Washington State
Road Usage Charge Assessment

Steering Committee Meeting #8

October 14, 2013
WELCOME AND INTRODUCTIONS
What We Need to Accomplish Today

- Listen to the business case evaluation
  - Get your questions answered
  - Discuss what you’ve heard
  - Help formulate any further analysis you think needs attention
- Indicate any preferences for concepts
- Identify issues that you’d like answered in the next phase of work (if desired and funded)
- Point the consultants toward any recommendations you would like them to include in the draft final report you will review in November
PUBLIC COMMENT
OVERVIEW
2013 Legislate Directive¹

Work to be done

- Develop preliminary road usage charge policies that are necessary to develop the business case, as well as supporting research...
- Develop the preferred operational concept(s) that reflect the preliminary policies
- Evaluate the business case....must assess likely financial outcomes
- Identify and document policy and other issues that are deemed important to further refine....to gain public acceptance.
  » Should form the basis for continued work...

¹ESSB 5024 Section 205(3)
Project Schedule

Legislatively Directed Dates

- Progress reports to the Joint Transportation Committee and Governor
  - Mandated by November 1, 2013
  - Met with Joint Transportation Committee on October 9, 2013

- Final Report
  - December 15, 2013
    - Possible extension
    - Finalize simplified business case analysis
    - In the meantime we will continue to stay on track
### Project Work Plan Status

**June 2013 through February 2014 – As of Today 10/14/13**

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - Develop Road Usage Charge Policy Statements</td>
<td>Develop road usage charge policy statements for use in refining road usage charge concepts in Task 2</td>
</tr>
<tr>
<td></td>
<td><strong>100%</strong></td>
</tr>
<tr>
<td>2 - Refine Operational Concepts</td>
<td>Develop operational concepts that reflect the policies developed in Task 1</td>
</tr>
<tr>
<td></td>
<td><strong>100%</strong></td>
</tr>
<tr>
<td>3 - Evaluate the Business Case</td>
<td>Evaluate the value proposition of potential road usage charging systems developed in Task 2 compared to the existing gas tax</td>
</tr>
<tr>
<td></td>
<td><strong>90%</strong></td>
</tr>
<tr>
<td>4 - Documentation and Budget Preparation</td>
<td>Document the suggested findings resulting from the work conducted in Tasks 1 through 3, culminating in a final report from the Commission to the Governor and Legislature, including a workplan and budget for the next year</td>
</tr>
<tr>
<td></td>
<td><strong>30%</strong></td>
</tr>
</tbody>
</table>
Overview of Material for Today’s Discussion

- Forecasts
- Operational concepts
- Financial evaluation
- Qualitative evaluation
- What a road usage charge means for motorists
- Issues to address in future work (the “parking lot”)
FORECASTS
Forecast Overview

- We prepared a range of forecasts to evaluate the business case
  - State forecast
  - Alternative forecast that generates lower revenue estimates (more “conservative”)

- Who would pay the road usage charge?
  - All non-diesel vehicles including those that run on:
    - Gasoline
    - Gasoline/electric hybrid
    - All-electric/alternative fuels
  - Diesel vehicles would continue to pay diesel tax
“State” Forecast

- Supplied by WSDOT based on forecast data developed by the Transportation Revenue Forecast Council
  - Passenger car and truck registrations (by weight category)
  - Vehicle miles traveled (VMT)
  - Gasoline consumption
  - Fuel efficiency (of the U.S. fleet)
  - Gasoline tax revenue

- Extended to 2040 by WSDOT

- Most recent quarterly forecast available when did the work
# Alternative Forecasts

**Scenarios that would generate less revenue**

<table>
<thead>
<tr>
<th>Category</th>
<th>Basis for Low Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicle Registrations</td>
<td>10 percent below the State forecast</td>
</tr>
<tr>
<td>VMT</td>
<td>Tied to VMT reduction benchmarks found in RCW 47.01.440</td>
</tr>
<tr>
<td>Gasoline Consumption</td>
<td>Lower VMT and higher fuel efficiency</td>
</tr>
<tr>
<td>Fuel Efficiency</td>
<td>Higher fuel efficiency as forecast by Global Insight</td>
</tr>
<tr>
<td>Gas Tax Revenue</td>
<td>Low VMT and high fuel efficiency</td>
</tr>
</tbody>
</table>
Registered Non-Diesel Vehicles
State Forecast and Low Scenario

Total Non-Diesel Vehicles
(Millions)

State Forecast
Low Scenario
10 percent below
the State forecast

Historic
VMT for Non-Diesel Vehicles
State Forecast and Low Scenario

VMT per Non-Diesel Vehicles (Billions)

State Forecast
Low Scenario
Historic

Tied to VMT reduction benchmarks found in RCW 47.01.440

VMT per Non-Diesel Vehicles (Billions)


Washington State Road Usage Charge Assessment
Gasoline Consumption
State Forecast and Low Scenario

Total Gas Consumption ( Millions of Gallons )

- Historic
- State Forecast
- Low Scenario

Lower VMT and higher fuel efficiency
Fuel Efficiency
State Forecast and High Fuel Efficiency Scenario

[Graph showing fuel efficiency trends from 1990 to 2040]

Historic
High Fuel Efficiency Scenario
As forecast by Global Insight
State Forecast
Gasoline Tax Revenue
State Forecast and Low Scenario

Total Gasoline Tax Revenue (Millions)

Historic
State Forecast
Low Scenario
Low VMT and high fuel efficiency

Washington State Road Usage Charge Assessment
OPERATIONAL CONCEPTS
Proposed Operational Concepts for Business Case Evaluation

Winnowed 8 operational concepts from prior work down to three to present a range of possibilities:

» A. Time Permit
   - Permit for unlimited road network access for a given period of time.

» B: Odometer Charge
   - Prepay for a standard amount of miles, and then reconcile actual miles

» C: Differentiated Distance Charge
   - In-vehicle device records miles driven inside and outside State borders and charges accordingly

» Plus, combinations - A&B; A&C; B&C; A+B+C
Concept A: Time Permit

Overview

- Principals buy a permit for an unlimited number of miles for a given period of time (such as one year), tied to vehicle registration transactions

Principal perspective

- User pre-purchases a permit for unlimited usage
- Permits are annual but can be paid in semiannual or quarterly installments
- Purchase and renewal is tied to vehicle registration
- Easy to enforce: valid tabs = valid permit
- Relatively easy to implement for out-of-state vehicles

Agency perspective

- Similar to Department of Licensing (DOL) current handling of vehicle registration, except adds functions for account and Customer Relations Management (CRM)
Concept B: Odometer Charge
Overview

- Principals pre-pay for the amount of miles they expect to drive over a given period (such as one year)
  - At period end, actual miles are reported and reconciled with amount prepaid
  - System does not distinguish miles driven in Washington vs. out-of-state

Principal perspective

- User estimates annual mileage and pre-purchases a permit to cover estimated miles
- At end of year, user reports actual miles traveled and reconciles payment (additional payment required or credit applied to next period), and pays in advance for following year
- Reporting periods can be annual, semiannual, or quarterly

Agency perspective

- Accounting and CRM would need to be significantly scaled up from current functions at State agencies
Concept C: Differentiated Distance Charge

Overview

- Principals use in-vehicle electronics to count miles traveled in state only
  - Represents the most technically involved of the three concepts and would require a sophisticated accounting and CRM system
  - Could be operated fully by a State agency, outsourced, or left to consumers to select methods of reporting and payment using existing service providers (Note: for the business case we assumed a state agency will operate all aspects)

Principal perspective

- User pays for road usage on Washington State at the end of each quarter, semester, or year
- Enforcement through device certification, compliance analytics, and odometer reading

Agency perspective

- Requires extensive account and CRM
- Similar to tolling, but scale of accounts would be much more than current capabilities
Combinations of Operational Concepts

- Time Permit (A) + Odometer Charge (B)
- Odometer Charge (B) + Differentiated Distance Charge (C)
- Time Permit (A) + Differentiated Distance Charge (C)
- Time Permit (A) + Odometer charge (B) + Differentiated Distance Charge (C)
Financial Criteria

- Sustainable revenue source
  » This is the overriding goal
  » The present value of the cash flow helps illustrate the differences among alternatives

- Cost-effectiveness
  » Annual cost of collection as a percent of gross revenues
  » Net revenue comparison
Non-Financial Criteria

Qualitative

» Qualitative scale: 0 through 4

» Transparency

» Complementary policy objectives

» Equity

» Simplicity

» Enforcement

» Privacy

Other Important Considerations

» Ability to distinguish between travel on Washington public roads and other roads

» Ability to charge non-Washington residents
Performance Criteria that Could be Met by Proper Design of a New System

We did not evaluate these criteria because they would be part of all concepts and will not help evaluate the differences among the concepts

» Data security
» Accountability
» System flexibility
» Interoperability and cooperation
» Phasing
» User options
High-Level Assumptions

- Road usage charge would replace the gas tax in 2015, with no transition period
  - Numerous ways to transition
  - If there is a business case to be made for any of the alternatives, the implications of different strategies can be evaluated in the next phase of work
  - The financial model is a good foundation from which to evaluate transition options

- Non-diesel vehicles are subject to the road usage charge
## Rate Assumptions

Rate setting prerogative of the Legislature and Governor, but we assumed:

- Gross revenue neutrality in 2015
  - Means that cost of collection is not included in rates
  - Net revenue neutrality would make the rates higher
- Current gas tax of 37.5 cents per gallon
- No inflation adjustments for gas tax or road usage charge

<table>
<thead>
<tr>
<th>Alternative</th>
<th>Rate</th>
<th>Unit</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing Gas Tax</td>
<td>$0.375</td>
<td>Gallon</td>
<td>Current rate</td>
</tr>
<tr>
<td>A. Time Permit</td>
<td>$174</td>
<td>Year</td>
<td>This equals the average annual gas tax paid in Washington forecast for 2015, which is total annual gas tax collections divided by the number of registered non-diesel vehicles</td>
</tr>
<tr>
<td>B: Odometer Charge</td>
<td>$0.019</td>
<td>Mile</td>
<td>An amount equal to the total gas tax collections in Washington forecast for 2015 divided by the total number of miles driven by Washington non-diesel vehicles</td>
</tr>
<tr>
<td>C: Differentiated Distance Charge</td>
<td>$0.019</td>
<td>Mile</td>
<td>An amount equal to the total gas tax collections in Washington forecast for 2015 divided by the total number of miles driven by Washington non-diesel vehicles</td>
</tr>
</tbody>
</table>
Gas Tax Collection Cost Assumptions

- Preliminary analysis of DOL’s 2011-2013 biennial budget suggests that the cost to collect the gas tax represents about 0.8 percent of gas tax revenues annually
- Other national studies confirm this general range
- DOL updating estimates, with results expected December 2013
Summary Findings

- We developed a conservative picture of road usage charging and gas tax revenues to 2040

- Concepts A, B, and C all outperform gas tax by anywhere from $30 million to just under $4 billion on a net present value basis over the 2015-2040 period
  - De-coupling revenues from gas consumption is the biggest driver
  - The simplest systems (A and B) suggest a larger differential, because of lower collection costs and initial capital outlays
  - It may take 5+ years, conservatively, to make up the initial costs of implementing the new system, excluding any additional costs from an extended transition period (which may not be necessary, depending on the concept)
  - The $30 million difference scenario is probably unrealistic: Concept C without other options plus other extremely conservative operational assumptions
Summary Findings (continued)

- Combinations of concepts may not be meaningfully different than pure concepts

- None of the concepts appear to outshine the others in terms of the other policy objectives
  - Interpretations as to which concept may be “better” will depend heavily on the policy priorities of the individual

- We assumed no involvement by private service providers for account management
  - Service providers would only be involved if there are demonstrated cost savings
  - Oregon is developing a private service provider market—Washington could allow certification of the same providers

- A long transition period might meaningfully change the results of the financial evaluation
Components of the Financial Model

Forecasts for 2015-2040
  » Non-diesel vehicle registrations
  » Gasoline consumption in Washington (used to compute tax revenues)
  » Non-diesel VMT in Washington
  » Fuel efficiency

Operational and economic assumptions
  » Expected adoption rates of each operational concept
  » Audit rates
  » Salary costs
  » IT equipment costs
  » Credit card merchant fees
  » Inflation and discount rates

Computations

Outputs
  » Present value of gross revenues and costs of collection and the net present value for 2015-2040
Major Cost Categories

*Administration and Collection*

- Program administration
- Account management
- Information technology (IT)
- **Enforcement**
  - Lost revenue due to evasion
  - Cost of recovering unpaid tax debt
  - Cost of audit
- Public relations
- Cash flow
Example of Road Usage Charge Costs by Category
for Concept A, B & C (2015-2040)

Dollars (Millions)

- High early year costs due to startup
- Peaks are periodic IT updates

Program Admin
Audit
Evasion
Collections
IT
Cash Flow
Public Relations
Account Management

Washington State Road Usage Charge Assessment
Assumptions – Cost of Road Usage Charge Collection

Account management

» Concepts A & B: 30% online, 35% in person, 35% via mail
» Concept C: 60% online, 20% in person, 20% via mail
» By 2025, all concepts increase to 90% online payment
» Costs include in-vehicle hardware and communications for Concept C

Evasion

» Concepts A & C: 95% compliance (among already-compliant registered vehicles) with no audits
» Concept B: 90% compliance (among already-compliant registered vehicles) with no audits

IT

» Upfront costs of $20 million
» 10% annual maintenance, 75% major maintenance every 8 years
» 10 FTE to operate

Cash flow

» 1% interest on short-term loans to make net prepay road usage charge revenue equal to net gas tax revenue, rising to 4% by 2020
Other Important Assumptions

- 2% Inflation
- 3% Discount Rate
- Gas tax collection cost = 0.8% of gross revenues
- Road usage charge rate set in 2015 to be gross revenue neutral with gas tax
- Conservative fuel efficiency:

<table>
<thead>
<tr>
<th>Scenario</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
<th>2040</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Forecasts: average fleet MPG</td>
<td>20.0</td>
<td>21.8</td>
<td>23.1</td>
<td>24.4</td>
<td>25.6</td>
<td>26.7</td>
</tr>
<tr>
<td>Low fuel consumption scenario: average fleet MPG</td>
<td>20.0</td>
<td>22.9</td>
<td>25.2</td>
<td>27.9</td>
<td>30.7</td>
<td>34.3</td>
</tr>
</tbody>
</table>
32 Scenarios Tested

Eight combinations of adoption rates for the concepts:

- Gas tax only
- Concept A only
- Concept B only
- Concept C only
- Concepts A & B
- Concepts A & C
- Concepts B & C
- Concepts A & B & C

Four combinations of forecast assumptions:

- State forecast of VMT and fuel efficiency
- State forecast of VMT and alternative forecast of fuel efficiency
- Alternative VMT forecast and State forecast of fuel efficiency
- State forecast of VMT and fuel efficiency, scaled down to reflect alternative forecast of registered vehicles
## Present Values of Revenues, Costs, Net and Percent Cost of Collection (2015-2040) – All Scenarios

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</thead>
<tbody>
<tr>
<td><strong>Basic Road Usage Charge System Adoption Rates</strong></td>
<td></td>
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</tr>
<tr>
<td>Gas Tax</td>
<td>$17.1</td>
<td>$0.2</td>
<td>$16.9</td>
<td>1.0%</td>
<td>$15.5</td>
<td>$0.2</td>
<td>$15.3</td>
<td>1.1%</td>
<td>$15.5</td>
<td>$0.2</td>
<td>$15.4</td>
<td>1.1%</td>
</tr>
<tr>
<td>100% A</td>
<td>20.5</td>
<td>1.4</td>
<td>19.0</td>
<td>6.9%</td>
<td>20.5</td>
<td>1.4</td>
<td>19.1</td>
<td>6.9%</td>
<td>20.5</td>
<td>1.4</td>
<td>19.1</td>
<td>6.9%</td>
</tr>
<tr>
<td>100% B</td>
<td>19.8</td>
<td>1.6</td>
<td>18.2</td>
<td>8.0%</td>
<td>19.8</td>
<td>1.6</td>
<td>18.2</td>
<td>7.9%</td>
<td>17.9</td>
<td>1.5</td>
<td>16.4</td>
<td>8.5%</td>
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<td>100% C</td>
<td>19.8</td>
<td>2.5</td>
<td>17.3</td>
<td>12.7%</td>
<td>19.8</td>
<td>2.3</td>
<td>17.5</td>
<td>11.6%</td>
<td>17.9</td>
<td>2.5</td>
<td>15.4</td>
<td>13.8%</td>
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<td><strong>Variations in Road Usage Charge System Adoption Rates</strong></td>
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</tr>
<tr>
<td>5% A – 95% B</td>
<td>19.8</td>
<td>1.6</td>
<td>18.2</td>
<td>7.9%</td>
<td>19.8</td>
<td>1.6</td>
<td>18.2</td>
<td>7.9%</td>
<td>18.0</td>
<td>1.5</td>
<td>16.5</td>
<td>8.4%</td>
</tr>
<tr>
<td>40% A – 60% C</td>
<td>20.1</td>
<td>2.0</td>
<td>18.1</td>
<td>9.9%</td>
<td>20.1</td>
<td>1.9</td>
<td>18.2</td>
<td>9.4%</td>
<td>18.9</td>
<td>1.9</td>
<td>17.0</td>
<td>10.1%</td>
</tr>
<tr>
<td>40% B – 60% C</td>
<td>19.8</td>
<td>2.1</td>
<td>17.7</td>
<td>10.4%</td>
<td>19.8</td>
<td>2.0</td>
<td>17.8</td>
<td>9.9%</td>
<td>17.9</td>
<td>2.0</td>
<td>15.9</td>
<td>11.3%</td>
</tr>
<tr>
<td>5% A – 50% B – 45% C</td>
<td>19.8</td>
<td>1.9</td>
<td>17.9</td>
<td>9.7%</td>
<td>19.8</td>
<td>1.8</td>
<td>18.0</td>
<td>9.3%</td>
<td>18.0</td>
<td>1.9</td>
<td>16.1</td>
<td>10.3%</td>
</tr>
</tbody>
</table>

*Washington State Road Usage Charge Assessment*
Present Value of Net Tax Revenue
Alternative Concepts and Scenarios 2015-2040

All road usage charge concepts have considerably higher net present value than gas tax.
Present Value of Annual Net Revenues

Gas Tax vs. Concepts A & B & C

$ Millions

Road usage charge present value catches up with gas tax in 9 years
Cumulative Net Present Value
Gas Tax vs. Concepts A & B & C

Billions

- Road Usage Charge - Combination of Concepts A, B, and C
- Gas Tax

CUMULATIVE Road usage charge present value catches up with gas tax in 16 years
Present Value of Annual Net Revenues
Gas Tax vs. Concept B, High Fuel Efficiency

Billions

Road usage charge present value catches up with gas tax in 3 years
Cumulative Net Present Value

Gas Tax vs. Concept B, High Fuel Efficiency

Billions

$20
$18
$16
$14
$12
$10
$8
$6
$4
$2
$0

2015 2020 2025 2030 2035 2040

Road Usage Charge - Concept B  Gas Tax

CUMULATIVE Road usage charge present value catches up with gas tax in 7 years
Concept B Sensitivity Tests

Present Value of Revenue minus Cost

Discount rate and compliance rates have highest impact

<table>
<thead>
<tr>
<th>Change</th>
<th>Dollars (Billions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Forecast (no changes from baseline scenario)</td>
<td>$1.3</td>
</tr>
<tr>
<td>Discount rate from 3% to 6%</td>
<td>$0.7</td>
</tr>
<tr>
<td>Online payments from 90% in 2025 to 50% in 2025</td>
<td>$1.0</td>
</tr>
<tr>
<td>Time to audit a Concept B account from 1 hour to 4 hours</td>
<td>$1.0</td>
</tr>
<tr>
<td>Inflation from 2% to 4%</td>
<td>$1.1</td>
</tr>
<tr>
<td>IT costs from $15M to $50M</td>
<td>$1.1</td>
</tr>
<tr>
<td>PR costs triple</td>
<td>$1.2</td>
</tr>
<tr>
<td>Auditing 1% only results in 90% compliance (instead of 95%)</td>
<td>$0.6</td>
</tr>
<tr>
<td>Gas tax collection costs are 3% of revenues</td>
<td>$1.6</td>
</tr>
</tbody>
</table>

Washington State Road Usage Charge Assessment
Key Findings

Road usage charging is expected to outperform gas tax

» Difference ranges from $30 million to $4 billion in net present value between 2015-2040

» Biggest reason: de-coupling revenues from gas consumption

» The simplest systems (A and B) may have a larger differential, because of lower road usage charge collection costs

» It may take 5+ years, conservatively, to make up the initial costs of implementing the new system

Combinations of concepts are not meaningfully different

A state agency could collect road usage charges for ~10% of revenues

» Service providers should only be used if they can drive that figure even lower

» Service providers from Oregon and could be certified for Washington State
Other observations:

» IT costs are important, but do not significantly change the expected outcome if higher costs are assumed.

» These factors were not that important:
  – IT maintenance
  – Cost of an audit (materials)
  – Burden rate
  – Management staffing levels
  – Equipment failure rate
  – PR costs
BUSINESS CASE EVALUATION – QUALITATIVE
Qualitative Criteria are More Subjective and not Quantifiable

**Qualitative**
- Qualitative scale: 0 through 4
- Transparency
- Complementary policy objectives
- Equity
- Simplicity
- Enforcement
- Privacy

**Other Important Considerations**
- Ability to distinguish between travel on Washington public roads and other roads
- Ability to charge non-Washington residents
Ratings are the subjective judgment of the consultant team and are included simply to provide a starting point for the Steering Committee’s consideration:

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completely Satisfies Criteria</td>
<td>🌟🌟🌟🌟</td>
</tr>
<tr>
<td>Mostly Satisfies Criteria</td>
<td>🌟🌟🌟</td>
</tr>
<tr>
<td>Moderately Satisfies Criteria</td>
<td>🌟🌟</td>
</tr>
<tr>
<td>Minimally Satisfies Criteria</td>
<td>🌟</td>
</tr>
<tr>
<td>Does Not Satisfy Criteria</td>
<td>◯</td>
</tr>
</tbody>
</table>
### Qualitative Evaluation

#### Summary – Gas Tax and Concepts A, B, and C

<table>
<thead>
<tr>
<th>Category</th>
<th>Gas Tax</th>
<th>A: Time Permit</th>
<th>B: Odometer Charge</th>
<th>C: Differentiated Distance Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transparency</td>
<td>○</td>
<td>★★★★★</td>
<td>★★★★★</td>
<td>★★★★★</td>
</tr>
<tr>
<td>Complementary Policy Objectives</td>
<td>★★</td>
<td>★</td>
<td></td>
<td>★★</td>
</tr>
<tr>
<td>Equity: Pay for what you use</td>
<td>★</td>
<td>★</td>
<td>★★★★</td>
<td>★★★★</td>
</tr>
<tr>
<td>Equity: Urban/rural</td>
<td>★★★</td>
<td>★★★★</td>
<td>★★★★</td>
<td>★★★★</td>
</tr>
<tr>
<td>Equity: Regressiveness</td>
<td>★★</td>
<td>★</td>
<td>★★★★</td>
<td>★★★★</td>
</tr>
<tr>
<td>Equity: Border/Non-Border</td>
<td>★★★</td>
<td>★★★★</td>
<td>★★★★</td>
<td>★★★★</td>
</tr>
<tr>
<td>Simplicity</td>
<td>★★★★</td>
<td>★★★★</td>
<td>★★★★</td>
<td>★★★★</td>
</tr>
<tr>
<td>Enforcement</td>
<td>★★★★</td>
<td>★★★★</td>
<td>★★★★</td>
<td>★★★★</td>
</tr>
<tr>
<td>Privacy (perception)</td>
<td>★★★★</td>
<td>★★★★</td>
<td>★★★★</td>
<td>★★★★</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
<td>24</td>
<td>24</td>
<td>25</td>
</tr>
</tbody>
</table>

**Note:** Totals provide an interesting way to quickly size up an option, however, individual ratings have not been weighted by importance from the Steering Committee, so they could give a misleading view of performance.
### Other Important Considerations

**Summary – Gas Tax and Concepts A, B, and C**

<table>
<thead>
<tr>
<th>Factor/Rating</th>
<th>Gas Tax</th>
<th>A: Time Permit</th>
<th>B: Odometer Charge</th>
<th>C: Differentiated Distance Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to distinguish between travel on Washington public roads and private roads.</td>
<td>★</td>
<td>○</td>
<td>○</td>
<td>★★★★★</td>
</tr>
<tr>
<td>Ability to charge non-Washington residents.</td>
<td>★★★★</td>
<td>★★★★</td>
<td>○</td>
<td>★★★</td>
</tr>
<tr>
<td>Total</td>
<td>4</td>
<td>3</td>
<td>0</td>
<td>6</td>
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</tbody>
</table>

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## Qualitative Evaluation

### Summary – Combinations of Concepts

<table>
<thead>
<tr>
<th></th>
<th>1: A (Time Permit) + B (Odometer Charge)</th>
<th>2: A (Time Permit) + C (Differentiated Distance Charge)</th>
<th>3: B (Odometer Charge) + C (Differentiated Distance Charge)</th>
<th>4: A (Time Permit) + B (Odometer Charge) + C (Differentiated Distance Charge)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transparency</td>
<td>★★★★★</td>
<td>★★★★★</td>
<td>★★★★★</td>
<td>★★★★★</td>
</tr>
<tr>
<td>Complementary Policy Objectives</td>
<td>★★★</td>
<td>★</td>
<td>★</td>
<td>★</td>
</tr>
<tr>
<td>Equity: Pay for what you use</td>
<td>★★★</td>
<td>★★★</td>
<td>★★★</td>
<td>★★★</td>
</tr>
<tr>
<td>Equity: Urban/rural</td>
<td>★★★</td>
<td>★★★</td>
<td>★★★</td>
<td>★★★</td>
</tr>
<tr>
<td>Equity: Regressiveness</td>
<td>★★</td>
<td>★★★</td>
<td>★★★</td>
<td>★★★</td>
</tr>
<tr>
<td>Equity: Border/Non-Border</td>
<td>★</td>
<td>★★★</td>
<td>★★★</td>
<td>★★★</td>
</tr>
<tr>
<td>Simplicity</td>
<td>★★★</td>
<td>★★★</td>
<td>★★★</td>
<td>★★★</td>
</tr>
<tr>
<td>Enforcement</td>
<td>★★★</td>
<td>★★</td>
<td>★★</td>
<td>★★</td>
</tr>
<tr>
<td>Privacy (perception)</td>
<td>★★★</td>
<td>★★★</td>
<td>★★★</td>
<td>★★★</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>24</td>
<td>26</td>
<td>22</td>
<td>24</td>
</tr>
</tbody>
</table>

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Other Important Considerations

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<td>Ability to distinguish between travel on Washington public roads and private roads.</td>
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<td>★ ★ ★</td>
<td>★ ★</td>
<td>★ ★ ★</td>
</tr>
<tr>
<td>Ability to charge non-Washington residents.</td>
<td>★ ★ ★</td>
<td>★ ★ ★</td>
<td>☀</td>
<td>★ ★ ★</td>
</tr>
<tr>
<td>Total</td>
<td>3</td>
<td>7</td>
<td>2</td>
<td>6</td>
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</tbody>
</table>

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## Summary Qualitative Evaluation

<table>
<thead>
<tr>
<th>Concept</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas Tax</td>
<td>• Simple&lt;br&gt;• Easy to enforce&lt;br&gt;• No privacy issues</td>
<td>• People are unaware of the tax and how much they pay (not transparent)&lt;br&gt;• Imperfect proxy for road usage in that it varies greatly according to the fuel economy of individual vehicles</td>
</tr>
<tr>
<td>Concept A: Time Permit</td>
<td>• Transparent&lt;br&gt;• Relatively simple&lt;br&gt;• Easy to enforce&lt;br&gt;• No privacy issues</td>
<td>• No relationship to use</td>
</tr>
<tr>
<td>Concept B: Odometer Charge</td>
<td>• Transparent&lt;br&gt;• Relatively simple&lt;br&gt;• Easy to enforce&lt;br&gt;• Privacy not a significant issue (but some might object to mileage reporting)&lt;br&gt;• Strong relationship to use</td>
<td>• Border residents that travel out of state or drive on private land may pay for many miles driven out of state or off public roads</td>
</tr>
<tr>
<td>Concept C: Differentiated Distance Charge</td>
<td>• Transparent&lt;br&gt;• Strongest relationship to use, capturing in-state versus out-of-state travel</td>
<td>• Less simple than others&lt;br&gt;• Perception of privacy infringement&lt;br&gt;• Less easy to enforce</td>
</tr>
</tbody>
</table>
WHAT DOES A ROAD USAGE CHARGE MEAN FOR MOTORISTS?
We compared the annual tax payments of different types of motorists under each concept

- **Representative vehicles**
  - Electric – $100 flat tax enacted this year
  - Hybrid – 50 MPG
  - Compact/Midsize – 25 MPG
  - SUV/Pick Up Truck – 15 MPG

- **Per year mileage levels**
  - 9,000
  - 12,000
  - 20,000

- Note electric vehicles currently pay a flat fee of $100 per year
Example Comparison of Annual Tax Payments by Vehicle Type and Annual Miles

- **Electric Vehicle**
  - Electric Vehicle (Flat Fee)
  - Concept A (Flat)
  - Concept B/C - Mileage Based

- **Hybrid (50 mpg)**
  - Washington State Gas Tax
  - Concept A (Flat)
  - Concept B/C - Mileage Based

- **Midsize (25 mpg)**
  - Washington State Gas Tax
  - Concept A (Flat)
  - Concept B/C - Mileage Based

- **Pickup/SUV (15 mpg)**
  - Washington State Gas Tax
  - Concept A (Flat)
  - Concept B/C - Mileage Based
PARKING LOT
These important issues have not been ignored – They are simply being deferred for later study

<table>
<thead>
<tr>
<th>Issue</th>
<th>Issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas Tax Bonds</td>
<td>Tribal Agreements</td>
</tr>
<tr>
<td>Rate Setting</td>
<td>Administrative Structure</td>
</tr>
<tr>
<td>Out-of-State Drivers</td>
<td>Interoperability with Toll System</td>
</tr>
<tr>
<td>Interoperability with Other Jurisdictions</td>
<td>Legal Considerations</td>
</tr>
<tr>
<td>Private Service Providers</td>
<td>Changes to the Gas Tax Rate</td>
</tr>
<tr>
<td>Transition</td>
<td>Technology</td>
</tr>
<tr>
<td>Which vehicles get charged?</td>
<td>“What if?” Scenarios</td>
</tr>
<tr>
<td>18th Amendment</td>
<td>Integration with Existing Processes</td>
</tr>
<tr>
<td>Transit Vehicles</td>
<td>Information Technology Upgrades</td>
</tr>
<tr>
<td>Refunds</td>
<td>Other?</td>
</tr>
</tbody>
</table>
DISCUSSION
Questions to Discuss

- Thinking back over what you’ve learned this past year about road usage charging, do you have any outstanding questions?
  - Things you don’t understand?
  - Things you think haven’t been addressed?

- Based upon what was presented today and the results of the business case analysis, do you recommend that a road usage charge system be pursued to replace the gas tax at some point in the future?

- Do you think it should be recommended that the Steering Committee’s work continue in order to further flesh out the details of a road usage charge system?
Questions to Discuss (continued)

- What do you need to know between now and November 18 to be able to make a recommendation to the Transportation Commission?
  - Are there any gaps you would like filled related to the business case?

- What additional research or analysis needs to be done in the next year to move this forward?
  - This will help us develop tasks for the 2014 work plan

- Looking through the issues in the parking lot, which items are critical to you (priorities) and/or should be a focus of the Steering Committee in 2014?
Questions to Discuss (continued)

- How important is a pilot program?
  - What would the objectives be?
  - Could these objectives be met in some other way?
  - When should a pilot take place – 2014? 2015? or after further work on the operational concepts to test in a pilot is complete?
Next Steps

- Update the Commission on October 15, 2013
- Develop a final report for the Steering Committee to submit to the Commission, including a work plan and budget for the next year
  - Engage the final report Steering Committee Subcommittee
  - Likely to occur the week of November 4-8, 2013 (phone or web conference)
- Finalize the Steering Committee’s recommendations at its last meeting on November 18
- Submit the Steering Committee’s final report to the Commission on December 10 or 11
THANK YOU