\$789,387	\$797,281	\$805,254	\$813,307	\$821,440	\$4,026,669
<i>Total Equipment and Facilities</i>	\$3,263,794	\$3,677,365	\$3,714,138	\$3,751,280	\$3,788,793	\$3,826,680	\$3,864,947	\$18,945,838
Bridge Maintenance and Repair	\$1,621,944	\$1,827,467	\$1,845,742	\$1,864,200	\$1,882,842	\$1,901,670	\$1,920,687	\$9,415,140
Road Maintenance	\$11,236,158	\$12,659,942	\$12,786,542	\$12,914,407	\$13,043,551	\$13,173,987	\$13,305,727	\$65,224,214
<i>Total Maintenance</i>	\$12,858,101	\$14,487,410	\$14,632,284	\$14,778,607	\$14,926,393	\$15,075,657	\$15,226,413	\$74,639,354
Facilities (Non-Roadway)	\$1,306,341	\$1,471,874	\$1,486,592	\$1,501,458	\$1,516,473	\$1,531,638	\$1,546,954	\$7,583,116
<i>Total Facilities (Non-Roadway)</i>	\$1,306,341	\$1,471,874	\$1,486,592	\$1,501,458	\$1,516,473	\$1,531,638	\$1,546,954	\$7,583,116

TOTAL (5 Years) \$283,679,578

TOTAL - Stage 2 \$553,590,961

Table 9-7:

MISSISSIPPI GULF COAST PROJECTED TRANSPORTATION FUNDING BY CATEGORY OF EXPENDITURE: STAGE 3 (2031-2040)

CATEGORY	AVG ANN EXPENDITURE (2013 \$\$)	2030 PROJECTED EXPENDITURE	2031-2035 PROJECTED EXPENDITURE					5-YEAR SUBTOTAL
			2031	2032	2033	2034	2035	
Bicycle and Pedestrian	\$665,354	\$787,905	\$795,784	\$803,742	\$811,779	\$819,897	\$828,096	\$4,059,297
Interstate/Interchange	\$3,974,993	\$4,707,141	\$4,754,212	\$4,801,755	\$4,849,772	\$4,898,270	\$4,947,252	\$24,251,261
Road Improvements	\$26,800,819	\$31,737,217	\$32,054,589	\$32,375,135	\$32,698,887	\$33,025,876	\$33,356,134	\$163,510,621
<i>Total Construction</i>	\$31,441,166	\$97,249,298	\$37,604,586	\$37,980,631	\$38,360,438	\$38,744,042	\$39,131,483	\$191,821,180
Lighting, Safety, Signals	\$2,570,121	\$3,043,508	\$3,073,943	\$3,104,682	\$3,135,729	\$3,167,086	\$3,198,757	\$15,680,197
Roadside Improvements	\$693,673	\$821,440	\$829,654	\$837,951	\$846,330	\$854,793	\$863,341	\$4,232,070
<i>Total Equipment and Facilities</i>	\$3,263,794	\$3,864,947	\$3,903,597	\$3,942,633	\$3,982,059	\$4,021,880	\$4,062,098	\$19,912,267
Bridge Maintenance and Repair	\$1,621,944	\$1,920,687	\$1,939,894	\$1,959,292	\$1,978,885	\$1,998,674	\$2,018,661	\$9,895,407
Road Maintenance	\$11,236,158	\$13,305,727	\$13,438,784	\$13,573,172	\$13,708,904	\$13,845,993	\$13,984,452	\$68,551,304
<i>Total Maintenance</i>	\$12,858,101	\$15,226,413	\$15,378,678	\$15,532,464	\$15,687,789	\$15,844,667	\$16,003,114	\$78,446,711
Facilities (Non-Roadway)	\$1,306,341	\$1,546,954	\$1,562,424	\$1,578,048	\$1,593,828	\$1,609,767	\$1,625,864	\$7,969,931
<i>Total Facilities (Non-Roadway)</i>	\$1,306,341	\$1,546,954	\$1,562,424	\$1,578,048	\$1,593,828	\$1,609,767	\$1,625,864	\$7,969,931

TOTAL (5 Years) \$298,150,088

CATEGORY	AVG ANN EXPENDITURE (2013 \$\$)	2035 PROJECTED EXPENDITURE	2036-2040 PROJECTED EXPENDITURE					5-YEAR SUBTOTAL
			2036	2037	2038	2039	2040	
Bicycle and Pedestrian	\$665,354	\$828,096	\$836,377	\$844,741	\$853,188	\$861,720	\$870,337	\$4,266,362
Interstate/interchange	\$3,974,993	\$4,947,252	\$4,996,725	\$5,046,692	\$5,097,159	\$5,148,130	\$5,199,612	\$25,488,317
Road Improvements	\$26,800,819	\$33,356,134	\$33,689,696	\$34,026,593	\$34,366,859	\$34,710,527	\$35,057,632	\$171,851,306
<i>Total Construction</i>	\$31,441,166	\$102,209,990	\$39,522,797	\$39,918,025	\$40,317,205	\$40,720,377	\$41,127,581	\$201,605,985
Lighting, Safety, Signals	\$2,570,121	\$3,198,757	\$3,230,745	\$3,263,052	\$3,295,683	\$3,328,639	\$3,361,926	\$16,480,044
Roadside Improvements	\$693,673	\$863,341	\$871,975	\$880,695	\$889,502	\$898,397	\$907,380	\$4,447,948
<i>Total Equipment and Facilities</i>	\$3,263,794	\$4,062,098	\$4,102,719	\$4,143,747	\$4,185,184	\$4,227,036	\$4,269,306	\$20,927,992
Bridge Maintenance and Repair	\$1,621,944	\$2,018,661	\$2,038,848	\$2,059,236	\$2,079,828	\$2,100,627	\$2,121,633	\$10,400,172
Road Maintenance	\$11,236,158	\$13,984,452	\$14,124,297	\$14,265,540	\$14,408,195	\$14,552,277	\$14,697,800	\$72,048,110
<i>Total Maintenance</i>	\$12,858,101	\$16,003,114	\$16,163,145	\$16,324,776	\$16,488,024	\$16,652,904	\$16,819,433	\$82,448,282
Facilities (Non-Roadway)	\$1,306,341	\$1,625,864	\$1,642,123	\$1,658,544	\$1,675,130	\$1,691,881	\$1,708,800	\$8,376,477
<i>Total Facilities (Non-Roadway)</i>	\$1,306,341	\$1,625,864	\$1,642,123	\$1,658,544	\$1,675,130	\$1,691,881	\$1,708,800	\$8,376,477

TOTAL (5 Years) \$313,358,736

TOTAL - Stage 3 \$611,508,825

Projected expenditures for roadside improvements, such as rest stops and landscaping, are not contemplated in the Staged Improvement Program presented in Chapter 11. Nor are costs that may be incurred for non-roadway facilities. The focus of the program is on needed surface transportation improvements in four categories: Alternative Transportation; Safety Improvements; Roadway Construction; and Interstate/Interchange Improvements. The Alternative Transportation category includes pedestrian and bicycle facilities and public transportation improvements funded through the Surface Transportation Program rather than transit-only funding sources administered by the Federal Transit Administration. Safety improvements may include lighting, signage, signalization, enhanced signal control systems, railroad-highway crossing protection devices, traffic monitoring equipment, channelization and other intersection geometry improvements, or other actions intended to make travel safer.

Roadway Construction projects fall into three principal groups: (1) New construction involving the extension or realignment of existing routes or the building of entirely new streets and highways; (2) Improvements to existing roads such as the addition of turn or travel lanes, roadway reconstruction, or the installation of raised medians and other access management measures; and (3) Roadway widening and overlay projects. The Interstate/Interchange category is reserved for improvements to the interstate highway system, including the addition of travel lanes, construction of new interchanges, or reconstruction of existing interchanges.

Table 9-8:
PROJECTED STAGED IMPROVEMENT PROGRAM FUNDING BY CATEGORY

FUNDING CATEGORY	PROJECTED FUNDING AVAILABILITY			
	Stage 1 2016-2020	Stage 2 2021-2030	Stage 3 2031-2040	TOTAL
Alternative Transportation (Local)	\$5,680,000	\$10,939,316	\$12,083,810	\$28,703,126
Safety Improvements (Local)	\$3,187,000	\$5,336,252	\$5,894,591	\$14,417,843
Road Construction (Local)	\$40,313,820	\$53,494,600	\$59,091,319	\$152,899,739
Road Construction (State)	\$100,525,968	\$250,104,178	\$276,270,608	\$626,900,754
Interstate/Interchange (State)	\$20,888,809	\$45,028,591	\$49,739,578	\$115,656,978
Safety Improvements (State)	\$11,006,129	\$23,777,995	\$26,265,650	\$61,049,774
TOTAL	\$181,601,726	\$388,680,932	\$429,345,556	\$999,628,214

Note: Alternative Transportation amounts shown in previous tables (under "Bicycle and Pedestrian Facilities") have been adjusted to achieve consistency with the Statewide Transportation Improvement Program. Stage 1 Road Construction (Local) amount includes Surface Transportation Program (STP) carryover funds (\$14,901,320) from previous years. Stage 1 Safety Improvements (Local) amount also includes STP carryover funds (\$687,000).

Source: Mississippi Department of Transportation (2014): Statewide Transportation Improvement Program: 2015-2019.

The total amount projected to be available for improvements in these four categories over the next 25 years falls just below \$1 billion (see Table 9-8). More than three-quarters of that total—approximately \$780 million—falls in the Road Construction category. The anticipated availability of funding for the other three categories is roughly equal to the following amounts: Interstate/Interchange Improvements - \$115 million; Safety - \$75 million; Alternative Transportation - \$28 million. A little more than \$800 million is projected to be available for state-maintained highway projects; a little less than \$200 million for local street and highway improvements, bicycle and pedestrian facilities, and safety projects.

Federal funding for public transportation is available through the Federal Transit Administration (FTA). Programs include the Discretionary Grant Program (Section 5309), the Enhanced Mobility for Seniors and Individuals with Disabilities Program (Section 5310), the Job Access/Reverse Commute Program (Section 5316), the New Freedom Program (5317) and the Transportation Planning Program (Section 5303). (Projected funding for Coast Transit Authority is addressed in the *Mississippi Gulf Coast Transit Development Update: 2016-2040*.)