37334

Congestion Pricing

November 30, 2017 City Council Presentation

PBOT
PORTLAND BUREAU OF TRANSPORTATION

Why we are here?

- Congestion is a growing problem for the Portland region
- ODOT is considering congestion pricing on I-5 and I-205
- Desire to better understand the role of congestion pricing in Portland's future

Oregon legislature looking at pricing

- House Bill 2017 includes congestion pricing
- Focus on I-5 and I-205
- Portland is participating on advisory committee
- Portland focus on:
  - Demand management
  - Diversion to local streets
  - Equity
  - Climate
  - Responsible use of new revenue

HB 2017

Broader potential for pricing to meet multimodal objectives

- Potential strategies to reduce congestion and improve multimodal transportation outcomes
  - Cordons and other area-based pricing
  - Parking demand management
  - Automated, shared, electric vehicles
  - Bridge pricing

- Advance Portland's land use, housing, equity, Vision Zero, and climate policies

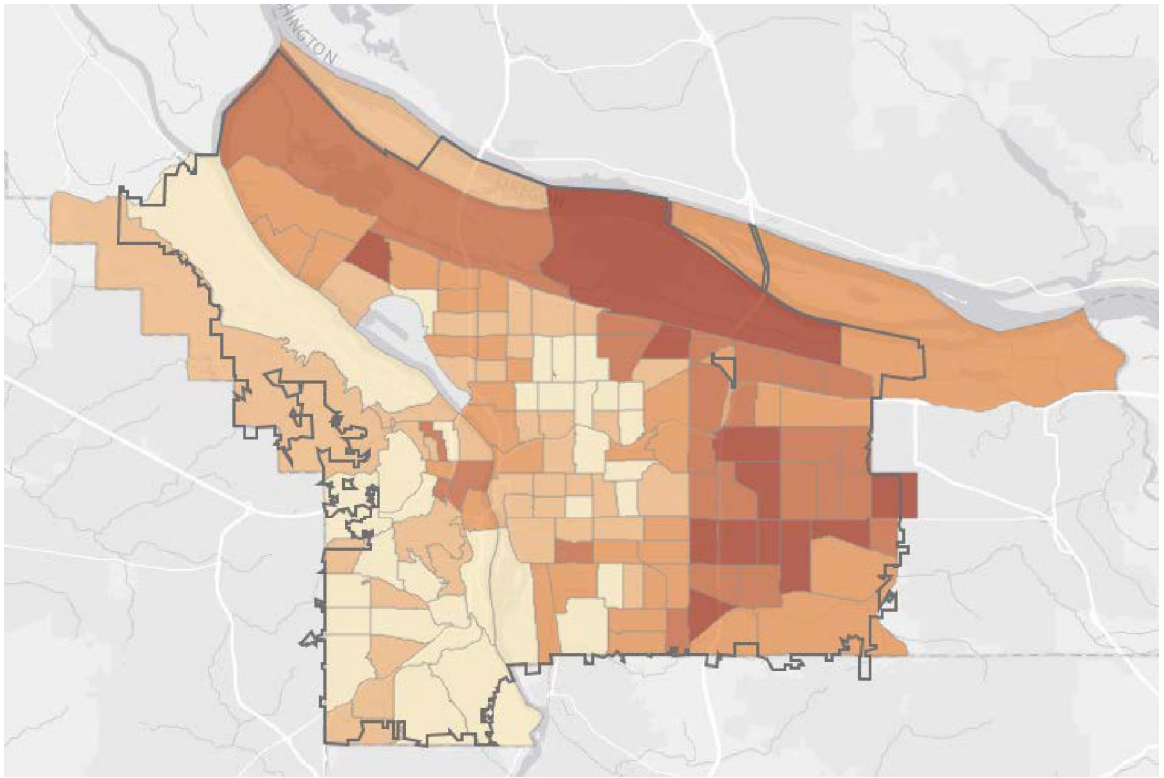
Costs of congestion - Economy

- Increased commute times
- Increased fuel costs, car maintenance, childcare, time away from family/community
- By 2025, Metro estimates the regional cost of congestion will be $844 million per year

Costs of congestion – Health & Equity

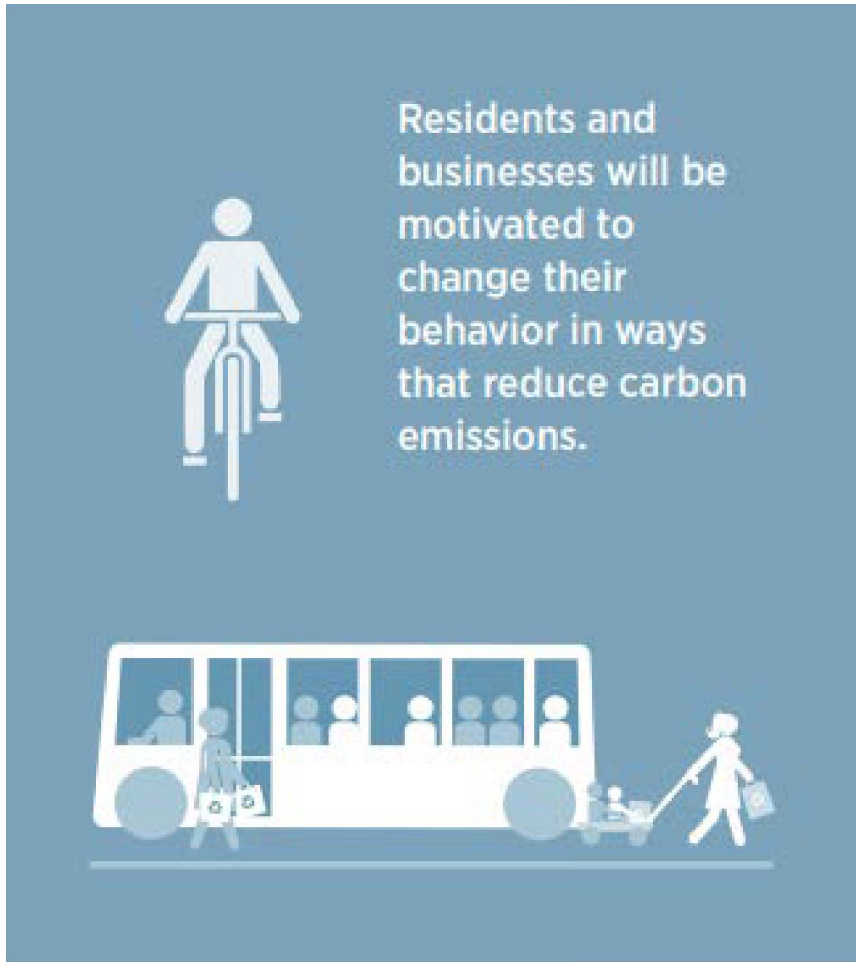
- People with lower incomes tend to live closer to congested and polluted roads:
  - Emissions contribute to asthma, heart attacks, and other problems
- Lower income people often live farther from work:
  - Long commutes are associated with obesity, high blood pressure, heart disease, diabetes, others

PBOT Equity Matrix



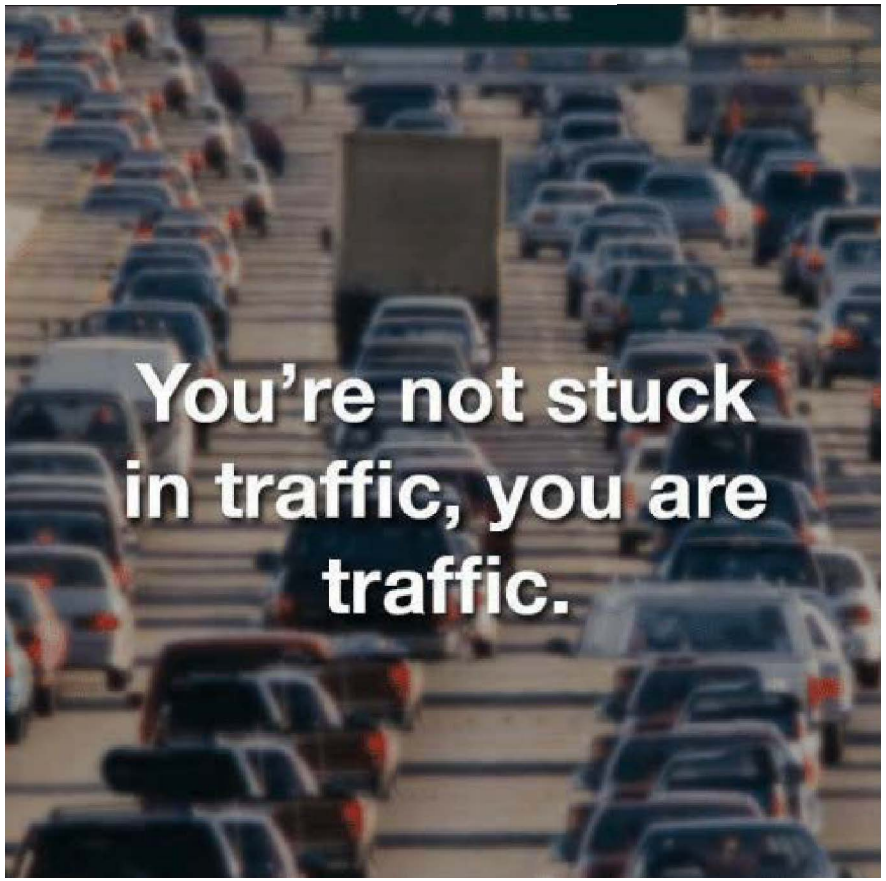
Costs of congestion -- Climate

- Nearly 40% of Oregon GHG emissions from motor vehicles
- Fastest growing percentage is freight, exacerbated by stop and go traffic
- Buses also impacted by congestion - discourages transit use.



Congestion is an economic problem

- Road use is free, leads to inefficiency
- Without pricing, roads are not subject to the rules of supply and demand
- This leads to many discretionary trips in peak periods

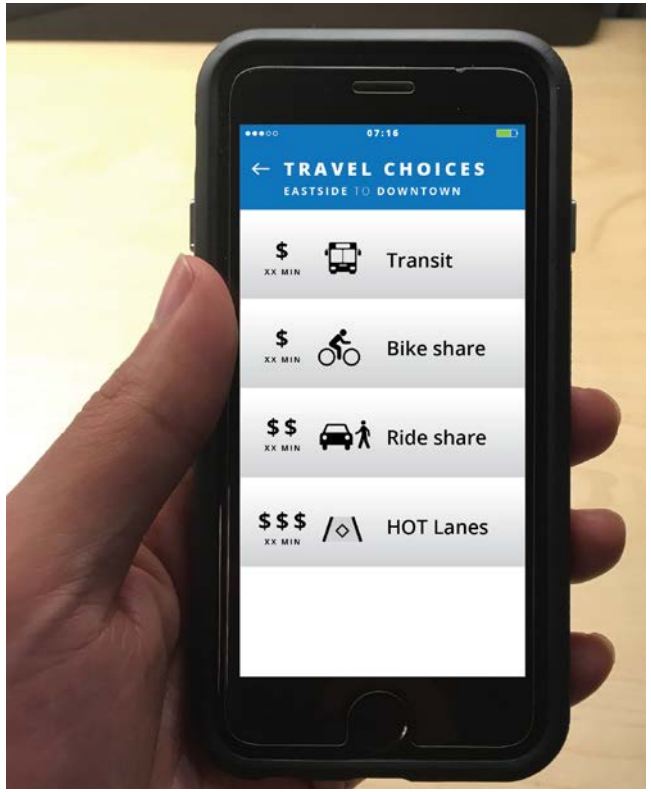


Pricing roads leads to more efficient choices

- Pricing can be a tool to incent more efficient use of the limited right of way
- Different modes have different footprints on the road
- Price inefficiency & reward efficiency
  - Location/congestion level
  - Time of day
  - Number of passengers
  - Fuel efficiency
  - Parking > pick-up and drop-off zones

Current strategies for congestion relief

- Provide alternatives to single occupancy vehicle trips – transit, carpools, biking, and walking
- Land use / Housing strategies (20-minute neighborhoods)
- Transportation Demand Management



Strategies for congestion relief: road specific

- Build more and more roads: *very expensive*
- Change time of day for road use: *limited benefits*
- Intelligent Transportation Systems (signal synchronization and prioritization): *limited benefits*

Charge people for using roads at congested times

Congestion Pricing is key to existing plans

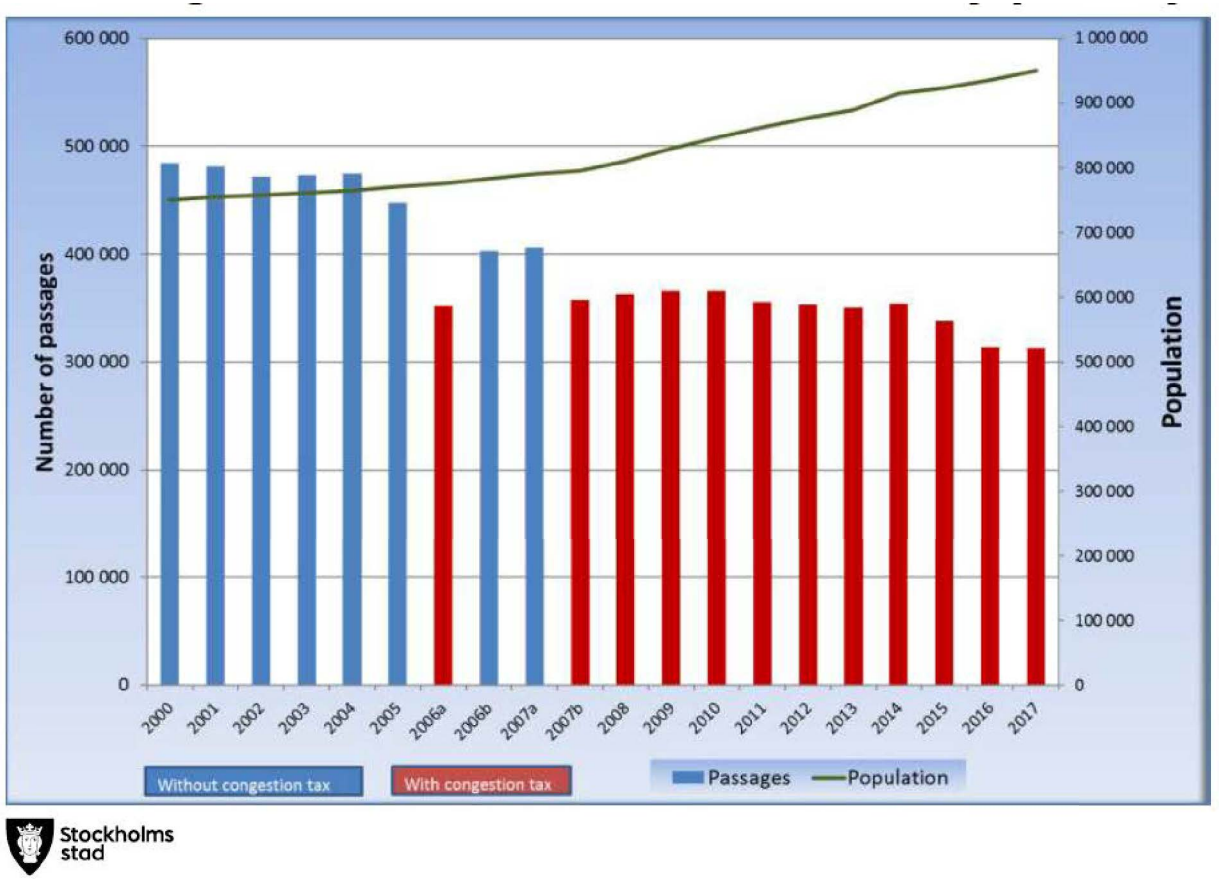
- **Portland Plan**: Action 124 – calls for a shift in how we fund transportation
- **Climate Action Plan**: Actions 4A through 4C – calls for road usage & fuel efficiency charges as long-term replacement for declining gas tax revenue
- **Comprehensive Plan**: Policy 9.50 – calls for a regional congestion management approach, including a market-based system, to price or charge for auto trips & parking

Other cities have done this and it works

- London
  - Commute times fell by 14% almost immediately
  - Safety improvement (40-70% crash reduction)
- Singapore
  - Advanced system of pricing, now at 45% reduction and pushing for more

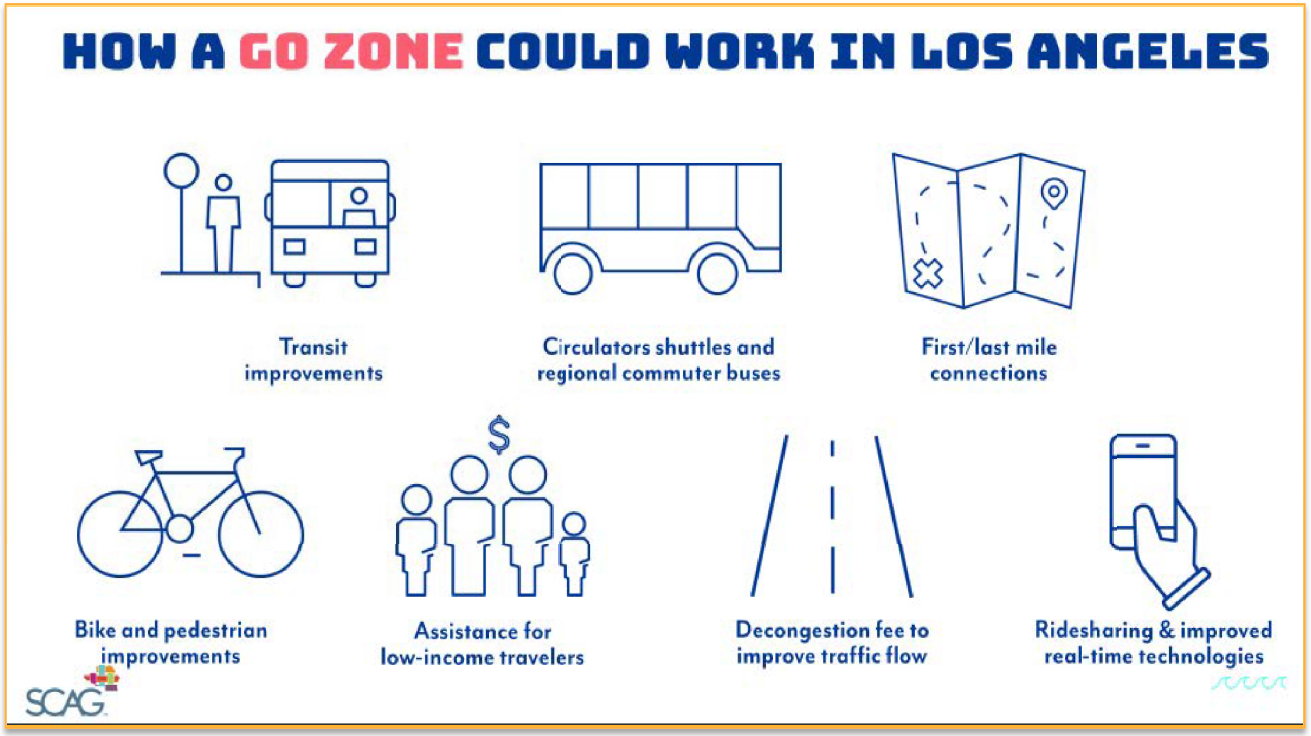
Stockholm

- Auto trips into and out of the city continued to decline with congestion tax in place
- Population rose during this time
- When tax was removed, trips rose again



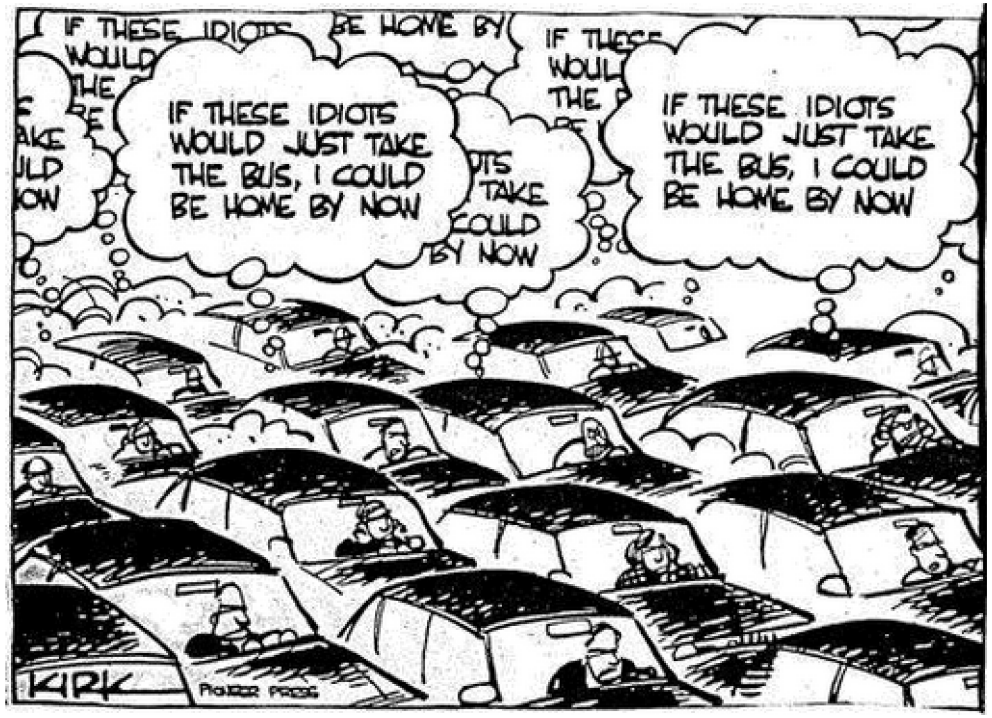
North American cities implementing & considering pricing policies

- Variable bridge tolls used in NY, Seattle
- Many other places looking at pricing policies (SF, LA, NYC, Vancouver)



Pricing and Transit

- Congestion pricing works best when paired with viable transit options
  - Stockholm pricing revenue directly funds new transit lines
  - London timed introduction of the cordon with the opening of new Tube line, and over 80% of revenue goes to improving bus service
- Local decisions about use of revenue
  - Some may be constitutionally restricted
  - We can still find ways to link the two (e.g. investments in making high crash corridors like 82nd Avenue safer and more efficient)



Portland and congestion pricing

- For pricing to work, we must find solutions that work for our communities
  - Advance Equity
  - Reduce Climate Impacts
  - Achieve Vision Zero
  - Support Land use and housing goals
- Support our entire transportation system, not just divert from one place to another

Initial equity questions

- Displaced communities that are driving farther
- Additional cost to those who can least afford it
- Limited access to transit in many communities

Next Steps: Per Resolution

1. Support ODOT congestion pricing effort
   - Demand management
   - Emphasis on equity, climate, safety
   - Diversion
   - Revenue use

Next Steps: Per Resolution

2. Research & evaluate pricing best practices to decrease congestion & improve multimodal options

- Consider comprehensive congestion pricing & demand management strategies including:
  - Cordons, other area-based pricing, bridge pricing
  - Parking demand management
  - Automated, electric, and shared vehicle mobility pricing
- Engage many stakeholders including low-income and other marginalized communities
- Work with regional and national partners to do it right

Congestion Pricing Timeline

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