



# Metro

June 9, 2006

**TO:** BOARD OF DIRECTORS

**THROUGH:** ROGER SNOBLE  
CHIEF EXECUTIVE OFFICER

**FROM:** CAROL INGE  
CHIEF PLANNING OFFICER,  
COUNTYWIDE PLANNING & DEVELOPMENT

**SUBJECT:** ROUTE 710 TUNNEL TECHNICAL FEASIBILITY  
ASSESSMENT

## ISSUE

Staff has completed the feasibility assessment of a tunnel alternative to extend the 710 Freeway from its current terminus at Valley Boulevard in Los Angeles to I-210 in Pasadena. Staff would like to inform the Board of the study findings prior to a public meeting scheduled for June 22, 2006. The purpose of this public meeting is to share the assessment findings with local cities, agencies and the general public. The public meeting will be followed by similar presentations at City Council meetings for the cities of Alhambra, La Canada Flintridge, Los Angeles, Pasadena, San Marino and South Pasadena, and the San Gabriel Valley COG.

## BACKGROUND

Over the past year, Metro staff, in coordination with its consultant team, has been conducting a feasibility assessment of a bored or mined tunnel to extend the Route 710 from its terminus at Valley Boulevard in Los Angeles to I-210 in Pasadena. This assessment has been performed in conjunction with the technical staff from Caltrans, SCAG, and the Cities of Alhambra, La Canada Flintridge, Los Angeles, Pasadena, San Marino and South Pasadena. Representatives from these affected agencies formed the Route 710 Tunnel Technical Feasibility Assessment's Working Group (Working Group). Although the Working Group provided technical input throughout the study, its technical contribution does not represent individual members' or their agencies' endorsement of the assessment results.

Several criteria and subject areas were considered, explored and evaluated as part of the feasibility assessment. These criteria and subject areas include:

- A preliminary evaluation of the geotechnical, geological and hydrological conditions of the project study area.

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- An evaluation of current tunneling technology and potential configurations.
- Preliminary traffic analysis and forecasting for a range of scenarios including three and four lane configurations, trucks & no-trucks, with and without an interchange at Huntington Drive. Each scenario was compared with a Year 2030 baseline, no-build scenario.
- A preliminary identification of potential environmental impacts.
- An analysis of construction and operation costs and funding strategies.

### Findings

The technical feasibility of the tunnel concept was addressed using the basic physical, environmental and financial perspectives identified above. Generally, it is concluded that the tunnel concept is feasible from the physical and environmental perspectives. Potential environmental impacts were identified, however the severity of these impacts could be minimized, eliminated or mitigated. No insurmountable environmental issues have been identified that would preclude further consideration of the tunnel alternative. The technical feasibility assessment considered a myriad of tunnel alternatives with construction costs ranging from approximately \$2.3 billion to \$3.6 billion (2006 dollars).

### **NEXT STEPS**

A public workshop will be held on June 22, 2006 from 6 PM to 8 PM at the Lake Avenue Church in Pasadena, followed by similar presentations at City Council meetings for the cities of Alhambra, La Canada Flintridge, Los Angeles, Pasadena, San Marino and South Pasadena, and the San Gabriel Valley COG.

Staff will collect and summarize feedback received at these meetings and will return to the Board in the fall.

### ATTACHMENT:

Route 710 Tunnel Technical Feasibility Assessment Report

## **Route 710 Tunnel Technical Feasibility Assessment Report**

June 7, 2006

Please replace the below listed pages with the attached corresponding correct pages.

### Page Number:

- 3-14
- 3-17
- 3-18
- 3-19
- 3-20
- 5-58
- 5-59
- 6-71
- 6-79
- 9-120
- 9-121
- 10-136



Figure 3-2 Geotechnical Profile 1

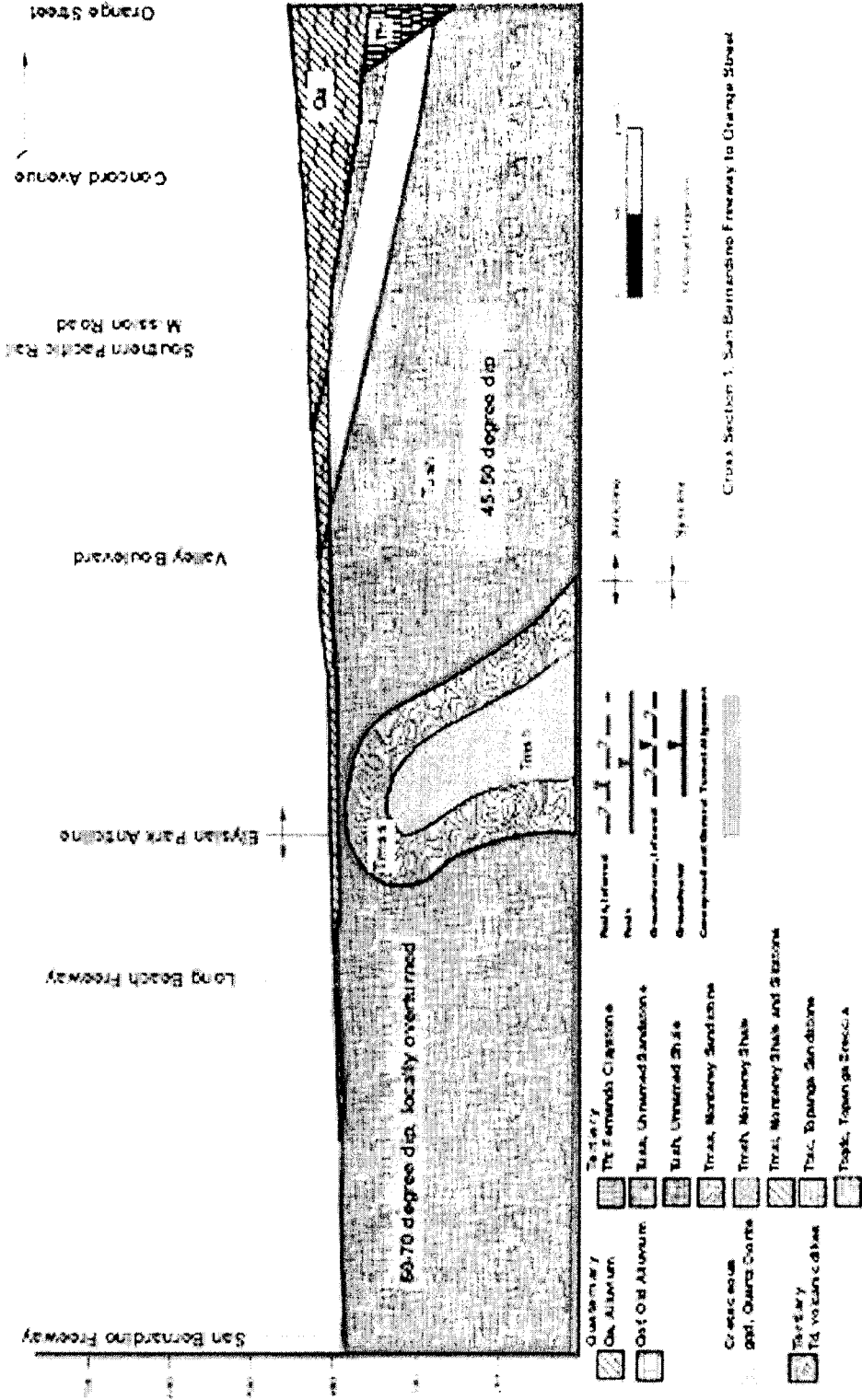


Figure 3-3 Geotechnical Profile 2

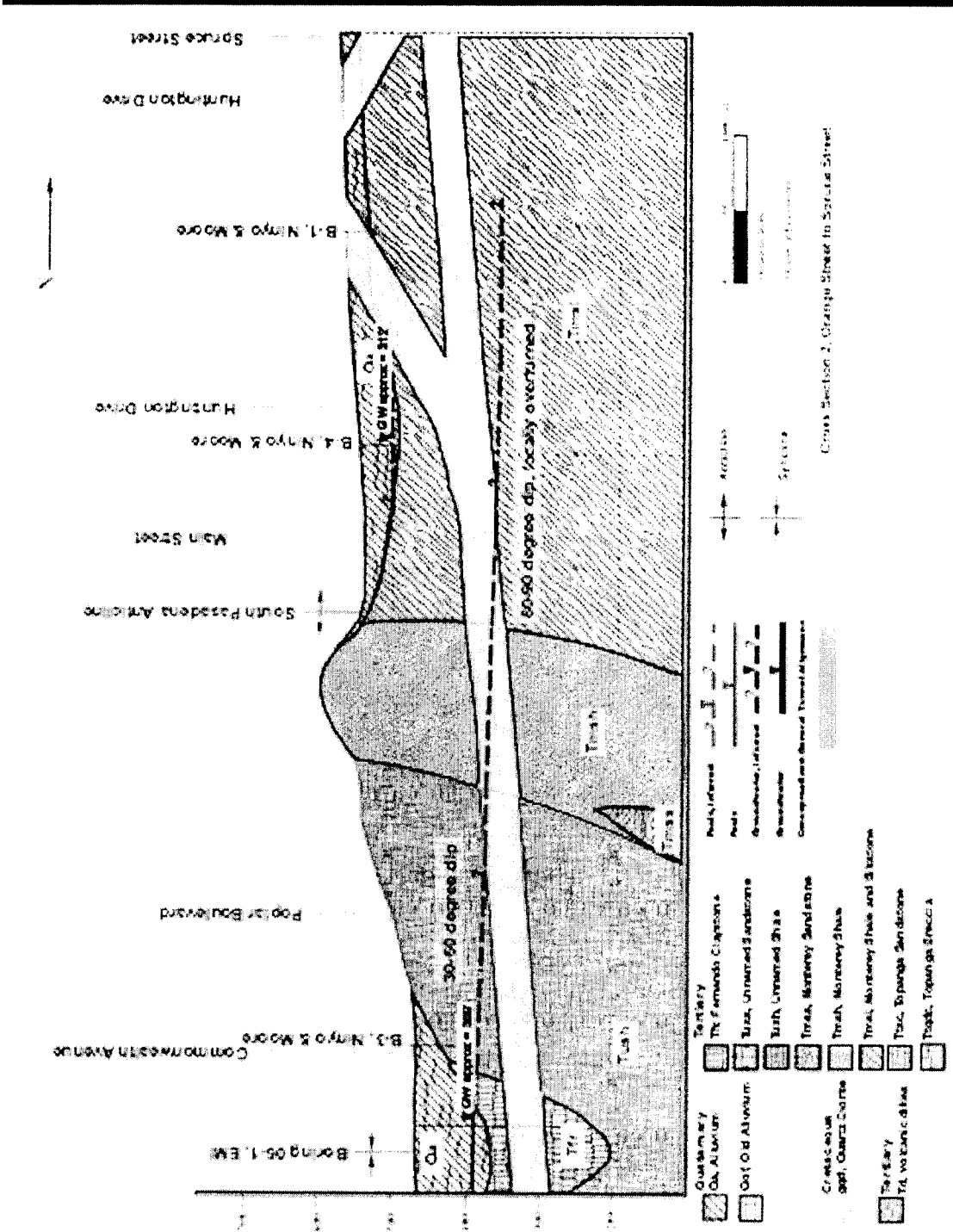


Figure 3-4 Geotechnical Profile 3

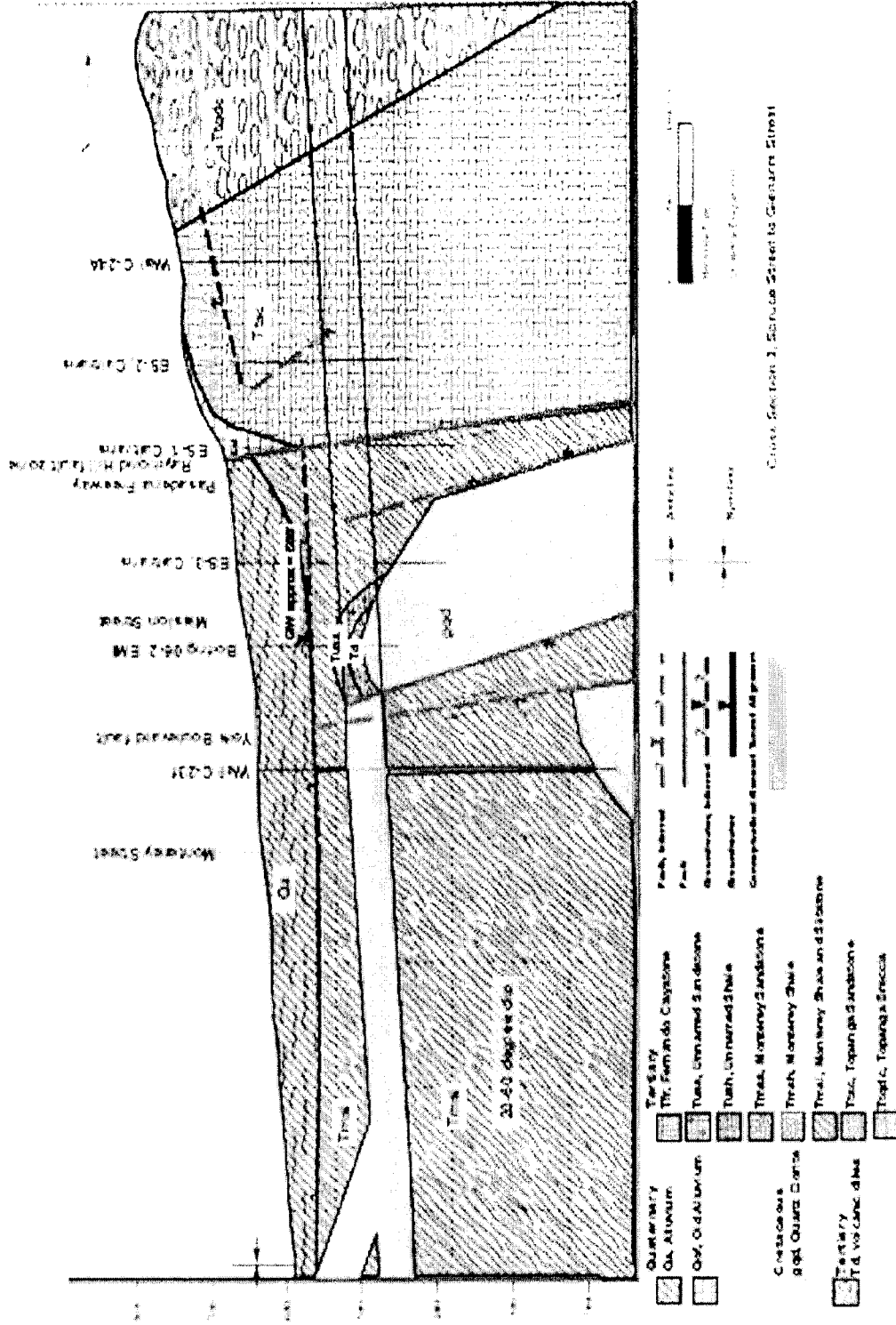


Figure 3-5 Geotechnical Profile 4

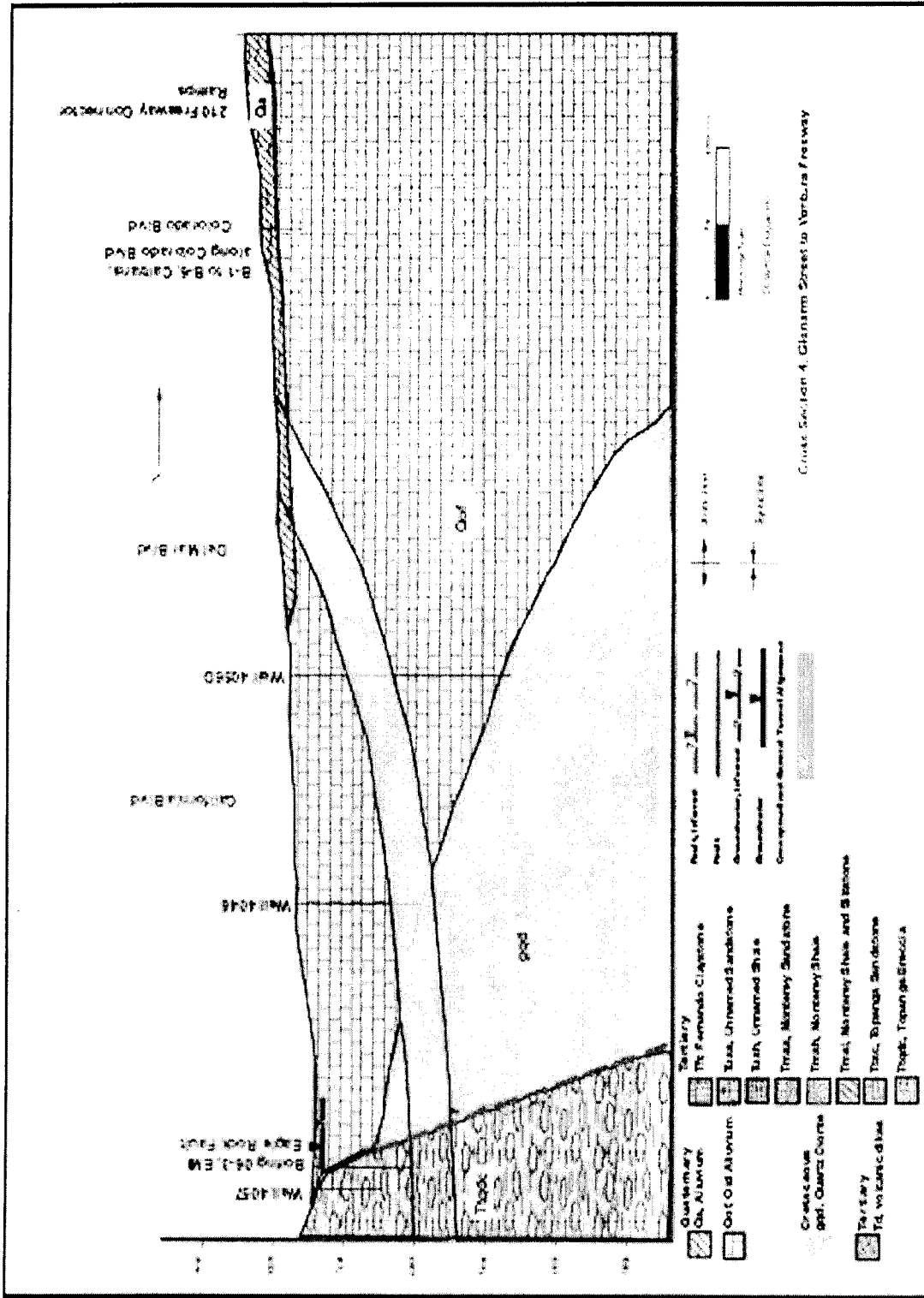




Figure 5-4 Route 710 Tunnel Configuration Scenarios

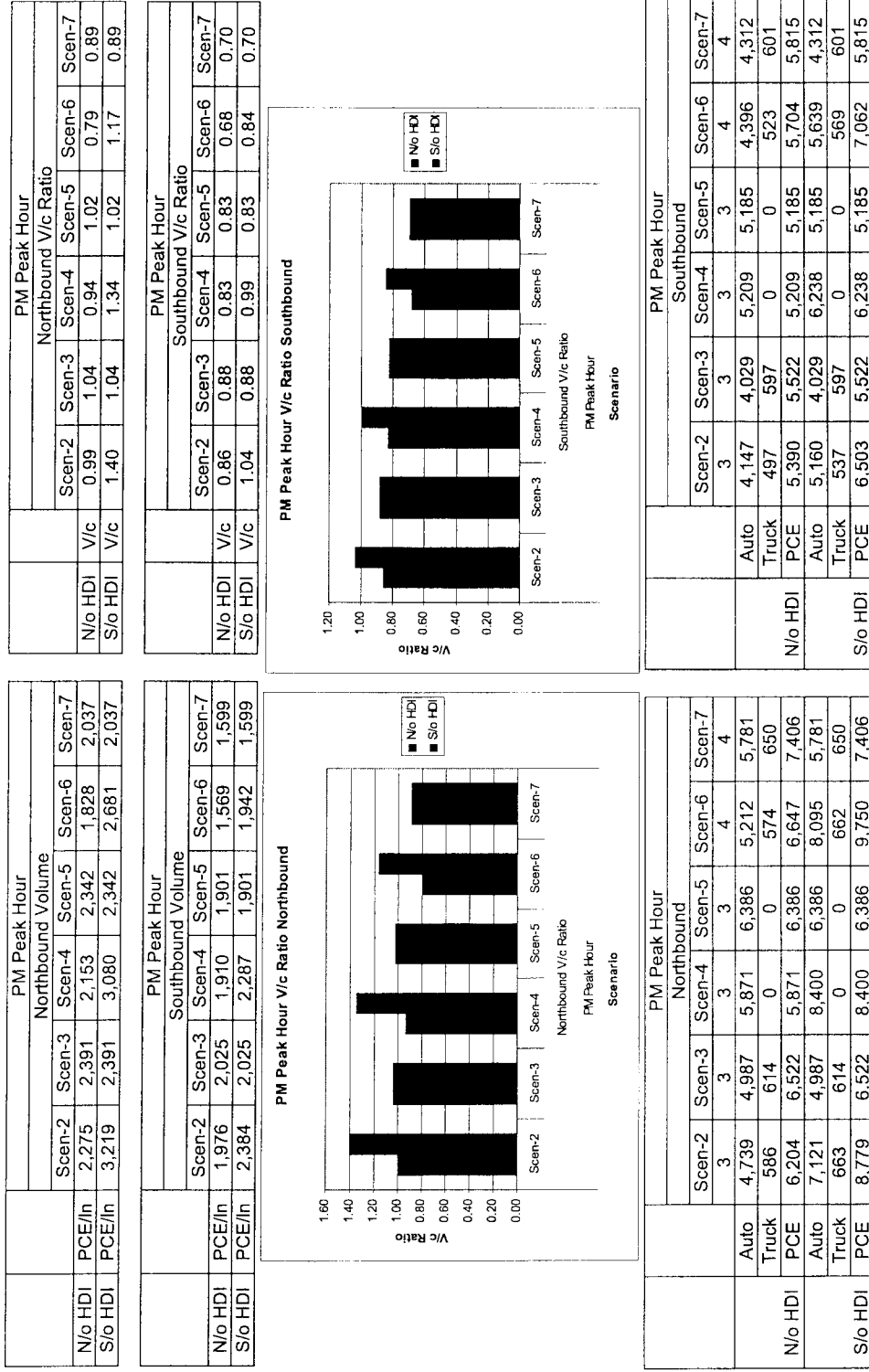
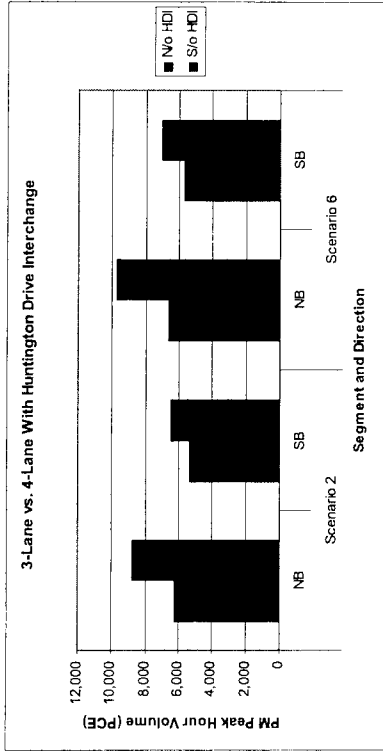
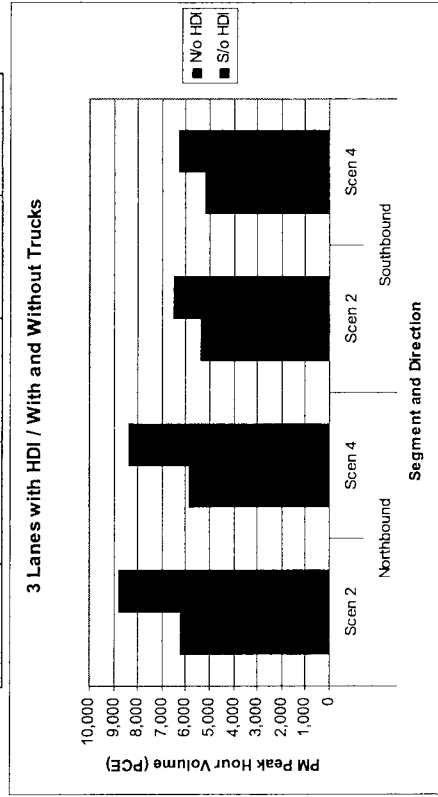


Figure 5-5 Comparison of Scenarios

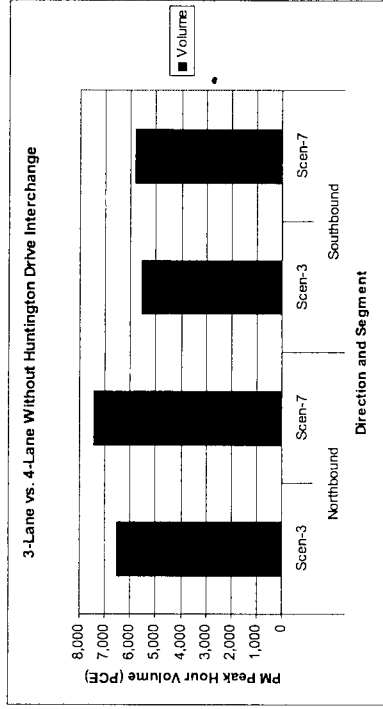
	Scenario 2		Scenario 6	
	NB	SB	NB	SB
N/o HDI	6,204	5,390	6,647	5,704
S/o HDI	8,779	6,503	9,750	7,062



	Northbound		Southbound	
	Scen 2	Scen 4	Scen 2	Scen 4
N/o HDI	6,204	5,871	5,390	5,209
S/o HDI	8,779	8,400	6,503	6,238



	Northbound		Southbound	
	Scen-3	Scen-7	Scen-3	Scen-7
Volume	6,522	7,406	5,522	5,815



	Northbound		Southbound	
	Scen-3	Scen-5	Scen-3	Scen-5
Volume	6,522	6,386	5,522	5,185

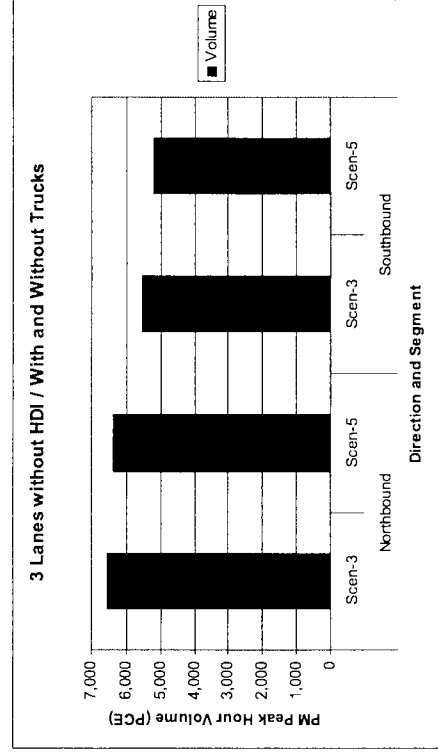


Figure 6-1 Cross Section Matrix

