

Is There a Market for Avoided Vehicle Trips?

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Is There a Market for Avoided Vehicle Trips?

Presentation Overview

- What is the vision?
- What is the market?
- What have we attempted so far?
- What have we learned?

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Presentation Overview

The Basic Questions

- Will the **profit motive** encourage employers or entrepreneurs to develop effective programs?
- Will a **market develop** and lead to more cost effective transportation solutions?

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The Basic Questions

Vision

- **State investments will be made without bias** to demand or supply side capacity
- **Sellers meet needs for transportation services** with demand side, supply side and combined strategies

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Vision

What Is an Avoided Vehicle Trip?

- A set amount of access or mobility provided using one less vehicle trip
- For a worksite, providing a set of employees access to work with one less vehicle trip

MEASURE:

Annualized avoided vehicle trips or one daily trip avoided for a year

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What Is an Avoided Vehicle Trip?

What Is an Avoided Vehicle Trip Market?

- A system that facilitates buying and selling avoided vehicle trips
- A system that establishes a value for avoided vehicle trips
- A system that brings sellers together with the buyer

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What Is an Avoided Vehicle Trip Market?

Who Is the Buyer?

Washington State (DOT)

- Responsible for providing and maintaining highway capacity
- WSDOT approaches for influencing demand and creating capacity (supply) differ

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Who Is the Buyer?

Who Might Be the Sellers?

- Entrepreneurs
- Employers
- Public agencies
- Highway contractors
- Others?

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Who Might Be the Sellers?

What have we attempted?

Various market models since 2003

City	Price Per Trip	No. of Sellers	Potential Budget	No. of Trips
Bellevue	\$175	42	\$470K	1,700
Redmond	\$300	17	\$800K	300
Issaquah	\$250	TBD	\$ 98K	86
Renton/ Federal Way	\$250	21	\$398K	420

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What have we attempted?

Developing a Statewide Market

2003 Legislative direction (RCW 70.94.996):

Develop an entrepreneurial grant program

- Grant amount “based on the value to the transportation system”
- “Priority given to applications achieving the greatest reduction in trips and commute miles per public dollar requested”

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Developing a Statewide Market

Developing a Statewide Market

- **Considerations**
 - Local cost of providing new highway capacity
 - Congestion levels
 - Geographic distribution
- **Purchase \$1,500,000 worth of avoided trips**

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Developing a Statewide Market

Implementation Issues

- How much are we willing to pay per trip?
- Will our willingness to pay vary
 - With location?
 - With time?

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Implementation Issues

Implementation Issues

- Who bears the financial risk?
- How do we demonstrate avoided trips?
- How do we communicate the purpose
 - To potential suppliers (so that they will bid)?
 - To other transportation stakeholders?

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Implementation Issues

What we've done in 2003/4

Goal: Keep it simple

- \$460/annualized trip set as a statewide maximum
- Risk is shared between seller and buyer
- Measurement is based on CTR surveys
- Training provided to potential sellers

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What we've done in 2003/4

First Year (Pre-measurement) Results

SELLERS Offered:

- 50 proposals
- \$3.1 million total

BUYER Accepted:

- \$1.5 million for 34 projects
- 5,022 avoided trips
- 137,000 daily VMT reduction

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First Year (Pre-measurement) Results

First Year (Pre-measurement) Results

LEAST expensive
trip offered:

\$48 per
annualized trip

MOST expensive
trip offered:

\$460 per
annualized trip

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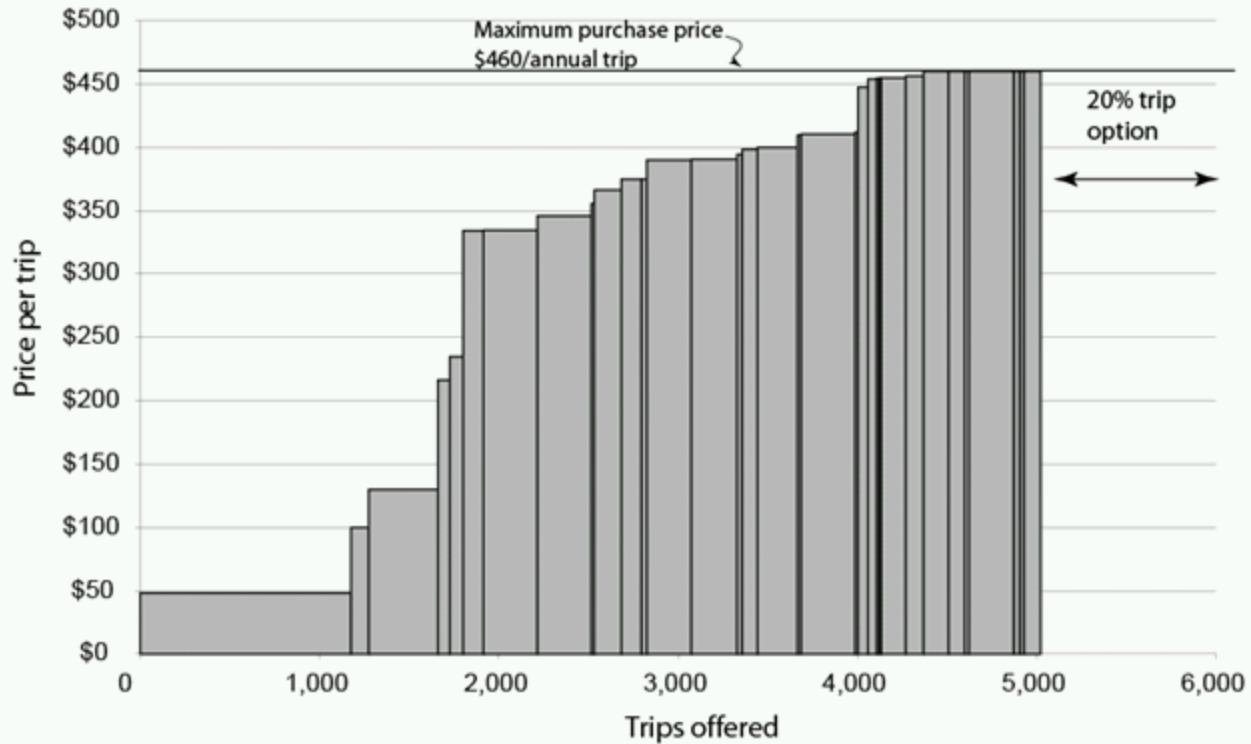
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First Year (Pre-measurement) Results

Avoided trip supply curve, as offered

2003-2004



5,022 annualized avoided trips were offered at \$460 per trip or less. An average of \$296 per avoided trip. If possible, providers can sell 120 percent of their contracted trips at their offered sale price.

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Examples of Projects

- **Unico (property developer) & FlexCar**
 - Purchase transit passes
 - Purchase car sharing memberships
- **CommuterChallenge (non-profit)**
 - Provide incentives to employees at small worksites
- http://www.wsdot.wa.gov/dm/program_summaries/pg_intro.cfm

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Examples of Projects

What have we learned?

- Program created a market
 - Avoided trips were valued
 - Avoided trips were offered
 - Offers were accepted
- Questions outstanding
 - How many trips will actually be avoided (and paid for)?
 - How will the measurements be made?
 - What resources are required to start and administer a program of this sort?

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What have we learned?

Lessons From 2003/4

- **Things to fix**
 - Ensure sufficient staff and time to fully develop program
 - Too much of the same—haven't tapped into the potential
 - Vary maximum payment amount based on avoided trip value
 - Many outstanding questions

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Lessons From 2003/4

Next Steps

Research underway

- How can we vary maximum trip payments?
- Can the program target investments in key areas?
- How do we attract the entrepreneurial crowd?
- How can the measurement be improved?
- How can communications be improved?
- How robust is the supply curve?

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Next Steps

Future Steps

- **Evaluate the persistence of avoided trips**
 - The 2003/4 program has an annual time frame
 - It pays for avoiding additional trips
 - It pays nothing for continuing to avoid a trip after the first year
 - How long do avoided trips stay avoided?

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Future Steps

Future Steps

- Determine the on-going costs
- Evaluate whether a market can lead to more effective decision: least cost planning

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Future Steps

Questions?

- **CTR Performance Grants link:**
 - http://www.wsdot.wa.gov/fdm/program_summaries/pg_intro.cfm
- **Commute Trip Reduction link:**
 - http://www.wsdot.wa.gov/fdm/program_summaries/ctr_summ.cfm

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Questions?