

MRT 2

An Affordable Alternative Valley-to-LAX Monorail Route Through the Sepulveda Pass

*Because Metro Cannot Afford Any of Their Four Concepts
With Currently Available Measure M Funding*

Bel Air Beverly Crest Neighborhood Council Transportation Committee

April 11, 2019

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Sherman Oaks
Neighborhood Council

Metro's Four Concepts

HRT 1



Heavy Rail
Fully Underground

HRT 2



Heavy Rail
Fully Underground

HRT 3



Heavy Rail
Valley Elevated

MRT 1



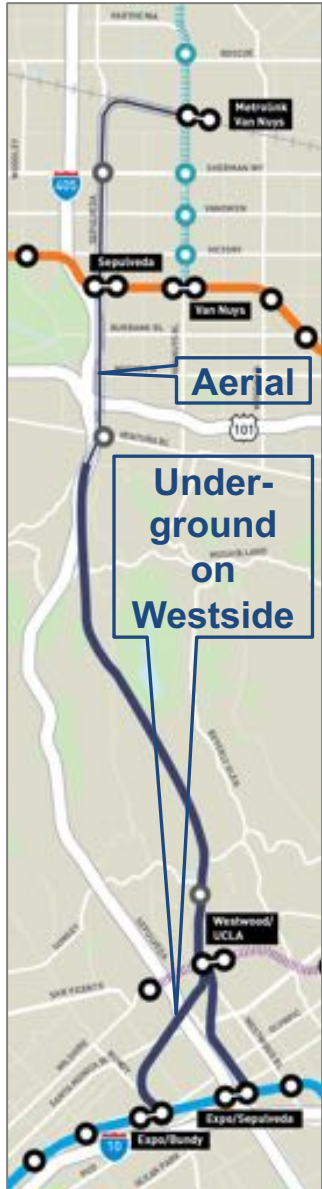
Monorail
Pass & Valley Elevated

Sepulveda Pass Funding Dilemma

- ◆ SOHA and SONC **strongly support** HRT 1 and HRT 2
 - Both fully underground heavy rail in Valley and Westside
 - Highest capacity, shortest travel times, and least invasive
 - **Not affordable** under available Measure M funding
- ◆ SOHA and SONC **strongly oppose** HRT 3
 - Heavy rail elevated above Sepulveda Boulevard in Valley
 - Inequitable – Elevated in Valley – Underground on Westside
 - **Not affordable** under available Measure M funding
- ◆ SOHA and SONC **strongly oppose** MRT 1
 - Monorail elevated in Pass and above Sepulveda Boulevard in Valley
 - Inequitable – Elevated in Valley – Underground on Westside
 - **Not affordable** under available Measure M funding

**Valley Getting the Short End of the Stick – As Usual
We Need Equitable and Affordable Alternative to MRT 1**

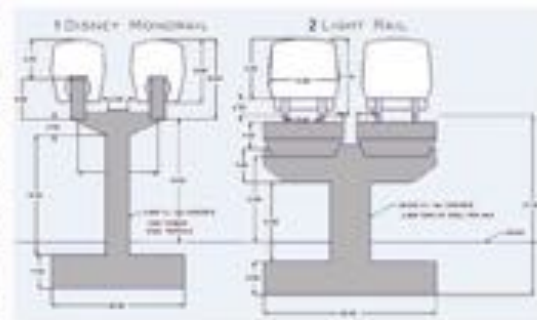
Why Isn't HRT 3 Concept Viable?



- ◆ Operates elevated above Sepulveda Boulevard for five miles
- ◆ Encroaches on Valley residents, businesses, streets, drivers, and pedestrians
- ◆ Destroys community's light, air, and privacy
- ◆ Eliminates lanes and increases traffic congestion on Sepulveda Boulevard
- ◆ Reduces street parking on Sepulveda Blvd
- ◆ Construction nightmare for years and years
- ◆ High potential for legal battles and delays
- ◆ Inequitably underground on the Westside
- ◆ Higher cost and longer schedule to build underground Westside tunnels and stations

Metro Needs a Better, Equitable Alternative

HRT 3 – Aerial on Sepulveda in Valley



TRAINS CAN NEGOTIATE A 5.8% GRADE
20' DROP = 345' LENGTH, 40' = 690'

**HRT 3 Transitions
from Underground to
Aerial near Valley
Vista Boulevard**

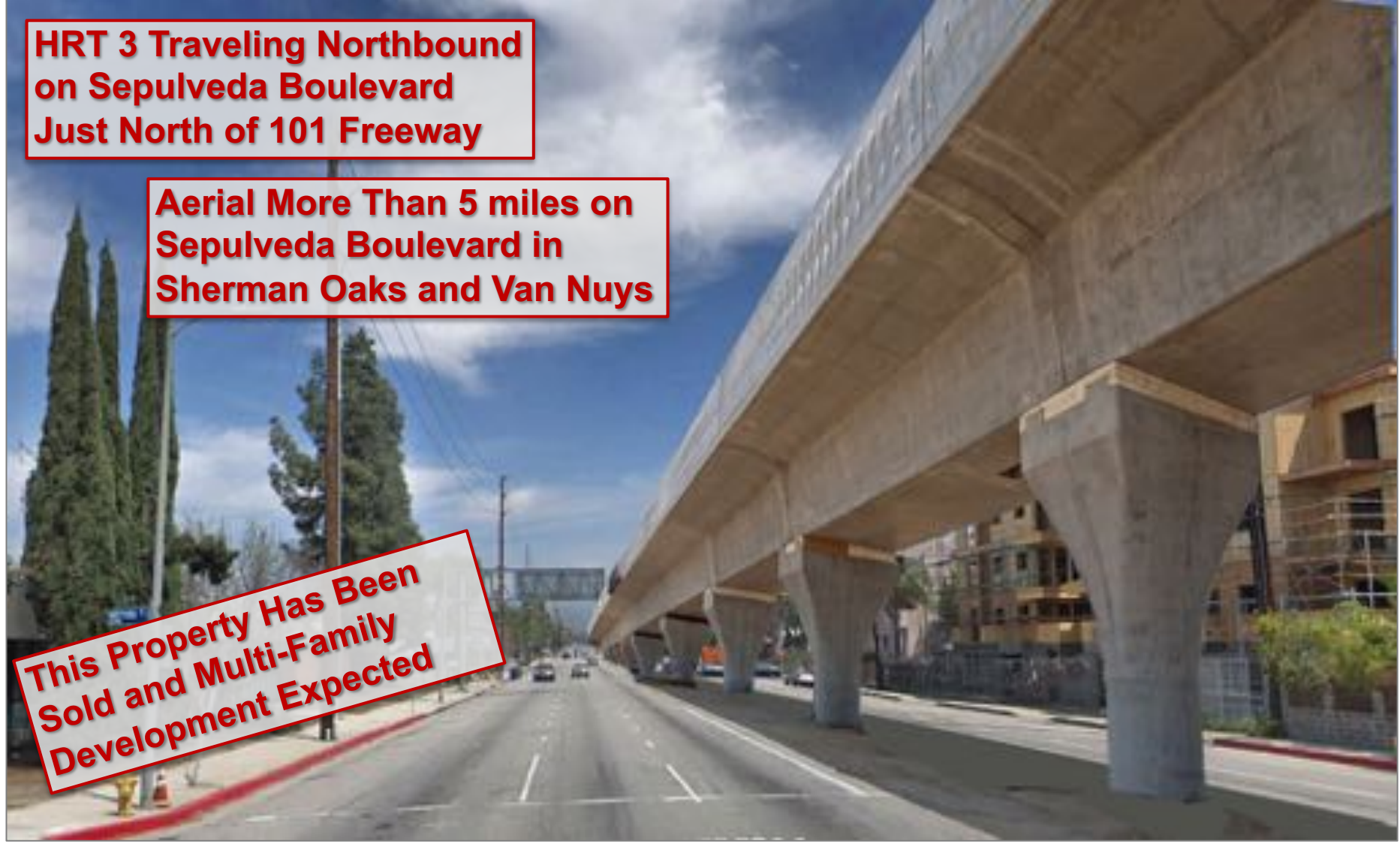
- Aerial on Sepulveda Boulevard
- Transition from underground to aerial

HRT 3 – Very Intrusive Valley Operation

**HRT 3 Traveling Northbound
on Sepulveda Boulevard
Just North of 101 Freeway**

**Aerial More Than 5 miles on
Sepulveda Boulevard in
Sherman Oaks and Van Nuys**

**This Property Has Been
Sold and Multi-Family
Development Expected**



Sepulveda at Morrison Looking East

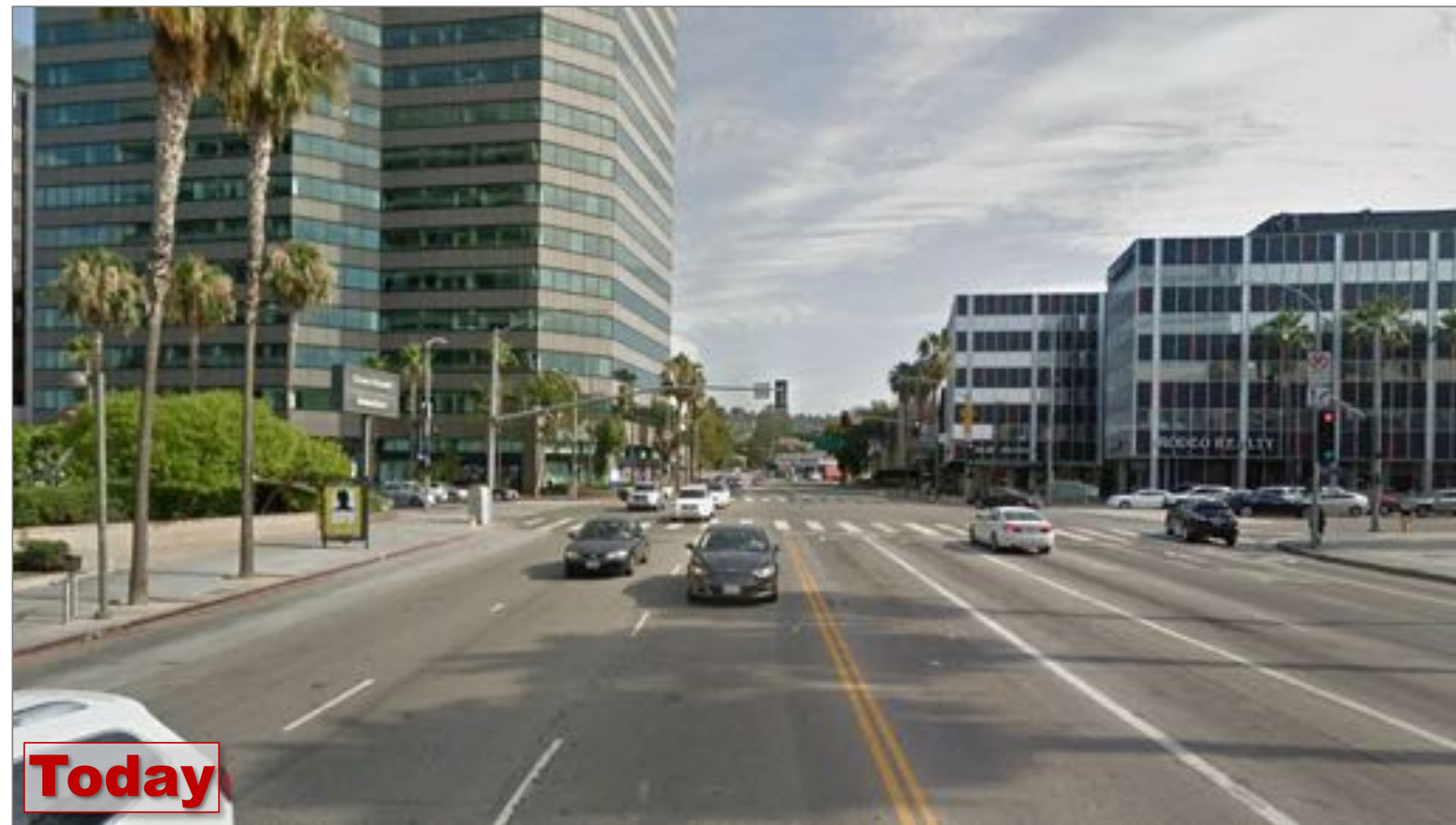


Sepulveda at Morrison Looking East



With HRT 3

Sepulveda at Ventura Looking South



Today

Sepulveda at Ventura Looking South



With HRT 3

Ventura at Sepulveda Looking East



Ventura at Sepulveda Looking East



Sepulveda at Greenleaf Looking West



Sepulveda at Greenleaf Looking West



With HRT 3

Sepulveda at Sutton Looking South



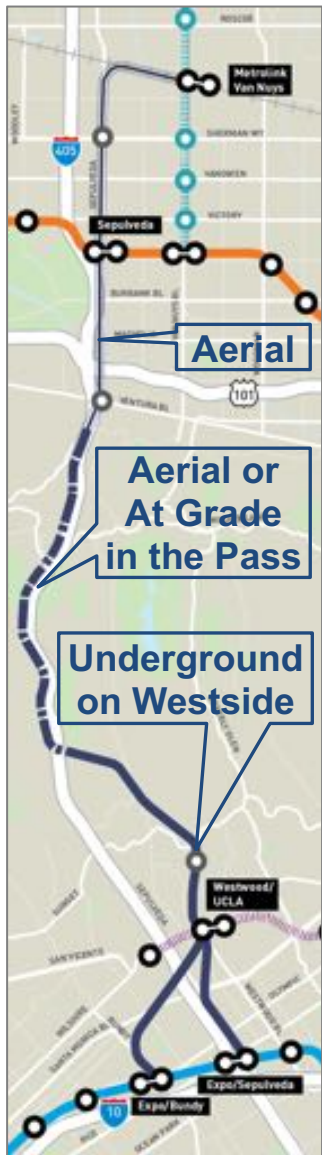
Sepulveda at Sutton Looking South

More Than 100 Apartments and Condos Demolished To Allow HRT 3 To Go Underground

With HRT 3



Why Isn't MRT 1 Concept Viable?



- ◆ Operates elevated above Sepulveda Boulevard for five miles
- ◆ Encroaches on Valley residents, businesses, streets, drivers, and pedestrians
- ◆ Destroys community's light, air, and privacy
- ◆ Eliminates lanes and increases traffic congestion on Sepulveda Boulevard
- ◆ Reduces street parking on Sepulveda Blvd
- ◆ Construction nightmare for years and years
- ◆ High potential for legal battles and delays
- ◆ Inequitably underground on the Westside
- ◆ Higher cost and longer schedule to build underground Westside tunnels and stations

Metro Needs a Better, Equitable Monorail Alternative

MRT 1 – Aerial on Sepulveda in Valley



MRT 1 – Intrusive Valley Operation

**MRT 1 Traveling Northbound
Above Sepulveda Boulevard
Near Valley Vista Boulevard**

**Aerial Above Sepulveda
Boulevard for 5 miles in
Sherman Oaks and Van Nuys**

Measure M Funding Is Not Enough

Measure M Funding for Sepulveda Transit Corridor Project (in \$2015 billions)

Metro Subregion	Measure M Funding	Local, State, Federal, & Other Funding	TOTAL
San Fernando Valley	\$1.270	\$1.567	\$2.837
Westside	\$1.270	\$1.567	\$2.837
TOTAL (Phase 2)	\$2.540	\$3.134	\$5.674

Average U.S. inflation rate of 3.4 percent per year optimistically applied over four years

At Most \$6.5 billion Currently Available from Measure M (\$2019)

HRT 1 and 2 Construction Cost Per Mile

- ◆ **Metro Purple Line Extension is best for cost comparison**
 - Ongoing heavy rail subway construction under Wilshire Boulevard
 - 9.07 miles, 7 stations (every 1-1/2 mile), and no maintenance facility
 - \$9.35 billion forecast cost (per Metro Program Management Dashboard)
 - \$1.03 billion per mile (\$1.43 billion per mile for last section)
- ◆ **HRT 1 and 2 same heavy rail subway but fewer stations**
 - 14 miles, 6 or 7 stations (every 2 miles), and maintenance facility
 - \$0.8 billion per mile lowest possible – Less stations but extra facility
- ◆ **Lowest to highest possible HRT 1 and 2 construction cost**
 - 14 miles at \$0.8 billion per mile = **\$11.2 billion – Optimistic**
 - 14 miles at \$1.0 billion per mile = **\$14.0 billion – Probable**
 - 14 miles at \$1.2 billion per mile = **\$16.8 billion – Probable**
 - 14 miles at \$1.4 billion per mile = **\$19.6 billion – Pessimistic**

HRT 1 and HRT 2 Will Cost \$11 Billion To Build – Probably More

Metro's Severe Funding Gap

- ◆ Measure M provides at most **\$6.5 billion** (\$2019)
 - 28x28 Olympics initiative \$8.6 billion not available because none of Metro concepts can meet 2028 deadline
 - Congestion pricing and mobility fees insufficient to fill gap
 - Public Private Partnership (P3) possible through Metro Office of Extraordinary Innovation if financially sensible
- ◆ Concepts HRT 1 and HRT 2 cost **\$11 to \$17 billion**
 - Not affordable – 14 miles of tunneling
- ◆ Concept HRT 3 costs **\$9 to \$13 billion**
 - Not affordable – 9 miles of tunneling in Westside and Pass
- ◆ Concept MRT 1 costs **\$7 to \$11 billion**
 - Not affordable – 6 miles of tunneling on Westside

**Huge Funding Gaps May Force Metro to Select
Then Downgrade MRT 1 Monorail Concept**

Metro Needs Better, Affordable Monorail Alternative

Meet MRT 2 – A Monorail on the I-405



- ◆ Futuristic look and appeal
- ◆ Aerial above 405 freeway median
- ◆ Dual tracks on streamlined single support structure
- ◆ Similar stations to MRT 1 monorail
- ◆ Equitably elevated in Valley, Westside, and LAX regions
- ◆ Almost zero impacts to communities and streets – Even during construction
- ◆ Minimal potential for legal actions
- ◆ Shortest schedule – No tunneling
- ◆ Possibility of Valley to LAX by 2028
- ◆ Lowest cost – \$6 to \$7 billion to LAX

Better Concept That Metro Should Adopt

MRT 2 – Minimal Community Impact

Envious Drivers Will Watch Monorail Fly By!



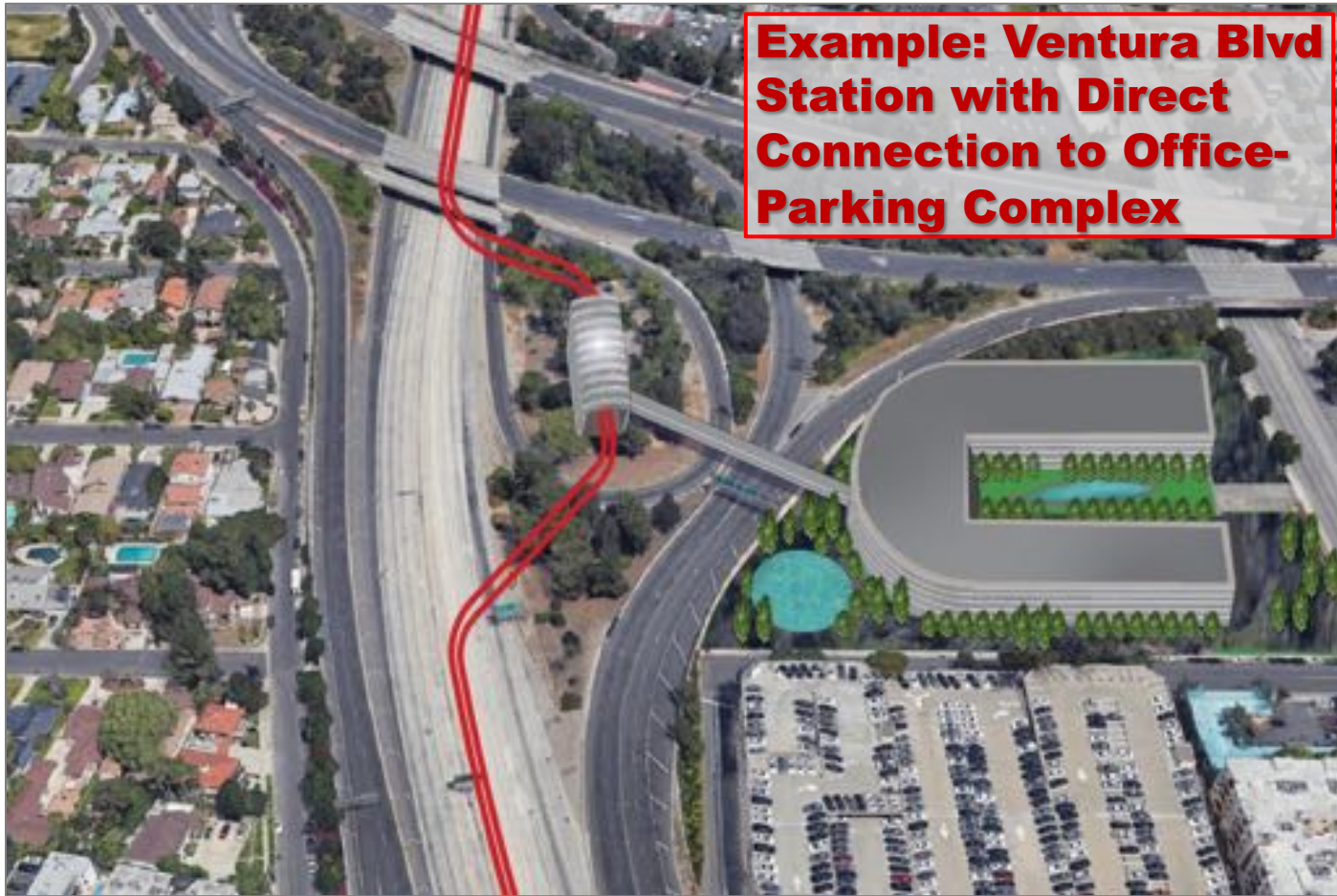
- ◆ **Dual-track monorail operates above freeway median in both directions**
- ◆ **Safe and quiet operation**
- ◆ **No interference with freeway traffic**
- ◆ **Easy evacuation path between tracks if emergency**

Easy Ride Over the Sepulveda Pass



- ◆ **MRT 2 travels under the Mulholland Bridge**
- ◆ **Travels over smaller bridges and overpasses**
 - **Skirball and Sunset Bridges, Orange Line, and Burbank Boulevard**
- ◆ **Travels over or around major freeway interchanges**
 - **Ventura (101), Santa Monica (10), and Marina (90) freeways**

Many Station Options Available



- ◆ Stations can be located next to freeway on dogleg track
- ◆ Stations can be located above freeway median with moving sidewalk to terminal, parking, offices, and more

MRT 2 Van Nuys Metrolink Station



- ◆ Northern terminus at Van Nuys Metrolink station – Easy connection
- ◆ Runs aerial and parallel to Metrolink tracks before turning above I-405 freeway median
- ◆ Additional parking for east Valley possible at station

MRT 2 Sherman Way Parking Station



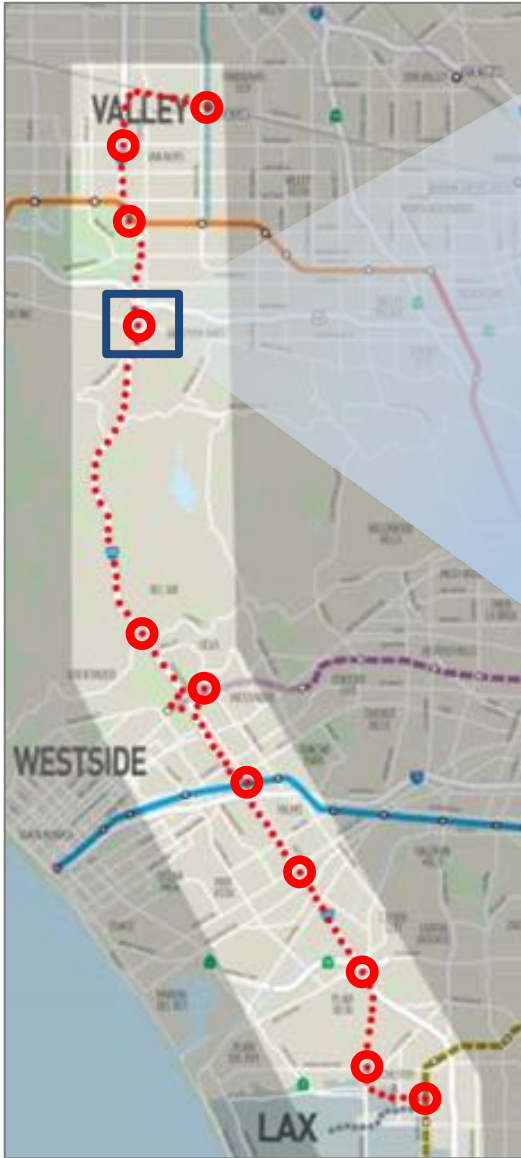
- ◆ Major driver access from north Valley, North County, Metrolink, and more
- ◆ Huge 10,000-car parking structure at Sherman Way with easy access to/from 405 freeway
- ◆ Station inside parking structure on dogleg track

MRT 2 Orange Line Parking Station



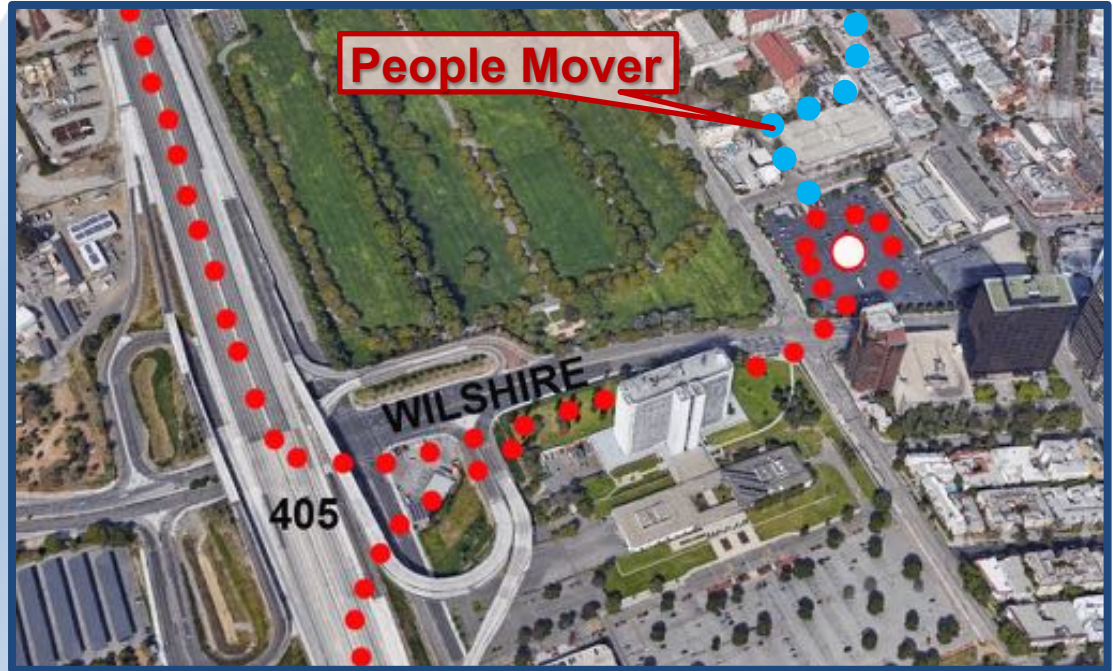
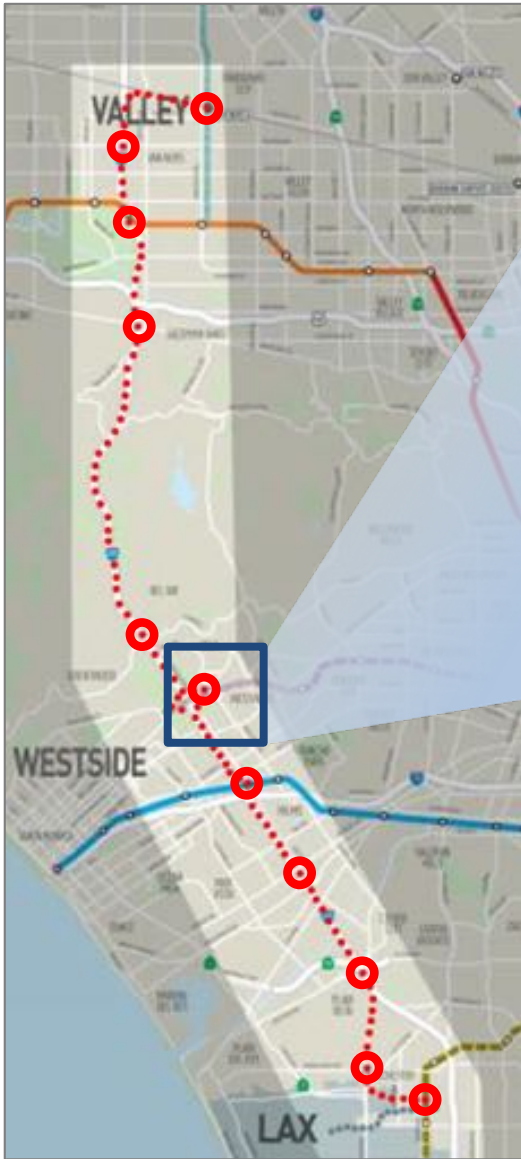
- ◆ Major driver access from north Valley, south Valley, Orange Line, and more
- ◆ Large parking structure on existing Orange Line parking lot with easy access to/from Sepulveda Boulevard
- ◆ Station inside parking structure on dogleg track
- ◆ People mover to Orange Line station

MRT 2 Ventura Boulevard Station



- ◆ Easy access to Sepulveda and Ventura Boulevard transit
- ◆ Station adjacent to freeway on dogleg track with people mover to parking
- ◆ Station could be closer to Ventura Boulevard if desirable

MRT 2 Wilshire Boulevard Station



- ◆ Easy access to/from 405 freeway, Wilshire Boulevard, and UCLA
- ◆ Large UCLA on-campus parking structure with station on dogleg track
- ◆ People mover onto UCLA campus
- ◆ Direct connection to Purple Line on Wilshire Boulevard

MRT 2 Expo Line Station



- ◆ Direct connection to Expo Line for either Santa Monica or downtown Los Angeles
- ◆ Station adjacent to 405 and 10 freeways on dogleg track
- ◆ Monorail continues south to further stations and LAX terminus

Monorail Performance Underestimated?

- ◆ **Metro heavy rail performance estimates – HRT 1, 2, and 3**
 - Six cars per train traveling at up to 70 mph
 - 12,000 passengers per hour at four minutes between trains
 - 15 to 16 minutes from Van Nuys Metrolink to Expo Line
- ◆ **Metro monorail performance estimates – MRT 1**
 - Three cars per train traveling at up to 50 mph
 - 7,500 passengers per hour at four minutes between trains
 - 26 minutes from Van Nuys Metrolink to Expo Line
- ◆ **Today's monorail performance estimates much better**
 - Six cars per train traveling at up to 75 mph
 - 14,000 passengers per hour at two minutes between trains
 - 20 minutes from Van Nuys Metrolink to Expo Line

**Monorail Performance Is At Least As Good As Heavy Rail
Better, Faster, Equitable, Quickest To Build, and Least Costly**

Toll Lanes Cannot Preclude MRT 2

- ◆ Metro planning four 405 ExpressLanes through Pass
 - One HOV lane and one toll lane in each direction
 - Measure M, Attachment A, footnote f “includes early delivery of highway ExpressLane”
- ◆ ExpressLanes must not preclude MRT 2 monorail above 405 median through Sepulveda Pass
 - One part of Metro says four ExpressLanes excludes MRT 2
 - Another part of Metro says ExpressLanes and MRT 2 compatible
 - Toll ExpressLanes also penalize low-income drivers
- ◆ Metro must ensure compatibility of toll lanes and MRT 2
 - And stop considering unacceptable elevated tracks above Sherman Oaks and Van Nuys streets

Don't Preclude Best, Quickest-To-Build, Actually Affordable, Median-Running Monorail Route for Short-Term Toll Lanes

Public-Private Partnership Concepts

- ◆ Metro also soliciting Public-Private Partnership (P3) concepts for Sepulveda Transit Corridor Project
- ◆ Commercial organizations propose innovative concepts
 - Combined rail-auto tunnels?
 - Alternative monorail routes?
 - Other?
- ◆ Metro evaluates proposed P3 concepts in 2019
- ◆ Metro Board selects P3 concepts to continue through environmental impact analysis
 - Selected P3 concepts evaluated alongside selected Metro concepts

**Public-Private Partnership Proposals from Commercial Organizations
May Offer Additional Innovative and Affordable Concepts
Metro Must Provide Additional Transparency Into P3 Process**

MRT 2 Monorail – A Better Alternative

- **Heavy Rail Subways HRT 1 and 2 Are Terrific But Unaffordable**
- **HRT 3 and MRT 1 Are Inequitable To Valley, Unaffordable, and Destroy Van Nuys and Sherman Oaks**
- **MRT 2 Monorail Above 405 Median Is Only Affordable and Equitable Concept Operating by '28 Olympics**
- **Let's Make MRT 2 a Reality!**

Please Send Comments To Metro

- ◆ Please send comments to Metro about the Sepulveda Transit corridor Project
 - Opposition against elevated tracks in Valley
 - Support for MRT 2 monorail above 405 freeway
 - Other?

- ◆ Email comments to:
 - sepulvedatransit@metro.net
 - Cory Zelmer, Metro Project Manager, zelmerc@metro.net
 - Joshua Schank, Metro Chief Innovation Officer, schankj@metro.net
 - Karen Swift, Metro Valley Communications, swiftk@metro.net

- ◆ Mail comments to:
 - Cory Zelmer, Metro Project Manager
Metro, One Gateway Plaza, M/S 99-22-5, Los Angeles, CA, 90012

- ◆ Thank you