

# SR - 710 Tunnel Technical Study

## City of Glendale Community Meeting

**May 27, 2009**



# Introductions

- Elected Officials
- Caltrans
- Metro
- Community Outreach Team
- Technical Team



# Purpose of Meeting

- Learn why we are doing the Study
- Describe the Exploration Program
- Engage in two-way conversation
- Learn the best ways to communicate to you and involve you



# Agenda Overview

- Tunnel Technology
- Exploration Program
- Questions, Answers, Comments
- Next Steps



# Ground Rules

- **Maintain mutual respect**
- **Maintain a respectful environment**
- **Listen to each other; learning from each other**
- **Keep an open mind – all ideas are valid**
- **Opinions need to be respected**



# Why Tunnels?

- Reduce impacts to communities and sensitive areas



# Modern Tunnel Systems

- **Lighting**
- **Communications**
- **Traffic Surveillance**
- **Ventilation**
- **Air Monitoring**
- **Motorist Aid Stations**
- **Emergency Egress/Refuge**
- **Public Address/Radio Rebroadcast**



# Tunnel Safety

Lighting and  
Communication



Traffic Surveillance  
and Communication



# Motorist Assistance



Motorist Aid Station



Cross Passage for  
Emergency Access



# OMC Building



# Jet Fan Ventilation



# Two Basic Options

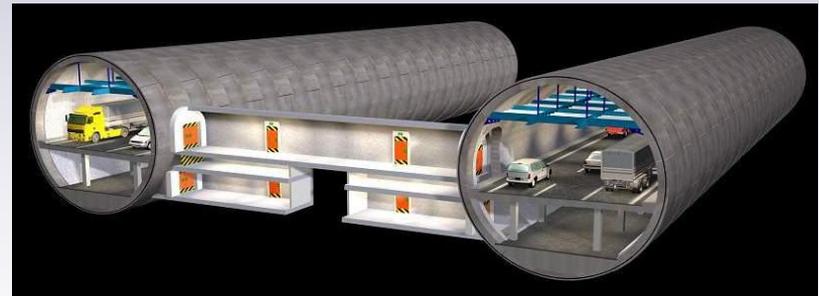


- **Tunnel Boring Machines (TBM)**
- **New Austrian Tunneling Method/Sequential Excavation Method (NATM/SEM)**

# Madrid – “Calle” 30 Highway Tunnel



- Tunnel on M-30 highway to relieve inner-city traffic congestion
- Twin bores 3.6 km long
- 3 traffic lanes on top of 2 emergency lanes



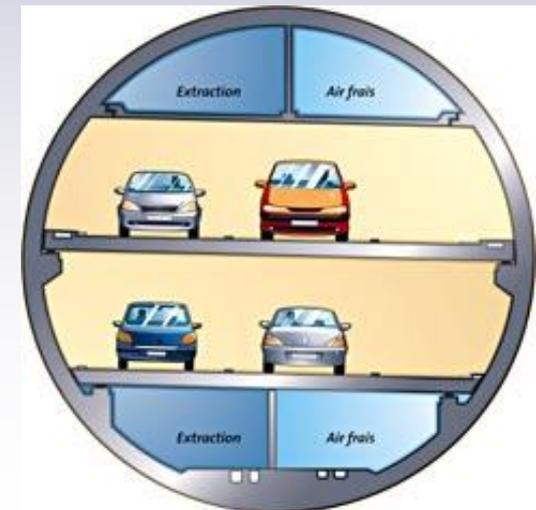
# Shanghai – Yangtse River Crossing

- Twin bores 7.2 km each
- 3 traffic lanes in each direction
- Mass transit trains run on lower level



# Paris – A86 Tunnel

- Two tunnels 7.5 and 10 km long
- 6 traffic lanes in each tunnel (3 in each direction)



# Objective of the Exploration Program

- A total of 5 potential zones were investigated
- Collected geotechnical, geological, and hydro-geological information for each zone
- Information to be used for screening purposes



# Exploration Plan Zones

