




CarSharing: Cutting Edge Parking Management




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Transit Oriented Developments

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- Density and parking are among the biggest challenges facing TODs
 - Most parking requirements are not TOD friendly
 - Meeting certain parking requirements encourages high vehicle ownership rates
 - Complying with some local & State requirements defeats the intent and purpose of smart growth
 - Many developers are shying away from TOD projects

Case Study – Residential Development

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- Prior Gas station site in Red Bank, New Jersey
 - Site currently under-utilized and dilapidated
 - Site has been vacant for many years
 - In the heart of one of the most desirable areas in NJ
 - Two blocks away from train station
 - 60 units needed to make the project viable
 - Parking requirements dictate about 120 spaces
 - Challenge: Providing 120 spaces is not feasible and not desirable

CarSharing – The Solution


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- One car shared by many
 - Fully automated system
 - Technology based on Internet, wireless, and GPS
 - Once subscribed, reserving a vehicle is done in seconds
 - Provider pays for gas, tolls, insurance, maintenance, car washing....
 - The car is normally picked up and dropped off at a convenient location (downtown or train station)

CarSharing – How it Works

- Reserve on-line or by phone
- Data is wirelessly transmitted to the vehicle enabling individuals to unlock and lock the vehicle with their smart card or cell phone
- The technology logs the vehicle usage and vital driver and vehicle information.



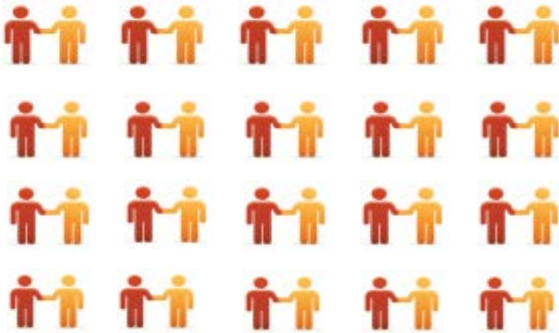
CarSharing - History

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- CarSharing programs launched successfully in Germany and Switzerland in the mid-1980s
 - In North America car sharing began in the mid-1990s
 - Today, an estimated 500,000 use CarSharing in North America served by about 12,000 cars
 - About 18 non-profit and for-profit operations in 30 states serving more than 20 major metropolitan markets, over 150 college campuses, and many commercial businesses

CarSharing - Benefits

Studies have shown 1 CarShare vehicle:

- Removes up to 31 private vehicles off the road
- Eliminates the need for up to 30 parking spaces
- 71% of CarShare members avoid purchasing a second vehicle



We all share the
same vehicle . . .

Sources:

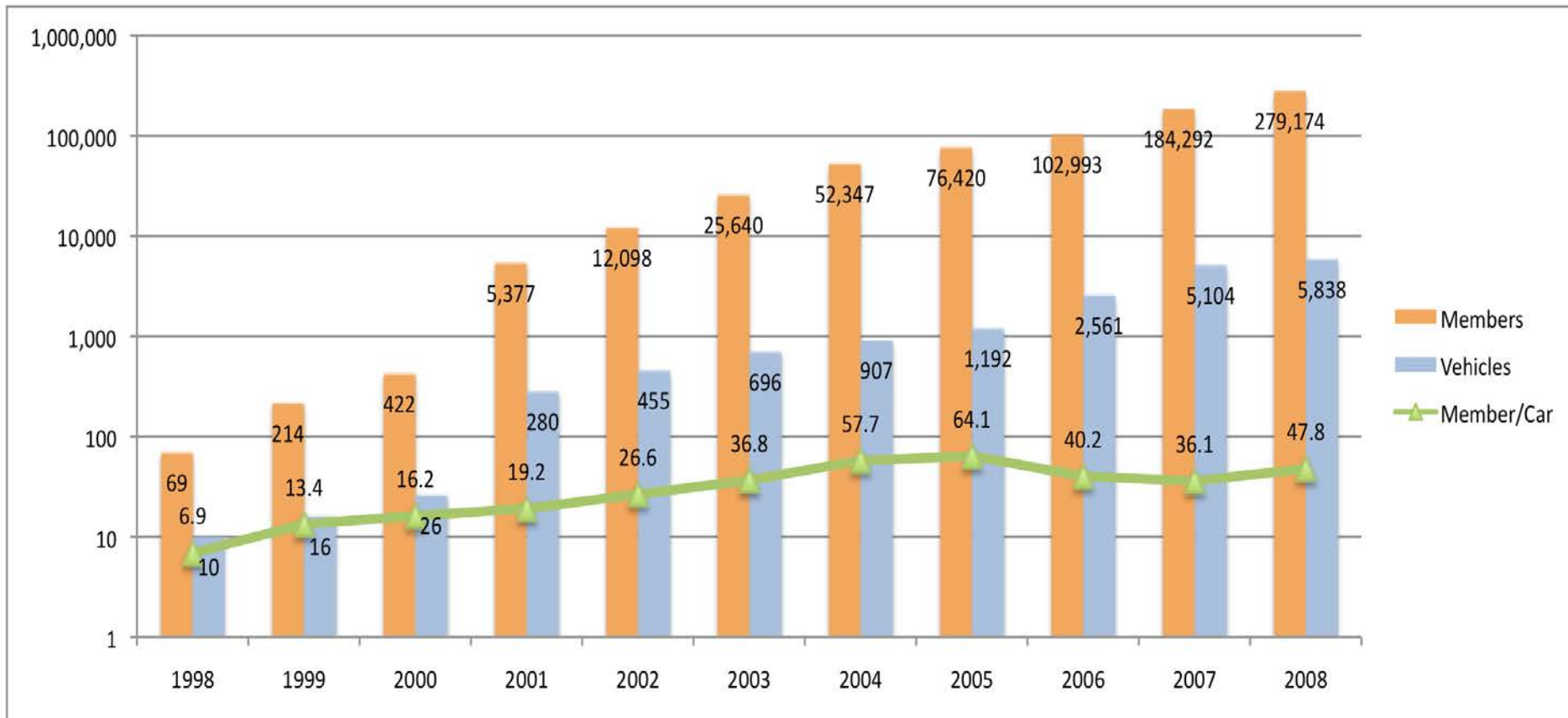
*Elliot Martin, PhD Post-Doctoral Research Engineer,
Transportation Sustainability Research Center University of
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*Susan A. Shaheen, PhD Research Associate, Mineta Institute Honda
Distinguished Scholar in Transportation, University of California,*

*Davis, & Acting Co-Director, Transportation Sustainability
Research Center (TSRC) University of California, Berkeley*

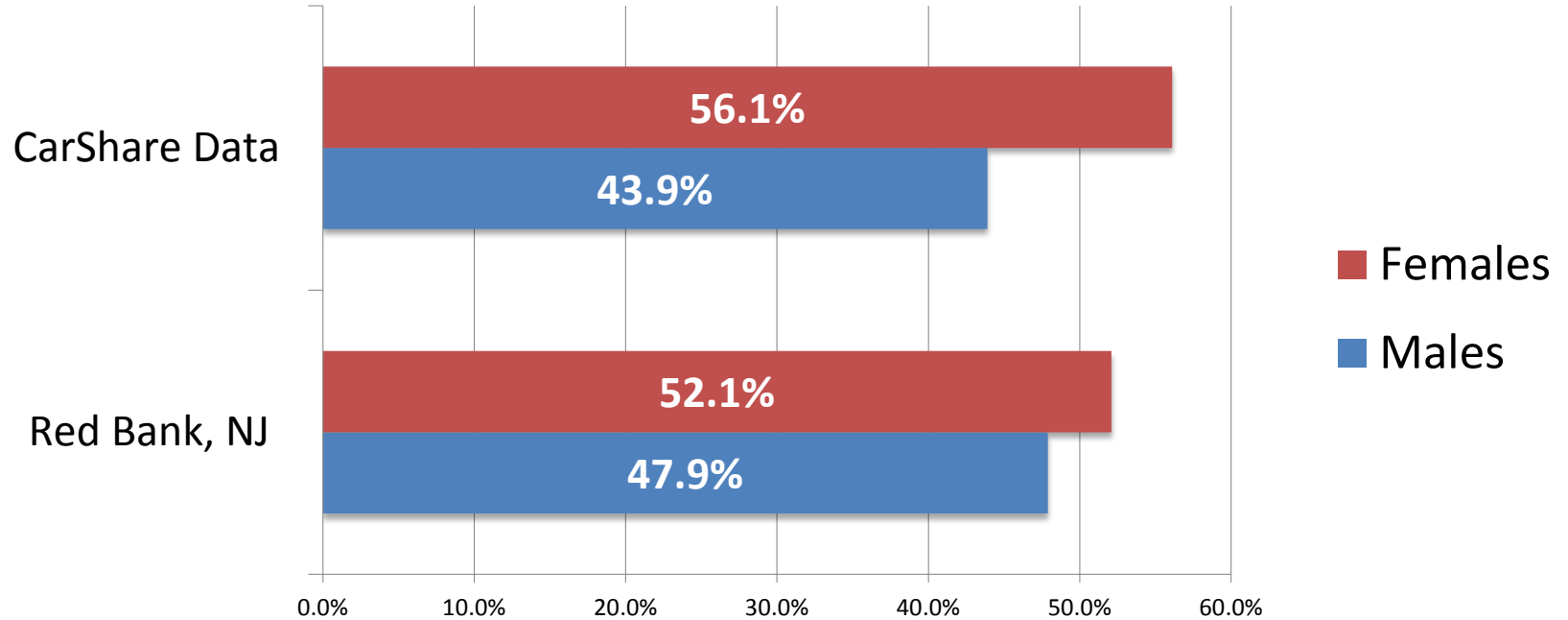
NYC Planning Board Amendment of 2010

CarSharing - Utilization



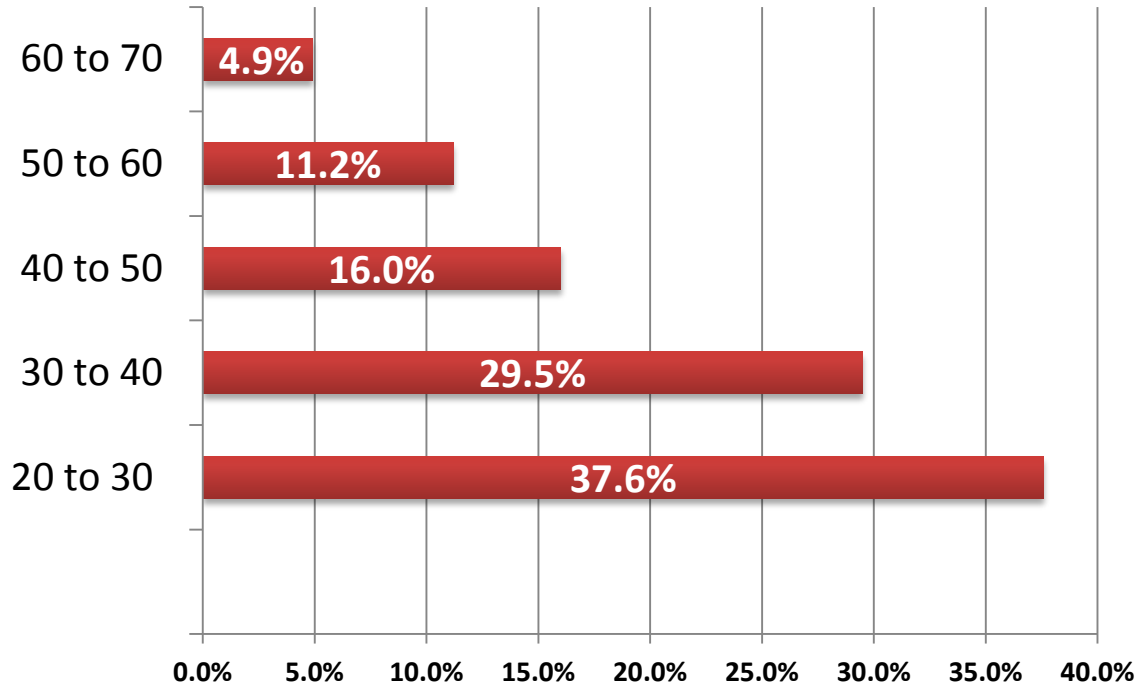
Sources: Shaheen, Cohen, and Chung. TRB 9-3688 NORTH AMERICAN CARSHARING: A TEN-YEAR RETROSPECTIVE

CarSharing - Demographics



City Data.com / Shaheen, Cohen, and Chung. TRB 09-3688 **NORTH AMERICAN CARSHARING: A TEN-YEAR RETROSPECTIVE**

CarSharing – Age Distribution

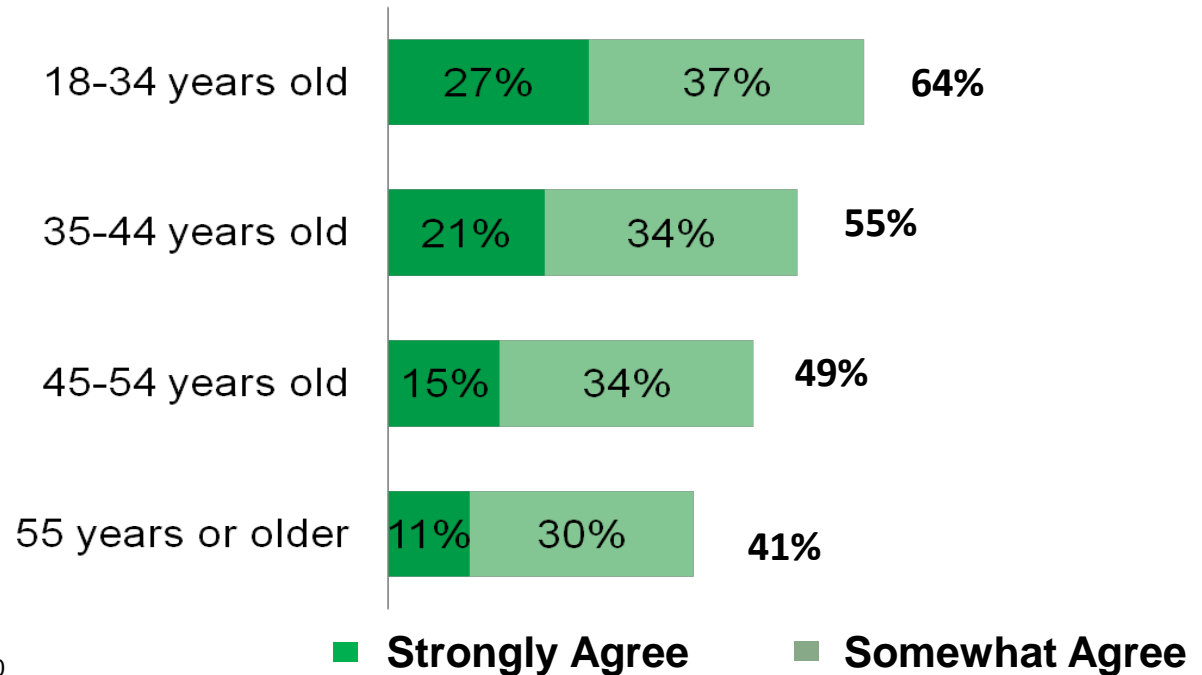


Sources: City Data.com / Shaheen, Cohen, and Chung. TRB 09-3688 NORTH AMERICAN CARSHARING: A TEN-YEAR RETROSPECTIVE

Y Generation Survey

If there were more options in my area such as public transportation, car sharing or convenient carpooling, I would drive less than I do now.

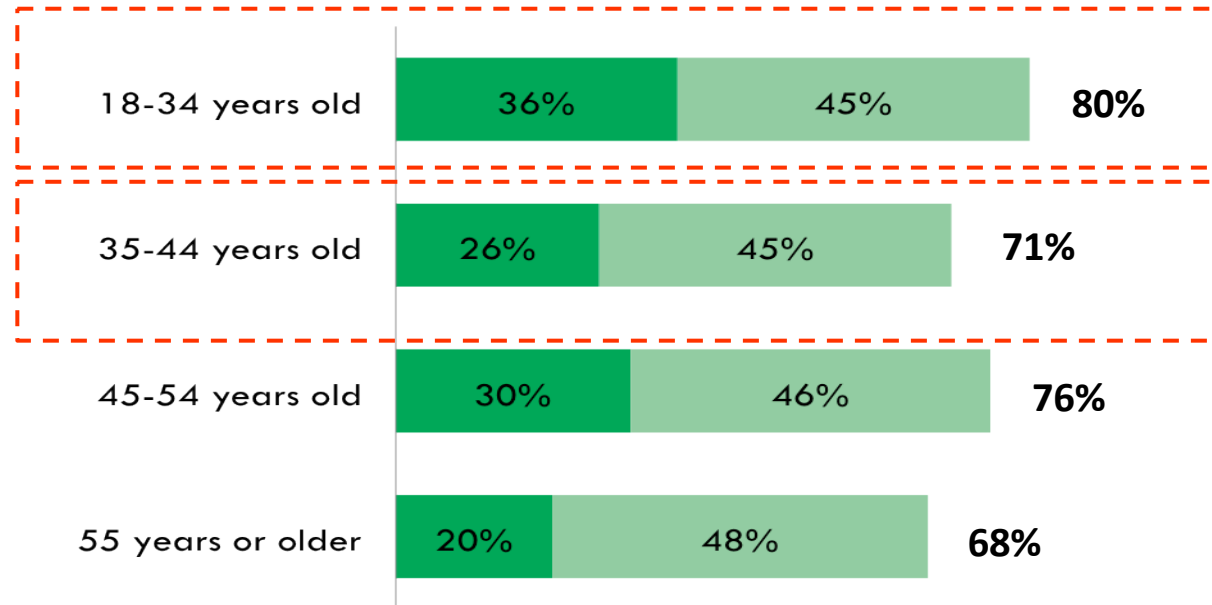
- Online survey of 1,025 adults
- Ages 18 and over
- 966 licensed driver
- Conducted October 2010



Sources: Zipcar Millennial Survey October 2010

Survey Findings

In today's economy, it can be difficult to own a car because of the high cost of gas, insurance, maintenance and parking.



Sources: Zipcar Millennial Survey October 2010

■ Strongly Agree

■ Somewhat Agree

CarSharing – Individual Benefits

	Car Owner	CarShare Member
Car payment	\$288	included
Finance charges	\$67	included
Insurance	\$84	included
Gas	\$100	included
License, registration & tax	\$49	included
Maintenance	\$44	included
Parking	\$150	included
Total:	\$782/mo <small>*Monthly cost based on small – mid-size car</small>	\$144/mo avg. (6 two hour trips & 2 four-hour trips)

Sources: Data based on 2010 AAA study of average driving cost Zipcar www.zipcar.com

The Red Bank Project

- 2 CarSharing vehicles
- 1 space per unit
- 4 spaces for visitors
- Parking reduced by about 55 spaces
- “Cool Project Concept:” Bicycle facilities, solar energy, virtual concierge...



Acknowledgements

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- Julian Espiritu, Abrams Carsharing Advisors
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Project Success