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

May 2019

Bob Anderson
Board Member and Chair, Transportation Committee
BobHillsideOrdinance@roadrunner.com

Jeffrey Kalban
Board Member and Chair, PLUM Committee
jeff.kalban.sonc@gmail.com

Sherman Oaks
Homeowners Association

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
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 vehemently oppose HRT 3 – Not Viable
- Heavy rail elevated above Sepulveda Boulevard in Valley
- Inequitable – Aerial in Valley – Underground on Westside
- Not affordable under available Measure M funding

SOHA and SONC vehemently oppose MRT 1 – Not Viable
- Monorail elevated in Pass and above Sepulveda Boulevard in Valley
- Inequitable – Aerial in Valley – Underground on Westside
- Not affordable under available Measure M funding

QUESTION 1 – Why Is Valley Getting Short End of the Stick Again With Elevated Trains on Sepulveda?
Everyone Deserves A Viable, Affordable, and Equitable Alternative
Why HRT 3 and MRT 1 Aren’t Viable

- Both operate aerial 20 feet above Sepulveda Boulevard for five miles – Valley Vista to Raymer
- MRT 1 operates aerial or at-grade through Pass
- Both encroach on residents and businesses
- Both demolish about 100 homes in Sherman Oaks
- Both destroy community’s light, air, and privacy
- Both eliminate lanes on Sepulveda Boulevard and increase traffic congestion
- Both reduce street parking on Sepulveda Boulevard
- Both stress 96-inch water main under Sepulveda
- Both construction nightmares for years and years
- Both high potential for legal battles and delays
- Both inequitably underground on the Westside
- Both are high cost and long schedule because of underground Westside tunnels and stations
HRT 3 – Aerial on Sepulveda in Valley

HRT 3 Transitions from Underground to Aerial near Valley Vista Boulevard

- Aerial on Sepulveda Boulevard
- Transition from underground to aerial

Runs Aerial Above Sepulveda Boulevard for 5 miles

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
MRT 1 – Aerial on Sepulveda in Valley

- Runs Aerial Above Sepulveda Boulevard
- Crosses 405 Near Valley Vista Boulevard
- Continues Aerial 5 miles to Van Nuys Metrolink
- Runs Along 405 West Shoulder Through Pass

Sherman Oaks Homeowners Association - Sherman Oaks Neighborhood Council
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
Sepulveda at Morrison Looking East
Sepulveda at Morrison Looking East

With HRT 3
Sepulveda at Ventura Looking South

With HRT 3
Sepulveda at Greenleaf Looking West

With HRT 3
Sepulveda at Sutton Looking South

Today
Sepulveda at Sutton Looking South

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

With HRT 3
Measure M Funding is Not Enough

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

<table>
<thead>
<tr>
<th>Metro Subregion</th>
<th>Measure M Funding</th>
<th>Local, State, Federal, &amp; Other Funding</th>
<th>TOTAL</th>
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<td>San Fernando Valley</td>
<td>$1.270</td>
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<td>$2.837</td>
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<tr>
<td>Westside</td>
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<td>$1.567</td>
<td>$2.837</td>
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<tr>
<td>TOTAL (Phase 2)</td>
<td>$2.540</td>
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At Most $6.5 billion Maximum Available from Measure M ($2019)

Average U.S. inflation rate of 3.4 percent per year optimistically applied over four years.
HRT 1 and 2 Cost Per Mile Is High

- Metro Purple Line Extension is best for cost comparison
  - Ongoing heavy rail subway construction under Wilshire Boulevard
  - 9.07 miles (3 sections), 7 stations, and maintenance facility upgrade
  - 14 years to construct (10 years first 4-mile section)
  - $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, and new maintenance facility
  - $1.0 billion per mile lowest supported by Metro data

- Lowest to highest possible HRT 1 and 2 construction cost
  - 14 miles at $1.0 billion per mile = $14.0 billion – Possible
  - 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 2 Will Cost $14 billion and Take 10 years – Probably More**
Metro’s Huge Funding Gaps

- 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 gaps
  - Public-private partnerships (PPPs) help finance projects but PPPs DO NOT fill huge funding gaps

- Concepts HRT 1 and HRT 2 cost $14 to $17 billion
  - Not affordable – 14 to 15 miles of tunneling

- Concept HRT 3 costs $10 to $14 billion
  - Not affordable – 9 miles of costly tunneling in Westside and Pass

- Concept MRT 1 costs $8 to $12 billion
  - Not affordable – 6 miles of costly tunneling in Westside

QUESTION 2 – Why Is Metro Spending Taxpayer Dollars To Continue Analyzing Four Obviously Unaffordable Concepts?

Huge Funding Gaps Will Force Metro to Downgrade Their Concepts Public Perceives As Bait & Switch – Like East Valley Transit Corridor
PPP May Bring Affordable Concepts

- Metro soliciting Public-Private Partnership (PPP) concepts for Sepulveda Transit Corridor Project
  - Through Request for Qualifications/Proposals (RFQ/P) in 2019 leading to Preliminary Development Agreement (PDA) in 2020
- Commercial organizations propose innovative concepts
  - Combined rail-auto tunnels?
  - Alternative monorail routes?
  - Other?
- Metro Board selects PPP concept(s) in December 2019
  - Selected PPP and Metro concepts proceed side-by-side into environmental analyses from 2020 to 2022

**QUESTION 3 – Why Hasn’t Metro Explained Their PPP Plan?**

Public-Private Partnership Proposals from Commercial Organizations Hopefully Offer Additional Innovative and Affordable Concepts
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 Metro’s MRT 1
- 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

QUESTION 4 – Why Didn’t Metro Consider MRT 2?
Why MRT 2 Happened and Is Viable

- **February 2nd** – Metro discloses four concepts at public meeting
- **February 7th** – Jeff Kalban (SONC) and Bob Anderson (SOHA) worry about affordability and think about better concept
- **February 18th** – Bob and Jeff work together on President’s Day to develop alternative monorail concept on 405
- **February 28th** – SOHA and SONC present MRT 2 concept to Councilmember Ryu and Council Districts 3, 4, and 6 staff
- **March 8th** – BYD SkyRail learns of MRT 2 concept – contacts us
- **March 11th** – SONC Board approves MRT 2 concept
- **March 12th** – Jeff and Bob meet with BYD SkyRail to learn about their “remarkably similar” affordable and viable monorail concept on 405
- **March 12th** – Jeff and Bob start presenting MRT 2 widely – Supervisor Kuehl’s office, Metro Sepulveda Transit Corridor Project Manager & staff, Mayor Garcetti’s staff, Metro Chief Innovation Officer, Senator Hertzberg office, Village at Sherman Oaks Business Improvement District, Sherman Oaks Chamber of Commerce, and more …
MRT 2 – Minimal Community Impact

- Dual-track monorail on single support operates above freeway median in both directions
- No interference with freeway traffic
- Quiet operation with rubber tires on concrete track
- Easy & safe emergency evacuation path between tracks

Envious Drivers Will Watch Monorail Fly By!
Easy Ride Over Sepulveda Pass To LAX

- MRT 2 travels under Mulholland Bridge
- Travels over smaller bridges and overpasses
  - Skirball and Sunset Bridges, and Burbank Boulevard Overpass
- Travels over or around major freeway interchanges
  - Ventura (101), Santa Monica (10), and Marina (90) freeways
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 Blvd Parking Station

- Station adjacent to freeway on dogleg track with people mover to parking
- Easy access to Sepulveda and Ventura Boulevard transit
- Station could be closer to Ventura Boulevard if desirable – Or even above 405

Example: Ventura Blvd Station with Direct Connection to Office-Parking Complex
MRT 2 Wilshire/UCLA 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
- Continues south to LAX terminus station and connections to Green Line, Crenshaw Line, and LAX Automated People Mover
Monorail As Good As Heavy Rail

- **Metro heavy rail performance estimates – HRT 1, 2, & 3**
  - Six-car trains traveling up to 70 mph
  - 12,000 passengers per hour with four minutes between trains
  - 15 to 16 minutes from Van Nuys Metrolink to Expo Line

- **Metro performance for their monorail – MRT 1**
  - Three-car trains traveling up to 50 mph
  - 7,500 passengers per hour with four minutes between trains
  - 26 minutes from Van Nuys Metrolink to Expo Line

- **State-of-the-art monorail performance – MRT 2**
  - Six-car trains traveling up to 75 mph
  - 14,000 passengers per hour with two minutes between trains
  - 20 minutes from Van Nuys Metrolink to Expo Line

**QUESTION 6 – Why Does Metro Degrade Monorail Performance and Capacity Compared To Heavy Rail?**

MRT 2 Is Equitable, Quickest To Build, and Most Affordable
Ensure Toll Lanes Can’t Preclude MRT 2

- Metro adding two Toll Express Lanes to 405 freeway
  - Measure M Sepulveda Transit Corridor Project Phase 1
  - One toll lane in each direction from 10 freeway to 101 freeway

- Express Lanes cannot preclude MRT 2 monorail above 405 median through Sepulveda Pass
  - One part of Metro says Express Lanes preclude MRT 2
  - Another part of Metro says Express Lanes compatible with MRT 2

- Metro must ensure toll lanes and MRT 2 work together
  - Stop considering unacceptable elevated tracks above Sepulveda Boulevard in Sherman Oaks and Van Nuys

**QUESTION 7** – Why Can’t Metro Simply Ensure Toll Lanes and Monorail Can Work Together on 405?
Questions Metro Needs To Answer

QUESTION 1: Why Is Valley Getting Short End of the Stick Again With Elevated Trains on Sepulveda?

QUESTION 2: Why Is Metro Spending Taxpayer Dollars To Continue Analyzing Four Obviously Unaffordable Concepts?

QUESTION 3: Why Hasn’t Metro Explained Their PPP Plan?

QUESTION 4: Why Didn’t Metro Consider MRT 2?

QUESTION 5: Why Does Metro Degrade Monorail Capacity and Performance Compared To Heavy Rail?

QUESTION 6: Why Can’t Metro Simply Ensure Toll Lanes and Monorail Can Work Together on 405?
MRT 2 Monorail – A Better Alternative

◆ **Heavy Rail Subways HRT 1 and 2 Are**
**Terrific But Unaffordable**
- $8 to $10 billion Funding Shortfall

◆ **HRT 3 and MRT 1 Are Inequitable To Valley, Unaffordable, and Destroy Van Nuys and Sherman Oaks**
- Elevated 20 feet Above Sepulveda Boulevard for Five Miles

◆ **MRT 2 Monorail Above 405 Median Is Only Affordable and Equitable Concept**
- Can Be Operating by 2028 Olympics

◆ **Metro Must Fairly Consider MRT 2**
I absolutely oppose any elevated tracks above any Valley streets – Unfair!
I support a fully underground subway in the Valley, but only if it's affordable
The ONLY acceptable alternative is a monorail along the middle of the 405

Email comments to:
- Supervisor Sheila Kuehl, Chair, Metro Board, sheila@bos.lacounty.gov
- Mayor James Butts, First Vice Chair, Metro Board, mayor@cityofinglewood.org
- Mayor Eric Garcetti, Second Vice Chair, Metro Board, mayor.garcetti@lacity.org
- Supervisor Kathryn Barger, Metro Board, kathryn@bos.lacounty.gov
- Councilmember Mike Bonin, Metro Board, councilmember.bonin@lacity.org
- Councilmember Paul Krekorian, Metro Board, councilmember.krekorian@lacity.org
- Mayor Ara Najarian, Metro Board, anajarian@glendaleca.gov
- Joshua Schank, Metro Chief Innovation Officer, schankj@metro.net
- Cory Zelmer, Metro Project Manager, zelmerc@metro.net
- Metro Email Comment Box, sepulvedatransit@metro.net

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