

SR - 710 Tunnel Technical Study
Joint Steering & Technical
Advisory Committee Meeting
No.5

San Marino Center
August 4, 2009



Today's Meeting Objectives

- Review purpose, guiding principles and Committee roles & process
- Review and discuss Task Order No. 5
- Develop recommendations



Role of the Steering Committee

- Provide input and advice to Caltrans
- Receive presentations about tunnel technology in order to become “community experts”
- Review deliverables
- Serve as informed spokespersons
- Steer us down a Route Neutral path
- Bring forward your respective community’s values, questions and concerns



Role of the Technical Advisory Committee

- Review technical data
- Provide technical guidance to Caltrans staff, the consultant team, and the public
- Review deliverables
- Provide input to the Steering Committee



Study Group Process

Collaborative Consensus

- Everyone can “work with” or “buy into” the decisions
- Minority opinions are explored and win/win solutions are sought
- Results:
 - Participation and ownership
 - Understanding of decisions



Guiding Principles

- **Develop reliable geo-technical information for tunnel options**
- **Respect Route Neutrality**
- **Clearly communicate the purpose and scope of the study to solicit public input**



Purpose of the Geotechnical Study

- Consider all practical routes for the extension of Route 710
- Gather information on soil and sub-surface conditions
- Provide for public input and involvement



Technical Advisory Committee Input 6-9-09

- Real time application of geologic conditions for tunneling in each zone
- Data presented in terms we can understand
- Unbiased facts so we can come to our own conclusions
- What does it all mean? Geotechnical implications for tunneling
- Glossary of Terms



Steering Committee 6-25-09

- Need sufficient time to review and comment on Study Report (Committee and the Public)
- Need the Glossary of Terms expanded
- More time to review and comment on Task Order No. 5
- Circulate Committee comments
- Explain rationale for expansion of studies



Community Perspectives

- Outreach Overview
- Community Meetings
- Emerging Themes



Community Meetings

Attendee Total: 640+

- February 25th South Pasadena
- March 26th El Sereno
- April 28th Pasadena
- May 26th La Cañada Flintridge
- May 27th Glendale
- May 28th Monterey Park
- June 2nd San Marino
- June 4th Alhambra
- June 16th Northeast Los Angeles



South Pasadena

- Cost benefit of the Study
- Why a tunnel?
- Traffic Studies that support tunnel option
- Increased traffic through neighborhoods
- Impacts to neighborhoods near tunnel portals
- Ventilation shaft location



El Sereno

- Impact to homes along tunnel route
- When will EIR start?
- Cost of the current Study
- Purpose of testing in all 5 Zones
- Traffic studies that support tunnel option
- Health concerns with existing traffic congestion
- Ventilation shaft location



Pasadena

- Selection of testing sites
- Noise and vibration during tunnel construction
- Tunnel design and ventilation stacks
- EIR process
- Fate of Caltrans owned properties



La Canada Flintridge

- Increased truck traffic on I-210, SR-2, and SR-134
- Potential impacts to air quality
- Emphasis of using rail for goods movement
- Concerned with narrow focus of Study
- Increased noise to neighborhoods and schools



Glendale

- **Cost of EIR document**
- **Will summary report make route recommendations**
- **Estimated time for tunnel construction**
- **Increase in traffic on I-210 and SR-2**
- **Tunnel ventilation**



Monterey Park

- Location of Southern tunnel portal
- Input from other cities
- Why are we studying extending SR-710 to SR-2, I-5 and I-605?
- Cost of tunnel if privately funded
- Traffic impacts



San Marino

- Location of portals
- Will cost benefit be used as a screening criteria
- Reconfiguring current freeway interchanges
- What are the best soil conditions for tunneling?
- Tunnel ventilation



Alhambra

- Soil conditions at end of SR-710
- Why was testing only conducted north of I-10
- Impact of portal location on community
- Traffic impacts/improvements to Alhambra
- Vibrations during tunnel construction and operation
- Why are we studying in Zones 4 and 5



Northeast Los Angeles

- Funding for construction
- Why connect SR-710?
- Will public vote on this project?
- Tunnel design options
- Traffic studies that support tunnel option
- Ventilation stacks



Emerging Themes

- **Geotechnical**
 - How will geology within zones influence tunnel design
- **Environmental**
 - Traffic impacts to neighborhoods
 - Health Concerns with existing traffic
- **Tunneling and Technology**
 - How safety will be ensured
 - Tunnel design and ventilation
 - Vibration during tunnel construction



Emerging Themes

- **Cost and Funding**
 - Cost of current Study
 - Cost of potential tunnel project
 - Availability of future funding
- **Study Outcome**
 - Study should tell us which of the zones present the optimal geotechnical conditions for tunneling
 - Strong interest in more information



Summary of Comments	South Pasadena	El Sereno	Pasadena	LCF	Monterey Park	Glendale	San Marino	Alhambra	NELA
Impact of Geotechnical Data	X	X	X			X		X	X
Environmental Impacts	X	X	X	X	X	X			X
Traffic Impact	X	X	X	X	X	X	X	X	X
Tunnel Design & Ventilation	X	X	X	X		X	X		X
Air Quality	X	X	X	X		X			X
Noise		X	X	X				X	X
Portal Impacts	X	X		X	X		X	X	X
Cost of Potential Tunnel	X	X	X	X	X	X			X
Study Outcome	X	X	X	X	X	X	X	X	X



Metro

Purpose of the Expanded Scope

- Responsive to community and stakeholders feedback
- Perform conceptual level study on additional technical areas
- Data to be used for screening of the zones
- **THIS IS NOT AN ENVIRONMENTAL STUDY**

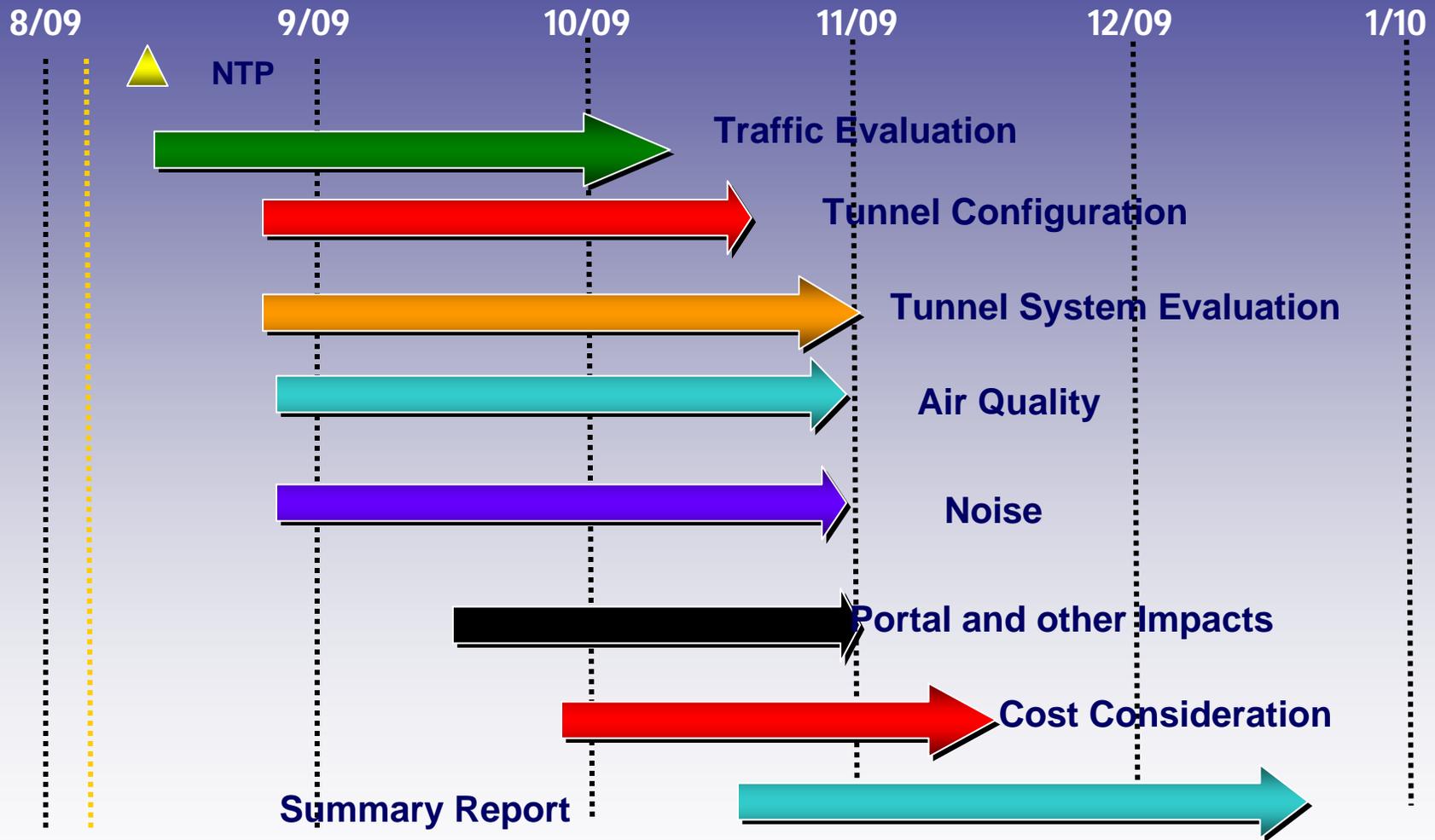


Expanded Scope

- **Additional Technical Studies include:**
 - **Traffic**
 - **Tunnel configuration**
 - **Tunnel system evaluation**
 - **Air quality**
 - **Noise**
 - **Portal and other Impacts**
 - **Cost considerations**



Project Schedule



Summary Report

- Present summary report documenting findings of this study
- Will include a comparison of each of the technical study



Presentation to TAC and SC

- Findings will be presented to TAC and SC
- Two sets of meetings are planned



General Comments

- **Premature to proceed with the study**
 - Pasadena and La Canada Flintridge
- **Should complete the study as scoped**
 - Alhambra and Glendale
- **Level of study should be expanded (if proceeded)**
 - La Canada Flintridge and South Pasadena
- **Clarification on the purpose of scope**
 - South Pasadena
- **Comments on Traffic Modeling**
 - SCAG
- **Involve Community and Stakeholder**
 - La Canada Flintridge



General Comments

- Roles and Responsibility of TAC and SC
- Provide basis for development of TO#5
- Adequate notification of the discussion topics
- Comments on technical scope provided by all



Traffic Modeling

- Determine travel demand model
- Develop performance measures and facilities to be analyzed
 - freeways
 - local streets
- Analyses to be performed for tunnels in five zones



Tunnel Configuration

- Assume circular cross section
- Develop tunnel profiles considering a logical termini for each zone.
- The evaluation would include length of cut-and-cover tunnel and length of bored tunnel



Tunnel System Evaluation

- Determination of emergency exits and cross passages
- Preliminary Ventilation Study
 - Emergency ventilation
 - air-scrubbing
 - need for intermediate shafts



Air Quality

- Evaluate emission changes of freeways and major arterials within project area
- Assess air quality impacts to affected communities
- Based on the outcome of the traffic study
- CO emissions will be used as the indicator of impacts



Noise

- Identify land uses along freeways and roadway segments that may experience noise changes
- Estimate traffic noise changes that could result based on traffic data
- Screen areas where traffic noise levels would potentially increase
- Compare extent of potential noise impacts among various zones



Portal Impacts

- Determine logical termini points for each zone
- Impact will be based on a typical connection configuration at each termini
- Impacts at portal locations will be listed



Cost Consideration

- Will be performed at a conceptual level
 - No quantity take-offs
- Consider groundwater and soil contamination
- Allowance will be made for fault crossing
- All the factors evaluated will be considered



Committee Input



Recap and Recommendations



Next Steps

- Continued feedback on Study
- Topics for Next Meeting
- Future Meeting Schedule



See You Next Meeting!

