



Bicycle Sharing in Phoenix



BICYCLE SHARING

- What is bike share?
- Who else is doing it?
- What are its benefits?
- How do we pay for it?
- How do we get started?



What is bike sharing?



- Automated, self service, bicycle rental
- Priced to encourage short trips
- One style of bicycle
- One way use/return bicycle at any station
- Long term (annual) and casual (tourist) membership

Global Activity

As of Spring 2011:

- 136 bikesharing programs in approximately 160 cities around the world
- Over 236,700 bicycles and 13,500 stations on the roads worldwide



United States Activity

As of Summer 2012:

- 25 bikesharing programs in 20 states and the District of Columbia
- 16,727 bicycles and 1340 stations
- Nothing at scale in Arizona



United States Activity

	Stations	Bicycles
Atlanta, GA	8	40
Bay St Louis, MS		10
Boston, MA	61	610
Boulder, CO	15	120
Broward County, FL	35	
Charlotte, NC	20	200
Chattanooga, TN	30	300
Chicago, IL	7	100
Des Moines, IA	4	18
Denver, CO	52	520
Houston, TX	3	18
Kailua, Hawaii	2	12
Kansas City, MO	12	90
Madison, WI	27	270
Miami Beach, FL	100	1,000
Minneapolis, MN	146	1,330
New York City, NY	600	10,000
Omaha, NE	5	35
Phoenixville, PA	1	10
Portland, OR		
Pottstown, PA	2	30
Salt Lake City, UT	10	100
San Antonio, TX	23	230
Spartanburg, SC	2	14
Washington, D.C.	175	1,670



How does it work?

- See video: D DOT
- <http://www.youtube.com/watch?v=qQ62cQiGFI8>



People like riding bikeshare

- See video: NACTO / Street Films
- <http://www.youtube.com/watch?v=-KqOAr3ARo4>



Benefits of bike sharing



- Reduced traffic congestion
- Less air pollution
- Complement transit and other modes
- Increased mobility options
- Environmental, social, **economic** and health benefits
- Spontaneous bicycle trips

Economic Benefits

Cycling projects create 11.4 jobs for every \$1 million spent

Induced trips generated

64% of bikeshare users take trip by bike instead of staying home because it's too far to walk

56% of users also ride to eat

40% of users also ride to shop

83% of users likely or more likely to patronize business accessible by bikeshare

Bicyclists spend more than walkers, car drivers, and transit riders



Destination		# Trips / Month	\$ / Trip	\$ / month
Bar	CAR	1.6	\$ 25.55	\$ 40.88
	BIKE	4.9	\$ 14.08	\$ 68.99
	TRANSIT	1.8	\$ 19.54	\$ 35.17
	WALK	3.1	\$ 22.17	\$ 68.73
Convenience Store	CAR	9.9	\$ 7.98	\$ 79.00
	BIKE	14.5	\$ 7.30	\$ 105.85
	TRANSIT	10.9	\$ 6.91	\$ 75.32
	WALK	12.6	\$ 6.13	\$ 77.24
Restaurant	CAR	2.2	\$ 18.74	\$ 41.23
	BIKE	3.5	\$ 12.08	\$ 42.28
	TRANSIT	3.5	\$ 11.52	\$ 40.32
	WALK	2.6	\$ 16.74	\$ 43.52

How could we pay for it?

PRIVATE GRANTS

GRANTS

- Blue Cross/Blue Shield
- Humana
- New Balance
- Mary Black Foundation
- JM Smith Foundation
- Children's Hospital
- Procter Gamble
- Gillette
- Harvard University
- others

CUSTOMER FEES

MEMBERSHIP FEES

- \$45-\$85 – one year
- \$15-\$60 – one month
- \$15-\$30 – 3 day/weekly
- \$5-\$7 – daily

USAGE FEES

- Free 30-60 mins
- Additional fee for every 30 mins thereafter

PUBLIC

FEDERAL

- Formula
- Discretionary
- FTA
- FHWA

STATE

- Colorado FASTER
- CPPW grants

State DOTs

LOCAL

- Parking fees
- Matching funding

ADVERTISING AND SPONSORSHIP

- Naming rights
- Advertising
- Logos on equipment and website

Large Systems (800-1200 bikes)

	Capital Bikeshare	Nice Ride	Deco Bike
Start date	September 20, 2010	June 10, 2010	March 15, 2011
Number of bikes	1200	1200	800
Number of Stations	140	116	91
Docks per station (Range)	11 to 39	11 to 39	13 to 19
Solar vs. wired	Solar	Solar	Solar
Service Area (Sq Mi)	35.95	33.30	6.30
Average Station Density (# station per Sq. Mile)	3.92	3.48	14.13
# of Members (Annual/Casual)	19,200 Annual 105,644 casual	3,521 annual 37,103 casual	2,500 annual No casual data reported
Year round or seasonal	Year-Round	Seasonal (Closed Nov-Mar)	Year-round
# of Trips per year	1,171,562 trips in 365 days	217,530 trips in 212 days	540,000 trips in 274 days
Business Model	Jurisdiction owned and managed	Non-Profit	For-Profit

Medium Systems (200-800 bikes)

	Hubway	Denver B-Cycle	San Antonio B-Cycle
Start date	July 28, 2011	April 22, 2010	March 1, 2011
Number of bikes	600	520	200
Number of Stations	60	52	20
Docks per station (Range)	13 to 19	9 to 19	7 to 23
Solar vs. wired	Solar	Solar and Wired	Solar and Wired
Service Area (Sq Mi)	11.79	12.571	4.77
Average Station Density (# station per Sq. Mile)	4.83	4.1365	4.19
# of Members (Annual/Casual)	3,600 Annual 30,000 Casual	2,659 Annual 40,600 Casual	1,000 Annual 2,800 casual
Year round or seasonal	Seasonal (Closed Dec-Mar)	Seasonal (Closed Dec-Mar)	Year-round
# of Trips per year	60,000 trips in 120 days	202,731 trips in 271 days	23,272 trips in 180 days
Business Model	Advertising and Sponsorship Concession with profit sharing	Non-Profit	Non-Profit

Infrastructure station siting and power

- AC POWER



- SOLAR POWER



Docks	Width	Station Depth	Access Depth	Total Depth	Weight
11	31 to 32 feet	6 to 8 feet	4 feet	10' to 12'	3000 to 5000 lbs
15	40 to 42 feet	6 to 8 feet	4 feet	10' to 12'	4500 to 5500 lbs
19	50 to 52 feet	6 to 8 feet	4 feet	10' to 12'	5500 to 6500 lbs

Service area profiles

- Size: 1.5 sq.mi. to 36 sq.mi.
- Station density: 1.4 - 14.3 stations/sq.mi. (avg. 4.7)
- Station spacing: 0.1 - 0.75 mi.
- Housing: 1,400 - 9,300 units/sq.mi.
- Employment: 570 - 7,000 jobs/sq.mi.
- Income: \$28,000 - \$66,000 (avg. \$47,000)
- Bike To Work rate: 0.2% - 5% (avg. 3%)



2011 Use Patterns

DENVER

Total Checkouts by Time of Day



Denver Community Partners

Community Partners:

- Arbys
- Chipotle
- Patton Boggs LLP
- Orange Marbel
- PepsiCo
- Xfinity
- Encana
- US Bank
- Kentwood
- Suncor Energy
- CLIF
- The Walton Family Foundation
- ROSE Medical Center
- WELLS FARGO
- LiveWell COLORADO
- KAISER PERMANENTE
- energy Office
- Pro byzorian/St. Luke's Medical Center
- RTD
- DENVER

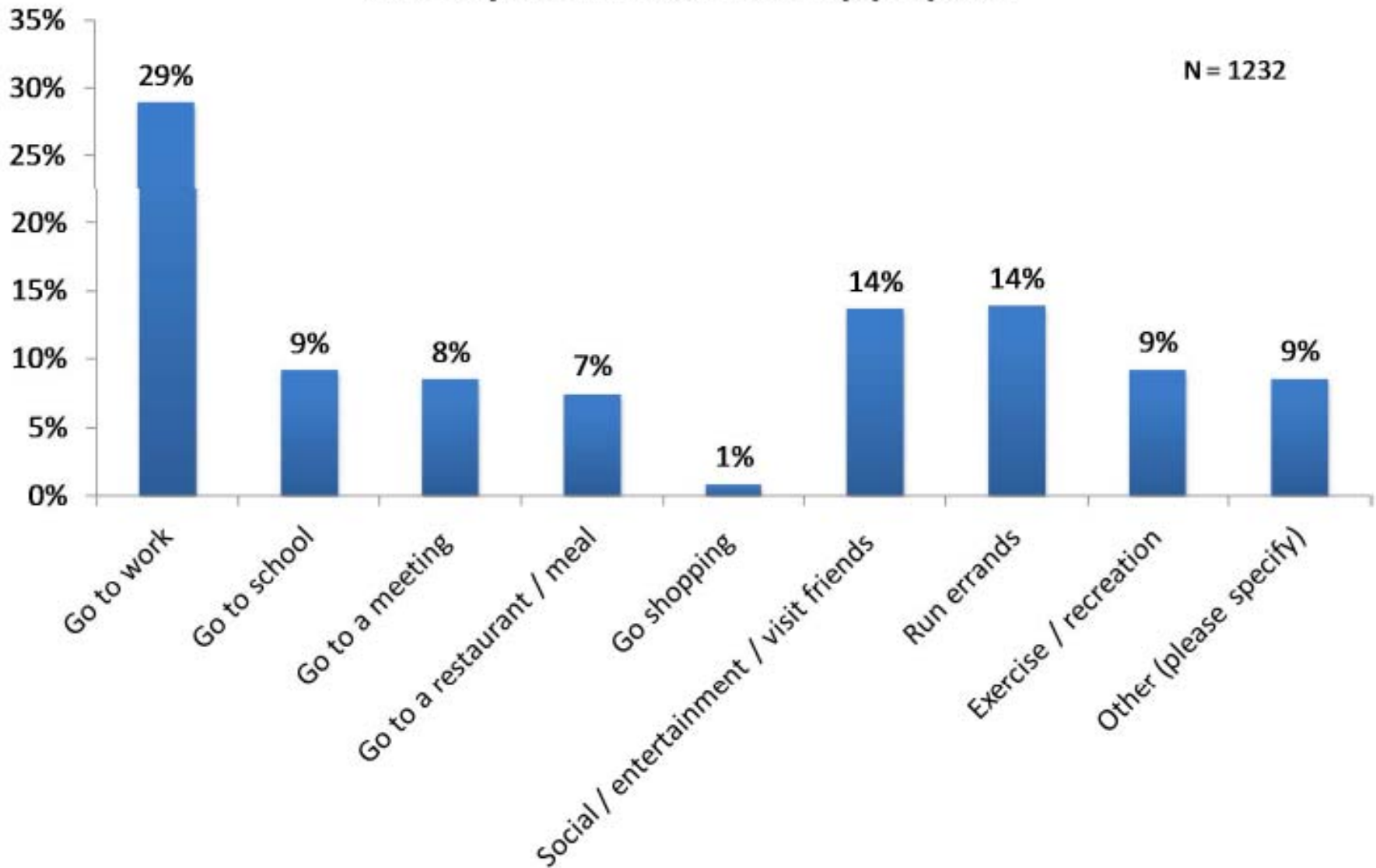
Denver Bike Sharing, 501(c)(3) • Owner and Operator of Denver B-Cycle • www.denver.bicycle.com • 303.825.3325

System Profile

- 2010 launch - 65 stations, 700 bikes
- 2011 - 116 stations, 1200 bikes
- 2012 Expansion - 30 stations, 128 bikes
- Spanning two downtowns 10 miles apart
- Service area 50+ sq. miles
- 3500 Annual subscribers
- 100,000 rentals in 2010
- 217,000 rentals in 2011
- Season runs April – November
- Staff: 6-7 full time, 10 seasonal



What is your most common trip purpose?



Why bike sharing? More Reasons



- Cars are expensive to park
- Reduces air pollution
- The light rail and bus take too long
- A better way to sight-see without the wear of walking
- People will go to places that were too far to walk
- The bike is quick and easy
- It builds community

Next Steps?

Vendor chosen: CycleHop

500 Bike deployment

45-55 hubs

(\$500,000 Street Transportation
Budget for infrastructure such as bike
lanes, curb ramps, signage etc)

EXPECTED LAUNCH

Late Fall or Early Winter 2013



Negotiate Contract

Define Scope, service area

Business model

Funding sources

Technology/equipment

Phasing

Program administration, contracts,
and procurement

Sustainability

Regional Collaboration

Public Outreach

Web based station selection

City crew confirmation



Social Bicycle bike



Questions?

- Joseph Perez
602-531-4985
joseph.perez@phoenix.gov

