

Metro

December 28, 2007

Mr. Thomas M. McNamara
Office of the Assistant Secretary for Transportation Policy
U.S. Department of Transportation
1200 New Jersey Avenue, S.E.
W84-322
Washington, D.C. 20590

CONGESTION-REDUCTION DEMONSTRATION INITIATIVES APPLICATION FOR LOS ANGELES COUNTY REGION

Dear Mr. McNamara:

The Los Angeles County Metropolitan Transportation Authority (Metro) is pleased to submit to you our Congestion-Reduction Demonstration Initiatives application on behalf of the Los Angeles County region. This application is being submitted in cooperation with a number of major transportation stakeholders in Los Angeles County. Because we are applying for Federal Highway funds, our State of California Department of Transportation (Caltrans) is also signing as a co-applicant.

In the last several months, we have been working diligently with our regional partners and our Board of Directors on developing transportation alternatives to improve mobility in our region. Our efforts involve a series of innovative activities such as the ones included in this application. Last June, our Board of Directors directed us to engage in the development of an operating plan for implementing congestion pricing projects in our region in an effort to relieve congestion. This proposal, if funded, will provide needed financial assistance to help mitigate congestion in Los Angeles County. Specifically, our application includes countywide mobility enhancements made possible through innovative transit and technology projects and programs, including congestion pricing. For this effort, Los Angeles County partners will be seeking the technical support and advice of the U.S. Department of Transportation (USDOT).

We are particularly pleased that Metro has worked collaboratively with Caltrans, the Southern California Association of Governments, the San Gabriel Valley Council of Governments, Los Angeles Department of Transportation, and Los Angeles County Department of Public Works to craft this application. Working together, these entities have cooperated on an application that effectively deals with the wide array of mobility challenges faced each day by our county's 10 million residents.

We believe that Los Angeles County, the most congested urban area in the United States, is a prime candidate to become a qualified jurisdiction under USDOT's Congestion-Reduction Demonstration Initiatives.

Mr. Thomas M. McNamara December 28, 2007 Page 2

We thank you in advance for your careful review of Metro's application and your support in improving the quality of life to the residents and workers of the Los Angeles region.

Sincerely,

ROGER SNOBLE

Chief Executive Officer
Los Angeles County Metropolitan
Transportation Authority

DOUGLAS'R. FAILING

District Director
Caltrans District 7



Submitted December 31, 2007 to the U.S. Department of Transportation

BY:

Los Angeles County Metropolitan Transportation Authority
IN PARTNERSHIP WITH

California Department of Transportation







Los Angeles Region Partners



























Table of Contents

1.0 Introduction	
1.1 Systemwide Approach for Congestion-Reduction	
1.2 Los Angeles Region Congestion-Reduction Demonstration Initiative	
1.3 Los Angeles Region Congestion-Reduction Initiative Meets USDOT Criteria	
1.4 Public Outreach	2
1.5 Congestion-Pricing Strategy	4
1.6 Federal Funding Request	
2.0 Background	10
2.1 Los Angeles County Sub-regions	* * *
2.2 Los Angeles Regional Partners	
3.0 Los Angeles Traffic Congestion Problem	
4.0 Local Public's Acknowledgement of the Traffic Congestion Problem	
5.0 Political Leadership to Solve the Traffic Congestion Problem	
5.1 Local Leadership	
5.2 State Leadership	
6.0 Los Angeles Region Systemwide Congestion-Reduction Demonstration Initiative	
7.0 Congestion-Pricing Proposal	20
7.1 Congestion-Pricing Operating Elements	
7.2 Present and Future Use of HOV Lanes in the Proposed HOT Corridors	
7.3 Proposed Congestion Pricing Projects	
7.4 Toll Technology	
7.5 Los Angeles Region HOT Lane Success Characteristics and Estimated Costs	
8.0 Transit Complementary Services	
8.1 Transit Existing Services	
8.2 Transit Proposed Services	
9.0 Technology Complementary Services	
9.1 Technology – Existing Services	32 24
10.0 Expedited Project Completion	
12.0 Other Time-Frame Considerations	
13.0 Funding Support for Los Angeles Congestion Reduction Strategy	
14.0 Contact Information	
	40
Letters of Support	

1.0 Introduction

This application for funding of the Los Angeles Region Congestion-Reduction Demonstration Initiative is being submitted by the Los Angeles County Metropolitan Transportation Authority (LACMTA) in response to the United States Department of Transportation (USDOT) solicitation for proposals that was published in the Federal register on November 13, 2007.

This application is being submitted in partnership with the California Department of Transportation District 7 (Caltrans) and on behalf of other regional partners, including the Southern California Association of Governments (SCAG), the San Gabriel Valley Council of Governments (SGVCOG), the South Bay Cities Council of Governments (SBCCOG), the City of Los Angeles Department of Transportation (LADOT), the Los Angeles County Department of Public Works (LACDPW), the Southern California Regional Rail Authority (Metrolink), Foothill Transit, Gardena Transit, Torrance Transit, and the California Partners for Advanced Transit and Highways (PATH) from the University of California at Berkeley.

1.1 Systemwide Approach for Congestion-Reduction

The LACMTA's Los Angeles Region Congestion-Reduction Demonstration Initiative is a systemwide transportation strategy that integrates variable highway and parking pricing, expanded transit services and innovative transportation technologies in a way that significantly improves mobility in the country's most congested urban region. This systemwide approach incorporates improvements in three of the nine sub-regions of Los Angeles County: the San Gabriel Valley, Central Los Angeles, and the South Bay Cities. These three sub-regions represent nearly 50 percent of both population and employment in Los Angeles County. It is projected that by the year 2030 these three sub-regions combined will generate about 50 percent of the region's peak-period home-to-work trips.

The congestion-reduction demonstration initiative proposed by the LACMTA and its regional partners is an integrated systemwide approach to mitigating traffic congestion along major highways and arterial facilities in the region. This initiative relies on the introduction of congestion pricing to major highways, deployment of new traffic technologies with far-reaching potential, improvement of transit service and other alternatives to driving, and the implementation of an intelligent parking management system in the downtown of the City of Los Angeles that allows charging variable fees depending of the level of traffic congestion. This comprehensive package of strategies will optimize the operational performance of the Los Angeles Region's multi-modal transportation system and will provide more travel choices by allowing a better management of the use of physical infrastructure at both origins/ destinations and along the roadways.

1.2 Los Angeles Region Congestion-Reduction Demonstration Initiative

The Los Angeles Region Congestion-Reduction Demonstration Initiative includes a transportation systems approach for the country's most congested urban region that could serve as a model for other parts of the country. It is a unique opportunity to demonstrate the traffic congestion mitigation potential of integrating innovative transit applications, new transportation technologies, and peak-period pricing strategies.

This proposal includes the conversion of existing High Occupancy Vehicle (HOV) lanes to High Occupancy Toll (HOT) lanes along Interstate 10 (El Monte Busway), Interstate 210 (from Interstate 605 to Interstate 710) and Interstate 110 (Harbor Freeway Transitway) as part of a

first phase. A second phase would include the conversion of HOV lanes to HOT lanes on three major freeway corridors east of Interstate 605 to the San Bernardino County line. These corridors are State Route 60 (under construction), Interstate 10 (in design), and Interstate 210 (existing). The Interstate 10 that is included among the three east-west corridors proposed in the second phase is one the "Corridors of the Future" that were designated by the USDOT. When the HOT lanes described in both phases are fully operational, the Los Angeles Region will have the largest HOT lane network in the country and around the world with an estimated 183 lane-miles. Figure 1 provides a graphical representation of the congestion-pricing components of the application, including the extent of the proposed HOT lane network and its location within the three sub-regions of the Los Angeles County that are covered in this proposal.

In addition to converting HOV lanes to HOT lanes, a variety of complementary transit services and adaptation of new transportation technologies would be deployed to optimize the operational performance of the overall transportation system. These include expanding Bus Rapid Transit (BRT) services, improving access and security at bus stops, commuter rail stations, and transit centers, implementing an intelligent parking management system in the downtown of the City of Los Angeles, and expanding and promoting vanpools and transit by providing incentives. Among the transit incentives is to provide credits for regular bus riders that could be redeemed towards access to the HOT lanes.

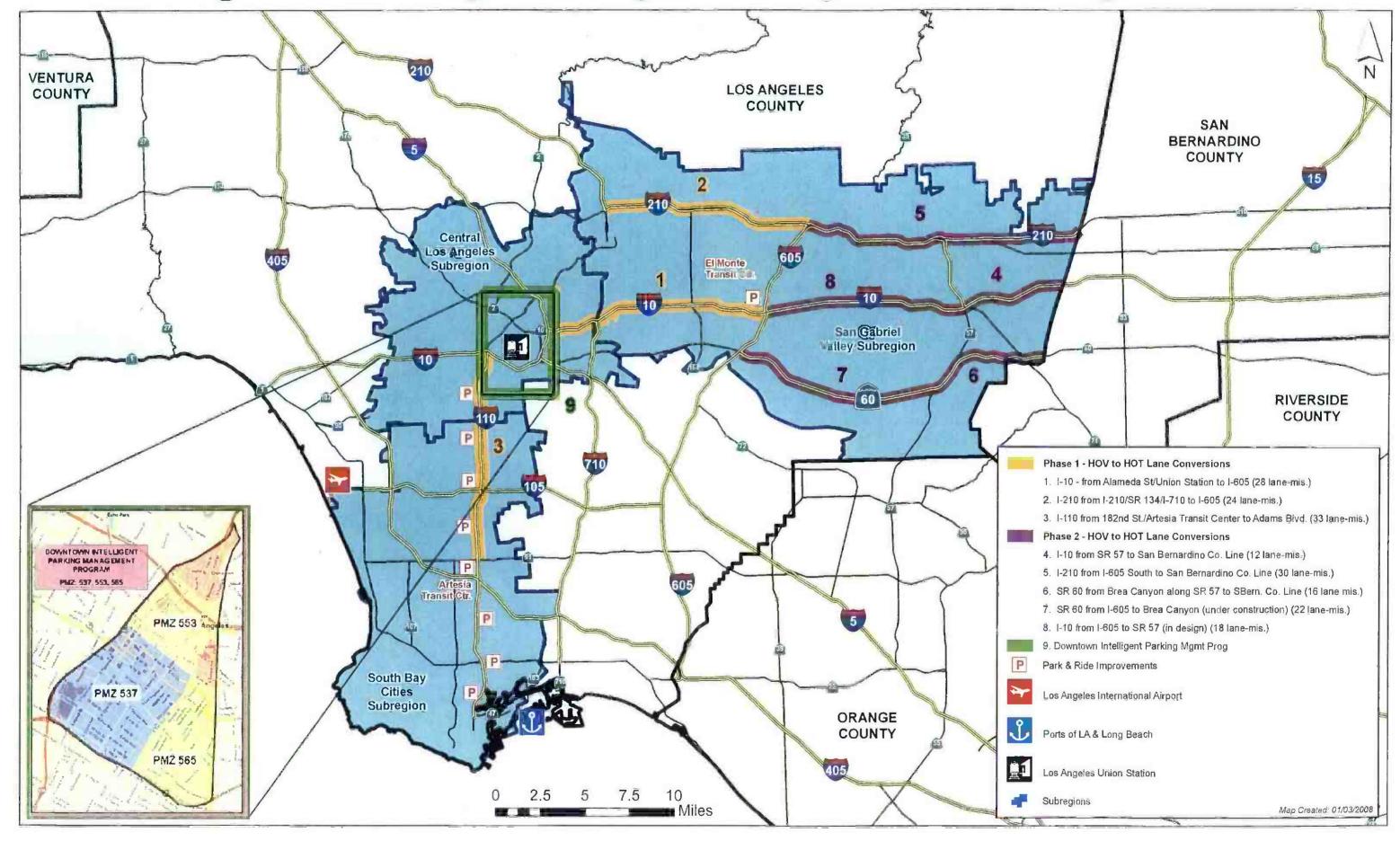
1.3 Los Angeles Region Congestion-Reduction Initiative Meets USDOT Criteria

The LACMTA estimates peak-period travel times along the proposed corridors to improve by 30 percent to 50 percent, while maintaining a minimum Level of Service (LOS) of C. Similarly, the LACMTA estimates that the complementary transit service and enhanced vanpool program will result in transit ridership increase ranging from 10 percent to 20 percent depending on the corridor. The LACMTA also estimates that one third of this transit ridership increase will be generated by people who previously traveled by automobile. Moreover, with the innovative technology applications being proposed, including transit signal priority and active traffic management systems, the region anticipates an additional 10 percent reduction in travel times along parallel arterials and transit services along the HOT lane corridors. Together, these strategies should improve the traffic flow along the general-purpose lanes parallel to the proposed HOT lane corridors.

1.4 Public Outreach

The LACMTA and the major transportation agencies in the Los Angeles Region organized several meetings to discuss congestion-reduction strategies, including the potential of congestion-pricing applications. These discussions resulted in the support for the Los Angeles Region Congestion-Reduction Demonstration Initiative that is included in this proposal. The LACMTA and its regional partners are also preparing a detailed implementation plan with extensive outreach to local jurisdictions and communities. Among the objectives of this plan is to implement the projects included in the Los Angeles Region Congestion-Reduction Demonstration Initiative as a win-win strategy to manage traffic congestion in the region. Public outreach will be an important element to achieve public support for the proposed projects. In particular, the HOT lanes would be designed, implemented, and operated to provide travel time and mobility benefits to highway and transit users without adversely impacting adjacent freeway lanes and arterials.

Fig. 1: Los Angeles Region Congestion Pricing Plan



1.5 Congestion-Pricing Strategy

The LACMTA and its regional partners plan to demonstrate the potential of congestion pricing in improving mobility in the Los Angeles Region through the conversion of existing, under construction, or in design HOV lanes to HOT lanes. The operation of the HOT lanes will include a one-year demonstration prior to permanent implementation. Pre-implementation would begin in March 2008, including providing additional transit and vanpool service to enhance the travel options available to highway and transit users when the HOT lane network is fully operational. The first phase of the HOT lane network would become operational by March 2009. Toll revenues would be used to cover HOT lane operation expenses and for transit and technology improvements along the HOT lane corridors.

These corridors were selected for the demonstration program because of the availability of transit service along or parallel to the proposed HOT lane corridors, including express bus service on transitways, light rail, and/or commuter rail and heavy rail. The corridors also include HOV lanes and are complemented with existing vanpool services. Additionally, there is high travel demand along these corridors, with the Central Business District (CBD) of the City of Los Angeles being the primary destination. Due to the high traffic volumes on these corridors, both the HOV lanes and the general-purpose lanes have severe traffic congestion. This has resulted in reduced passenger and vehicle throughput and loss of productivity, among other negative impacts, for both the Los Angeles Region and the rest of the country. Indeed, these negative impacts extend beyond the Los Angeles Region because of the regional and national significance some of the proposed corridors. In fact, the Interstate 10 in the San Gabriel Valley sub-region is one of the USDOT designated "Corridors of the Future".

The basic elements of the demonstration congestion pricing projects would be to convert 183 lane miles of existing, under-construction and in design HOV lanes to HOT lanes and introduce them to all drivers with a graduated toll designed to keep traffic moving in the HOT lane at a minimum travel speed of 50 miles per hour. To accomplish this, the tolls would be set dynamically to vary by time of day and traffic congestion levels. Tolls would be the highest for solo drivers and gradually lower for vehicles with two passengers and three passengers, respectively. Buses, vanpools, and emergency vehicles would be exempt. Toll revenues would be used for improvements along that same corridor. These improvements could include, for example, additional transit facilities and service, subsidies for vanpools, and funding for advanced traffic signal timing and arterial capacity improvements.

1.6 Federal Funding Request

The total estimated cost to implement the proposed congestion reduction strategies is \$1.4 billion. The Los Angeles Region partners are seeking federal grant funding in the amount of \$648 million. This total includes \$332 million for congestion-pricing initiatives, \$220 million for transit complementary services, and \$96 million for technology complementary services. The local contribution is \$781 million, representing 55 percent of the estimated total cost for implementing the Los Angeles Region Congestion-Reduction Demonstration Initiative. This contribution is composed of a combination of local, state, and federal formula funds.

Table 1 summarizes the cost estimates for the three main congestion-reduction strategies and corresponding project categories that are integrated in the Los Angeles Region proposal. Table 2 provides a detailed matrix of the projects that are included in the application. Figure 2 includes a graphic representation of the transit complementary projects and services that are included in this proposal and which correspond to the project matrix in Table 2.

Table 1 - Los Angeles Region Congestion-Reduction Demonstration Initiative (\$millions)

Corridor	Project	Lane Miles	Total Cost	Federal Grant Request
Congestion Pricing System				
	Phase 1			
San Gabriel Valley	I-10 from Alameda St/Union Station to I-605	28	\$59.9	\$47.9
	I-210 from I-210/SR 134/I-710 to I-605	24	51.4	41.1
Los Angeles / South Bay	I-110 from 182 nd St./Artesia Transit Center to Adams Blvd.	33	71.0	56.8
Subtotal - Phase 1		85	182.3	\$145.9
	Phase 2			
San Gabriel Valley	I-10 from SR57 to San Bernardino County Line	12	25. 7	20.5
	I-210 from I-605 South to San Bernardino County Line	30	64.2	51.4
	SR 60 from Brea Canyon along SR 57 to San Bernardino Co. Line	16	33.4	26.7
	SR 60 from I-605 to Brea Canyon (HOV lane under construction)	22	47.1	37.7
	I-10 from I-605 to SR 57 - HOT lane costs only (HOV in design)	18	38.5	30.8
San Gabriel Valley	I-10 from I-605 to SR 57 - HOV lane costs only (HOV in design)	_	365.0	\$0.0
Subtotal - Phase 2		98	\$573.9	\$167.1
Subtotal - Phases 1 & 2		183	\$756.2	\$313.0
Downtown Los Angeles	Downtown Los Angeles Intelligent Parking Management	_	15.0	12.0
San Gabriel Valley	I-605/I-10 Interchange Improvements	_	71.0	\$0.0
San Gabriel Valley	I-10/I-710 Interchange Improvements, Project Study Report	_	3.0	2.4
All Corridors	Congestion Pricing Operating Plan	-	6.0	4.8
Subtotal - Related Projects		-	\$95.0	\$19.2
Total - Congestion Pricing Sys	stem	183	\$851.2	\$332.2
Transit Complementary Servi	čes ^t ,			i Mar-
All Corridors	Bus and Rail Car Purchases	_	118.7	96.9
	Bus Division Upgrade	_	90.0	22.5
	Transit Station Improvements	_	12.2	6.4
	Busway and Track Improvements	_	69.7	46.4
	Park and Ride Improvements	_	59.5	47.6
Total - Transit Projects			\$350.1	\$219.7
Technology Complementary S	ervices	1	et I _{lyd} '	
All Corridors	Traffic Management	=	127.9	33.9
	Traveler Information	-	86.3	51,1
	Fare Technology	_	14.0	11.2
Total, Technology Projects			\$228.2	\$96.2
GR/AND TOTALE Congestion	Reduction Demonstration initiative:	A STATE	\$1,429.5	\$648.1

Table 2 - LOS ANGELES REGION CONGESTION-REDUCTION DEMONSTRATION INITIATIVE PROJECT MATRIX (\$millions)

			(\$millions)							
<u> </u>						Federal Funding Request				
#	Project	Regional Partner	Related HOT Lane	Start-Up Date	Estimated Cost	Congestion Pricing	Transit	Technology	Total	Total Local
	I. CONGESTION PRICING SYSTEM						_			
	Phase 1 - HOV Lane Conversions to HOT Lanes			-				† <u>-</u> †		
	San Gabriei Valley Corridor		<u> </u>	ľ				 		
1	F10 - from Alameda St/Union Station to F605 (28 lane-miles)	LACMTA	⊢10	2009	\$59.9	\$47.9	_	 	\$47.9	\$12.0
2	I-210 from I-210/SR 134/I-710 to I-605 (24 lane-miles)	LACMTA	I-210	2009	51.4	41.1		 	41.1	10.3
	Los Angeles/South Bay Corridor									
3	I-110 from 182nd St./Artesia Transit Center to Adams Blvd (33 lane-miles)	LACMTA	1-110	2009	71.1	56.8		 	58.8	14.2
	Subtotal, Phase 1 HOT Lanes				182.3	145.9			145.9	36.5
	Phase 2 - HOV Lane Conversions to HOT Lanes							† †	<u> </u>	
	San Gabriel Valley Corridor		_			_				
4	I-10 from SR 57 to San Bernardino Co. Line (12 lane-miles)	LACMTA	I-10	2009	25.7	20.8		 	20,6	5.1
5	I-210 from I-605 to San Bernardino Co. Line (30 lane miles)	LACMTA	I-210	2009	64.2	51,4		1	51.4	12.8
6	SR 60 from Brea Canyon along SR 57 to San Bernardino Co. Line (18 lane-miles)	LACMTA	SR 60	2009	33.4	28.7			26.7	6.7
7	SR 60 from I-605 to Brea Canyon (HOV under construction, 22 lane-miles)	LACMTA	SR 80	2009	47.1	37.7			37.7	9.4
В	I-10 from I-605 to SR 57 HOT Lane (HOV in design, 18 tane-miles)**	LACMTA	I-10	2014*	403.5	30.8	_		30.8	372.7
	Subtotal, Phase 2 HOT Lanes	_			573.9	167.1		 	167.1	406.8
	Subtotal, Phase 1 and 2 HOT Lanes				756.2	313.0			313.0	443.2
	Related Congestion Pricing Projects		_		_			-		1.0.2
	Parking Management Program		_			-	·	_		
9	Downlown Los Angeles Intelligent Parking Management Program (Park & Pay)	LADOT	F110	2009	15.0	12.0		 	12.0	3.0
	Interchange Improvements for HOT Lanes	_		-	_	-				-
10	I-605/I-10 Interchange Improvements	Caltrans	I-10	2013***	71.0	0.0		-	0.0	71.0
11	1-10/1-710 Interchange Improvements, Project Study Report	Caltrans	I-10	2008	3.0	2.4		-	2.4	0.6
	Congestion Pricing Operating Plan		_						0.0	
12	Congestion Pricing Operating Plan	LACMTA	Ail	2008	8.0	4.8	.	-	4.8	1,2
•	Subtotal, Related Congestion Pricing Projects				95.0	19,2			19.2	75.8
\neg	Total, Congestion Pricing Projects	_	_		\$851.2	\$332.2	<u> </u>		\$332.2	\$519.0
	II. TRANSIT COMPLEMENTARY SERVICES							 		1010.0
	Bus and Rail Car Purchases				_	_	<u>-</u>			_
13	10 additional Silver Streak buses - 60 ' Articulated	Foothill Transit	I-10	2008	10.5		8.72		8.7	1.8
14		Foothill Transit	I-210	2008	15.8	_	13.11	 	13,1	2.7
. 15		Foothill Transit	I-10	2008	5.3		4.36	 	4.4	0.9
16	33 additional buses for the I-10 El Monte Busway	LÂCMTA	I-10	2008	21:8	-	18.09		18.1	3.7
17	50 additional buses for the I-110 Transitway.	LACMTA	I-110	2008	32.0		26.00	 	28.0	8.0
18	Vanpool Program	LACMTA	All	2008	0.4	- -	0.00	-	0.0	0.4

Table 2 - LOS ANGELES REGION CONGESTION-REDUCTION DEMONSTRATION INITIATIVE PROJECT MATRIX (\$millions)

T	Federal Funding Request								_	
*	Project	Regional Partner	Related' HOT Lane	Start-Up Date	Estimated Cost	Congestion Pricing	Transit	Technology	Total	Total Local
19	3 additional gasoline/hybrid buses for Line 1 on Harbor Transitway	Gardena	I-110	2008	1.8		1.49		1.5	0.3
20	8 additional Bus Rapid Lina & Expansion Buses	Torrance	I-110·	2008	4.2		3.49	T 1	3.5	0.7
21	15 Rail Cars for San Bernardino and Riverside Lines	Metrolink	I-10, SR 60	2010	27.0		21.60		21.6	5.4
	Bus Division Upgrade						_			
22	Upgrade of Union Division	LACMTA	1-110, 1-10	2009	90.0		22.50		22.5	67.5
\Box	Transit Station Improvements								0.0	
23	Platforms and Parking at the Metrolink Pomona Station ****	Metrolink	j-10	2009	10.5		5.00		5.0	5.5
24	Freeway stop for Silver Streak and Commuler Lines	Foothill Transit	I-10	2008	1.0		0.83	1	0.8	0.2
	Improved local bus access (new bus stops) under Slauson and Manchester stations for Line 108 and Line 115 respectively	LACMTA	J-110	2009	0.5		0.40		0.4	0.1
	Ticket vending machines at each of the eight Harbor Transitway stations to allow for all-door boarding	LACMTA	l-110	2009	0.2		0.12		0.1	0.0
	Busway and Track Improvements								0.0	
27	Double Track, While to San Dimas Ave. on San Bernardino Line	Metrolink	1-10	2010	30.7		18.00		18.0	12.7
28	Foothill Extension of Gold Line - ROW acquisition for Yard & Maintenance Facility	Gold Line Const. Auth,	I-210	2009	25.0		20.00		20.0	5.0
29	Transportation Systems Mgmt Improvements - Harbor Transitway Extension Flower and 5th (BRT - bus only lane)	LADOT	I-110	2009	1.0		0.80		0.8	0.2
30	1-10 Ramirez Flyover at LA Union Station	LACMTA	J-10	2010	10.0		5.20		5.2	4.8
31	I-110 Adams-Figueroa Flyover - Project Study Report	LACMTA	j-110	2009	3.0		2.40		2.4	0.6
	Los Angeles/South Bay Corridor - Park and Ride Improvements									
32	Expand Park & Ride facilities at Artesia Transit Center, Including parking shuttle (SR-91 / I-110)	LACMTA	J-110	2009	2.0		1.60		1.6	0.4
33	Improve signage and securily for existing Harbor Transitway Park and Ride lots at Stauson, Manchester, Harbor Green Line, Rosecrans, Artesia, Carson, PCH, and Harbor/Beacon Stations	LACMTA	1-110	2009	0.5		0.40		0.4	0.1
	San Gabriel Valley Corridor Park and Ride Improvements									
34	Improve West Covina Park & Ride, including construction of pedestrian bridge	Foothill Transit	i-10	2009	12.0		9.60		9.6	2.4
35	Expand Park & Ride facilities at tha El Monte Transit Center and increase the number of bus bays from 15 to 26 to allow higher bus service frequency	LACMTA	I-10	2009	45.0		36.00		36.0	9.0
	Total, Transit Complementary Projects				\$350.1		219.7	1	\$219.7	\$130.4
	III. TECHNOLOGY COMPLEMENTARY SERVICES									
一	Traffic Management		_				_			
36	City of Los Angeles Automated Traffic Surveillance and Control Systems (ATSAC)	LADOT	I-110	2009	52.5			0.0	0.0	52 .5
37	County of Los Angeles Automated Traffic Surveillance and Control Systems (ATSAC)	LA County	I-210, i-10, SR 60	2009	36.9			21.0	21.0	15.9
38	Regional Integration of Intelligent Transportation Systems (RtITS)	LACMTA	All	·2009	2.3			1.8	1.8	0.5
39	Line 187 Bus Signal Priority Project	Foothill Transit	1-210	·2008	2.1			0.6	0.6	1.5
40	I-210 Congestion Relief Project, inc. System Wide Adaptive Ramp Metering (SWARM)	Caltrans	I-210	2009	21.0			0.0	0.0	21:0
41	I-210 Active Traffic Management Project	Caltrans	1-210	·2008	0.9			0.7	0.7	0.2
42	Adaptive signal control system on 5 major arterials	Caltrans	I-210	2008	12.2			9.8	9.8	2.4

Table 2 - LOS ANGELES REGION CONGESTION-REDUCTION DEMONSTRATION INITIATIVE PROJECT MATRIX (\$millions)

7			(41101110112)	<u>'</u>		Federal Funding Request				
#	Project	Regional Partner	Related HOT Lane	Start-Up Date	Estimated Cost	Congestion Pricing	Transit	Technology	Total	Total Loca
	Traveler Information									+
43	511 traveler information system improvements	LACMTA	Ali	2009	59.0			29.0	29.0	30.0
44	Next Trip Bus Information	LACMTA	Ali	2008	2.7	<u> </u>		2.4	2:4	0.3
45	AVL/Passenger Information System - Downtown DASH	LACMTA	1-110	2009	12.0			9.6	9.6	2.4
46	AVL/Passenger Information System - Downtown Commuter Express	LACMTA	I-110	2009	2.0			1.6	1.6	0.4
47	AVL System	Torrance	I-110	2009	3.1			2.5	2.5	0.6
48	Changeable Message Signs - Figueroa-Broadway	LADOT	1-110	2009	5.0			4.0	4.0	1,0
49	Real-time passenger information displays at each of the 12 stations (incl 37th St, 23rd St, 7th/Flower, 5th/Flower)	LACMTA	I-110	2009	2.5	_		2.0	2,0	0.5
	Fare Technology	_							_	
50	Inlegrated Mobility Account	LACMTA	Ali	2008	14,0			11.2	11.2	2.8
	Total, Tech	nology Complem	entary Projects		\$228.2	\$0.0	\$0.0	\$96.2	\$96.2	\$132.0
			GRAND TOTAL		\$1,429.5	\$332.2	\$219.7	\$96.2	\$648.1	\$781.4
	· · · · · · · · · · · · · · · · · · ·		Percentage		100%	23%	15%	7%	45%	55%

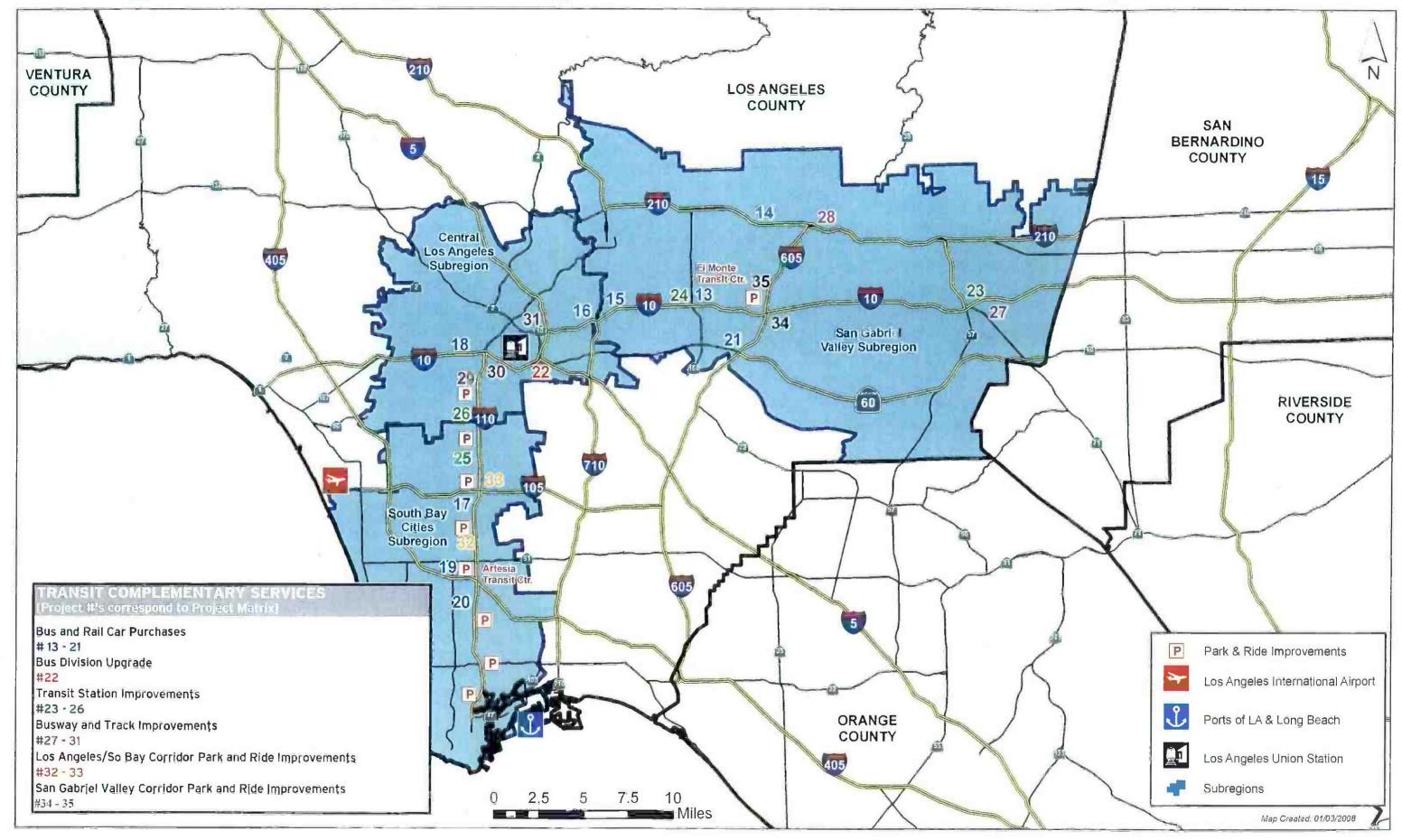
Project implementation could be expedited with the additional federal funding request to convert the additional HOV lane to a HOT tane.

^{**} Total cost of \$403.5 million includes \$365 million for the HOV lane and \$38.5 for the HOT lane conversion costs. The local contribution of \$372.7 includes state and federal committed funds of \$365 million plus \$7.7 million match for congestion pricing costs.

^{***} The project could be expedited with USDOT support for environmental clearance.

^{****} The \$5.5 million funding contribution also includes \$4.4 million of federal funding.

Fig. 2: Los Angeles Region Transit Complementary Services



2.0 Background

Los Angeles County is a large, highly urbanized county consisting of over 4,000 square miles. It has a population of over 10 million people and employment base of about 4.5 million jobs. The county has grown by about 1 million residents in the past 10 years. The county's population is approximately 47 percent Latino, 30 percent non-Latino White, 12 percent Asian, and 9 percent African-American. This ethnic profile of Los Angeles County is similar to the one that state demographers predict for California by mid-century. Los Angeles County comprises 88 cities and several unincorporated areas. The county's largest city is Los Angeles, with an estimated population of 3.9 million.

The Los Angeles Region is also the home of major transportation investments that are of regional and national significance, including the Port of Los Angeles, the Port of Long Beach, and the Los Angeles LAX International Airport. Los Angeles County's economy is ranked 16th worldwide, and its two ports combined rank fifth worldwide in the volume of cargo that is handled. Los Angeles County is the most populous county in the country and comprises about 85 percent of the Los Angeles-Long Beach-Santa Ana urbanized area. Despite its large urban sprawl development, the Los Angeles urban area has the second highest population density in the country, estimated at 7,068 persons per square mile. Figure 1 shows the major road network in Los Angeles County, including the three major sub-regions that are comprised in this proposal (Central Los Angeles, the San Gabriel Valley, and the South Bay Cities).

The Los Angeles Region has a complex transportation network of freeways, highways, arterials, heavy and light rail, commuter rail, and bus service, including Bus Rapid Transit (BRT). Its freeway system, including its network of HOV lanes, is the most extensive in the country. Public transportation is available throughout the region, with the LACMTA being the largest transit provider, covering by itself an area of about 1,433 square miles. Additionally, there are 16 municipal transit operators in Los Angeles County.

In 2006 the LACMTA was named America's Outstanding Transportation System by the American Public Transportation Association in recognition for the quality of its service and for its innovative approach in meeting travel demand and mitigating traffic congestion in Los Angeles County.

2.1 Los Angeles County Sub-regions

For planning purposes, Los Angeles County is divided into nine sub-regions. Table 3 summarizes some of the main demographic data for the three sub-regions that are included in this proposal. Combined, these three sub-regions comprise about 50 percent of the population and employment of the entire Los Angeles County, respectively. The LACMTA also estimates that the travel demand in these three sub-regions is to account for about 50 percent of the home-to-work peak-period trips that are projected for the entire county in the year 2030.

The LACMTA also estimates that the major freeways that are comprised in these three subregions, both HOV lanes and general-purpose lanes, will be operating at similar travel speeds by the year 2015 and well below the design standards. Table 4 summarizes some of the current operating characteristics of the four corridors that include the existing, under construction, or in design HOV lanes that are proposed to be converted to HOT lanes. These corridors are located within the San Gabriel Valley, Central Los Angeles, and the South Bay Cities sub-regions. A brief description of these sub-regions is provided below. Table 3 Los Angeles County Sub-region Demographics (millions)

Sub-region	Measure	2003	2030	% Change
Sän Gabriel Valley	Population	1.80	2.33	29%
(345 square miles)	Employment	0.75	0.92	23%
Central Los Angeles	Population	1.70	2.00	10%
(126 square miles)	Employment	0.90	1.06	18%
South Bay Cities	Population	1.43	1.67	17%
(183 square miles)	Employment	0.63	0.79	24%

Table 4 Los Angeles County Operating Characteristics for HOV Lanes

HOV Statistics (AM peak hours)	I-10	SR-60	I-110	I-210
High Occupancy Vehicles Lanes (HOV)				
Number of Lanes	1	n/a	2	1
Number of Vehicles	1515	1389	3175	1474
Number of People	6884	3036	7546	2998
Mixed Flow Lanes (MFL)				
Number of Lanes	4	4	4	4
Number of Vehicles	5775	5365	,5770	6140
Number of People	6285	5750	6115	6480
Freeway and Occupancy Summary				
HOV Lane Time Savings	46%	23%	53%	36%
Number of ingress/Egress - Eastbound	5	2	3	15
Number of Ingress/Egress - Westbound	9	3	3	13
HOV People Occupancy	4.54	2.19	2.38	2,02
MFL_People_Occupancy	1.09	1.07	1.06	1.06
Transit Service and Park & Ride				
Number of Park & Ride Sites/Spaces	5 / 2089	3 / 413	8 / 1693	4 / 1190
Available Transit Service	Rail/Bus_	Rail/Bus	R ail/Bus	Rail/Bus

Data excerpted from California State DOT District 7, 2007 HOV Annual Report, July 2007

HOV lane time savings measured for westbound (AM) travel.

The San Gabriel Valley Sub-region

The San Gabriel Valley sub-region is the eastern portion of Los Angeles County. It is bounded on the west mainly by the Central Los Angeles sub-region and its boundaries extend to the east to the San Bernardino County line. This sub-region accounts for 20 percent of Los Angeles County's population and is served by many freeways and transit providers.

This sub-region includes the El Monte Busway, which runs along the San Bernardino Freeway (Interstate10) and also allows carpools. It also comprises the Foothill Freeway (Interstate 210), which has an HOV lane throughout the sub-region. It also comprises State Route 60, which is the sub-region's third east-west freeway corridor and runs parallel to the Interstate 10 and the Interstate 210. Currently, 22 HOV lane-miles are being constructed along State Route 60, which would operate as HOT lanes when completed in the year 2011. An additional 18 HOV lane-miles are in the design phase along the Interstate 10. The sub-region also includes major north-south corridors, such as the Interstate 710, the Interstate 605, and State Route 57.

Rail service in this sub-region includes two Metrolink lines: the San Bernardino Line and the Riverside Line. It also includes the Gold Line, a light rail system that connects the downtown of the City of Los Angeles to the City of Pasadena and runs along the median of the Interstate 210 at some of its segments. Future rail facilities in the sub-region include the Pasadena Gold Line extension to provide additional travel options for passenger-travel, as well as the Alameda Corridor East (ACE) project to improve goods movement throughout the Los Angeles Region and to the rest of the country. Bus transit is provided by the LACMTA, Foothill Transit, and Montebello Transit. There are several park and ride lots throughout the sub-region, including a large facility at the El Monte Transit Center.

The Central Los Angeles Sub-region

This sub-region is geographically centered in Los Angeles County and is surrounded by other six of the county's nine sub-regions, including the South Bay Cities sub-region in the south and the San Gabriel Valley sub-region in the east.

Numerous freeways feed into the Central Los Angeles sub-region, which comprises the CBD of the City of Los Angeles. Among these major corridors are the Golden State (Interstate 5), Santa Monica (Interstate 10), Pomona (State Route 60), Hollywood (State Route 101), and the Pasadena/Harbor Transitway (Interstate 110). These freeways carry heavy peak-period commute traffic into the CDB of the City of Los Angeles. Also, they are becoming increasingly congested daylong as growth has occurred outside the CBD and the movement of goods has increased considerably throughout the entire Los Angeles Region. This sub-region comprises some of the major transit investments in Los Angeles County. It includes the Harbor Transitway along the Interstate 110, which includes elevated HOV lanes and a busway (a total of two lanes per each direction) that run 10 miles along the median of the freeway.

This transitway connects the CBD of Los Angeles to the Artesia Transit Center in the vicinity of State Route 91 (which extends to Orange County). It provides adequate connections to other transit service, including the Green Line light rail system that serves the Los Angeles LAX international Airport. Within the CBD, buses that use the Harbor Transitway continue operation through a network of bus-only peak-period lanes. This sub-region also comprises the Los Angeles Union Passenger Terminal (Union Station), which is the heart of the region's rail and bus systems. Amtrak, Metrolink, and the LACMTA's heavy and light rail (known as Metro) all originate from the Union Station.

The Metro Blue Line, a light rail system that runs parallel to the Harbor Transitway and connects the cities of Los Angeles and Long Beach, is a 5-minute ride by the Metro Red Line or Purple Line from the Union Station. The Purple Line is the Metro heavy rail that runs underground from Union Station to the Wilshire/Western station in the west. The Metro Red Line extends to North Hollywood in the San Fernando Valley where it connects to the Metro Orange Line BRT. The Metro Gold Line light rail system extends from Union Station to the City of Pasadena in the San Gabriel Valley sub-region. In addition, the LACMTA is currently constructing a 6-mile extension of the Metro Gold Line that would run parallel to State Route 60 and connect to East Los Angeles. It is scheduled to initiate operations in the year 2009. Similarly, the Expo Line that will connect the CBD of the City of Los Angeles to Culver City in the westside of the county, an 8.5 mile expansion of Metro's light-rail network, is currently under construction by the LACMTA and scheduled to commence operations in the year 2010.

The South Bay Cities Sub-region

This sub-region is bounded by the Central Los Angeles sub-region in the north, the Pacific Ocean in the west and south, and mainly by the City of Los Angeles along the Harbor Transitway (Interstate110) on the east. In addition to the Harbor Transitway, it includes major highway and transit investments, including the Glenn Anderson Freeway (Interstate 105), the San Diego Freeway (Interstate 405), and the Artesia Freeway (State Route 91).

This sub-region comprises most of the transitway (a total of two lanes per each direction) that run 10 miles along the median of the Interstate 110. It also comprises the Metro Green Line, which runs along the median of the Interstate 105 from Norwalk in the east, through the southern edge of Los Angeles LAX International Airport, and then south to Redondo Beach. These transit services, including an extensive network of Metro's Rapid BRT, provide adequate service and connections to major destinations, particularly through the Artesia Transit Center. The transit service is enhanced by the availability of several park and ride facilities, particularly along the Harbor Transitway. Almost all transit stations along the Harbor Transitway and the Interstate 105 are served by park and ride lots that are free of charge.

In addition to the LACMTA's regional service, the area has transit service provided by Torrance Transit, Municipal Area Express (MAX), Gardena Municipal Bus Lines, Long Beach Transit, Palos Verdes Transit, and LADOT's Commuter Express. Most of these transit agencies provide service along the Harbor Transitway. The South Bay Cities sub-region also has three major transportation hubs near its borders: the Los Angeles LAX International Airport, the Port of Los Angeles, and the Port of Long Beach. The 78 million passenger trips that are recorded annually at the LAX airport substantially increase the traffic volumes on the South Bay Cities' freeways and surface streets. The ports' cargo and truck traffic also have major congestion and air pollution impacts on the Los Angeles Region's transportation system.

2.2 Los Angeles Regional Partners

The Los Angeles Region partners have been innovative and invested substantially in road and transit infrastructure, technology, and operational improvements. They have partnered to deploy technologies, operating practices, and strategies to get the most efficiency out from the Los Angeles Region roadway and transit systems. According to the TTI 2007 Annual Urban Mobility Report, the Los Angeles Region had the largest delay reduction from the application of ramp metering, signal coordination, and incident management among the most congested urban areas in the country. The following is a brief description of the regional partners that are committed to the Los Angeles Region Congestion-Reduction Demonstration Initiative.

Los Angeles County Metropolitan Transportation Authority (LACMTA)

The LACMTA is the lead agency for this Congestion-Reduction Demonstration Initiative proposal. As the Regional Transportation Planning Agency (RTPA) for Los Angeles County, it is responsible for preparing the Long Range Transportation Plan. In addition, it is also designated by law as the Congestion Management Agency for the Los Angeles County. The LACMTA Countywide Planning and Development Department programs and administers funds for a wide array of transportation projects, including transit capital projects and services, bikeways and pedestrian facilities, local roads and highway improvements, and goods movement. The LACMTA is unique among the country's transportation agencies as it serves as the transportation planner and coordinator, designer, builder and operator for the country's most populous county. More than 10 million people, nearly one-third of California's residents, live, work, and recreate within its 1,433-square-mile service area. The LACMTA's is governed by the Board of Directors, which represents the 88 cities of Los Angeles County.

Besides operating over 2,000 peak-hour buses on an average weekday, the LACMTA also designed, built and now operates about 73 miles of rail service (heavy-rail subway and light-rail) providing service along a total of 62 stations. Other rail projects are currently being implemented (the Expo Line and the Gold Line Eastside Extension). Similarly, other projects, such as the future extension of the Gold Line from Pasadena to Montclair, are currently in the planning phase. The LACMTA also operates an extensive BRT network consisting of its Metro Rapid Program and its Metro Orange Line. In addition to operating its own service, the LACMTA funds 16 municipal bus operators, Metrolink (commuter rail network), the Freeway Service Patrol, and Access Paratransit.

California Department of Transportation (Caltrans - District 7)

Caltrans - District 7, which includes Los Angeles and Ventura counties, is the second largest geographically among California's 12 districts. Caltrans - District 7 is responsible for the operation and maintenance of the largest urban freeway system in the country. Caltrans' mission of improving mobility in the Los Angeles Region is evidenced in all District 7 activities. Several regional projects are currently underway which will assist in decreasing congestion and increasing mobility. Constructing HOV lanes and direct connectors continues to be a departmental priority. District 7 currently has 468 HOV lane miles in Los Angeles County, the largest network in California. District 7, in conjunction with the California Highway Patrol (CHP), has also implemented the most innovative technologies in its Transportation Management Center to allow a better operation of the region's freeways, including real-time detection and response to incidents. District 7 has also deployed a new Changeable Message Sign (CMS) Travel Time sub-system. This system is integrated as part of the award-winning Advanced Transportation Management System (ATMS) of Caltrans.

City of Los Angeles Department of Transportation (LADOT)

The LADOT delivers an array of transportation-related services to reduce traffic congestion and facilitate the flow of traffic along city streets, increase the safety of motorists, pedestrians, and bicyclists, calm traffic within residential neighborhoods, and mitigate the impact of traffic associated with new commercial and residential developments. An innovative project that the LADOT operates is the Adaptive Traffic Control System (ATCS), which provides a computer-based real-time traffic signal monitoring and control system to improve the overall level of service on arterial streets within the City of Los Angeles. The ATCS is the latest enhancement to the LADOT's Automated Traffic Surveillance and Control (ATSAC) System.

The benefits derived from the ATSAC/ATCS technology are reduced traffic congestion and fuel consumption and improved air quality and vehicle travel times.

Los Angeles County Department of Public Works (LACDPW)

The LACDPW serves over one million residents in the unincorporated areas of Los Angeles County, as well as contract cities. Among its responsibilities is to recommend solutions to improve mobility in the congested local highways and streets of those areas. The LACDPW also administers numerous multi-jurisdictional Intelligent Transportation Systems (ITS) projects, including the deployment of advanced technology traffic signal coordination systems. It also maintains over 3,100 miles of major roads and local streets in the unincorporated areas and over 1,700 miles in 22 incorporated cities.

Southern California Association of Governments (SCAG)

SCAG is the designated Metropolitan Planning Organization (MPO) for six counties in Southem California: Los Angeles, Orange, San Bernardino, Riverside, Ventura and Imperial. The region encompasses a population exceeding 18 million persons in an area of more than 38,000 square miles. SCAG is mandated by the federal government to research and draw up plans for transportation, growth management, hazardous waste management, and air quality. Additional mandates exist at the state level. Among its responsibilities are developing the Regional Transportation Plan and the Regional Transportation Improvement Program. SCAG is the largest of nearly 700 councils of government in the United States.

San Gabriel Valley Council of Governments (SGVCOG)

Over the past decade, the SGVCOG has served the San Gabriel Valley and its estimated population of about 1.8 million residents that live in 31 incorporated cities and unincorporated communities. Major transportation accomplishments of the SGVCOG include the formation of the Pasadena Blue Line Construction Authority to build the LACMTA's 13.6-mile Gold Line light rail from the CBD of the City of Los Angeles to the City of Pasadena. A future extension of the Gold Line from Pasadena to Montclair is currently in the planning phase. Other transit services include express bus service along the El Monte Busway and the Interstate 210, which are provided by Foothill Transit and the LACMTA. The LACMTA also provides Metro Rapid BRT along some of the major arterials in the San Gabriel Valley. In this regard, the West San Gabriel Valley Sector Governance Council was created to improve transit service for the eight cities in the San Gabriel Valley that are currently not served by Foothill Transit. Another accomplishment is the formation of the Alameda Corridor East Construction Authority to construct grade separations for busy intersections of rail and vehicular traffic. This would allow a better flow of passenger traffic and goods movement through the San Gabriel Valley to other regions in Southern California, as well as to other parts of the country.

South Bay Cities Council of Governments (SBCCOG)

The SBCCOG serves fifteen cities, comprising over 1.4 million people, in addition to portions of the City of Los Angeles and unincorporated portions of Los Angeles County. The SBCCOG assists its member cities to obtain additional funds to implement transportation projects. The SBCCOG maintains a current assessment of transportation needs and funds studies for analyzing congested corridors, such as arterial streets accessing the Interstate 405 freeway, synchronizing the traffic signals on major streets, and getting a better understanding of goods movement through the South Bay Cities sub-region.

Southern California Regional Rail Authority (Metrolink)

Metrolink is a regional rail transit system formed in 1992 by five county transportation agencies: the LACMTA, the Orange County Transportation Authority, the Riverside County Transportation Commission, the San Bernardino Association of Governments, and the Ventura County Transportation Commission. It was established to reduce the congestion on highways and improve mobility throughout the Southern California region. Metrolink has seven lines. Although only 40 percent of Metrolink's systemwide riders live in Los Angeles County, over 80 percent of the riders have this county as their work-trip destination. Two of these lines, the San Bernardino Line and the Riverside Line, travel through the San Gabriel Valley and connect to Union Station in downtown the City of Los Angeles. The service provided by Metrolink contributes in reducing traffic congestion. For example, the San Bernardino Line that parallels the Interstate 10 carries on average the equivalent of 1.3 freeway lanes in the peak-hour.

Other Regional Partners

Other regional partners for the Los Angeles Region Congestion-Reduction Demonstration Initiative include Foothill Transit (from the San Gabriel Valley sub-region) and Gardena Transit and Torrance Transit (from the South Bay Cities sub-region). PATH, through the University of California, Berkeley, is also a partner in this proposal to conduct Active Traffic Management research and applications along the Interstate 210 in the San Gabriel Valley sub-region. PATH is a collaboration initiative between Caltrans, the University of California, other public and private academic institutions, and private industry. PATH's mission is applying advanced technology to increase highway capacity and safety, and to reduce traffic congestion, air pollution, and energy. Recent projects conducted by PATH include: i) Smart Parking Management Pilot Project Planning; ii) New Approach to Bottleneck Capacity Analysis; and, iii) Measure and Field Test the Effectiveness of Adaptive Traffic Control for Arterial Signal Management.

3.0 Los Angeles Traffic Congestion Problem

Despite significant transportation investments, the Los Angeles Region has consistently been ranked as the most congested urbanized area in the country by the Texas Transportation Institute (TTI). According to the TTI's 2007 Annual Mobility Report, traffic congestion in Los Angeles is considered to be the most severe in the country. Peak-period traffic and major congestion on the roadway system in the Los Angeles Region extends from 6:00-10:00 AM and from 3:00-7:00 PM. About 86 percent of peak-period vehicle miles of travel occur under congested conditions and 62 percent of its road network's lane-miles are congested.

As a result, the Los Angeles Region ranked first in the country in the total person-hours of delay per peak traveler per year (estimated at 72 hours) based on comparable estimates provided by the TTI for the year 2005. Overall, the Los Angeles Region has the worst travel time index in the country, estimated by the TTI to be 1.50, which translates in an additional 50 percent in travel time to make a trip during a typical peak travel period as compared to traveling at free flow speeds. Not surprisingly, many major traffic corridors have a LOS service F. Traffic congestion in the Los Angeles Region is considered severe due to the following:

 Increasing trend toward urban sprawl development in the outer areas of the county, which limits the effectiveness of transit strategies and opportunities and puts a greater demand on the need for new road infrastructure or new and highly subsidized transit service.

- Large population and employment growth generating additional travel demand.
- Complex travel patterns where traffic is multi-directional, rather than going from the suburbs to a one activity center, due to the polycentric structure of the Los Angeles Region area that consists of several CBD areas.
- Rapid growth of in the volume of goods movement for all modes, particularly trucks transporting containers.
- Disproportionate increase in the demand for travel as compared to the supply of road capacity (i.e., vehicle miles of travel compared to road lane-miles).
- An increase in the number of bottlenecks.
- Increase in the number of traffic related incidents, particularly along major freight corridors.
- Except until recently, relatively low gasoline prices.
- Insufficient funding resources to timely implement needed transportation investments.
- Competing investment priorities, particularly due to the need to address other major transportation related concerns in the region, such as air pollution.

Regarding the last factor mentioned above, the Los Angeles South Coast Air Basin (SCAB) region, which mainly includes the Los Angeles Region, is the only area in the country that is designated by the U.S. Environmental Protection Agency (EPA) as severe non-attainment for the 8-hour ozone standard. It is also designated as serious non-attainment for carbon monoxide and particulate matter.

Given the magnitude of the transportation-related challenges in the Los Angeles Region, the focus of the LACMTA and its regional partners is on several strategies for achieving the objectives of improved mobility, air quality, and accessibility. With these objectives into consideration, the following actions define the strategic direction in the Los Angeles Region:

- 1. <u>Manage Existing System</u> Protect the integrity of transportation infrastructure and systems currently in place.
- 2. <u>Maximize System Efficiency</u> Make the most efficient use of the existing transportation system.
- 3. <u>Increase System Capacity</u> With limited funding available for future projects, determine infrastructure and service improvements that are most effective in maximizing mobility.
- 4. <u>Manage Demand</u> Examine traditional and innovative ways to reduce the demand for single occupant vehicle travel and/or to reduce the need for travel.

In a more recent action, the LACMTA Board of Directors has directed to include congestion pricing in the Long Range Transportation Plan for Los Angeles County as a strategy to achieve the multiple goals of improved mobility, air quality, and accessibility in the region. Similarly, a recent Business Plan prepared by Caltrans - District 7 and the Draft 2008 Regional Transportation Plan prepared by SCAG includes congestion-pricing as one of the proposed effective strategies for mitigating traffic congestion in the Los Angeles Region.

4.0 Local Public's Acknowledgement of the Traffic Congestion Problem

The local public in Los Angeles County, residents and commuters alike, consider traffic congestion to be a serious problem in this region. Residents of the Los Angeles Region consider traffic congestion to be their greatest concern, ranking it higher than crime, global warming, terrorism, race relations, and access to health care and housing as stated in a survey released in April of 2007 by Loyola Marymount University. In a 2005 survey by the Public Policy Institute of California (PPIC), three out of every four respondents identified traffic congestion on freeways and major roads as big problems in their regions within Los Angeles. When asked about the county's top priority over the next 20 years, 18 percent of respondents chose transportation, higher than any other issue and only considered as important as education.

Looking ahead, the public's view of traffic congestion on major freeways and roads is considerably pessimistic, with about 77 percent of respondents stating that this problem will get worse. Consistent with these perceptions, but in search for solutions to the traffic congestion problem, 67 percent of respondents in a 2004 PPIC survey expressed their preference for strategies focusing on expanding transit and using carpool lanes, pricing, and other strategies that make a more efficient use of existing transportation infrastructure in Los Angeles Region as opposed to building more freeways and roads.

5.0 Political Leadership to Solve the Traffic Congestion Problem

There are different initiatives and expressions of readiness that demonstrate the willingness of the political leadership in the Los Angeles Region and of State legislators to solve the traffic congestion problem, including the application of congestion-pricing strategies that are complemented by enhanced transit service and technology solutions. The attached letters of support for the Los Angeles Region Congestion-Reduction Demonstration Initiative are one example of their leadership and commitment to solve the traffic congestion problem. Other initiatives by local and state political leaders are briefly described below.

5.1 Local Leadership

Throughout the years, political leaders in Los Angeles County have shown readiness in solving the traffic congestion problem. This readiness is evidenced from their active involvement in drafting and supporting local, state, and federal legislation that addressed this problem and provided needed regulatory authority and funding to implement transportation investments supporting a multi-modal approach to mitigate traffic congestion.

At the local level, leaders were successful in getting voter approval in 1980 and in 1990 for two permanent one-half of one-percent local optional sales tax increases to fund transportation investments. Revenue from this combined and dedicated one-percent sales tax has allowed the implementation of major transit projects and rideshare programs, the construction of HOV lanes, and the deployment of innovative technologies to provide more travel choices and improve general travel conditions.

More recently, local leaders from Los Angeles County were instrumental in getting voter approval in November 2006 for a statewide infrastructure bond proposal (Proposition 1B) that included about \$20 billion for transportation investments, the largest ever in the history of the United States. Highlights include funding for three carpool lane projects worth \$1.17 billion. Additional funding is expected for the Los Angeles Region from this statewide bond

transportation package, mainly for transit improvements and for investments that would improve the movement of goods throughout the region.

Another indication of the readiness of local political leaders to solve the traffic congestion problem is a motion by the City of Los Angeles in February 2007 directing the city's Department of Transportation (LADOT) to coordinate with the California Department of Transportation (Caltrans) and the LACMTA regarding the feasibility of implementing HOT lanes on new and/or existing carpool lanes of freeways or on arterial roads in the Los Angeles Region. More recently, the City of Los Angeles approved in December 2007 to partner with the LACMTA to submit to the USDOT the Los Angeles Region Congestion-Reduction Demonstration Initiative funding application. Among other projects, this application includes the City of Los Angeles Intelligent Parking Management Program that would use variable parking rates to manage traffic congestion in the city's CBD.

The LACMTA Board of Directors has also acted quickly this year to support innovative congestion-reduction initiatives. In June 2007, the LACMTA Board of Directors approved a motion to develop a congestion-pricing operating plan for implementing congestion-pricing in Los Angeles County by the year 2010. In September 2007, the LACMTA Board approved the formation of an Ad-Hoc Congestion Pricing Committee, which is comprised of members from the LACMTA's Board of Directors and the Director of Caltrans - District 7, to provide policy guidance and recommendations to the LACMTA Board of Directors for implementing congestion-pricing. In November 2007, the LACMTA's Board of Directors approved the submittal of the Los Angeles Region Congestion-Reduction Demonstration Initiative proposal to the USDOT.

5.2 State Leadership

State political leaders are also very committed to solving the traffic congestion problem in the Los Angeles Region (and other parts of California) and for allowing innovative congestion-reduction strategies, including congestion-pricing. The 2006 Governor's Strategic Growth Plan (SGP) includes a comprehensive transportation investment package designed to decrease traffic congestion, improve travel times and increase safety, while accommodating future growth in the population and in the economy. The SGP includes the deployment of demand-management strategies, such as dedicated truck lanes and HOT lanes.

Additionally, in May 2006 State legislators passed Assembly Bill 1467 authorizing regional transportation planning agencies, such as the LACMTA, in cooperation with Caltrans, to develop high occupancy toll lanes and to administer and operate value pricing programs and exclusive lane facilities for transit. This legislation was introduced by State Assembly Speaker Fabián Nuñez, who represents the 46th District that comprises areas in downtown the City of Los Angeles.

The LACMTA, jointly with Caltrans - District 7 will be requesting authorization from the State Legislature to exercise the authority provided in Assembly Bill 1467 to implement the HOT lane projects included in this proposal. The LACMTA, in collaboration with Caltrans and other regional partners, is working with the California Transportation Commission (CTC) and the State Legislature to ensure that its request for authority to develop and operate HOT lanes in the Los Angeles Region is approved in the current legislative session within the following few months.

6.0 Los Angeles Region Systemwide Congestion-Reduction Demonstration Initiative

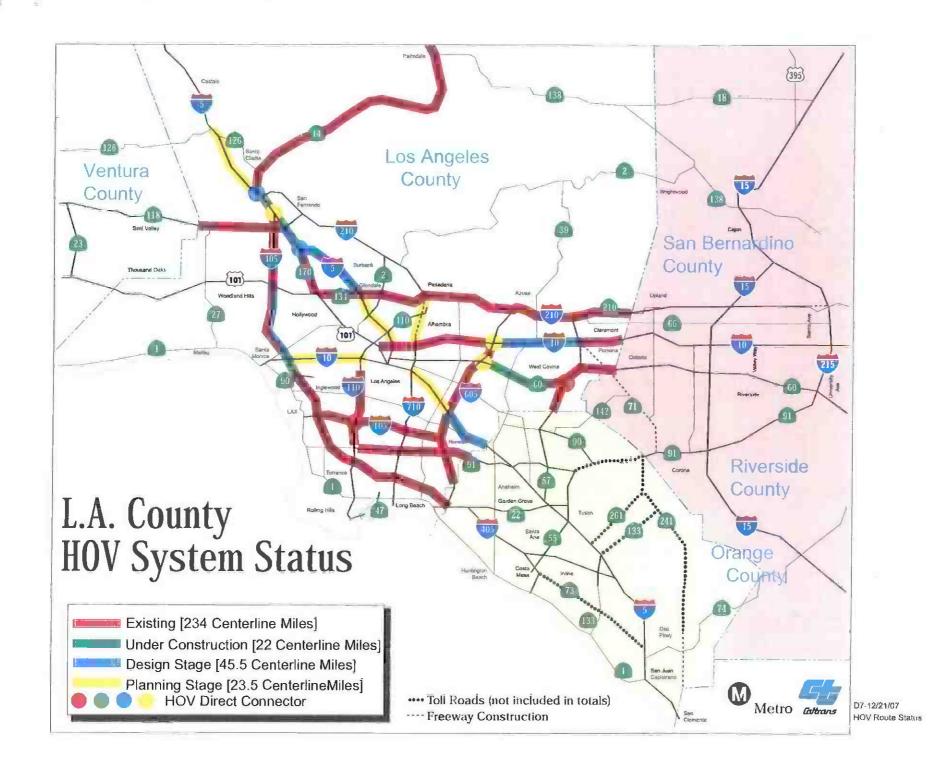
The Los Angeles Region Congestion-Pricing Demonstration Initiative will convert existing HOV lanes, as well as HOV lanes that are currently either under construction or in design and which will be completed in the near-term, to HOT lanes. This congestion-pricing application is only one of the strategies proposed in the Los Angeles Region initiative and is expected to be an effective strategy, within a larger framework of strategies, to manage traffic congestion, mitigate air quality and other environmental impacts, and generate new revenues to fund local transportation investments. Within the larger framework of strategies, the Los Angeles Region partners propose enhanced transit service and technology improvements.

In this regard, demand management strategies that encourage the travel by modes other than relying on the use of private vehicles and solo driving during peak-periods, such as enhanced transit service and parking pricing, will also be implemented in conjunction with the congestion-pricing proposal that includes converting HOV lanes to HOT lanes. Overall, the combination of these strategies allows for an integrated approach that has resulted in the successful implementation of congestion-pricing in San Diego, Orange County, Minneapolis, London, Stockholm, Singapore and other cities around the world by providing more transportation choices to urban travelers in a way that reduces traffic congestion and improves the quality of life while maintaining a vibrant economy.

7.0 Congestion-Pricing Proposal

The congestion-pricing strategy that is included in the Los Angeles Region Congestion-Reduction Demonstration Initiative is a bold and new concept for congestion management and trip reduction. When considering the implementation of congestion-pricing in the Los Angeles Region, it is important to emphasize its large geographic size, complex socio-economic and urban structure, and age of its freeway system. The Los Angeles Region partners propose to create additional roadway capacity from converting HOV lanes (those currently existing, under construction, or to be implemented in the near-term) to HOT lanes. What makes the proposed HOT lanes for Los Angeles Region different from other HOT lane projects that have been implemented in the country is the systemwide approach that would convert 183 lane-miles of HOV lanes to HOT lanes (representing over one-third of the Los Angeles Region HOV lane network) within a very short time-frame. Thus, the Los Angeles Region proposes a HOT lane network implementation that will result in more significant mobility benefits.

This conversion of HOV lanes to HOT lanes is not due to the lack of demand for the use of HOV lanes, as in the case in other parts of the country. On the contrary, HOV lanes in the Los Angeles Region have been very successful, to the point that the high travel demand along some of the corridors (such as those included in this proposal) is resulting in lower operating performance. The Los Angeles Region extensive HOV lane network (currently 468 lane-miles) operates practically at capacity during the peak-periods, including HOV corridors where the minimum vehicle occupancy requirement is three or more passengers (i.e., El Monte Busway). Figure 3 shows the implementation status of the HOV system in Los Angeles County. Therefore, enhancing transit service, achieving operational improvements through the deployment of innovative technologies, and encouraging higher vehicle passenger occupancy requirements will play an important role in providing additional roadway capacity. It is expected that these strategies combined would result in the shift of discretionary trips that are currently done during peak-periods to the off-peak period, as well as shifts in the modes of travel, particularly from automobiles to vanpools and transit. The following sections provide more detail about the congestion-pricing component of the proposal.



7.1 Congestion-Pricing Operating Elements

The basic operating elements of the congestion-pricing proposal include:

- The HOT lanes would be open to all vehicles, except trucks, with a graduated toll
 designed to keep the lane moving at a minimum travel speed of 50 miles per hour.
- The toll rate would be set dynamically over the 24-hour period of the day, varying with the level of traffic congestion.
- The toll rate would be the highest for solo drivers and gradually lower for vehicles with two passengers per vehicle and three passengers per vehicle, respectively.
- Buses, vanpools, and emergency vehicles would be exempt from tolls.
- Toll revenues would be used to cover HOT lane operating costs and improvements along the HOT lane corridors, including, for example, additional transit facilities and service, subsidies for vanpools, and traffic management improvements.
- The LACMTA and its regional partners would implement several transit and technology-based traffic management projects prior to operating the HOT lanes.
- Prior to actually charging the tolls for the use of HOT lane corridors, there will be a test period to allow potential HOT lane users to get familiar with the new managed lanes.
- Due to the severity of the traffic congestion problem, a short-term demonstration of one year will be conducted for the operation of the HOT lanes prior to permanent implementation.

It is expected that the conversion of HOV lanes to HOT lanes along the proposed corridors would result in improved operational performance, mainly due driver behavioral shifts. These shifts will result in a combined net benefit for highway and transit users that will demonstrate to the public the effectiveness of the HOT lanes in improving the operating performance of the corridor. The perceived benefits should result in growing public acceptance of this strategy. The following section discusses the need for the HOV lane conversions to HOT lanes.

7.2 Present and Future Use of HOV Lanes in the Proposed HOT Corridors

Table 4 included a summary some of the current operating characteristics of the four corridors that comprise the HOV lanes that are proposed to be converted to HOT lanes. The HOV lanes along the four freeway corridors that are proposed to be converted to HOT lanes combined serve over 7,500 carpools, vanpools, and buses and carry over 20,400 people during the morning peak-hour. The general-purpose lanes along these corridors combined serve slightly over 23,000 vehicles and carry about 24,600 people during the same period. Although traveling along the HOV lanes currently provides some travel time savings compared to traveling along the general-purpose lanes (both the travel speeds being below design standards or free flow travel conditions), this advantage is expected to vanish in the near-term. The analysis of current and projected travel on the proposed four corridors indicates considerable traffic growth. By the year 2015, it is estimated that the HOV lanes and the general-purpose lanes along the four corridors would be at or near capacity.¹

¹ The HOV lane capacity is assumed to be 1650 vehicles per lane per hour. The general-purpose lane capacity is assumed to be 1800 vehicles per lane per hour (although most corridors actually operate at a higher traffic volume than this standard).

The HOV lanes when operating at or beyond their practical capacity would no longer provide the travel time advantage needed to encourage more HOV formation. Options open to the LACMTA and Caltrans at that stage could include:

- 1. Increasing the HOV vehicle occupancy requirement during the peak periods (e.g., from a minimum of two passengers per vehicle to three passengers per vehicle):
- 2. Adding HOV lanes, which is a costly and challenging option due to land use limitations and environmental considerations;
- 3. Making spot improvements that would provide temporary traffic congestion relief;
- 4. Making operational improvements through the application of innovative technologies, which although effective, would not result in changes in travel behavior:
- 5. Increasing transit services substantially, which in particular will not be effective if buses operate in congested traffic, and would be more costly and require more time for implementation if proposals include the construction of new rail systems; and,
- 6. Implementing travel demand management techniques, such as congestion-pricing.

With these options into consideration, the Los Angeles Region partners are proposing to implement a combination of strategies that include congestion-pricing, enhanced transit service, and active traffic management technologies to help manage traffic congestion.

When reviewing current average daily traffic counts on the four corridors that would include the HOV lane conversions and those estimated for the year 2015, it is estimated that vehicle capacity would be available for the operation of the proposed HOT lanes during the 24-hour period. Currently, most of the general-purpose lanes along the four corridors are operating at 60 percent to 85 percent of their useful capacity.

Similarly, during an average 24-hour period, the HOV lanes are operating at 25 percent to 35 percent of their available capacity. Regarding the forecast for the year 2015, with the exception of the HOT corridors along the Interstate 210 and State Route 60 that are proposed in phase 2, the general-purpose lanes along the other two corridors would be operating near or exceeding 100 percent of the useful traffic flow capacity. Even when considering a useful capacity of 2,000 vehicles per lane per hour (rather than 1800 vehicles per lane per hour), most of the corridors would still be operating at over 85 percent of their traffic flow capacity.

The analysis also indicates that while the travel demand along the general-purpose lanes is expected to increase to a level where the lanes are essentially congested during the average day, the HOV lanes would continue to have space available during the off-peak hours and in the "shoulder" hours, which are just before or after the peak-periods. It is estimated that the travel demand along the HOV lanes of the proposed four corndors would only use about 50 percent of the managed lane's overall traffic carrying capacity during the 24-hour period. Therefore, the remaining 50 percent capacity would be available to travelers willing to pay a toll for a trip that would be faster and more reliable than using the general-purpose lanes.

Experience shows that as a roadway facility approaches its design traffic flow capacity during the peak-hour of travel, travelers make several behavioral shifts, including: i) changing routes corridors; ii) changing the time of the day of their travel; ii) changing modes of travel; and, iv) changing trip destinations. These changes can be expected to occur to some degree in the Los Angeles Region, the extent of which will be evaluated as part of the monitoring of the HOT network operations and the refinement of travel demand forecasts.

7.3 Proposed Congestion Pricing Projects

Conversion of the Interstate 110 Harbor Transitway to a HOT Corridor - The 10-mile transitway includes two HOV lanes per direction, with sections further south between the Interstate 105 and the Artesia Transit Center in the vicinity of State Route 91 being bus-only lanes that parallel the HOV lanes. In addition to having two HOV lanes per direction, other criteria supporting the HOV lane conversion to HOT lanes include: i) availability of extra capacity during the peak- periods on the existing HOV lanes; ii) existing congested traffic conditions along the general-purpose lanes; iii) availability of transit service along the corridor and on parallel routes; iv) availability of physical space for toll monitoring equipment; and, v) limited egress and access points. These factors combined would assist in toll monitoring and enforcement and would provide significant travel time savings for drivers choosing to travel along the HOT lanes. This project would be implemented as part of a proposed first phase.

Conversion of the El Monte Busway along Interstate 10 to a HOT Corridor - The 14-mile busway between the Interstate 605 to the CBD of the City of Los Angeles includes one HOV lane per direction. Among the criteria supporting the HOV lane conversion to HOT lanes are: i) existing congested traffic conditions along the general-purpose lanes; ii) availability of Metrolink rail and express bus service along the corridor, in addition to the LACMTA's Metro Rapid; iii) availability of physical space for toll monitoring equipment, including a 12-foot median between the HOV lane and the general-purpose lanes; and, iv) limited egress and access points. This project would be implemented as part of a proposed first phase. This HOT corridor would be extended 15 miles further east of the Interstate 605 to the San Bernardino county line as part of a second phase that would add a 9-mile segment with one HOV lane per direction (currently in design) and another 6-mile segment with already existing HOV lanes.

Conversion of the Interstate 210 to a HOT Corridor - The 12-mile corridor along the Interstate 210 between Interstate 605 and State Route 134 near the City of Pasadena has one HOV lane per direction. Among the criteria supporting the HOV lane conversion to HOT lanes are: i) existing congested traffic conditions along the general-purpose lanes; ii) availability of Metro light rail and express bus service along segments of the corridor; and, iii) limited egress and access points. This project would be implemented as part of a proposed first phase. This HOT corridor would be extended 15 miles further east of the Interstate 605 to the San Bernardino county line as part of a second phase that would include the conversion of already existing HOV lanes (one in each direction) to HOT lanes.

Conversion of the State Route 60 to a HOT Corridor - The 11-mile corridor along the State Route 60 between the Interstate 605 and Brea Canyon (close to State Route 57) that is currently under construction to add one HOV lane per direction would start operating as an HOT lane when completed during the first quarter of the year 2011. Among the criteria supporting the HOV lane conversion to HOT lanes are: i) existing congested traffic conditions along the general-purpose lanes; ii) availability of Metrolink rail and bus service parallel to the corridor; iii) limited egress and access points; and, iv) being a new facility. This project would be implemented as part of a proposed first phase. This HOT corridor would be extended an additional 8 miles further east of the Brea Canyon, through State Route 57, to the San Bernardino county line as part of a second phase that would include the conversion of already existing HOV lanes (one in each direction) to HOT lanes.

City of Los Angeles Intelligent Parking Management Program – This project would be implemented in the downtown of the City of Los Angeles as part of the proposed first phase. This project complements the congestion-pricing component that is proposed by the Los

Angeles Region as it would link the proposed HOT lanes along the three east-west corridors to the proposed north-south HOT corridor along the Harbor Transitway. This project provides a comprehensive strategy to relieve traffic congestion, improve curb access, and better manage traffic demand in the downtown of the City of Los Angeles through the implementation of optimal pricing strategies and operational policies for on-street and off-street parking.

To support the new parking project and policies, new parking technology will be deployed to provide motorists alternative payment options and real-time parking availability information. This real-time information from nearly 17,000 on-street and off-street parking spaces will aid motorists in understanding their parking options and will guide them to available parking, thus eliminating the need to search for parking, which creates additional traffic congestion.

As part of this parking management program, new parking meter technology will be deployed at the approximately 8,000 on-street metered parking spaces in the CBD area of the City of Los Angeles. These parking meters will be capable of charging motorists demand-based rates depending on the time of day and traffic congestion levels. These meters will also provide alternative payment options, allowing motorists to pay for parking using their credit card or cell phone and sending a text message to users when their paid parking time is about to expire.

LACMTA Congestion Pricing Operating Plan - In June 2007, LACMTA's Board of Directors directed the development of a detailed operating plan for implementing congestion pricing in Los Angeles County by the year 2010. This plan will include methods to estimate travel time savings that would result from the transit investment to be implemented as part of the Los Angeles Region overall congestion-reduction strategy. This plan will also allow developing an implementation plan for the congestion-pricing components included in the Los Angeles Region Congestion-Reduction Demonstration Initiative proposal to the USDOT.

interchange Improvements - This includes two additional projects that are needed for making operational improvements that would result in a more efficient use of the HOT corridors, particularly by mitigating the negative impacts of any potential bottlenecks. One of the projects includes improvements for the Interstate 605/ Interstate 10 interchange. The other project is for improvements for the Interstate 710/ Interstate 10. These projects will be needed, but will not delay the operation of the proposed HOT lane corridors.

7.4 Toll Technology

The Los Angeles Region HOT lane network will use a similar technology as used by the San Diego Association of Governments (SANDAG) for the implementation of its I-15 Managed Lanes corridor. The LACMTA will use dedicated short range communications (DSRC) equipment, including the Title 21 FasTrak transponders and readers that are standard by law in California, to collect tolls electronically on the Los Angeles Region HOT lane facilities. Antennas mounted on overhead gantries along the corridors will read the transponders and send the information to a reader for further transmission via the lane controller to the administration office. Additional equipment to be installed along the lanes will include automatic vehicle detection (AVD) to identify the presence of a vehicle and violation enforcement system (VES) to take an image of vehicles that are not authorized to travel on the HOT lanes. The following is a brief description of the toll technology elements of the proposal.

<u>Dynamic Value Based Pricing/Demand Management</u> The congestion pricing strategy will apply a per-mile toll that would be dynamically calculated and adjusted as often as necessary (e.g., every 3 minutes) to efficiently manage travel demand and traffic congestion levels.

The LACMTA plans to use the value of travel time savings (VOTT), defined as the difference in travel time between the HOT lanes and the adjacent general-purpose lanes for traveling along the same corridor during the peak-period to reach a particular destination, as an additional criterion for setting the toll rate. This criterion will actually operate as the base calculation for setting the toll rate and will be filtered by an additional layer of information that incorporates the basic volume-to-capacity calculation to ensure compliance with a minimum LOS of C along the HOT lanes. The LACMTA will determine the priority of the criteria to be met to guarantee the desired LOS. Traffic parameters, such as vehicle counts, speed, and passenger occupancy will be measured at various locations along the HOT lanes and the adjacent general-purpose lanes and used as key inputs into the toll rate algorithm computations. The algorithm is anticipated to operate as often as every three or six minutes, but can be more or less frequent based on a user-specified interval that will depend on the level of traffic. The one-year pilot operation of the HOT lanes will allow refining the algorithm that would set the toll rates after the demonstration period is over.

Transit Incentive Programs - As part of future enhancements to the LACMTA's operation of the HOT lanes and complementary transit services, several incentive programs that link the use of the HOT lanes to the use of transit services are proposed. For example, the LACMTA may provide a toll credit to the regular transit pass holder that could be applied to the occasional use of the HOT lanes. Another incentive program that will be implemented on these corridors is for vanpools, where the LACMTA will provide a subsidy of up to \$400 a month on new or existing vanpools to lower the leasing cost of a vanpool vehicle and for passenger fares. Vanpoolers will be able to reduce their one-way peak-period commute travel time by an average of 20 minutes by using the HOT lanes. They would also avoid the stress and additional expenses associated with driving alone and will be exempt from paying any tolls.

<u>Violation Enforcement System (VES)</u> - All users of the HOT lane facilities, including vanpools, will be required to obtain and mount transponders on their vehicles to allow the automated processing of violations (vehicles without a transponder). To support the automated citation process, image capture on the lanes, image processing, and optical character recognition (OCR) systems are required. This would complement the enforcement of violations on the HOT lanes through additional means, such as the assistance of the CHP and the use of associated equipment. The VES is the initial step that enables the processing of violations for not having a transponder. Enforcing drivers' compliance with the requirements for accessing the HOT lanes, such as meeting the vehicle passenger requirement matching the information stored in the transponder will have to be enforced by other means, such as manual inspections by the CHP.

<u>Variable Toll Rate Structure</u> - Under any of the technology and incentive options discussed above, a common element will be the use of a variable toll rate that will be set dynamically based on the continuous measurement of traffic flow rates and graduated according to the vehicle passenger occupancy. Although among the alternatives is to consider traffic flow along the HOT lane as the main determinant of the toll rate, other pricing algorithms can also take into consideration the traffic conditions along the general-purpose lanes and dynamically adjust the per-mile toll on the HOT lanes.

7.5 Los Angeles Region HOT Lane Success Characteristics and Estimated Costs

The review of key HOT lane operation success characteristics demonstrates the likely success of implementing HOT lanes along the four corridors in the Los Angeles Region that are included in this proposal, particularly the following:

- 1. Existence of an HOV lane along the corridor;
- 2. High demand for travel along the HOV lane (current or projected in the near-term) and traffic congestion on the general- purpose lanes;
- Ability to manage traffic volumes and travel speed on the HOT lane;
- 4. Availability of physical space for HOT lane improvements (i.e., signs, readers, buffer, and enforcement);
- 5. Public support from local governments;
- 6. Availability of travel alternatives to driving, such as bus and/or rail service, along the HOT lane or on parallel routes;
- Integration with a parking management policy at employment centers that are served by the HOT lane corridors and which requires parking rates that vary by the level of traffic demand and time of the day;
- 8. Ability to generate enough revenue to finance start-up for operations;
- 9. Ability to generate sufficient revenue to pay for continuing operations, maintenance, and administration and for other capital improvements and services along the of the HOT lane corridor; and,
- 10. Support of state, regional, and local transportation agencies.

The high peak-hour traffic volumes (Table 4) and the expected growth in traffic demonstrate the demand for travel along the proposed four corridors. Additional capacity on the HOT lanes will be created by means of a more effective management that allows maintaining stable travel speeds of at least 50 miles per hour. The graduated toll rate structure is expected to encourage transit use and the formation of vanpools in the near-term. These behavioral changes are expected to improve the travel conditions along both the HOT lanes and the general- purpose lanes.

These shifts, as well changes in the time of travel are expected, especially when travel time and out-of-pocket cost savings are to be realized. The HOV lanes that are proposed to be converted to HOT lanes currently allow users to save significant time in their commute (Table 4). As an example, the Metro Rapid Program has resulted in a 20 percent increase in transit ridership, with one-third of that increase generated by patrons that previously used the automobile. Similarly, passenger travel times were reduced by an average of 26 percent. By maintaining stable traffic flow conditions on the HOT lanes, additional travel time savings can be expected compared to operating the facility as an HOV lane, which are currently performing near capacity.

It is projected that the difference in travel speeds along the HOV and general-purpose lanes of the four corridors under consideration is expected to decrease in the near-term. This suggests that the relative travel time savings for traveling along the HOV lanes at the current HOV occupancy requirements will decrease over time. The proposed graduated toll structure can help maintaining the travel time saving incentive for vehicles with high passenger occupancy rates.

The travel time savings and other mobility benefits to be achieved from the conversion of HOV lanes to HOT lanes along the four corridors justify the initial implementation costs, which are estimated at about \$2.1 million per lane-mile (including roadway, structures, signing, tolling equipment, and other related costs). These costs are within the range of costs for other HOT lane projects in California, such as the Interstate 15 in San Diego, State Route 91 in Orange County, and the Interstate 680 in Alameda County, which have similar design standards.

8.0 Transit Complementary Services

Transit is the second component of the Los Angeles Region Congestion-Reduction Demonstration Initiative. The following is a brief description of some of the existing transit services, as well as of proposed transit projects and complimentary services.

8.1 Transit Existing Services

The public transportation system in the Los Angeles Region provides a dense grid of transit options that includes heavy rail, light rail, commuter rail, local buses, and BRT. As a result of its expanded service, transit ridership in the Los Angeles Region is growing at an annual rate of about 6 percent, which is almost double the national average.

<u>Fixed Guideway Systems</u> - Over the past 20 years, the Los Angeles Region has probably had the most ambitious and aggressive program of new fixed guideway construction in the United States. During that period, over \$8.6 billion has been spent for building nine new fixed guideway projects. Over 60 percent of that funding has come from state and local sources, with some projects being entirely funded by these sources, such as the Blue Line (from the downtown of the City of Los Angeles to the City of Long Beach), the Green Line (from the City of Norwalk to the City of Redondo Beach), and the Gold Line (from the downtown of the City of Los Angeles to the City of Pasadena).

The LACMTA's subway system expands 17.4 miles from downtown the City of Los Angeles to North Hollywood and to Wilshire Boulevard and Western Avenue. These rail systems combined cover 62 stations along 73 miles of service and recorded a ridership of over 82 million in the year 2006. The Gold Line is currently being extended 6 miles (8 stations) into East Los Angeles. It is scheduled to begin operations in the year 2009. Also, construction recently started for the Expo Line, an 8.5 mile expansion (10 stations) to the LACMTA's light rail network from the CBD of the City of Los Angeles to Culver City on the Westside of Los Angeles County. The construction cost of the Expo Line (about \$640 million) is almost entirely funded by non-federal sources and is scheduled to commence operations in 2010.

<u>Bus Service</u> - Complementing light and heavy rail systems is Los Angeles extensive bus service that covers over 18,500 stops and which recorded a ridership of about 400 million passengers in the year 2006. This regional bus service is supplemented by bus service provided by 16 municipal bus operators.

LACMTA Metro Rapid - The LACMTA's Metro Rapid Program is a high quality bus operation that provides fast, frequent, regional bus service throughout Los Angeles County. Key features of Metro Rapid include frequent service, bus signal priority, headway-based operations, fewer stops, low-floor buses to facilitate boarding and alighting, color-coded buses and stations, and simple route layouts. These attributes make the Metro Rapid a BRT system. The Metro Rapid has reduced passenger travel times significantly, improved service reliability, and reduced delays associated with signalized intersections and dwell times at bus stops. About one-third of the reduction in travel time is attributed to the bus signal priority system.

The LACMTA currently operates 17 Metro Rapid Lines serving approximately 180,000 daily riders. When complete in 2008, the Metro Rapid network will consist of 28 lines with over 400 miles of service throughout the region. Ridership increase along the existing Metro Rapid corridors has varied, but the LACMTA has realized an overall average corridor ridership increase of 20 percent, of which one-third is by patrons who previously used the automobile.

Also planned, is a BRT project along Wilshire Boulevard, which has recently been approved for project development by the Federal Transit Administration. This is a 12.5-mile bus-only lane project between the CBD of the City of Los Angeles and the City of Santa Monica. The project is a stand-alone fixed-guideway project consisting of dedicated peak-period bus-only lanes in both the eastbound and westbound directions.

Metro Orange Line - This BRT system runs parallel to the U.S. 101 and connects to the LACMTA's Red Line in North Hollywood. It consists of an exclusive 13-mile at-grade transitway that includes 13 stations along its path. About 95 percent of the estimated \$330 million construction costs were funded by local and state sources. The number of daily boardings along the Orange Line, which started operations in October 2005, is currently over 23,000 passengers. This ridership was projected to be achieved by the year 2020. The innovative features of this BRT system, including its technology applications, have helped achieve this success.

<u>Park and Ride Facilities</u> – The Los Angeles Region has an extensive park and ride system. Table 4 showed the number of park and ride sites and corresponding parking spaces in existence along the proposed four HOT lane corridors. Additional park and ride enhancements are needed to complement and support the operation of these corridors.

8.2 Transit Proposed Services

The following projects are important for providing complementary services for the operation of the HOT lanes. In particular, these services are needed to generate the additional capacity that would allow the HOT lanes to operate more efficiently..

8.2.1 Bus and Rail Car Purchases

In advance of the start-up of the operation of the HOT lanes, the LACMTA and its transit partners will increase service along the Harbor Transitway, the El Monte Busway, and the managed lanes along the Interstate 210 and the State Route 60. A significant number of bus lines already traverse these corridors, but additional transit enhancements will allow the HOT lanes and the general purpose lanes to operate more efficiently.

The LACMTA, Metrolink, Foothill Transit, Torrance Transit, and Gardena Transit are collectively requesting 122 new buses, 15 new rail cars, and related capital improvements, to enhance bus and rail lines running adjacent to or along routes that run parallel or the vicinity of the proposed HOT lane corridors.

<u>Foothill Transit Purchases and Additions</u> - To enhance its "Silver Streak," express, and commuter bus transit services, Foothill Transit proposes the following bus purchases and related improvements:

• With the implementation of congestion-pricing on the El Monte Busway, the demand for Silver Streak service is expected to increase by 25 to 30 percent. Therefore, ten additional 60-foot articulated buses will be needed to meet the additional demand. It is also expected that the demand for peak-hour commuter service will increase along the El Monte Busway, requiring five additional high-capacity commuter buses to provide more frequent service. Similarly, the bus service of Line 690 along the Interstate 210 will be restructured to provide high-capacity and high-frequency express service. Fifteen additional buses for Line 690 will be required to meet the expected increase in transit demand.

<u>LACMTA Purchases and Additions</u> - To enhance its bus transit services, the LACMTA proposes the following bus purchases:

- 33 additional buses for the El Monte Busway to support the operations of the proposed HOT lanes along the Interstate 10.
- 50 additional buses for the Harbor Transitway to support the operations of the proposed HOT lanes along the Interstate 110.

<u>LACMTA Vanpool Start-up Program</u> - This program will be designed to assist in the formation of up to 300 vanpools along the proposed HOT lane corridors. It will provide a viable commute alternative compared to carpooling or driving alone.

In addition to receiving the incentive of free access to the HOT lanes, vanpools along those corridors will also be eligible for new start-up assistance. This will include covering the cost of the physical exam and driver training required for the vanpool driver and back-up driver. In addition, the program will offer extensive outreach where a dedicated vanpool representative will actively attempt to form vanpools in employment areas and provide a much higher level of support to ensure that vanpools not only are created, but also retained. This representative will also host meetings with groups of businesses located along the target HOT corridors to increase awareness about as a reliable commute option. Once a group of commuters agrees to create a vanpool, training will be provided about the best strategies and practices to maintain already formed vanpools. In addition, special information materials, including print and radio advertising, will be utilized to help educate the public about the benefits of forming vanpools.

This targeted marketing approach when integrated with the LACMTA's ongoing Vanpool Program that subsidizes the lease of vehicles and passenger travel fees, will help the formation of additional vanpools that would have been possible without this type of effort. The application of congestion-pricing strategies, including variable parking and HOT toll rates, will result in an additional demand for forming vanpools. An alternative that is being considered is to have employers certify the formation of vanpools at their institutions.

The experience of the LACMTA with this program shows that vanpools make a considerable impact in improving mobility and in reducing traffic congestion because of their higher passenger occupancy rate compared to carpools and solo driving.

<u>Gardena Transit Purchases and Additions</u> - To enhance its bus transit services, Gardena Transit proposes the purchases of 3 gasoline/hybrid buses for Line 1 that operates along the Harbor Transitway to support the operations of the proposed HOT lanes along the interstate 110.

<u>Torrance Transit Purchases and Additions</u> - To enhance its express bus transit services, Torrance Transit proposes the purchases of 6 expansion buses for expand it Rapid Line service along the Harbor Transitway to support the operations of the proposed HOT lanes along the interstate 110.

Metrolink Purchases and Additions - To enhance rail services, Metrolink proposes the purchase of 15 rail cars. The cars would be used to increase the capacity of trains on the San Bernardino Line that parallels the Interstate 10 and the Riverside Line that parallels the State Route 60. The agency will purchase 11 cars to make each train composed of a 6-car set for the San Bernardino Line and of a 4-car set for the Riverside Line.

8.2.2 Bus Division Upgrade

The LACMTA proposes to construct a new maintenance and operating division in the downtown of the City of Los Angeles to accommodate the service expansion for the implementation of the HOT lane corridors. The new facility will be centrally located in relation to these corridors and will house and will serve the operations of a mixed fleet of approximately 200 buses. It will be constructed to accommodate 40-foot buses, 45-foot buses, and 60-foot articulated buses. If in the future LACMTA acquires other buses besides CNG buses, this facility would still be able to accommodate the maintenance and operations of all these buses.

8.2.3 Transit Station Improvements

Several improvements to existing rail and bus transit stations are proposed, including:

Metrolink Pomona Station, Interstate 10 - This project is on the San Bernardino Line that parallels the Interstate 10. It calls for the construction of two side platforms that will be able to accommodate 8-car trains, the closure of an existing at-grade pedestrian crossing, and the construction of a retaining wall to accommodate new parking. In addition, about 100 more patron parking spaces will be provided.

<u>Foothill Transit Freeway Bus Stop</u>, <u>Interstate 10</u> - This project will provide a freeway bus stop at Vincent Avenue for the Silver Streak and commuter bus lines operating along the Interstate 10 to support the operations of the proposed HOT lanes. This project will allow a more efficient service to the West Covina park and ride facility and will primarily shorten the commute time.

<u>LACMTA</u>, <u>Improved Bus Access</u>, <u>Interstate 110</u> - This project includes improved local bus access (**new** bus stops) for the Slauson and Manchester stations operating along the Interstate 110 to support the operations of the proposed HOT lanes.

<u>LACMTA</u>, <u>Ticket Vending Machines</u>, <u>Interstate 110</u> - This project includes the purchase of ticket vending machines at each one of the of eight stations along the Harbor Transitway to allow for all-door boarding to support the operations of the proposed HOT lanes.

8.2.4 Busway and Track Improvements

Several improvements to key busway and rail tracks are proposed to complement the operations of the proposed HOT lanes. These include the following projects:

Metrolink, Double Track Project, SR-60 and Interstate 10 - This project consists of building three miles of double track along the San Bernardino Line that parallels the Interstate 10 freeway to allow an increase in both reverse and peak-direction trains on this line.

Gold Line Construction Authority Foothill Extension, Interstate 210 - The Gold Line Construction Authority proposes the acquisition of right-of-way for systemwide expansion, such as the planned maintenance yard and shops for the Foothill extension of the Gold Line light rail system, which will support the operations of the proposed Interstate 210 HOT lanes.

<u>LADOT, Transportation System Management (TSM) Improvements</u> - This project implements TSM improvements along the Harbor Transitway, including a bus-only extension of the corridor into the CBD of the City of Los Angeles lane through Flower Street and Fifth Street.

LACMTA. Ramirez Flyover at LA Union Station. Interstate 10 - The Ramirez Flyover at the Union Station project is a two-lane bus only drop ramp linking the transit plaza to the intersection of Ramirez Street and Center Street, parallel to the U.S. 101 and El Monte Busway. It will increase the overall bus flow through the plaza by 100 to 125 percent.

<u>LACMTA</u>, <u>Adams/Figueroa Flyover</u>, <u>Interstate 110</u> - This is a Project Study Report to analyze the construction of a flyover from the Harbor Transitway over Adams Boulevard, to provide a direct connector from the northbound off-ramp HOV lane directly to Figueroa Street. The objective is to improve traffic flow at the end of the current end of the transitway.

8.2.5 Park and Ride Facilities – Los Angeles / South Bay Cities Corridor

The following projects will improve park and ride facilities supporting the proposed HOT lanes along the Harbor Transitway:

<u>LACMTA</u>, <u>Artesia Transit Center</u>, <u>Interstate 110</u> - Expansion of park and ride facilities at the Artesia Transit Center, including a parking shuttle, to supporting the operation of the proposed HOT lanes.

<u>LACMTA, Improved Signage</u> - Improve signage and security for the park and ride lots along the Harbor Transitway, including Slauson, Manchester, Harbor Green Line, Rosecrans, Artesia, Carson, Pacific Coast Highway, and Harbor/Beacon.

8.2.6 Park and Ride Facilities - San Gabriel Valley Corridor

The following projects will improve park and ride facilities supporting the proposed HOT lanes along the San Gabriel Valley:

<u>Foothill Transit, West Covina Park and Ride</u> - Improve the West Covina park and ride facility by constructing a bridge for pedestrians that will connect to bus stop along the Interstate 10.

LACMTA, El Monte Transit Center - Expand the El Monte Transit Center by constructing a new upper and lower deck that will provide a total of 15 layover spaces and 38 bus berths (including some capable to accommodate articulated buses). The project will be implemented in phases to allow for the continued operation of the transit center during construction. The transit center will provide additional patron parking below the proposed added deck. Also, there will be dedicated parking and bus-way access directly from the main level of the transit center. The project also includes installing a closed circuit television cameras (CCTV) security surveillance system that will be consistent with the existing system that is currently deployed at the LACMTA facility.

9.0 Technology Complementary Services

9.1 Technology – Existing Services

Transportation agencies in the Los Angeles Region use state-of-the art technology-based systems and operational strategies that are integrated through institutional partnerships to better manage traffic on the region's freeways, arterials, and transitways. These systems and strategies target both the demand for and the supply of transportation services. Examples of such systems and strategies include the following:

- Ramp metering and adaptive ramp metering stations.
- Changeable message signs capable of displaying estimated travel times.
- Closed circuit television cameras located along the region's freeway to provide realtime data for monitoring traffic flow, including reporting any incidents, and facilitating communicating the progress of incident response.
- Freeway surveillance equipment and vehicle detection stations.
- Freeway Service Patrol (FSP).
- Transportation Management Centers.
- Advanced Transportation Management System (ATMS).

The goal of these strategies and systems is to help create a traveling environment that is safe, reduces congestion, both recurring and incident related, and reduces commute travel times while maximizing the use of roadway capacity. The following is a brief description of the major ongoing technology related areas of research, as well as existing programs and projects:

<u>Active Traffic Management Program</u> - Active Traffic Management (ATM) allows to dynamically manage recurrent and non-recurrent traffic congestion based on prevailing traffic conditions. Focusing on trip reliability, it maximizes the effectiveness and efficiency of the transportation facility facility. It increases vehicle (and passenger) throughput and safety through the integration of different technologies.

Caltrans - District 7 and the Los Angeles Region partners realize the potential of the implementation of ATM projects to mitigate the traffic congestion problem. With this into consideration, pilot project is proposed to test this potential of ATM technologies when applied jointly with congestion-pricing as part of a comprehensive strategy for congestion-reduction. This project will be implemented by PATH researchers from the University of California at Berkeley and tested along one of the proposed HOT lane corridors in the San Gabriel Valley.

Intelligent Transportation Systems (ITS) - Transportation agencies in the Los Angeles Region are pioneers in the implementation of ITS technologies to reduce traffic congestion. These agencies have relied extensively in developing plans to operationally test innovative applications for achieving traffic congestion reduction. Indeed, such systems have been deployed in the Los Angeles Region over the course of the past twenty-five years, even before the name 'intelligent transportation systems' was first used. Since then, the Los Angeles Region has invested hundreds of millions of dollars in ITS technologies to the improve mobility conditions across its freeway and arterial roadway networks, as well as its public transportation network. As a result, the Los Angeles Region is unique in the nation for the extent and variety of the ITS technologies that it has implemented.

The LACMTA has also created a Regional Integration of ITS (RIITS) Network to integrate and exchange information between individual ITS projects implemented by other transportation agencies in the region to leverage the maximum benefit from these investments. The region has been investing heavily in signal synchronization and bus speed improvements, reflecting the region's strong support for ITS improvements on regional arterials to improve traffic flow and enhance capacity in a cost-effective way where roadway expansion is not possible.

Emphasizing the need for regional collaboration, there are five Regional Traffic Forums in Los Angeles County participating in the Transportation Systems Management Program, which is a key component that is identified in the LACMTA's Long Range Transportation Plan.

Regional Integration of Intelligent Transportation Systems (RIITS) Network - The LACMTA, in partnership with Caltrans - District 7, the City of Los Angeles, and the California Highway Patrol, has developed an extremely successful RIITS Network. However, there is still a great need for expansion. The RIITS Network shares real time traffic operation and incident data with approximately 18 transportation agencies, provides traffic congestion data to 15 private Information Service Providers (ISPs), and recently rolled out a real-time traffic page on the LACMTA's website. This information sharing network and the ITS standards that have been established will be useful building blocks, but the RIITS Network will require additional elements to fully integrate the proposed Integrated Corridor Management (ICM) program.

City of Los Angeles ATSAC and ATCS - The City of Los Angeles Department of Transportation delivers an array of transportation-related services to facilitate the flow of traffic along major city streets, to increase the safety of motorists, pedestrians, and bicyclists, to calm traffic within residential neighborhoods, and to mitigate the impact of traffic associated with new commercial and residential development. In particular, its Automated Traffic Surveillance and Control (ATSAC) System / Adaptive Traffic Control System (ATCS) provides a computer-based real-time traffic signal monitoring and control system to improve the overall level of service of arterial streets within the City of Los Angeles. The benefits derived from the ATSAC/ATCS installations include reduced traffic congestion and fuel consumption and improved air quality and vehicle travel times.

Caltrans Transportation Management Center (TMC) - Caltrans - District 7, in conjunction with the California Highway Patrol, has implemented a TMC to rapidly detect and respond to incidents while managing the resulting traffic congestion. By applying the latest technologies, information is fed into the center through pavement sensors and other innovative technology monitoring equipment. The TMC is a state-of-the-art support facility for traffic administration that operates 24 hours of the day. Through the use of advanced technologies and equipment, some of which was developed by Caltrans, motorists benefit with a faster and more efficient transportation management network. The TMC has been developed to benefit from the most innovative applications for integrating transportation management and information systems.

9.2 Technology Proposed Services

Technology-based proposed services and projects include new traffic management, traveler information, and fare/toll collection technology systems that will support implementing the Los Angeles Region Congestion-Reduction Demonstration Initiative:

9.2.1 Traffic Management

<u>City of Los Angeles ATSAC Projects</u> - Improvements and enhancements to the City of Los Angeles Automated Traffic Surveillance and Control System (ATSAC), which is a computer-based traffic signal control system that monitors traffic conditions and system performance, selects appropriate signal timing (control) strategies, and performs equipment diagnostics and alert functions.

<u>County of Los Angeles ATSAC Projects</u> - Improvements and enhancements to the County of Los Angeles Automated Traffic Surveillance and Control System (ATSAC), which is a computer-based traffic signal control system that monitors traffic conditions and system performance, selects appropriate signal timing (control) strategies, and performs equipment diagnostics and alert functions. The implementation of these projects is expected to result in a ten percent reduction in travel times and additional improvement in maintenance responses.

LACMTA Regional Integration of RIITS - The Regional Integration of Intelligent Transportation Systems (RIITS) Network supports information exchange in real time between freeway, traffic, transit and emergency service agencies to improve management of the Los Angeles County transportation system and better serve the traveling public. The goal of the RIITS Network is to coordinate multi-modal operations among regional transportation stakeholders. This coordination enhances the performance of the existing transportation systems and enables the transportation stakeholders to work together for the benefit of the region as a whole. The RIITS Network also represents the Los Angeles Regional ITS Architecture, enabling LACMTA to meet federal funding requirements. The RIITS Network collects real time transportation data and then disseminates it public agencies. The RIITS Network also provides data to private traveler information services of all kinds, which allows them to reach the widest possible audience.

The Los Angeles Service Authority for Freeway Emergencies (LA SAFE) elected to use LACMTA's RIITS Network as the platform for the upcoming Los Angeles 511 Advance Traveler Information Project. The RIITS Network will therefore be moving to 24/7 operation and maintenance in 2008. Regional transportation agencies will be able to provide their data to the Los Angeles 511 system via the RIITS Network. Other systems that are currently being interfaced through RIITS or will be interfaced in the near future include:

- The Los Angeles Region HOT lane network;
- City of Los Angeles' proposed Changeable Message Signs Program;
- City of Los Angeles' proposed Downtown Intelligent Parking Management Program;
- City of Los Angeles' Downtown DASH System Enhancements;
- Enhancements proposed by Los Angeles SAFE including arterial information, improvements to LACMTA ATMS, improvements to Caltrans traffic detection and Freeway Service Patrol enhancements.

<u>Foothill Transit, Line 187 Bus Signal Priority Project</u> - This project would implement a Bus Signal Priority (BSP) technology project on Foothill Transit's Line 187 bus line, supporting the proposed I-210 HOT lanes.

<u>Caltrans Interstate 210 Congestion Relief Project System Wide Adaptive Ramp Metering (SWARM)</u> - I-210 (Foothill Freeway) is a critical component of the Los Angeles County freeway network. The freeway stretches more than 50 miles from the San Bernardino County line in the east to I-5 in the northern San Fernando Valley of Los Angeles.

Interstate 210 is a heavily traveled east-west corridor in Los Angeles County comprised of segments ranging from three to six lanes by direction, with many segments including dedicated HOV lanes. The I-210 Congestion Relief Project, which has been completed, included the expansion of existing traffic management strategies to new locations as well as the implementation of new and innovative strategies, including:

- 1. Addition of traffic responsive ramp metering;
- 2. Addition of microwave vehicle detection stations;
- 3. Freeway-to-freeway connector metering:
- 4. HOV bypass lane metering; and
- System Wide Adaptive Ramp Metering (SWARM).

SWARM is an advanced metering strategy works by evaluating real-time traffic situations at selected and dynamic bottlenecks throughout the corridor, in order to predict future congestion and properly set upstream ramp metering rates helping to reduce congestion. This methodology improves the ability to maximize and maintain efficiency of traffic flow throughout the corridor. It represents an innovation over current metering capabilities, by implementing ramp metering on a system wide basis, thus, responding to both recurring and non-recurring traffic congestion.

<u>I-210 Active Traffic Management Project - Proposed Project - Caltrans proposes to investigate the feasibility of implementing Active Traffic Management on the I-210 corridor, and, if feasible, design and implement a Pilot Demonstration Test of the selected ATMS technologies and strategies.</u>

While Caltrans has already identified the I-210 corridor as the general site for demonstration of ATM, it has not yet determined precisely where on the corridor the pilot demonstration would be carried out and this should be based on discussions with I-210 corridor stakeholders especially during the early stages of the project, who will form the basis for the project's Stakeholder Advisory Group that will provide feedback and advice to the team throughout the period of performance.

<u>Caltrans - Adaptive Signal Control</u> - This project proposes the development and deployment of an adaptive signal control system on 5 corridors (LA-001-PM 0.21/25.99, LA-107-PM 0.43/4.80, LA-213-PM0.00/4.80, LA-072-PM 0.29/6.77, LA-066-PM 0.3/5.34) targeting approximately 200 intersections to enable arterial management through signal timing optimization based on real-time traffic conditions.

These systems will reduce delay and improve traffic flow at intersections and increase throughput in the corridor during peak periods. Studies conducted by the City of Los Angeles Department of Transportation (LADOT) on their Adaptive Traffic Control System (ATCS) have demonstrated approximately 10-15 percent in delay savings. The response time to signal operational problems and field incidents will also be reduced.

9.2.2 Traveler Information Systems

The following proposed traveler information system adaptations are designed to provide travelers with real-time transit scheduling information.

511 System Improvements/Enhancements - The following items are all projects to improve 511 services. These items are specifically focused on the provision of additional information to end users (the general public). Any funding provided would support capital improvement and developmental costs and not on-going operation and maintenance costs. The 511 system is currently expected to cost \$30 million to develop, deploy, operate and maintain over a ten-year period. The services listed below represent enhancements to the current planned 511 deployment.

LACMTA Next Trip Bus Information - LACMTA is developing a system that will allow customers to obtain information on when the next bus or train will arrive at a particular bus stop or rail station. The information to be provided will be based on real-time transit data being collected by Transit Operations. The first phase will be to provide this information on the LACMTA website. In the future, LACMTA would like to provide this information via cell phones or other personal information devises such as Blackberries.

The key to providing this information will be to update the approximately 18,500 bus stop signs across the county by placing identification information to allow customers to type in a particular location and then receive the real-time information in response. This application is expected to attract new transit passengers. Providing this information will make the transit system in the Los Angeles Region more accessible and attractive. Currently, no information regarding schedules is provided at bus stops. The next bus trip information will provide an important new tool to enhance transit use.

LADOT AVL/Passenger Information System and Downtown DASH System Enhancements - This project will allow to create an interface between the LADOT's DASH system and the RIITS Network. The proposed DASH system enhancements would make such an interface much more feasible. The RIITS Network has data for the arterials in the City of Los Angeles and for the LACMTA bus and rail operations. Interfaces are currently being developed with Long Beach Transit and Foothill Transit. The addition of DASH information would further enhance the regional multi-modal transportation benefits generated by the RIITS Network.

This proposed project will provide real-time bus location and arrival information for passengers and system managers of the Downtown DASH shuttle system in the City of Los Angeles. This project would employ Automatic Vehicle Locator (AVL) technology to improve the overall efficiency and reliability of the Downtown DASH shuttle program. Passengers using this service will be able to obtain next bus arrival information from personal electronic devices, such as cell phones, computers, and personal data assistants. In addition, LED displays will be placed at key bus stop locations in the downtown of the City of Los Angeles to provide passengers with bus arrival information.

<u>LADOT AVL/Passenger Information System – Downtown Commuter Express</u> - This proposed project will provide real-time bus location and arrival information for passengers and system managers of the Commuter Express transit system operated by Los Angeles DOT. This project would employ Automatic Vehicle Locator (AVL) and Global Positioning System (GPS) technologies to improve overall efficiency and reliability of the Commuter Express transit program. The proposed project includes the purchase and installation of a digital communication system with GPS technology to communicate location and schedule information in areas outside of the downtown of the City of Los Angeles.

<u>Torrance Transit, AVL/Passenger Information System</u> - This proposed project will provide realtime bus location and arrival information for passengers and system managers of the Torrance Transit system for express buses operating along the Harbor Transitway.

LADOT Changeable Message Signs (CMS) Program - The RIITS Network currently has an interface with the LADOT for arterial data. This interface can be enhanced to provide data for the CMS. The RIITS Network already displays CMS of Caltrans on the LACMTA's website, as well as on other public websites. Adding this data to the RIITS Network will allow other transportation agencies and the general public to view the messages on the signs remotely, thus greatly enhancing the benefits derived from the deployment of this technology.

<u>LACMTA Real-time Passenger Information</u> – This project will provide real-time passenger information displays at each 12 transit stops (including 37th Street, 23rd Street., Seventh Street/ Flower Street, and Fifth Street / Flower Street).

9.2.3 Fare Technology Systems

LACMTA Integrated Mobility Account - This project would create a system that will integrate the Universal Fare System /Transit Access Pass (UFS / TAP) smart card ticketing system and the electronic toll collection system to be implemented in the Los Angeles Region into one single account. This project will enable the HOT lane or transit user to manage a single account to support his/her travel choices. The new system will allow for the creation of an innovative incentive program to promote mode shifts from the automobile to transit, resulting in additional travel options. The new system will allow maintaining a balance of credits awarded to previously regular automobile users who become regular transit users, but who may need to use the premium service along the HOT lane corridors occasionally. It will be possible for these travelers to redeem their accumulated "toll" credits for accessing the HOT lanes.

10.0 Expedited Project Completion

The LACMTA and its regional partners would like to expedite the delivery of the different components of the its Congestion-Reduction Demonstration Initiative through the following:

Federal Funding Programs - The Los Angeles Region partners are seeking federal funding from the USDOT discretionary programs to expedite the implementation of the congestion-pricing and complementary transit and technology projects that are included in this proposal, including, but not limited to: the Highways for Life Pilot Program, the Innovative Bridge Research and Deployment Program, the Transportation, Community, and System Preservation Program, the Bus and Bus-Related Facilities Program, the New Fixed Guideway Facilities program (including funding for Small Starts and Very Small Starts projects), Alternatives Analysis Program, RITA's SAFE TRIP- 21 Program, and the Value Pricing Program. In particular, the conversion to HOT lanes of the HOV lanes along the Interstate 10 that are currently under design and are expected to be completed in the year 2014 could be expedited should federal funding become available.

Expedited Project Delivery Reviews - The Los Angeles Region partners are seeking and would like from the USDOT to expedite the approval of the authority for implementing the proposed HOT lane corridors, operating the facilities, and collecting tolls. The Regional Partners are also seeking expedited project delivery from the USDOT by waiving certain FHWA regulations in accordance with FHWA's Special Experimental Project or SEP-15 program, or as otherwise permitted by law, by placing key projects on the Environmental Stewardship Executive Order 13, and by allowing for the streamlining of some aspects of the environmental review process. In particular, the LACMTA could accelerate the construction, and further conversion to HOT lanes, of the new HOV lanes along that are being designed along the Interstate 10.

<u>Technical Assistance</u> - Finally, the Los Angeles Regional partners are seeking to partner with the USDOT is this demonstration initiative and requesting technical assistance.

11.0 Research, Planning and Experience to Date

The Los Angeles Region partners included in this in this grant application to the USDOT have considerable experience in research and planning for each one of the main three categories of the Los Angeles Region Congestion-Reduction Demonstration Initiative. Their experience with transit and technology was briefly described in the previous sections. The following is a brief description of their experience researching congestion-pricing.

OffPeak Program - The OffPeak program (administered by PierPass Inc.) is a successful peak-period pricing program that is unique in the world and which was developed as a way to address chronic congestion and air quality issues in and around the Port of Los Angeles and the Port of Long Beach. Being a market-based incentive program to mitigate traffic congestion during peak-periods, the OffPeak program has resulted in major traffic relief along major travel corridors located in the vicinity of the ports, particularly along the Interstate 710 and the Interstate 110.

Alameda Corridor - The 20-mile long Alameda Corridor is the first link in the national rail system for goods movement from the Port of Los Angeles and the Port of Long Beach, through the transcontinental rail system near downtown the City of Los Angeles, to be then distributed to destinations across the United States. With more than 60 percent of the cargo arriving at the two ports ultimately reaching markets outside of Southern California, the Alameda Corridor has seen a 106 percent growth in cargo movement over the last four years. These ports also handle 24 percent of the country's total exports. Thus, with a trade volume of about \$300 billion, the Alameda Corridor is a project of regional and national significance.

While the Alameda Corridor focused on the north-south corridor between downtown the City of Los Angeles and the Port of Los Angeles and the Port of Long Beach, the Alameda Corridor East (ACE) focuses on the east-west corridor that is parallel to Interstate 10 and State Route 60 between East Los Angeles (just east of the downtown of the City of Los Angeles) to the San Bernardino County. The ACE is a set of projects to mitigate the anticipated traffic congestion and to enhance the overall mobility and safety caused by the expected increase in rail freight traffic through eastern Los Angeles County. The Alameda Corridor East Construction Authority has identified specific construction projects that are currently under construction, ranging from low-cost improvements in safety features and signal devices at rail crossings to expensive grade separations, which involve building underpasses or bridges so that rail and motor-vehicle traffic no longer intersect.

Reduce Emissions and Congestion on Highways (REACH) - The Los Angeles Region was among the first regions in the country to examine different pricing strategies and their public acceptance to mitigate traffic congestion. In 1995, SCAG created the REACH Task Force that included the LACMTA and Caltrans, among other regional agencies. This group reviewed market-based transportation management concepts, including vehicle user-fees and toll lanes. A key finding of this study was that HOT lanes have the most promise of introducing transportation pricing strategies to the region. The study also identified public acceptability and equity issues that needed to be addressed for the successful implementation of this pricing strategy.

<u>Draft 2008 Regional Transportation Plan (RTP)</u> - SCAG's Draft 2008 RTP discusses the need to address travel demand thought the combination of Travel Demand Management (TDM) strategies designed to influence an individual's travel behavior by making travel alternatives other than the single-occupant automobile be more attractive, especially during peak commute periods or by enacting regulatory strategies. The Draft 2008 RTP recommends the implementation of congestion-pricing strategies, particularly HOT lanes, along some of the region's corridors.

<u>Caltrans Business Plan</u> - Caltrans - District 7 recently submitted to the USDOT its Business Plan for improving the operating performance of the freeway system that it manages in the Los Angeles Region. This plan includes congestion-pricing options, including the implementation of HOT lanes.

<u>LACMTA Long Range Transportation Plan (LRTP)</u> - The LACMTA's 2001 LRTP included sensitivity tests to examine the effects of pricing (and land use) on the performance of the region's transportation system. It concluded that these strategies combined have tremendous positive impact on transit share, highway speed, mobility, and air quality. This finding is consistent with the research conducted at several universities in Southern California.

12.0 Other Time-Frame Considerations

The Los Angeles Region Congestion-Reduction Demonstration Initiative has already been approved by the Board of Directors of the LACMTA. The proposed conversion of HOV lanes to HOT lanes along the four freeways that are included in this proposal, including operating the facilities and collecting tolls, requires the approval of the State Legislature in California (per Assembly Bill 1467). The LACMTA and Caltrans - District 7 will be submitting in the following few weeks an application to the California Transportation Commission (CTC) seeking the authority to develop HOT lanes. If the CTC determines that the proposed projects meet their guidelines, then it will recommend the projects to the State Legislature for approval.

13.0 Funding Support for Los Angeles Congestion-Reduction Strategy

The total estimated cost to implement the proposed congestion reduction strategies is \$1.4 billion. Our partnership seeks federal grant funding in the amount of \$648 million, composed of \$332 million for congestion-pricing projects, \$220 million for transit complementary services and \$96 million for technology complementary services. The local contribution, composed of a combination of local, state, and federal formula funds, is \$781 million.

Los Angeles Region congestion-reduction strategies included in this grant application are a small representation of the region's overall investment need. The financial plan for the five-year period between Fiscal Year 2005 and Fiscal Year 2009 is over \$22 billion. It is anticipated that these funds will be spent for countywide capital and operating activities that would assist in reducing the traffic congestion levels in the region by allocating projected funding as follows: \$8.2 billion for bus and rail operations, \$4.2 billion for bus and rail capital, and \$9.6 billion for highway and road improvements. It is estimated that approximately 83 percent of the estimated \$22 billion will be from local and state sources. This five-year funding level represents about 14 percent of the total cost of the estimated \$153 billion in transportation investments required to fund the region's comprehensive congestion reduction strategy for the period between Fiscal Year 2005 and Fiscal Year 2030. The sources of these funds are estimated to be 65 percent local, 24 percent state, and 11 percent federal.

14.0 Contact Information

The primary point of contact for this USDOT Congestion-Reduction Demonstration Initiative application on behalf of Los Angeles County's regional partners is:

Name:

Ashad R. Hamideh, Ph.D.

Title

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Letters of Support



San Gabriel Valley Council of Governments

3452 East Foothill Blvd. Suite 810, Pasadena, California 91107 Phone: (626) 564-9702 FAX: (626) 564-1116 E-Mail SGV@sgvcog.org

December 28, 2007

Honorable Mary E. Peters U.S. Secretary of Transportation 400 Seventh Street, S.W. Room 10200 Washington, D.C. 20590

Dear Secretary Peters:

We have been advised that the Los Angeles County Metropolitan Transportation Authority (LACMTA) is submitting an application for funding for the Congestion-Reduction Demonstration Initiatives to the U.S. Department of Transportation (USDOT) on behalf of the Los Angeles County region. We understand this application includes priority projects supported by the San Gabriel Valley Council of Governments (SGVCOG).

Over the past decade the SGVCOG has served the San Gabriel Valley and its more than 1.5 million California residents living in 31 incorporated cities and unincorporated communities. Major SGVCOG transportation accomplishments include: the formation of the Pasadena Blue Line Construction Authority to build the 13.6 mile Metro Gold Line light rail from Downtown Los Angeles to Pasadena, the formation of the Alameda Corridor East Construction Authority to construct grade separations for busy intersections of rail and vehicular traffic, and the formation of a Metro West San Gabriel Valley Sector Governance Council to improve bus service to the eight SGV cities not served by Foothill Transit.

As proposed, the USDOT application includes implementation of congestion pricing on portions of the Interstate 10 and 210 and State Route 60 within the San Gabriel Valley. We are enthused about the new initiatives supported by USDOT and innovative measures undertaken by LACMTA's board. We are pleased that LACMTA has worked collaboratively with the California Department of Transportation, the Southern California Association of Governments and other key transportation stakeholders in Los Angeles County to develop the region's Congestion-Reduction Demonstration Initiatives application.

We thank you for your careful review of LACMTA's application, your appreciation of our many complex issues, and your support in improving the quality of life for the residents and workers of the Los Angeles region.

Sincerely,

Nicholas Conway

Executive Director

luckles J. Conway

cc: Roger Snoble, Los Angeles County Metropolitan Transportation Authority

CITY OF LOS ANGELES

RITA L. ROBINSON GENERAL MANAGER



DEPARTMENT OF TRANSPORTATION 100 S. Main St., 10th Floor LOS ANGELES, CA 90012 (213) 97Z-4949 FAX (213) 97Z-4910

December 27, 2007

Honorable Mary E. Peters U.S. Secretary of Transportation 400 Seventh Street, S.W. Room 10200 Washington, D.C. 20590

Dear Secretary Peters:

We are pleased to share with you our full support for the Congestion-Reduction Demonstration Initiatives application for funding to be submitted to the U.S. Department of Transportation (USDOT) by the Los Angeles County Metropolitan Transportation Authority (Metro) on behalf of the Los Angeles County region. This application is being submitted in cooperation with a number of major transportation stakeholders in Los Angeles, including the Los Angeles Department of Transportation.

Enacting the proposals in this Congestion-Reduction Demonstration Initiatives application will help mitigate the traffic congestion problem in Los Angeles, which is consistently ranked as being the worst in the country. Specifically, Metro's application includes countywide mobility enhancements made possible through innovative transit and technology projects and programs. Additionally, we are proposing to implement a congestion-pricing scheme that envisions a system-wide approach that could serve as a model to be implemented in other areas of the country. To succeed in this effort, the regional partners in Los Angeles County are seeking the support of the USDOT.

We are particularly pleased that Metro has worked collaboratively with the California Department of Transportation, the Southern California Association of Governments, the City of Los Angeles Department of Transportation, the Los Angeles County Department of Public Works, and other key transportation stakeholders in Los Angeles County to develop the region's Congestion-Reduction Demonstration Initiatives application. Working together, these entities have agreed on an application that effectively deals with the wide array of mobility challenges faced each day by our county's 10 million residents, the most populous in the United States. These challenges also have an impact on the economy of the country due to the status of Los Angeles as a trade gateway.

It is our understanding that Metro will be submitting its Congestion-Reduction Demonstration Initiatives application to the USDOT by December 31, 2007 and that your agency could make a decision as early as January 2008. We wholeheartedly believe that Los Angeles County, which comprises the most congested urban area in the United States, would be a prime candidate to become a qualified jurisdiction under the USDOT's Congestion-Reduction Demonstration Initiatives program.

We thank you in advance for your careful review of our region's Congestion-Reduction Demonstration Initiatives application.

Sincerely,

Rita L. Robinson, General Manager

Los Angeles Department of Transportation



ANTONIO R. VILLARAIGOSA MAYOR

December 21, 2007

Honorable Mary E. Peters U.S. Secretary of Transportation 400 Seventh Street, S.W. Roorn 10200 Washington, D.C. 20590

Re: Los

Los Angeles County Metropolitan Transportation Authority (Metro) Congestion-Reduction Demonstration Initiatives Application Letter

Dear Secretary Peters:

I write to express my support for the Congestion-Reduction Demonstration Initiatives application for funding to be submitted to the U.S. Department of Transportation (USDOT) by the Los Angeles County Metropolitan Transportation Authority (Metro) on behalf of the Los Angeles County region.

Metro's application includes countywide mobility enhancements made possible through innovative transit and technology projects and programs that will effectively address the mobility challenges faced daily by Los Angeles County's ten million residents, the most populous and congested urban area in the nation. These challenges also have an impact on the economy of the country due to the status of Los Angeles as a trade gateway. For these reasons, Los Angeles County would be a prime candidate to become a qualified jurisdiction under the USDOT's Congestion-Reduction Demonstration Initiatives program.

I thank you in advance for your careful review of our region's application. Should you have any questions concerning MTA's application, please contact Heidi Sickler, Policy Analyst, of my staff at (213) 978-3062.

Very truly yours,

ANTONIO R. VILLARAIGOSA

Mayor

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€\$

SOUTHERN CALIFORNIA



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Las Angeles County: Young B. Burle, Los Angeles County - Zev Yausfarshy, Lus Angeles County - Richard Alamon, Los Angeles - Itm Alchnyer, Manhattan Boach Harry Baldwin, San Gabriel - Tony Cardenes, Los Angeles - Stan Carroll, La Habra Heights - Maryaret Clark, Rosemend - Gene Daniels, Paramo Duntag, logicarood - Rae Sabelich, Long Beach - David Gaffo, Downey - Eric Garcetti, Los Angeles - Wendy Grenel, Los Angeles - Frank Gorulé, Codahy - Janica Hahr, Los Angeles - Isadore Hall, Compton - Keith W. Hanks, Azusa - Jusé Huizar, Los Angeles - Jim Jeffra, Lancaster - Tom LaBorige, Los Angeles - Paula Lantz. Pomona - Barbara Messina, Albambra - Larry Nelson Artesia - Paul Novatia, Torrance - Parn O'Connor Santa Monica - Bernard Paris, Los Angeles - Jan Perry, Los Angeles - 66 Reyes, Los Angeles - 810 Rosendahi, Los Angeles - Greig Smith, Los Angeles - Iom Sykes, Walnut - Mike Ten, South Pasadena - Tonia Reyes Uranga, Long Beach - Antonio Villaraigosa, Los Angeles - Denni Washburn, Calabasas - Jack Welss, Los Angeles - Herb L Wesson, Jr., Los Angeles - Dennis Zine, Los Angeles

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San Bernardina County: Gary Ovitz, San Bernardino County • Lawrence Role, Bacstow • Paul Eston, Morricha • Lee Ann Garda, Grand Tescac • Tim Jacope, Towen of Apple Valley • Larry McCallon, Highland • Deborals Robertison, Raiho • Alan Wapner, Ontario Deborals Robertison, Raiho • Alan Wapner, Ontario

Ventura County: Linda Parks, Ventura County -Glen: Bettria, Simi Valley - Carl Morchouse, San Buesawestura-Koni Young, Port Hoeneme

Tethal Government Representation: Andrew Mariel Sr. Pethanga Band of Lutseho Indians

Orange County Transportation Authority: Art Brown, Barna Park

Electrical County Transportation Commission:

San Bernardino Associated Governments: Pari

Vestissa County Transportation Commission: Keith Militouse, Moorpark 10/24/07 December 20, 2007

Honorable Mary E. Peters U.S. Secretary of Transportation 400 Seventh Street, S.W. Room 10200 Washington, D.C. 20590

Dear Secretary Peters:

The Southern California association of Governments (SCAG) is pleased to share with you our full support for the Congestion-Reduction Demonstration Initiatives application for funding submitted to the U.S. Department of Transportation (USDOT) by the Los Angeles County Metropolitan Transportation Authority (Metro) on behalf of Los Angeles County.

This application is being submitted in cooperation with a number of major transportation stakeholders in Southern California, including SCAG, the California Department of Transportation, the City of Los Angeles Department of Transportation, the Los Angeles County Department of Public Works, and other key transportation stakeholders in Los Angeles County. Working together, these entities have agreed on an application that effectively deals with the wide array of mobility challenges faced each day by our county's 10 million residents, the most populous in the United States.

Specifically, Metro's application includes countywide mobility enhancements made possible through innovative transit and technology projects and programs.

In addition, Metro is proposing to implement a congestionpricing scheme that envisions a system-wide approach that could serve as a model to be implemented in other areas of the country. To succeed in this effort, the regional partners in the Los Angeles metropolitan region are seeking the support of the USDOT.

Enacting the proposals in this Congestion-Reduction Demonstration Initiatives application will help mitigate the traffic congestion problem in Los Angeles, which is consistently ranked as being the worst in the country. These challenges also have an impact on the economy of the country due to the status of Los Angeles as a trade gateway. In 2005, the Ports of Los Angeles and Long Beach accounted for approximately 24% of all U.S. container export traffic and 40% of all U.S. import container traffic. Seventy percent of the import container traffic goes to areas outside of the region.

It is our understanding that Metro will submit its Congestion-Reduction Demonstration Initiatives application to the USDOT by December 31, 2007 and that your agency could make a decision as early as January 2008. We wholeheartedly believe that Los Angeles County, which comprises the most congested urban area in the United States, would be a prime candidate to become a qualified jurisdiction under the USDOT's Congestion-Reduction Demonstration Initiatives program.

We highly recommend your consideration and approval of Metro's Congestion-Reduction Demonstration Initiatives application.

Sincerely,

Hasan Ikhrata,

Director, Planning and Policy

Southern California Association of Governments

Cc: Roger Snoble



COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

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IN REPLY PLEASE REFER TO FILE: PD-0

December 18, 2007

The Honorable Mary E. Peters U.S. Secretary of Transportation 400 Seventh Street, S.W., Room 10200 Washington, D.C. 20590

Dear Secretary Peters:

CONGESTION-REDUCTION DEMONSTRATION INITIATIVES APPLICATION

We are pleased to share with you our full support for the Congestion-Reduction Demonstration Initiatives application for funding to be submitted to the U.S. Department of Transportation (USDOT) by the Los Angeles County Metropolitan Transportation Authority (Metro) on behalf of the Los Angeles County region. This application is being submitted in cooperation with a number of major transportation stakeholders in Los Angeles, including the County of Los Angeles Department of Public Works.

Implementing the proposals in this application will help mitigate the traffic congestion problem in Los Angeles, which is consistently ranked as being the worst in the country. Specifically, Metro's application includes countywide mobility enhancements made possible through innovative transit and technology projects and programs. Additionally, Metro is proposing to implement a congestion-pricing scheme that envisions a system-wide approach that could serve as a model to be implemented in other areas of the country. To succeed in this effort, the regional partners in the County of Los Angeles are seeking the support of the USDOT.

We are particularly pleased that Metro has worked collaboratively with the California Department of Transportation, the Southern California Association of Governments, the City of Los Angeles Department of Transportation, ourselves, and other key transportation stakeholders in the County of Los Angeles to develop the region's Congestion-Reduction Demonstration Initiatives application. Working together, we have agreed on an application that sets forth a plan addressing many of the mobility challenges faced each day by our County's ten million residents, the most populous county in the United States. These challenges also have an impact on the economy of the country since Los Angeles is a trade gateway.

The Honorable Mary E. Peters December 18, 2007 Page 2

It is our understanding that Metro will be submitting its Congestion-Reduction Demonstration Initiatives application to the USDOT by December 31, 2007, and that your agency could make a decision as early as January 2008. We wholeheartedly believe that the County of Los Angeles, which comprises the most congested urban area in the United States, would be a prime candidate to become a qualified jurisdiction under the USDOT's Congestion-Reduction Demonstration Initiatives program.

We thank you in advance for your careful review of our Congestion-Reduction Demonstration Initiatives application.

Very truly yours,
Donald L. Wolfe

DONALD L. WOLFE
Director of Public Works

SA:abc

P:\pdpub\Admin\MEMO\Letter of Support w_ congestion pricing.doc

cc: Metropolitan Transportation Authority (Gladys Lowe)

SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY

December 31, 2007

Honorable Mary E. Peters U.S. Secretary of Transportation 400 Seventh Street, S.W. Room 10200 Washington, D.C. 20590

Member Agencies: Los Angeles County Metropolitan Transportation Authority. Orange County Transportation Authority. Riverside County Transportation Commission. San Bernardino Associated Governments. Ventura County Transportation Commission. Ex Officio Members: Southern California Association of Governments. San Diego Association of Governments. State of California

Dear Secretary Peters:

We are pleased to share with you our full support for the Congestion-Reduction Demonstration Initiatives application for funding to be submitted to the U.S. Department of Transportation (USDOT) by the Los Angeles County Metropolitan Transportation Authority (LACMTA) on behalf of the Los Angeles County region. This application is being submitted in cooperation with a number of major transportation stakeholders in Los Angeles, including the Southern California Regional Rail Authority (SCRRA).

Enacting the proposals in this Congestion-Reduction Demonstration Initiatives application will help mitigate the traffic congestion problem in Los Angeles, which is consistently ranked as being the worst in the country. Specifically, LACMTA's application includes countywide mobility enhancements made possible through innovative transit and technology projects and programs. Additionally, we are proposing to implement a congestion-pricing scheme that envisions a system-wide approach that could serve as a model to be implemented in other areas of the country. To succeed in this effort, the regional partners in Los Angeles County are seeking the support of the USDOT.

We are particularly pleased that LACMTA has worked collaboratively with the California Department of Transportation, the Southern California Association of Governments, the City of Los Angeles Department of Transportation, the Los Angeles County Department of Public Works, SCRRA and other key transportation stakeholders in Los Angeles County to develop the region's Congestion-Reduction Demonstration Initiatives application. Working together, these entities have agreed on an application that effectively deals with the wide array of mobility challenges faced each day by our county's 10 million residents, the most populous in the United States. These challenges also have an impact on the economy of the country due to the status of Los Angeles as a trade gateway.

It is our understanding that LACMTA will be submitting its Congestion-Reduction Demonstration Initiatives application to the USDOT by December 31, 2007 and that your agency could make a decision as early as January 2008. We wholeheartedly believe that Los Angeles County, which comprises the most congested urban area in the United States, would be a prime candidate to become a qualified jurisdiction under the USDOT's Congestion-Reduction Demonstration Initiatives program.

We thank you in advance for your careful review of our region's Congestion-Reduction Demonstration Initiatives application.

//

Sincerely.

David Solow Chief Executive Officer

Cc: Roger Snoble, LACMTA

CALIFORNIA PATH HEAD GRAFTERS
University of California, Berkeley
1357 South 46th Sa. 840, 452
Richmond Ca. 94804—4643
Tel: (510) 665-3406
Faz: (510) 665-3537
http://www.path.bet.koley.edu

January 4, 2008

The Honorable Mary E. Peters United States Secretary of Transportation 1200 New Jersey Ave, SE Washington, D.C. 20590

Dear Secretary Peters:

We are very pleased to write and submit to you this letter of support for the Congestion-Reduction Demonstration Initiatives Application for funding that was just submitted to the U.S. Department of Transportation (USDOT) by the Los Angeles County Metropolitan Transportation Authority (Metro) on behalf of the Los Angeles County region. This application has been submitted in cooperation with several major transportation agency stakeholders in Los Angeles County together with the California Partners for Advanced Transit and Highways (PATH) Program of the Institute of Transportation Studies at the University of California, Berkeley.

Enacting the proposals in this Congestion-Reduction Demonstration Initiatives Application will contribute to mitigating existing traffic congestion in the Los Angeles region, which has consistently been ranked as the worst in the nation. Specifically, Metro's application includes countywide mobility enhancements made possible through innovative transit and technology projects and programs. Additionally, the application is proposing to implement a congestion-pricing plan that envisions a system-wide approach that could serve as a model to be implemented in other areas of the country. To succeed in this effort, the regional partners in Los Angeles County are seeking the support of the United States Department of Transportation (USDOT).

Metro has developed its Congestion-Reduction Demonstration Initiatives Application by working collaboratively with its institutional regional partners and assembling a robust team including the California Department of Transportation, the Southern California Association of Governments, the City of Los Angeles Department of Transportation, and the Los Angeles County Department of Public Works, as well as other key transportation stakeholders in Los Angeles County. We feel very fortunate and excited to be a member of this team; moreover, with PATH's 21-year history as a continuing expert and leader in the field of intelligent transportation system technologies, we firmly believe that we can substantively contribute to the overall success of the program in the Los Angeles region.

We feel that this application effectively deals with a wide array of mobility challenges faced on a daily basis by Los Angeles County's 10 million residents, the most populous in the United States. These challenges also have an impact on the economy of the country due to the status of Los Angeles as a major international trade gateway. Thus we wholeheartedly believe that Los Angeles County would be a prime candidate to become a qualified jurisdiction under the USDOT's Congestion-Reduction Demonstration Initiatives program.

We thank you in advance for your careful review of the Los Angeles Congestion-Reduction Demonstration Initiatives Application.

Sincerely,

Alex Skabardonis, PhD.

Director, California PATH Program

Professor, Department of Civil & Environmental Engineering

University of California, Berkeley

DEPARTMENT OF TRANSPORTATION OFFICE OF THE DIRECTOR 1120 N STREET P. O. BOX 942873 SACRAMENTO, CA 94273-0001 PHONE (916) 654-5266 FAX (916) 654-6608 TTY 711



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December 27, 2007

The Honorable Mary E. Peters, Secretary United States Department of Transportation 400 Seventh Street, S.W., Room 10200 Washington, D.C. 20590

Dear Secretari Peters:

I am pleased to share with you the California Department of Transportation's (Department) full support for the Congestion-Reduction Demonstration Initiatives application for funding to be submitted to the United States Department of Transportation (USDOT) by the Los Angeles County Metropolitan Transportation Authority (Metro) on behalf of the Los Angeles County region. This application is being submitted in cooperation with a number of major transportation stakeholders in Los Angeles, including the support of key policy makers.

I am particularly pleased that this Congestion-Reduction Demonstration Initiatives application has been a collaborative effort with the Department's District 7, the Metro, the Southern California Association of Governments, the City of Los Angeles Department of Transportation, the Los Angeles County Department of Public Works, and other key transportation stakeholders in Los Angeles County. Working together, these entities have agreed on an application that effectively deals with the wide array of mobility challenges faced each day by the 10 million residents of the most populous county in the United States. These challenges also have an impact on the country's economy, as Los Angeles is a global trade gateway between the United States and Asia.

Enacting the proposals in this Congestion-Reduction Demonstration Initiatives application will help mitigate the traffic congestion problem in Los Angeles, which is consistently ranked as being the worst in the country. Specifically, Metro's application includes countywide mobility enhancements made possible through innovative transit and technology projects/programs. Additionally, the proposal would implement a congestion-pricing strategy that envisions a system-wide approach that could serve as a model for implementation in other areas of the country. To succeed in this effort, the Department and our Los Angeles County regional partners are seeking the support of the USDOT.

I would like to highlight that the Los Angeles area has been a continuing pioneer in the implementation of Intelligent Transportation Systems strategies in California, as well as the nation. Los Angeles has demonstrated its ability to create a model of strong institutional coordination and collaboration to deploy integrated solutions across a complex multi-modal transportation system.

The Honorable Mary E. Peters December 27, 2007 Page 2

It is our understanding that the Metro will submit its Congestion-Reduction Demonstration Initiatives application to the USDOT by December 31, 2007, and that your agency could make a decision as early as January, 2008. We wholeheartedly believe that Los Angeles County, which comprises the most congested urban area in the United States, would be a prime candidate to become a qualified jurisdiction under the USDOT's Congestion-Reduction Demonstration Initiatives program.

We thank you in advance for your careful review of our region's Congestion-Reduction Demonstration Initiatives application.

Sincerely,

WILL KEMPTON

Director

c: Roger Snoble, Metro Randell H. Iwasaki, Cl

Randell H. Iwasaki, Chief Deputy Director Douglas R. Failing, District 7 Director The Honorable Mary E. Peters December 27, 2007 Page 2

bc: Michael Miles, Deputy Director, Maintenance and Operations Robert Copp, Chief, Division of Traffic Operations John Wolf, Assistant Chief, Division of Traffic Operations DO File

Reference: DOTS 20079135

John Wolf/amc