From Seabiscuit re the debut of the automobile in San Francisco in the mid-1930's:

"…[It] was turning into one of those colorfully unmitigated disasters that bring misery to everyone but historians…[T]he automobile, so sleekly efficient on paper, was in practice a civic menace, belching out exhaust, kicking up storms of dust…tying up horse traffic, and raising an earsplitting cacophony that sent buggy horses fleeing."

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Complete Streets 2.0

Advancing City Values in a Changing Landscape

May 29, 2019

Catherine Ciarlo
Active Transportation & Safety Division Manager
Portland Bureau of Transportation

"Even though population is growing and the economy is expanding our roadway space is not."

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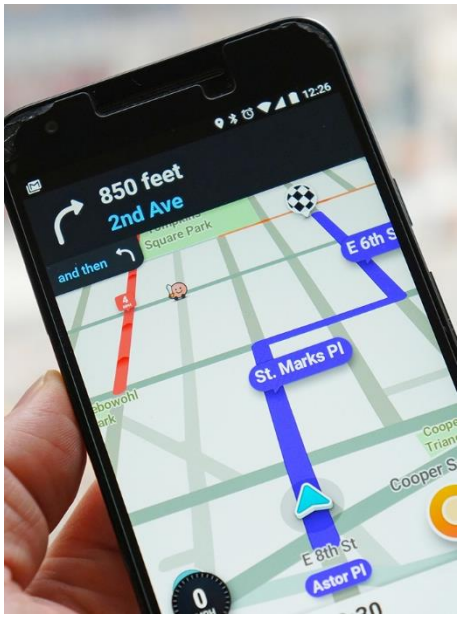
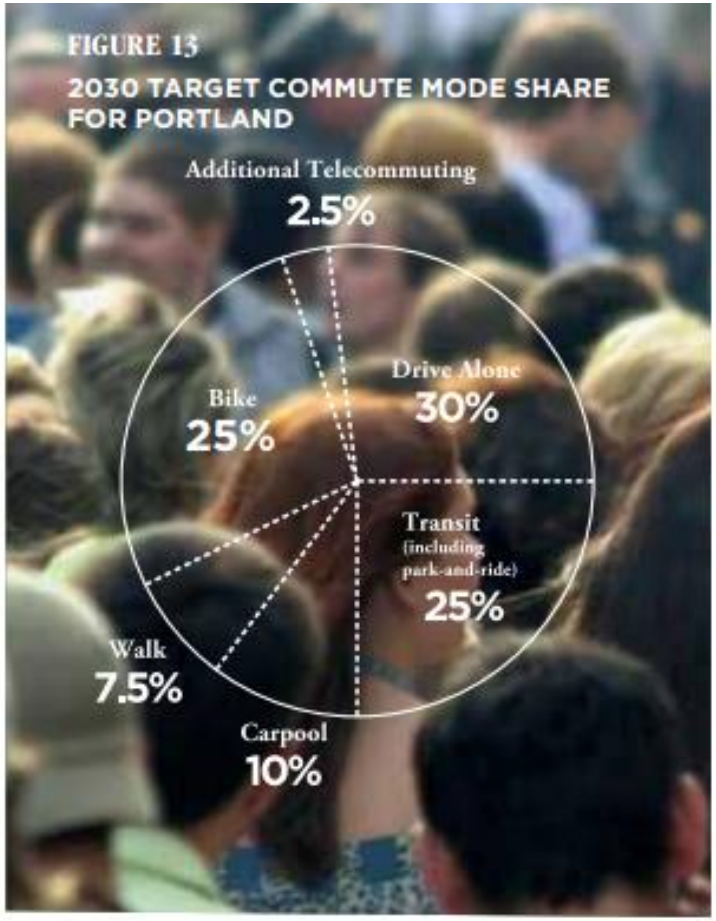
Portland's goal: leverage New Mobility to create better streets for everyone





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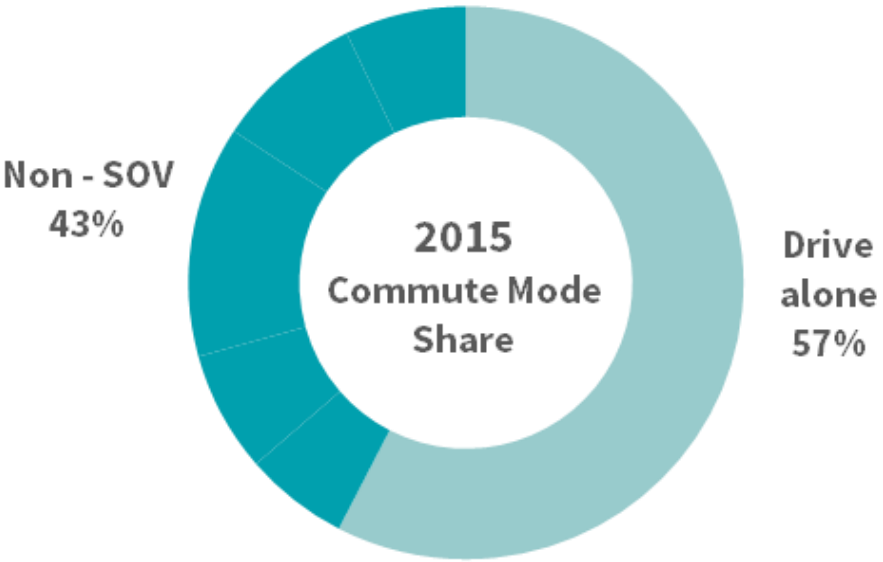
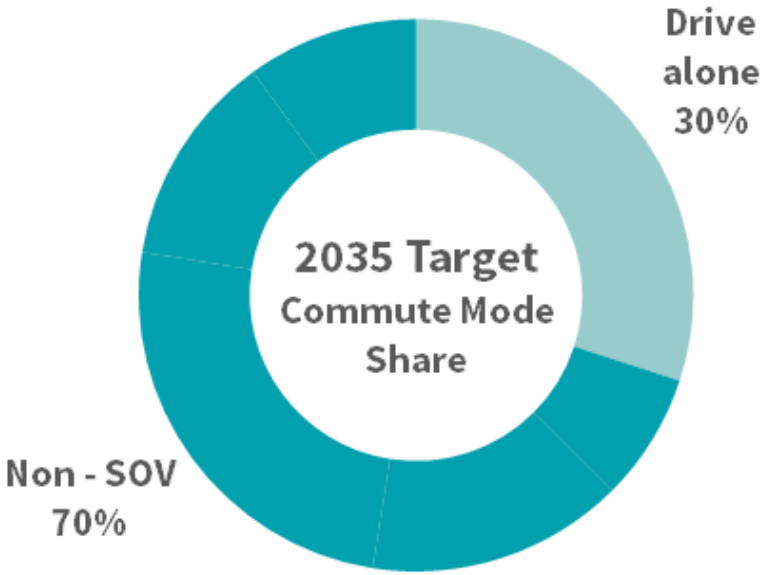
Ambitious 2035 mode share targets to advance City goals





- Climate Action Plan
- Create “20 minute communities” where people thrive
- More choices = less traffic

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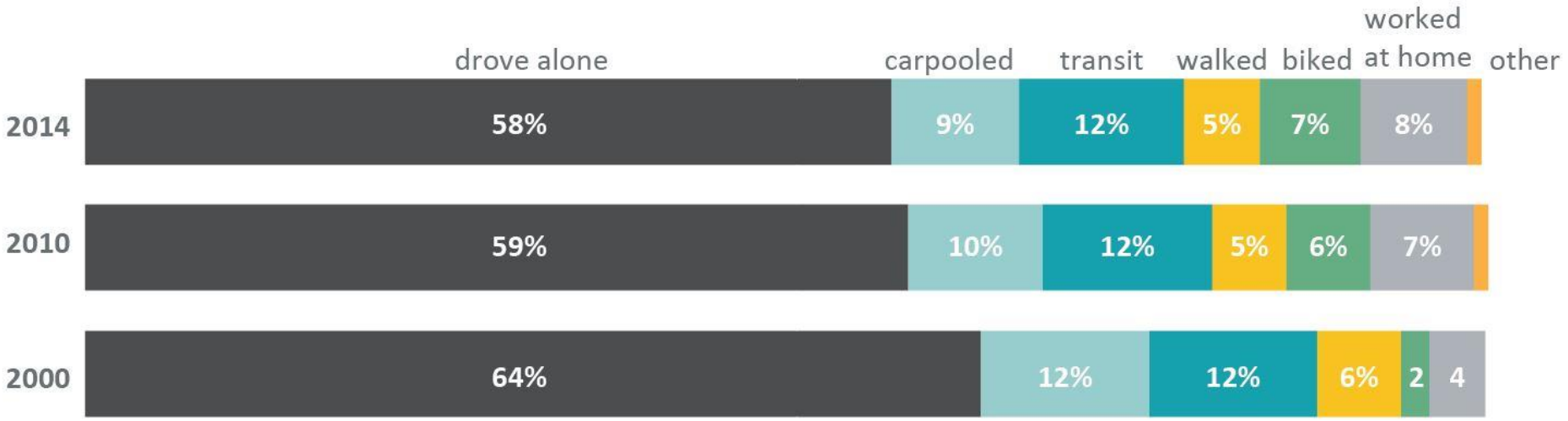
Shifting trips in a changing city



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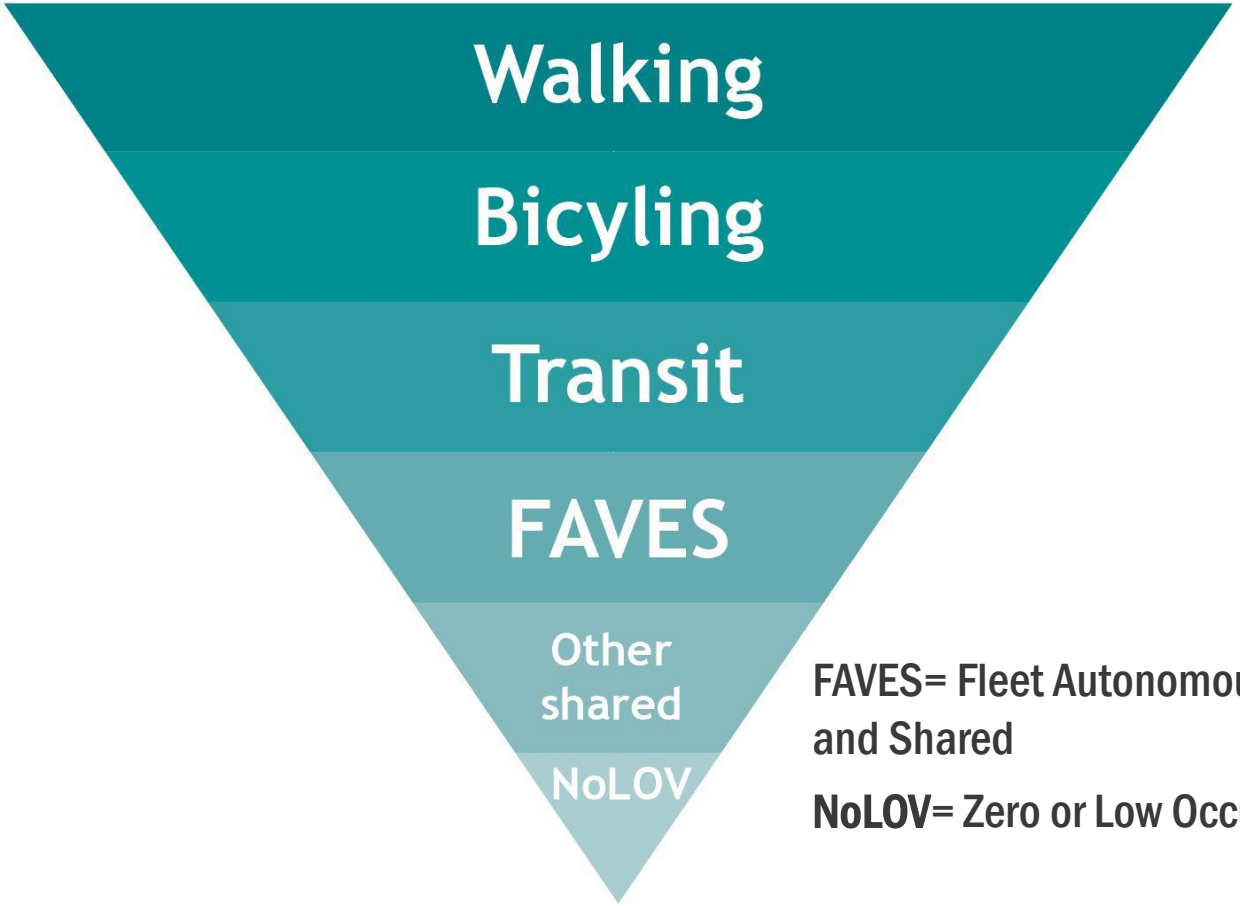
Transportation Strategy for People Movement

(Portland Comprehensive Plan + TSP)



FAVES= Fleet Autonomous Vehicles Electric and Shared

NoLOV= Zero or Low Occupancy Vehicles

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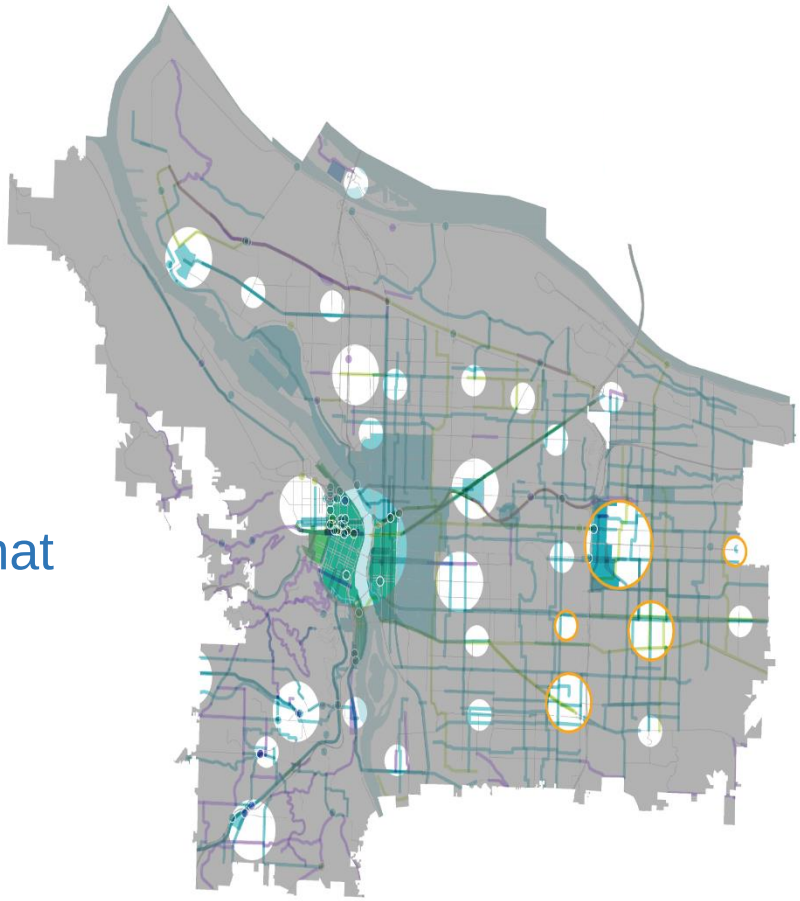
Portland's strategy: a balanced transportation system

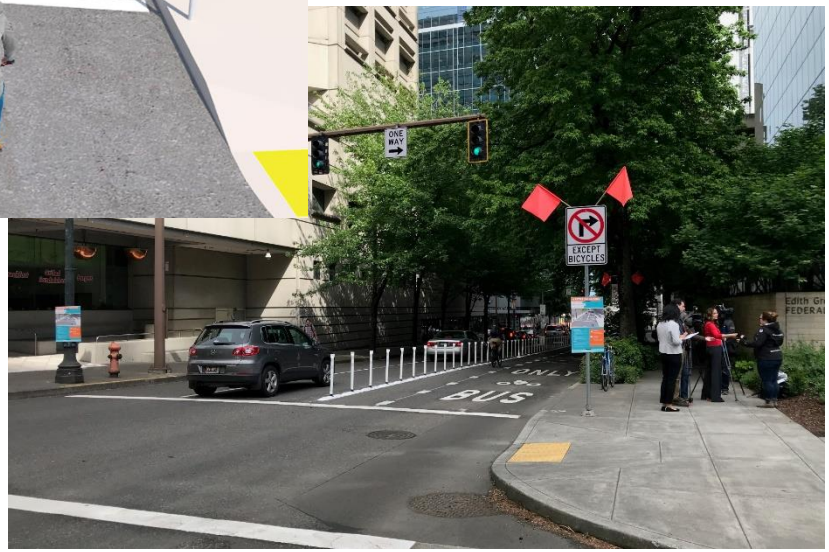
- Offer more choices for short trips
  - Walking: fix gaps and improve safety
  - Bicycling: create an *All Ages and Abilities* Network
  - Transit: expand rail network and support bus system speed and reliability
- Save space for longer trips and trips that must use motor vehicles
- Prioritize freight and other "high value" trips



Complete Street Principles, revisited

- **Access and mobility**
- **Unique**
- **Balanced**
- **Safe**
- **Comprehensive**

Complete Street 2.0: transit, bikes, pedestrians, and…



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…E-scooters!

(and ride hailing, bike share, autonomous vehicles and more)

Complete Streets 2.0 design guided by:

- **Mode**
- **Speed**
- **Person-Capacity**
- **Demand**

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But how do we decide?

- *Where*
  - *When*
    - *How many*
      - *How much to charge*
        - *Who/which companies*

…and a few other small questions

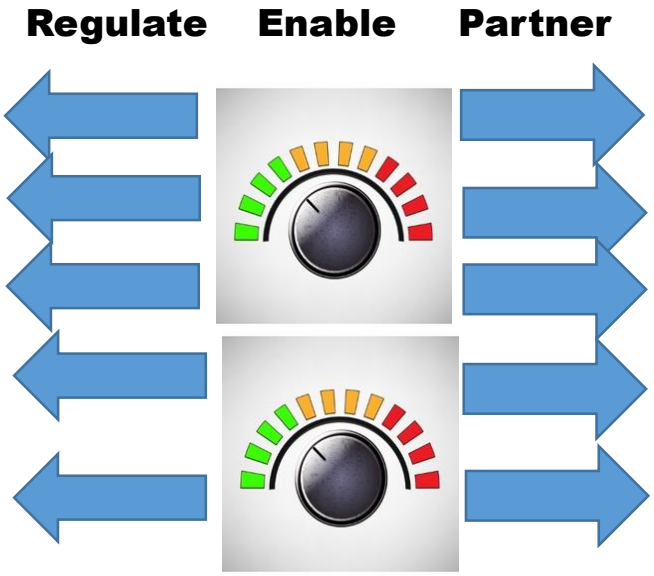
✓ Get clear on goals

Apply outcomes-based thinking to assess the impact of specific proposals and guide agency response

Critical goals

- **Vision Zero**
- **Health and community vitality**
- **Calm traffic congestion**
- **Reduce climate-harming emissions**
- **Equitable transportation system**

Public action



✓ Identify and reward high-performance innovation

Public Action

Regulate **Enable** **Reward**

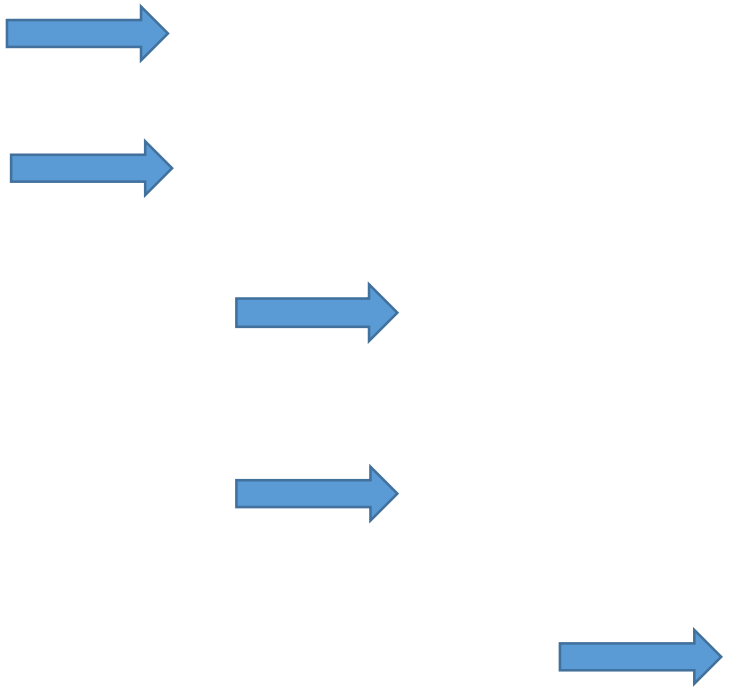
Set minimum standards
(15 mph max speed, MDS data)

Set strong goals
(20% equity area deployment)

Encourage innovative strategies
(Curb sidewalk riding)

Monitor & report performance
(SOV trip reduction)

Reward good performance
(Multiple languages, utilization)



✓ Get the information essential to success

Local government is responsible for protecting:
Public health, Safety, Community Welfare

Need access to information about what is happening in the public street

- Where, when, how movement occurs
- Evaluating system performance to make improvements
- Identifying market externalities and rewarding good behavior

✓ Use data to create sustainable accessible, equitable, vibrant cities

Portland requires data from:

- Taxis & TNCs
- Shared bikes
- E-Scooters
- Autonomous vehicles (no pilots, however data sharing is required)

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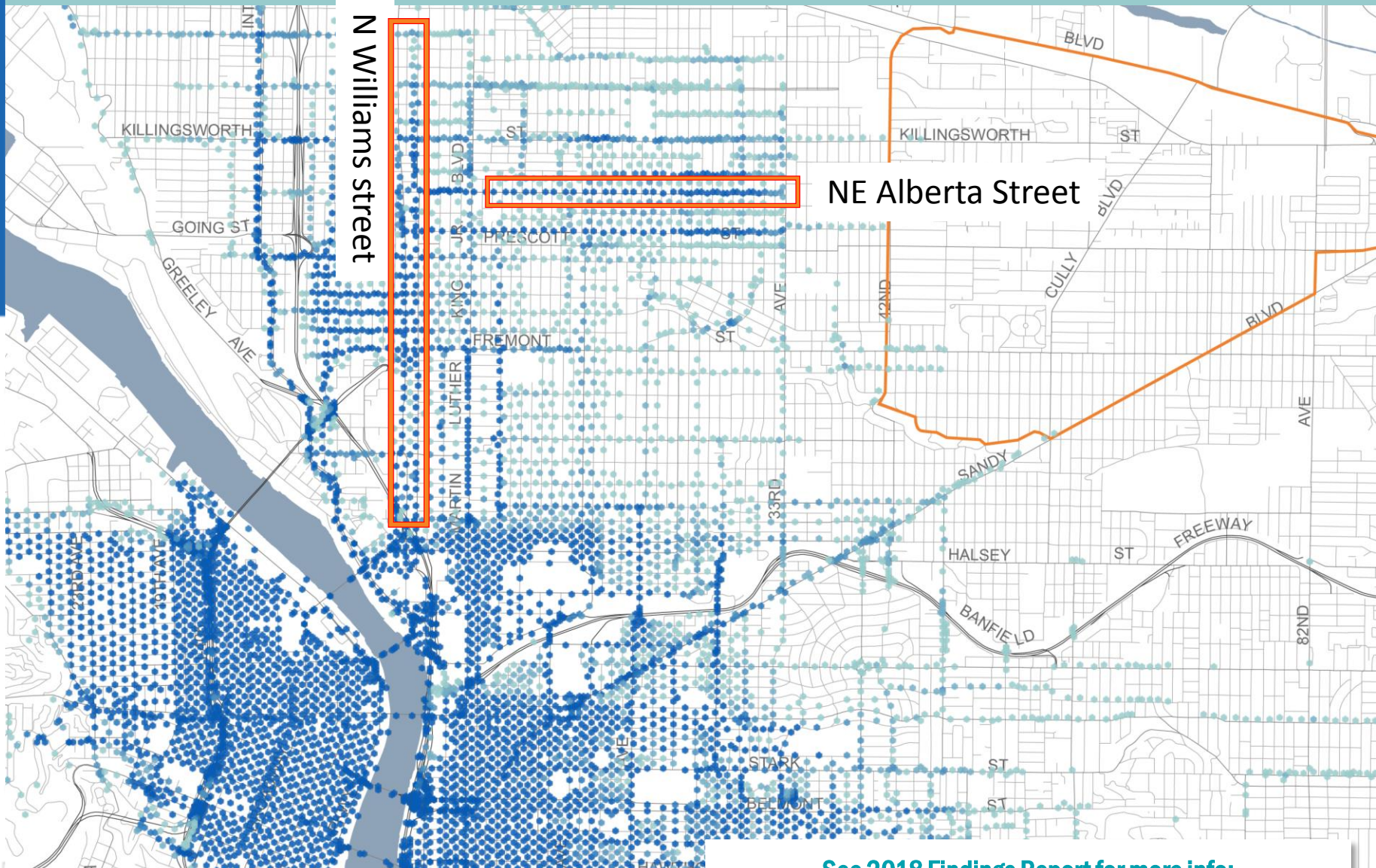
Understanding travel patterns: Users prefer to ride on bikeways but also travelled on commercial corridors that lack in street facilities



Case Study:
Assessing the potential of E-scooters to meet City goals

- ✓ Alleviate traffic congestion
- ✓ Reduce private motor vehicle use
- ✓ Prevent fatalities and injuries
- ✓ Expand access for underserved communities
- ✓ Reduce climate pollution

2018 E-scooter pilot key statistics

- **120 day pilot** (July – October)
- Total trips: **700,369**
- Total miles: **801,887**
- Average trip length: **1.15 miles**
- Three companies permitted:
  - Lime
  - Bird
  - Skip

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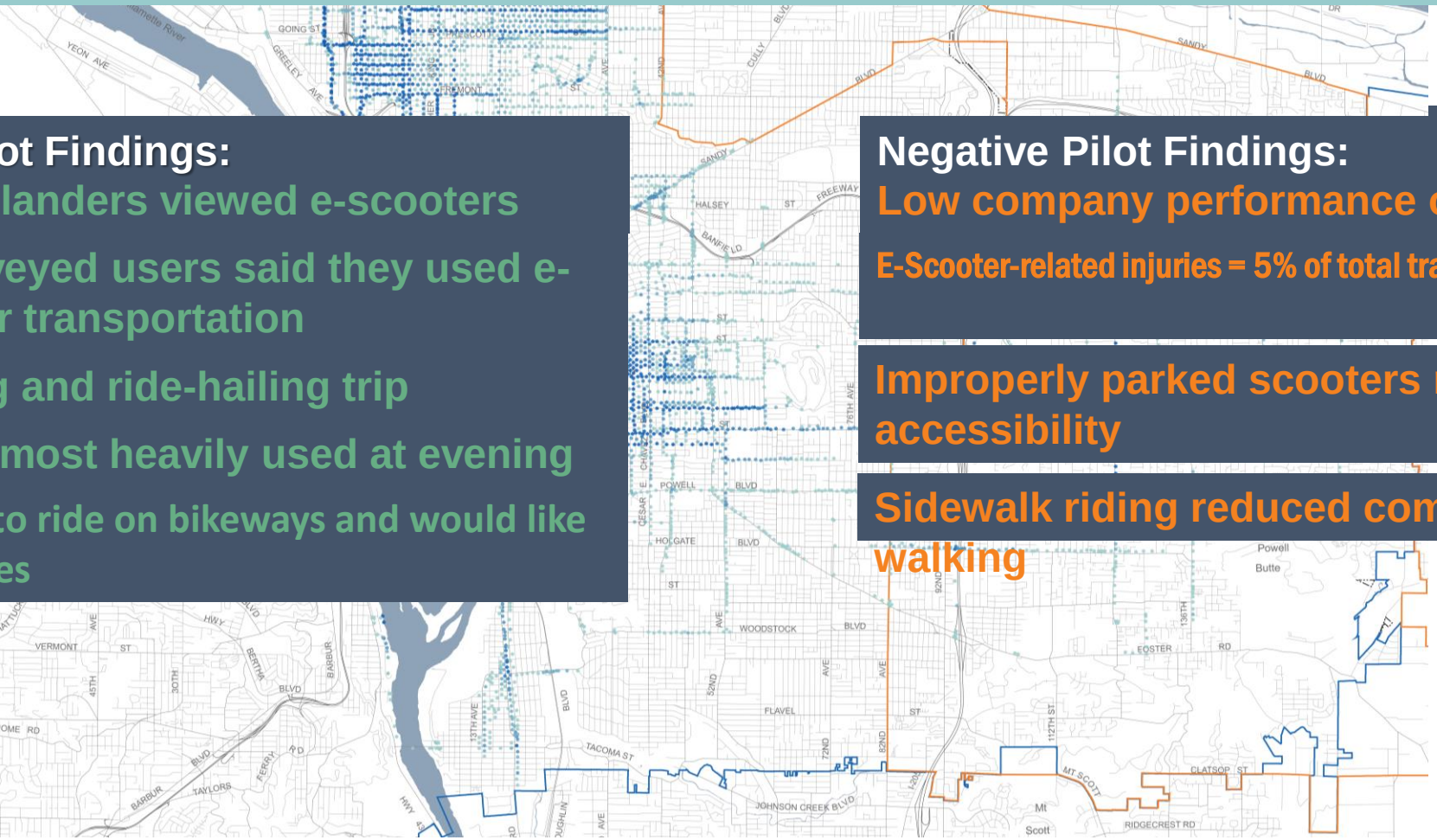
nbine travel data with survey data and system data to understand overall impact ag established goals



ot Findings:

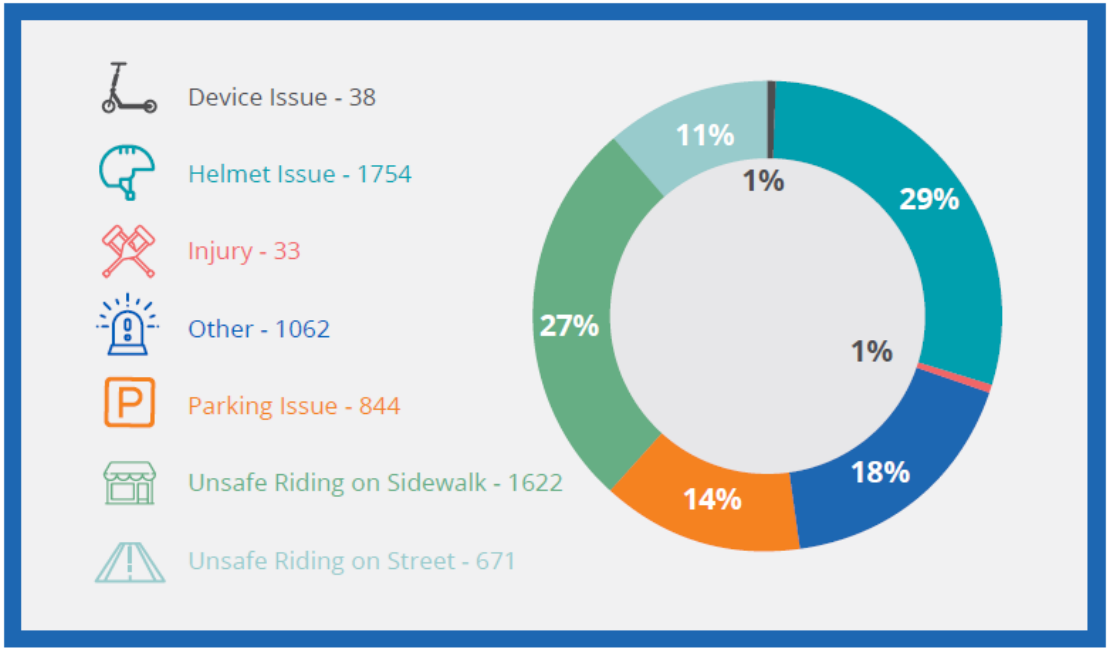
- landers viewed e-scooters
- veyed users said they used e- r transportation
- g and ride-hailing trip
- most heavily used at evening
- to ride on bikeways and would like es

Negative Pilot Findings:

- Low company performance on equity go
- E-Scooter-related injuries = 5% of total traffic-related injur
- Improperly parked scooters negatively i accessibility
- Sidewalk riding reduced comfort for ped walking

What we heard from Portlanders: concerns

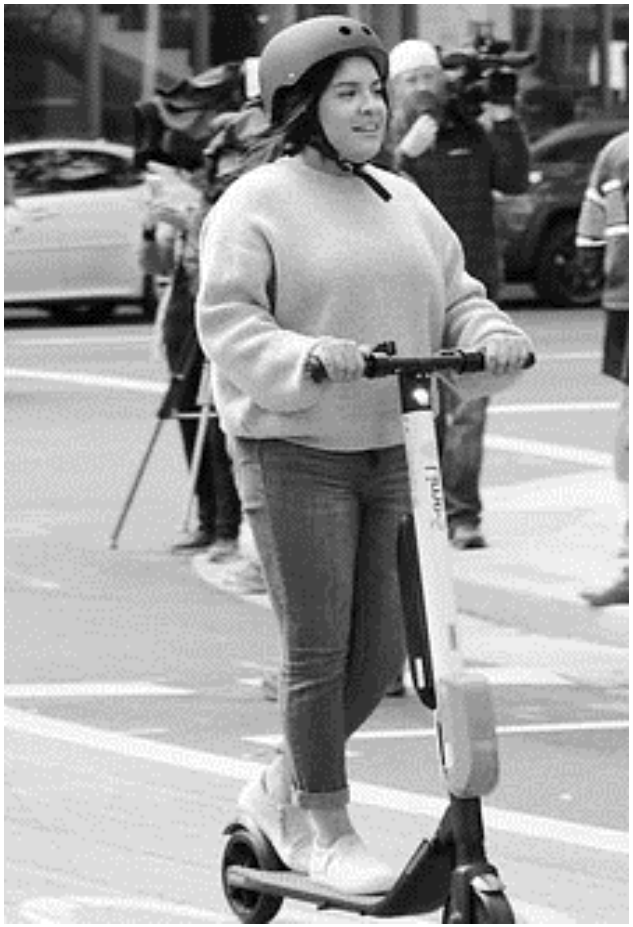
- Sidewalk conflicts
- Accessibility
- Tripping hazards
- Rule breaking/chaos
- Aesthetics



What's the root of the problem?

- Many demands on our sidewalks
- Conflicting or unclear laws
- Change
- Perception of who the change is for
- Lack of safe places to ride

What we heard from Portlanders: desires



- More enforcement, especially sidewalk riding and parking
- Dedicated parking
- Accessible scooter designs – seated or three wheeled
- Report back on unanswered questions from the first pilot

Pilot #2: Maximize benefits and test management strategies to realize potential

- Data requirements
- Citywide deployment
- Parking strategies
- Utilization
- Sidewalk riding
- Operational VMT
- Life cycle analysis

Data requirements for E-scooters

- **Modeled after Los Angeles MDS**
  - Device availability
  - Trips (start, end, and route data)
  - Collisions
  - Complaints
  - Other values that are referenced in the API specifications

New management strategies for Pilot #2

- **PBOT Parking Enforcement staff** will issue parking tickets and sidewalk riding tickets to companies
  - Companies required to issue warnings, tickets, account suspensions to users.
- **Geofencing requirements:** No parking zones
- **Required sustainability reporting** on Life Cycle Analysis and Vehicle Miles Traveled
- **Surcharges to companies and users** will fund dedicated parking and safe infrastructure

PBOT teams involved in Portand's E-scooter pilot

- Active Transportation Operations
- Regulatory
- Parking Enforcement
- Policy Innovation & Regional Collaboration
- Office of Strategy, Innovation & Performance
- Communications
- Maintenance
- Business Technology Services
- Financial Services
- Office of the Director

Pilot Fee Structure

Permit Application Fee	**$500.00**
Per Scooter Pilot Permit Fee	**$80.00**
Street Use Surcharge - Passed to Consumer	**$0.25**
Right-of-Way Use Surcharge – Paid by Company	
Central City Pattern Area	**$0.20**
West Neighborhoods, Inner Neighborhoods, River & Industrial Pattern Area	**$0.10**
East Neighborhoods Pattern Area	**$0.05**

Future needs

- **Data infrastructure**
  - Conservative estimate for 2019-2020 pilot = 2 million trips
  - PUDL regional data partnership
- **Compliance monitoring**
  - Requires analytical processing power
- **Physical infrastructure**
  - Places to park in the street
  - Safer places to ride – not on sidewalks

QUESTIONS

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