



Los Angeles California

Metro Gold Line Eastside LRT Extension Ingredients for Project Success

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“There is no one giant step. It is a lot of little steps.”
- *Peter Cohen*

Los Angeles County Today

- 10.2 million people
(population is bigger than 43 states)
- 4.5 million jobs
- 7.4% population growth in 1990s
- Densest metropolitan area in the nation



The Metropolitan Transportation Authority is.

➤ the Regional
Planner



➤ the Regional Builder

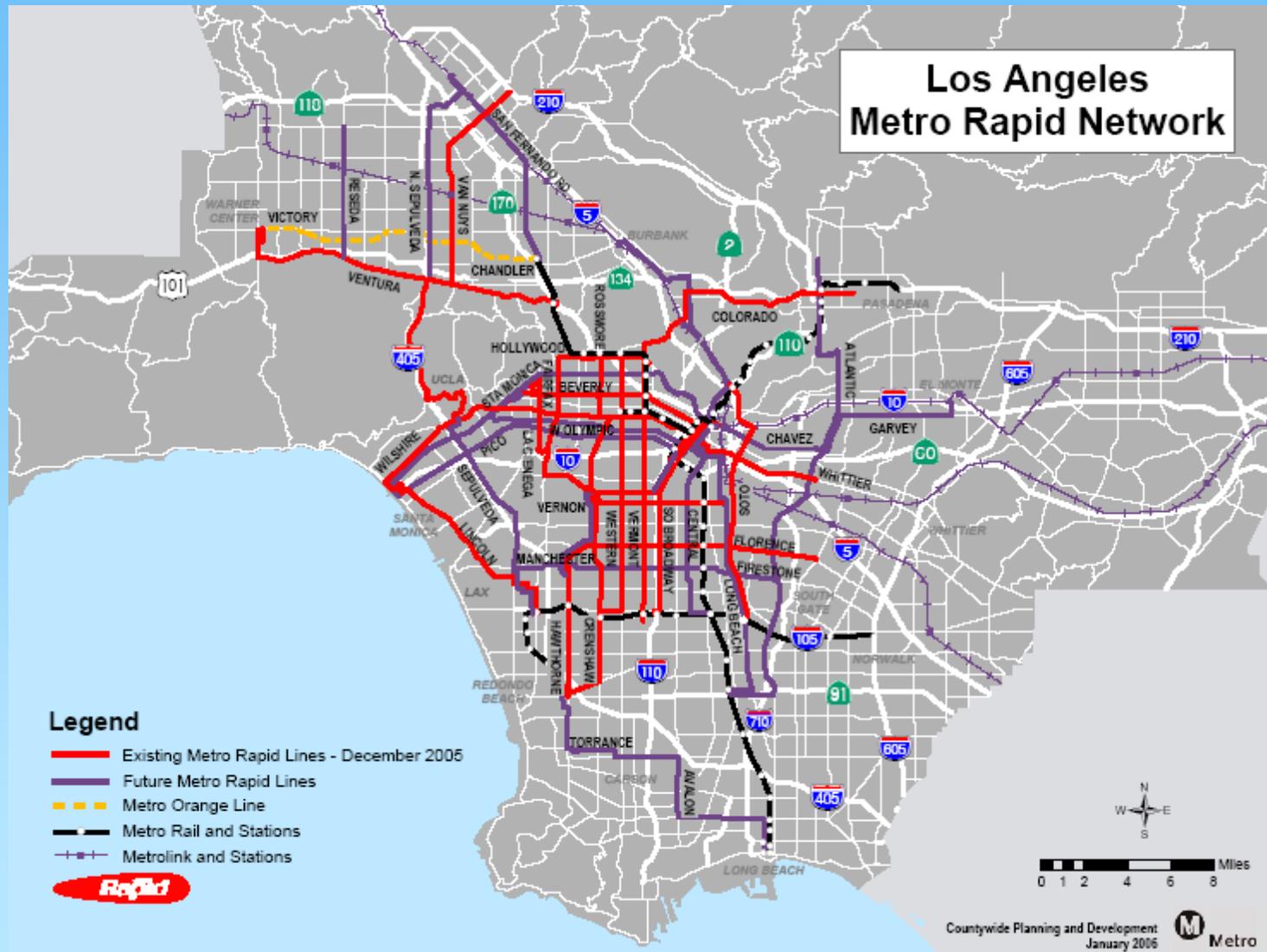


➤ the Regional
Operator



for Los Angeles County

Metro Rapid Lines



Rapid Success

Reduced Travel Times By 20%

Increased Corridor Ridership By 20% to 30%

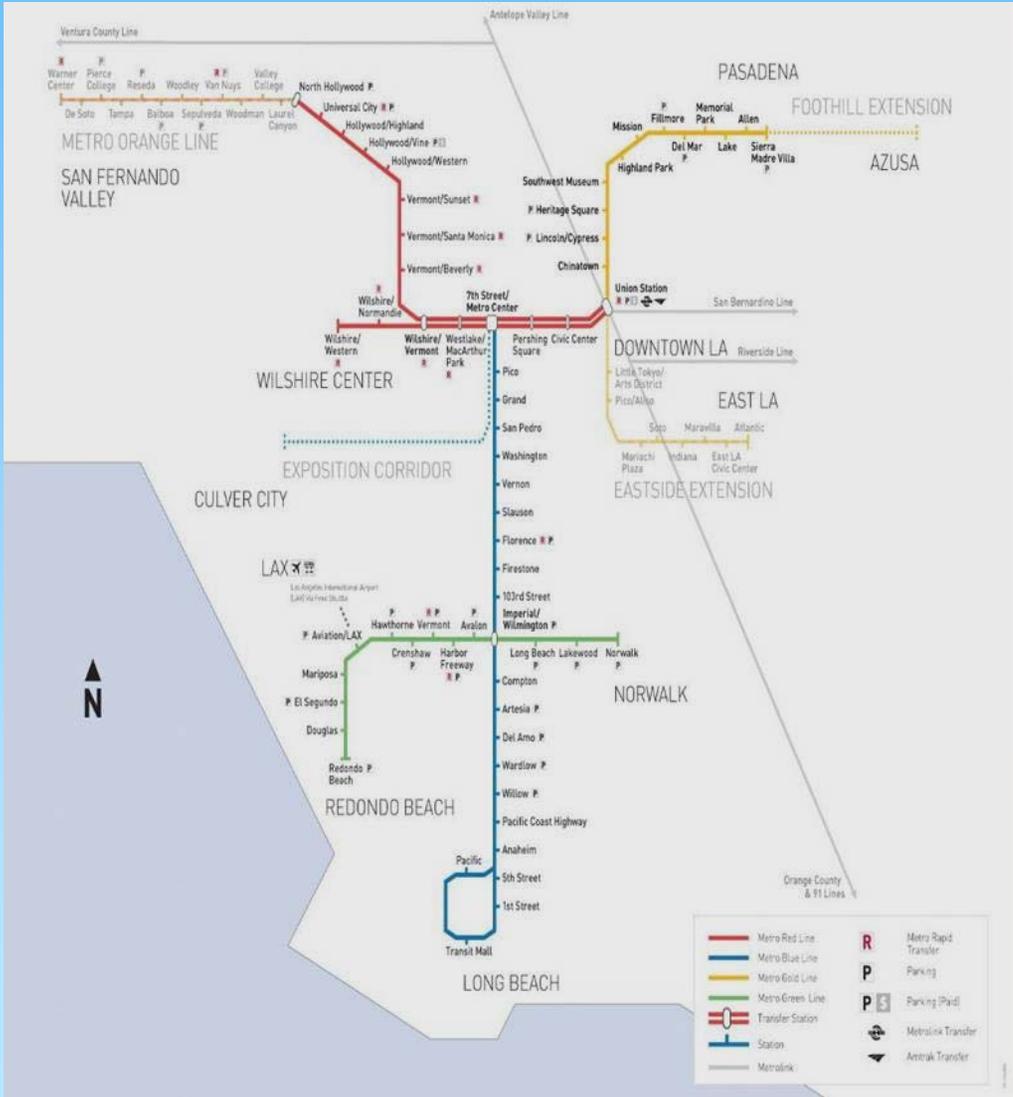
1/3 of ridership increase are new riders

1/3 of increase are current riders riding more often

1/3 of increase are current riders who changed routes



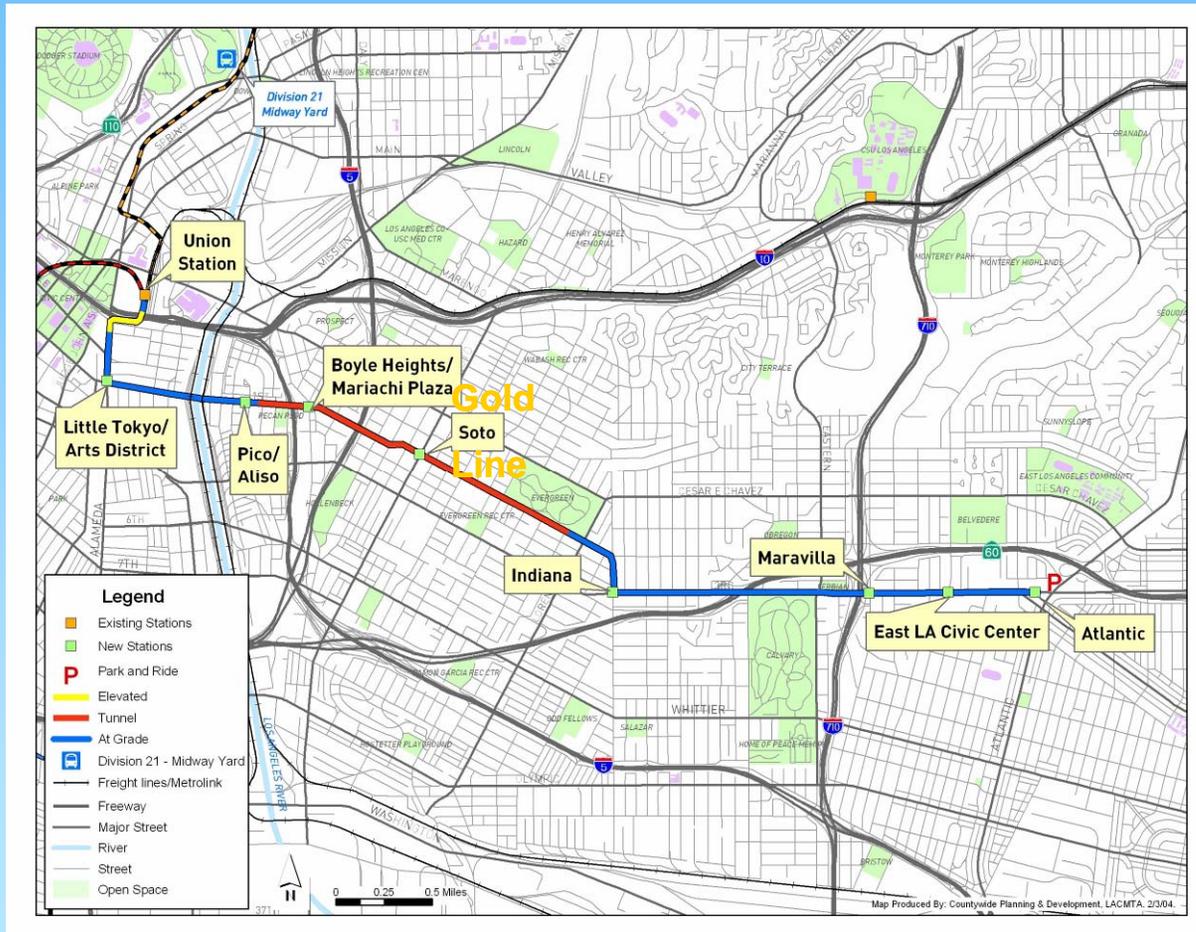
Metro Rail



73 Miles of Metro Rail – 63 Stations 225 Rail Cars



Metro Gold Line Eastside LRT Extension



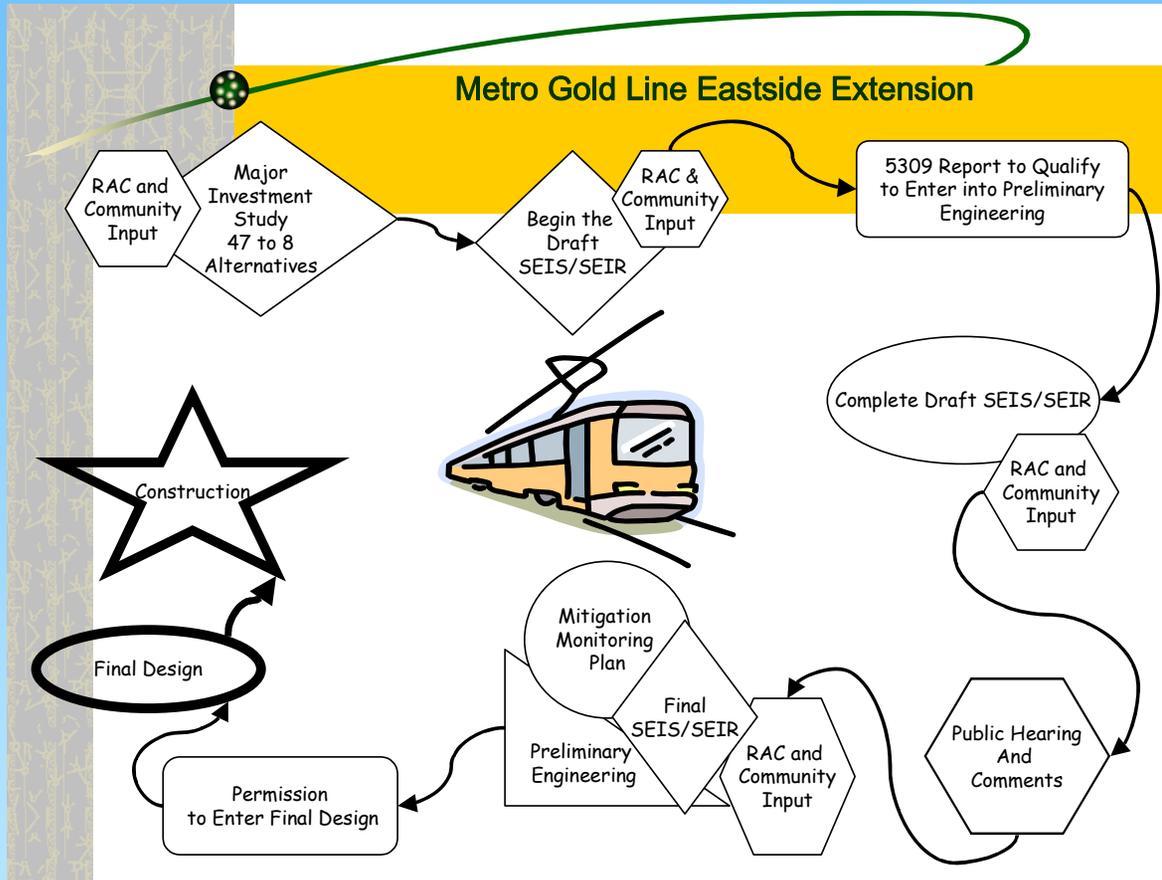
- 6 Mile Alignment
- 1.7 Miles of Tunnel
- 8 Stations (6 At-grade & 2 Underground)
- Park & Ride Facility
- Direct Connection to the Pasadena Metro Gold Line
- \$898.8 million
- Opens in 2009

Successful Project Execution

- Environmental Planning and Community Outreach
- Project Planning and FTA Approval Schedule
- Developing a Reasonable Budget
- Selecting the Right Contract Delivery Method
- Third Party Agency/Utility Coordination
- Putting Together the Right Project Team
- Managing Disputes

Metro Gold Line Eastside LRT Extension

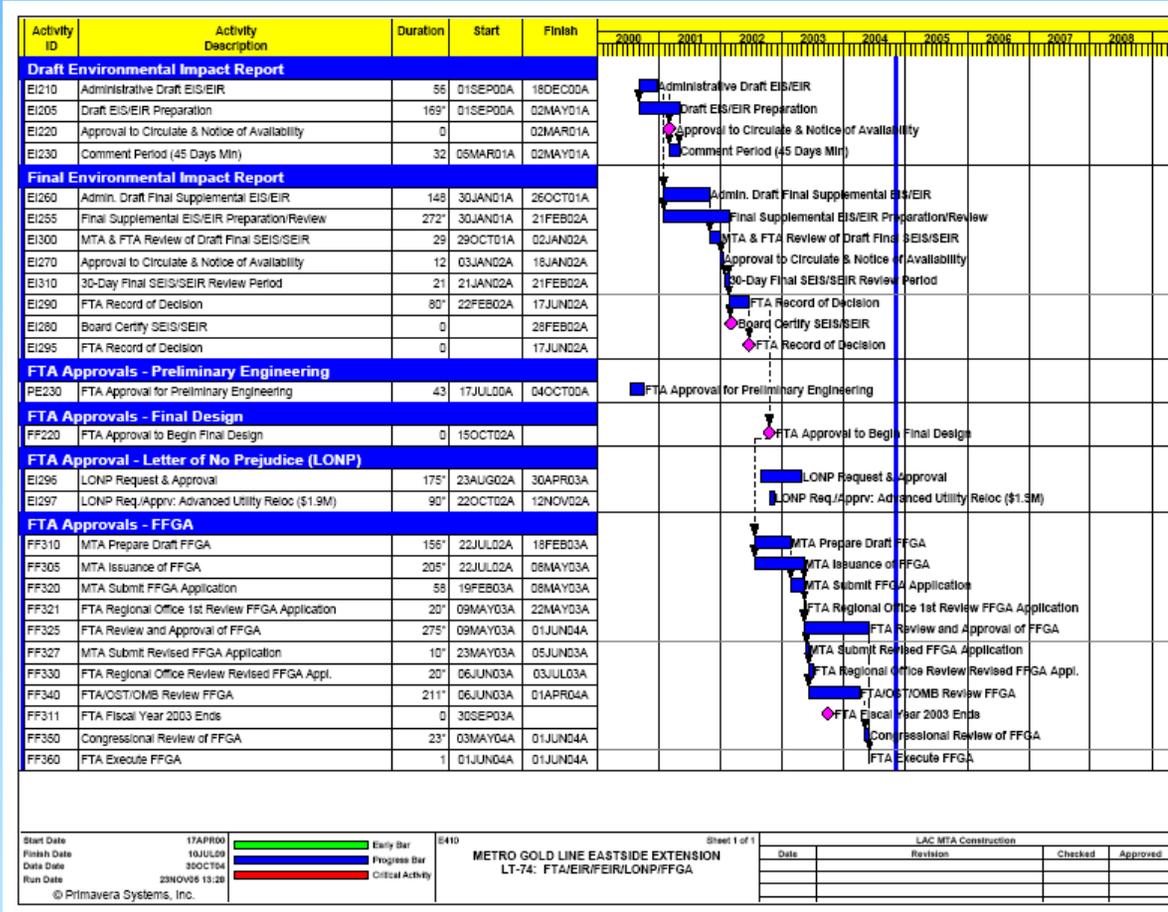
Environmental Planning and Community Outreach



- Thorough environmental planning and review including community outreach can help to avoid controversial planning decisions which can lead to difficult and costly environmental mitigations.

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Project Planning and FTA Approval Schedule

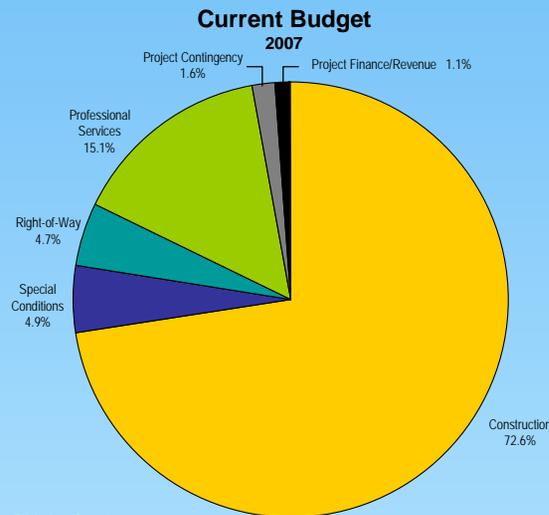
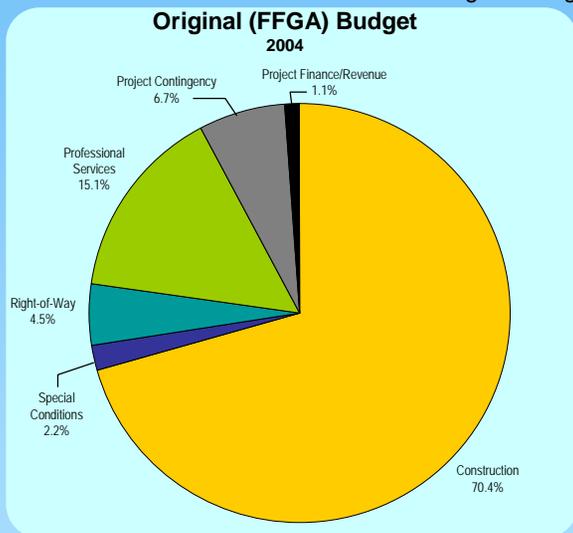


- Understanding all of the steps necessary to obtain a Federal Full Funding Grant Agreement is essential in developing a realistic Project Schedule.
- Bid/Award and Construction NTP will be held up if approvals are not in place.

Metro Gold Line Eastside LRT Extension

Developing a Reasonable Budget

Metro Gold Line Eastside Extension
Project Budget Comparison by Element
 Original Budget vs. Current Budget



Cost in \$ mil.	Original Budget	Current Budget	Difference
Construction	633.2	652.0	18.8
Special Conditions	19.5	43.9	24.4
Right-of-Way	40.4	42.3	1.9
Professional Services	135.3	135.8	0.5
Project Contingency	60.2	14.6	-45.6
Project Finance/Revenue	10.2	10.2	0.0
TOTAL	898.8	898.8	0.0

- Developing reasonable budgets require estimates that take into account construction material and labor cost trends.
- Limited funding leads to decisions as to how the budget should be allocated against cost risks and the remaining project contingency.

Metro Gold Line Eastside LRT Extension Risk Assessment Process



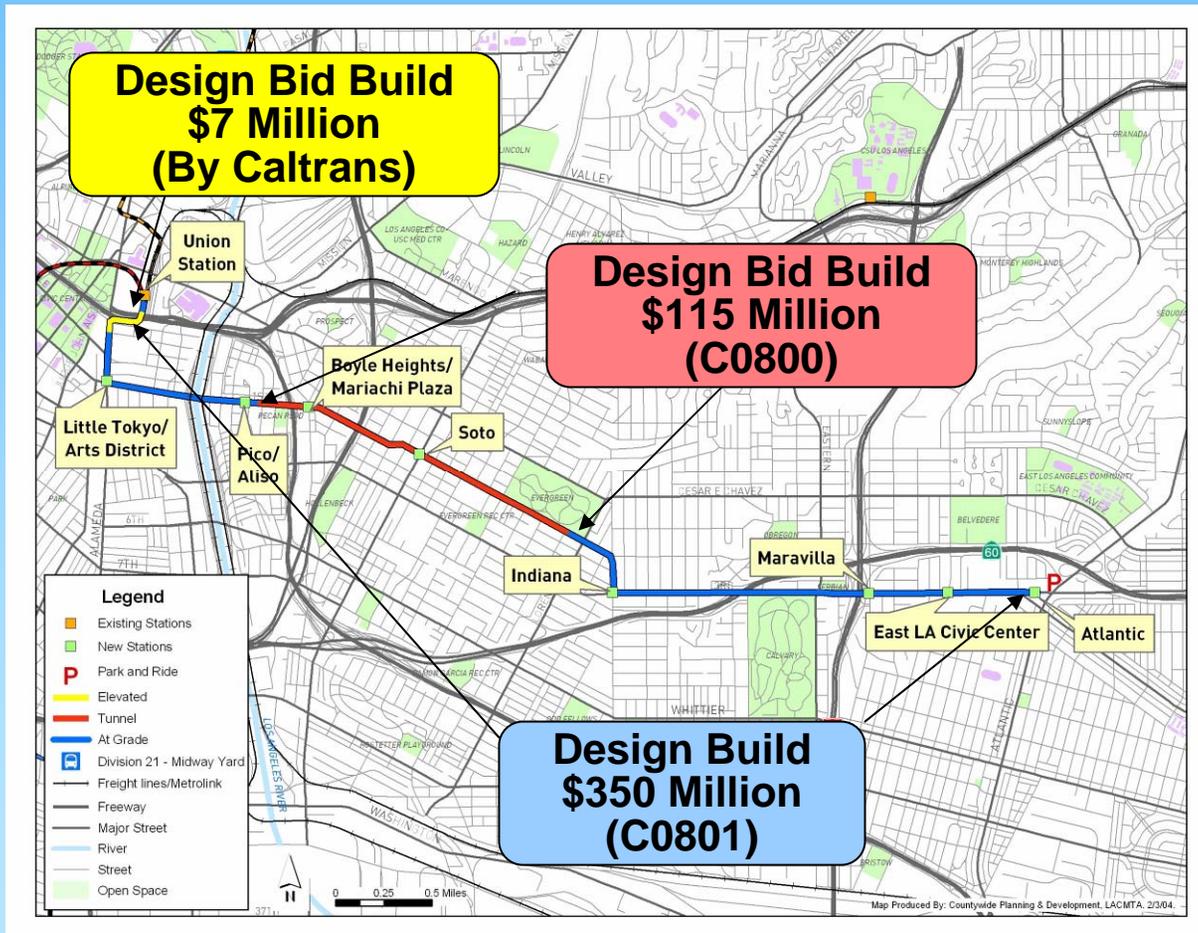
Management of Highest Risk Elements

Each risk assessment item is comprised of the following:

- Risk Owner
- Potential of Risk Being Realized (Low/Medium/High)
- Probability of Occurrence as a Percentage
- Strategy Summary (Avoid/Transfer/Mitigate/Accept)
- Timetable
- Dollar Impact to Project Per Risk Register
- Project Contingency Set-Aside
- Schedule Impact to Project in Working Days and
- Project Schedule Contingency in Working Days

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Selecting the Right Contract Delivery Method



- The bidding climate and cost risk factors must be considered in selecting the appropriate Contract Delivery Method for the Project.
- Weighing Owner Risk vs. Contractor Risk in the amount of engineering details is an important decision.

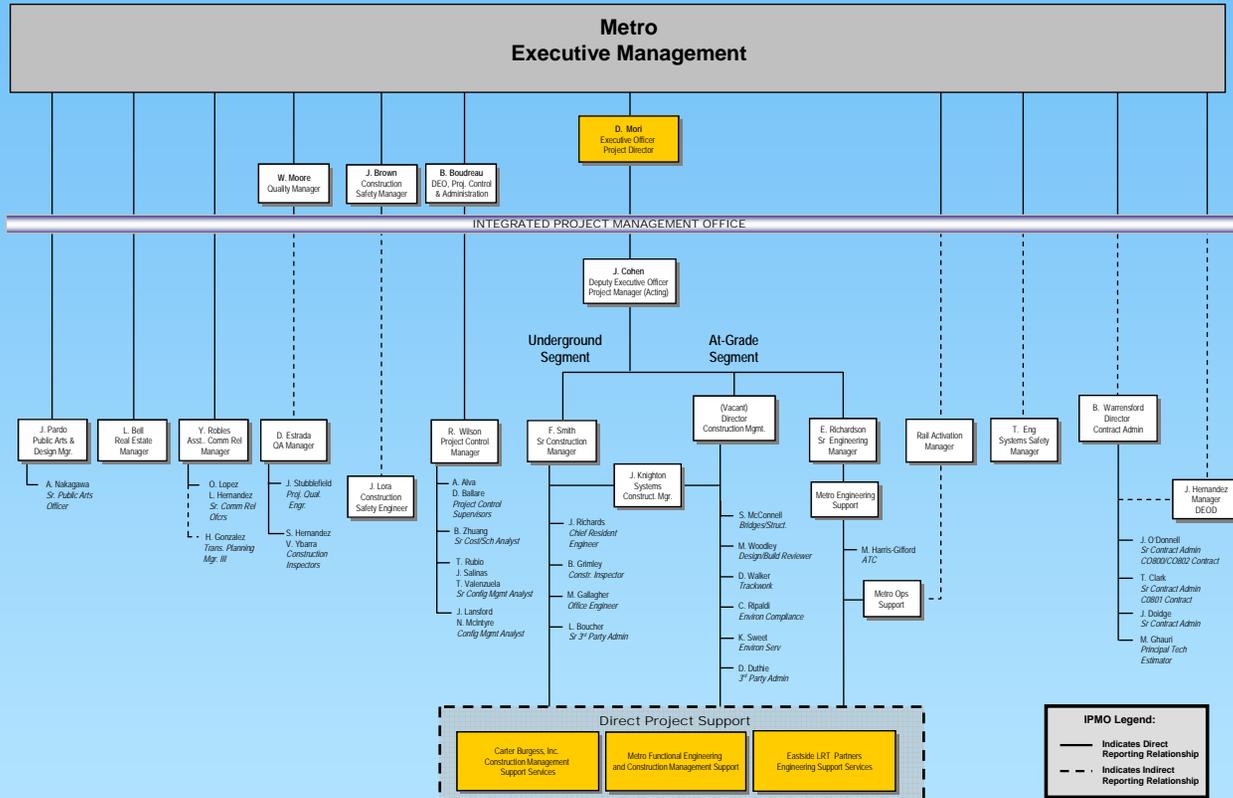
Los Angeles Metro Gold Line Eastside Extension Project

Third Party Agency/Utility Coordination

- Early coordination to define project scope, limits and cost responsibilities
- Reduced risk perception by Design/Builders
- More competitive price bids
- Roles and responsibilities clearly defined to expedite approvals during design and construction
- Reduced potential for third party claims and adversarial relationships

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Putting Together the Right Project Team



- Integrated Project Management Office (IPMO) approach can define roles and responsibilities, streamline reporting relationships and the co-location of the owner, consultants and contractor will improve daily communication and decision making.

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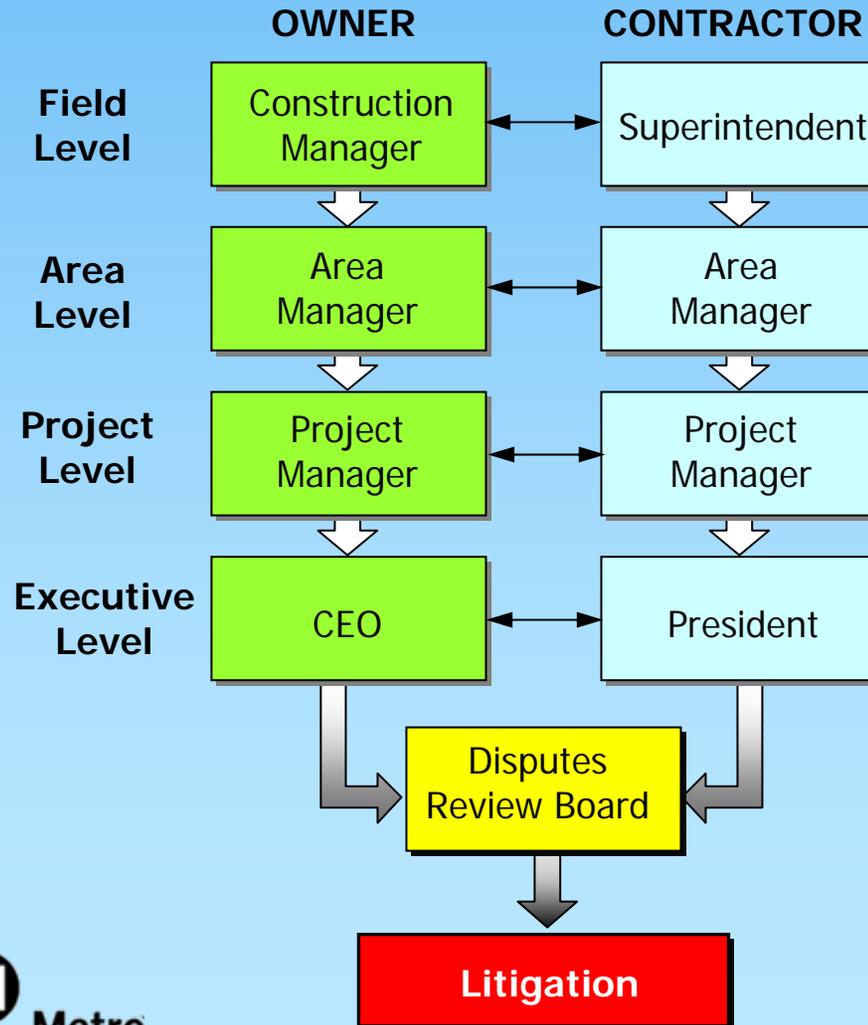
Putting Together the Right Team

Agency, Consultant and Contractor Resources

- Finding and attracting Agency and Consultant staff with the right technical knowledge, experience and management skills.
- Keeping experienced staff in a competitive job market when job security or future opportunities are uncertain.
- Capturing “lessons learned” and mentoring from “old-timers” before they retire and leave the transit industry.
- Attracting the right Contractors during a healthy construction environment when Contractors are in high demand.

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Managing Disputes



- Disputes can be time-consuming and costly
- Resolving disputes through a “Disputes Resolution Ladder” can be done effectively before escalating the dispute to Executive Management
- Disputes Resolution Board is the last step before litigation

Metro Gold Line Eastside LRT Extension Underground Construction



- Excavation of both tunnels was completed in December 2006 with no measurable surface settlement.
- Construction of the two underground stations is underway.

Metro Gold Line Eastside LRT Extension At-Grade Construction



Little Tokyo/Arts District LRT Station



Pomona/Atlantic LRT Station

- 4 of the 6 At-Grade Light Rail Transit Stations are in Construction.
- Trackwork installation is underway along the eastern part of 3rd Street.
- Traction Power Sub Station installation will begin by Summer 2007.

Joint Development Sites

RED LINE:

North Hollywood Acres	15.56
Universal City Acres	12.00
Westlake Mac Arthur Park Acres	3.7
Wilshire/Vermont Acres	(a) 4.2
Acres	(b) 5.3
Vermont/Santa Monica Blvd Acres	1.3
Vermont/Sunset Acres	0.7
Vermont/Beverly Acres	0.5

ORANGE LINE:

Balboa Orange Line Station (2 sites) Acres	1.8, 2.2
Canoga Park-and-Ride Acres	3.8
Sepulveda Station: Acres	12.48



Eastside Extension –

GOLD LINE:	
Chavez/Soto Acres	3.5
First Street/Boyle	0.2 Acres
First Street/Soto	0.1 Acre
First Street/Lorena	0.1 Acre
Santa Fe Acres	2.7
Pomona/Atlantic	1.3 Acres
BUS FACILITIES:	
Division 7- (West Hollywood)	8.3 Acres
El Monte Transit Village	
Temple/Beaudry Acres	1.25

OTHER:

Taylor Yard Acres	23
Chatsworth Metrolink Station:	11.4
Acres	
Artesia (Blue Line) Acres	6.4
Expo Line (Culver City et.al.)	-----



Management Organization Chart

