

I-24 Multimodal Corridor Study

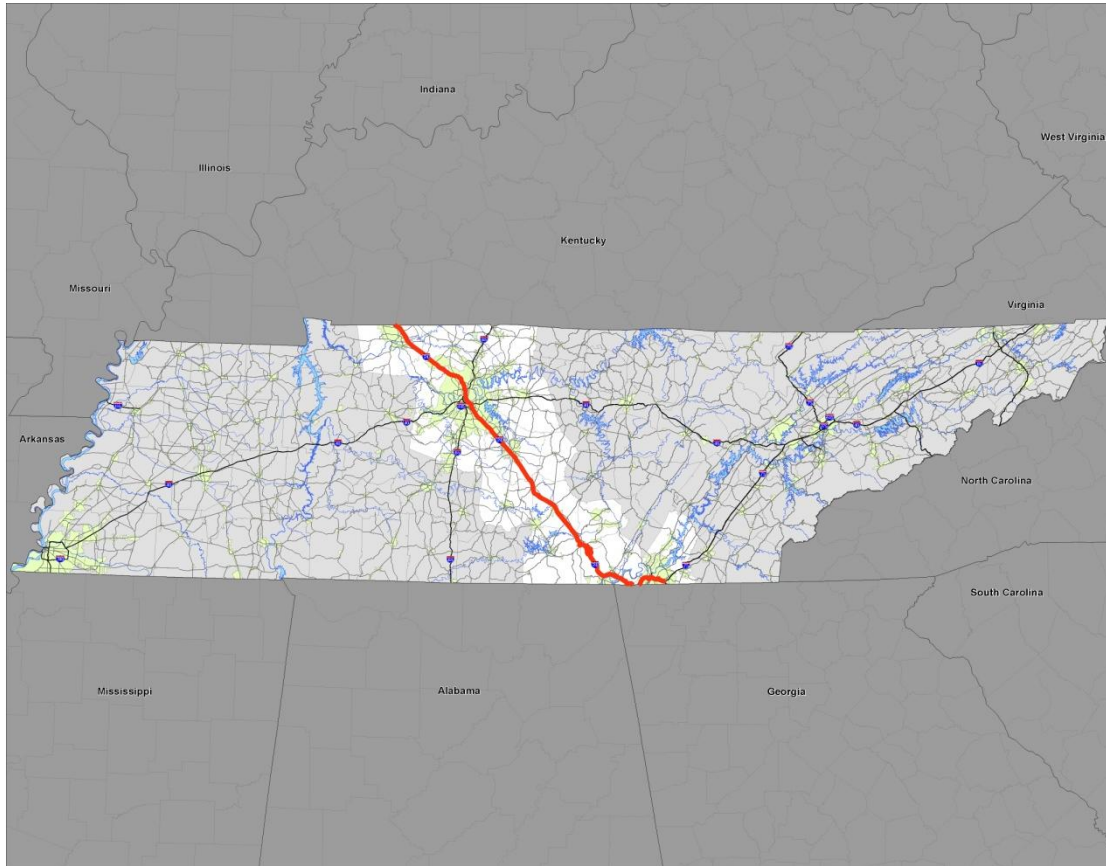
Chattanooga Area Public Meeting
Chattanooga Public Library
October 17, 2013



Presentation Outline

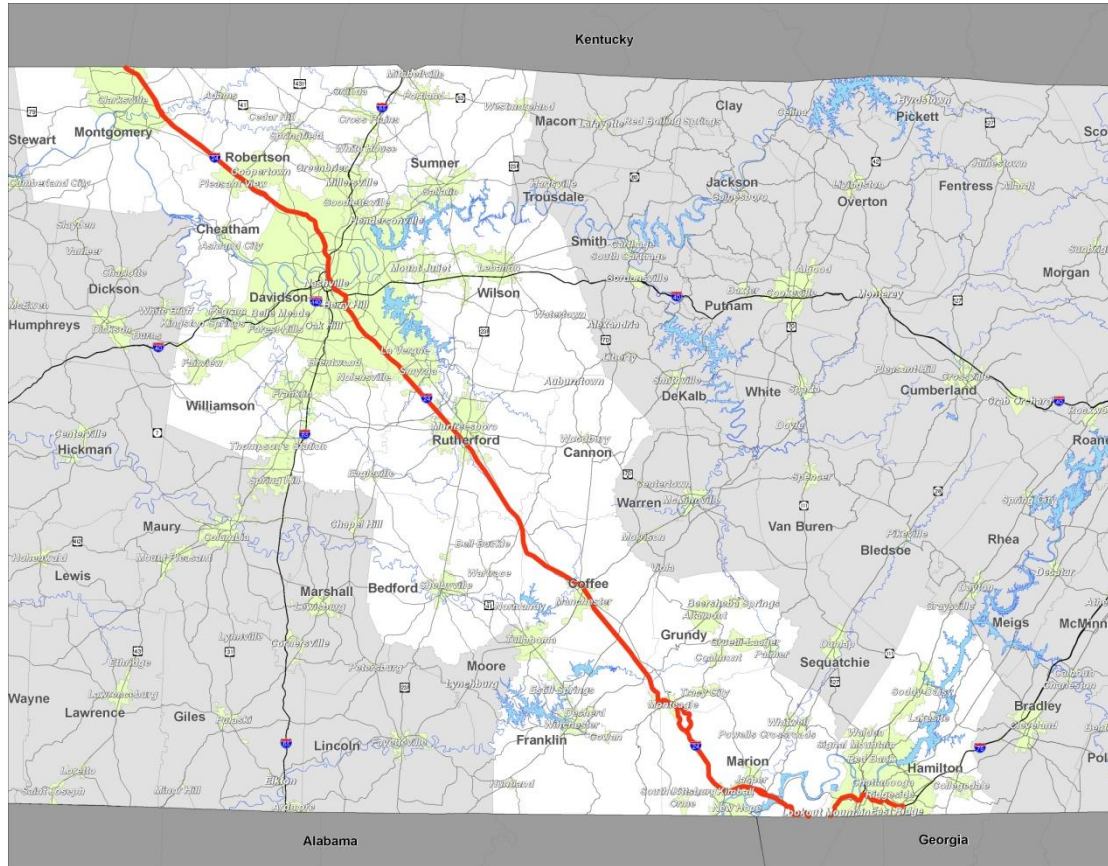
- Corridor Overview
- Schedule
- Survey Results
- Types of Proposed Projects
- Questions





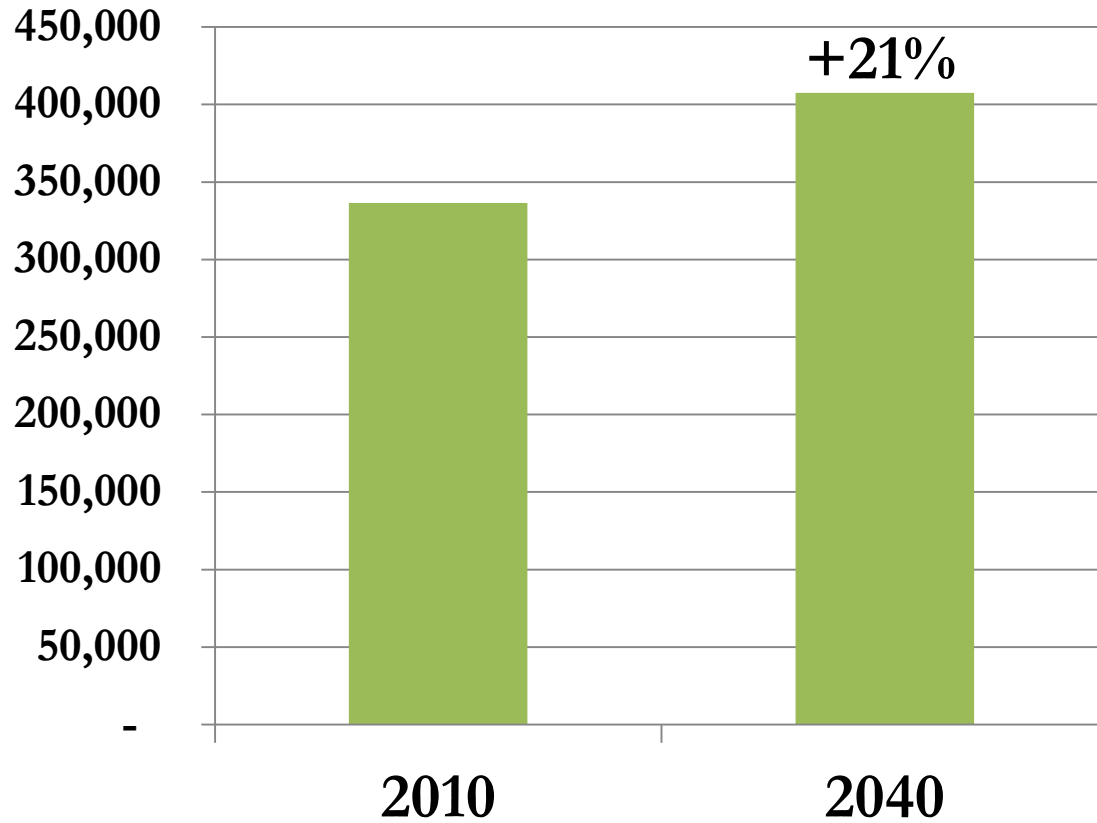
I-24 and Tennessee





I-24 Corridor



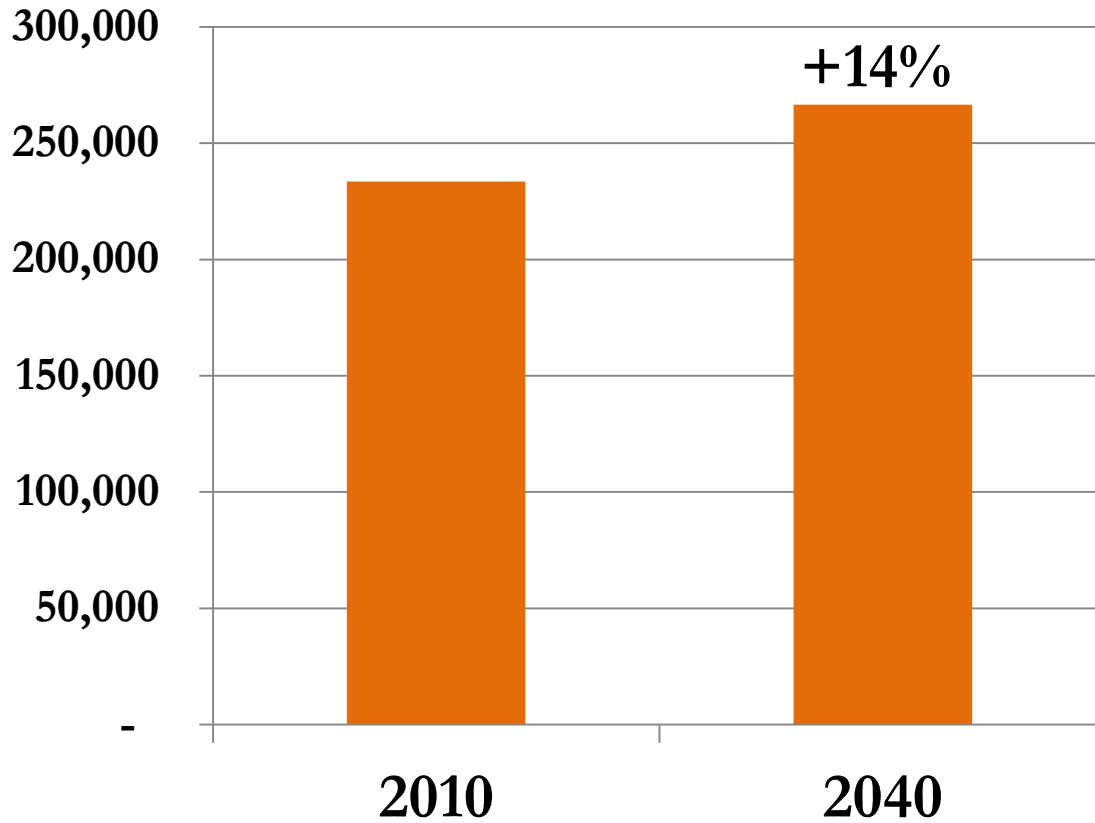


Population Growth in Chattanooga

Hamilton County

Source: Chattanooga TPO





Employment Growth in Chattanooga

Hamilton County

Source: Chattanooga TPO



Why Have a Plan for the Future?

- ❑ Develop solutions now to prevent future problems
- ❑ Need to start the planning process in order to get to construction
- ❑ Determine how to best spend future money (i.e., prioritize projects)



Schedule

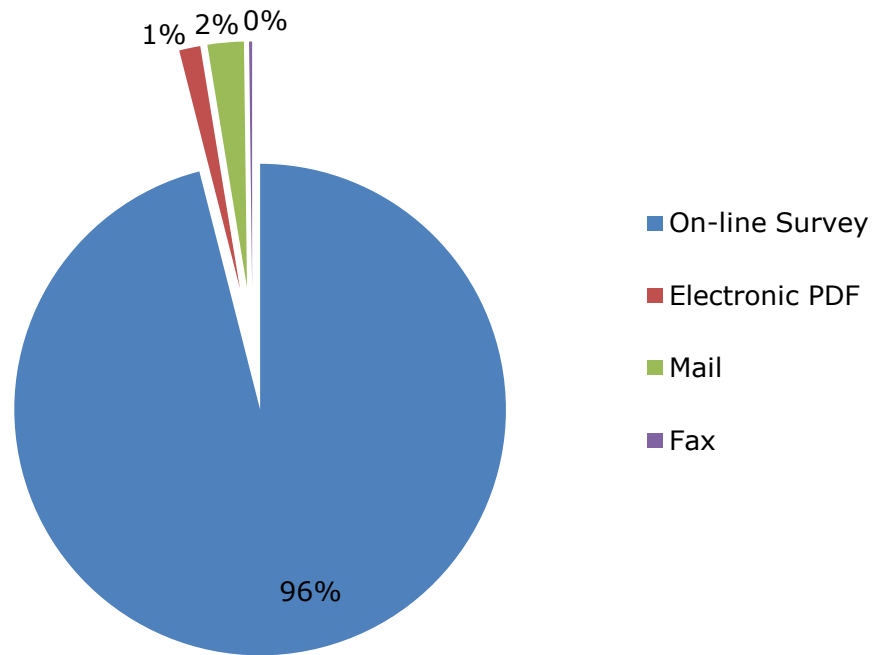
- ❑ Completed Identification of Potential Projects in September
- ❑ Currently Evaluating Feasible Projects
- ❑ Will Develop Prioritized List by January '14



Survey

- ❑ Started January 24, 2013
- ❑ Ended June 20, 2013
- ❑ Total of 503 Responses

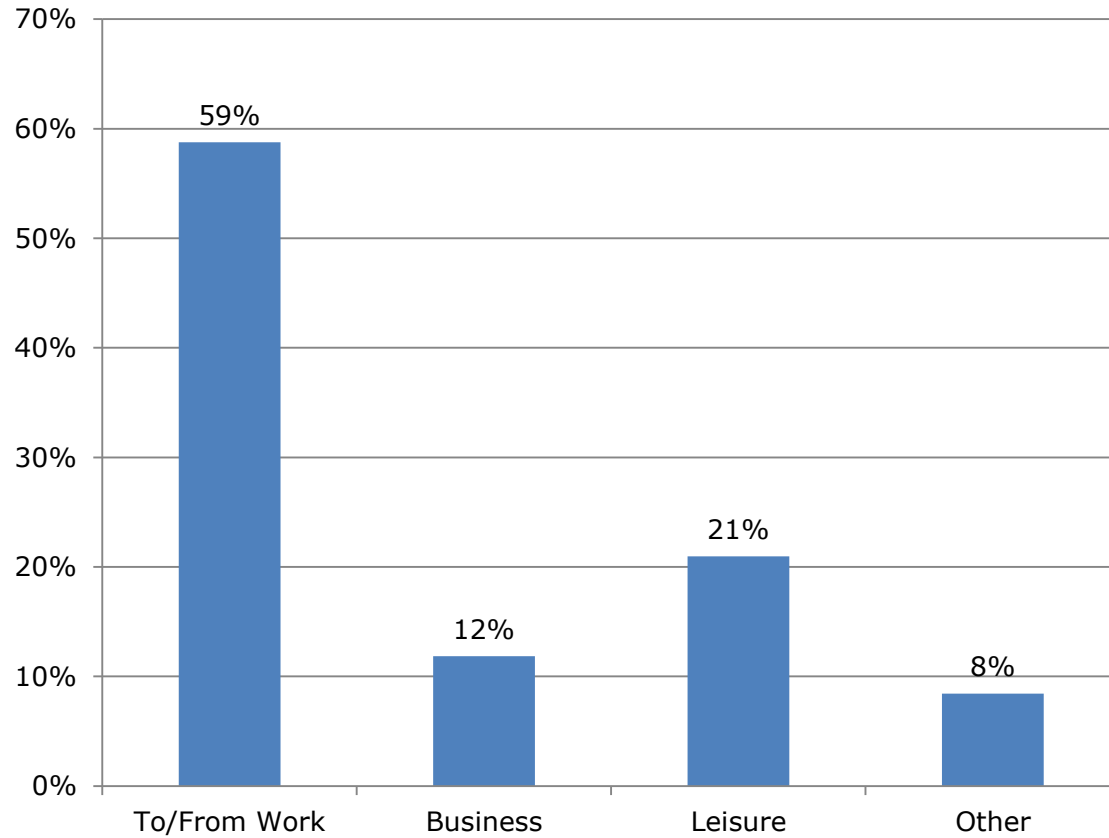




I-24 Survey Final Results

How were the surveys submitted?

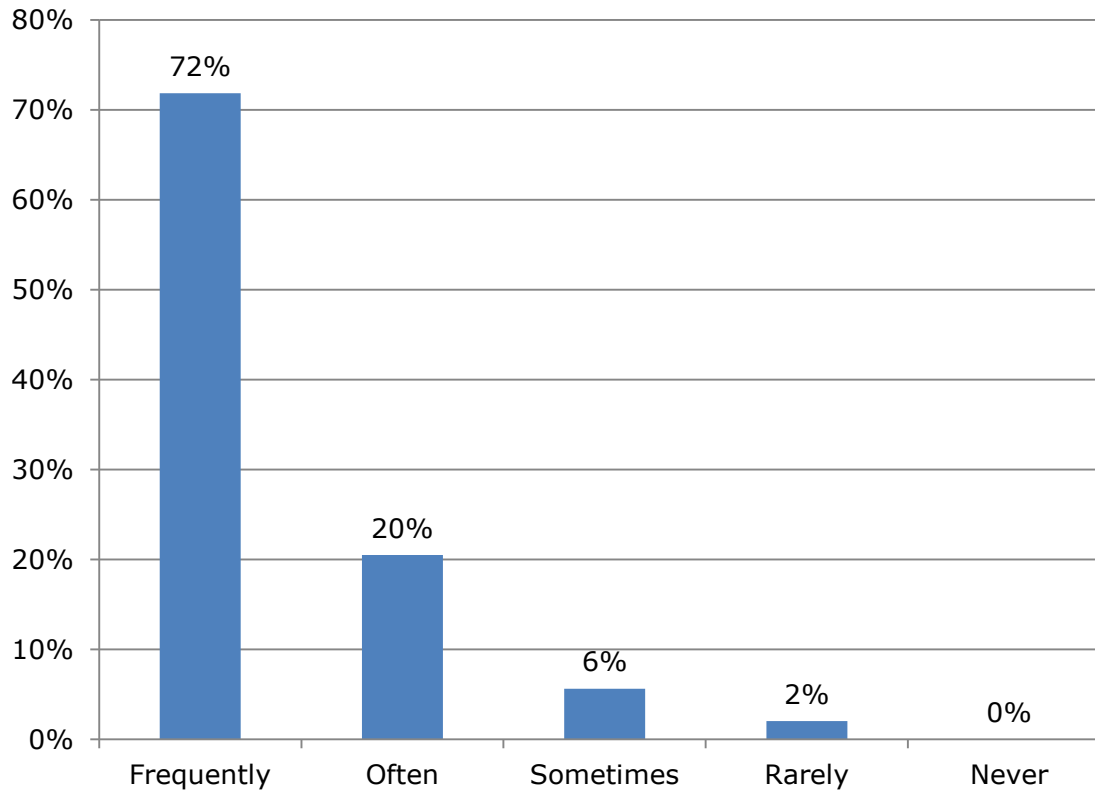




I-24 Survey Final Results

What is your main purpose for traveling along I-24?

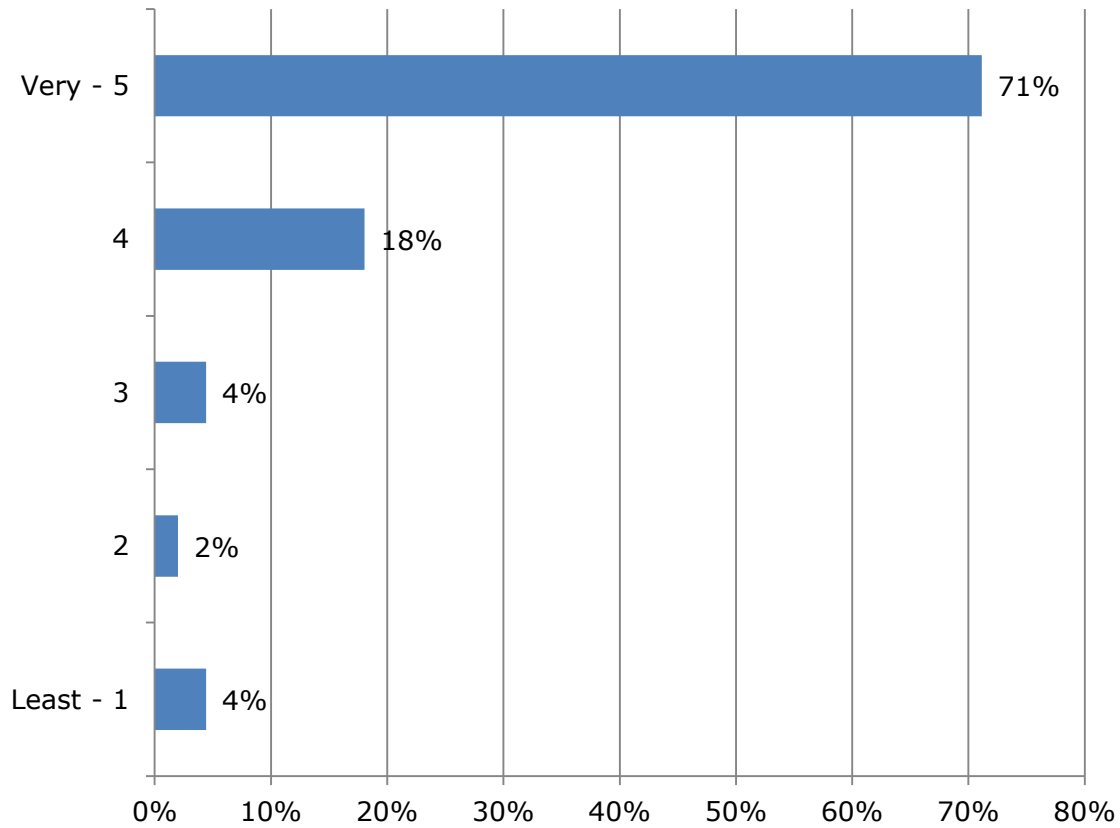




I-24 Survey Final Results

How often do you travel along I-24?

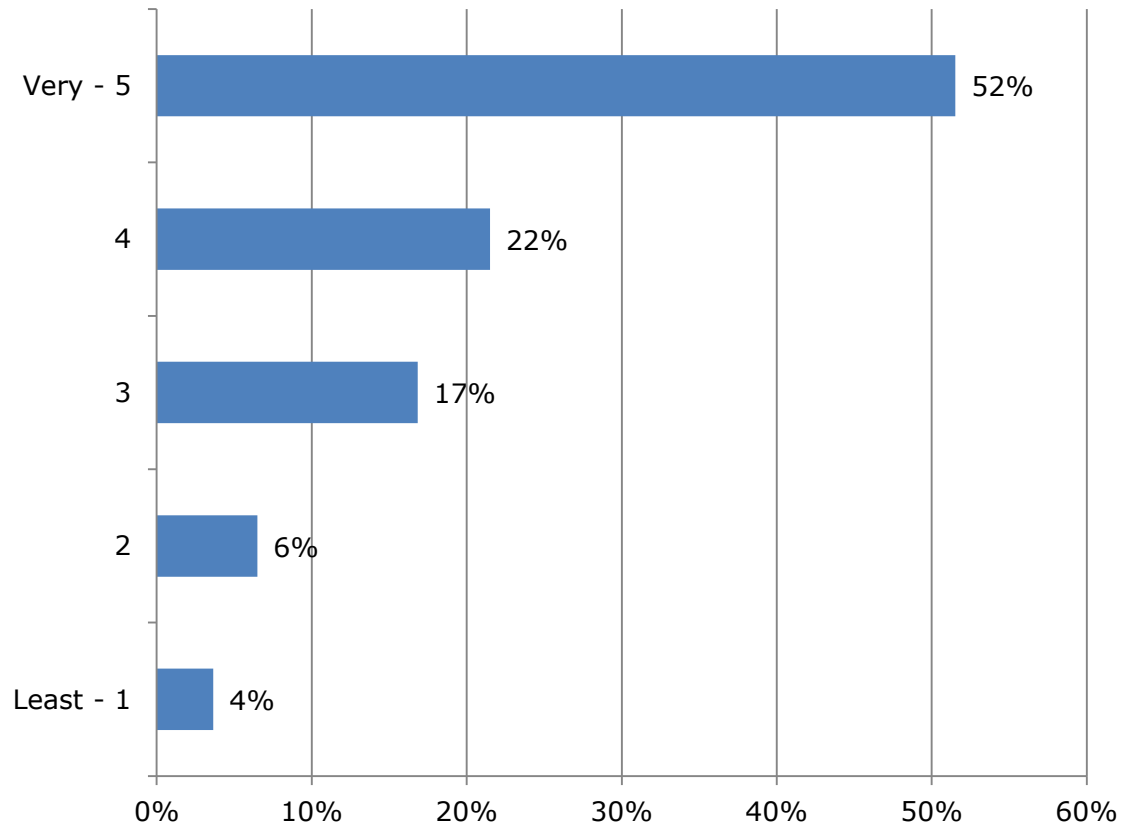




I-24 Survey Final Results

What is the importance of congestion on I-24 to you?

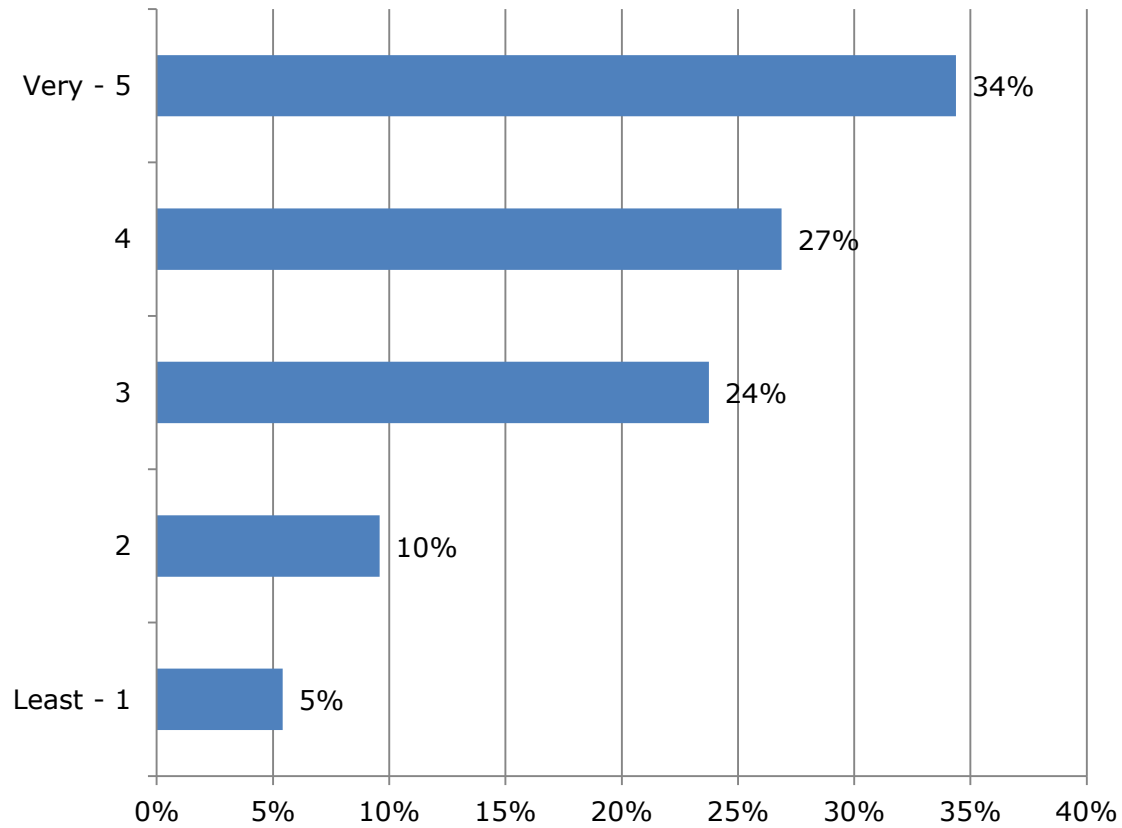




I-24 Survey Final Results

What is the importance of safer travel on I-24 to you?

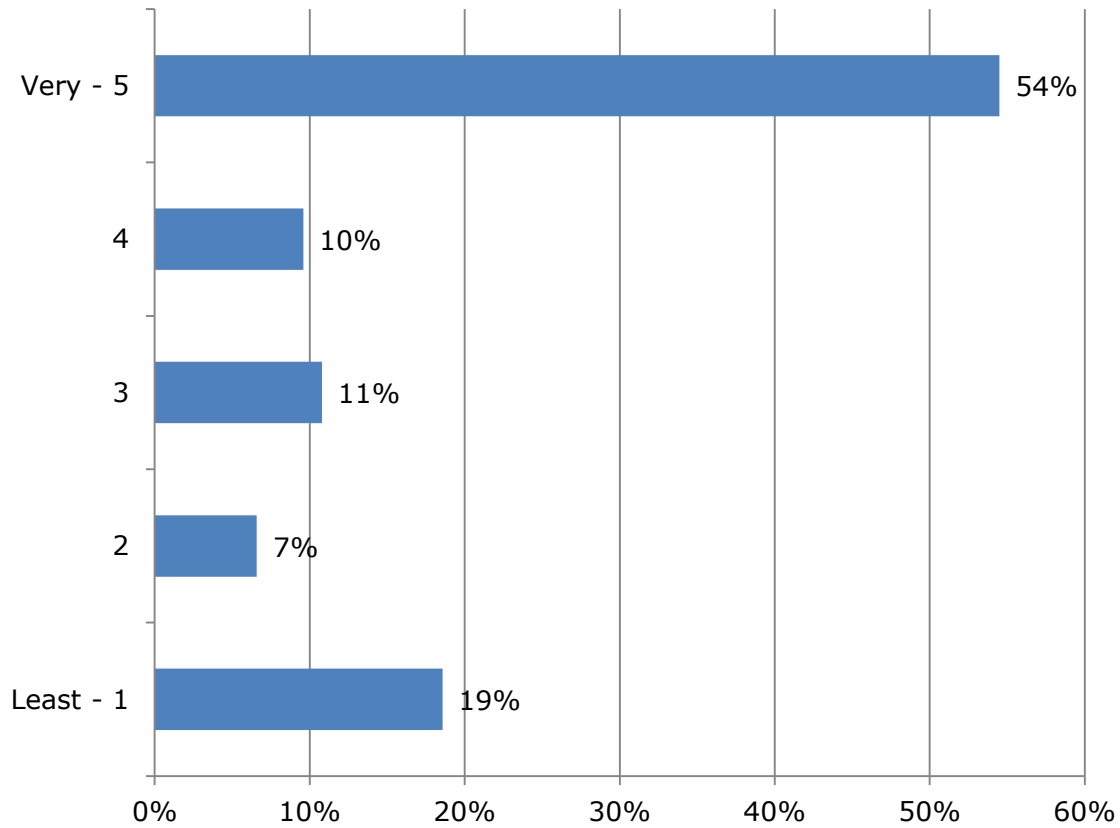




I-24 Survey Final Results

What is the importance of better/more efficient interchanges on I-24 to you?

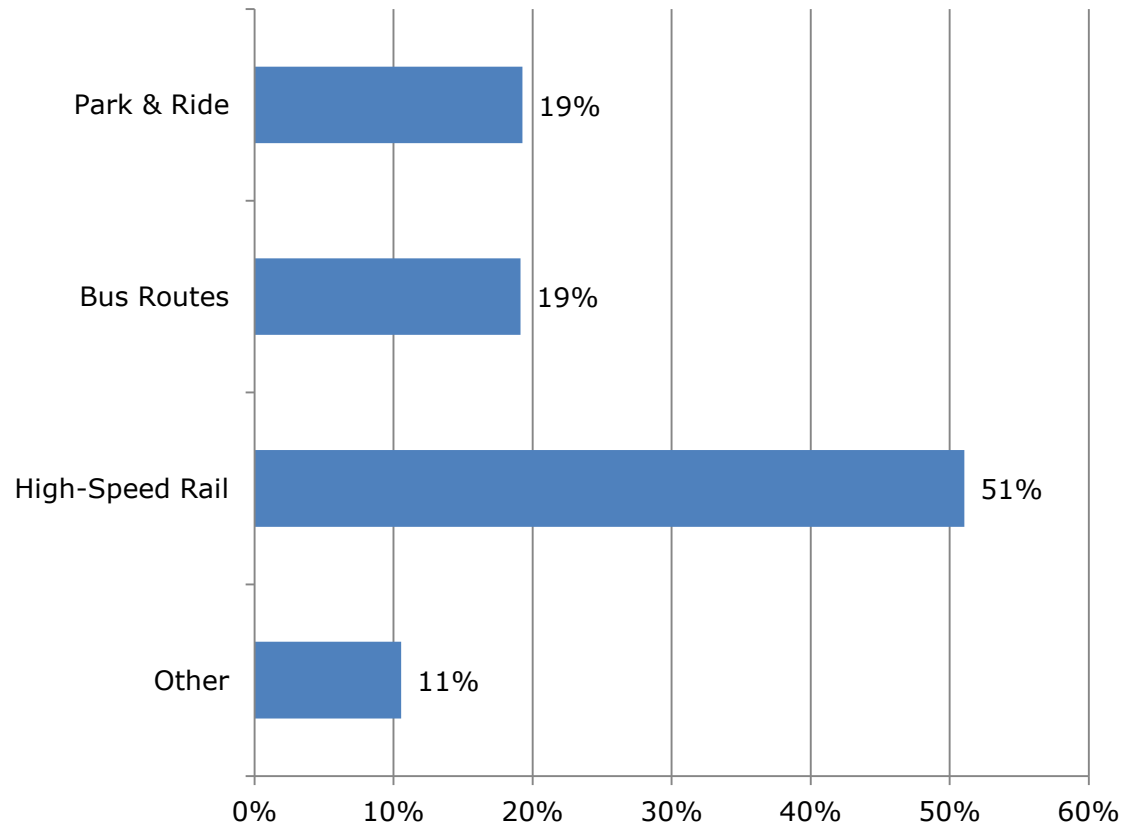




I-24 Survey Final Results

What is the importance of other issues on I-24 to you?





I-24 Survey Final Results

What other transportation options would you consider along I-24?



List of All Proposed Projects & Strategies

- Total List Available at <http://www.tdot.state.tn.us/i24/>
- 572 proposals by citizens
- 169 specific projects & strategies proposed by citizens
- 31 types of projects & strategies
- List includes additional improvements by TDOT, MPOs, consultant and other agencies



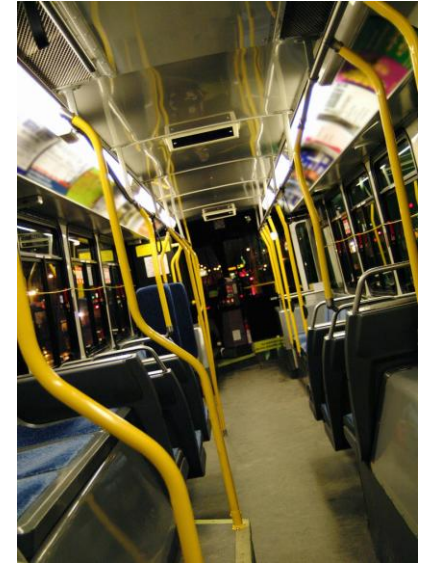
Proposed Projects & Strategies

- Roadway Capacity (add lanes on I-24)
 - 129 proposals by citizens
 - 21 specific projects and/or strategies
- Examples
 - Add lanes on I-24 throughout Chattanooga / Hamilton County
 - “Double-deck” I-24 in the Moccasin Bend area in order to add lanes on I-24



Proposed Projects & Strategies

- Transit – Express Bus & Rail
 - 82 proposals by citizens
 - 6 specific projects and/or strategies
- Examples
 - Chattanooga mass transit options, including express bus / rail
 - Express bus / rail options between Murfreesboro and Nashville



Proposed Projects & Strategies

- Operational - Ramps
 - 52 proposals by citizens
 - 22 specific projects and/or strategies

- Examples
 - Extend ramp to US-27 (Exit 178) from WB I-24
 - Lengthen short ramps on I-24 at S. Germantown Road, Belvoir Avenue and S. Moore Road



Proposed Projects & Strategies

- Corridor Capacity
(improve roads parallel to I-24)
 - 47 proposals by citizens
 - 16 specific projects and/or strategies
- Examples
 - Alternative routes north and south of I-24 in Chattanooga
 - Divert trucks from the ridge cut through a truck tunnel at Westside Drive



Proposed Projects & Strategies

□ Operational - Enforcement

- 38 proposals by citizens
- 5 specific projects and/or strategies

□ Examples

- Improve enforcement of traffic violations coming down both sides of Monteagle mountain
- Improve enforcement of traffic violations throughout corridor



Proposed Projects & Strategies

- Policy – HOV Lanes
 - 32 proposals by citizens
 - 6 specific projects and/or strategies
- Examples
 - Open HOV lane to single occupancy vehicles from Downtown Nashville to Murfreesboro
 - Designate HOV lanes in Chattanooga to mitigate congestion



Proposed Projects & Strategies

- Operational – Signing & Marking
 - 29 proposals by citizens
 - 15 specific projects and/or strategies
- Examples
 - Add a warning light before the EB bridge at Exit 178, to slow speeds on the bridge
 - Install lane reflectors throughout the I-24 corridor



Proposed Projects & Strategies

- New Access - Interchanges & Rest Areas
 - 25 proposals by citizens
 - 10 specific projects and/or strategies
- Examples
 - Add interchanges in Chattanooga
 - Add new interchange in Manchester between Exit 105 and Exit 110



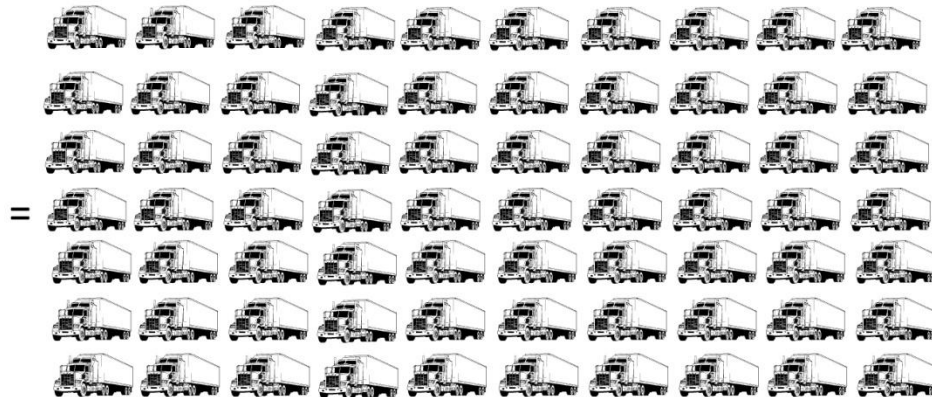
Proposed Projects & Strategies

- Operational – Truck Restrictions
 - 20 proposals by citizens
 - 7 specific projects and/or strategies
- Examples
 - Restrict large trucks to right two lanes
 - Restrict trucks to right lane along the ridge cut in Chattanooga during the rush hour

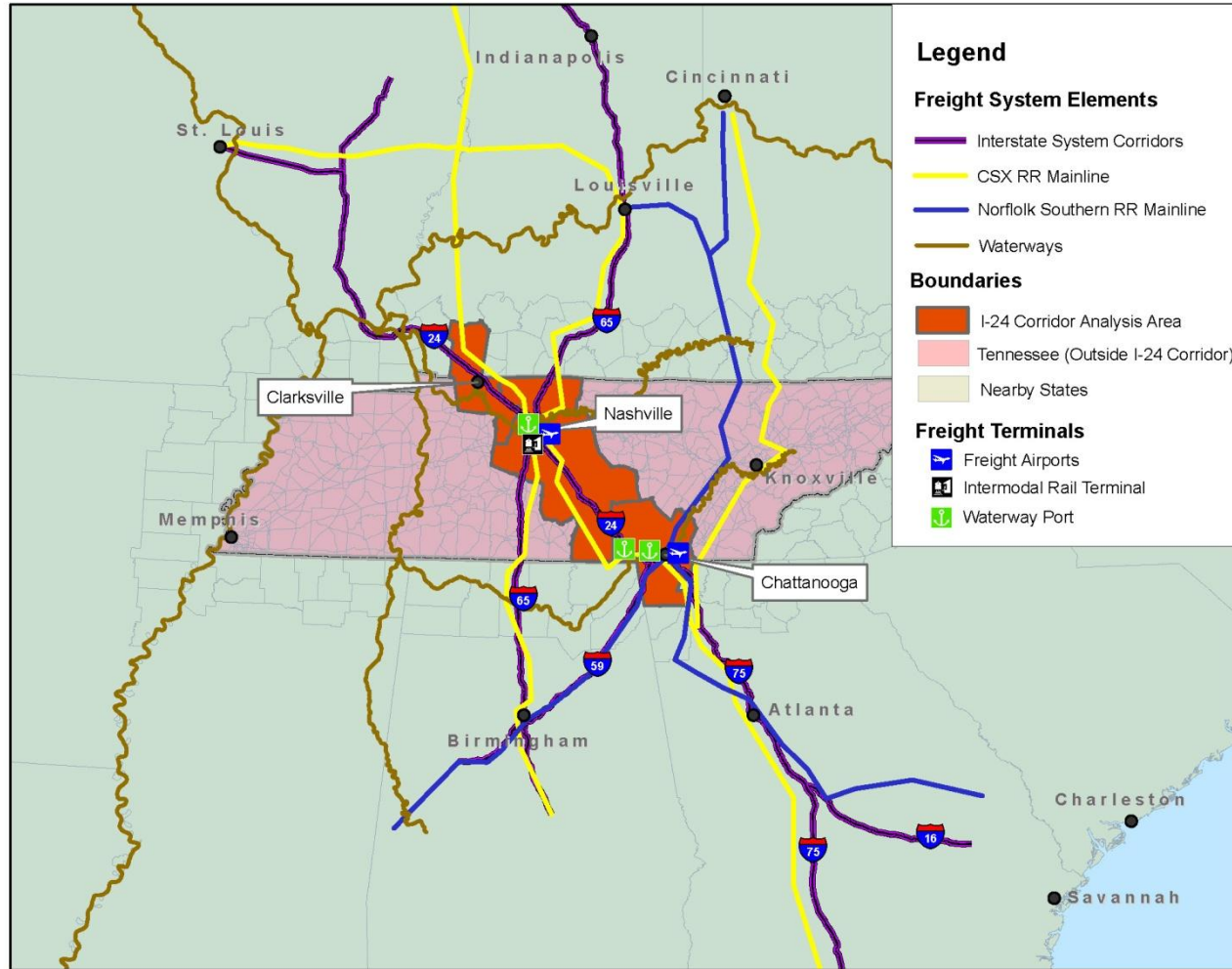


Truck Equivalencies

MODAL COMPARISON OF TRUCK EQUIVALENCIES



Freight System



Proposed Projects & Strategies

- Operational – Intelligent Transportation Systems (ITS)
 - 19 proposals by citizens
 - 7 specific projects and/or strategies
- Examples
 - Control merging traffic from ramps by using ramp metering
 - Add more Dynamic Message Signs (DMS) to warn of lane closures in Monteagle area

**PLEASE
WATCH YOUR SPEED
DON'T TEXT AND DRIVE**



Proposed Projects & Strategies

- Operational –
Interchange
Modifications
 - 14 proposals by citizens
 - 10 specific projects and/or strategies
- Examples
 - Improve the I-75/I-24 split at Exit 185 in Chattanooga
 - Upgrade Exit 111 in Manchester to remove loop ramp



Proposed Projects & Strategies

- Operational –
Emergency Response
 - 12 proposals by citizens
 - 5 specific projects and/or strategies

- Examples
 - Add emergency turn-around lanes from GA state line to ridge cut
 - Work with GDOT to improve emergency response on Georgia portion of I-24



Proposed Projects & Strategies

- Transit – Commuter Rail
 - 11 proposals by citizens
 - 4 specific projects and/or strategies

- Examples
 - Nashville - Chattanooga Commuter Rail
 - Clarksville - Murfreesboro Commuter Rail



Proposed Projects & Strategies

- Operational – Speed Limits
 - 7 proposals by citizens
 - 3 specific projects and/or strategies

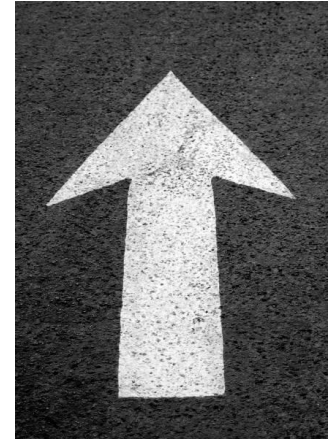
- Examples
 - Reduce speed limit from Smyrna into Nashville
 - Reduce speed limit for trucks in Chattanooga



Proposed Projects & Strategies

- Operational – Narrow Lanes
 - 6 proposals by citizens
 - 2 specific projects and/or strategies

- Examples
 - Widen narrow lanes between Haywood Lane (Exit 57) and Hickory Hollow Pkwy (Exit 60)
 - Widen narrow lanes in major cities like Nashville & Chattanooga



Proposed Projects & Strategies

- Policy – Beautification
 - 6 proposals by citizens
 - 3 specific projects and/or strategies
- Examples
 - Consolidate billboards and add landscaping at interchanges
 - Exit 59 Bell Road interchange



Proposed Projects & Strategies

- Operational – Signals
 - 5 proposals by citizens
 - 2 specific projects and/or strategies
- Examples
 - Install traffic lights on westbound at Rossvie Road (Exit 8)
 - Improve traffic signal patterns at Bell Road (Exit 59) to mitigate traffic issues coming onto I-24



Proposed Projects & Strategies

- Operational – Truck Lanes
 - 6 proposals by citizens
 - 5 specific projects and/or strategies
- Examples
 - Exit 169 - Exit 178
Dedicate EB truck climbing lane in Chattanooga
 - Add a commercial vehicle/truck lane through metro areas



Proposed Projects & Strategies

- Rock Fall/Slide Mitigation
 - 5 proposals by citizens
 - 1 specific project and/or strategy
- Examples
 - Mitigate rock slide issues on Monteagle mountain (Exit 135 - Exit 143)



Roadway Construction Costs

- Add one lane in both directions
 - Rural & Flat - \$7 million per mile
 - Urban & Mountainous - \$27 million per mile

- Bridge - Add one lane in both directions for a typical 300' bridge
 - \$1 million - \$1.5 million



Other Roadway Construction Costs

- New Interchange - Rural
 - \$8 million - \$36 million
- New Interchange - Urban
 - \$18 million - \$86 million

- Traffic Signal
 - \$90,000 - \$120,000 per installation



Transit Capital Costs

- Express Bus
 - \$100,000 - \$300,000 per mile
- Bus Rapid Transit - Exclusive
 - \$3 - \$10 million per mile
- Commuter Rail
 - \$5 - \$15 million per mile
- Light Rail Transit
 - \$40 - \$70 million per mile



Questions

