Performance Measures

In evaluating projects the RTID statute requires considering:

- **Reduced level of congestion and improved safety**
- **Improved travel time**
- **Improved air quality**
- **Increases in person and vehicle trip capacity**
- **Reductions in person and vehicle delay**
- **Improved freight mobility**
- **Cost effectiveness**

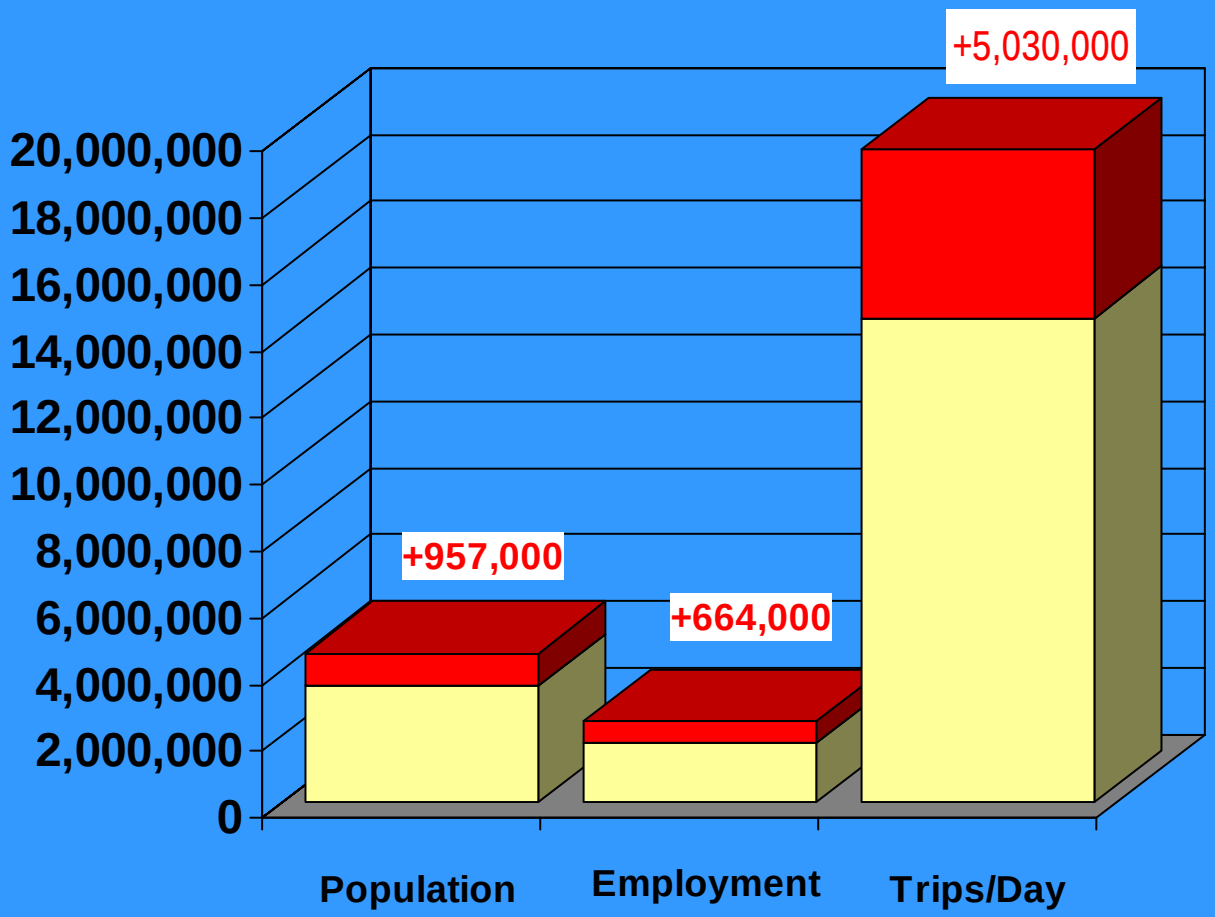
Methodology

- Analysis uses best practice (PSRC Regional model)
- System Level Modeling
  - Population and employment based on local and regional GMA plans
  - All improvements tested together as a system
  - System performance measured for 3 Counties (King, Snohomish, & Pierce).
  - Projects then tested individually
  - Performance improvement measured against 2028 baseline congestion

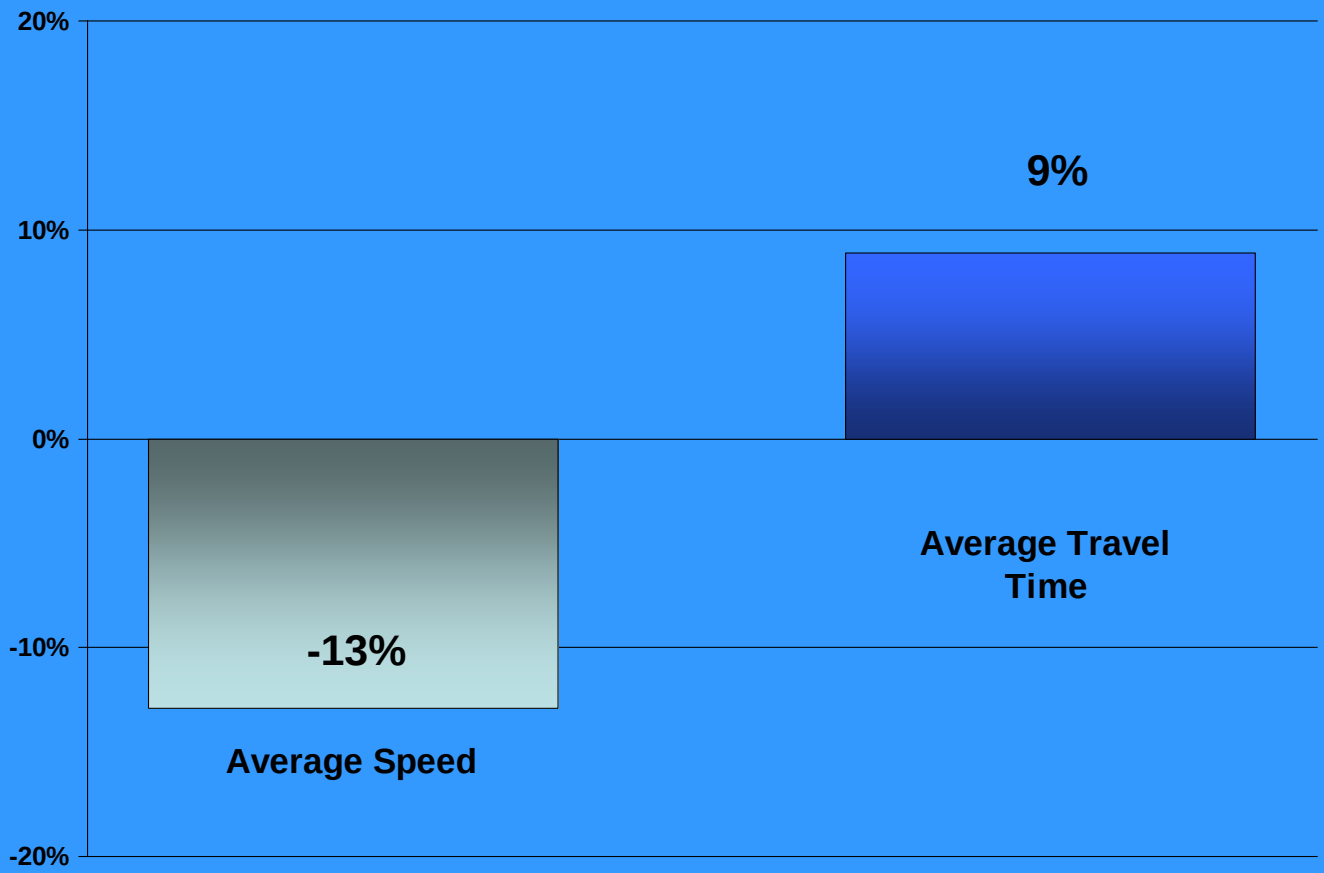
Important Notes

- System analysis based on RTID projects defined as of May 23, 2007
- Two future scenarios analyzed:
    1) 2028 baseline including all state funded projects plus Sound Move
    2) 2028 baseline without state funded projects (still includes Sound Move)
- ST2 projects included in 2028 system level performance benefits

Looking Ahead, Let's Keep This in Mind: Region's Growth Through 2028



Scenario 1 - 2028 Baseline
PM Peak Period



System Analysis – 2 Scenarios

First Scenario

- **2028 Baseline (including state funded projects and Sound Move)**
- **2028 RTID/ST2**

Second Scenario

- **2028 Baseline (without state funded projects)**
- **2028 RTID/ST2 plus state investments**

Scenario 1 - Baseline Network

- Existing network plus local projects planned to be completed by 2028
- Funded state highway projects
- Sound Move is completed
- Other anticipated transit investments planned to be completed by 2028

Scenario 1 - 2028 Build Network

- Network included in 2028 baseline, plus
- RTID Proposal (as of May 23, 2007)
  - 186 added lane-miles
    - 30 miles of HOV lanes
    - 4 Miles of Transit (BAT) Lanes
    - 152 miles of general purpose lanes
  - ST2 Light Rail construction - 164th/Ash Way to Tacoma Dome and Seattle CBD to Overlake

Scenario 1 - 2028 RTID Build
Additional Lane Capacity

Freeway GP	77	Lane Miles
Freeway HOV	30	Lane Miles
Other GP	75	Lane Miles
Transit (BAT) Lanes	4	Lane Miles
Total Roads	186	Lane Miles

Scenario 1 - 2028 RTID Build: Improved Freight Mobility

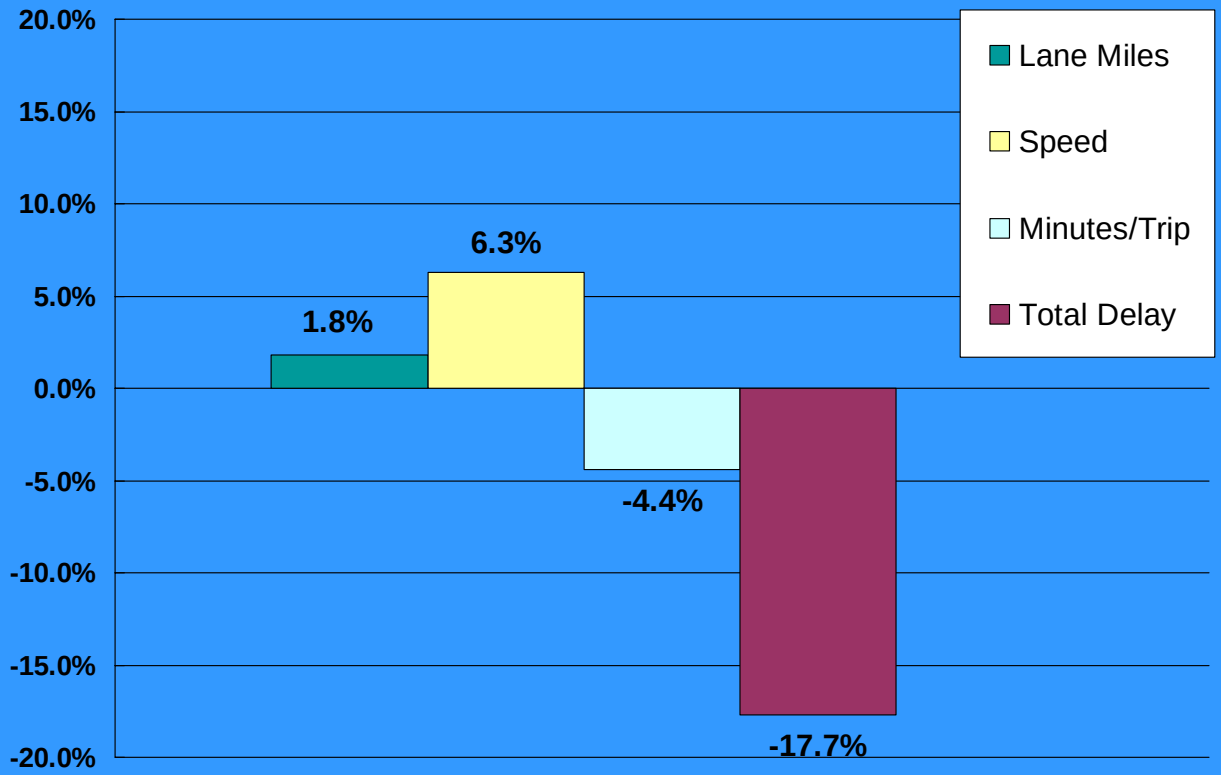
- Many proposed improvements are on major freight routes
- System wide, truck hours delay reduction is estimated at 10,900 hours/day
- Translated to dollar value, it would save about $160M/yr. in freight shipping costs

Scenario 1 - 2028 RTID Build: Improved Safety

- 50 high accident locations in the three county area will be addressed
- 88 centerline miles of high accident corridors will be addressed
- Three seismically vulnerable structures will be upgraded (SR 520, South Park Bridge and Spokane Street Viaduct)

Scenario 1 – With RTID/ST2 the system will experience improved performance

1.8% additional system lane miles plus 50 miles of additional light rail produce higher speeds and reduce both travel time and overall delay

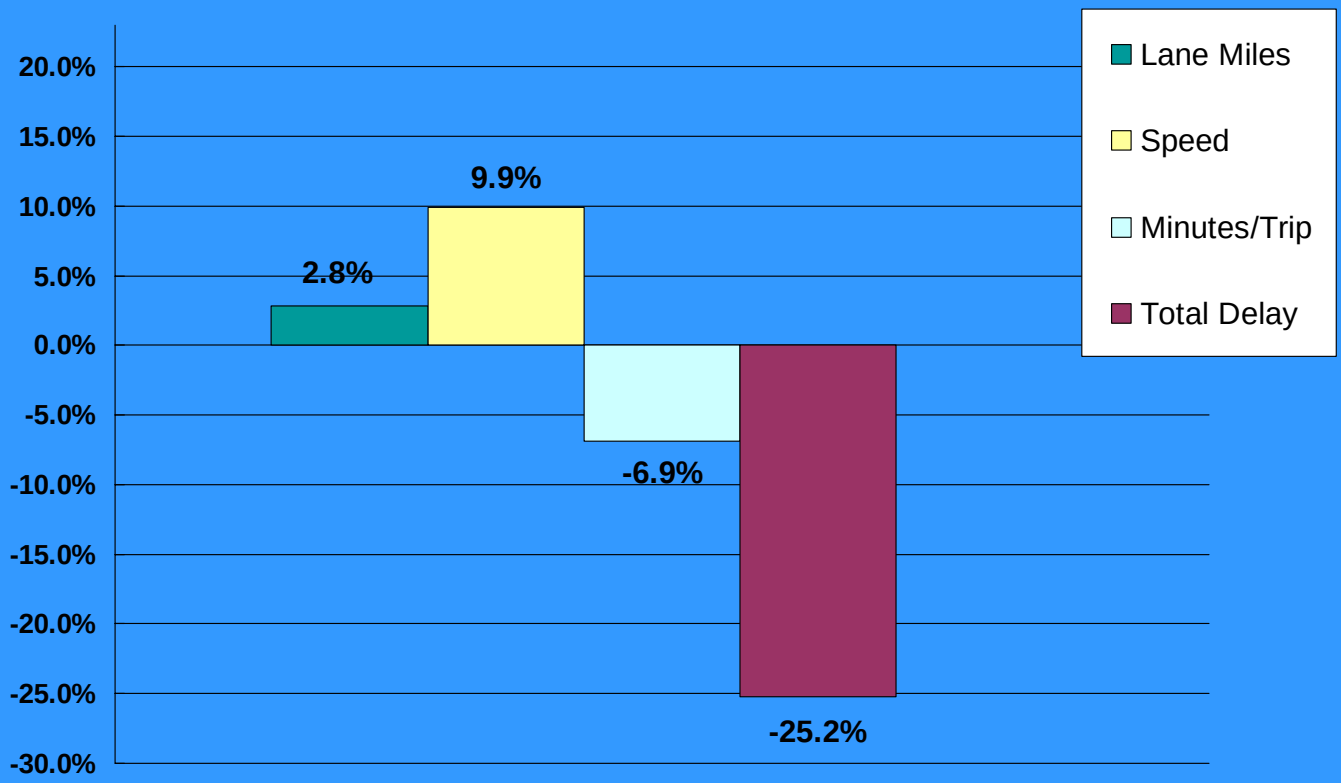


Scenario 2 – State funded plus RTID Improvements: Additional Lane Capacity

Freeway GP	122	Lane Miles
Freeway HOV	79	Lane Miles
Other GP	107	Lane Miles
Other HOV	5	Lane Miles
Total Roads	313	Lane Miles

Scenario 2 - When the funded state improvements are added to the RTID/ST 2 investment, system performance is significantly improved.

2.8% additional system lane miles plus 50 miles of additional light rail produce higher speeds while travel time and total delay are significantly reduced.



Conclusions

- **RTID in conjunction with the Sound Transit 2 package provides significant regional system benefits including increased speed, reduced travel time, reduced delay and reduced emissions**
- **RTID projects are in locations that address congestion, safety, and freight mobility**
- **By investing in major roadways, traffic impacts in neighborhoods will be reduced**