Seattle Congestion Pricing Study
Preliminary Findings

Phase 1 Briefing
July 2019
Our mission, vision, and values

**Mission:** deliver a transportation system that provides safe and affordable access to places and opportunities

**Vision:** Seattle is a thriving, equitable community powered by dependable transportation

**Values:**
- Equity
- Safety
- Mobility
- Sustainability
- Livability
- Excellence
Presentation overview

• Background
• Study overview
• Key findings
• Next steps
Seattle is growing

• Seattle has ranked among the top four U.S. cities for growth for the past five years
• We must move more people and goods in the same amount of space

Seattle’s population has grown by 17% since 2010. That’s 105,000 more residents, and more are on the way.

It’s not just the city either; the entire region is experiencing growth. Regional population is expected to grow a further 50% and jobs are projected to increase 28% by 2035.
Climate change is accelerating

- 66% of emissions citywide come from transportation
- We must act now to curb emissions

- 14% Residential Buildings
- 3% Waste
- 18% Commercial Buildings
- 16% Freight Transportation
- 50% Passenger Transportation

Passenger transportation comprises 50% of citywide GHG emissions in Seattle.
Our streets are more congested

- We are one of the most congested U.S. cities
- People and goods spend 55 hours a year in Seattle traffic
- We must reduce the economic cost of congestion, especially for our most vulnerable residents

In 2017, the time spent in Seattle traffic is estimated to have cost $5 billion in lost productivity. That is nearly as much as the entire City of Seattle budget for 2019-2020.

$5 billion in lost productivity

$5.9 billion
The 2019-2020 City budget
Our current system is inequitable

- Growth is causing pressures on housing and affordability
- People with hourly wage jobs or more than one job are most impacted by unreliable traffic patterns
- We must make our transportation system work better for everyone

The average Seattle household spends 15% of its budget on transportation. That percentage can be up to 30% for low-income households. Transportation is less of a financial burden for residents without cars.
Study overview

• Council provided initial funding
• Seattle’s 2018 Climate Action Plan calls for study of congestion pricing
• Initial exploratory study launched in summer 2018
• Focus areas included peer review, equity, pricing tools, and initial impacts and benefits
Developing a policy

WE ARE HERE

**EXPLORATION**

Identify the problem

| Define goals and objectives to develop solutions / pricing options |

| POTENTIAL |

Convene independent commission or advisory group

Identify and engage audiences and stakeholders

| Explore potential solutions / pricing options |

**PROGRAM DEVELOPMENT**

Narrow potential solutions / pricing options

| Evaluate potential solutions / pricing options |

**APPROVAL PROCESS AND IMPLEMENTATION**

Recommend pricing solution

| Adopt and implement final pricing solution |

City of Seattle

Department of Transportation
What is congestion pricing?

A strategy to address congestion and transportation emissions through pricing. It involves pricing city streets to encourage alternatives to single occupant vehicle trips, and to improve travel reliability, reduce travel times, and improve safety.

*Seattle Climate Action Strategy, April 2018*
Who is pricing now or studying pricing?
What have we learned?

• All cities that have implemented congestion pricing built on aggressive transportation demand management programs

• All congestion pricing programs implemented to date have been with the intention to reduce congestion and/or emissions

• Most programs have provided a positive revenue stream that funds additional transportation options and services

• Public and business acceptance has risen dramatically post implementation
## What are the benefits?

<table>
<thead>
<tr>
<th></th>
<th>Stockholm</th>
<th>London</th>
<th>Singapore</th>
<th>Milan</th>
<th>Gothenburg</th>
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</thead>
<tbody>
<tr>
<td><strong>Trip Reduction</strong></td>
<td>-22%</td>
<td>-16% all -30% charged</td>
<td>-15% with new technology -44% in 1975</td>
<td>-34%</td>
<td>-10%</td>
</tr>
<tr>
<td><strong>GHG Benefit</strong></td>
<td>-14% CO2</td>
<td>-17% CO2</td>
<td>-15% CO2</td>
<td>-22% CO2</td>
<td>-2.5% CO2</td>
</tr>
<tr>
<td><strong>Travel Time Results</strong></td>
<td>-33% delays</td>
<td>-30% delays</td>
<td>Managed by price for 45-65 km/h (expressways) 20-30 km/h (other roads)</td>
<td>-30% delays</td>
<td>-10% to 20% travel time in corridors</td>
</tr>
<tr>
<td><strong>Net Annual Revenue</strong></td>
<td>$150M</td>
<td>$230M</td>
<td>$100M</td>
<td>$20M</td>
<td>$90M</td>
</tr>
</tbody>
</table>
What are the benefits?

• In every case, congestion pricing has reduced vehicle trips, reduced CO2 emissions, and lowered travel times
• Businesses have seen economic benefits
• Programs have evolved to meet new challenges
What are the benefits?

• London has invested revenues in new buses and active transportation projects
• Road space has been prioritized to move more people
• Traffic collisions have fallen by 40%
What are potential tools?

• Cordon pricing
• Area pricing
• Fleet / vehicle class pricing
• Road user charge
• License plate-based restriction zone

• On-street parking pricing
• Off-street parking pricing
• Arterial toll roads
• Arterial express lanes
• Connected / AV zone
• Fossil fuel free zone

These tools are described in detail on pg. 20-21 of the Summary Report.
What about technology?

• Pricing systems must include:
  – Vehicle ID devices
  – Roadside detectors and enforcement equipment
  – Back office

• Technology considerations include:
  – Maturity
  – Infrastructure footprint
  – Cost
  – Market penetration and interoperability
  – Scalability and flexibility

• Privacy protections would include:
  – Personally identifiable information
  – Surveillance Ordinance review
How were these evaluated?

• Initial qualitative screening across four focus areas
• Rated tools based on applicability to Seattle and likely influence
• All are valuable and could be used to meet other goals

This process is described in detail on pg. 22-23 of the Summary Report.
Which tools are most promising?

Cordon Pricing

Area Pricing
Which tools are most promising?

Fleet Pricing

Road User Charge
Centering equity

- Our existing systems, including how we pay for transportation, are inequitable
- A well-designed pricing program can be a tool to advance equity
- This requires a full understanding of impacts and tailored solutions

![Graph showing Total State and Local Taxes in Washington (Share of Family Income)]
Creating an equitable pricing program

- Existing data about travel behavior are limited, but LODES data provide a high-level understanding of potential impacts
- We focused on commute data at the regional level, as a potential pricing program would affect people beyond Seattle residents
- The data include people over age 16 who drive to work, whether they drive into downtown or live in downtown
- We assumed an all-day area pricing program for the purposes of this analysis, but no decisions about program design have been made
- And we looked specifically at race and income to understand whether different groups might be more or less impacted by a potential pricing program compared to the general population
Creating an equitable pricing program

- Existing data are limited
- LODES data indicate approximately 13% of workers who drive in the region would be impacted by a downtown pricing program
- Of these drivers, more higher-income people would be affected

![Percent of Drivers (Commute Trips Only) Impacted by Pricing, by Income]

Source: LODES and ACS. Universe: Workers age 16 and over in PSRC counties.
Creating an equitable pricing program

• Of these drivers, people of color who drive and white drivers would be affected at nearly the same rate

• We are committed to prioritizing racial and social equity

Percent of Drivers (Commute Trips Only) Impacted by Pricing, by Race

- People of Color: 12.3%
- White: 12.2%
- Other: 11.8%

Source: LODES and ACS. Universe: Workers age 16 and over in PSRC counties.
Strategies to advance an equity agenda

• Program design has the greatest potential to improve outcomes
• Reinvesting revenue with an equity focus is also critical
• Programs such as caps, discounts, and exemptions can also help to address impacts
Benefits for public transit

• Benefits for transit could include reduced travel times
• May have a positive impact on regional equity based on demographics of existing riders
## Climate benefits

<table>
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<tr>
<th>Congestion Pricing Approach</th>
<th>Change in VMT</th>
<th>Change in Road GHG Emissions</th>
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<tbody>
<tr>
<td></td>
<td>From Baseline</td>
<td>From 2035 Control (Low – High)</td>
</tr>
<tr>
<td>Area Pricing: Center City</td>
<td>-14.3% – -23.1%</td>
<td>-22.0% – -30.0%</td>
</tr>
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Moving forward

As we consider congestion pricing in Seattle, we are committed to prioritizing racial and social equity, and to exploring how a pricing program might improve access to opportunities and reduce current inequities.
Moving forward

• Developing an equity strategy
• Beginning public engagement
• Refining and prioritizing goals
• Continuing impacts and benefits analysis
• Identifying supportive projects and programs
• Understanding implementation
• Building a tool to test various scenarios
Building a tool to test scenarios

- Analyze a potential area pricing program using different geographies, prices, and policy levers
- Understand program’s effects on congestion, greenhouse gas emissions, travel mode, and travel time
- Use recent data regarding vehicle and bicycle volumes, transit ridership, shared mobility, and parking
- Build in demographic and traveler data to further explore costs and benefits for specific groups of people

Illustrative Sample Only
Next steps

**Department of Transportation**

**Summer 2019**
- Develop tool to test various scenarios

**Fall 2019**
- Share information about the work-to-date

**Late Fall 2019**
- **BEGIN PROGRAM DEFINITION**
  - building on what we hear through Community Engagement

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**Exploration**
- Identify the problem

**Program Development**
- Define goals and objectives to develop solutions / pricing options
- Narrow potential solutions / pricing options
- Evaluate potential solutions / pricing options
- Recommend pricing solution

**Approval Process and Implementation**
- Identify and engage audiences and stakeholders

**Potential**
- Convene independent commission or advisory group

**We Are Here**
- Explore potential solutions / pricing options
Questions?

kristen.simpson@seattle.gov | (206) 684-5054

www.seattle.gov/transportation