#### **TexITE Summer Meeting**

# Upper Valley Traffic Study El Paso, Texas

Presented by: Randy Schulze, P.E., PTOE, PTP

#### WALTER P MOORE





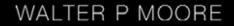


#### June 18, 2010

## Introduction

- Background
- Methodology
- Public Outreach
- MPO Forecasts
- Analysis
- Recommendations
- Q & A

# BACKGROUND



### Background

- City of El Paso needed to upgrade Country Club Road to repair utilities
- Country Club Road also had operational issues
- City wanted to review mobility of the general area



### Purpose of Study

- Determine existing traffic conditions
- Determine traffic conditions for 2017, 2025, and 2035
- Determine improvement options to
  - Maintain acceptable levels of mobility
  - Provide context-sensitive solutions

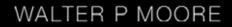
#### **Context Sensitive Solutions**

#### • The Seven Principles of CSS:

- Satisfy the purposes and needs of stakeholders
- Provide a safe facility
- Are in harmony with the community
- Exceed expectations
- Involve an efficient and effective use of resources
- Are designed and built with minimal disruption
- Add lasting value to the community

From Context Sensitive Solutions in Designing Major Urban Thoroughfares for Walkable Communities, Institute of Transportation Engineers, 2006.

# METHODOLOGY

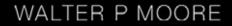


# Methodology

- Data Collection
- Public Outreach
- Regional Planning (TransCAD)
- Analysis (Synchro)
- Simulation (VISSIM)
- Cost Estimates
- Recommended Improvements

- Agency Meetings
  - City of El Paso
  - Texas DOT
  - Sun Metro
  - El Paso MPO
  - New Mexico DOT
  - Doña Ana County
  - City of Sunland Park
  - Verde Group
  - BNSF
  - Utility Companies

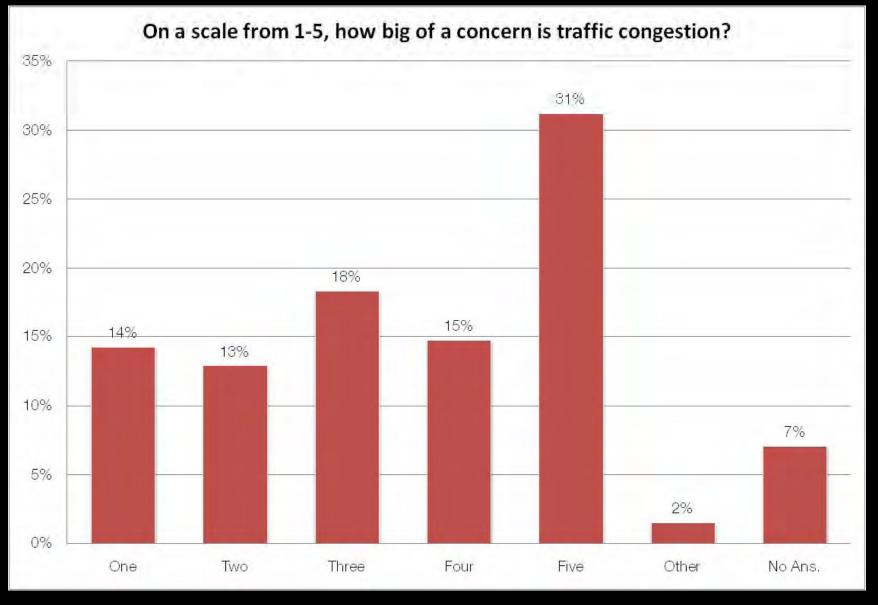
# **PUBLIC OUTREACH**



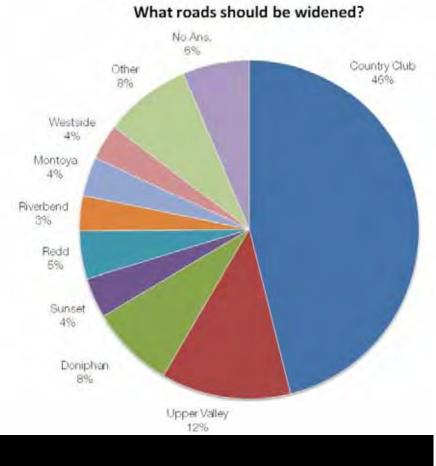
### **Public Outreach**

- Mailed Survey
  - Learn community's perceptions of traffic conditions
  - Identify issues and concerns
  - Determine any trends in comments about traffic conditions that should be addressed in the study
- 7,500 surveys mailed to two zip codes
- 1,745 surveys (23%) returned
- 68 households contacted by phone to verify authenticity

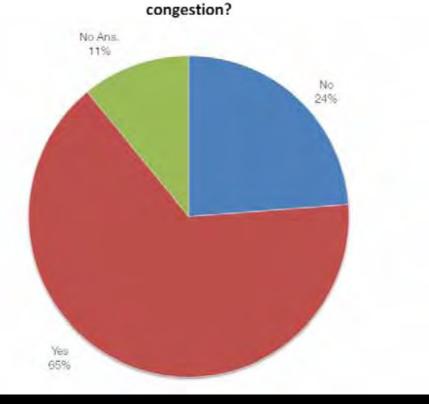
## **Survey Results**



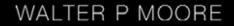
# Survey Results



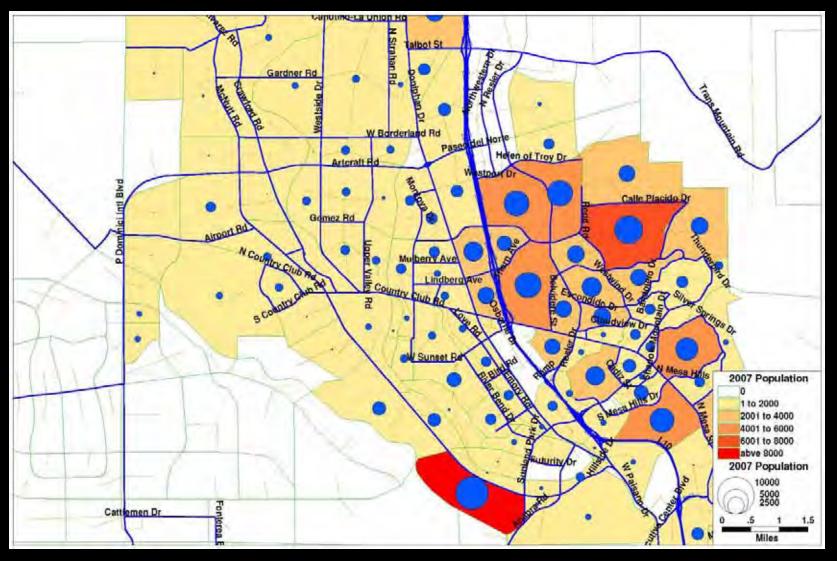
Providing additional routes by extending/adding roads to alleviate



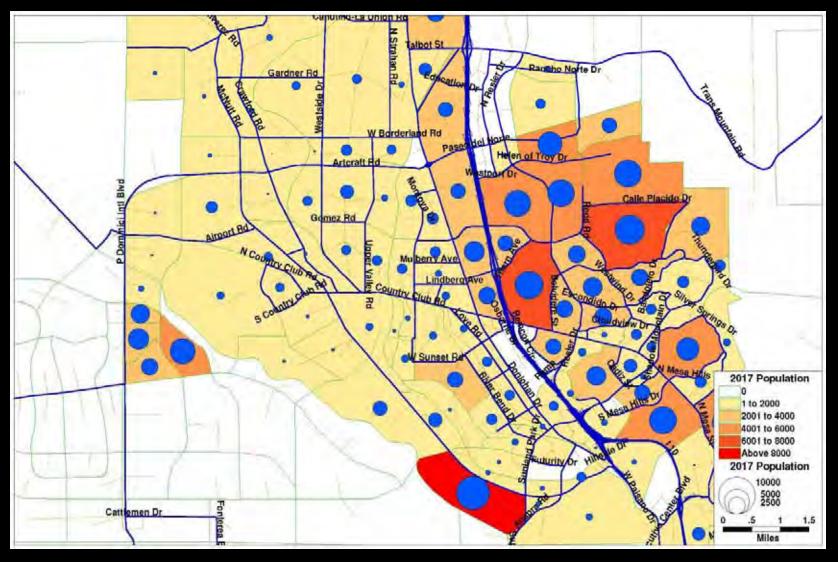
# **MPO FORECASTS**



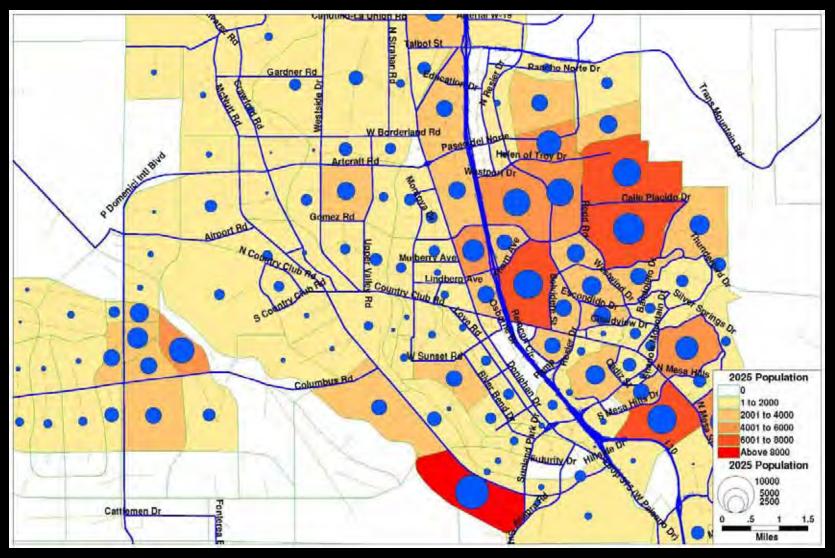
## Upper Valley Region 2007 Population Estimates



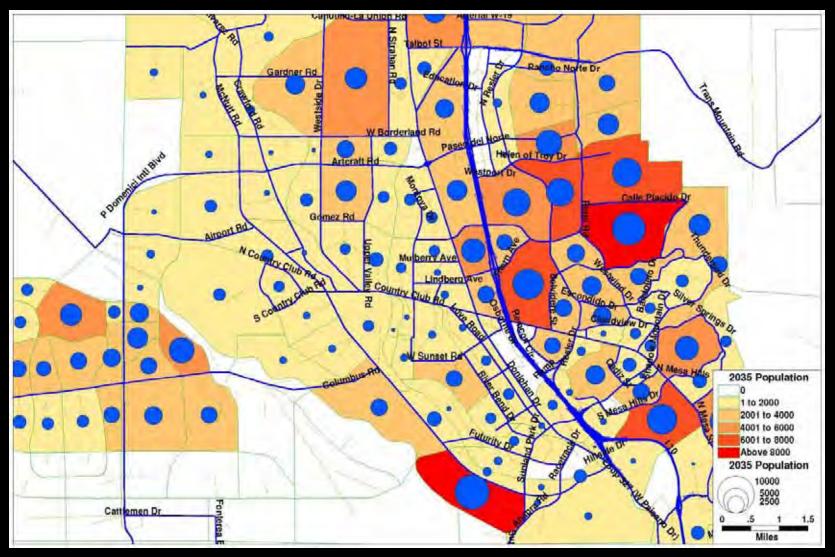
## Upper Valley Region 2017 Population Estimates



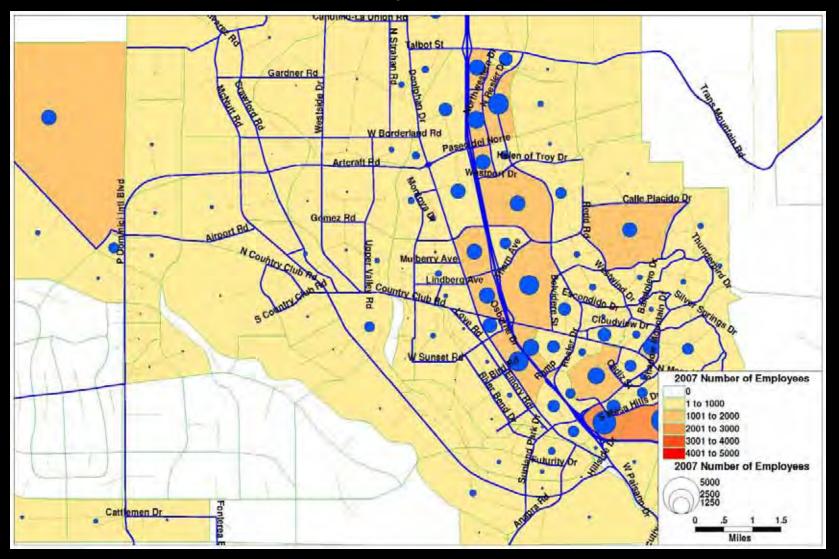
## Upper Valley Region 2025 Population Estimates



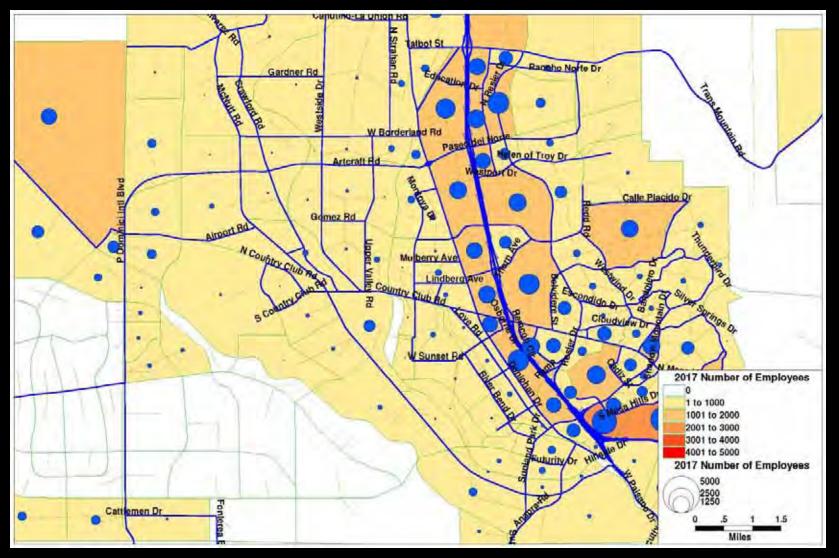
## Upper Valley Region 2035 Population Estimates



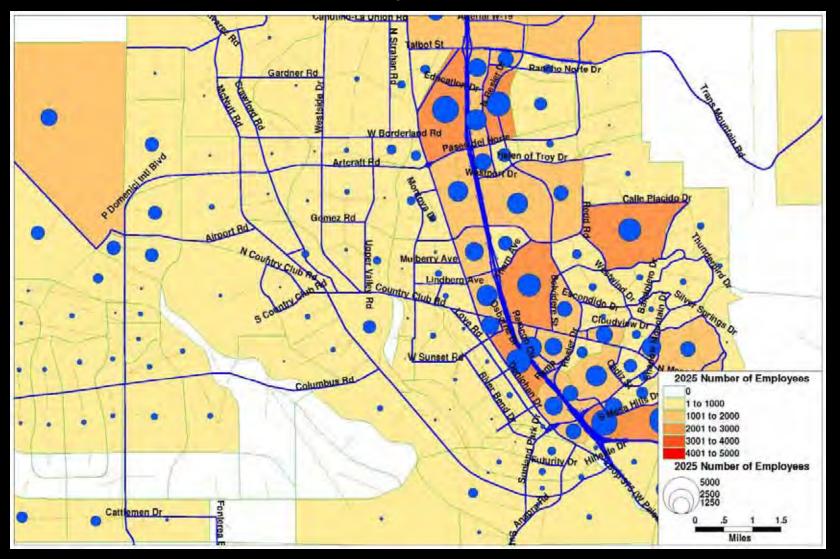
## Upper Valley Region 2007 Employee Estimates



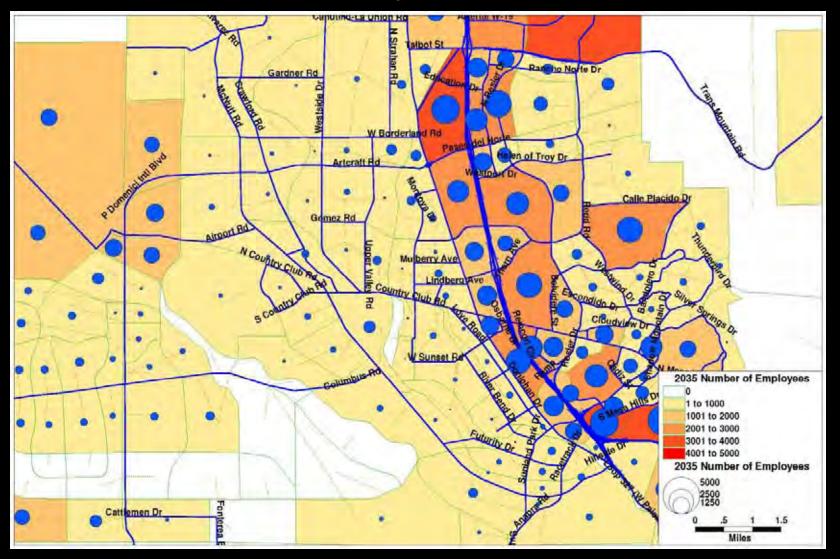
## Upper Valley Region 2017 Employee Estimates



## Upper Valley Region 2025 Employee Estimates



## Upper Valley Region 2035 Employee Estimates



## Upper Valley Region 2007 Traffic Estimates



## Upper Valley Region 2017 Traffic Estimates



## Upper Valley Region 2025 Traffic Estimates



## Upper Valley Region 2035 Traffic Estimates



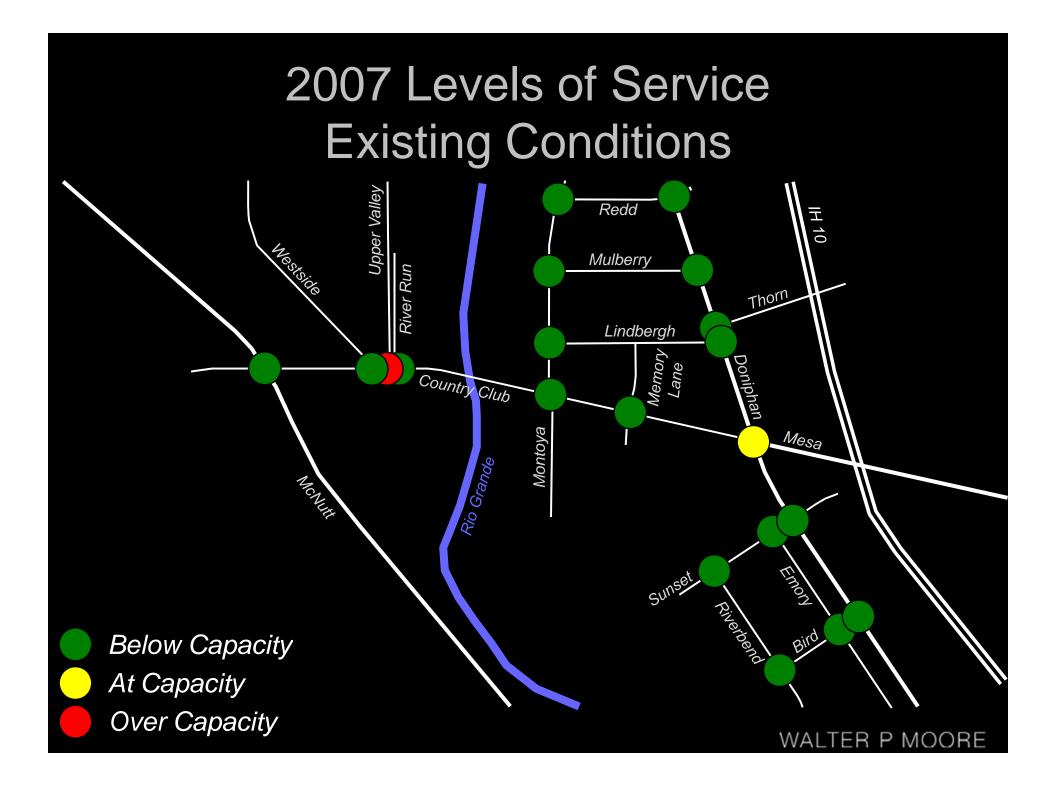
# ANALYSIS

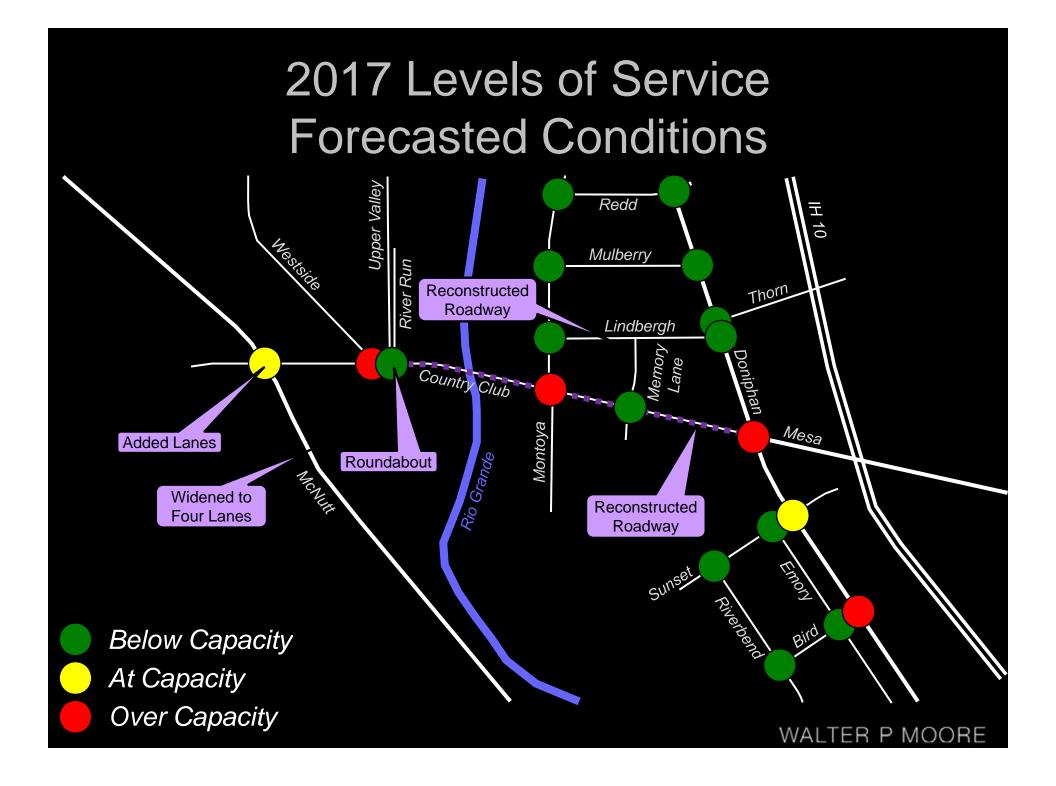
# Study Area

- Traffic Analysis
  - Northern Third
  - Central Third
  - Southern Third

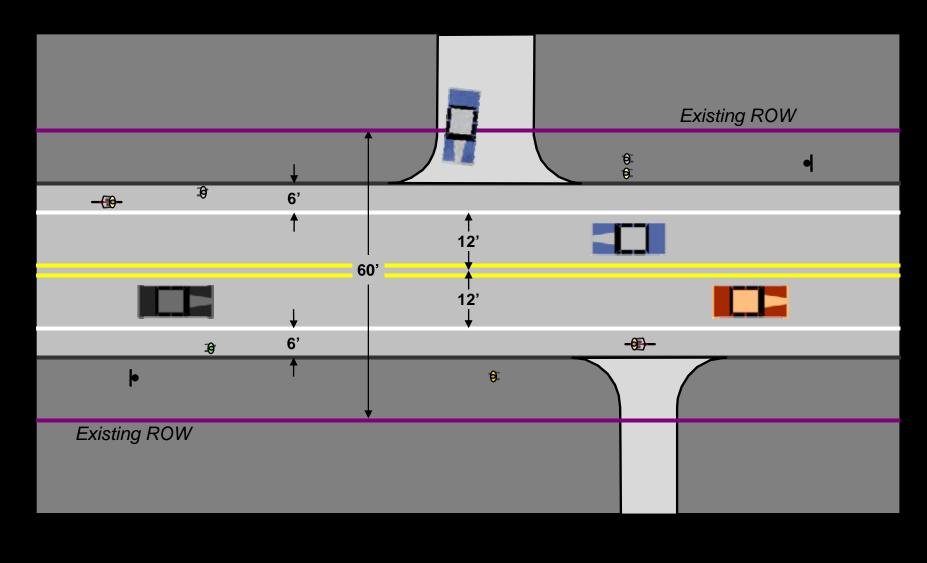
Analyzed Intersection



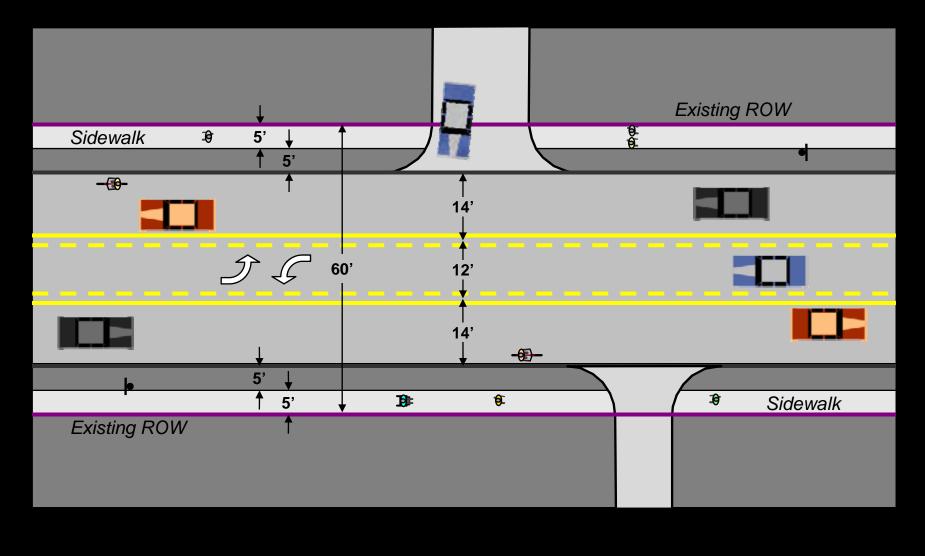




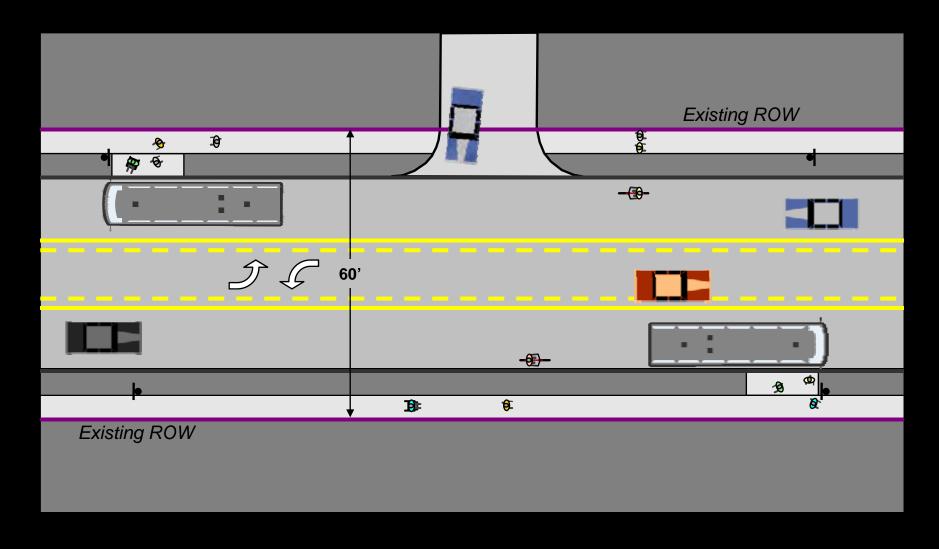
### Existing Country Club Design at Midblock



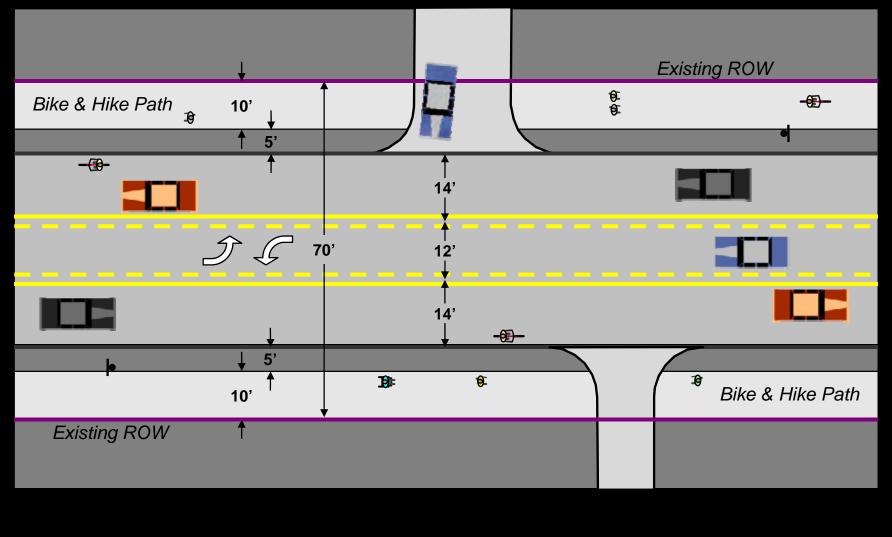
### Recommended Option Within 60' ROW Shared-Use Lanes and Sidewalks



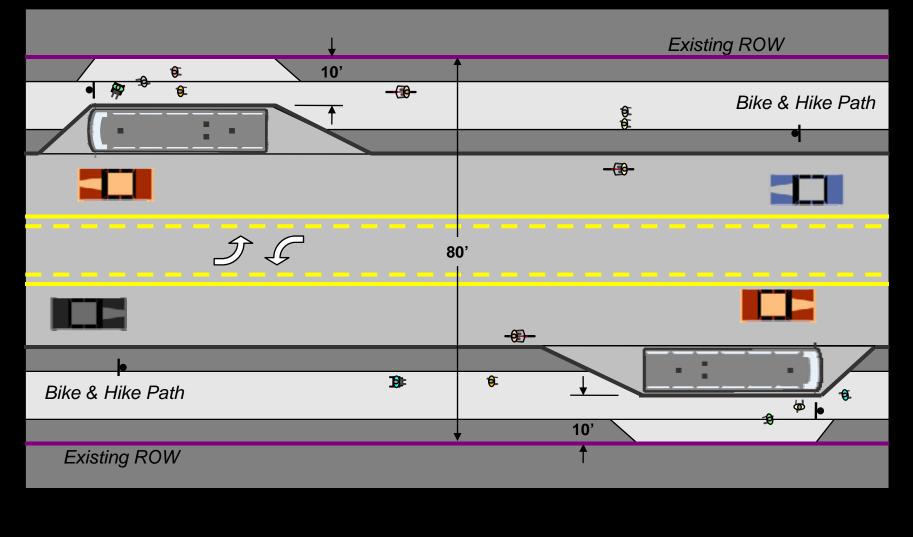
### Recommended Option for Bus Stops Within 60' ROW - Curbside Stop

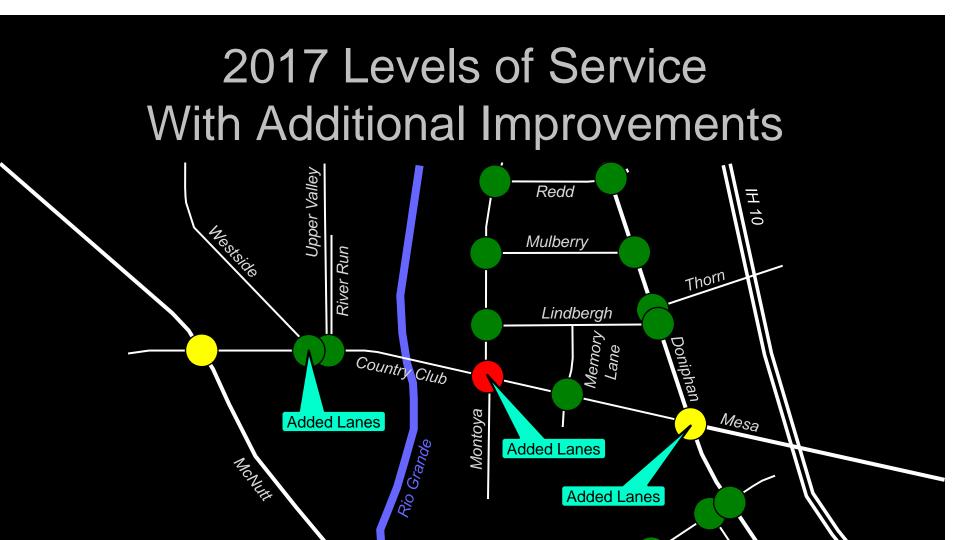


### Recommended Option Within 70' ROW Shared-Use Lanes and Bike & Hike Paths



### Recommended Option for Bus Stops Within 80' ROW - Pull-Out Stop





Below Capacity At Capacity Over Capacity

WALTER P MOORE

Traffic Signal

Emony

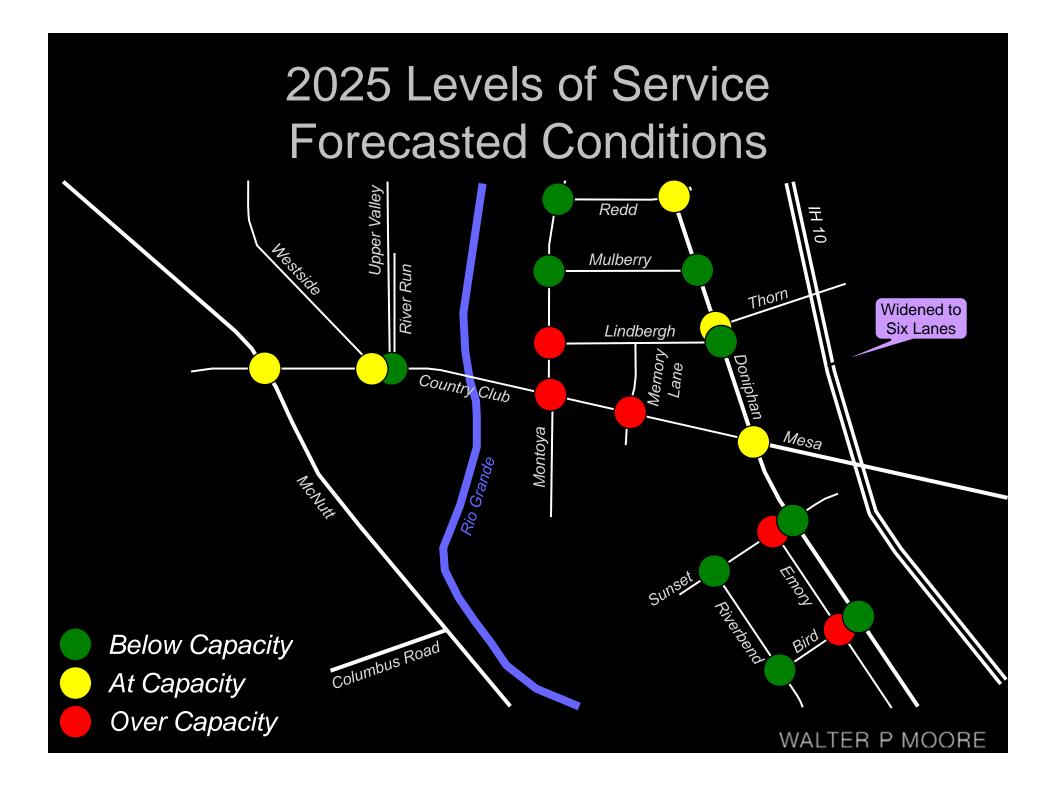
Bird

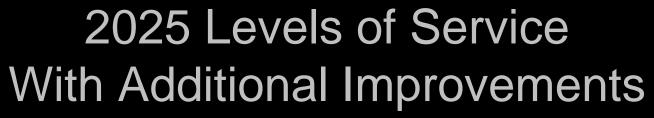
Riverbend

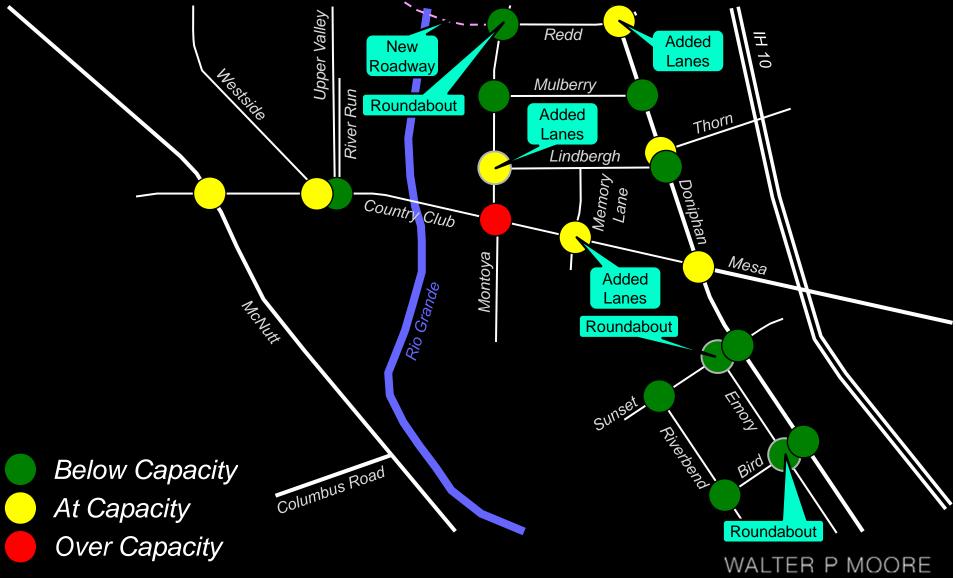
Sunsel

### Conceptual Design for Adding Lanes at Country Club and Montoya





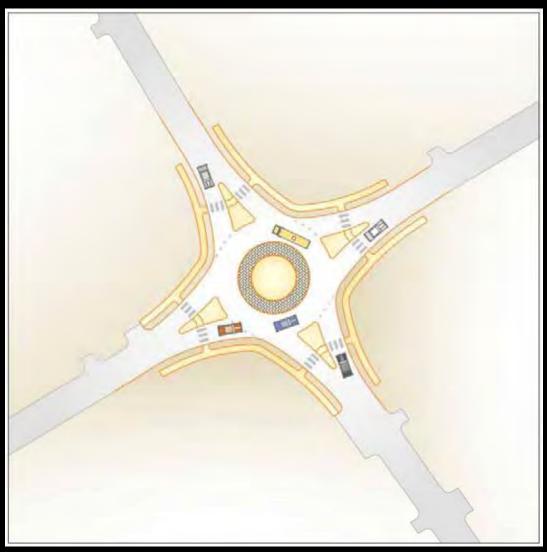


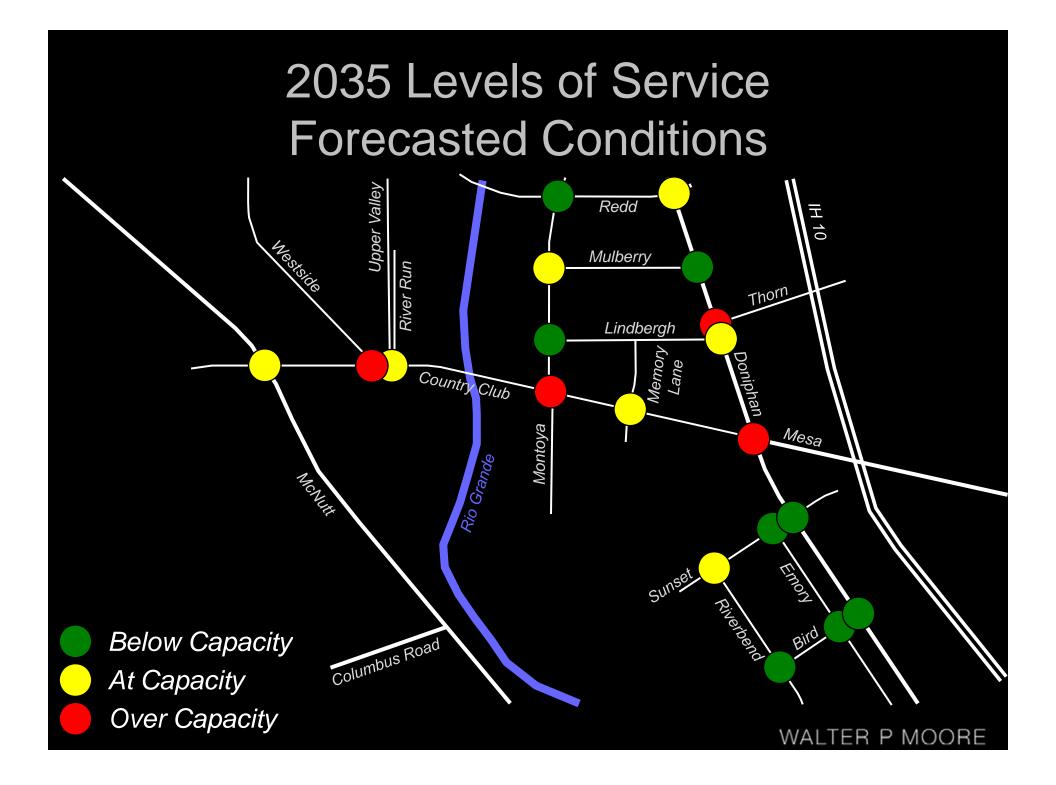


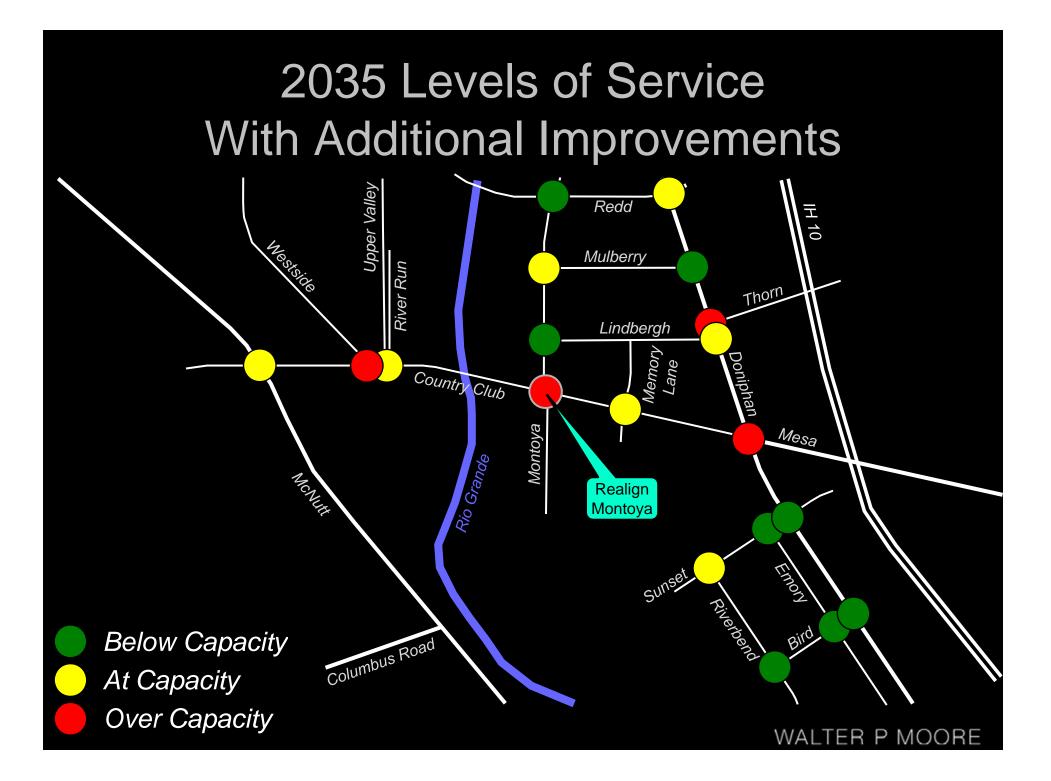
### Conceptual Design for Adding Lanes at Lindbergh and Montoya



## Conceptual Design for a Single Lane Roundabout At Emory and Sunset



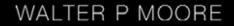




## Conceptual Design for Realigning Montoya at Country Club



# RECOMMENDATIONS



## Summary

### Recommended Improvements

- Context sensitive solutions
- Mitigates impacts of anticipated traffic growth
- Responsive to community issues
- Self-regulating with minimal operational needs

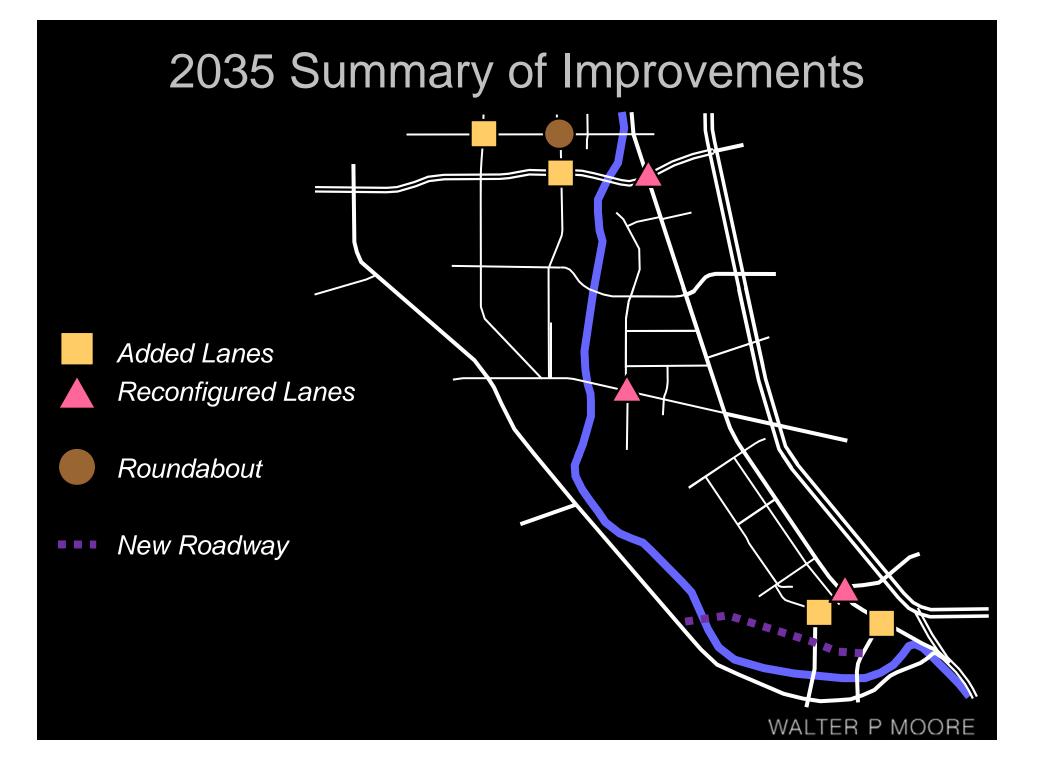
## 2017 Summary of Improvements

WALTER P MOORE

Added Lanes Reconfigured Lanes Traffic Signal Roundabout Reconstructed Roadway

## 2025 Summary of Improvements

Added Lanes **Reconfigured Lanes** Traffic Signal Roundabout Reconstructed Roadway New Roadway New Overpass



## Summary

### • Next Steps

- Identify and program 2017 improvements for funding
- Plan follow up study in 8-10 years to validate future recommendations
- Consider complementary studies
- Continue stakeholder inclusion

# **QUESTIONS?**

