

Eastside Corridor Independent Traffic and Revenue Study

Survey Briefing

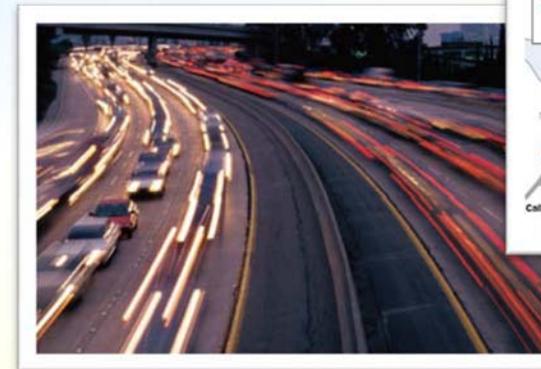
presented to

**Washington State
Transportation Commission**

presented by

**Cambridge Systematics, Inc.
Jeff Buxbaum**

July 19, 2011



Traffic and revenue study questions

- **Are express toll lanes a workable solution in the I-405/SR167 corridor?**
- **What range of revenue will they generate?**
- **How will express toll lanes impact traffic operations?**

Traffic and revenue study methods

- Evaluate existing traffic conditions
- Forecast future corridor growth
- Evaluate choices:
 - » Use general purpose lanes without tolls
 - » Change to transit or HOV to get free ride
 - » Pay toll and use express toll lane
- Incorporate risk of alternative outcomes

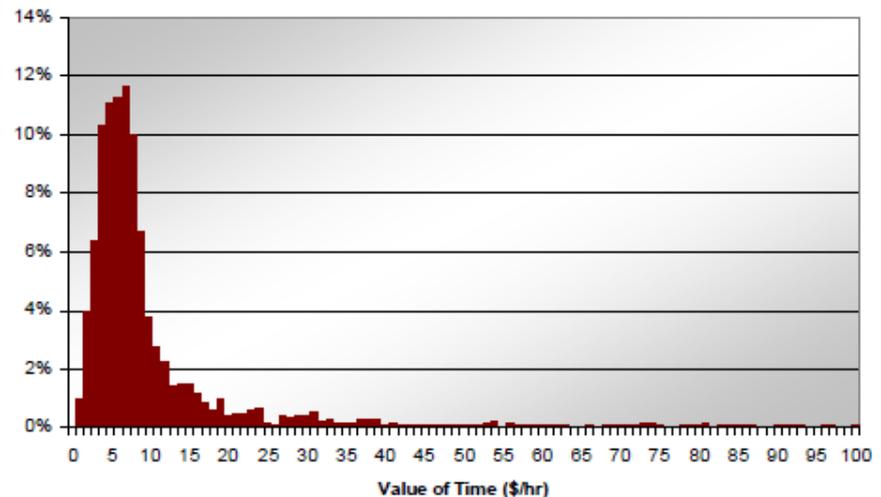
Role of surveys on this project

- **Stated preference (SP) surveys aim to understand how people will respond when faced with new choices**
 - » Gets at the issue of “willingness to pay”, or “value of time”
 - » One element of forecasting, including experience on similar projects
- **Attitudinal surveys aim to understand how people feel about the project**
 - » Not directly related to traffic and revenue analysis

Role of value of time

- **Varies by person, by situation**
 - » **Aggregated in logical ways to be useful for our modeling**
- **Trade off depth of analysis to cost of collection and ability to incorporate into travel demand model**
- **Survey data just one element to these estimates**

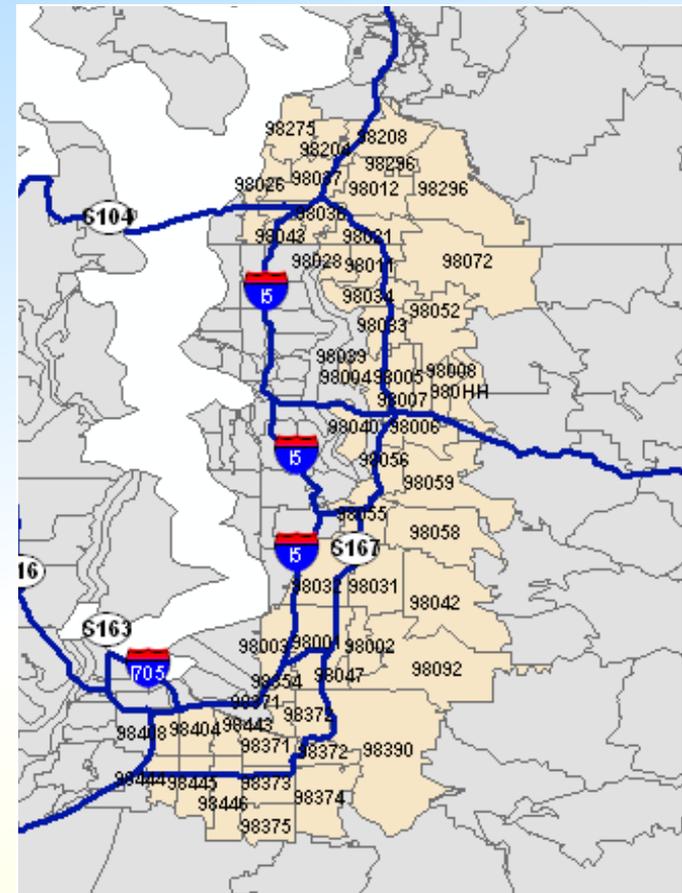
Figure 23: Distribution of Individual Values of Time



Source: *I-405 Managed Lanes Stated Preference Survey*, Resource Systems Group, 2006

Sampling Plan (Tentative*)

| Type | Expected responses |
|---|--------------------------------|
| E-mail distribution to employees in or near corridor | 300 |
| Email distribution to members of online research panel | 700 |
| Postcard distribution to random sample of households in corridor region | 500-1000 (50,000 postcards) |
| Total | 1,500 minimum |



Methods and quotas

- **Online survey customizes questions to people's trips and previous responses**
- **RSG will monitor trip characteristics and demographics in real time to adjust sample plan during survey**
- **Sample sizes to allow model four segments**
 - » 400 work; 400 non-work
 - » 400 peak; 400 off-peak
- **By location:**
 - » 300 residents south of I-90
 - » 300 residents north of I-90

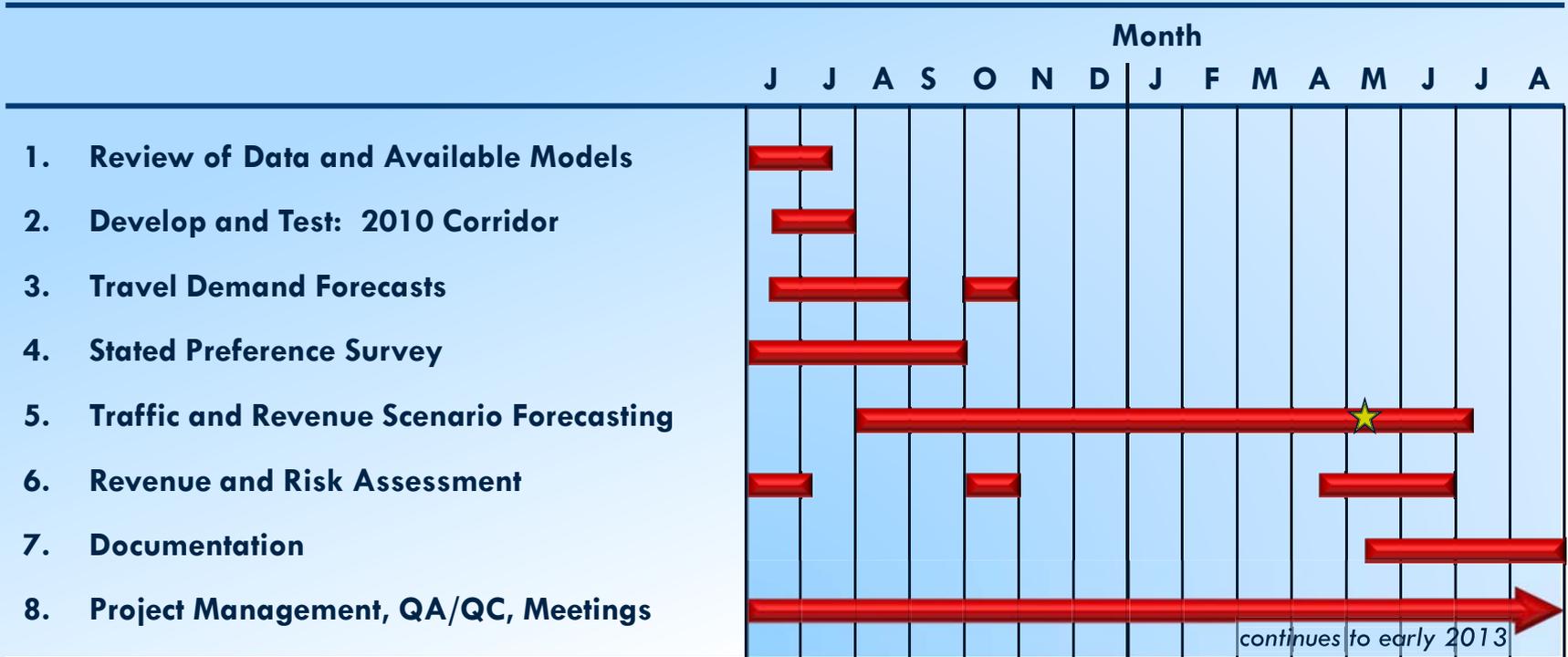
Attitudinal questions

- **Will probe attitudes regarding:**
 - » Existing congestion levels
 - » Level of agreement with the Express Toll Lanes solution
 - Compared to doing nothing
 - » Level of agreement with moving to HOV3 if that resulted in better corridor traffic flow
- **Keep it short and simple**

Stated preference survey schedule

| Task | Weeks from Notice-to-Proceed | | | | | | | | | | | | | |
|------------------------------------|------------------------------|---|---|---|---|---|---|---|---|----|----|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| Task 1: Questionnaire Design | █ | █ | █ | | | | | | | | | | | |
| Task 2: Survey Development | | █ | █ | █ | █ | █ | █ | █ | | | | | | |
| Task 3: Administration Planning | | █ | █ | █ | █ | █ | █ | █ | | | | | | |
| Task 4: Survey Administration | | | | | | █ | █ | █ | █ | █ | | | | |
| Task 5: Data Analysis and Modeling | | | | | | | | | | █ | █ | █ | █ | █ |
| Task 6: Reporting | | | | | | | | | | | █ | █ | █ | █ |

Study Schedule and Key Milestones



Key Milestones

- Stated Preference Survey Complete in October 2011
- ★ Optional delivery of HOV2+ and HOV3+ free scenario findings for use in WSDOT financial planning
- Technical Work Complete by July 2012
- Present Findings to WSTC in the Fall of 2012 and to Legislature before 2013 Legislative Session

Thank you...
Questions?