



City of Seattle Vehicle Reduction through Car-Sharing Feasibility Study

Finance and Administrative Services (FAS)
SLI 45-1-A-2 Response

Finance and Budget Committee
December 6, 2011

SLI Request

- Identify which City of Seattle fleet vehicles are best suited for replacement with vehicles in a car-sharing program
- Estimate the capital and operating savings/costs
- Identify barriers to implementing a program
- Evaluate whether car-sharing could reduce number of take-home vehicles
- Propose a set of metrics to determine whether pilot results in reduced demand for vehicles, reduced vehicle miles traveled, and reduced emissions associated with City trips

FAS Response

- City engaged in multi-year effort to reduce its fleet size and make it more efficient.
- Implemented new technologies, including:
 - FleetFocus, a fleet maintenance management system
 - FuelFocus, a fuel management information system
 - KeyValet, a motor pool management system
- Contracted with Mercury Associates in 2010 to make recommendations for further reductions in fleet.
- Exploring fleet alternatives, including car-sharing.

City Fleet Profile

Snapshot: September 2010

Dept	Small Sedans	Large Sedans	SUVs	Vans	Scooters/ Motorcycles	Light Trucks	Heavy Trucks	Trailers/ Trailer	Off-Road Equipment	Total
City Light	125		47	189		152	179	112	105	909
Police	115	288	49	61	105	16	13	26	22	695
SPU	32		53	81		185	118	97	88	654
Parks	41		4	94		197	44	86	132	598
SDOT	50		17	24		94	113	62	54	414
Health	184		12	13		6				215
Fire	15	7	33	34		8	79	24	8	208
FAS*	60		2	43		27	5		23	160
DPD	38		43							81
All Other	27	1	9	33	0	6	7	3	30	116
Total	687	296	269	572	105	691	558	410	462	4,050

* FAS number includes 64 vehicles in the motor pool for use by most departments

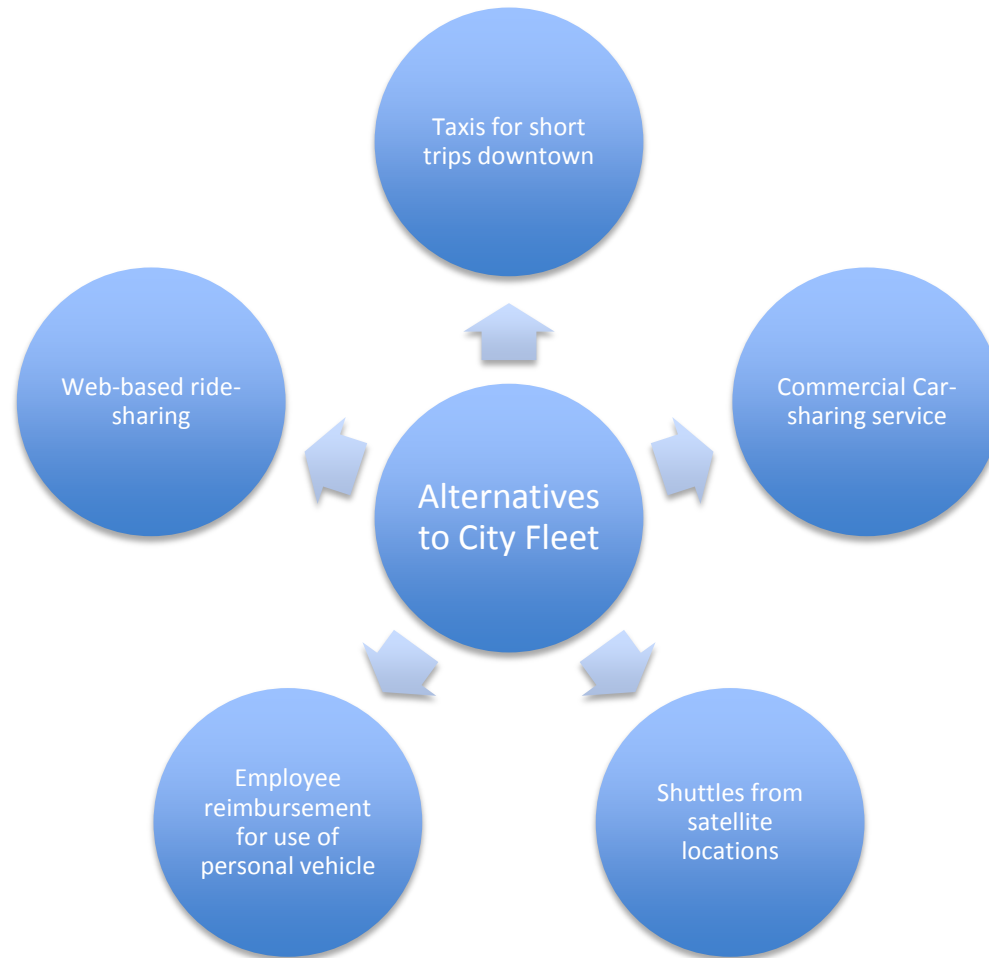
Mercury Associates 2010 Right-Sizing Study

Recommended Actions

Dept	Retain	Eliminate now	Eliminate later	Pool	Downsize
DPD	25	4		17	
DPR	197	25		6	
FAS	36	17	2	7	
HSD	10	10		13	
SCL	24	5	3	13	
SDOT	185	21	1	30	2
SFD	14	2	15	1	
SPD	64	18	6		
SPU	258	20	6	14	
All Other	36	9	0	4	10
Total	849	131	33	105	12

- Evaluated 1,500+ low mileage/low use vehicles and equipment in the City's fleet and made recommendations for over 1,000 vehicles.
- 164 identified for elimination.
- 105 identified to move to a centralized motor pool.
- FAS worked with departments to implement these recommendations in 2012 budget.
- Further reductions are possible if employees are given viable alternatives to meet their work-related transportation needs.

Beyond Mercury Associates: Additional Fleet Reduction Strategies



Why Consider Car-Sharing?

- Car-sharing is generally cheaper than ownership for vehicles driven fewer than 6,000 per year
- Lower acquisition costs
- Reduced fuel expenses
- Lower parking charges in non-city facilities/increased parking revenues in city-owned garages
- More-expensive-to-maintain vehicles can be culled from the municipal fleet
- Automated tracking system reduces potential for unauthorized/personal use

Car-Sharing Programs in Select Cities

Programs vary in scope, cost, and incentives offered to car-share operators

Most programs allow both municipal and public use, but some provide exclusive use for municipal employees during business hours (New York)

Some jurisdictions provide parking spaces (Philadelphia, Baltimore) or parking subsidies.

Some jurisdictions contract with car-share providers to manage fleet (Portland) or fleet technology (Washington, D.C.)

City	Fleet Size	Operator	Municipal Use	General Public	Program Details
Austin, TX	5,400	Car2go	Yes	Yes	Austin received free use of vehicles; Car2go received consumer testing data and parking subsidy
Baltimore, MD	5,800	Zipcar	Yes	Yes	Baltimore provided 22 parking spaces to Zipcar
New York, NY	26,000	Zipcar	Yes	Yes	25 cars dedicated exclusively for city use during business hours; city provides free off-street parking
Philadelphia, PA	6,300	Zipcar	Yes	Yes	Philadelphia provides two on-street parking spaces.
Portland, OR	2,900	Zipcar	Yes	Unknown	Portland contracted with Flexcar (now Zipcar) to manage City's motor pool
San Francisco, CA	6,000	City CarShare	Yes	Yes	San Francisco employees have full access to City CarShare fleet, prospectively, as City retires passenger vehicles, replaced by CityCarShare vehicles
Washington, DC	3,500	Zipcar	Yes	No	Washington uses Zipcar registration and tracking technology on municipal fleet

Car-Sharing Market Overview

Operator	Program	US locations	Year Started	Green Fleet	Financing model/ Fees
Daimler	Car2Go	Austin	2011	Yes	\$0.35 per minute, \$12.99 per hour, \$65.99 per day, \$35 registration fee
Enterprise Rental Car	WeCar	College campuses and several state govts	2007	Yes	Rates vary by location. Hourly rentals and application, membership fees
Hertz	Hertz on Demand	Select US cities	2011	Yes	No application or membership fees. Rates start at \$7.65 per hour. Up to \$60 per day
U-haul	UhaulCar Share	Select college campuses	2008	Yes	Application Fee: \$25 Rates:\$4.95/hour + \$0.59/mile for 1st hour, \$8-12/hour up to 180 miles thereafter, 10-15% discount with monthly pre-pay
ZipCar	ZipCar	575K members in 25+ states	2000	Yes	Membership: \$50/year Application:\$25 Rates: start at \$9.25/hour or \$58+/day

- Many first generation car-share providers, often non-profits supported by government grants, have ceased operations except in a few markets (the Bay Area, Boulder, and Chicago)
- The two largest for-profit car-share providers, Zipcar and Flexcar, merged in 2007
- Rental car companies began competing for this market in 2007
- Car manufacturers also began entering the US market this year. VW and BMW have launched in Europe

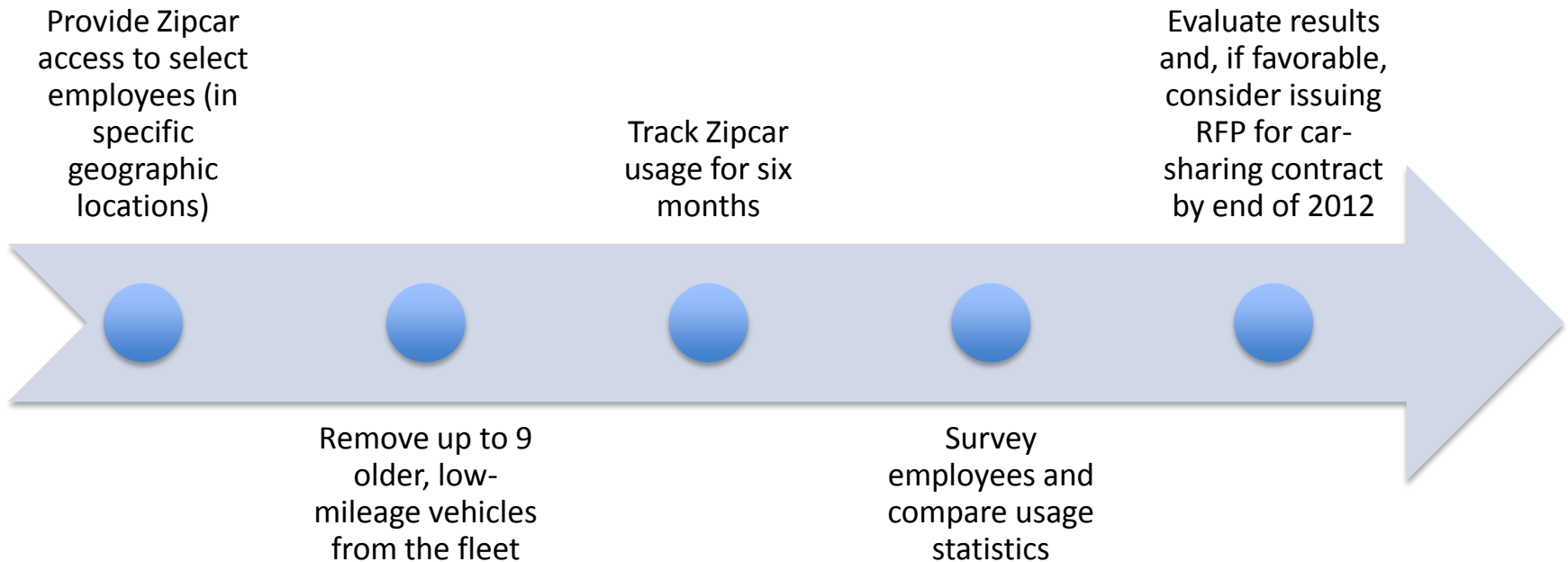
City of Seattle Motor Pool

An Effective Car-Sharing Program

- City motor pool vehicles average over 8,000 miles per year
- Based on current available Zipcar rates and recent motor pool usage, it would not be cost-effective to turn over Seattle's motor pool to a private car-sharing service
- City's motor pool only serves the Civic Center Campus and satellite locations may not be as cost-effective

Vehicle Type	SMT	SeaPark	Total
Prius Hybrid	31	4	35
Camry Hybrid	2		2
Escape Hybrid	3	1	4
Passenger Vans		4	4
Nissan Leafs	19		19
Total	55	9	64

Commercial Car-Sharing Pilot Proposal





- meet the cars**
- 1001 4th Ave
2 vehicles
 - 5th Ave/Columbia St
2 vehicles
 - 5th Ave/Madison St
2 vehicles
 - 7th Ave/James St (Seventh & James Apartments)
2 vehicles
 - 800 5th Ave
2 vehicles
 - 925 4th Ave (4th/Madison)
2 vehicles

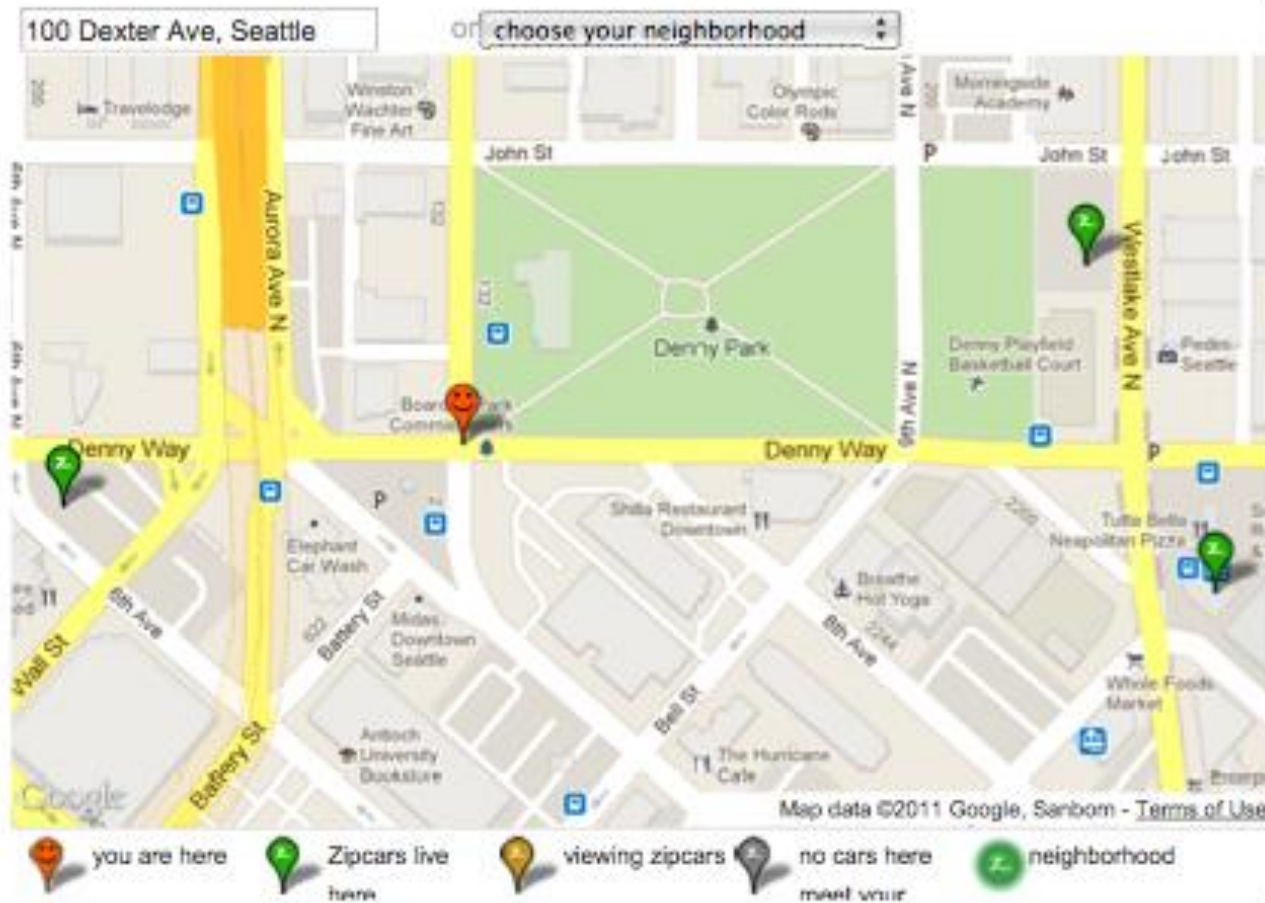
Zipcars in the Central Business District

- Twelve Zipcars within short walking distance of Civic Center Campus



Zipcars in the International District

- Four vehicles (two at Uwajimaya Village not shown) within walking distance of Parks RDA offices and Charles Street Shops.
- Numerous low mileage vehicles at RDA



Zipcars in South Lake Union

Five Zipcars within walking distance of Parks Headquarters at 100 Dexter.
Potential for on-site parking in Denny Park.

Key Factors to Success of Car-Sharing Pilot

Available

- Cars must be available nearby when employees need them

Easy-to-Use

- Employees must be able to make reservations quickly and easily and comply with program rules without incurring excessive penalties

Cost-effective

- Needs to be cheaper to use than City Fleet alternative; either department owned or motor pool vehicle

Potential Barriers

City and State Law

- Requirements for Marked Vehicles [RCW 46.08.065](#)
- Parking Code for car-sharing parking fees and exclusive use of curb space SMC [11.23.150](#) and [11.23.440](#)

Lack of Competition

- Zipcar is the only car share provider with an active presence in Seattle
- If pilot is successful, City should issue RFP for contract to solicit other providers

Employee Behavior

- Success depends on employee acceptance of program and compliance with program rules

Projected Car-Sharing Pilot Savings

over five year period (based on replacing 9 fleet vehicles)

Key Assumptions

- 9 City cars taken out of service
- Costs of maintenance and repair, overhead, accidents and fuel based on City fleet Prius actuals
- Acquisition costs based on 2011 Prius cost and 10 year replacement cycle
- 4 Zipcars used 4 hours per day for 250 days per year
- Car-sharing cost based on current available rates from Zipcar (\$9.25 per hour)
- If vehicles taken out of service are permanently removed from fleet after pilot, there would be additional savings related to parking and additional revenues from auction proceeds.

Savings/Cost	Annual Savings per Vehicle	Year 1	Year 2	Year 3	Year 4	Year 5
Maintenance and Repair	\$924	\$8,316	\$8,524	\$8,737	\$8,955	\$9,179
Overhead	\$324	\$2,916	\$2,989	\$3,064	\$3,140	\$3,219
Accidents	\$338	\$3,038	\$3,113	\$3,191	\$3,271	\$3,353
Fuel	\$468	\$4,213	\$4,319	\$4,427	\$4,537	\$4,651
Acquisition	\$2,540	\$22,857	\$23,429	\$24,014	\$24,615	\$25,230
Savings subtotal	\$4,594	\$41,340	\$42,374	\$43,433	\$44,518	\$45,632
Car-sharing Cost		(\$37,000)	(\$37,925)	(\$38,873)	(\$39,845)	(\$40,841)
Net Savings		\$4,340	\$4,449	\$4,560	\$4,673	\$4,791
Cumulative five year net savings		\$22,813				