

SECTION E

LOUISIANA HIGHWAYS

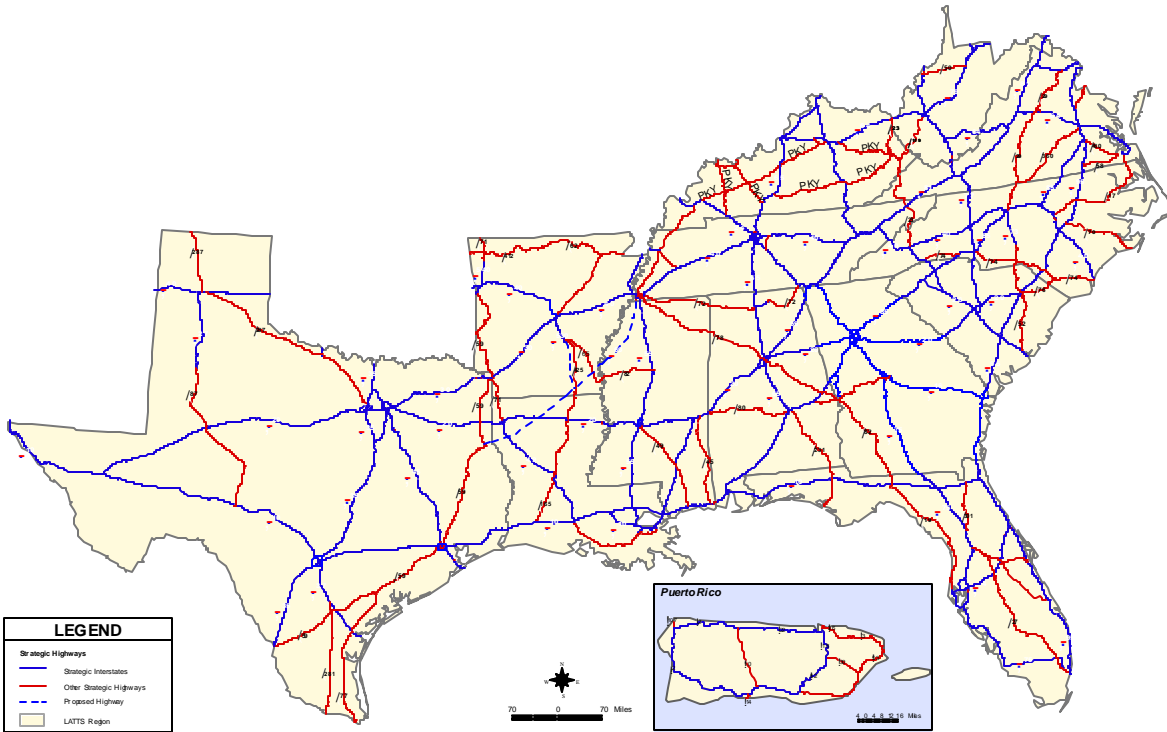
As explained in the main Alliance Report, the specific highways determined to comprise the LATTs Strategic Highway System were identified using a series of criteria to help identify a network of highways which had the greatest significance regarding trade with Latin America. The 22,859-mile mainline LATTs Strategic Highway System shown in Exhibit E-1 is the result of this process.

More than six percent of the mainline LATTs Strategic Highway System (1,431 miles) is located in Louisiana (Exhibit E-2). The Louisiana components¹ include the following:

- ▶ All of Louisiana's 893 miles of interstate highways, including:
 - I-10, a major east-west interstate linking Texas with Baton Rouge, New Orleans, Mobile and Jacksonville through the southern portion of the state
 - I-20, a major east-west interstate linking Texas with Shreveport, Monroe, Jackson, Birmingham, Atlanta and Wilmington, NC
 - I-49 between Shreveport and Lafayette
 - I-55, a major north-south interstate linking St. Louis, Memphis, Jackson and New Orleans
 - I-12, connecting to I-10 at Baton Rouge and near the Mississippi state line
 - I-59, from I-10 near the Mississippi state line to Chattanooga
 - Several urban interstates, including routes I-110, I-210, I-220, I-310, I-510, and I-610
- ▶ 538 miles of non-interstate National Highway System (NHS) facilities
 - U.S. 71 from the Arkansas State Line to I-20 (37 miles), part of LATTs Corridor 8 (Kansas City to New Orleans). This section is mostly a two-lane highway with no access control. It is also part of Congressional High Priority Corridor 1 (I-49) between Kansas City and Shreveport.

¹ Mileage, number of lanes, pavement condition and other data reported herein were taken from the HPMS Database, as discussed subsequently, and may differ from information in other databases.

**Exhibit E-1
LATS STRATEGIC HIGHWAY SYSTEM**



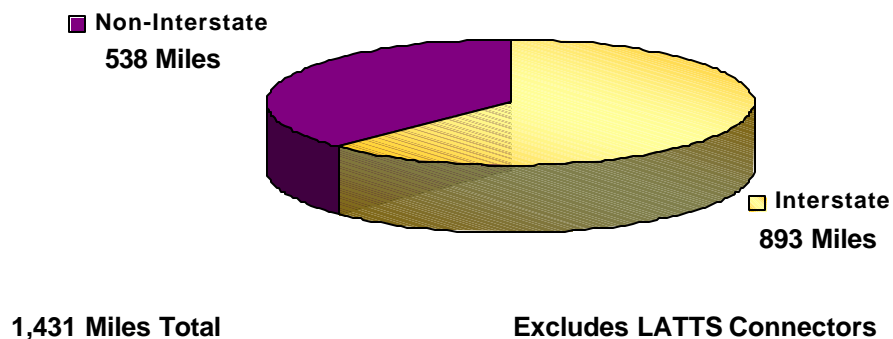
**Exhibit E-2
LOUISIANA LATTTS HIGHWAY SYSTEM**



- U.S. 90 from Lafayette to New Orleans (157 miles), part of Corridor 14 (I-10) from West Texas to Jacksonville. U.S. 90 is multi-laned with varying levels of access control.
 - U.S. 165/425 from the Arkansas State Line to I-10 east of Lake Charles (210 miles), part of Corridor 21 (U.S. 65/67/165) between St. Louis and Lake Charles. These highways are nearly all two-lane facilities with no access control.
 - The proposed Corridor 18 (Indianapolis to Laredo) also crosses the northwest corner of Louisiana while this facility was included in the LATTTS Strategic Highway System, Corridor 18 was not included in the needs investment analysis since it is a proposed freeway.
- ▶ LATTTS connectors linking a LATTTS Strategic Highway with a LATTTS airport or waterport were included in the Strategic Highway System. However, because of database differences, it was not possible to analyze LATTTS connectors in the same manner and to the same level of detail as for mainline highways. LATTTS connectors are discussed at the conclusion of Section E.

Exhibit E-3 displays the composition of Louisiana’s portion of the LATTTS highways by system.

Exhibit E-3
LATTTS MAINLINE STRATEGIC HIGHWAY SYSTEM – LOUISIANA PORTION



LATTTS HIGHWAYS VS. LATTTS TRADE CORRIDORS

The 22,859 miles of “mainline” LATTTS Strategic Highways were grouped into 25 LATTTS Trade Corridors (Exhibit E-4). The Trade Corridors were established using logical origins/destinations and assigning each highway to only one corridor. Each corridor was assigned a number (1-25) and was referred to by the primary highway within the corridor (i.e., I-40). Portions of seven LATTTS Trade Corridors cross Louisiana, including:

- ▶ Corridor 3 (I-59/81/66) – New Orleans to Washington, D.C. and Pennsylvania
- ▶ Corridor 7 (I-55) – St. Louis to New Orleans
- ▶ Corridor 8 (I-49, U.S. 71) – Kansas City to New Orleans

- ▶ Corridor 13 (I-20) – El Paso to Wilmington
- ▶ Corridor 14 (I-10, I-12, U.S. 90) – West Texas to Jacksonville
- ▶ Corridor 18 (U.S. 59, U.S. 51) – Indianapolis to Laredo
- ▶ Corridor 21 (U.S. 65/67/165/425) – St. Louis to Lake Charles

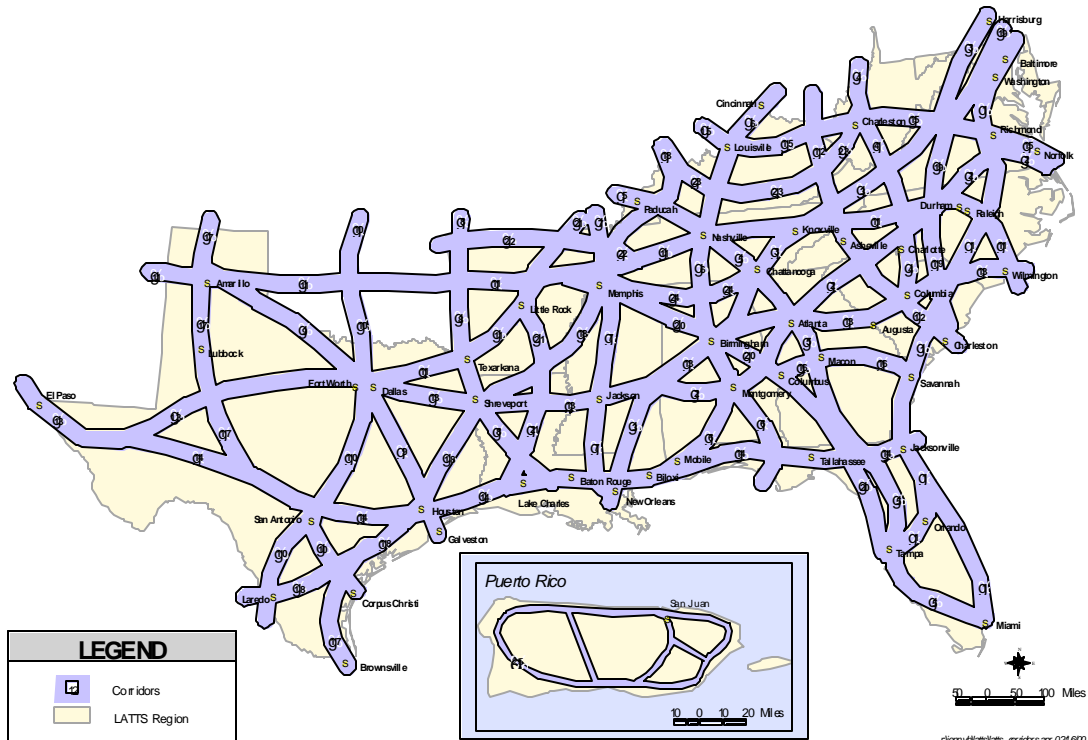
HIGHWAY DATABASES

Two main sources of data were used for the analysis of highway investment. The first one, the Highway Performance Monitoring System (HPMS), includes information about the characteristics and conditions of public highways. The second source of data was the LATTs estimates of current and forecasts of future Latin America trade flows.

HPMS Database

The HPMS database was selected for the LATTs analyses of highway system investment needs because (1) it covered the entire Alliance Region, (2) it employs a consistent format and data definitions and (3) no additional primary data collection was necessary. Nevertheless, it was recognized that (1) the data is time sensitive (i.e., since the latest available information at the time of these analyses was for 1997, it is expected that improvements and additions will have occurred subsequently) (2) the HPMS database may have minor differences relative to other databases that individual Alliance members might use for their own planning and system management purposes and (3) information is not always available for every segment of the LATTs Strategic Highway System.

Exhibit E-4 LATTS TRADE CORRIDORS



For this study, only that portion of the HPMS database corresponding to the selected LATTS Strategic Highway Network was utilized. For Louisiana, the LATTS HPMS database consisted of 477 records describing 1,273 miles of highway on the LATTS Strategic Highway Network.

Trade Flows

As explained in the main Alliance report, 1996 and expected 2020 trade volumes with Latin America were estimated and the portion of this trade that would be using highway facilities was translated into truck flows. The truck flows were then assigned to specific highway facilities using GIS generated shortest time paths. The LATTS truck traffic assignment was then merged with the LATTS HPMS database for further analysis.

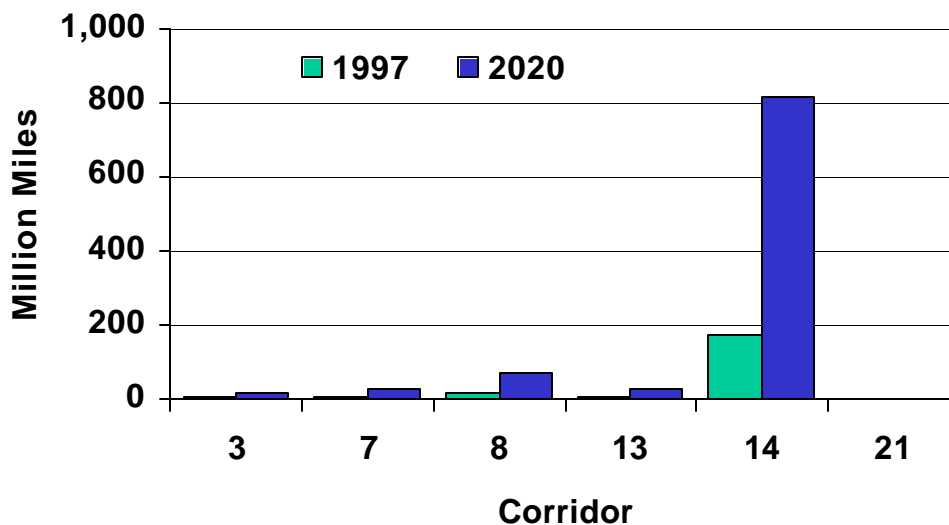
The LATTS procedure for assigning truck flows is appropriate for a macro-scale study such as LATTS. Nevertheless, it should be noted that the procedure produces approximations which may vary slightly from actual conditions. That is, an all-or-nothing assignment on the basis of shortest time paths favors high speed facilities and likely under estimates flows on facilities with lower speeds. In reality, a modest amount of truck flows could choose a lower speed path for a variety of unique reasons. Also, some LATTS trucks undoubtedly will travel on facilities other than those included in the LATTS Strategic Highway System (e.g., a local road to reach a warehouse or plant). Despite these circumstances, the LATTS procedure is deemed to be sufficiently valid for purposes of a regional transportation study.

As a result of this assignment methodology, 813 miles of the Strategic Highway Network in Louisiana were shown to carry LATTS truck traffic. All 813 miles are interstate highways.

LATTS TRUCK TRAFFIC IN LOUISIANA

The LATTS highway database was used to quantify the LATTS truck traffic in terms of annual Vehicle Miles of Travel (VMT) and to compare LATTS truck traffic to total truck traffic (LATTS and others). Results of this analysis by corridor for 1997 and 2020 are illustrated in Exhibit E-5. More detailed information is presented in Exhibit E-6.

**Exhibit E-5
LATTS ANNUAL TRUCK VMT IN LOUISIANA**



Information was available in the HPMS database for six LATTS corridors crossing Louisiana. Only five of those existing corridors were assigned LATTS truck traffic based on study procedures. Corridor 21 (U.S. 67/U.S. 65/U.S. 165 from Lake Charles, LA to St. Louis, MO) was not assigned any LATTS traffic in any Alliance member. It is comprised of U.S. Routes as opposed to interstates.

Corridor 14 (I-10 from West Texas to Jacksonville, FL) was assigned the majority (85 percent) of the LATTS truck traffic in Louisiana, 814 million miles in 2020 which corresponds to an average annual daily truck volume of 4,187 LATTS trucks for all LATTS highways in this corridor. If only that portion of Corridor 14 which was assigned LATTS truck traffic was included, this average truck volume would be higher. Corridor 3 (I-59/I-81/I-66 from New Orleans, LA to Washington D.C. and Pennsylvania) is very short in Louisiana so it was assigned a much lower portion of the total LATTS traffic, less than 2 percent of the total LATTS truck VMT in 2020. However, it corresponds to a similar average annual daily LATTS trucks volume, about 4,296.

**Exhibit E-6
LOUISIANA LATTS TRUCK TRAFFIC**

Corridor/ Functional Class	Length (Miles)	1997 Annual Truck VMT (Million Miles)				2020 Annual Truck VMT (Million Miles)			
		All Trucks	All Trucks	LATTS	LATTS	All Trucks	All Trucks	LATTS	LATTS
		Full Network	Part. Network	Trucks Only	Percent	Full Network	Part. Network	Trucks Only	Percent
3	I-59, I-81, I-66	New Orleans, LA to DC and Pennsylvania							
R.Interstate	8.18	12.90	12.90	2.96	22.9%	32.23	32.23	12.83	39.8%
R.Other PA	-	-	-	-	0.0%	-	-	-	0.0%
U.Interstate	3.30	6.12	6.12	1.19	19.5%	14.22	14.22	5.18	36.4%
U.Other Fwy.	-	-	-	-	0.0%	-	-	-	0.0%
U.Other PA	-	-	-	-	0.0%	-	-	-	0.0%
TOTAL	11.48	19.02	19.02	4.16	21.8%	46.45	46.45	18.00	38.8%
7	I-55	New Orleans, LA to St. Louis, MO							
R.Interstate	64.64	95.75	95.75	5.71	6.0%	156.08	156.08	25.08	16.1%
R.Other PA	-	-	-	-	0.0%	-	-	-	0.0%
U.Interstate	1.17	2.35	2.35	0.10	4.3%	4.06	4.06	0.44	10.8%
U.Other Fwy.	-	-	-	-	0.0%	-	-	-	0.0%
U.Other PA	-	-	-	-	0.0%	-	-	-	0.0%
TOTAL	65.81	98.10	98.10	5.82	5.9%	160.14	160.14	25.51	15.9%
8	I-49, US 71	New Orleans, LA to Kansas City, MO							
R.Interstate	164.86	145.23	127.28	13.42	10.5%	247.36	220.53	55.71	25.3%
R.Other PA	23.99	6.88	-	-	0.0%	10.00	-	-	0.0%
U.Interstate	43.39	78.59	78.59	4.04	5.1%	121.85	121.85	16.76	13.8%
U.Other Fwy.	-	-	-	-	0.0%	-	-	-	0.0%
U.Other PA	13.31	9.87	-	-	0.0%	14.66	-	-	0.0%
TOTAL	245.55	240.57	205.88	17.46	8.5%	393.88	342.38	72.48	21.2%
13	I-20, US 76	El Paso, TX to Wilmington, NC							
R.Interstate	143.60	306.62	306.62	3.89	1.3%	431.95	431.95	18.81	4.4%
R.Other PA	-	-	-	-	0.0%	-	-	-	0.0%
U.Interstate	63.89	206.68	178.17	1.91	1.1%	291.74	250.57	9.15	3.7%
U.Other Fwy.	-	-	-	-	0.0%	-	-	-	0.0%
U.Other PA	-	-	-	-	0.0%	-	-	-	0.0%
TOTAL	207.49	513.30	484.79	5.80	1.2%	723.69	682.52	27.96	4.1%
14	I-10	West Texas to Jacksonville, FL (also includes I-12 and US 90 in Louisiana)							
R.Interstate	230.35	497.15	485.59	124.57	25.7%	1,310.91	1,293.24	577.66	44.7%
R.Other PA	86.69	84.38	-	-	0.0%	119.14	-	-	0.0%
U.Interstate	169.76	488.68	433.92	50.28	11.6%	947.00	868.82	229.52	26.4%
U.Other Fwy.	8.14	3.78	-	-	0.0%	5.91	-	-	0.0%
U.Other PA	37.73	69.33	12.35	1.78	14.4%	109.19	23.18	6.96	30.0%
TOTAL	532.67	1,143.32	931.86	176.63	19.0%	2,492.15	2,185.24	814.13	37.3%
21	US 67, US 65, US 165	Lake Charles, LA to St. Louis, MO (also includes US 425 in Louisiana)							
R.Interstate	-	-	-	-	0.0%	-	-	-	0.0%
R.Other PA	180.67	90.51	-	-	0.0%	121.64	-	-	0.0%
U.Interstate	-	-	-	-	0.0%	-	-	-	0.0%
U.Other Fwy.	-	-	-	-	0.0%	-	-	-	0.0%
U.Other PA	29.59	36.80	-	-	0.0%	56.34	-	-	0.0%
TOTAL	210.26	127.30	-	-	0.0%	177.98	-	-	0.0%
ALL CORRIDORS									
R.Interstate	611.63	1,057.65	1,028.15	150.55	14.6%	2,178.52	2,134.03	690.08	32.3%
R.Other PA	291.35	181.76	-	-	0.0%	250.79	-	-	0.0%
U.Interstate	281.51	782.42	699.16	57.53	8.2%	1,378.87	1,259.53	261.04	20.7%
U.Other Fwy.	8.14	3.78	-	-	0.0%	5.91	-	-	0.0%
U.Other PA	80.63	116.00	12.35	1.78	14.4%	180.20	23.18	6.96	30.0%
TOTAL	1,273.26	2,141.61	1,739.65	209.85	12.1%	3,994.29	3,416.74	958.08	28.0%

Notes: (1) Total truck VMT for highways carrying LATTS traffic only.
(2) Percentage calculated based on Partial Network.

Of LATTs truck traffic in Louisiana 72 percent is on the rural interstate system and 28 percent is on the urban interstate system. The percentage of LATTs trucks to total trucks is expected to grow from 12 percent in 1997 to 28 percent in 2020 on those highways carrying LATTs traffic (from 10 to 24 percent for the entire LATTs strategic network). This growth in LATTs share of total truck traffic is due to the fact that LATTs truck traffic is expected to increase 4.6 fold between 1997 and 2020 while overall truck traffic would increase by 44 percent only without LATTs trucks and by 87 percent with LATTs trucks. LATTs truck share of total trucks varies from corridor to corridor. The highest share in Louisiana is 37 percent on Corridor 14 and Corridor 3.

IMPACT MEASURES

The purpose of the highway analysis portion of this study was to quantify the LATTs Strategic Network total investment needs and the incremental investment needs that could be attributed to LATTs truck traffic specifically. Because of the macro-scale nature of this study, the investment needs analysis focused on capacity and pavement resurfacing needs.

In order to identify needs due to expected traffic (cars and trucks) other than LATTs and needs specifically attributable to LATTs traffic, two sets of capacity and pavement needs were estimated. First, future needs were estimated based on the “normal” traffic as defined by the HPMS database which includes AADT, truck percentages, and growth rate. Future needs were estimated a second time with the same HPMS traffic plus the “additional” LATTs truck traffic above and beyond the traffic that would be estimated using the “normal” growth. The difference in needs between the two was considered the incremental needs due to growth in LATTs traffic.

Minimum tolerable conditions (MTCs) for both congestion (capacity) and pavement conditions were applied uniformly to all segments of the LATTs Strategic Highway System. These MTCs are described in more detail in the main Alliance report and are summarized below.

- ▶ Capacity needs were based on Level of Service (LOS) not exceeding:
 - LOS C for rural highways
 - LOS D for urban highways
- ▶ Pavement resurfacing needs were based on the following minimum pavement condition rating:
 - Interstate type facilities: PSR 3.0
 - Other facilities: PSR 2.5

The LATTs minimum tolerable conditions are in no way intended to replicate or replace values that individual members of the Alliance might consider to be more appropriate for their circumstances. The LATTs MTCs were established for this study so as to be consistent for all the Alliance members.

To price the identified capacity or pavement needs, the same unit costs were used consistently throughout the Alliance Region. These unit costs were provided by the FHWA and correspond to 1997 national averages. To maintain consistency throughout the Region, no attempt was made to tailor these unit costs to each state beyond the stratification provided by the FHWA.

CAPACITY NEEDS

A needs analysis model was developed to analyze capacity needs for 1997 and 2020. For the year 2020, capacity needs with and without the “additional” LATTs traffic were estimated. The model was then applied to every one of the HPMS records comprising the Louisiana LATTs highway database and the results were summarized. This model applied the same methodology, outlined in the main Alliance report, and found in the HPMS Analytical Package, to calculate capacity needs. The results reflect the information contained in the HPMS Database and do not consider any improvements that may have occurred subsequently or any planned improvements.

Detailed results for Louisiana are presented in Exhibit E-7. The total number of Louisiana LATTs Strategic Highway Network road miles with capacity deficiencies in 1997 and 2020 are shown in columns 4 through 6. For 2020, the amount of capacity deficiencies with and without the “additional” LATTs traffic is shown.

Exhibit E-7
LOUISIANA CAPACITY INVESTMENT NEEDS

Corridor/ Functional Class	Length (Miles)	Existing Lane Miles	Capacity Analysis							
			Deficient Mileage			2020 Needed Lane Miles		2020 Cost in \$Million		
			1997	2020 W/O LATTs Added Traffic	2020 With LATTs Added Traffic	Base	With LATTs Added Traffic	Base	With LATTs Added Traffic	% Increase Due to LATTs
3	I-59, I-81, I-66		New Orleans, LA to DC and Pennsylvania							
R.Interstate	8.18	32.72	-	-	-	-	-	-	-	0.0%
U.Interstate	3.30	13.20	-	-	-	-	-	-	-	0.0%
TOTAL	11.48	45.92	-	-	-	-	-	-	-	0.0%
7	I-55		New Orleans, LA to St. Louis, MO							
R.Interstate	64.64	258.56	-	-	-	-	-	-	-	0.0%
U.Interstate	1.17	4.68	-	-	-	-	-	-	-	0.0%
TOTAL	65.81	263.24	-	-	-	-	-	-	-	0.0%
8	I-49, US 71		New Orleans, LA to Kansas City, MO							
R.Interstate	164.86	666.74	-	-	-	-	-	-	-	0.0%
R.Other PA	23.99	47.98	-	-	-	-	-	-	-	0.0%
U.Interstate	43.39	173.56	-	6.06	6.06	12.12	12.12	42	42	0.0%
U.Other PA	13.31	42.82	-	-	-	-	-	-	-	0.0%
TOTAL	245.55	931.10	-	6.06	6.06	12.12	12.12	42	42	0.0%
13	I-20, US 76		El Paso, TX to Wilmington, NC							
R.Interstate	143.60	574.40	1.70	19.92	19.92	39.84	39.84	44	44	0.0%
U.Interstate	63.89	273.10	9.53	19.89	19.89	42.98	42.98	149	149	0.0%
TOTAL	207.49	847.50	11.23	39.81	39.81	82.82	82.82	193	193	0.0%
14	I-10, I-12, US 90		West Texas to Jacksonville, FL							
R.Interstate	230.35	927.38	8.54	85.17	200.95	187.42	421.88	187	431	130.8%
R.Other PA	86.69	346.76	-	0.63	0.63	1.26	1.26	1	1	0.0%
U.Interstate	169.76	826.50	35.23	76.61	88.55	257.04	298.74	892	1,037	16.2%
U.Other Fwy.	8.14	32.56	-	-	-	-	-	-	-	0.0%
U.Other PA	37.73	171.80	22.31	34.35	34.35	77.44	77.44	165	165	0.0%
TOTAL	532.67	2,305.00	66.08	196.76	324.48	523.16	799.32	1,245	1,634	31.2%
21	US 67, US 65, US 165/425		Lake Charles, LA to St. Louis, MO							
R.Other PA	180.67	410.07	64.07	125.23	125.23	248.85	248.85	187	187	0.0%
U.Other PA	29.59	119.42	3.58	8.44	8.44	21.35	21.35	44	44	0.0%
TOTAL	210.26	529.49	67.65	133.67	133.67	270.20	270.20	231	231	0.0%
ALL CORRIDORS										
R.Interstate	611.63	2,459.80	10.24	105.09	220.87	227.26	461.72	231	475	
R.Other PA	291.35	804.81	64.07	125.86	125.86	250.11	250.11	188	188	0.0%
U.Interstate	281.51	1,291.04	44.76	102.56	114.50	312.14	353.84	1,083	1,228	13.4%
U.Other Fwy.	8.14	32.56	-	-	-	-	-	-	-	0.0%
U.Other PA	80.63	334.04	25.89	42.79	42.79	98.79	98.79	209	209	0.0%
TOTAL	1,273.26	4,922.25	144.96	376.30	504.02	888.30	1,164.46	1,712	2,100	22.7%

These analyses indicate that 145 of the LATTs roadway miles in Louisiana, or 11 percent of the Louisiana portion of the Strategic Network, have existing capacity problems. The analyses also show that the majority of the capacity deficiencies will occur in the next 20 years unless capacity is added.

With the expected “normal” growth (as defined by the HPMS database), a total of 376 road miles or 30 percent of the LATTs network will have congestion problems by 2020. The “additional” LATTs trucks are expected to increase the total to 504 miles or 40 percent of total mileage as noted in Exhibit E-8. In other words, LATTs truck will increase congested miles of roadway by about 34 percent and the number of needed lane miles by 31 percent. These percentages are significant but they also indicate that the majority of the congestion problems in Louisiana are not due solely to LATTs traffic but expected overall growth in total traffic. However, unless these capacity needs are met, LATTs truck traffic will be affected by these capacity deficiencies regardless of the source of traffic. As congestion increases, LATTs trucks like other traffic, will experience lower operating speeds, frequent speed changes, lower reliability, and increased operating costs.

**Exhibit E-8
LOUISIANA 2020 CAPACITY NEEDS
LATTs Strategic Network**

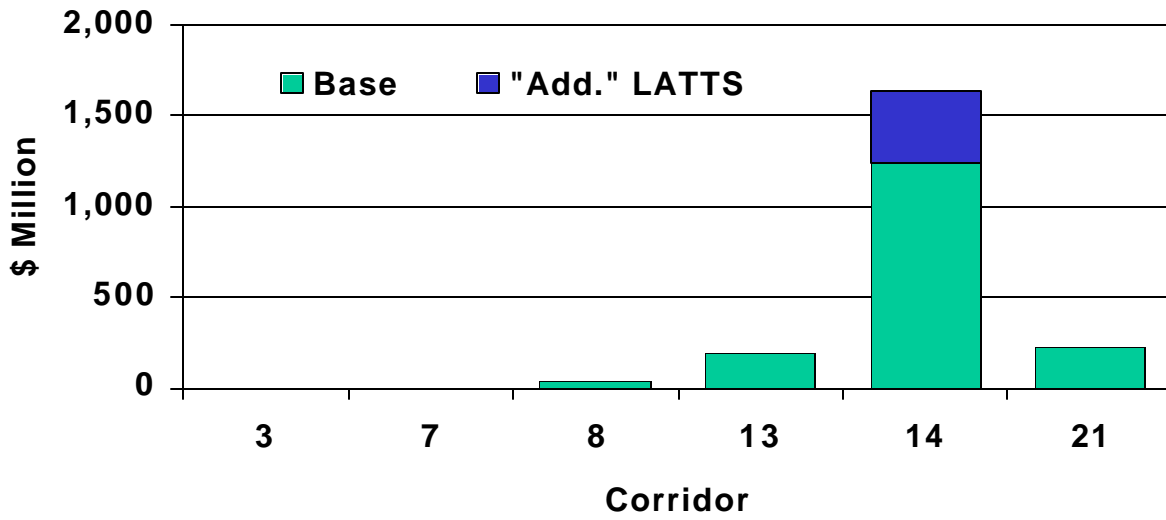
	<u>Deficient Miles</u>	<u>% of Total Miles</u>	<u>Needs (Billion)</u>
“Normal” Growth	376	30%	\$1.7
“Additional” LATTs Traffic	128	10%	\$0.4
Total	504	40%	\$2.1

Based on the HPMS expected growth in traffic, nearly \$1.7 billion will be required in the next 20 years to address congestion problems on the Louisiana portion of the LATTs Strategic Network. The “additional” LATTs traffic will bring that total to \$2.1 billion, a 23 percent increase. The dollar increase in capacity needs due to LATTs traffic is lower than the corresponding increase in terms of needed lane miles because a majority of LATTs truck traffic occurs on rural highways which are less expensive to improve than urban highways.

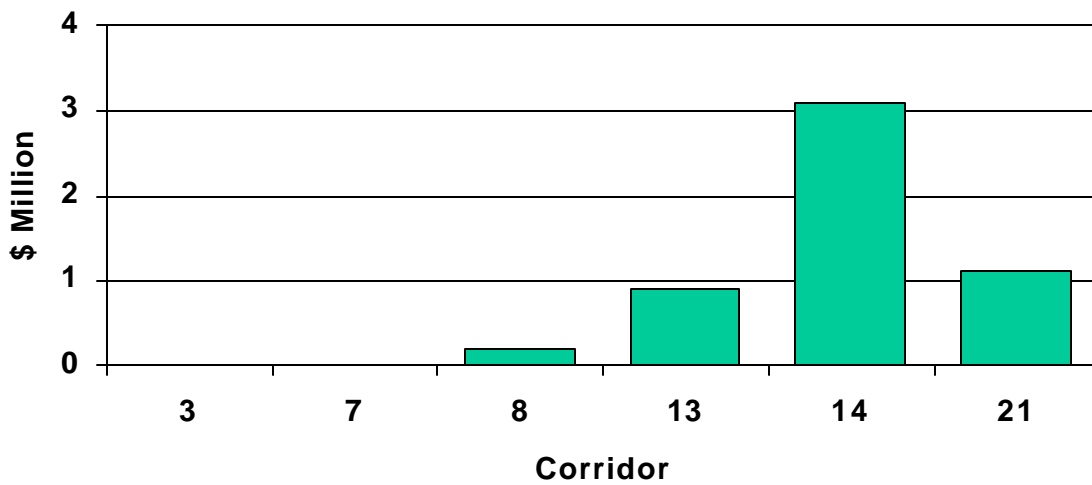
Capacity needs by corridor are illustrated in Exhibit E-9. Total capacity needs by corridor are related to the amount of congestion on a particular corridor and to the total length of the corridor (the longer the corridor, the higher the needs). Corridor 14 (I-10 from West Texas to Jacksonville, FL), which is the most used LATTs corridor and the longest in Louisiana, has the highest capacity needs both in terms of total needs (\$1.6 billion by 2020) and in terms of average needs per mile. A significant portion of this corridor’s capacity needs, 31 percent by 2020, is due to LATTs “additional” truck traffic. Other corridors capacity needs are not increased by the forecast LATTs truck traffic.

**Exhibit E-9
LOUISIANA STRATEGIC HIGHWAY NETWORK
Capacity Needs by Corridor**

Total 2020 Capacity Needs



Average 2020 Capacity Needs per Mile



PAVEMENT NEEDS

For purposes of this study, average annual pavement needs in 2020 were estimated. The number of years it would take for the pavement to deteriorate from new in 2020 to a deficient PSR rating (as defined by the minimum tolerable conditions presented earlier) was calculated for each highway segment. As an indicator of the existing condition of the network, pavement deficiencies were identified for 1997.

Pavements typically are designed to last for a fairly long time. However, as they age and are subjected to traffic loads, they deteriorate. The pavement life measure used in these analyses is dependent on the amount of traffic using the highway and, more specifically, truck traffic (car traffic is a factor in the pavement deterioration rate but it has far less impact). The type of pavement (for example high flexible versus high rigid) is also an important factor affecting pavement deterioration rates. The pavement type on each highway segment, as indicated by the 1997 HPMS database, was used in the estimation of the deterioration rates. The number of lanes indicated for 1997 was used in the calculation of pavement deterioration rate and resurfacing costs. No attempt was made to measure the impact on pavement needs of adding lanes to address the congestion problems identified earlier. Finally, the HPMS-AP methodology for deteriorating pavement was applied in this study. It is based on the concept of 18Kip Equivalent Single Axle Loads. Weather condition or type of subsoil can also influence pavement deterioration rates but, for this study, no other factors beyond traffic and pavement type were used to differentiate pavement deterioration rates between sections.

Each highway segment pavement life was calculated twice. An initial calculation was made using the “base” car and truck traffic from the Louisiana HPMS database. The second calculation was made with the “additional” LATTTS traffic added to it. The difference in the two pavement lives is a measure of the impact of LATTTS traffic.

Results of Louisiana pavement needs for the LATTTS Strategic Highway Network are presented in Exhibit E-10. Based on the HPMS data, a large proportion of the Louisiana portion of the LATTTS Strategic Highway Network, 36 percent or 460 miles, had existing (1997) pavement deficiencies. The highest proportion of pavement deficiencies are found on the interstate system. More than 40 percent of the rural interstate system and 50 percent of the urban interstate system had existing pavement deficiencies. Corridor 14 (I-10 from West Texas to Jacksonville, FL), which carries a majority of LATTTS traffic in Louisiana, had existing pavement deficiency on 42 percent of its length.

**Exhibit E-10
LOUISIANA PAVEMENT RESURFACING INVESTMENT NEEDS**

Corridor/ Functional Class	Length (Miles)	Existing Lane Miles	Pavement Analysis					
			1997 Deficient Mileage	2020 Pavement Life (Years)		2020 Average Annual Cost (\$1,000)		
				W/O LATTS Added Traffic	With LATTS Added Traffic	W/O LATTS Added Traffic	With LATTS Added Traffic	% Increase Due to LATTS
3	I-59, I-81, I-66		New Orleans, LA to DC and Pennsylvania					
R.Interstate	8.18	32.72	2.75	11.5	10.6	311	343	10.3%
U.Interstate	3.30	13.20	3.30	4.2	3.6	640	735	14.8%
TOTAL	11.48	45.92	6.05	9.4	8.6	951	1,077	13.2%
7	I-55		New Orleans, LA to St. Louis, MO					
R.Interstate	64.64	258.56	16.66	10.9	10.4	2,599	2,779	6.9%
U.Interstate	1.17	4.68	0.63	7.3	7.2	167	174	4.2%
TOTAL	65.81	263.24	17.29	10.8	10.3	2,765	2,954	6.8%
8	I-49, US 71		New Orleans, LA to Kansas City, MO					
R.Interstate	164.86	666.74	40.74	11.0	10.9	6,589	6,704	1.7%
R.Other PA	23.99	47.98	13.92	8.7	8.7	390	390	0.0%
U.Interstate	43.39	173.56	6.36	7.5	7.4	6,059	6,245	3.1%
U.Other PA	13.31	42.82	3.85	8.8	8.8	795	795	0.0%
TOTAL	245.55	931.10	64.87	10.1	10.0	13,832	14,134	2.2%
13	I-20, US 76		El Paso, TX to Wilmington, NC					
R.Interstate	143.60	574.40	76.39	9.8	9.7	6,767	6,841	1.1%
U.Interstate	63.89	273.10	48.23	5.3	5.3	12,205	12,226	0.2%
TOTAL	207.49	847.50	124.62	8.4	8.3	18,972	19,067	0.5%
14	I-10, I-12, US 90		West Texas to Jacksonville, FL			(also includes I-12 and US 90 in Louisiana)		
R.Interstate	230.35	927.38	109.79	8.1	5.4	14,095	20,855	48.0%
R.Other PA	86.69	346.76	15.78	9.8	9.8	3,046	3,046	0.0%
U.Interstate	169.76	826.50	82.07	5.4	5.0	36,460	38,780	6.4%
U.Other Fwy.	8.14	32.56	4.88	10.4	10.4	647	647	0.0%
U.Other PA	37.73	171.80	13.22	7.6	7.5	3,464	3,524	1.7%
TOTAL	532.67	2,305.00	225.74	7.3	6.1	57,712	66,853	15.8%
21	US 67, US 65, US 165, US 425		Lake Charles, LA to St. Louis, MO			(also includes US 425 in Louisiana)		
R.Other PA	180.67	410.07	12.08	7.7	7.7	4,025	4,025	0.0%
U.Other PA	29.59	119.42	9.59	9.4	9.4	2,078	2,078	0.0%
TOTAL	210.26	529.49	21.67	8.1	8.1	6,104	6,104	0.0%
ALL CORRIDORS								
R.Interstate	611.63	2,459.80	246.33	9.6	8.5	30,360	37,522	
R.Other PA	291.35	804.81	41.78	8.7	8.7	7,461	7,461	0.0%
U.Interstate	281.51	1,291.04	140.59	5.7	5.4	55,530	58,160	4.7%
U.Other Fwy.	8.14	32.56	4.88	10.4	10.4	647	647	0.0%
U.Other PA	80.63	334.04	26.66	8.4	8.3	6,337	6,397	0.9%
TOTAL	1,273.26	4,922.25	460.24	8.3	7.7	100,336	110,187	9.8%

One would expect that the corridors with the highest concentration of LATTS truck traffic would show the largest impact from LATTS. Exhibit E-10 confirms this expectation.

- ▶ Corridor 3 (I-59/I-81/I-66 from New Orleans, LA to Washington, D.C. and Pennsylvania) was assigned one of the highest concentration of LATTS trucks in terms of daily volume and the second highest reduction in pavement life from 9.4 years to 8.6 years.
- ▶ Corridor 14 (I-10 from West Texas to Jacksonville, FL) which also was assigned one of the highest concentrations of daily LATTS volume (and due to its length was assigned the most VMT from LATTS traffic) will experience the greatest impact on pavement life due to LATTS truck traffic with a reduction from 7.3 years to 6.1 years in 2020.

Total resurfacing costs are a function of the average pavement life and the length of the highways. Corridor 14 (I-10 from West Texas to Jacksonville, FL), the longest LATTS corridor in Louisiana, has the highest average annual resurfacing needs, nearly \$ 67

million with LATTs traffic. It also has the largest incremental resurfacing needs due to LATTs trucks, \$ 9.1 million annually or 16 percent increase.

Future (2020) pavement needs are summarized in Exhibit E-11. Pavement life for the Louisiana portion of the LATTs Strategic Highway Network will average 8.3 years in 2020 without the “additional” LATTs truck traffic and 7.7 years with it. The annual resurfacing costs for the Louisiana portion of the LATTs Strategic Highway Network is estimated to be \$101 million without LATTs “additional” truck traffic and \$110 millions with it, an increase which is 9.8 percent.

**Exhibit E-11
LOUISIANA 2020 PAVEMENT NEEDS
LATTs Strategic Network**

	<u>Pavement Life (Years)</u>	<u>Annual Resurfacing Cost (\$Million)</u>
“Normal” Growth	8.3	\$101
With “Additional” LATTs Traffic	7.7	\$110

OPERATING SPEEDS

Truck operating speed was chosen as a key study performance measure for the LATTs Strategic Highway Network. Truck operating speeds were estimated for each LATTs roadway segment based on the conditions of the roadway, including roadway geometry and alignment, pavement condition, speed limit and traffic volumes. The operating speed calculation for each sample segment or link was based on the methodology of the HPMS Analytical Package used by FHWA to estimate highway needs.

Two types of operating speeds were calculated. One was the average daily operating speed and the other was the peak hour operating speed as defined by the peak hour factor or “K” factor for each road segment. Because it is not known when a truck would travel over a specific highway section during the peak hour, the peak hour operating speed assumed that every section was traveled during peak hour. As a result, the calculated peak hour speed and travel time for an entire corridor is probably somewhat overstated, as it is unlikely that a truck would travel every section during peak hour conditions.

Truck operating speeds were calculated for each LATTs roadway section. Operating speeds over a combination of segments were then calculated by adding travel time and distance for each segment and calculating the new speed.

Truck operating speeds on the Louisiana portion of the LATTs Strategic Highway Network are presented on Exhibit E-12. In this exhibit, Louisiana truck operating speeds estimates are presented by functional class. The total lengths of all the segments, which were used in the analysis of the corridor, are listed first. This is followed by items describing the characteristics of the segments, including average number of lanes, speed limit, and AADT. The purpose of listing these items is to facilitate better understanding of the calculated operating speeds. For example, two/three-lane

highways have lower operating speeds than equivalent four-lane highways because of passing difficulties. Similarly, low speed limits will result in low operating speeds on facilities no matter what the road conditions are.

Average daily and peak period speeds/travel times for trucks also are presented for the base year (1997). Further, truck operating speeds are listed twice for year 2020. The first time, truck operating speeds were calculated assuming the base growth rate, i.e. the growth rate indicated by the HPMS database. The second time, truck operating speeds were calculated with the LATTs "additional" traffic. Overall results for the entire corridor within Louisiana are then listed, as well as the overall time required to travel the entire corridor. By comparing these speed and travel time values (based on present conditions), it is possible to determine which facilities are most efficient today, which facilities are going to experience deteriorating conditions due to traffic growth regardless of LATTs impact, and finally which facilities are going to be most affected by LATTs traffic.

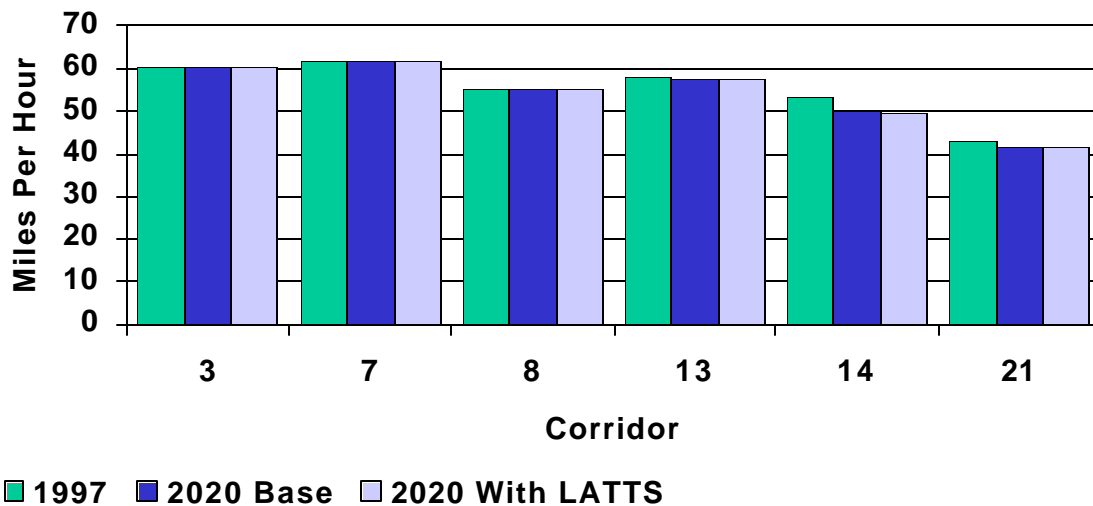
**Exhibit E-12
LOUISIANA TRUCK OPERATING SPEEDS**

Corridor/ Functional Class	Length (Miles)	Average No. Lane	Speed Limit (MPH)	Average 1997 AADT	1997 Truck Speed (MPH)		2020 Truck Speed (MPH) W/O Added LATTTS Traffic		2020 Truck Speed (MPH) With Added LATTTS Traffic	
					Daily Average	Peak Hour	Daily Average	Peak Hour	Daily Average	Peak Hour
3	I-59, I-81, I-66				New Orleans, LA to DC and Pennsylvania					
R.Interstate	8.20	4.0	70.0	21,536	62.5	62.5	62.4	61.2	62.4	61.2
R.Other PA	-	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0
U.Interstate	3.30	4.0	55.0	24,198	56.3	56.3	56.3	56.3	56.3	56.3
U.Other Fwy.	-	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0
U.Other PA	-	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0
Total	11.50									
Average		4.0	64.9	22,301	60.5	60.5	60.5	59.7	60.5	59.7
Time (HR)					0.2	0.2	0.2	0.2	0.2	0.2
7	I-55				New Orleans, LA to St. Louis, MO					
R.Interstate	64.60	4.0	66.0	16,873	61.7	61.7	61.7	60.8	61.7	60.8
R.Other PA	-	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0
U.Interstate	1.20	4.0	70.0	21,849	61.9	61.9	61.9	60.8	61.8	60.8
U.Other Fwy.	-	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0
U.Other PA	-	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0
Total	65.80									
Average		4.0	66.0	16,961	61.7	61.7	61.7	60.8	61.7	60.8
Time (HR)					1.1	1.1	1.1	1.1	1.1	1.1
8	I-49, US 71				New Orleans, LA to Kansas City, MO					
R.Interstate	164.90	4.0	59.8	10,350	61.0	61.0	61.0	61.0	61.0	61.0
R.Other PA	24.00	2.0	55.0	3,737	48.9	44.2	47.8	41.6	47.8	41.6
U.Interstate	43.40	4.0	55.7	20,860	57.2	55.8	57.2	45.6	57.2	41.3
U.Other Fwy.	-	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0
U.Other PA	13.30	3.2	50.2	12,046	26.9	26.5	26.9	25.4	26.9	25.4
Total	245.50									
Average		3.8	57.9	11,653	55.3	54.3	55.1	51.6	55.1	50.6
Time (HR)					4.4	4.5	4.5	4.8	4.5	4.9
13	I-20, US 76				El Paso, TX to Wilmington, NC					
R.Interstate	143.60	4.0	63.9	22,822	59.2	58.9	59.2	55.6	59.2	55.6
R.Other PA	-	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0
U.Interstate	63.90	4.3	56.7	36,606	56.1	46.3	54.6	29.4	54.3	29.4
U.Other Fwy.	-	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0
U.Other PA	-	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0
Total	207.50									
Average		4.1	61.5	27,066	58.2	54.3	57.7	43.6	57.6	43.6
Time (HR)					3.6	3.8	3.6	4.8	3.6	4.8
14	I-10				West Texas to Jacksonville, FL (also includes I-12 and US 90 in Louisiana)					
R.Interstate	230.30	4.0	58.5	33,020	59.0	58.8	58.7	49.8	58.5	41.4
R.Other PA	86.70	4.0	55.0	16,913	54.6	54.5	54.6	53.6	54.6	53.6
U.Interstate	169.80	4.9	54.8	55,147	53.9	34.8	46.4	25.3	45.8	22.7
U.Other Fwy.	8.10	4.0	55.0	12,242	51.0	51.0	51.0	51.0	51.0	51.0
U.Other PA	37.70	4.6	45.8	33,892	30.9	16.7	27.6	13.8	27.3	13.8
Total	532.70									
Average		4.3	55.6	37,195	53.2	41.6	49.8	33.6	49.4	30.3
Time (HR)					10.0	12.8	10.7	15.9	10.8	17.6
21	US 67, US 65, US 165				Lake Charles, LA to St. Louis, MO (also includes US 425 in Louisiana)					
R.Interstate	-	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0
R.Other PA	180.70	2.3	54.0	6,920	47.3	41.9	46.6	40.9	46.6	40.9
U.Interstate	-	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0
U.Other Fwy.	-	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0
U.Other PA	29.60	4.0	43.1	19,365	26.8	23.2	25.8	19.3	25.8	19.3
Total	210.30									
Average		2.5	52.2	8,671	42.7	37.6	41.8	35.4	41.8	35.4
Time (HR)					4.9	5.6	5.0	5.9	5.0	5.9

As illustrated in Exhibit E-13, all corridors with a majority of interstate facilities (Corridors 3, 7, 8, 13 and 14) have average daily operating speeds above 50 MPH in 1997. Corridor 21 has lower average daily speeds around 43 MPH because it is comprised of lower type facilities.

The projected growth in traffic between 1997 and 2020 will not affect this measure of performance significantly. Corridor 14 (I-10 from West Texas to Jacksonville, FL) is the only corridor which will experience some noticeable deterioration in average daily travel speeds, about a 3 MPH reduction, unless new capacity enhancement measures are undertaken.

Exhibit E-13
LOUISIANA STRATEGIC HIGHWAY NETWORK
Average Daily Truck Operating Speeds

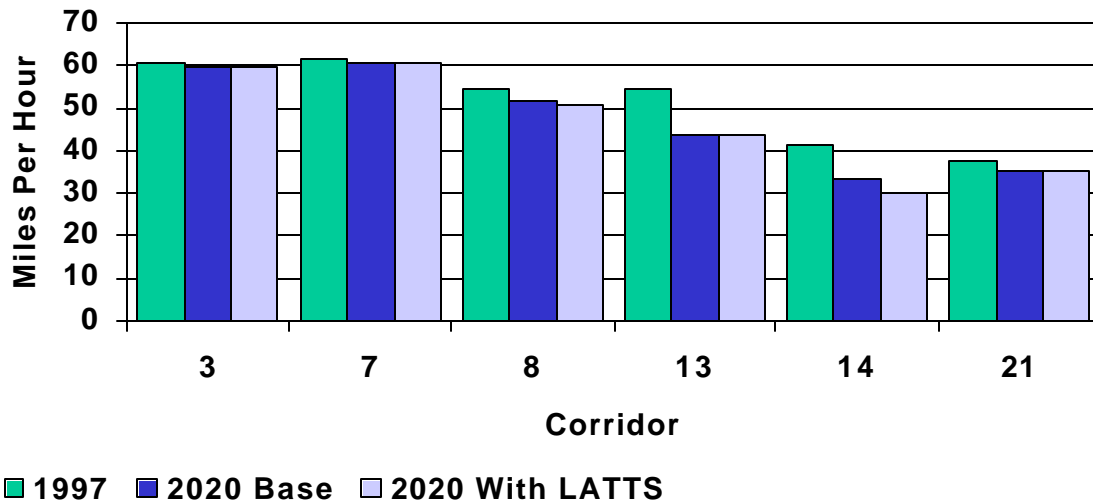


Compared to the impact of the expected traffic growth between 1997 and 2020, the impact of the “additional” LATTs traffic on average daily truck travel speed appears minor. Even the worse case, Corridor 14, will only experience an additional reduction in average daily

speed of 0.4 MPH. One may wonder why there would be such an apparent small impact on average speeds when the impact of LATTs traffic on capacity appeared more significant. The reason is due to the selected minimum tolerable standards used to identify capacity needs. The capacity needs are based on not exceeding LOS C on rural highways and LOS D on urban highways during peak hour. However, traveling speeds are most affected (change rapidly) when the LOS reaches E and F. In other words, capacity needs are based on explicit standards that are higher than those used implicitly in the LATTs speed calculation.

As noted in Exhibit E-14, the expected traffic growth in Louisiana LATTs corridors will affect “peak hour” speeds more significantly, up to 11 MPH for Corridor 13 (I-20/U.S.76 from El Paso, TX to Wilmington, NC) and 8 MPH for Corridor 14 (I-10 from West Texas to Jacksonville, FL).

Exhibit E-14
LOUISIANA STRATEGIC HIGHWAY NETWORK
“Peak-Hour” Truck Operating Speeds



The impact of LATTS “additional traffic” is more pronounced on “peak hour” speeds than on average daily speeds for Corridor 14 and negligible for the other corridors. As mentioned earlier, these travel speeds are estimated assuming no change in capacity on any section of the LATTS highway network and traffic peaking patterns the same as they are today.

CONCLUSION FOR LATTS MAINLINE HIGHWAY

- (1) LATTS truck traffic in Louisiana is expected to grow at a much higher rate than the rest of the traffic in the state. From 1997 to 2020, LATTS truck traffic will increase by 357 percent while all other traffic is expected to increase by only 44 percent.
- (2) About 40 percent of the LATTS Strategic Highway Network in Louisiana will require additional capacity by 2020 at a cost of \$ 2.1 billion. More than 81 percent of these capacity needs are for the interstate system (58 percent for the urban interstate system alone).
- (3) LATTS truck traffic will have an increasing impact on the state highway investment needs for the Strategic Highway Network. By 2020, LATTS “additional” truck traffic will have resulted in:
 - ▶ 34% more highway miles needing capacity improvements.
 - ▶ 23% additional costs to address these capacity needs.
 - ▶ 10% increase in annual pavement resurfacing costs.
- (4) In Louisiana, Corridor 14 (I-10 from West Texas to Jacksonville, FL) will be most affected by LATTS trucks because of the high volume of LATTS trucks using this corridor.

WATERPORT AND AIRPORT INTERMODAL CONNECTORS

The focus of the highway analysis was, appropriately, on the mainline portion of the LATTs Strategic Highway System. This is the portion of the highway network carrying the vast majority of truck travel (vehicle miles) and has “needs” that could be quantified using existing databases. Additionally, the portion of the highway system connecting the LATTs mainline system with the LATTs waterports and airports also were assessed. While these highway intermodal connectors sometimes are overlooked, their deficiencies can significantly impact the efficient movement of vehicles, especially large trucks.

LATTs intermodal connectors are the highways that link the mainline LATTs Strategic System with LATTs intermodal facilities (waterports and airports). To avoid costly new data collection activities, a recently compiled database was used to conduct the connectors analysis. This database, the *NHS Connectors*, was populated by the state DOTs and compiled by the Federal Highway Administration. It includes a high quality sample of the LATTs intermodal connectors. However, it does not contain information for every LATTs intermodal connector. These analyses utilized information for those LATTs intermodal connectors for which information was available in the NHS connectors database at the time the analyzes were performed.

As noted in Exhibit E-15, Louisiana has eight LATTs intermodal connectors for which information was available in the *NHS Inventory Database*. Only the Port of Lake Charles – South Side Terminal (LA8P) connector is owned entirely by the state.

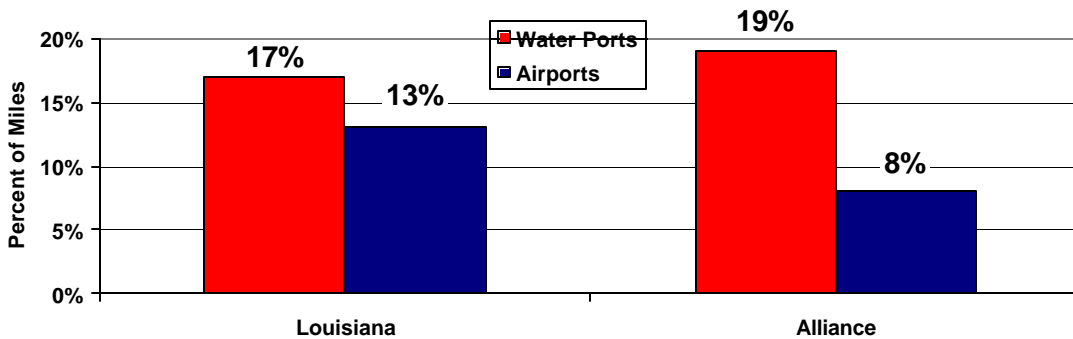
**Exhibit E-15
LATTs INTERMODAL CONNECTORS**

FACILITY ID	FACILITY NAME	LINK MILES	RURAL/URBAN DESIGNATION	OWNERSHIP	AGENCY
LA17P	Port of New Orleans - Jourdan Road Terminal	0.8	Urbanized (>200k)	Municipal Hwy	Regional Planning Commission
LA18P	Port of New Orleans - Downtown Wharves	2	Urbanized (>200k)	Municipal Hwy	Regional Planning Commission
LA19P	Port of New Orleans - Miss. River Term.	1.4	Urbanized (>200k)	Municipal Hwy	Regional Planning Commission
LA6P	Port of Lake Charles - City Docks	1.6	Urbanized (50k to 200k)	Municipal Hwy-State Highway	Imperial Calcasieu Reg. Planning and Dev. Comm.
LA7P	Port of Lake Charles - Bulk Terminal	3.6	Urbanized (50k to 200k)	Municipal Hwy-State Highway	Imperial Calcasieu Reg. Planning and Dev. Comm.
LA8P	Port of Lake Charles - South Side Terminal	8.5	Urbanized (50k to 200k)	State Highway	Imperial Calcasieu Reg. Planning and Dev. Comm.
LA9A	New Orleans International Airport	0.5	Urbanized (>200k)	Municipal Hwy	Regional Planning Commission
LA9A	New Orleans International Airport	2.4	Urbanized (>200k)	Other Local Agency - Municipal Hwy	Regional Planning Commission

Pavement Problems

Louisiana’s LATTs connectors followed Alliance trends in this category, though only three connectors reported pavement condition deficiencies. The Port of New Orleans’ Mississippi River Terminal and the Downtown Wharves reported significant pavement condition deficiencies, as did the New Orleans International Airport’s half-mile connector. All three of these connectors were reported to have 80% or greater pavement deficiency.

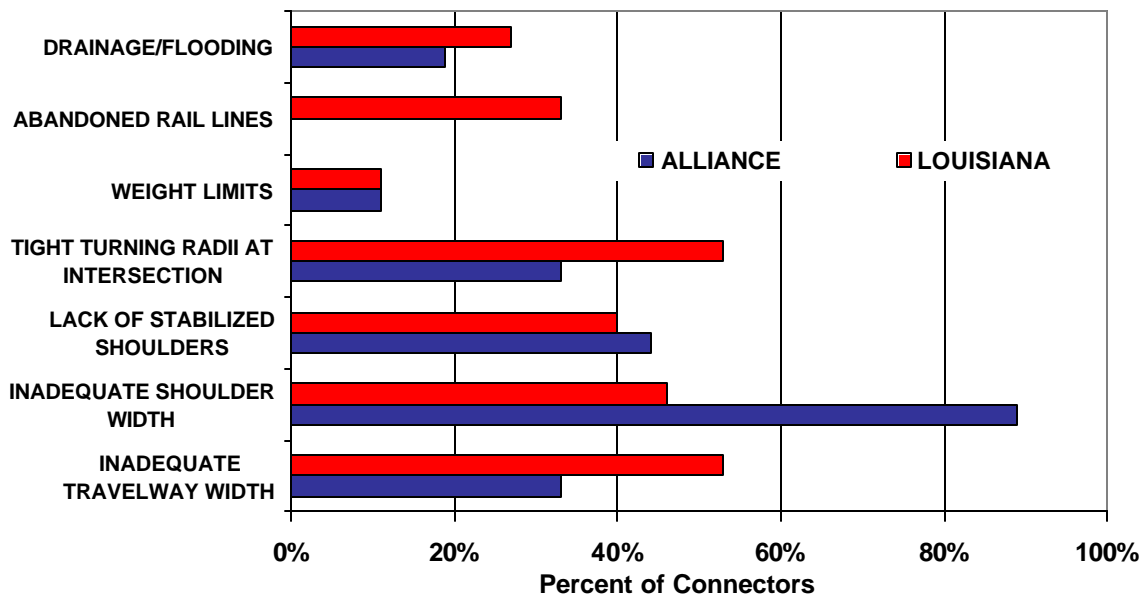
Exhibit E-16
CONNECTORS WITH PAVEMENT PROBLEMS
 Louisiana vs. Alliance Local/Other



Geometric/Physical Problems

A number of Louisiana’ LATTs connectors reported 40% and higher geometric/physical problems. Those deficiencies that reported 40% or higher were travel way width, inadequate shoulders, and inadequate turning radii. Abandoned rail lines were also frequently reported as a deficiency in this category.

Exhibit E-17
GEOMETRIC/PHYSICAL PROBLEMS



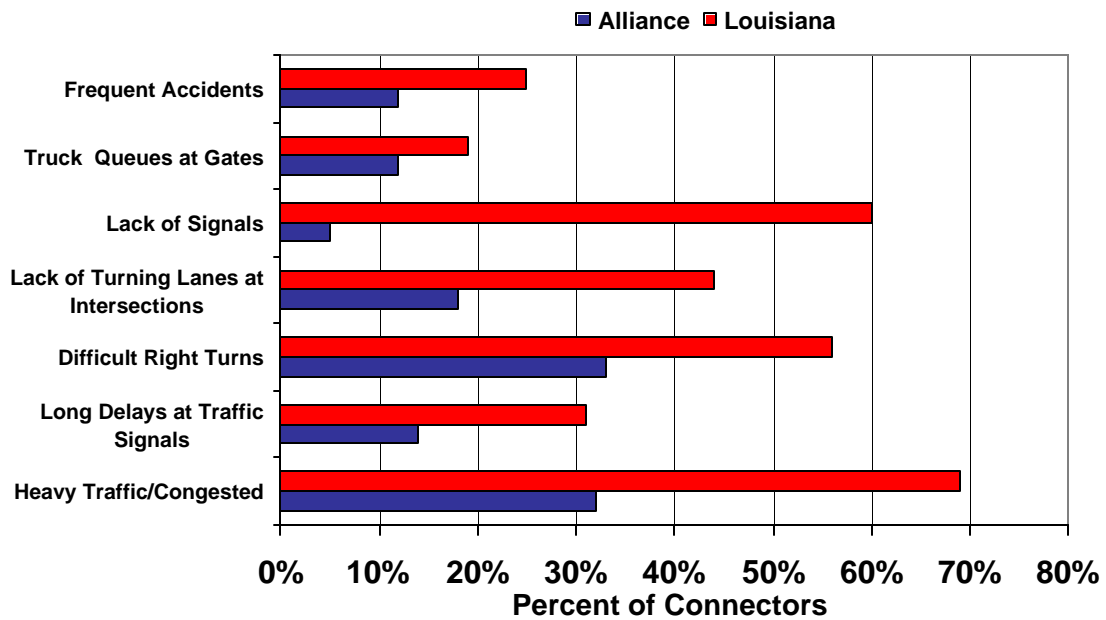
At-Grade Railroad Crossing Problems

The only significant deficiencies in this category are the rough abandoned rail crossings mentioned above.

Traffic Operations and Safety Problems

As noted in Exhibit E-16, congestion, heavy traffic and delays were three key operational deficiencies reported in this category. Inadequate signage was also a key factor in reduced operational efficiency and safety. In New Orleans, LA19P, and in Lake Charles, LA9P, both reported the most deficiencies. Traffic congestion, difficult turns, and lack of signals were among the deficiencies reported by LA19P and LA9P. Congestion and delays were key deficiencies at another Lake Charles facility, LA6P.

**Exhibit E-18
OPERATIONS AND SAFETY PROBLEMS**



State Summary

The connectors serving both the Lake Charles port facilities and the New Orleans port facilities reported a significant number of physical and operating deficiencies. Based upon available information, Louisiana’s intermodal connectors generally have more deficiencies than the Alliance average.

INTELLIGENT TRANSPORTATION SYSTEMS (ITS)

While it is clear that improvements in highway infrastructure are required to achieve an economically efficient transportation system, truck operations also can be improved by the implementation of ITS. Transportation technologies help freight transport become more productive and more responsive to the needs of business enterprises, including those which are engaged in Latin American trade. Fortunately, a large portion of current work in the ITS arena is with commercial vehicle operations (CVO). Of significant relevance to LATTs is the Commercial Vehicle Information Systems and Networks (CVISN) that embodies a collection of information systems and communications networks that provide support to CVO.

The national ITS/CVO program encompasses numerous projects undertaken by the individual states. The national program is designed to encourage the development and implementation of technology to enhance the safe movement of commercial vehicles across the United States. There are four main areas within the national program and each of the individual states are striving to meet these goals:

- ▶ Safety Assurance – Programs and projects that are designed to assure the safety of commercial drivers, vehicles, and cargo.
- ▶ Credentials Administration – Programs and projects that are designed to improve the procedures and systems for managing motor carrier regulation.
- ▶ Electronic Screening – Programs and projects that are designed to facilitate the verification of size, weight, safety, and credentials information.
- ▶ Carrier Operations – Programs and projects that are designed to reduce congestion and manage the flow of commercial vehicle traffic.

Most of the Alliance member states have completed some type of ITS/CVO Business Plan. Many of these documents are living documents and are continually being updated and revised. Since state's ITS/CVO plans are changing frequently, the information contained below is only a snapshot of ITS information available in early 2001.

Louisiana ITS/CVO Plan

Louisiana's ITS/CVO planning efforts were designed to meet the state's current and long term Commercial Vehicle Operations and Intelligent Transportation System needs. The current CVO operations are inefficient and consist mainly of administrative regulations that are cumbersome to the motor carrier operators, owners, and State regulators.

The *Louisiana CVO/ITS Business Plan* was completed during June 1998 by the CVO/ITS steering committee. This committee was led by the Louisiana Department of Transportation and Development (DOTD) and comprised of members from the Department of Revenue, Office of Motor Vehicles, Public Service Commission (PSC), Louisiana State Police (LSP) Transportation and Environmental and Safety Section (TESS), Louisiana Motor Transport Association (LMTA) and the regional office of the Federal Highway Administration (FHWA) and its Office of Motor Carriers (OMC).

Currently the state has a role in CVO in three distinct areas: regulatory enforcement, safety enforcement and infrastructure planning. These three areas are all currently

handled by agencies that comprise the steering committee. Each committee agency's responsibility to the CVO process is outlined below.

- ▶ Department of Transportation and Development (DOTD) – This state department oversees three CVO programs and the planning and upgrade of the existing state infrastructure. The programs are Weights and Standards Program, Trucks Permit Office and Weight Standards Police. Each of these programs is responsible for precisely what the titles imply.
- ▶ Department of Public Safety and Corrections - There are three agencies with CVO responsibilities within this department: Office of Motor Vehicles (OMV), Louisiana State Police, and Transportation and Environmental and Safety Section (TESS). Each agency is responsible for law enforcement. In addition, the OMV is responsible for licensing and regulation of motor carriers and drivers. TESS operates the State's mobile weight scales.
- ▶ Department of Revenue – The Excise Tax Division is responsible for the administration of the IFTA program.
- ▶ Public Service Commission – The PSC has a Transportation Division that is responsible for a variety of motor carrier operations. This division's main authority lies in the administration of the SSRS program and the enforcement of operating authority requirements.

During the month of February 2001, Louisiana signed the necessary agreements to begin the planning process for installation of PrePass. At the time of this report, the specifics as to location and timing were not known. The state will be beginning the planning and development phase soon. Other than the above-mentioned PrePass site, Louisiana has a limited number of CVO activities that contain an ITS component. Most activities are related to the regulation and permitting processes. However, with the development of the *Louisiana CVO/ITS Business Plan*, Louisiana hopes to improve the existing CVO activities and include an ITS component.

Through this plan Louisiana hopes to improve the overall efficiency of COV business. The mission of the plan includes three distinct elements. These elements are: 1) increasing administrative productivity of both the private and public sectors; 2) maximizing operational safety and productivity through improved compliance and targeted enforcement; and 3) improving freight flows by increasing CVO operational productivity².

The program framework set forth within the Business Plan consists of three interrelated goal areas that are associated with the three elements outlined above. Within each of these areas are a series of projects that collectively will enable each particular goal to be achieved. The goals areas and projects within each are outlined in Exhibits E-19, E-20 and E-21.

² Louisiana CVO/ITS Business Plan, Louisiana CVO/ITS Steering Committee and Parker – Young, and In Motion, Inc., June 1998

Exhibit E-19 INCREASING ADMINISTRATIVE EFFICIENCY³	
Program Category with Projects Outlined	Time Frame
Streamline Credentialing/Tax Filing Requirements	
Streamline Forms, Supporting Document Requirements, Processes – Current processes will be reviewed and electronic credentialing needs will be identified.	Started in 1998 and completion is not dependent upon any other activities.
Statutory/Administrative Rules Revisions – This project will review current regulatory practices and determine areas where improvements are needed.	Started in 1998 and legislative requirements were presented during the 1999 legislative session.
Initiatives to Improve Motor Carrier Compliance	
Position the ongoing Motor Carrier Advisory Committee (MCAC) also as an ITS/CVO Advisory Committee.	This committee will continue to operate throughout the entire ITS/CVO process
Develop a regulatory handbook that outlines all State and national regulatory guidelines and assists motor carriers in understanding regulatory requirements.	Started in 1998. Completion was scheduled for 1999.
Develop a State Web Site with all regulatory functions and guidelines. The handbook and other CVO information will be made available on-line.	Started in 1998. Completion was scheduled for 1999.
Develop a Unique Carrier Identification System that is consistent with the national program.	Dependent on the development of the national program.
Electronic Credentialing	
Statutory / Administrative Rules Revisions – Organize current rules and regulations regarding administrative transactions.	Started in 1998 and legislative requirements were presented during the 1999 legislative session.
Evaluate / Acquire Carrier Automated Transaction Software (CATS) – This project will determine all processes involved with the review and implementation of CATS.	Started in 1998 and continues through entire CVO process.
Develop Legacy System Upload Capabilities – Develop a Credential Interface (CI) that will provide a communications link between all legacy systems and other electronic data systems.	Phase I started 1998 and Phase II depends on software development.
Electronic Payment Options – This project will evaluate various electronic payment methods and implement the option of choice.	Phase I review and evaluations began in 1998 and Phase II implementation began in 1999.
Add CAT access to CVO Web Site – Access to CATS will be provided via the PERBA OS/OW automated credentialing process.*	Review started in 1998 and implementation will be concurrent with other CAT and CI projects.
Electronic Information Exchange	
Automation of credential recap, transmittal and associated fee transfers – Improve administrative productivity by building upon already established national programs (IRP and IFTA).	1998 IRP Clearinghouse pilot test and completion dependent upon development of national clearinghouses.

*This project will be undertaken if electronic data interchange via the Internet is the preferred data exchange means.

³ Louisiana CVO/ITS Business Plan, Louisiana CVO/ITS Steering Committee and Parker – Young, and In Motion, Inc., June 1998

Exhibit E-20 IMPROVING OPERATIONAL SAFETY AND PRODUCTIVITY⁴	
Program Category with Projects Outlined	Time Frame
Increase Efficiency of Existing Scale Operations	
Join Port Operations – Operate a joint scale at the Mississippi/Louisiana border.	Pilot test 1998 – pending legislation Full implementation 1999
Routine Scale Calibration – Determine how best to routinely and more effectively calibrate weight scales.	No time frame
Fixed Scale Computer/ Communications Links Upgrades – This program will allow roadside scales to electronically share data.	Some capabilities were available first quarter 1998 All roadside upgrades were completed end of 1998
Electronic Clearance	
WIM capabilities at Select High Volume Fixed Scale Facilities – This program will allow for the installation of WIM technology at select locations.	Installation Schedule: Breux Bridge 1998-1999 Baptist 2000-2001 Greenwood 2001-2002
Quality Controlled Sampling at Select High Speed Volume Facilities – Those facilities not scheduled for WIM installation will have AVI readers and transponders installed to pre-select those carriers for inspection.	Pilot test 1998 Full Deployment 1999
Credential and Safety Status Data Available to the Roadside – Program will allow for connections between State legacy systems, user systems and national systems.	Phase I 1998 Full implementation 2003
Information – Based Safety Assurance	
Automated Safety Inspections Data Collection and Exchange – Program will allow TESS real-time access to safety information on specific carriers	No time frame
SAFER Connection and Enrollment – Program will allow access to vehicle credential information via SAFER.	SAFER enrollment second quarter 1998. Updated on a regularly scheduled basis when available.
Automate Crash Reporting – Program will evaluate feasibility of acquiring electronic data entry programs.	Started 1999
Evaluate Capabilities of “Smart” Mobile Scales – Program will monitor and evaluate states that are currently using this technology.	Started planning phase 1999.
Increase Available Commercial Vehicle Rest Areas	
Private Sector Initiatives – Expansion of commercial vehicle facility will be examined in consultation with private sector businesses and property owners.	Started planning phase 1999.
Public Sector Initiatives – This project will determine the availability of State land that could be used for expansion of rest facilities.	Started planning phase 1999.

⁴ Louisiana CVO/ITS Business Plan, Louisiana CVO/ITS Steering Committee and Parker – Young, and In Motion, Inc., June 1998

Exhibit E-21 IMPROVE FREIGHT FLOWS ⁵	
Program Category with Projects Outlined	Time Frame
Mobility Improvements	
Bring Key Freight Corridors to Target Quality / Service Levels - This project will ensure that some portion of highway funding is used on high priority freight corridors within the State.	Long-term initiative that will be phased in over 25 years.
Construction Site Mobility Improvements – This project will improve freight movement through construction areas by modifying Louisiana’s construction management procedures.	Implemented in 1999.
Statewide Incident Management Plan – This project is designed to reduce response time, delay costs, and delay time due to incidents.	Started planning in 1999
Revise CVO Operating Restrictions – This project will examine existing CVO operating restrictions and determine whether changes to the restrictions can be made.	Started planning in 1999
Increase Available Fund for Mobility Improvements	
Review Dedication to the Transportation Trust Fund – This project will redirect CVO highway users fees into the Transportation Trust Fund to improve freight mobility.	Started planning in 1998. DOTD continues to seek legislative action to direct truck registration fees to the Transportation Trust Fund.

⁵ Louisiana CVO/ITS Business Plan, Louisiana CVO/ITS Steering Committee and Parker – Young, and In Motion, Inc., June 1998