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**Transportation Sustainability**  
RESEARCH CENTER

# **The Look of Carsharing Today Across North America and Abroad**

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# Overview

- Definition of Carsharing
- Current State of the Industry
- Comparison of Carsharing Studies
- Market Development – Past, Present, and Future
- Carsharing and Policy



# What is Carsharing?

- Carsharing organizations maintain fleets of cars and trucks in a network of locations.
- Allows households and businesses to access shared fleet on an as-needed basis, at an hourly or mileage rate
- Individuals gain benefits of private vehicle use without costs and responsibilities of ownership.



# Some Statistics

## July 2008: North America

- 319,000 carsharing members
- 7,500 carsharing vehicles
- 33 programs operational

### U.S.

- 279,174 members
- 5,838 vehicles
- 19 programs

### Canada

- 39,664 members
- 1,667 vehicles
- 14 programs



# Some Statistics (cont'd)

July 2008: Worldwide

- ~600,000 carsharing members
- 4 continents
- 21 countries
- 8 planned



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# Carsharing Impacts

Impact	North America (2008)	Europe (2006)
Cars Replaced Per Carsharing Vehicle	4.6 – 20 cars	4 – 10 cars
Members Who Sold Their Cars due to Carsharing	15 – 32%	15.6 – 34%
Members Who Avoided a Car Purchase due to Carsharing	25 – 71%	23 – 26.2%
VMT/VKT Reduction due to Carsharing	44%	28 – 45%
Decrease in Transportation Costs due to Carsharing	\$154 - \$435 US	-

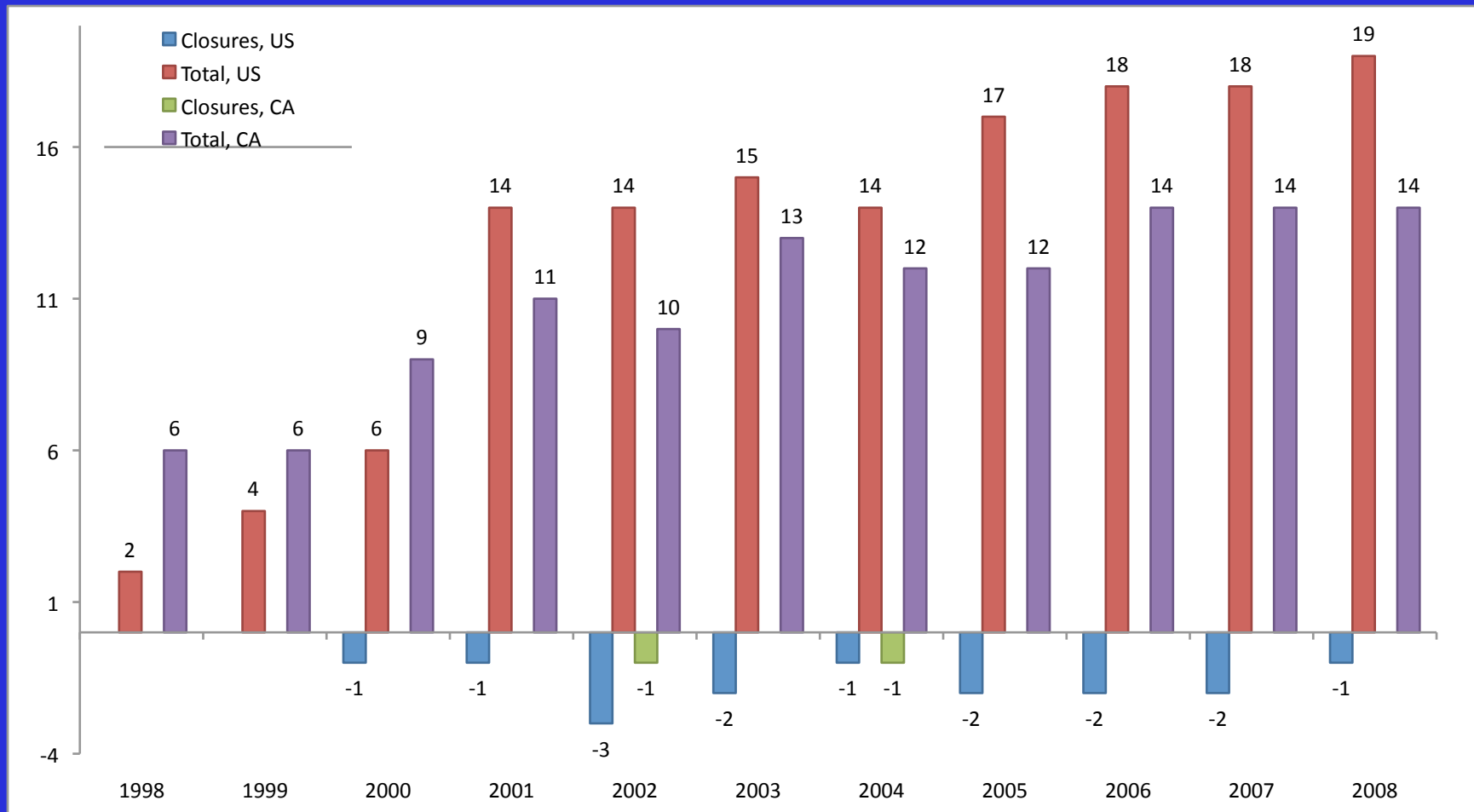


# Carsharing Impacts (cont'd)

- Reduces greenhouse gas emissions
  - Via low-emission vehicles, decreased VMT, carbon offset programs
- Reduces parking demand
- Complements alternative transportation modes
  - Public transit, walking, biking, etc.
  - Helps address first mile-last mile problem
- Increases mobility of low-income residents and college students
  - Provides car use without bearing full ownership cost



# North American Carsharing Organization Growth



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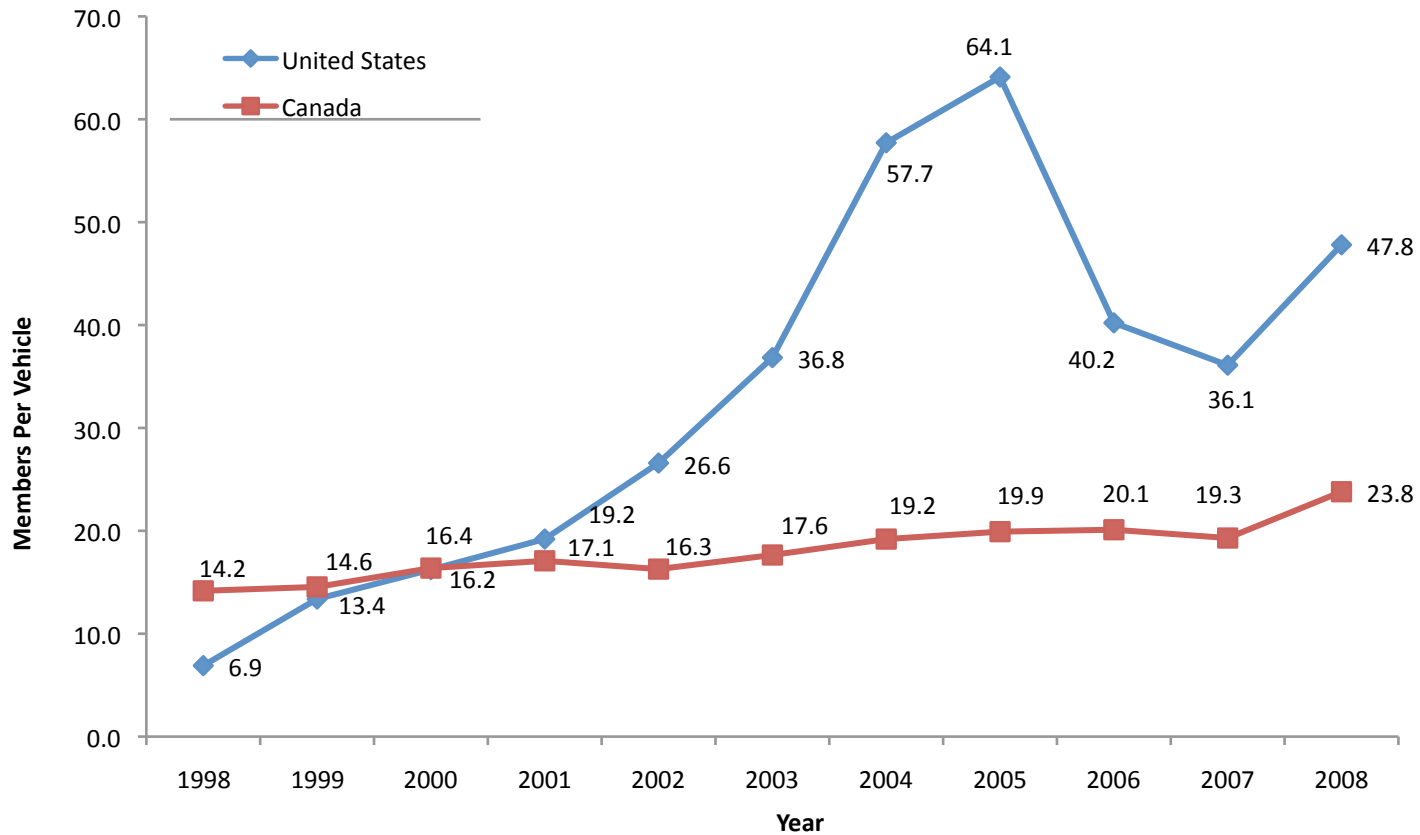


# Member and Vehicle Growth

- Carsharing organization membership has increased
  - U.S. Growth Rate Peak: 1174% from 2000 to 2001
  - CA Growth Rate Peak: 81% from 2000 to 2001
  - Levelled to an average growth rate of 50% for North America in 2008
- Member-vehicle ratios have increased from 1998 to 2008
  - CA MV ratios increased from 14:1 to 24:1
  - US MV ratios increased from 7:1 to 48:1
- Worldwide member-vehicle ratio (2005): 20:1



# Member-Vehicle Ratios



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# Business Models

- Four types of carsharing business models exist:
  - For-profits,
  - Non-profits,
  - Cooperatives, and
  - University research.



# Business Models (U.S.)

- Only 5 of 19 (28.6%) U.S. operators are for-profit. They account for 74% of all carsharing members and 81% of carsharing vehicles.
  - This trend has been relatively stable.
  - Non-profit membership continues to expand
    - Top three organizations' membership grew from 6,600 participants in 2005 to 71,000 participants in 2008.



# Business Models (Canada)

- 36% (5 of 14) of Canadian operators are for-profit, accounting for 87% of carsharing members and 84% of carsharing vehicles.
  - For-profits' member-vehicle market share has increased from 2005 to 2008.
  - Canadian non-profit organizations have also grown as U.S. non-profit operators.



# Rate Structure Comparison

- Majority of carsharing organizations cite cost recovery as a principal factor in their rate structures.
- Many U.S. carsharing organizations bundle limited free mileage with hourly rates.
  - Charging \$3.45-4.45 US/hour, CityWheels offers 20 free miles/hour, after which they charge \$3 every additional 10 miles.
  - Zipcar provides 180 free miles/day, then charges \$0.45US/additional mile.
- Canadian operators emphasize mileage rates.
  - Communauto charges \$0.25CA/km for the first 180 miles then \$0.18CA/km for each additional mile, as well as \$1.50-2.00CA/hour.
- 17 U.S. and 13 Canadian carsharing organizations changed their rate structure from 2005 to 2008—perhaps due to rising fuel costs.



# Insurance

- After 9/11 in 2001, increased insurance premiums became a major financial barrier for U.S. carsharing but have since decreased.
- In 2008, average \$2,014 US/carsharing vehicle/year in U.S.; \$1,742 CA/carsharing vehicle/year in Canada
- Reduced insurance rates coincide with college/university market growth



# Growth in North American College Market

- U.S. (July 2008):
  - 130 college campuses served by 11 U.S. carsharing organizations.
    - Represents approximately 9% of U.S. carsharing market
  - Approximately 300 vehicles stationed on-campus in agreements with universities.
    - An additional 220 vehicles within 4-block radius
- Canada (July 2008):
  - 9 operators serve 19 college campuses





# Inter-Operator Collaboration

- 20 carsharing organizations have signed North American Code of Ethics for the carsharing industry.
- Public policy collaboration
- Roaming user agreements
  - For example, City CarShare users can also use Austin CarShare services when in Texas – no application fee, but need new key fob.
  - 3 in Canada, 8 in U.S.
- Technology development (especially in Canada)



# Technology

- Use of electronic and wireless technologies
  - Smart card vehicle access
  - Vehicle location and tracking via GPS
  - Online member reservation systems
  - Electronic/online data collection
- July 2008: 56% of U.S. operators used advanced technologies compared to 15.4% of Canadian operators.



# Policy - Taxation

- Supportive
  - Tax benefits, credits, subsidies, grants, etc.
  - For example, Chicago's I-GO exempt from car rental tax
- Unsupportive
  - Car rental tax when carsharing is mistaken to be the same as car rental
  - For example, King County, WA: 18.6% tax on use (8.9% sales tax, 9.7% car rental tax)



# Policy - Parking

- New developments: reduce parking minimums, increase density, or substitute parking (general use for carsharing spaces)
- On-street parking allocation
  - Increased visibility, awareness, access, safety
  - Administrative issues
    - Enforcement, street cleaning
    - Fees and regulations vary dramatically by location



# Conclusion

- The four largest providers in the U.S. and Canada support 99% and 95.2% of total membership, respectively.
- Continued growth is forecasted, particularly in business and college market.
- North American developments include increased competition (rental car companies, hourly rental), program consolidation, market diversification, and greater operator collaboration.
- High energy costs and increased climate awareness are likely to facilitate carsharing's ongoing expansion.



# References

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