

I-580 Corridor Improvement Projects

Project Delivery Strategy and Status Update

Presentation to Alameda County Transportation Commission
Program and Projects Committee
April 11, 2011



Purpose of Presentation

- ❖ Provide an update on the status, scope, cost, and schedule of the I-580 Corridor Express (HOT) Lane Projects including a project delivery plan for the I-580 WB Express Lane.






Inventory of Current I-580 Corridor Projects

- ❖ **Eastbound I-580 HOV Lane Project (Hacienda Drive to Greenville Road)**
 - ◆ Includes Rehabilitation within project limits
- ❖ **Eastbound Auxiliary Lane Project (Isabel Avenue to First Street)**
- ❖ **Eastbound HOT Lane Project Conversion (Hacienda Dr to Greenville Rd)**
- ❖ **Westbound I-580 HOV Lane Project (Foothill Blvd to Greenville Rd)**
 - ◆ Includes Rehabilitation within project limits (Pending Fund Allocation)
- ❖ **Westbound HOT Lane Conversion Project (Foothill Blvd to Greenville Rd)**
- ❖ **I-580 Traffic Management Plan & Corridor Management**
- ❖ **I-580 Landscaping & Environmental Mitigation**
- ❖ **I-580/Isabel Avenue Interchange Project**
- ❖ **Eastbound Truck Climbing Lane Project (Greenville Rd to North Flynn Rd)**
- ❖ **I-580/I-680 Interchange Improvements Study**



I-580 Corridor Projects – Vicinity Map



-  Eastbound Aux Lane Limits
-  Eastbound HOT Lane Limits
-  Westbound HOV/HOT Lane Limits



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Eastbound I-580 HOV Lane Project

- ❖ **Constructed via two construction contracts**
 - ◆ **Segment 1 – Portola to Greenville**
 - ◆ HOV Lane opened October 2009
 - ◆ **Segment 2 – Hacienda to Portola**
 - ◆ HOV Lane opened November 2010



Eastbound I-580 HOV Lane Project

❖ Segment 1 Status

- ◆ Contract Acceptance – February 2, 2010
- ◆ Final Contract Cost – \$41,214,986.52

❖ Segment 2 Status

- ◆ Contract is suspended to accommodate Isabel I/C Project. Remaining work, pavement rehabilitation between Portola and Airway, will commence August 2011.
- ◆ Estimated Date of Contract Acceptance: December 2011
- ◆ Estimated Contract Cost - \$32,700,000

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Eastbound I-580 HOV Lane Project – Programmed Funding (In \$Mil)

	CMIA	STIP	TCRP (LONP)	SHOPP	RM2	TCRP	FED	TVTC	TOTAL
PSR	Prepared by Caltrans (Funding Unavailable)								
PA&ED					5.00	7.00			12.00
PS&E					1.00				1.00
ROW									0.00
Construct Capital	43.77	17.67	14.71	27.00			2.85		106.00
Construct Support	8.36		3.29				2.45	0.60	14.70
TOTAL	52.13	17.67	18.00	27.00	6.00	7.00	5.30	0.60	133.70

Total Project Cost: \$133.70 M



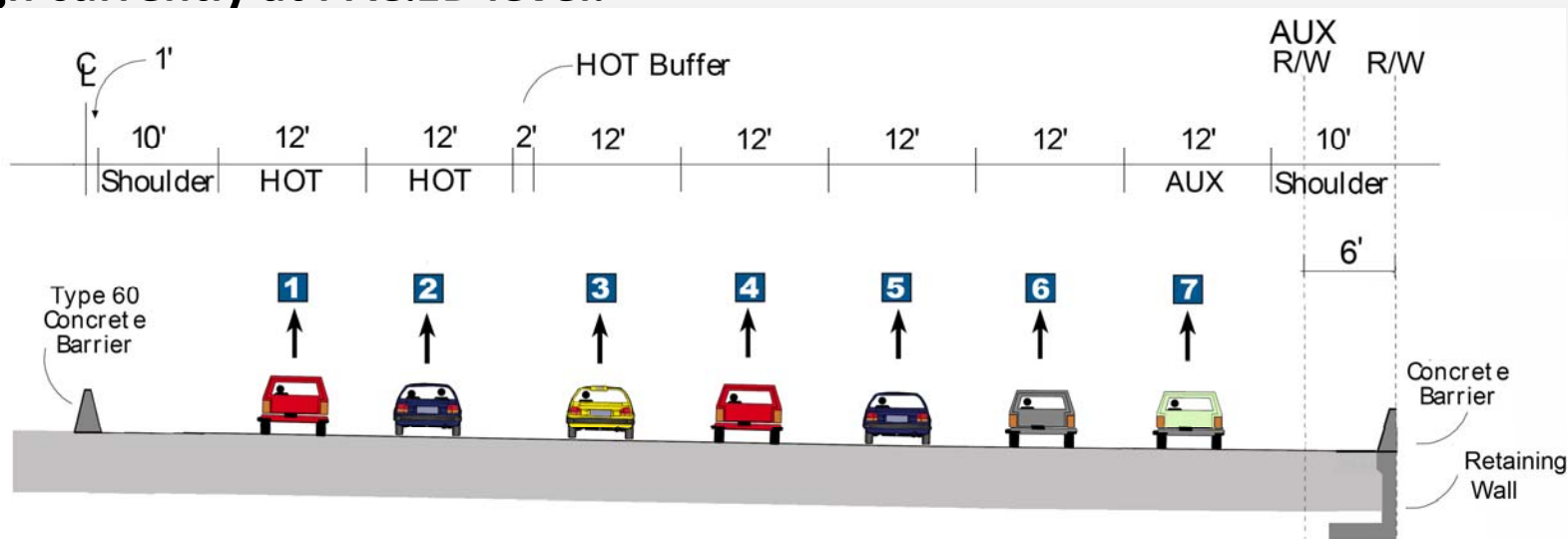
I-580 Eastbound Auxiliary Lanes Project – Isabel Avenue to First Street

- ❖ Environmental documentation is being prepared through a second revalidation of the original EB I-580 HOV Lane Project environmental document
 - ◆ Includes the road bed width necessary for a standard double HOT Lane.
- ❖ Currently at 95% PS&E:
 - ◆ 95% PS&E must be revised to include additional width to accommodate a double HOT Lane.
 - ◆ Includes sound wall that was deleted from the I-580/Isabel Avenue Interchange Project.
 - ◆ Plan to add additional HOT Lane scope for construction.



I-580 Eastbound Auxiliary Lanes Project with HOT Lane

- ❖ Will accommodate conversion of the recently constructed EB HOV Lane to a double HOT lane facility with standard shoulder and lane widths.
- ❖ Aux Lane PS&E will be revised to accommodate HOT Lane Project. HOT lane design currently at PA&ED level.



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I-580 Eastbound Auxiliary Lane Project -- Funding

	CMIA	RM2	TVTC	FED	Scope Seg 1	LONP	Total
PSR	Not Applicable						
PA&ED		1.35		0.23			1.58
PS&E		0.57	0.30				.87
ROW		0.50					0.50
Construct Cap	19.03				4.99	1.70	25.72
Construct Sup	2.54	0.24					2.78
TOTAL	21.57	2.66	0.30	0.23	4.99	1.70	31.45

Total Project Cost: \$31.45 M



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I-580 Eastbound Auxiliary Lane Project -- Schedule

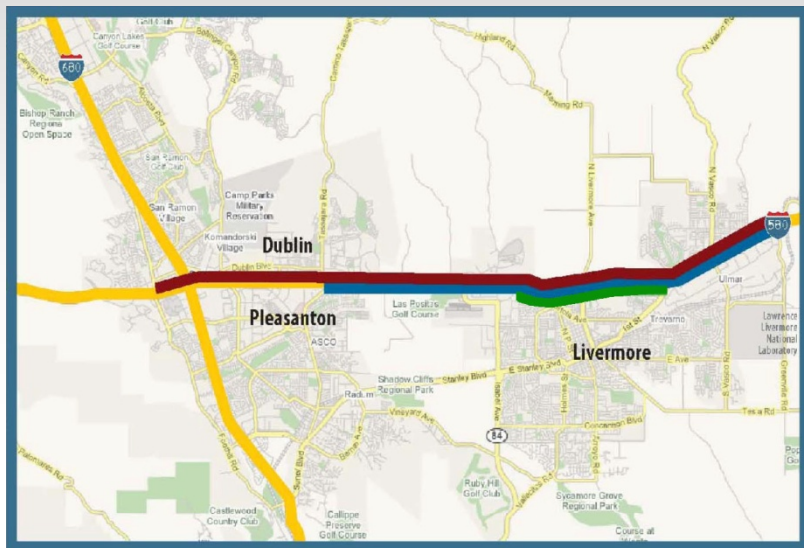
❖ Project Approval	October 2011
❖ PS&E	January 2012
❖ Right of Way Cert (Assuming no Condemnation)	April 2012
❖ RTL	April 2012
❖ Advertise	May 2012
❖ Bid Opening	July 2012
❖ Award	August 2012
❖ End Construction	April 2014



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I-580 Eastbound HOT Lane



■ EB HOT Lane

Project Location:

I-580 EB from Hacienda Drive to Greenville Road in Livermore

Status:

HOV Lane construction complete, HOT Lane Project in Environmental Phase, scope set. Expect to combine with Aux lane construction contract



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I-580 Eastbound HOT Lane Project -- Funding

	CMIA	STIP	SHOPP	RM2	TVTC	FED	Shortfall	Total
PSR	None							
PA&ED				1.50				1.50
PS&E				0.30			.40	0.70
Sys. Int.				0.50		7.50		8.00
ROW				0.20			.20	0.40
Construct Cap				6.30	2.70		7.90	16.90
Construct Sup	To be combined with I-580 EB Aux Lane Project							
TOTAL				8.80	2.70	7.50	8.50	27.5

Total Project Cost: \$27.5



I-580 Eastbound HOT Lane Project -- Schedule

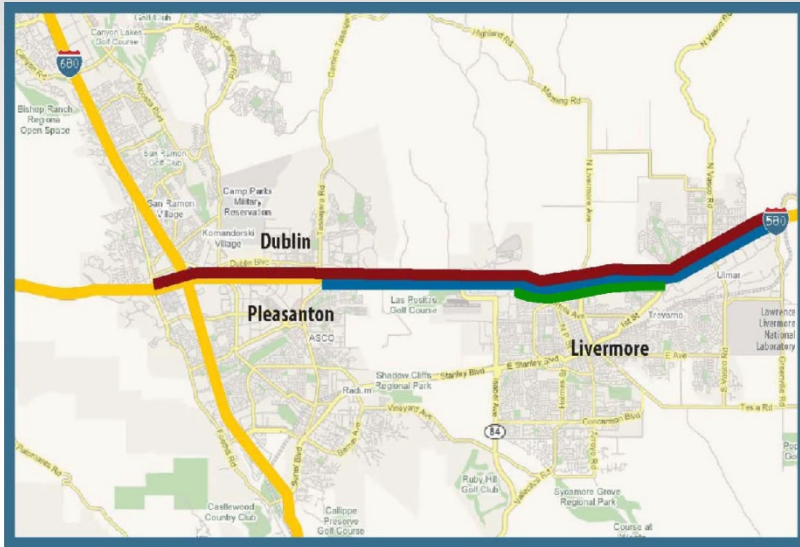
❖ Project Approval	November 2011
❖ PS&E	January 2012
❖ Right of Way Cert (Assuming no Condemnation)	April 2012
❖ RTL	April 2012
❖ Advertise	May 2012
❖ Bid Opening	July 2012
❖ Award	August 2012
❖ End Construction	April 2014

Note: Project combined with Aux Lane for Construction



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I-580 Westbound HOV Lane



 Westbound HOV Lanes

Project Location:

I-580 WB from Greenville Road in Livermore to Foothill Road in Dublin

Status:

PA&ED complete, Proj. split into 2 contracts, District PS&Es at 95% and 100%, R/W maps completed and Appraisal Letters sent. R/W acq. and incorporating rehab critical path.

Upcoming Contracts:

Construction – Fall 2011

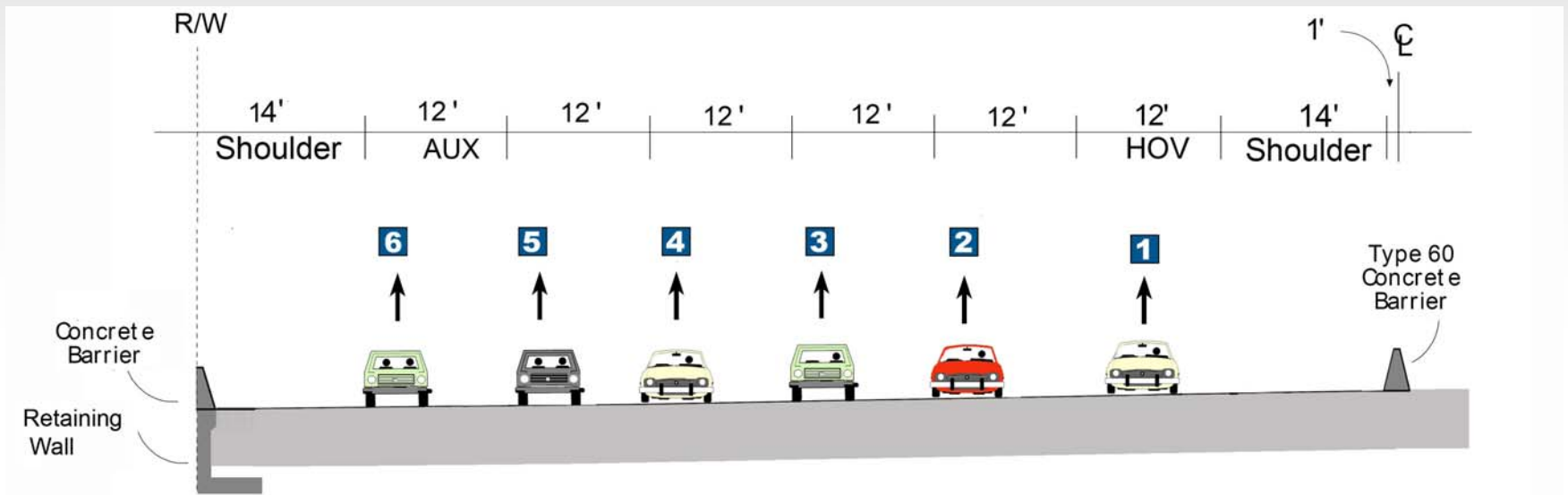


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I-580 Westbound HOV Lane

Typical cross section for WB HOV lane



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I-580 Westbound HOV Lane Project – Funding & Schedule

RM2	\$ 15,893,000
Savings from EB HOV Projects	\$ 0
I-Bond: CMIA	\$101,700,000
Federal	\$ 250,000
SHOPP	\$ 33,400,000
Caltrans PPM	\$ 57,400
Local (LONP, TVTC, Meas. B & Livermore)	\$ 19,851,000

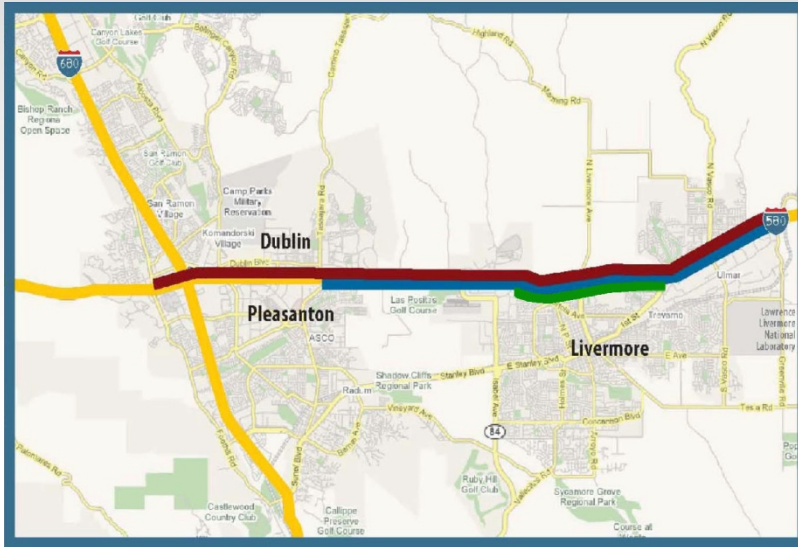
Total Funding**	\$171,151,400

Project Approval	Complete
PS&E	August 2011
Right of Way (Assuming no condemnation req'd)	November 2011
RTL	November 2011
Advertise	December 2011
Bid Opening	February 2012
Award	March 2012
End Construction	October 2014

Note: Schedule Updated to accommodate Incorporation of rehab.



I-580 Westbound HOT Lane



 Westbound HOT Lanes

Project Location:

I-580 WB from Greenville Road in Livermore to Foothill Road in Dublin

Status:

Feasibility, Revenue and Traffic Operations Report preparation underway.

Upcoming Contracts:

Alameda CTC issued RFP for PSR/PR in March 2011. RFP for System Manager Planned for April 2011



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I-580 Westbound HOT Lane Project

Current Status

- ❖ I-580 Westbound HOTL Feasibility Report, Traffic Operations Analysis Report (TOAR) and Revenue Analysis scheduled to be completed in June 2011
- ❖ Alameda CTC issued RFP to prepare a PSR/PR (Project Approval) in March 2011; Approved contract expected in June 2011
- ❖ RFP for I-580 and I-680 Corridors System Manager will be issued in April 2011
- ❖ The project delivery plan has been discussed with Caltrans, owner of the facility and MTC, owner of the Regional Hot Lane Network



I-580 Westbound HOT Lane Project Project Implementation

The project implementation plan for the Westbound Express Lane Project includes the following:

- ❖ Conversion of the I-580 westbound HOV lane to a single express lane, with conversion to a double HOT lane to occur in the future, when necessary
- ❖ Project Approval will come in the form of a revalidation of the I-580 WB HOV lane project document and approval of a PSR/PR
- ❖ Civil elements will be incorporated in to the I-580 westbound HOV lane project via CCO after westbound HOT project approval.
- ❖ Development of the Electronic Toll System and preparation of the required cooperative, interface, enforcement, and tolling agreements will occur concurrently with design



I-580 Westbound HOT Lane Project Project Implementation

Issues to be Finalized During Preparation of PSR/PR:

- ❖ Approval of necessary Design Exceptions (Minimal with single lane option)
- ❖ Location of Ingress/Egress (to be determined by Traffic Operations & Analysis Report)
- ❖ Location of Enforcement Areas
- ❖ Striping
- ❖ Location of signs, toll gantries & CCTV



I-580 Westbound HOT Lane Project System Manager

RFP for System manager will include one System Manager for I-680 and I-580 HOT lane corridors. System Manager tasks include :

- ❖ Concept of operations
- ❖ Enforcement Plan
- ❖ Systems Engineering Management Plan (SEMP)
- ❖ Expression of Interest
- ❖ Preparation of RFP for System Integrators
- ❖ Assisting Alameda CTC Staff with the management of System Integrator contracts
- ❖ Assisting with the development of corridor Tolling Policies.



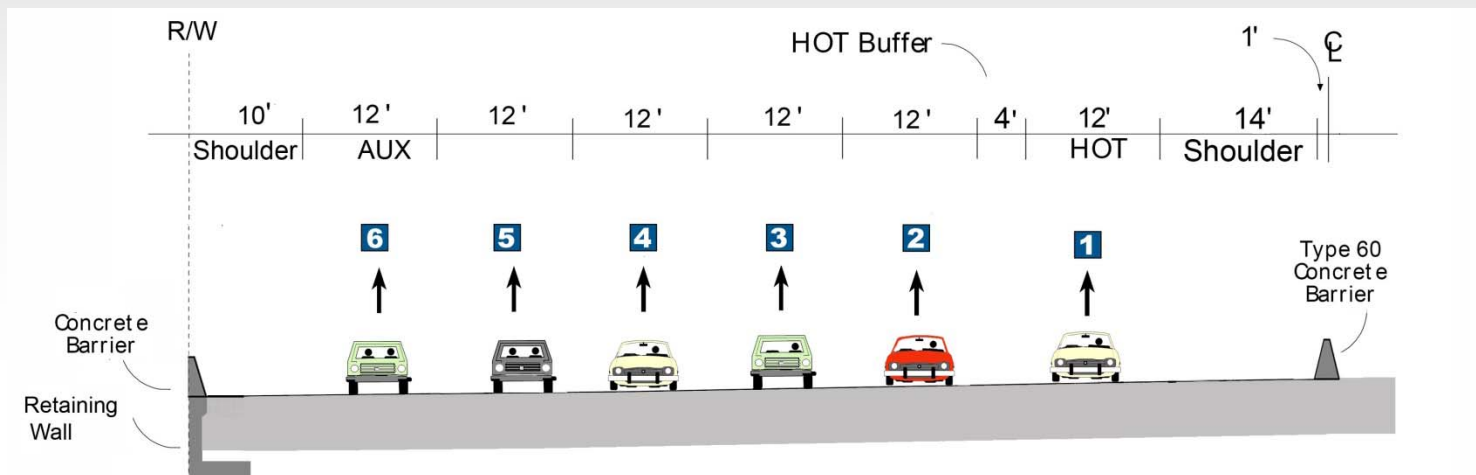
Project Issues

- ❖ Westbound HOT funded for scoping, project approval and design only. Source of System Integrator and construction funding in the amount of \$12.1 Million yet to be determined.
- ❖ Project will construct a single HOT lane. Conversion to double HOT lane will be a future project.
- ❖ Current design and estimate assumes utilization of existing pavement with no additional widening and no additional R/W (Constructing a single HOT lane mitigates this issue).
- ❖ Tolling Policy for westbound I-580 needed finalize TOAR and revenue Forecast.



I-580 Westbound HOT Lane

Typical cross section for single WB HOT lane



Notes:
Buffer width may be 2-feet



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I-580 Westbound HOT Lane – Funding & Schedule

Federal IMD	\$ 1,000,000
Local (TVTC)	\$ 3,400,000
Funding Shortfall	\$ 12,100,000

Total Funding**	\$ 16,500,000
**Assumes double HOT configuration	

Project Approval	October 2012
PS&E	March 2013
Right of Way (Assuming none req'd)	July 2013
RTL	July 2013
Advertise	August 2013
Bid Opening	September 2013
Award	October 2013
End Construction**	October 2014

Note: Scheduled to have HOT infrastructure in place for WB HOV opening as HOT



Discussion

