

# Remember This?!

The Good

The Bad, and

The Ugly



# THE UGLY



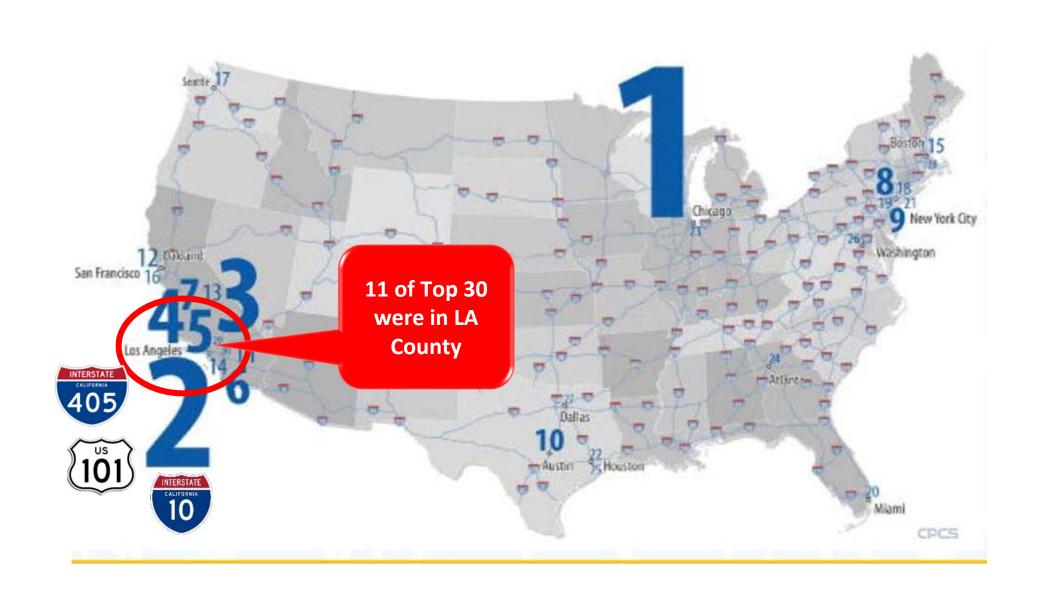
**Recurring Congestion** 



# Non-Recurring Congestion

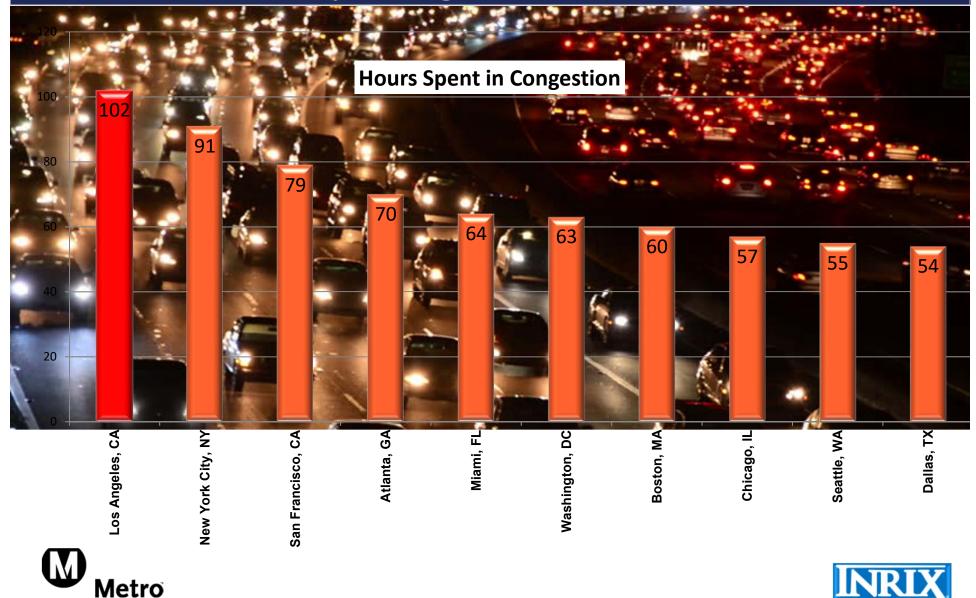


## America's Top Bottlenecks - 2015



## United States Top Congested Cities - 2017

**Metro** 



## Global Top Congested Cities - 2017





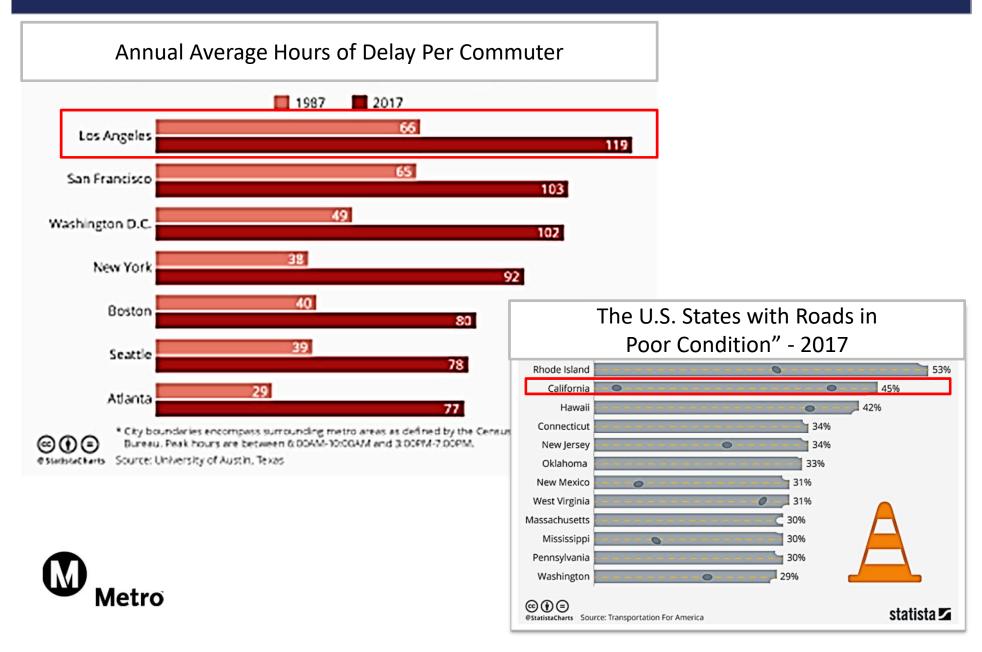
## Means of Transportation to Work LA County Residents 2005-2017



## Growth in U.S. Market Demand for Vehicles



## Impact on the Transportation System



## Land use decisions and Traffic Demand

Top  $\underline{US}$  cities with the longest commutes (2017)

Rank	City	Avg. Round Trip Commute (min.)	% Population commuting 2+ hrs round-trip per day	Car %	Public Transit %	Walk %	Bike %
1	Palmdale	85.4	35	91.4	2	8.0	0.2
4	Corona	73.4	23.6	90.7	1.6	1.2	0.1
6	Santa Clarita	69.8	19.7	87.9	3	1.2	0.5
8	Moreno Valley	68.6	17.1%	92.7	1.5	0.7	0.3



## California Statistics 2018

- ~ \$7.1 million full-time jobs in California in key industries like tourism, retail sales, agriculture and manufacturing are completely dependent on the state's transportation network.
- \$14 billion/year cost of driving on deteriorated roads
- **56**% of California's bridges are at least 50 years old (8<sup>th</sup> in the nation)
- \$29.1 billion each year in the form of lost time and wasted fuel on congested roads
- **\$9.8 billion** in economic loss in 2016 resulting from accidents related to deficient roadway features
- \$1800/year cost of lost time and wasted fuel per driver
- 876 traffic accident-related deaths per year between 2014 and





## Los Angeles Area Statistics 2018

- 79% of roads are in poor/mediocre condition
  - \$900+ per driver cost of extra vehicle operating costs
- 4% of bridges 20' or longer have significant structural deficiencies
- ~2 working weeks time per driver per year wasted in congestion
  - \$1800/year cost of lost time and wasted fuel per driver
- 876 traffic accident-related deaths per year between 2014 and 2016



## Los Angeles County Area Statistics

- ☐ 9.8 million people (2010 Census)
- ☐ 3.9 million workers commute by car or carpool (82% of the workforce)
- ☐ 220 million Daily Vehicle Miles Travelled
- ☐ 7.8 million vehicles registered in LA County
- ☐ 471,000 workers commute into LA County from other counties every day
- ☐ 6.6 million drivers licenses



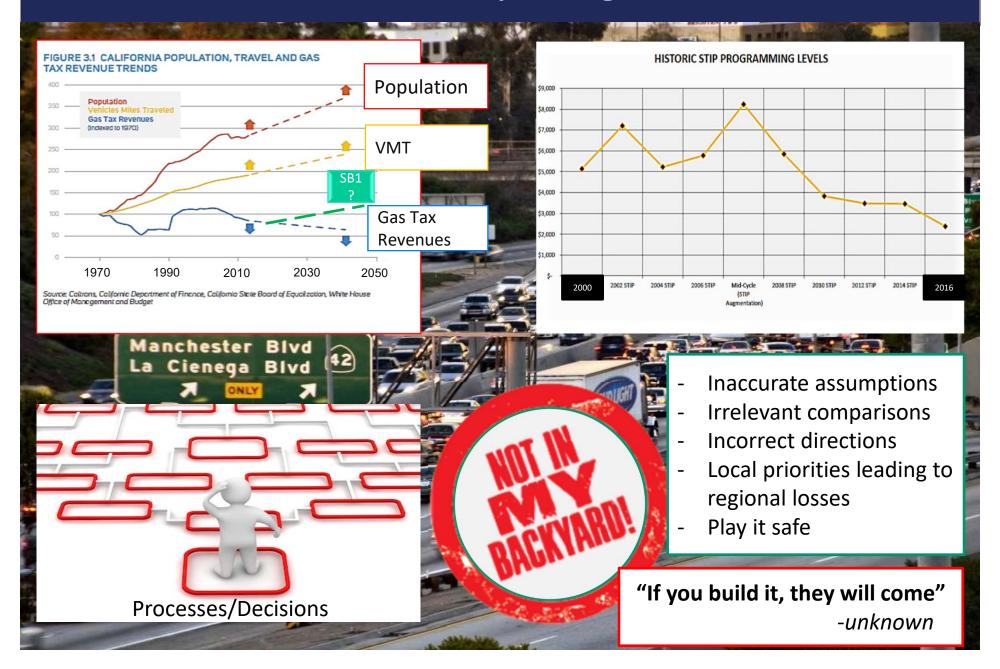


# THE BAD





## If we know all that, Why things don't work?!



## THE GOOD

Make a difference - NOW!



## Why is Metro in Highway Business? NORTH Santa Ana 110 NORTH San Bernardino Hollywood Pasadena TRUCK RTE 25% **Legislative Authority** State • SB 45 Chaptered in 1997 STIP funds split 75% MPOs/ **RTPAs**

## What Are We Doing to Alleviate the problem?

- Countywide Transportation Need Assessment
- Multi-agency Program Coordination/Management
- Fund Projects
- Accelerated and Cost-Effective Project Delivery
- Improve Countywide and Regional Mobility
- Create Jobs
- Improve the Economy



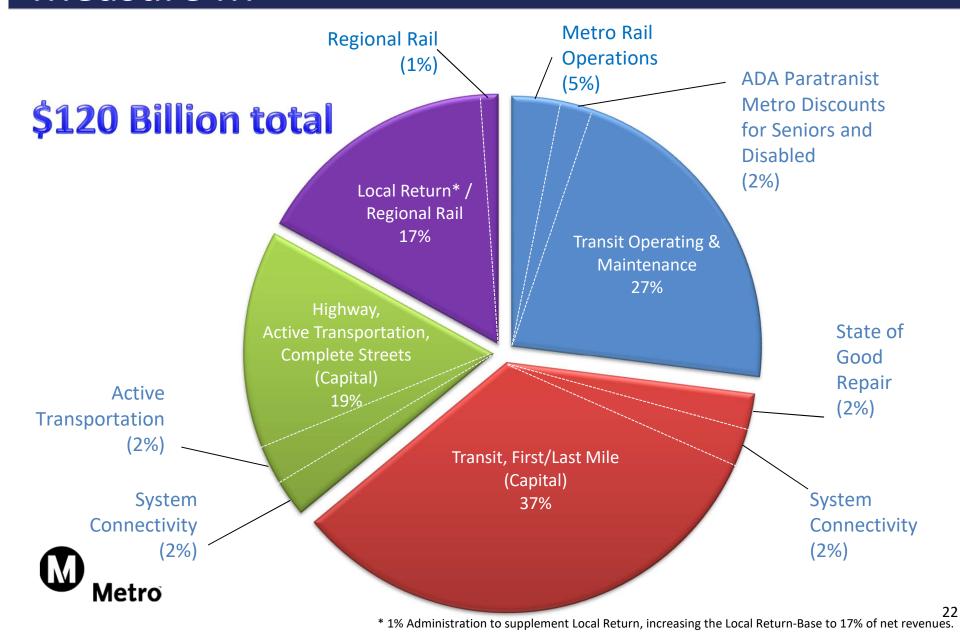


## Measure R Highway Projects





## Measure M



# Measures M Major Highway Projects

3	Project (Final Project to be Defined by the Environmental Process)		Schedule of Funds Available		ion*	2016 - 2067 Local, State,	Manager	Most Recent	Code
Casasaga			Ground- breaking Start Date <sup>‡</sup>	Expected Opening Date (3 year range)	Subregio	Federal, Other Funding 2015\$	Measure Funding 2015\$	Cost Estimate 2015\$**	Modal C
	Expenditure Plan Major Projects			1 <sup>st</sup> yr of Range					
	Airport Metro Connect 96th St. Station/Green Line Ext LAX ®	а,р	FY 2018	CY 2021	sc	\$233,984	\$347,016	\$581,000	Т
-	Westside Purnle Line Extension Section 3 ®	h	FY 2018	FY 2024	w	\$986.139	\$994.251	\$1.980.390	Т
	High Desert Multi-Purpose Corridor (HDMC)®	q	FY 2019	FY 2021	nc	\$100,000	\$170,000	\$270,000	Н
	I-5 N Cap. Enhancements (SR-14 to Lake Hughes Rd) ®		FY 2019	FY 2023	nc	\$544,080	\$240,000	\$784,080	H
	Gold Line Footnill Extension to Claremont ®	С	FY 2019	FY 2025	sg	\$78,000	\$1,019,000	\$1,097,000	1
	Orange Line BRT Improvements	n	FY 2019	FY 2025	sf	\$0	\$286,000	\$286,000	Т
	BRT Connector Orange/Red Line to Gold Line	0	FY 2020	FY 2022	av	\$0	\$240,300	\$240,300	Т
1	BRT Connector Orange/Red Line to Gold Line	0	FY 2020	FY 2022	sf	\$0	\$26,700	\$26,700	Т
	East SF Valley Transit Corridor Project ®	d	FY 2021	FY 2027	sf	\$520,500	\$810,500	\$1,331,000	Т
1	West Santa Ana Transit Corridor LRT ®	b,d	FY 2022	FY 2028	gc	\$500,000	\$535,000	\$1,035,000	Т
1	Crenshaw/LAX Track Enhancement Project	e.p	FY 2022	FY 2026	SC	\$0	\$49,599	\$49,599	Т
1	SR-71 Gap from I-10 to Rio Rancho Rd.		FY 2022	FY 2026	sg	\$26,443	\$248,557	\$275,000	Н
	LA River Waterway & System Bikepath		FY 2023	FY 2025	CC	\$0	\$365,000	\$365,000	н
1	Complete LA River Bikepath		FY 2023	FY 2025	sf	\$0	\$60,000	\$60,000	Н
1	Sepulveda Pass Transit Corridor (Ph 1) ®	b,f	FY 2024	FY 2026	sf	\$0	\$130,000	\$130,000	Н
1		b.f	FY 2024	FY 2026	w	\$0	\$130,000	\$130,000	н
	Vermont Transit Corridor	0	FY 2024	FY 2028	СС	\$400,000	\$25,000	\$425,000	T
1		d	FY 2025	FY 2031	sg	\$565,000	\$205,000	\$770,000	
		a,g			SD			\$891,000	
_	I-710 South Corridor Project (Ph 1)®	d,h	FY 2026	FY 2032	gc		\$250,000	\$400,000	
	1-105 Express Lane from 1-405 to 1-605	p	FY 2021		SC				
2		b	FY 2024	FY 2033	st	\$1,567,000	\$1,270,000	\$2,837,000	
2		b	FY 2024	FY 2033	w	\$1,567,000	\$1,270,000	\$2,837,000	Т
2		d	FY 2029	FY 2035	gc	\$957,000	\$543,000	\$1,500,000	Т
2		d	FY 2029	FY 2035	sg	\$957,000	\$543,000	\$1,500,000	T
2		r	FY 2022	FY 2041	CC	\$1,082,500	\$400,000	\$1,482,500	T
2		r	FY 2022	FY 2041	qc	\$982,500	\$500,000	\$1,482,500	Ť
2			FY 2032	FY 2041	gc	\$658,500	\$250,000	\$908,500	Н
2			FY 2036	FY 2042	ac	\$46,060	\$1.059.000	\$1,105,060	н
3		i	FY 2041	FY 2047	CC		\$1,185,000	\$1,680,000	T
3		i	FY 2041	FY 2047	w	\$0	\$560,000	\$560,000	Т
3			FY 2042	FY 2044	sb	\$0	\$250,000	\$250,000	Н
3			FY 2043	FY 2047	sg	\$472,400	\$126,000	\$598,400	Н
3			FY 2043	FY 2047	SO	\$360,600	\$130,000	\$490,600	Н
	Lincoln Blvd BRT	l.o		FY 2047	w	\$0	\$102,000	\$102,000	
3	I-110 Express Lane Ext South to I-405/I-110 Interchange		FY 2044	FY 2046	sb	\$228,500		\$280,000	Н
3			FY 2045	FY 2047	sb	\$250,840	\$150,000	\$400,840	
3		р	FY 2046	FY 2052	SC	\$570,000	\$200,000	\$770,000	T
3		m	FY 2048	FY 2050	sf		\$106,800	\$106,800	Ť
4		р	FY 2048	FY 2057	SC	\$3.800.000	\$65,000	\$3,865,000	÷ l
4		۲	FY 2051	FY 2057	sf		\$362,000	\$1,429,000	Ť
4			FY 2052	FY 2054	sf	\$1,007,000	\$5,000	\$5,000	н
4			FY 2053	FY 2057	CC	\$0	\$200,000	\$200,000	Ŧ
. 4		р	FY 2053	FY 2057	SC	\$110,000	\$2,890,000	\$3,000,000	÷ l
4		р	FY 2063	FY 2067	SC	\$32,982	\$1,845,718	\$1,878,700	Н
	Expenditure Plan Major Projects Subtotal	Р	1 2003	112001	30	\$19,581,027		\$40,570,969	
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# Measures M Subregional Projects

huly	Project (Final Project to be Defined by the Environmental Process)		Schedule of Funds Available		ion*	2016 - 2067 Local, State,	Measure	Most Recent	ode
For Reference Only			Ground- breaking Start Date <sup>‡</sup>	Expected Opening Date (3 year range)	Subregi	Federal, Other Funding 2015\$	Funding 2015\$	Cost Estimate 2015\$**	Modal Code
	Multi-Year Subregional Programs			1 <sup>st</sup> yr of Range					
47	Metro Active Transport, Transit 1st/Last Mile Program	р	FY 2018	FY 2057	sc	\$0	\$857,500	\$857,500	Н
48	Visionary Project Seed Funding	р	FY 2018	FY 2057	sc	\$0	\$20,000	\$20,000	Т
49	Street Car and Circulator Projects	k,p	FY 2018	FY 2022	sc	\$0	\$35,000	\$35,000	Т
50	Transportation System and Mobility Improve. Program		FY 2018	FY 2032	sb	\$0	\$293,500	\$293,500	н
51	Active Transportation 1st/Last Mile Connections Prog.		FY 2018	FY 2057	w	\$0	\$361,000	\$361,000	н
52	Active Transportation Program		FY 2018	FY 2057	nc	\$0	\$264,000	\$264,000	Н
53	Active Transportation Program		FY 2018	FY 2057	gc	\$0	TBD	TBD	н
54	Active Transportation Program (Including Greenway Proj.)		FY 2018	FY 2057	sg	\$0	\$231,000	\$231,000	н
55	Active Transportation, 1st/Last Mile, & Mobility Hubs		FY 2018	FY 2057	СС	\$0	\$215,000	\$215,000	Н
56	Active Transportation, Transit, and Tech. Program		FY 2018		lvm		\$32,000	\$32,000	Т
57	Highway Efficiency Program		FY 2018		lvm	5000	\$133,000	\$133,000	Н
58	Bus System Improvement Program		FY 2018	FY 2057	sg	\$0	\$55,000	\$55,000	Т
59	First/Last Mile and Complete Streets		FY 2018	FY 2057	sg	\$0	\$198,000	\$198,000	Н
60	Highway Demand Based Prog. (HOV Ext. & Connect.)		FY 2018	FY 2057	sg	\$0	\$231,000	\$231,000	Н
61	I-605 Corridor "Hot Spot" Interchange Improvements ®		FY 2018	FY 2057	gc	\$240,000	\$1,000,000	\$1,240,000	Н
62	Modal Connectivity and Complete Streets Projects		FY 2018	FY 2057	av	\$0	\$202,000	\$202,000	н
63	South Bay Highway Operational Improvements		FY 2018	FY 2057	sb	\$600,000	\$500,000	\$1,100,000	Н
64	Transit Program		FY 2018	FY 2057	nc	\$500,000	\$88,000	\$588,000	Т
65	Transit Projects		FY 2018	FY 2057	av	\$0	\$257,100	\$257,100	Т
66	Transportation System and Mobility Improve. Program		FY 2018	FY 2057	sb	\$0	\$350,000	\$350,000	Н
67	North San Fernando Valley Bus Rapid Transit Improvements			FY 2023	sc	\$0	\$180,000	\$180,000	Т
68	Subregional Equity Program	p,s		FY 2057	sc	TBD	TBD		T/H
69	Countywide BRT Projects Ph 1 (All Subregions)	I,p		FY 2022	sc	\$0	\$50,000	\$50,000	Т
70	Countywide BRT Projects Ph 2 (All Subregions)	l,p		FY 2032	sc	\$0	\$50,000	\$50,000	Т
71			FY 2033	FY 2057	av	\$0	\$136,500	\$136,500	Н
	Los Angeles Safe Routes to School Initiative		FY 2033	FY 2057	cc	\$0	\$250,000	\$250,000	Н
73	Multimodal Connectivity Program		FY 2033	FY 2057	nc	\$0	\$239,000	\$239,000	Н
74	Countywide BRT Projects Ph 3 (All Subregions)	l,p		FY 2042	sc	\$0	\$50,000	\$50,000	Т
75	Arterial Program		FY 2048	FY 2057	nc	\$0	\$726,130	\$726,130	H
	BRT and 1st/Last Mile Solutions e.g. DASH		FY 2048	FY 2057	cc	\$0	\$250,000	\$250,000	Т
77	Freeway Interchange and Operational Improvements		FY 2048	FY 2057	cc	\$0	\$195,000	\$195,000	H
78	Goods Movement (Improvements & RR Xing Elim.)		FY 2048	FY 2057	sg	\$0	\$33,000	\$33,000	Ţ
79	Goods Movement Program		FY 2048	FY 2057	nc	\$0	\$104,000	\$104,000	T
80	Goods Movement Projects		FY 2048	FY 2057	av	\$0	\$81,700	\$81,700	T
81	Highway Efficiency Program		FY 2048	FY 2057	nc	\$0 60	\$128,870	\$128,870	Н
	Highway Efficiency Program		FY 2048	FY 2057	sg	\$0 60	\$534,000	\$534,000	Н
83	Highway Efficiency, Noise Mitig. and Arterial Projects		FY 2048	FY 2057	av	\$0 \$0	\$602,800	\$602,800	Н
	ITS/Technology Program (Advanced Signal Tech.)		FY 2048	FY 2057	sg	\$0 60	\$66,000	\$66,000	Н
	LA Streetscape Enhance. & Great Streets Program		FY 2048 FY 2048	FY 2057 FY 2057	cc	\$0 \$0	\$450,000 \$68,000	\$450,000	H
86	Modal Connectivity Program		FY 2048		lvm	\$0 \$0		\$68,000	T
12.5	Public Transit State of Good Repair Program Traffic Congestion Relief and Improvement Program		FY 2048 FY 2048	FY 2057 FY 2057	cc Ivm	\$0 \$0	\$402,000 \$63,000	\$402,000 \$63,000	Н
88			FY 2048						Н
89	Traffic Congestion Relief/Signal Synchronization		FY 2048 FY 2048	FY 2057 FY 2057	CC	\$0 \$0	\$50,000 \$110,600	\$50,000 \$110,600	Н
90	Arroyo Verdugo Projects to be Determined	_			av	7.7		\$110,600 \$100,000	
91 92	Countywide BRT Projects Ph 4 (All Subregions) Countywide BRT Projects Ph 5 (All Subregions)	p p	FY 2050 FY 2060	FY 2052	sc sc	\$90,000 \$0	\$10,000 \$100,000	\$100,000	T
92	Multi-Year Subregional Programs Subtotal	р	F1 2000	FY 2062	SC	\$1,430,000		\$100,000 <b>\$12,879,700</b>	
									100000
94	GRAND TOTAL					\$21,011,027	\$31,243,641	\$53,450,669	



## Highway Project Development Process





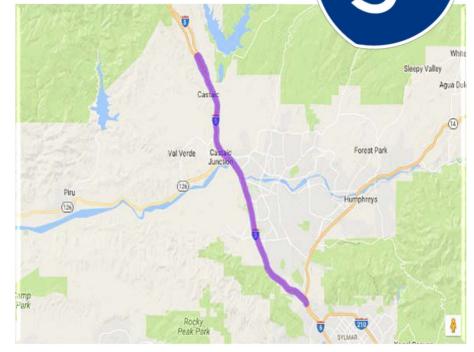
# In Progress

•	I-710 Corridor Improvements	\$6B	
•	SR-710 Corridor Improvements	\$1B	
•	I-605 Between I-105 and I-10 Improvements	\$5B	
•	I-5 HOV Lanes; SR-14 to Parker Road	\$500M	
•	SR-57/SR-60 Interchange Improvements	\$300M	
•	SR-71 Widening/Imp. between I-10 and SR-60	\$300M	
•	SR-91 Widening at I-605	\$140M	4
•	SR-91/Central Avenue Interchange Improvements	\$ 85M	\$14 Billion +
•	SR-91 Widening, EB, Atlantic to Cherry	\$ 80M	
•	I-710 Early Action Projects	\$ 60M	
•	I-605/South Street Interchange Improvements	\$ 20M	
•	I-605/Valley Blvd. Interchange Improvements	\$ 18M	
•	SR-60/7th Avenue Interchange Improvements	\$ 18M	
•	I-605/Beverly Interchange Improvements	\$ 10M	
•	I-405 NB and SB Imp., I-405 to Artesia Blvd.	TBD	



## I-5 North HOV and Truck Lanes

- 14 miles of HOV lanes in both directions
- 2 miles of truck climbing lanes at the south end
- 7 bridge modifications at:
  - Gavin Canyon
  - Calgrove Blvd.
  - Butte canyon
  - Magic Mountain Pkwy.
  - Santa Clara OH
  - Rye Canyon
  - Castaic Creek Bridge
- 1 bridge replacement at Weldon Canyon
- Soundwalls and retaining walls
- Completion of design: 2019
- Construction in 2020-21

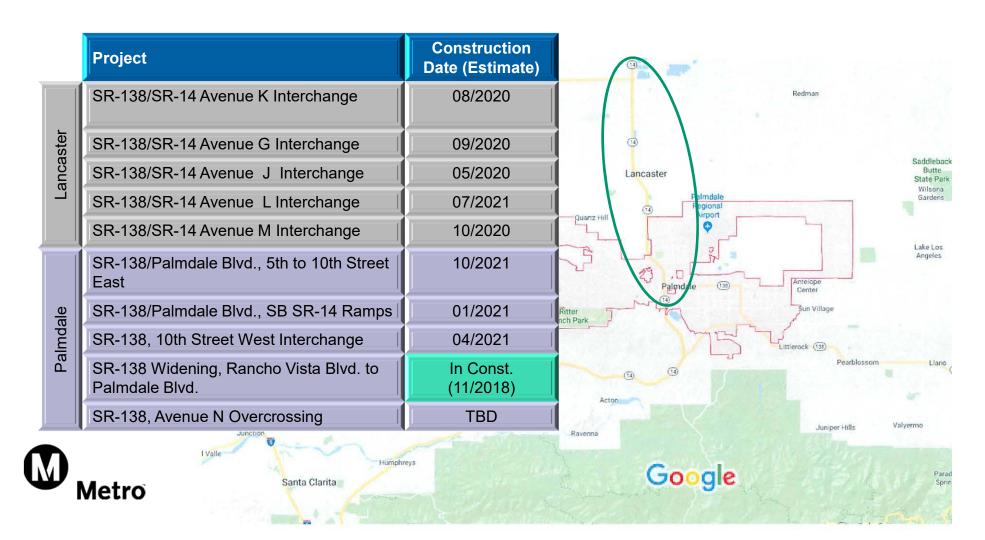






## North County SR-14 Interchange Improvements

\$200+ mil.



## High Desert Corridor

#### **Project Summary**

- 63 miles Highway, Expressway, Tollway, High Speed Rail, Bikeway, and energy production/transmission corridor concepts
- Connecting North Los Angeles County and San Bernardino County (Victorville)
- Transit connection between the CHSR and the XpressWest
- In Measure M for ROW and related services in 2019
- More funds in later years
- Final EIR/EIS completed in 2016

#### **Status Update**

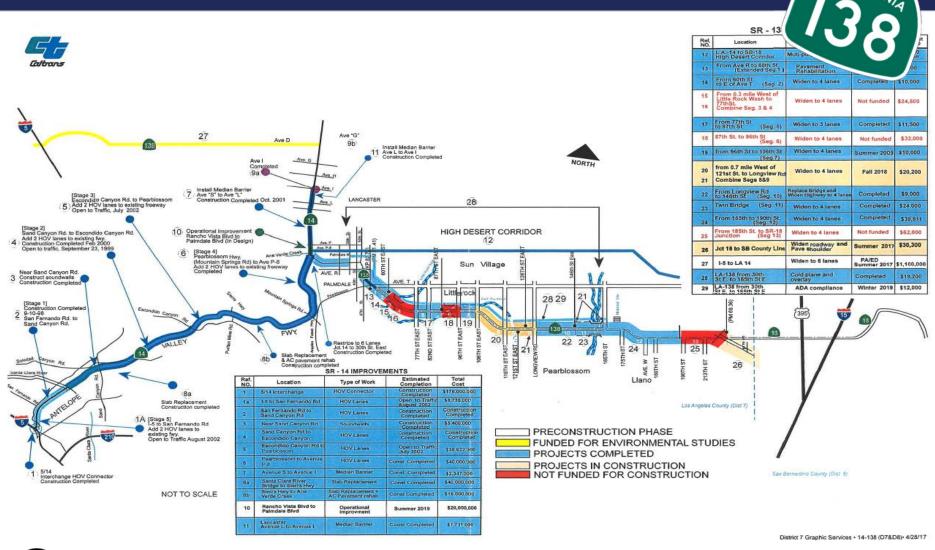
 Multi-agency efforts in assessing other feasible alternatives







# SR-138, SR-14 to LA/SB County Line





## Northwest SR-138

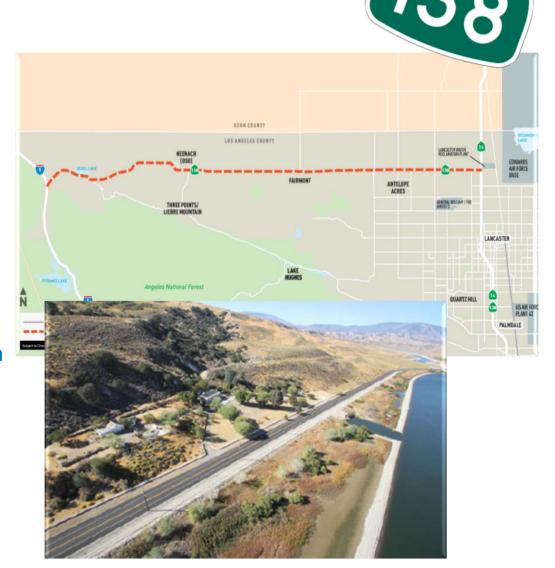
#### **Project Summary**

- 36 miles from I-5 to SR-14
- PAED Completed
- Freeway/Expressway/conventional highway
- No funding for subsequent phases
- EIR/EIS Completed in June 2017

#### **Status Update**

- Highway widening potential between
   I-5 and 300th Street third party
- Safety/rehab projects construction contracts by Caltrans





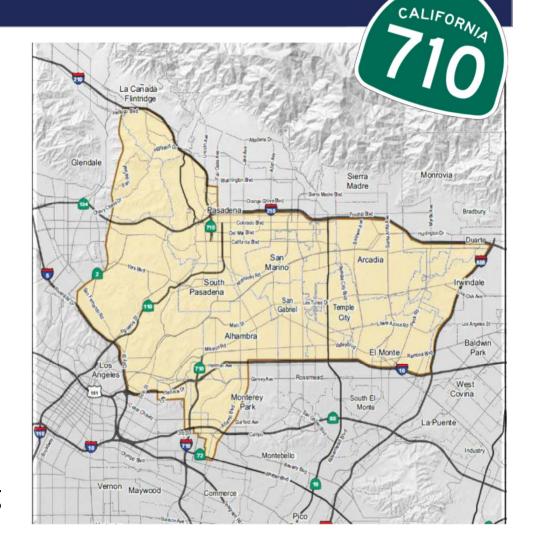
## SR-710

#### **Project Summary**

- \$780M in Measure R funds
- \$300+M in other funds
- LPA Adopted: Transportation
   System Management /
   Transportation Demand
   Management (TSM/TDM)

#### **Status Update**

 Implementation of mobility improvement projects starting in 2020





## "Hot Spots" Program

91 SINTERSTATE INTERSTATE CALIFORNIA 605

I-605/I-10

I-605/SR-60

I-605/I-5

I-605/I-105

I-605/Valley Blvd.
Construction in 2020

SR-60/7th Ave.

I-605/Beverly Blvd.
Construction in 2020

SR-91/Central Ave.

SR-91/Wilmington

I-605/South St.
Construction in 2020





+ Over 30 Arterial Intersection Improvements

## I-710

#### **Project Summary**

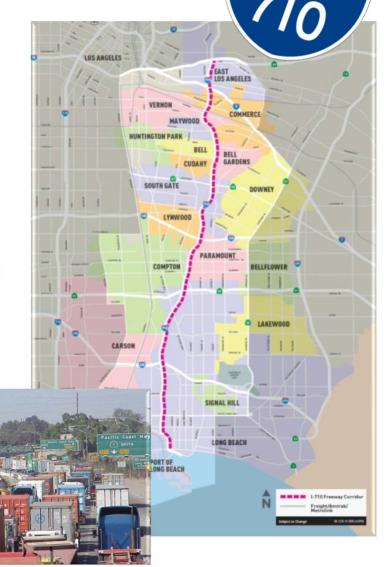
- In PAED phase 18 miles between the Ports of Long Beach and Los Angeles and the SR-60
- LPA: Add 1 lane + upgrade (Adopted by Metro Board as the LPA)
- Estimated Cost: \$6<sup>+</sup> billion
- Includes "Early Action" Projects
- \$420 mil in Measure R and \$500 mil. in Measure M

#### **Status Update**

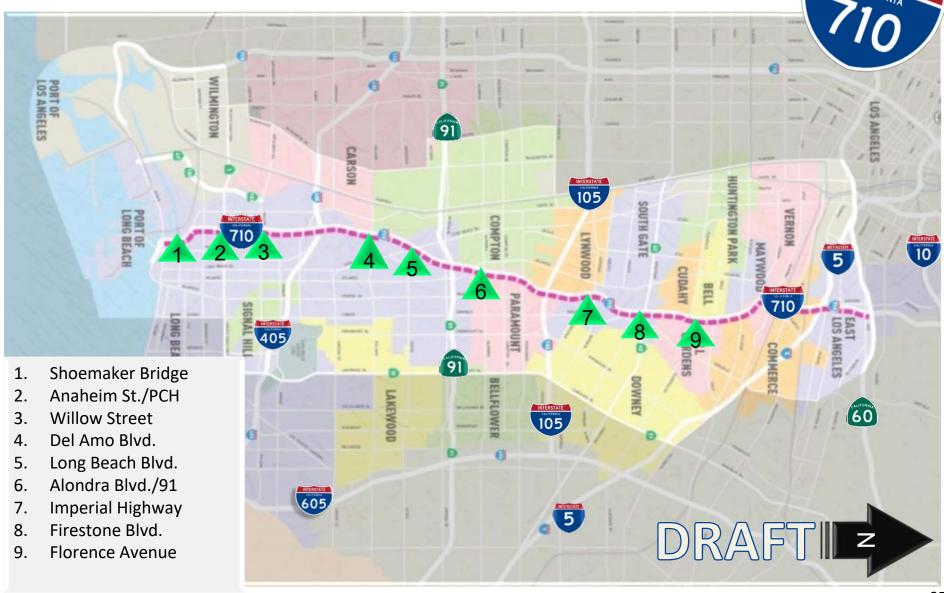
- Final EIR/EIS: 2020
- Early Action projects final design and construction pending approval of the
   ED and no legal challenges



Metro



## I-710 Early Action Freeway Projects



## I-405

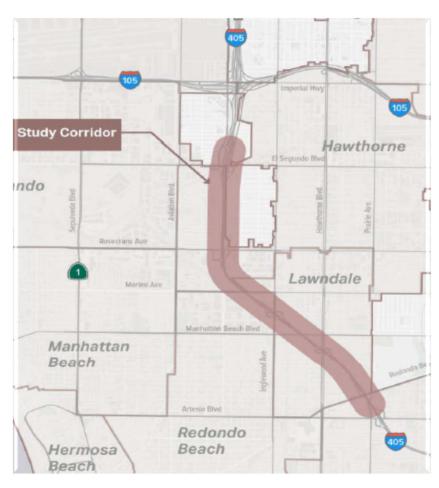


#### **Project Summary**

 Add auxiliary lanes NB & SB from I-105/I-405 to Artesia Blvd offramp

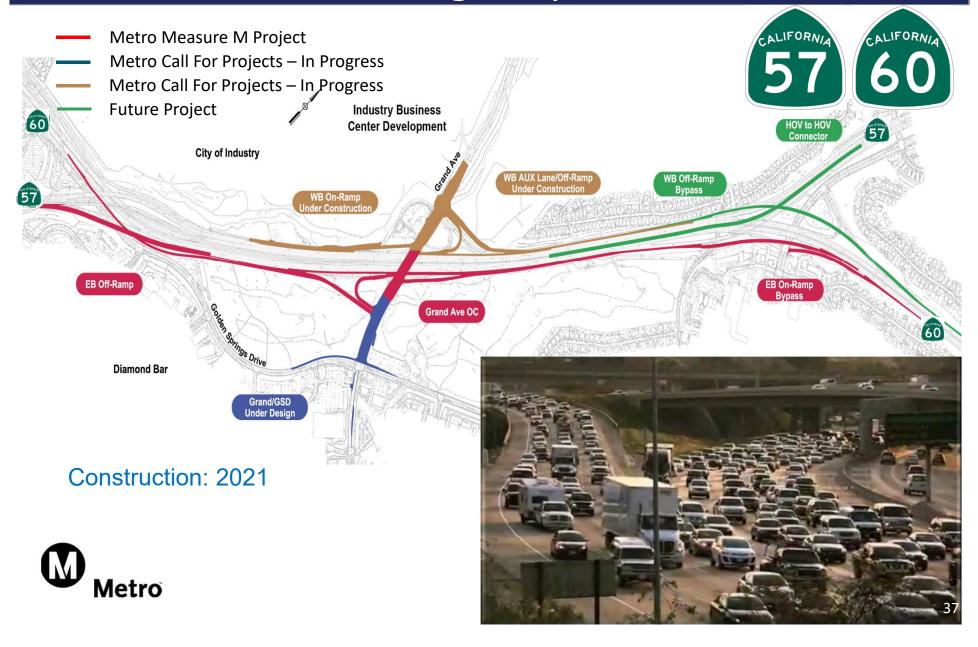
#### **Status Update**

- PSR completed Nov. 2018
- PAED commenced in March 2019
- Construction in 2023





# SR-57/SR-60 Interchange Improvements



## **SR-71**

#### **Project Summary**

- In Final Design phase
- Add a GP lane and an HOV lane
- 2 segments:
  - Mission to SR-60 upgrade from expressway to freeway
  - Mission to I-10 upgrade including raising 2 bridges over the RR tracks

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#### **Status Update**

- Construction of Mission to SR-60: Summer 2020
- Construction of Mission to I-10: Summer 2023

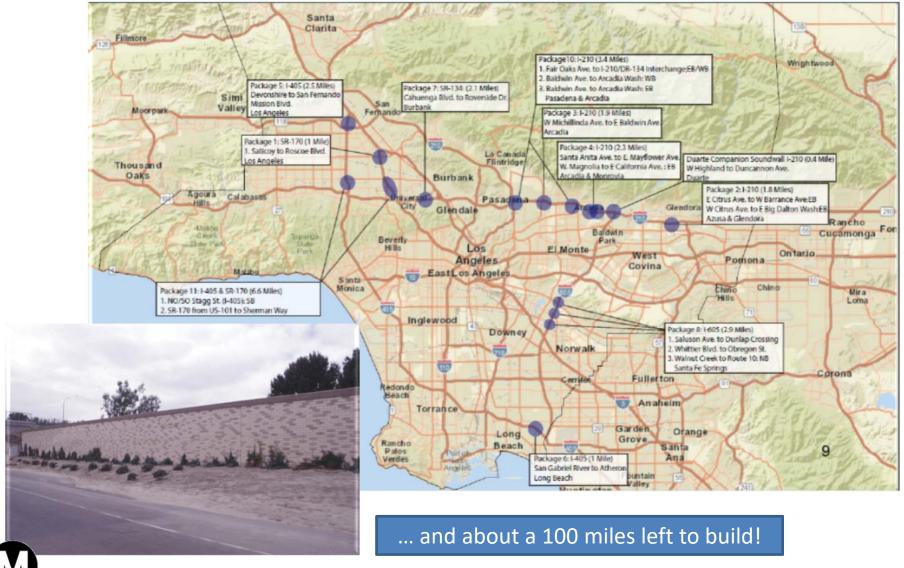


## Soundwalls

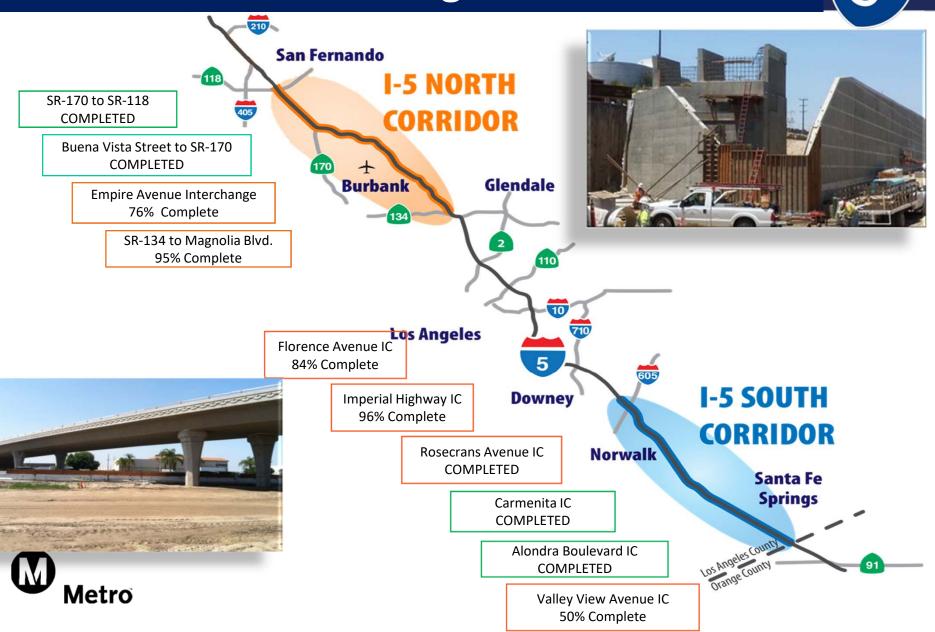




## Soundwalls



## **I-5 Construction Oversight**



## **Goods Movement**



# ITS/Local Traffic Improvements

- Signal Synchronization and bus speed improvements
- Maximize the capacity of existing surface streets and reduce traffic delays
- Designed to improve:
  - Traffic flow
  - Movement of vehicles and goods
  - Air quality
  - System accessibility and safety.
- Improvements are relatively low-cost and can be implemented in a short period of time
- Since the early 1990's, Metro has granted over \$600 million through the biannual Call for Projects to local agencies.
- 223 Candidate Projects
- 149 projects completed





## Doing Business with Metro

- Tough competition!
- A/E and construction contracts
- Focused and On-Call/Bench contracts
- Small Business expertise/market share



## Doing Business with Metro

#### How we help consultants:

- Identifying the right markets/pursuits to participate in
- Identifying their potential partners
- Assist in improving their staffing and qualifications
- Win work!

#### How consultants help us:

- Provide highly qualified resources and competent services
- Credible input and guidance in project delivery
- Right-pricing services
- Engage and train additional resources for the future needs
- Heavily negotiate and minimize changes required by others
- Minimize risk to Metro



# Discussions















