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## 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 Developments Past, Present, and Future
- Carsharing Policy
- Conclusion



# 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>U.S.</u>

**Canada** 

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

- 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



# **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/month US	-



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# 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.
  - Can help 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: 2000 to 2001 (1174%)
  - CA Growth Rate Peak: 2000 to 2001 (81%)
  - Leveled 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 similar to U.S. non-profit operators.



#### **Recent Market Developments**

- Increased competition (car rental, hourly rental)
- Program consolidation (Zipcar and Flexcar merger in 2007)
- Market diversification (college)
- Greater operator collaboration (code of ethics, roaming user agreements)



#### **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 \$3.45-4.45US/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--likely 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
- Some popular U.S. insurers include: NIAC, Liberty Mutual, National Indemnity, and Progressive.



# **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 a second smart key.
  - 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 & Other**

#### Supportive

- Tax credits & exemptions; 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**

On-street parking allocations (zones and permits)

- Increased visibility, awareness, access, safety
- Administrative issues
  - Enforcement, street cleaning
  - Fees and regulations vary dramatically by location
- New developments (parking variances and zoning/building codes): reduced parking minimums; increased density (floor area ratios); or substitute parking (convert general use to carsharing spaces)



### 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.



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