Metrolink's
Sealed Corridor Project

Presentation to

California Transportation Commission

June 7, 2006

625
METRO
UNION PACIFIC

Two Regional Strategies to Reduce Risk

- Crashworthiness – Already ordered equipment with Crash Energy Management technologies
- Crash Avoidance – Grade crossing improvements in a Sealed Corridor is the primary strategy

What is a Sealed Corridor?

A comprehensive strategy to enhance the safety of trains, passengers, motorists, pedestrians, and neighboring land uses within and along a railroad corridor, using appropriate safety measures to systematically reduce the opportunity for accidents at grade crossings or elsewhere within the corridor.

Metrolink's $70 Million Investment in Safety Improvements Since 1992

- Upgraded railroad signal system and enhanced control circuits
- Raised median islands
- Improved signage and striping
- Right of way fencing
- Improved traffic engineering and roadway geometry
- Closure of 7 public and 22 private crossings
- Construction of 12 grade separations
- Ongoing rail safety public education programs

Metrolink's Challenges

- **Geographic scale/multiple ownership**
  - 787 grade crossings of all types in the Metrolink system
    - 669 public
    - 36 pedestrian
    - 517 SCRRA owned
  - 443 at-grade crossings in the Metrolink system
- **Intensity of corridor usage**
  - Over 250 Metrolink, Amtrak and freight trains operate daily in Metrolink service area
- **Competing priorities for funding**

Amtrak Stops North of Santa Barbara
San Luis Obispo
Grover Beach
Guadalupe
Surf/Lompoc
Goleta
Santa Barbara
Carpinteria
Ventura
Montalvo
Oxnard
Camarillo
Moorpark
Simi Valley
Chatsworth
Northridge
Van Nuys
Burbank-Bob Hope Airport
Glendale
Sun Valley
Downtown Burbank
Sylmar/San Fernando
Newhall
Santa Clarita
Via Princessa
Lancaster
Palmdale
Vincent Grade/Acton
L.A. UNION STATION
Cal State L.A.
Montebello/Commerce
El Monte
Baldwin Park
Covina
Pomona (North)
Claremont
Montclair
Upland
Rancho Cucamonga
Fontana
Rialto
San Bernardino
Riverside Downtown
Industry
Downtown Pomona
Anaheim Canyon
E. Ontario
Pedley
Commerce
Norwalk/Santa Fe Springs
Buena Park
Fullerton
Anaheim
Orange
W. Corona
N. Main Corona
Riv. - La Sierra
Santa Ana
Tustin
Irvine
Laguna Niguel/Mission Viejo
San Juan Capistrano
San Clemente
Oceanside
Solana Beach
San Diego
VENTURA COUNTY
LOS ANGELES COUNTY
SAN BERNARDINO COUNTY
RIVERSIDE COUNTY
ORANGE COUNTY
SAN DIEGO COUNTY
Effective July 1, 2004
Metrolink/Amtrak Rail 2 Rail Joint Stations
Ventura County Line
Antelope Valley Line
San Bernardino Line
Riverside Line
Orange County Line
Inland Empire-Orange County Line
91 Line
(Riverside • Fullerton • Downtown LA)
METROLINK
Amtrak Pacific Surfliner Only
Rail 2 Rail Corridor
Future Station
Operated by MTA
Metro Red Line (Subway)
Metro Blue Line (Light Rail)
Metro Green Line (Light Rail)
Metro Gold Line (Light Rail)
Metro
Southern California Regional Rail Authority
metrolinktrains.com
Map not to scale

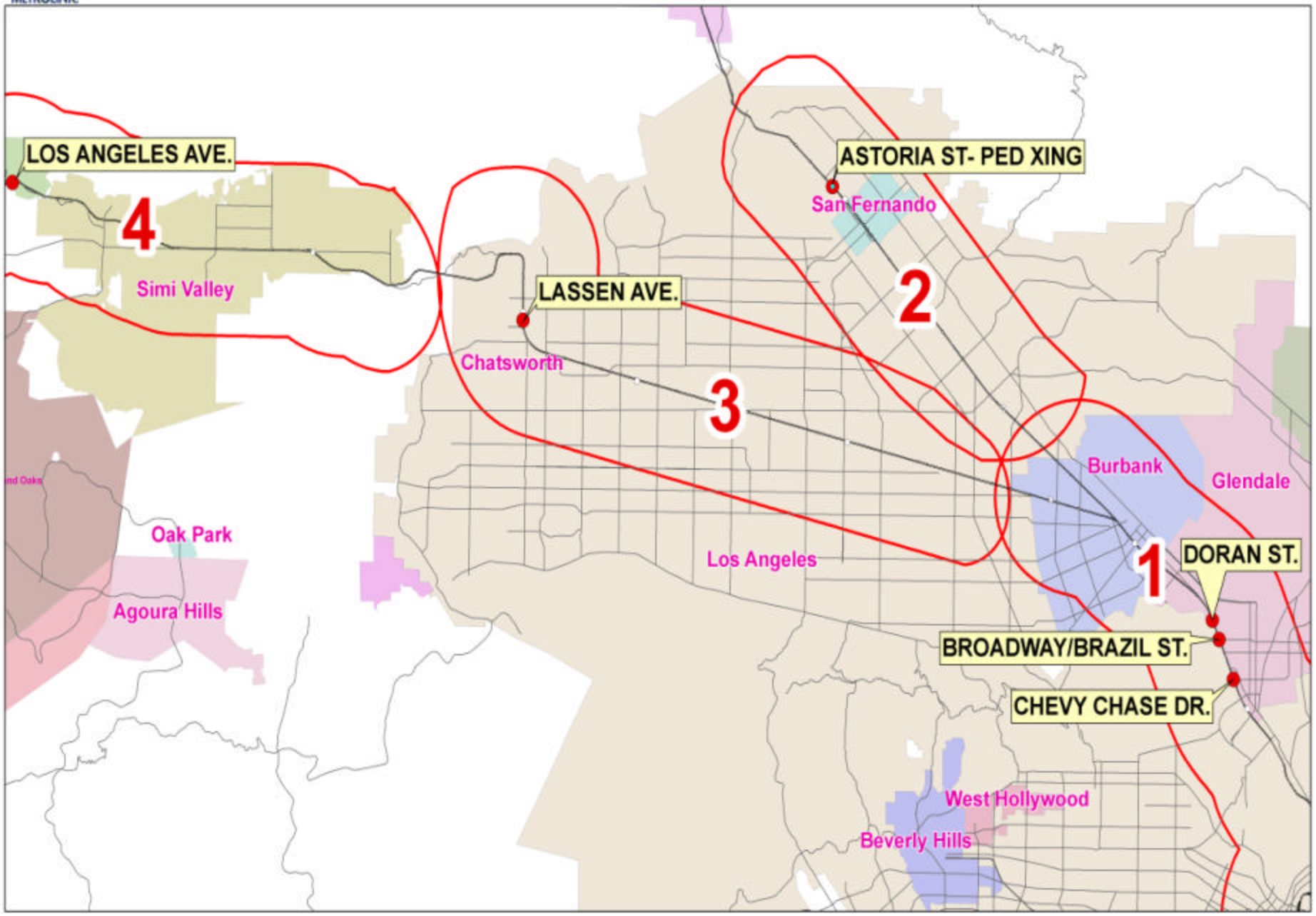
Sealed Corridor Safety Enhancements: Proven Effective

- Four-quadrant gates
- Median separators or raised islands
- New signs and pavement markings
- Crossing signal “health monitoring” systems
- Locked gates and fencing
- Crossing geometry improvements
- Grade separation or closing of crossings

Initial Corridors

- Antelope Valley Line
  - Sun Valley to Sylmar/San Fernando
- Ventura County Line
  - Union Station through Moorpark
- 65 miles of railroad
- 55 public highway-rail grade crossings
  - 4 private and 4 pedestrian-only crossings

Metrolink Sealed Corridor Project



Chevy Chase Drive, Glendale

- Quad gates due to adjacent street/driveway
- Signage improvements,
- Improve existing asphalt paving
- Right of way security

Right of Way Security
Swing Gates

- Prefabricated gates prevent access to right of way
- To be installed at all crossings over time

Broadway/Brazil
Glendale/Los Angeles

- Narrow crossing
- Significant truck traffic with U turns
- Open right of way

Broadway/Brazil
Glendale/Los Angeles

- Wednesday, April 19, 2006
- The result of a long truck in a narrow crossing

Doran Street, Glendale/Los Angeles

- Narrow hump crossing
- Industrial access only; significant truck traffic
- SR-134 and I-5 access
- Opportunities for street improvement and traffic re-routing

Lassen Avenue, Chatsworth

- The consequences of commercial driveways adjacent to railroad crossings

Los Angeles Avenue, Moorpark

- Narrow, hump crossing
- Highly skewed angle
- Open right of way
- Improve crossing geometry

Astoria Street, Sylmar

- Zig-zag pedestrian crossing

Project Approach

- Outreach to corridor cities, member agencies and other stakeholders
  - Build awareness and support for comprehensive corridor safety improvements
  - Policy and technical levels
- Engineering support for concept development, final design, and construction bid support
- High level consensus on improvements
- Create funding strategies

Potential Funding Sources

- Federal
  - Section 130 Crossing improvement program
  - Section 1010/1103 (C) High speed rail hazard elimination
  - Line item appropriations/earmarks
- State
  - Public Transportation Account
  - Section 190 grade separation program
  - Potential state transportation bond
- Local
  - Calls for projects
  - Development mitigation
  - Tax increments in redevelopment project areas

Associated Funding To Date

- $250,000 FRA Study Grant – August 2005
- $2,000,000 STP earmark – Senator Feinstein
- $500,000 High Speed Rail earmark – Congressman Berman
- $500,000 STP earmark – Congressman Schiff
- $925,000 – Van Nuys Blvd., Los Angeles
- $327,000+ - SCRRA Homeland Security Grant
- $1,000,000+ – controlled by City of Glendale
- $1,200,000 – controlled by City of Burbank

TOTAL: OVER $6,702,000

Proposed ITIP Request

- FY 06-07: $750,000 – Systemwide concept planning
- FY 07-08: $4,250,000 – Systemwide design
  - $1,250,0000 crossing improvements
  - $3,000,000 fiber optic deployment
- FY 08-09: $8,000,000 – Design and construction
  - $5,000,000 crossing improvements
  - $3,000,000 fiber optic deployment
- FY 09-10: $7,000,000 – Design and construction
- FY 10-11: $10,000,000 – Construction