Silicon Valley Transit Modes, Alternatives for Consideration in the West Valley Transit Corridors

August 3, 2015
Cupertino Community Hall

Hon. Rod Diridon Sr.

Chair, US High-Speed Rail Association

Past Chair Intercity High Speed Rail Committee American Public Transit Association

Chair Emeritus
California High Speed Rail Authority Board

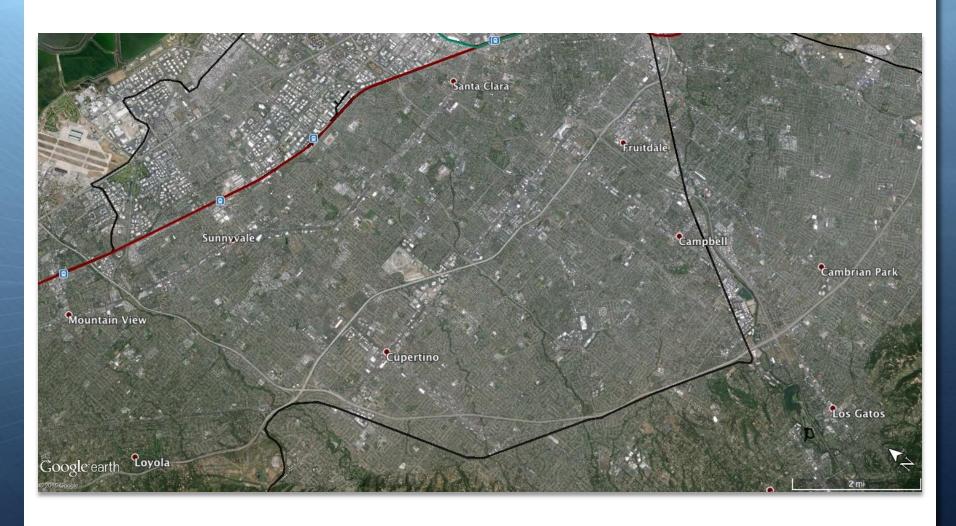
Emeritus Executive Director
Mineta National Transit Research Consortium
Mineta Transportation Institute



Federal Transit Administration Environmental Clearance Process

Background: The FTA Environmental Review can take many forms and is negotiated prior to the beginning usually following a concept study. The Valley's west side has preexisting environmental clearances, master plans and partially completed systems. The last formal environmental clearance was over a decade ago, therefore obsolete because of the Valley's rapid growth, and would need to be updated. That probably will require a new north/south corridors alternatives analysis then an analysis of the preferred mode in the environmentally approved corridor. Hence, the first step would be the creation of a JPAB followed by a short concept study to define the alternatives to be studied which would then be followed by an in-depth, formal FTA corridor and mode alternatives analysis. That process will cost a million dollars or more and take 2-4 years with the very important extensive community outreach element done properly. The ultimate result will be a selection of a preferred corridor and mode alternative justified by fact rather than emotion and supported by most of the citizens.

The Region's North/South Corridor Alternatives



Modal Alternatives

High-Speed Rail



China Railway High-Speed (CRH)



Shinkansen Japan

Commuter Rail



Capitol Corridor Train Auburn, CA -> San José, CA



Metrolink Southern California

Metro Rail



Paris Métro France



Washington Metro Washington D.C.

Light Rail



San Diego Trolley (SDTI) San Diego, CA



MAX Light Rail

Portland, OR SOLDUC 2013.

ATN/Podcar



Morgantown Personal Rapid Transit (WVU PRT)
Morgantown, WV



Skycube Suncheon, South Korea

Express Bus



RTC Rapid Reno, NV



MAX BRT Fort Collins, CO

Bus Rapid Transit Systems in the United States



Albany, NY
Atlanta, GA
Austin, TX
Boston, MA
Cleveland, OH
Des Moines, WA

El Paso, TX

Escondido, CA

Eugene, OR

Everett, WA

Federal Way, WA

Fort Collins, CO

Grand Rapids, MI

Hartford, CT

Houston, TX
Kansas City, MO

Las Vegas, NV

Los Angeles, CA

Miami, FL

Minneapolis, MN Nashville, TN New York, NY

Newark, NJ

Orlando, FL

Philadelphia, PA

Phoenix, AZ

Pittsburgh, PA

Reno, NV

Salt Lake City, UT

San Antonio, TX

San Bernardino, CA

San Diego, CA

San Gabriel Valley, CA

CA

San José, CA

Santa Monica, CA

Santa Monica, CA

SeaTac, WA

Stockton, CA

Tukwila, WA

Light Rail Systems in the United States



Atlanta, GA

Baltimore, MD

Boston, MA

Buffalo, NY

Camden/Trenton, NJ

Charlotte, NC

Cleveland, OH

Dallas, TX

Denver, CO

Fort Collins, CO

Honolulu, HI

Houston, TX

Jersey City/Hudson County, NJ

Kenosha, WI

Little Rock, AR

Los Angeles, CA

Memphis, TN

Minneapolis-Saint Paul, MN

Newark, NJ

New Orleans, LA

Norfolk, VA

Oceanside, CA

Philadelphia, PA

Phoenix, AZ

Pittsburgh, PA

Portland, OR

Sacramento, CA

Salt Lake City, UT

San Diego, CA

San Francisco, CA

San José, CA

Seattle, WA

St. Louis, MO

Tacoma, WA

Tampa, FL

Tucson, AZ

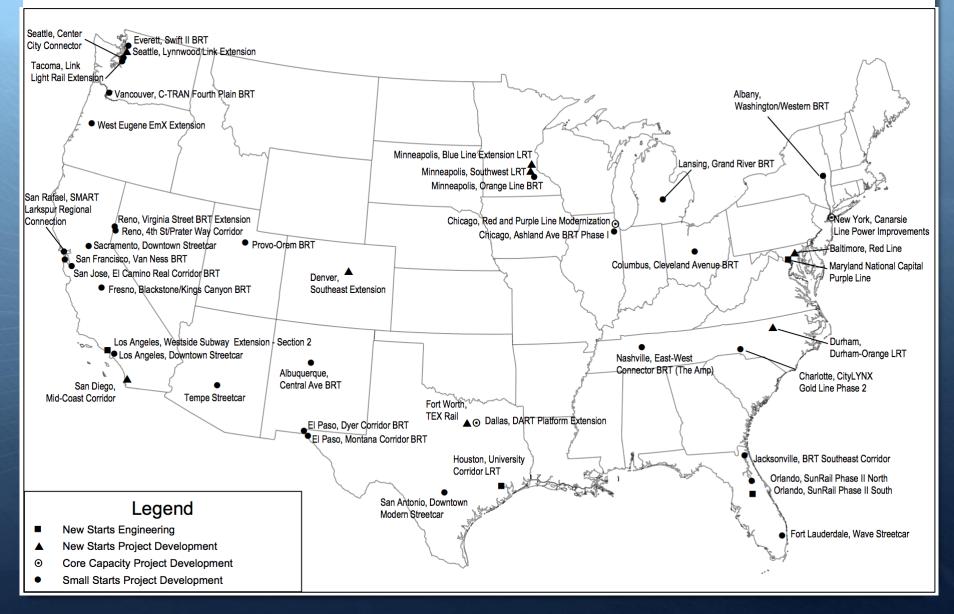
Table 1 - FY 2016 Funding for Capital Investment Grant Program

								Funds						
Project	Rating	Mode	ode Total Project C		t Section 5309 Request		Section 5309 Share	Appropriated/		Remaining Needs After FY15		FY16 Budget Recommendation		
Totals by Project Type														
Existing New Starts Construction Grant Agreements													\$	1,385,000,000
Recommended New Starts Projects Not Yet Under FFGAs													\$	792,000,000
Recommended Core Capacity Funding													\$	351,066,101
Recommended Small Starts Projects Not Yet Under SSGAs													\$	353,183,899
Accelerated Project Delivery and Development													\$	320,000,000
Oversight Activities													\$	48,750,000
GRAND TOTAL													\$	3,250,000,000
Existing New Starts Full Funding Grant Agreements With Remaining	ng Fundir	ıg Needs	- Pr	ojects Are Under	Co	nstruction or Or	oen for Se	rvice	9					
CA Los Angeles, Regional Connector Transit Corridor	FFGA	LRT	\$	1,402,932,490	\$	669,900,000	47.7%	\$	165,000,000	\$	504,900,000		\$	115,000,000
CA Los Angeles, Westside Subway Extension - Section 1	FFGA	HR	\$	2,821,957,153	\$	1,250,000,000	44.3%	\$	165,000,000	\$	1,085,000,000		\$	115,000,000
CA San Francisco - Third Street Light Rail-Central Subway Project	FFGA	LRT	\$	1,578,300,000	\$	942,200,000	59.7%	\$	619,181,899	\$	323,018,101		\$	165,000,000
CA San Jose - Silicon Valley Berryessa Extension	FFGA	HR	\$	2,230,021,971	\$	900,000,000	40.4%	\$	552,585,423	\$	347,414,577		\$	165,000,000
CO Denver - RTD Eagle, Denver	FFGA	CR	\$	2,043,143,000	\$	1,030,449,000	50.4%	\$	667,186,415	\$	363,262,585		\$	165,000,000
HI Honolulu - High Capacity Transit Corridor	FFGA	HR	\$	5,121,693,163	\$	1,550,000,000	30.3%	\$	1,056,267,358	\$	493,732,642		\$	265,000,000
MA Cambridge to Medford, Green Line Extension	FFGA	LRT	\$	2,297,618,856	\$	996,121,000	43.4%	Ť	TBD	_	TBD		\$	165,000,000
NC Charlotte, Blue Line Extension-Northeast Corridor	FFGA	LRT	\$	1,160,084,496	\$	580,042,248	50.0%	\$	305,807,660	\$	274,234,588		\$	115,000,000
OR Portland - Milwaukie LRT	FFGA	LRT	\$	1,490,350,173	\$	745,175,087	50.0%	\$	379,510,943	\$	365,664,144		\$	115,000,000
Total Existing New Starts Full Funding Grant Agreements			\$	20,146,101,302	_	8,663,887,335	2 010,0	-	3,910,539,698	_	3,757,226,637		\$	1,385,000,000
Total Existing New Starts Full Funding Grant Agreements			Ψ	20,140,101,502	Ψ	0,005,007,555		Ψ	3,710,337,070	Ψ	3,737,220,037		Ψ	1,505,000,000
New Starts Projects Recommended for Full Funding Grant Agreem	ents													
CA Los Angeles Westside Section 2	MH	HR	\$	2,374,436,573	\$	1,187,000,000	50.0%	\$		\$	1,187,000,000	+	\$	100,000,000
CA San Diego, Mid-Coast Corridor	MH	LRT	\$	2,112,114,987	\$	1,043,384,804	49.4%	\$	8,009,516	_	1,035,375,288	+	\$	150,000,000
CO Denver, Southeast Extension	MH	LRT	\$	224,295,280	\$	92,000,000	41.0%	\$	-	\$	92,000,000	*+	\$	92,000,000
MD Baltimore, Red Line	MH	LRT	\$	2,997,748,095	\$	900,000,000	30.0%	Ψ	TBD	Ψ	TBD	Ė	\$	100,000,000
MD Maryland National Capital Purple Line	MH	LRT	\$	2,448,222,331	\$	900,000,000	36.8%		TBD		TBD		\$	100,000,000
MN Minneapolis, Southwest LRT	MH	LRT	\$	1,653,448,925	\$	826,724,462	50.0%	\$	-	\$	826,724,462	+	\$	150,000,000
TX Fort Worth, TEX Rail	MH	CR	\$	891.898.224	\$	445,949,112	50.0%	Ψ	TBD	Ψ	TBD		\$	100,000,000
Total Recommended New Starts Projects	14111	CK	\$	12,702,164,414	-	5,395,058,378	30.070		TBD		TBD		\$	792,000,000
Total Recommended New Starts Projects			J	12,/02,104,414	3	5,395,056,376			עמו		100		3	/92,000,000
Core Capacity (project listed for illustrative purposes only, projects not yet ready for construction grant) \$\frac{351,066,1}{351,066}\$														
IL Chicago, Red and Purple Line Modernization Project		HR		,										
NY Canarsie Line Power Improvements		HR												
TX Dallas DART Platform Extension		LRT												
								•					•	
Small Starts Projects Recommended for Small Starts Grant Agreem	ents													
CA Fresno, FAX Blackstone/Kings Canyon BRT	M	BRT	\$	48,530,694	\$	38,824,555	80.0%	\$	27,800,000	\$	11,024,555	*	\$	11,024,555
CA San Francisco, Van Ness Avenue BRT	Н	BRT	\$	162,072,300	\$	74,999,999	46.3%	\$	45,396,000	\$	29,603,999	*	\$	29,603,999
CA San Rafael to Larkspur Regional Connector	M	CR	\$	42,532,750	\$	22,532,873	53.0%	\$	2,500,000	\$	20,032,873	*+	_	20,032,873
NC Charlotte, CityLYNX Gold Line Phase 2	MH	SC	\$	150,000,000	\$	74,999,999	50.0%	\$	-	\$	74,999,999	*+	\$	74,999,999
NV Reno, 4th St/Prater Way Corridor	MH	BRT	\$	52,570,000	\$	6,470,000	12.3%	\$	-	\$	6,470,000	*+	\$	6,470,000
OH Columbus, Cleveland Avenue BRT	M	BRT	\$	47,667,067	\$	38,133,654	80.0%	\$	-	\$	38,133,654	*+	\$	38,133,654
TX El Paso Montana Corridor BRT	M	BRT	\$	45,516,813	\$	26,972,509	59.3%	\$	-	\$	26,972,509	*+	\$	26,972,509
UT Provo Orem BRT	MH	BRT	\$	149,927,986	\$	74,964,311	50.0%	\$	4,018,000	\$	70,946,311	*+	_	70,946,311
WA Tacoma, Tacoma Link Light Rail Expansion	MH	LRT	\$	166,008,514	\$	74,999,999	45.2%	\$	-	\$	74,999,999	*+	\$	74,999,999
Total Small Starts			\$	864,826,123	_	432,897,898		\$	79,714,000	\$	353,183,898		\$	353,183,899
A OWN DIMMA DOWN 15			Ψ	007,020,123	Ψ	102,071,070		Ψ	12,117,000	Ψ	555,105,070		Ψ	555,105,033

Light Rail Capital Investment Grant Program Existing Full Funding Grant Agreements With Remaining Funding Needs in FY 2016



Light Rail Capital Investment Grant Program Projects in Project Development and Engineering – FY 2016



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