SDOT Bike Share Team

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Seattle Department of Transportation

SDOT's Mission, Vision, and Core Values

Mission: deliver a high-quality transportation system for Seattle

Vision: connected people, places, and products

Committed to 5 core values to create a city that is:

- Safe
- Interconnected
- Affordable
- Vibrant
- Innovative

For **all**

Presentation overview

- Brief history of bike share in Seattle
- Overview of the pilot permit
- Key findings
- E-bikes and adaptive cycles
- Questions for discussion

Bike Share in Seattle

Pronto

Seattle's first bike share system

- Dock-based system
- 500 bikes, 50 stations
- Limited service area
- October 2014 to March 2017

Free-Floating Bikes

- Three companies in pilot beginning July 2017
- Private market – no cost to city
- Citywide service area
- GPS technology on bike
- Smartphone app-based
- $1 for 30 - 60 min

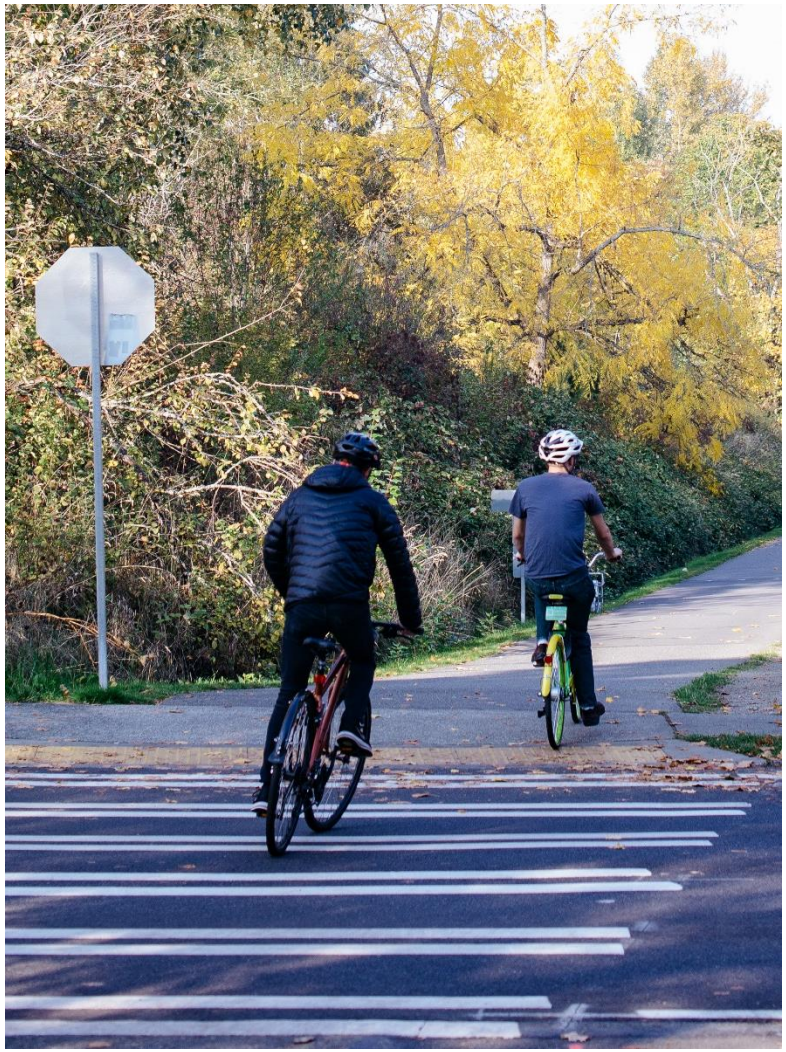
Pilot Permit

- Why a pilot?
- Year-long permits
- Evaluation Process – learn what works and what doesn't
- Now reviewing first 6 months of data
- Recommendations for City Council review

Pilot Permit

Regulatory Approaches

- "RFP" Approach (Philadelphia, San Francisco)
  - High control, sometimes at cost to public
  - Long-term commitment to one provider
  - Slower innovation and system growth
- No regulations (Dallas)
  - No control
  - No data
  - No fees
- Principle-based regulation (Seattle)
  - Moderate control
  - Access to data
  - Access to fees
  - Flexible
  - Allows innovation and growth

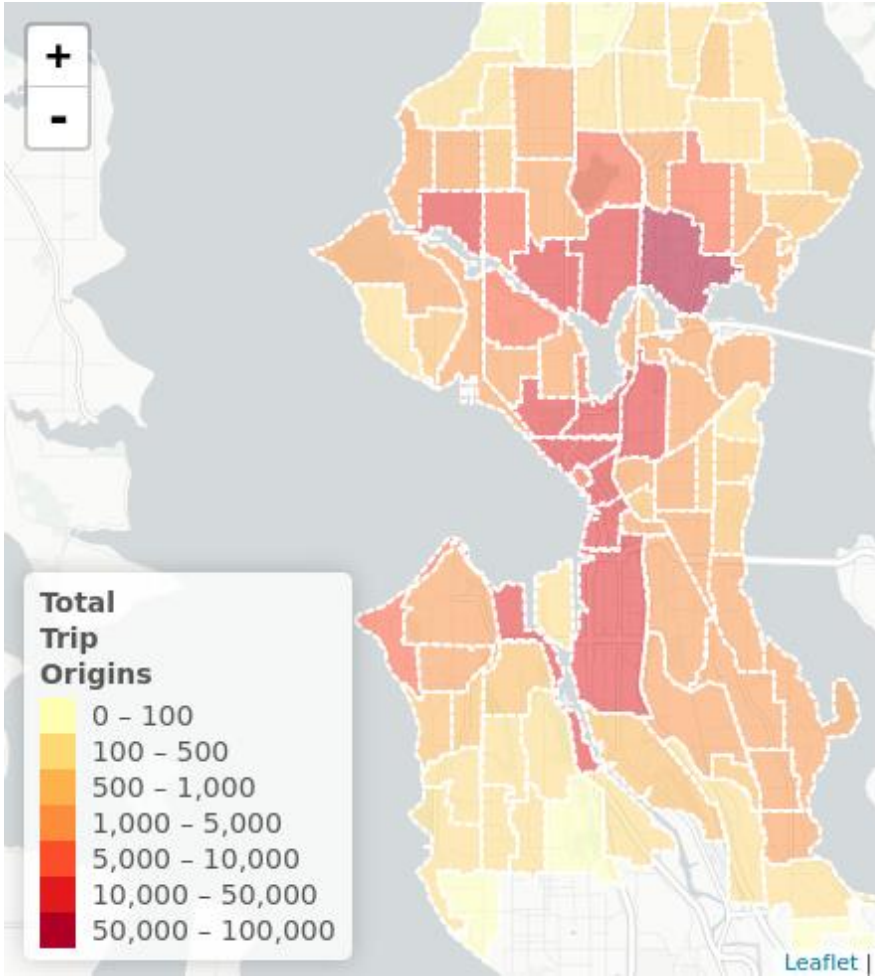


Positive Findings

Ridership Numbers

July to December 2017

- 468,978 trips in 6 months
  - Pronto: 278,143 trips in 30 months
- 2,572 trips per day
- ~10,000 total bikes as of December

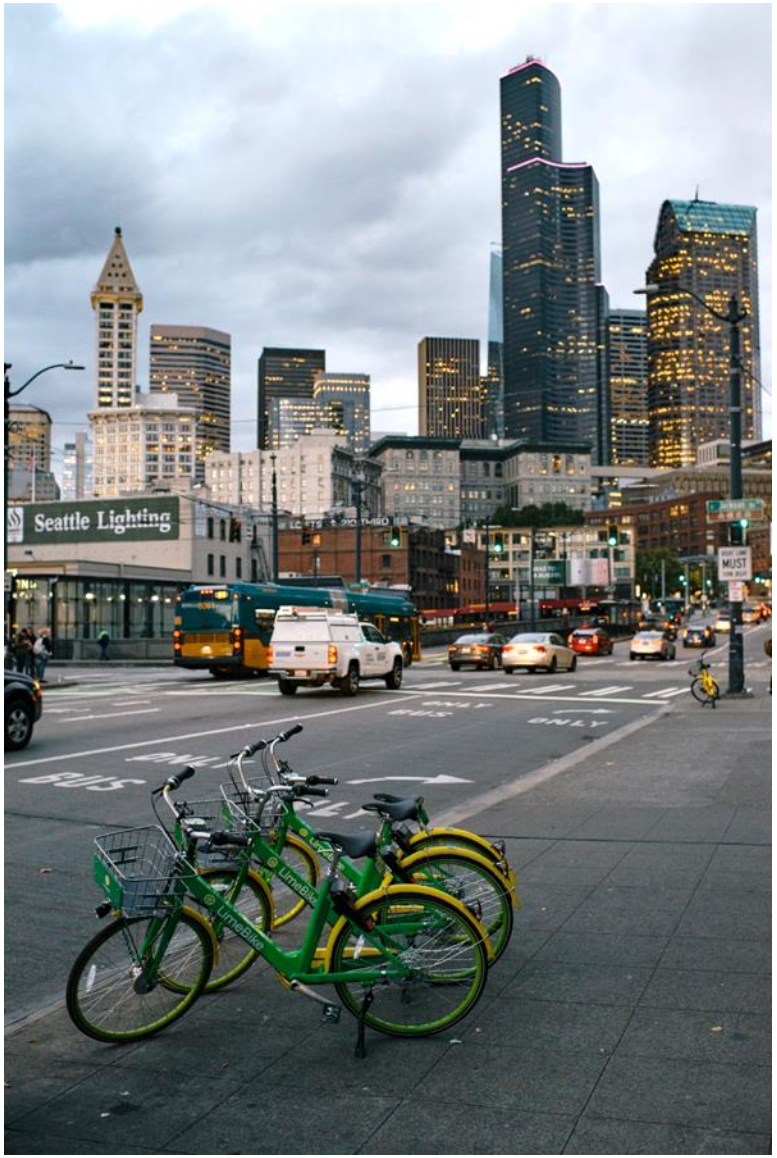


Source: TRAC

Program Benefits

Some good things we're seeing

- More transportation alternatives
- Reduced carbon emissions
- New opportunities for exercise and recreation
- Reduced infrastructure cost (docking stations)
- Large service area
- Supports quick trips, rides to/from transit

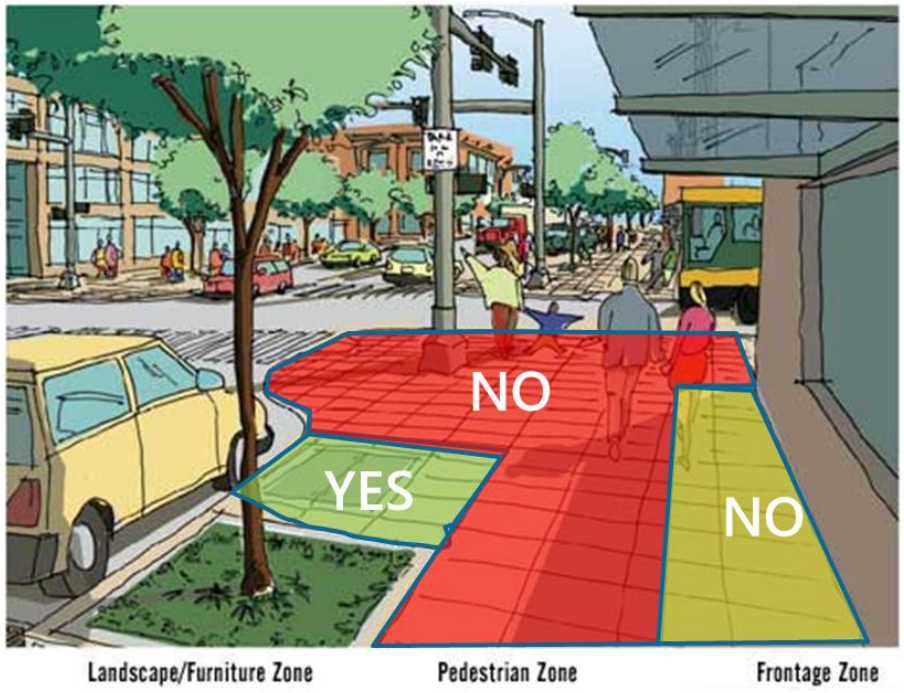


Parking Problems

Parking Issues

Parking rules during the pilot

- Bikes may be parked in furniture zone of **sidewalk** (along curb)
- **6 feet pedestrian clearance**
- No parking at:
  - Corners
  - Ramps
  - Transit stops
  - Benches
  - Loading and disabled parking
  - Driveways
  - Entryways
  - Grass and landscaping
- Companies move improperly parked bikes on request
  - 2 hours on weekdays
  - 10 hours on nights and weekends



Parking Issues

What we're seeing on the street

- Biggest regulatory and quality-of-life challenge
- Issues:
  - Blocked sidewalks, curb ramps
  - Blocked transit access
  - Blocked business access
  - Tipped bikes
  - Bike "clutter"
- Field surveys: **70%+** of bikes are parked correctly

Parking Issues

What we've learned so far

- Users don't always park correctly
  - Need to communicate rules to users better
  - Some areas don't have good parking surfaces
- Most improperly parked bikes are not reported
  - Don't know who to contact
  - Don't know the rules
  - Can't see bike number
  - Inconvenient

Addressing Parking Issues

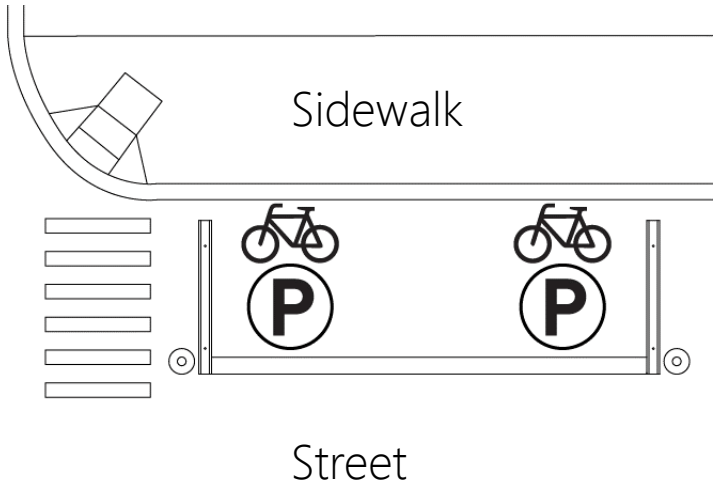
Designated parking areas

- Cues for orderly, safe parking
- Low cost and scalable
- Potential for geofencing

Addressing Parking Issues

Designated parking area types

- Off-street (sidewalk furniture zone)
  - Areas with wide sidewalks
- On-street (bike corral)
  - Expand on existing bike corral model
  - Underused curb buffer areas near intersections
  - Preserve sight lines, reduce crossing conflicts



Parking Issues

Centralized parking reporting

- Website receives and records parking requests
- Alerts company
- Helps SDOT track company responsiveness
- One contact instead of three

Parking Issues

Some things the companies can do

- Better rider education
  - Simple, memorable, effective rules
  - Remind riders of other street users
  - In-app and on-bike instructions
- Improve responsiveness
  - Companies: improve rider incentives and education, find right staffing levels
  - City: oversight and compliance checks


Other Problems

Other Issues

- Safety While Riding
  - Helmet Use
  - Riding on sidewalks
  - Less experienced bicyclists
- Access and Equity
  - Some neighborhoods have less access to bike share than others
  - Options for people without smartphones or credit cards
  - Lack of options for people with special needs

Adaptive Cycling

Adaptive Cycles

- Tricycles: upright, recumbent, cargo
- Handcycles
- Tandems
- Heavy Duty cycles
- Electric pedal assist
- Wheelchair attachments
- Grips and braces

How can we support cycling for riders of all abilities?

Adaptive Cycle Sharing

Where we are now

- Outdoors for All nonprofit
- No city program yet
- SDOT is researching options and needs your input

Photo credit: Jonathan Maus/BikePortland

Adaptive Cycle Sharing

Benefits

- More transportation and recreation options
- Cycling and exercise for all abilities
- Self-sufficiency and aging in place
- Reduce car trips and air pollution
- More inclusive cycling culture
- More visibility for the mobility needs of people with disabilities

Adaptive Cycle Sharing

Challenges

- Few existing providers, no largescale examples
- Scalability vs. individual needs
- Knowing where to find the right cycle for you
- Step-free cycling network
- Getting on and off; mobility device storage
- Parking
- Expense

Adaptive Cycle Sharing

Potential Distribution Models: Depot-Based

- **Examples:** Outdoors for All (Seattle), Adaptive biketown (Portland)
- **Advantages**
  - Individual fittings and education provided
  - Store mobility device at depot
  - Wide variety of models
- **Limitations**
  - Recreational round trips only (or depot to depot)
  - Low ridership potential

Adaptive Cycle Sharing

Potential Distribution Models: Delivery

- **Examples:** Pedal Anywhere (Seattle), MoGo delivery-to-dock (Detroit)
- **Advantages**
  - Reserve cycle for delivery to home or pickup location
  - Individual fittings and education possible with attended delivery
  - Store mobility device at home or pickup point
- **Limitations**
  - Preplanned trips only
  - Delivery and pickup costs

Adaptive Cycle Sharing

Potential Distribution Models: Dock-Based

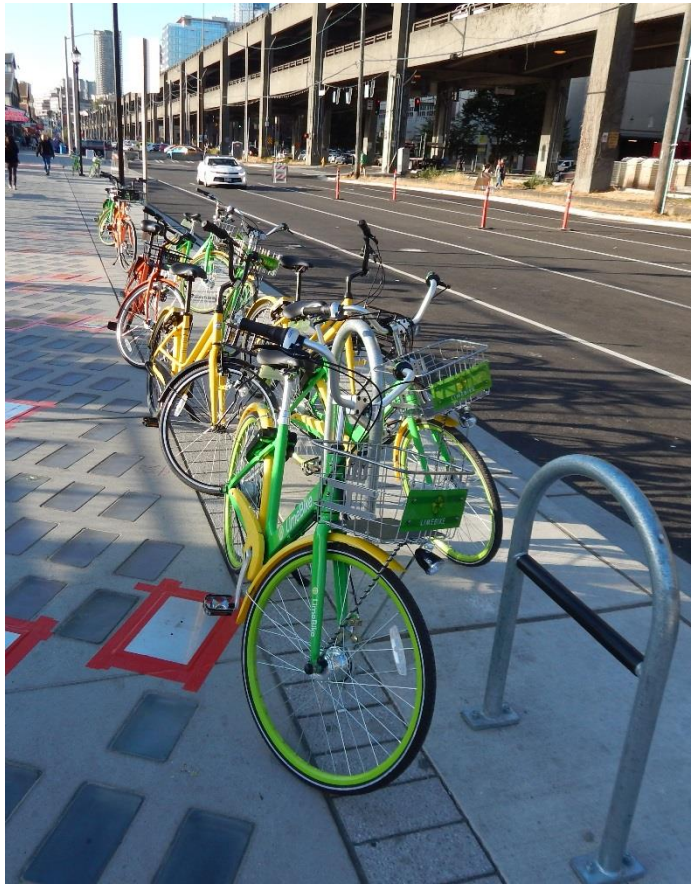
- **Examples:** Westminster, CO; Fort Collins, CO; Carmel, IN
- **Advantages**
  - Pick up and drop off at any dock
  - Recreation and transportation
- **Limitations**
  - Standard commercial models; no individual fittings
  - No mobility device storage
  - Limited service area

Photo credit: Fox59.com

Adaptive Cycle Sharing

Potential Distribution Models: Dockless (Free-Floating)

- **Examples:** E-bikes in Seattle
- **Advantages**
  - Anywhere to anywhere trips – most flexible, large service area
  - Recreation and transportation
- **Limitations**
  - Standard commercial models; no individual fittings
  - No mobility device storage
  - Pickup point changes
  - Parking challenges



Next Steps

Date	Activity/action
Dec 31, 2017	End of data collection
April 2018	Pilot evaluation
May 2018	Recommendations to mayor and city council

What We Hope to Learn Tonight

General Feedback

- What impacts (good and bad) has bike share had on you?
- What changes do you want to see in the program?
- What did we miss?

Parking Issues

- How do you use the street and sidewalk?
- What parking rules are most important?
- What issues do parked bikes create for you? How can the city and companies address them?

Designated Bike Parking

- How can designated parking improve bike share?
- Where should we put parking areas?

Adaptive Cycle Sharing

- What kind of system would work for you?
- What features should be included to serve your needs?
- How important is individualized fitting and education?
- What other benefits, barriers, and issues should we consider?

Thanks!

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