Bike Share: Council Briefing #2

Council Transportation Committee

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SDOT
Seattle Department of Transportation

Our 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 goal

1. Recap
2. Council options
3. Future expansion
4. Council questions

Partially lift proviso - $1.4M

Outcomes

1. City purchases Pronto bike share assets

2. City becomes owner of system

3. City contracts/oversees operator

4. Bike share stabilized and well-positioned to expand

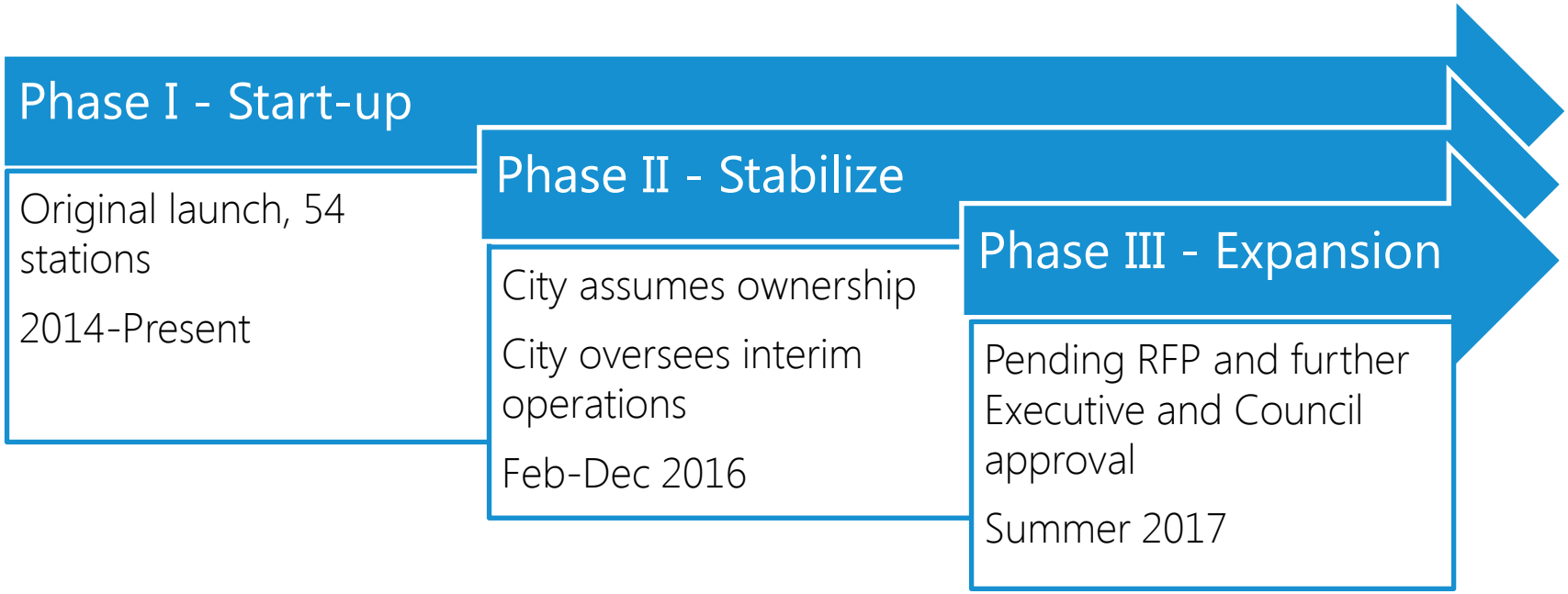
Worldwide


500 cities
5 continents
90 US municipalities
20 million US trips, 2015
Greenland
Finland
Russia
Canada
Kazakhstan
Mongolia
North Atlantic Ocean
Algeria
Libya
Mali
Niger
Sudan
Chad
Nigeria
Ethiopia
Kenya
DR Congo
Tanzania
Angola
Namibia
Brazil
Chile
South Pacific Ocean
South Atlantic Ocean
Indian Ocean
Papua New Guinea
Australia

Pronto!

1. Launched 2014
2. 54 stations/500 bikes
3. 140,000 trips
4. 3,000 members
5. 1st helmet system in US

3-phase process



Governance structure

Recommendation - Consistent with peer cities, adopt a public governance model.
The City will own the bike share equipment and contract with a third party for operations.

Public (Government Owns & 3rd Party Operates)	Non-Profit (Non-Profit Owns & Operates)	Private (For-Profit Owns & Operates)
•Cities - Boston, Chicago, London, Los Angeles, Philadelphia, Washington DC	•Cities - Aspen, Buffalo, Boulder, Denver, Honolulu, Memphis, Minneapolis	•Cities - NYC, Miami Beach
•Pros - City controls system and oversees operator. City determines station locations, prices, SLA's. City can drive expansion to make bike share a true extension of transit. Public systems tend to be largest	•Pros - City not responsible for finances. Local operations can achieve lower costs	•Pros - City not responsible for finances or management
•Cons - City responsible for some or all of finances	•Cons - City minimal control or input. City cannot drive expansion; systems tend to be smaller	•Cons - City minimal control or input. For-profit goals not always aligned with city's
•Best for - Larger cities invested in making bike share part of the public transportation system	•Best for- Small and mid-sized cities and systems where local operations are feasible and cost-effective	•Best for - Cities with exceptional private revenue potential from sponsorship, advertisements or tourists

Pronto vs City-Owned

2016 Annual Operating and CIP Costs and Revenues: Pronto vs City-Owned

	With Pronto	Without Pronto/City Owned
Annual Costs - Total	2,081,545	1,426,545
Operator Contract	1,307,945	1,307,945
Other (primarily helmets)	83,600	83,600
Pronto Overhead	190,000	0
Pronto Debt Service Payments	500,000	0
SDOT Overhead	$35,000	$35,000
Operating Revenues - Total	1,556,048	1,556,048
User Revenue	613,348	613,348
Annual Sponsorship	702,700	702,700
One-Time City Funding	240,000	240,000
Annual Net	-525,497	129,503

Pronto needed to borrow funds to launch and therefore incurred debt payments that require diverting revenue away from operations in out years

Options

Option 1 No Asset Purchase, No Bike Share	Option 2 Asset Purchase, No Expansion	Option 3 Asset Purchase And Expansion
• Outcome • System shutdown • City returns ~$1M grant • Stations removed • Members reimbursed	• Outcome • System continues, same size • City owns/ hires operator • Operations close to break-even with existing sponsors	•Outcome •Expands to 800-1500 bikes •City owns/hires operator •Can be financially self-sustaining
• Pros • No City involvement	• Pros • Service continuity • Benefits 20,000 users • Provides first/last mile option	•Pros •Realizes transportation, equity, health, environment, economy vision •All from Option 2
• Cons • System shutdown • 20,000 users without benefit • Eliminates first/last mile option • Impacts future sponsors	• Cons • Limited service area	•Cons •Cost
• $1,120,000 • $1M – FTA repayment • $130K– foregone 2016 revenue • $25K – Equipment removal • -$35K – SDOT staff saved (.25FTE)	• $1,305,000 • $1.4M purchase assets • $35K SDOT staff (.25 FTE) • -$130K surplus revenue in 2016 • (out-year annual operating shortfall of approx. $110K)	•$5,690,000 •$4.94M – capital purchases •$50K SDOT staff •$700K one-time operating shortfall in 2016 •(out-year annual operating surpluses of approx. $500K)

**Estimated total 12 months cost for removal and storage= $200,000. Performance bond of $175,000 will be used to cover these costs.*

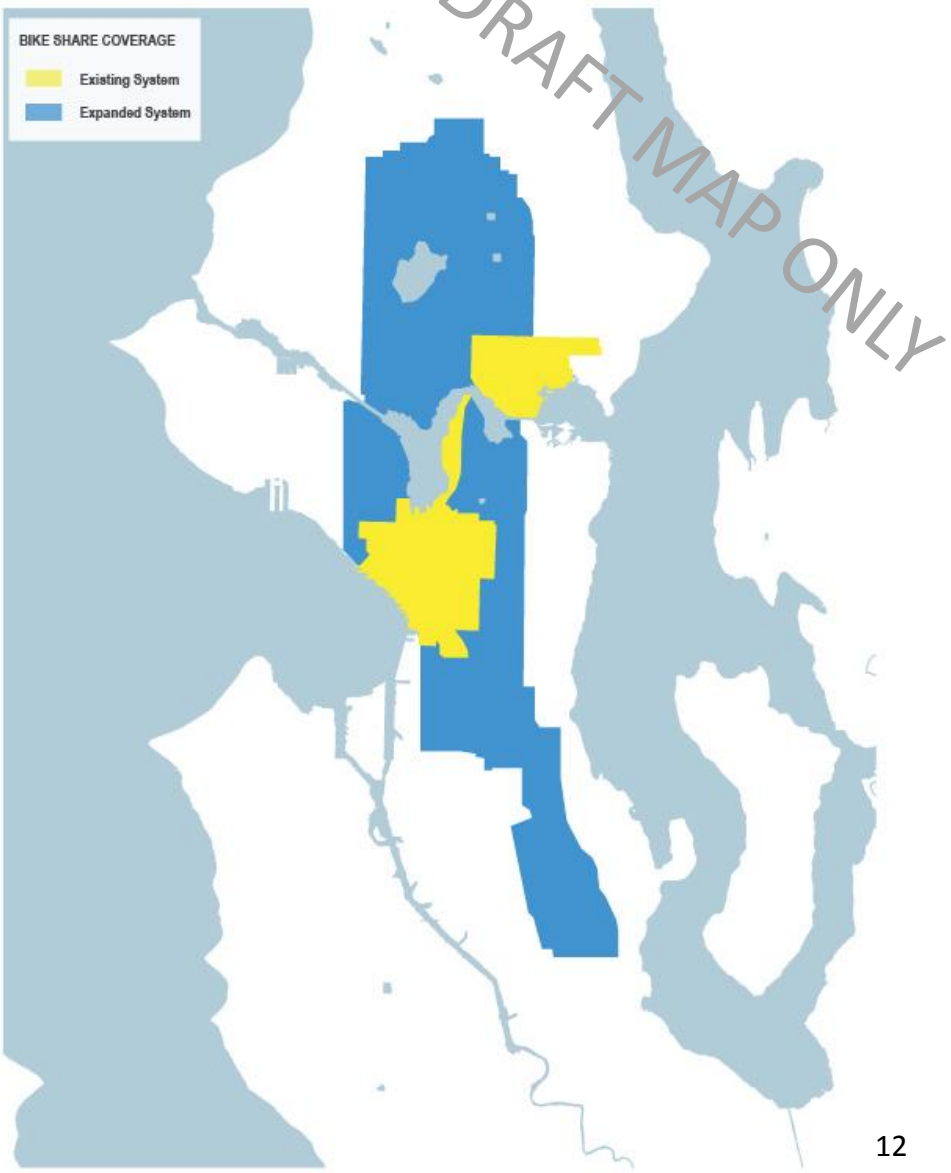
Vision

City seeks to sustain and expand bike share

- Increases access to transportation
- Complements public transit
- Promotes active and healthy living
- Is environmentally friendly and equitable
- Supports the local economy
- Is financially sustainable

Possibilities

1. 2017 launch
2. Expanded service area w/ SE Seattle
3. 80-130+ stations
4. Open to electric bikes
5. Can recover up to 100% of OpEx from sponsors & users, 2018



Usage Projections

Existing (500 bikes) 2015

1. 140,000 trips
2. 3,000 members
3. $675K user revenue

Expanded System (1,000 bikes)

1. 500,000+ trips
2. 8,000 members
3. $1.3M user revenue

Ridership, Membership and Revenue Projections	
	Annual
Total Trips	500,000
Annual Memberships Sold	8,000
Casual Memberships Sold	85,000
Revenue	$1,300,000

Financial Projections

Annual Operating Costs and Revenues in Expansion Scenario

	2015	2016	2017 (June-Dec)	2018
Operating Costs - Total	**1,904,121**	**1,524,925**	**1,211,000**	**1,961,000**
Operator Contract	1,307,945	1,281,600	1,071,000	1,836,000
Pronto Overhead	189,391			
Other (primarily helmets)	114,953	208,325	90,000	90,000
Pronto Debt Service Payments	291,832			
City Overhead		35,000	50,000	35,000
Operating Revenues - Total	**1,381,048**	**828,348**	**2,107,314**	**2,543,476**
User Revenue	613,348	588,348	907,314	1,343,476
Annual Sponsorship	702,700		1,200,000	1,200,000
City Funding	65,000	240,000		
Annual Net	**(523,073)**	**(696,577)**	**896,314**	**582,476**

Assumptions:

Current system would shut down in December 2016, new system to open in June 2017.

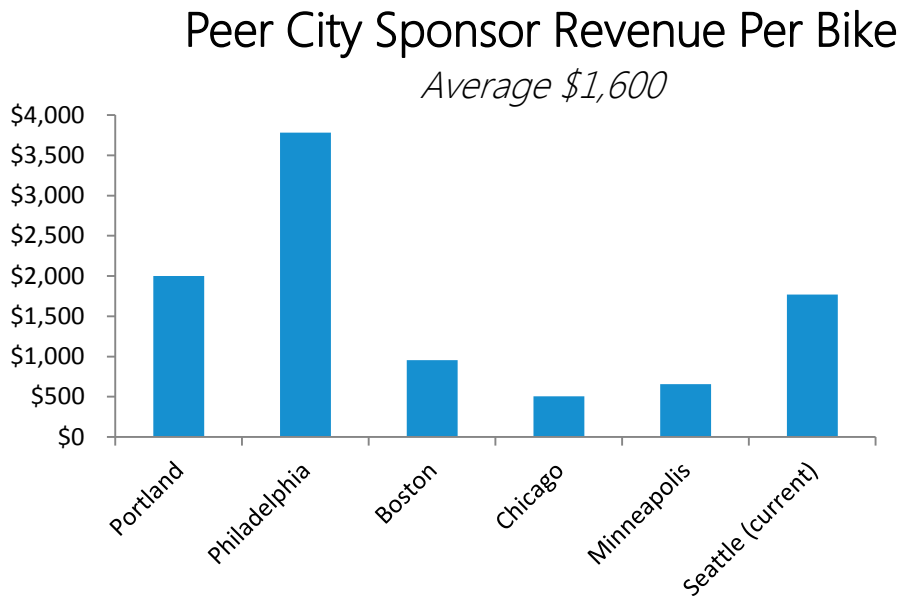
2017 and 2018 assume an expansion to 100 stations.

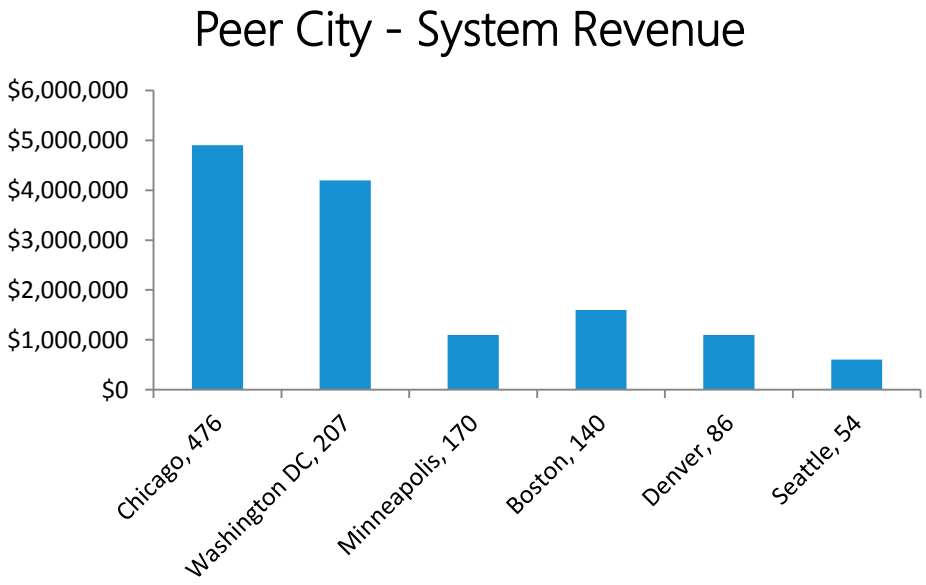
Sponsorship revenues from 2017-2018 are based on per bike average from comparable cities.

User revenues for 2017 and 2018 are based on data from comparable cities.

There are no sponsorship revenues in 2016, as sponsors pay forward one year (2016 sponsorship already paid in 2015).

Assumptions





Financial Projections

CIP Costs and Revenues in an Expansion Scenario

	2016	2017 (June-Dec)
CIP Costs - Total	1,400,000	4,944,000
Purchase Pronto Assets	1,400,000	
Program Expansion		4,344,000
Low Income Expansion		600,000
CIP Revenues - Total	1,400,000	4,944,000
City Capital (street use fees)	1,400,000	3,600,000
Net Surplus Sponsorship Revenues (2016-2017)		200,000
One-Time Commercial Parking Tax - Low-Income Expansion		600,000
Ride Share Tax Credit - One-Time Funding		144,000
Congestion Mitigation and Air Quality Grant		400,000

Equipment

Recommendation- Issue a flexible bid open to a range of equipment options to maximize choice. Bid responses will provide the detail required to determine the best solution for Seattle.

Generation 3.0 Station-Based Smart-Dock	Generation 3b Station-Optional Smart-Bike	Generation 4.0 Station-Options Smart-Bikes with Pedal Assist Electric Technology
•Vendors- 8D, Bcycle, PBSC	•Vendors - Sobi	•Vendors - Beweggen
•Pros - Highly robust, proven equipment. Operational in US since 2010. Dominant technology of large U.S. cities. Planned upgrades to include features from newer systems including potential electric retrofits	•Pros - Lower cost because technology in bikes. More nimble. Advanced features. Stations not required	•Pros - Electric increases pool of riders and revenue potential. Advanced features. Next generation of equipment
•Cons - Most expensive because technology in docks is duplicative. Lacks some newer features. Requires stations	•Cons -Less proven system. Stationless systems are less visible. Equipment not as robust. Stationless increases rebalancing challenges. Not compatible with existing equipment	•Cons - New technology. Early adopter challenges. Likely requires hardwiring stations. Not compatible with existing equipment
•Cities - Boston, Milwaukee, Philadelphia, Chicago, Washington DC, Seattle, NYC, Denver, Minneapolis	•Cities -Portland, Buffalo, Hamilton, Phoenix, Orlando, Long Beach	•Cities - Birmingham

Operations

Recommendation- Combine operations and equipment into a single, flexible bid, open to a range of financial models for operations.

Flat Fee

- System owner pays flat fee for operations based on size
- Revenue remains with owner
- Owner has near full decision making authority

Time and Management

- System owner pays actual costs of operations plus management fee
- Revenue remains with owner
- Owner retains full decision making authority

Risk/Revenue Share

- Owner and operator share revenue and risk
- Owner and operator share decisions

Privatized Operations

- Operator takes full responsibility for operations costs
- Operator keeps majority of revenue
- Operator retains decision making authority beyond contract terms
- Operator may own and/or be responsible for equipment

Bid Scenarios

1. Flat Fee Ops
Electric Bikes
(800-1200 bikes)

2. Flat Fee Ops
Existing Equipment
potential e-retrofit
(1300-1500 bikes)

3. Flat Fee Ops
New Equipment
(800-1500 bikes)

4."Free Ops"
Electric Bikes
(800-1200 bikes)

5."Free Ops"
Existing Equipment
potential e-retrofit
(1300-1500 bikes)

6. "Free Ops"
New Equipment
(800-1500 bikes)

Infrastructure & Safety

Recommendation - Seattle's existing infrastructure can safely support bike share. Expand bike share concurrent with implementation of the bike network.

Cycling Rating of Peer Cities with Bike Share							
	Population 2010	League of American Bicyclists Ranking	Rank By Mode Share	Launch Year	Start Size	Current Size	Fatalities
Chicago	2,700,000	Silver	20	2013	75	476	0
Wash DC	649,000	Silver	2	2010	49	339	0
Minneapolis	400,000	Gold	4	2010	65	169	0
Boston	644,000	Silver	14	2011	61	141	0
Denver	646,000	Silver	13	2010	40	86	0
Seattle	652,000	Gold	6	2014	50	54	0

System Size

Recommendation- Consistent with best practices from peer cities, invest capital to expand bike share to 80-150 stations. Properly capitalizing the expansion will contribute to the financial success of the system.

	Population	Launch Year	# Stations Initial	# Stations Current	% Growth
Chicago	2,700,000	2013	75	476	535%
Washington DC	649,000	2010	49	339	592%
Minneapolis	400,000	2010	65	169	160%
Boston	644,000	2011	61	141	131%
Denver	646,000	2010	40	86	115%
Seattle	652,000	2014	50	54	8%

Station Siting

Recommendation- Finalize the service area after procurement. Ensure a minimum density of six stations per square mile. Maintain the integrity of the network. Prioritize locations to meet equity, revenue, transit connectivity and operational goals.

City	Station Density (stations/sq. mile)
Washington DC	8.9
Minneapolis	7.7
Boston	8.3
Denver	8.7
Chicago	9.4
Average	8.7

Location Priorities

1. Equity
2. Revenue generation
3. Transit connectivity
4. Operations considerations (gap fill, rebalancing)

Network Integrity

1. Avoid creating "islands"
2. Avoid narrow or linear networks
3. Ensure all stations < one mile of an existing station, preferably every 300-500 yards.

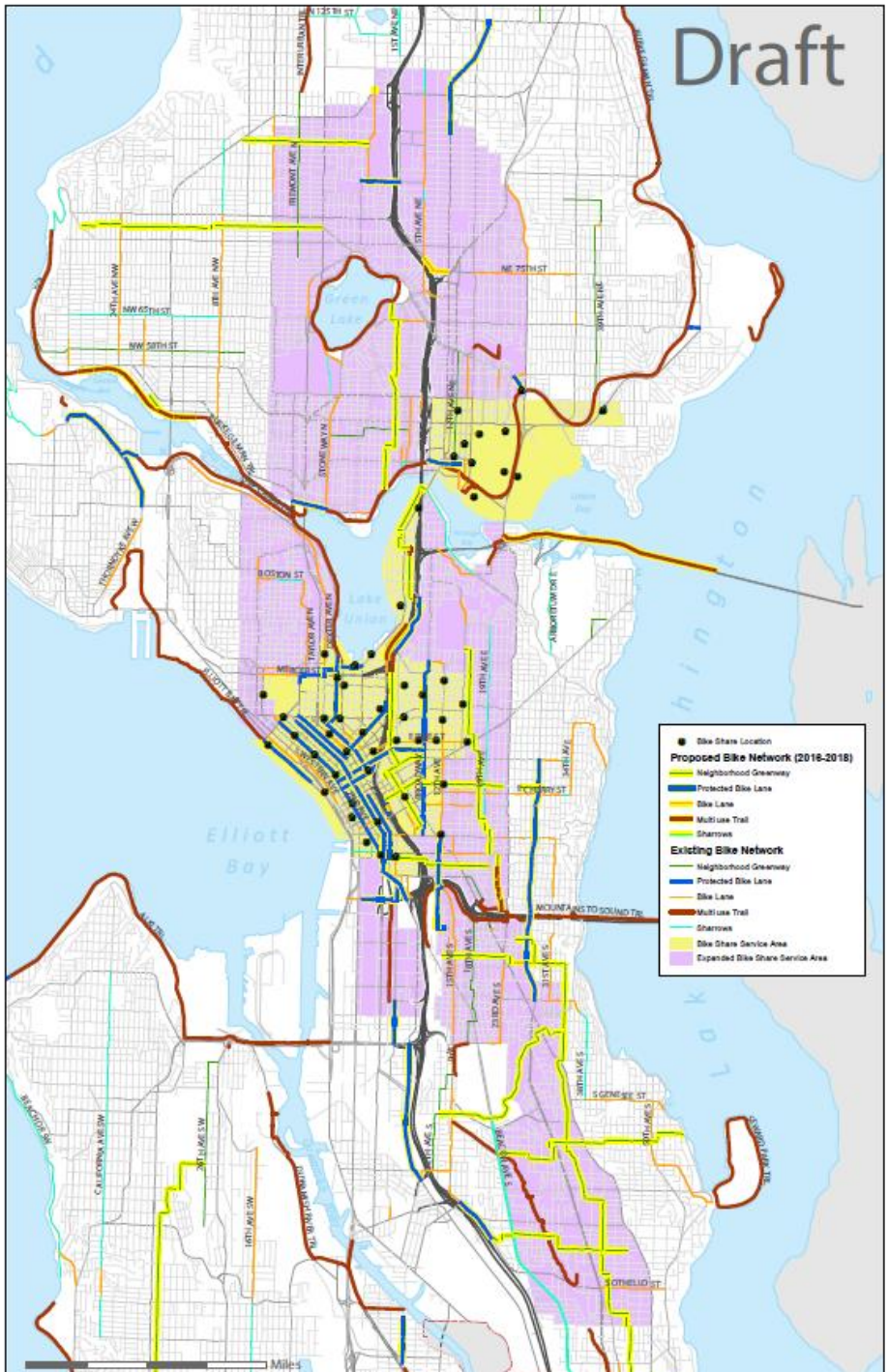
Equity

Recommendation- Locate a minimum 20% of stations in low-income neighborhoods, extending into southeast Seattle, as possible. Implement a suite of equity programs including a low-income membership program.

Marketing

Recommendation- Implement a comprehensive marketing program emphasizing corporate memberships.

How does the bike share service area leverage our infrastructure investments?



Summary

What are we getting for $1.4M

We will purchase 26 stations from Pronto as well as well as all remaining assets including: spare parts, vehicles, tools, helmets and equipment.

	Total Bike Share Assets	Pronto Owned Assets
On-street Station Equip	$ 2,061,234	$ 1,061,234
Helmet Services	$ 128,729	$ 128,729
Station Services	$ 61,711	$ 61,711
Bike Department	$ 602,081	$ 602,081
Deployment	$ 8,258	$ 8,258
Rebalancing/Dispatch	$ 110,341	$ 110,341
Spare Station Equipment	$ 119,395	$ 119,395
	$ 3,091,750	$ 2,091,750

Questions?

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www.seattle.gov/transportation




SDOT
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