



# Added Capacity - HOT Lane Workshop

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Jennifer Tsien, PBS&J  
Angela Jacobs, Federal Highway Administration

# Workshop Purpose

A background image showing a dense traffic jam on a multi-lane highway. The cars are packed closely together, and the scene is slightly hazy, suggesting a busy, congested roadway. The image is overlaid with a semi-transparent white box containing the text.

Provide hands-on practice in applying lessons learned and best practice from implemented projects across the country

- Understand the challenges in implementing pricing projects
- Move pricing forward in your area

# Workshop Agenda

- Review of Project
- Break into groups for exercises
- Five subject areas covered
  - 5-10 minute overview of subject area
  - 20-25 minutes to complete exercise
  - Break for lunch after second round of exercises
- Group reports

# Subject Areas

- Planning
  - Operations
  - Design
  - Funding and Finance
  - Outreach
- ❖ No specific order, all have overlapping elements



# Our Project

Length: 15 miles

6 lanes with full shoulders

165,000 AADT and growing

Peak period speeds as low as 30 mph

## Competing Facilities

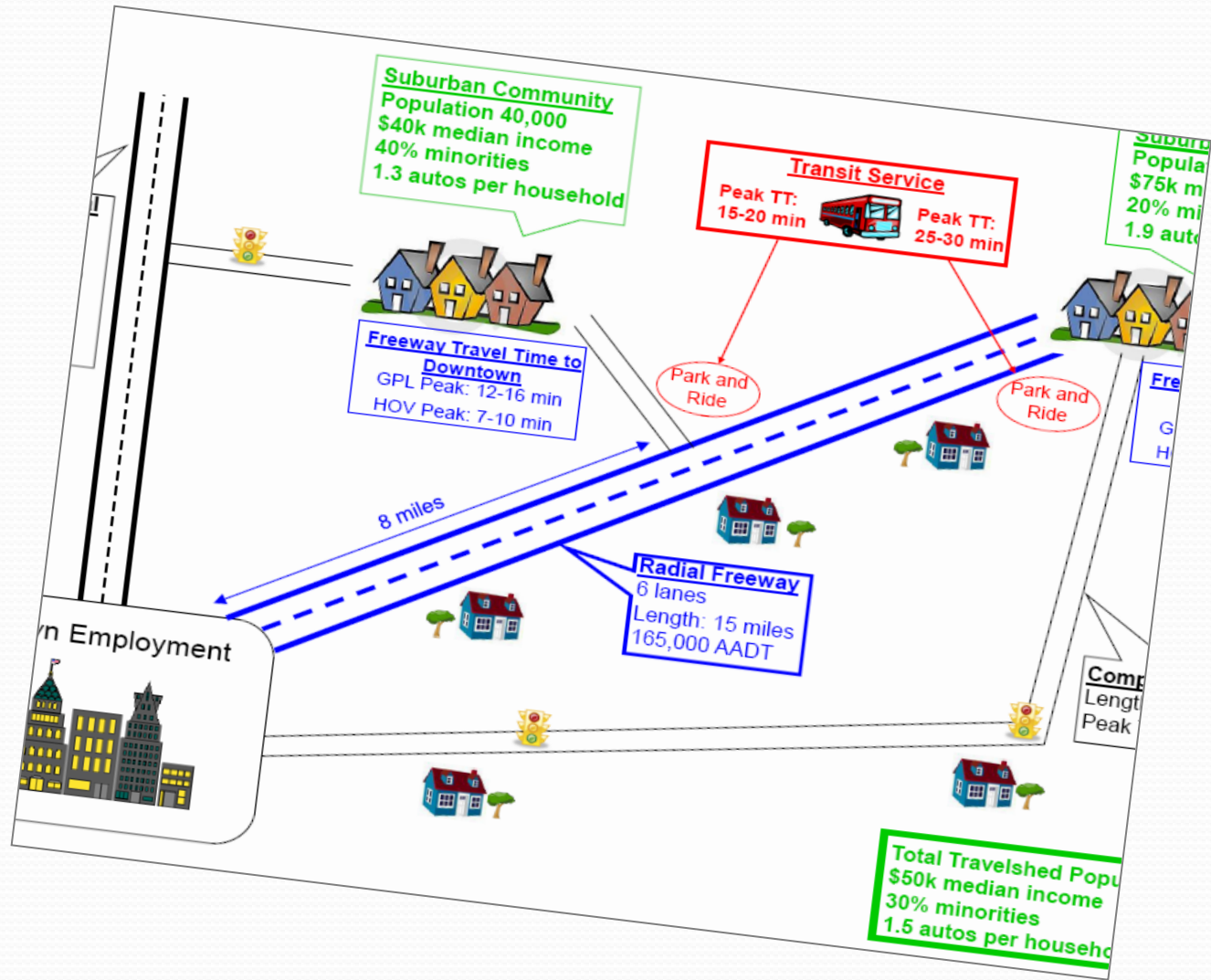
Arterial serves suburban community at the end of the study corridor

Nearby radial freeway to be expanded in the near future

## Transit Facilities

Serves entire corridor

2 Park and Ride lots





**Competing Radial Freeway**

Currently 4 lanes, very congested, to be expanded to 6 lanes in the future

**Suburban Community**  
Population 40,000  
\$40k median income  
40% minorities  
1.3 autos per household



**Freeway Travel Time to Downtown**  
GPL Peak: 12-16 min

**Transit Service**  
Peak TT: 15-20 min  Peak TT: 23-30

**Suburban Community**  
Population 20,000  
\$75k median income  
20% minorities  
1.9 autos per household



**Freeway Travel Time to Downtown**  
GPL Peak: 20-30 min

Park and Ride

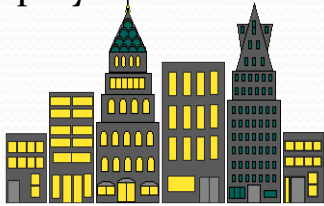
Park and Ride

8 miles

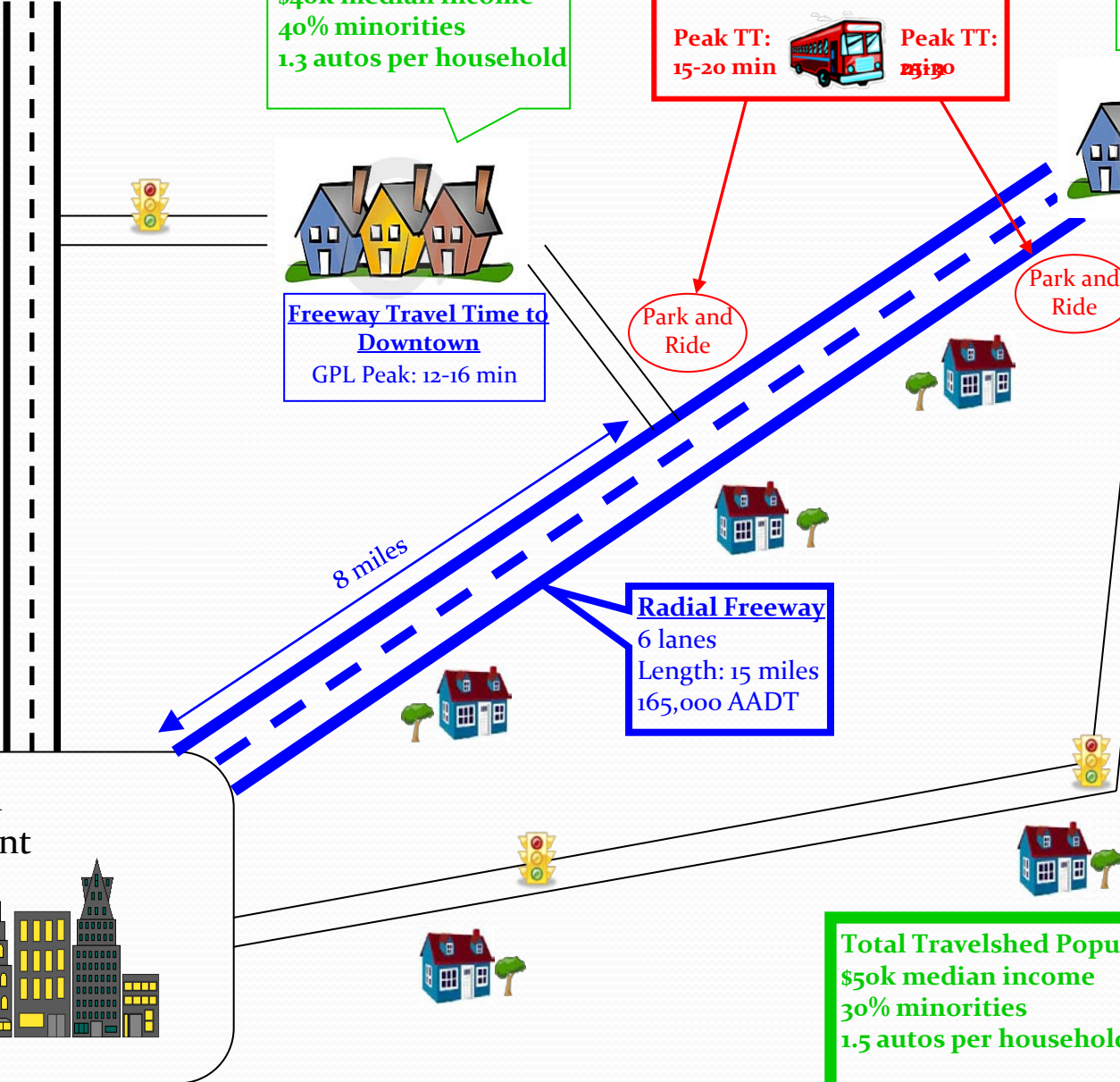
**Radial Freeway**  
6 lanes  
Length: 15 miles  
165,000 AADT

**Competing Arterial**  
Length: 20 miles  
Peak TT: 25-45 min

**Downtown Employment**



**Total Travelshed Population: 200,000**  
\$50k median income  
30% minorities  
1.5 autos per household



# Project Characteristics

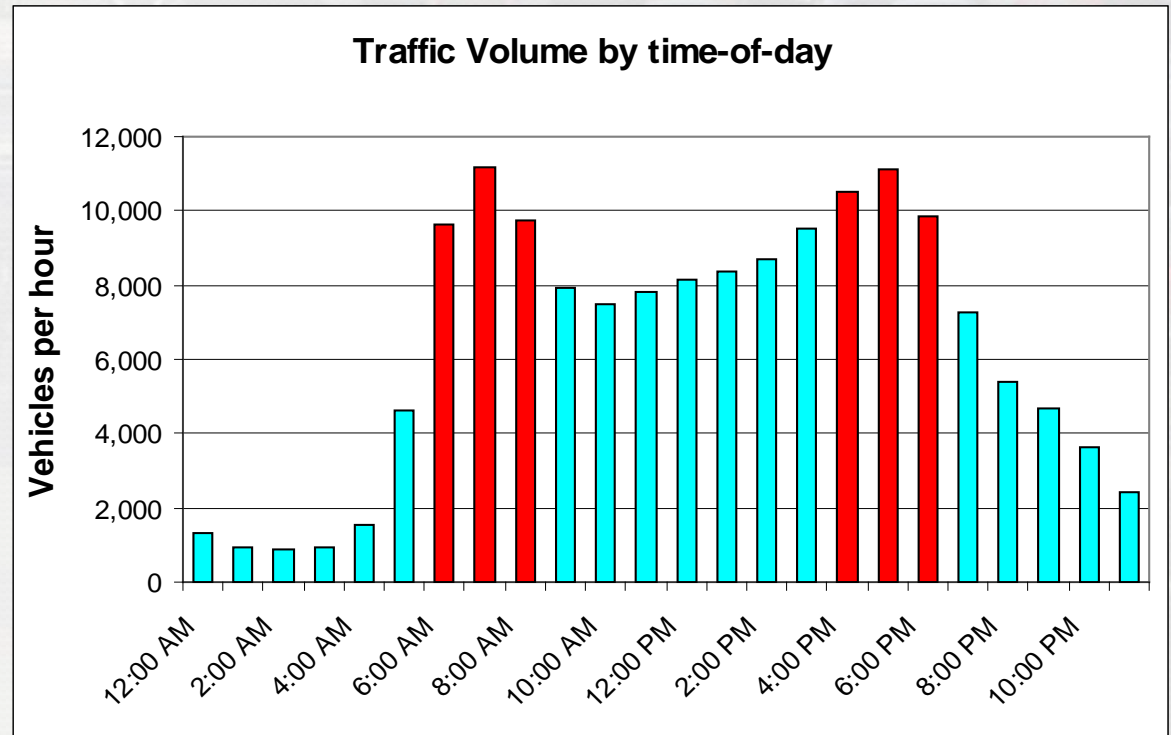
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- Corridor History
    - Congestion worsening
    - Downtown businesses seeking alternatives to bring more commuters downtown
    - Opposition to capacity improvements on adjacent radial corridor from environmental interests
  - Corridor demographics
    - Varies by sub-area
    - Total travelshed population = 200,000
    - \$50,000 median income
    - 30% minorities
    - 1.5 autos per household
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# Project Characteristics

## General Purpose Lanes

- 6 lanes with 10' shoulders
- 165,000 AADT and growing





# Project Characteristics

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## Project Partners

- State DOT
  - Owner of lanes and ROW
  - Operator of freeway
- Transit authority
  - Operator of express bus service and park-and-ride facilities
- Regional toll authority
  - Operates one toll road in region
    - Cash and transponder-based electronic tolling
- Metropolitan Planning Organization

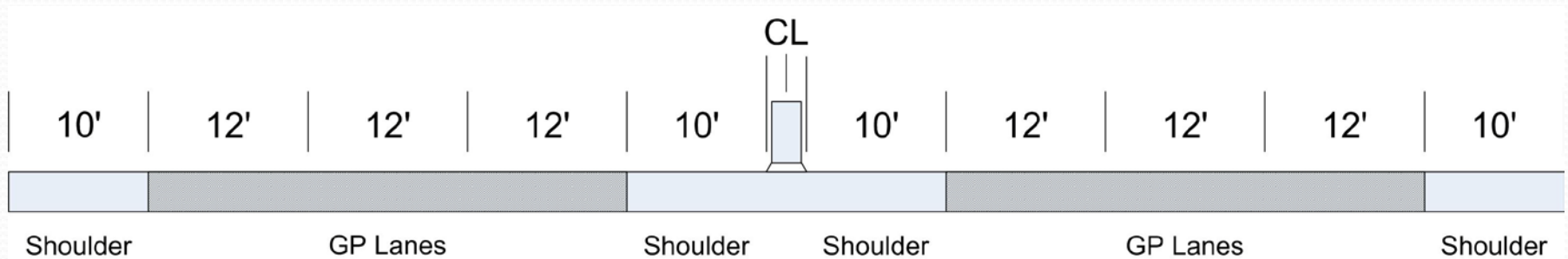
# Project Characteristics

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- Legal authority – HOT and express allowed by state statute
  - Regional policies – No policies on toll rate setting, occupancy, etc.
  - Project partners – state DOT (owner of ROW), transit authority, regional toll authority, state police
  - Toll authority currently operating one toll road in region with ETC (transponder) and cash
  - Environmental clearance – FONSI expected
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# Project Characteristics

- Cross section



- Total right of way available: 200 feet
- Access
  - Location and method of access undetermined
- Enforcement
  - Subject to design and location

# Project Characteristics

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- Estimated project costs
    - Capital costs: \$ 50,000,000
    - Annual operating costs: \$ 1,000,000
  - Available funding
    - State is committed to contributing \$ 28,000,000
  - Traffic and revenue studies - none
  - Revenue sharing potential – Regional toll authority, private partner
  - Possible funding partners - Regional toll authority, private partner
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# Planning

The background of the slide is a photograph of a heavy traffic jam on a multi-lane highway. The cars are packed closely together, and the scene is somewhat hazy, suggesting a busy, congested roadway. The image is faded and serves as a backdrop for the text.

- Establish goals and objectives and clearly communicate a vision
- Take advantage of opportunities
- Maintain flexibility
- Engage project partners and encourage agency cooperation



## Planning Exercise

### **Planning Group Exercise**

**Develop an Action Plan that identifies the steps necessary in the planning process to support the project.**

What are the sequential steps to plan the project?

What are the project goals?

Who are the players and what are their roles?

# Operations

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- Develop a Concept of Operations to guide the process
  - Establish Operational Policy
  - Leverage technology and operational strategies
  - Implement and maintain stakeholder group
  - Identify design and legislative impacts of operational goals
  - Enforcement strategies
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## Operations Exercise

### **Operations Group Exercise**

**Develop an Action Plan that identifies critical operational issues that need to be addressed to support a successful project.**

What are the roles and responsibilities of partner agencies?

How will the facility integrate into existing systems?

What are the appropriate measures of effectiveness and thresholds for performance?

# Design

- Identify user groups for the HOT lanes
- Provide safe and efficient design
- Provide enforcement areas
- Communicate to the public at the roadside

## Design Exercise

### **Design Group Exercise**

**Develop an action plan that addresses critical design elements.**

Identify user group(s) for the HOT lanes.

What is the preferred typical section?

What are the roles and responsibilities of partner agencies?



# Funding and Finance

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- Consider any and all funding and/or financing mechanisms
  - Available assistance through federal programs
  - Stakeholders
  - Revenue sharing
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## Finance Exercise

### **Finance Group Exercise**

Develop a financial plan that will allow for the successful design, construction, operations, and maintenance of the facility.

Who owns the lane(s) and right-of-way (ROW)?

Were FTA funds used for the HOV project?

Is the project eligible for an urban partnership agreement grant or a value pricing pilot program grant?

# Outreach

The background of the slide is a faded, high-angle photograph of a multi-lane highway completely clogged with cars, illustrating a traffic jam. The cars are packed closely together, and the overall scene is hazy, suggesting a long wait or a lack of progress, which is the context for the outreach strategies listed.

- Identify project champions
- Conduct market research and identify issues
- Develop clear and concise messages
- Communicate project goals
- Continue from project development through operations
- Create brand awareness

## Outreach Exercise

### **Outreach Group Exercise**

**Develop a communication/marketing plan that will support project implementation and operation.**

Outline sequential steps in outreach plan.

Who are the stakeholders?

What are the most appropriate communication methods? Will they vary throughout the corridor? If yes, how so?

# Breakout Group Reports

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