

Carpooling in Vermont



19th National Rural Public and Intercity Bus Transportation Conference

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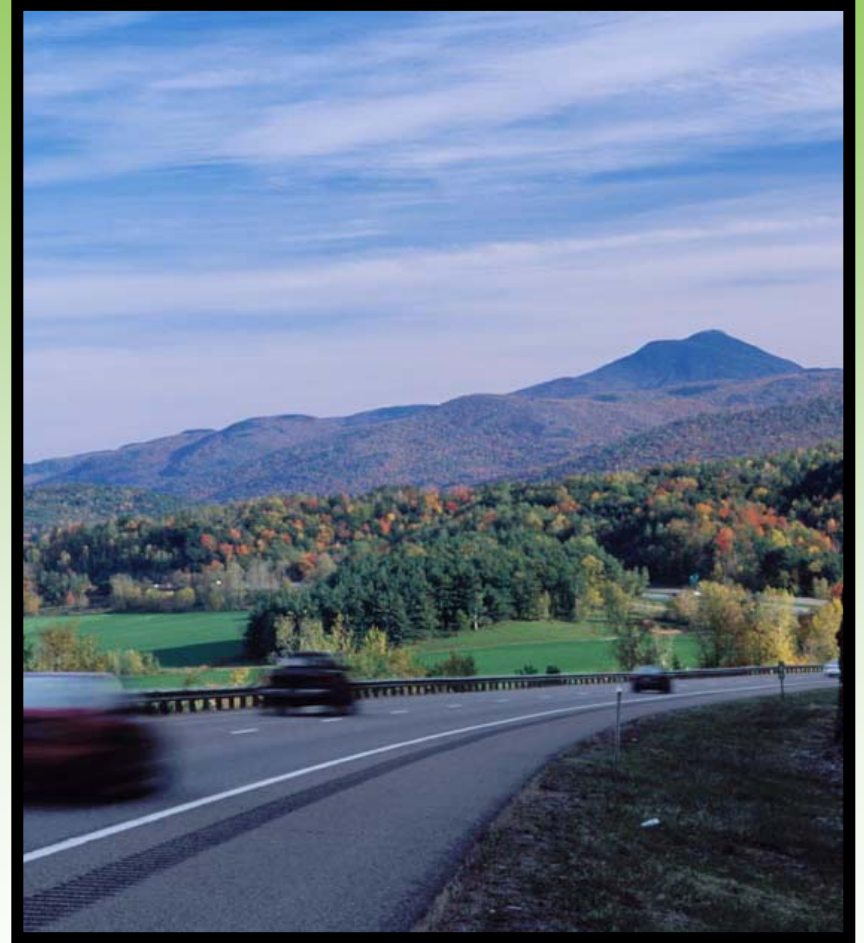
Carpool Programs in Rural Areas

Funding from Vermont Agency of Transportation and Transportation Research Center at UVM



University of Vermont Transportation Research Center

- Founded in Fall 2006 (SAFETEA LU)
- One of 10 National Transportation Centers
- Theme: Sustainable Systems and Advanced Technologies for Northern Communities
- Multi-disciplinary
- Service to Vermont



Picture Description / Source

Presentation Outline

- Brief history of “carpooling”
 - Vermont carpool research project
 - Some data
 - Recommendations, next steps
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- Basic narrative – rural state, car dependent. Need to fundamentally rethink our mobility strategies to reduce energy use in transportation.
 - Carpooling as one solution
 - Research project funded by Vtrans & TRC

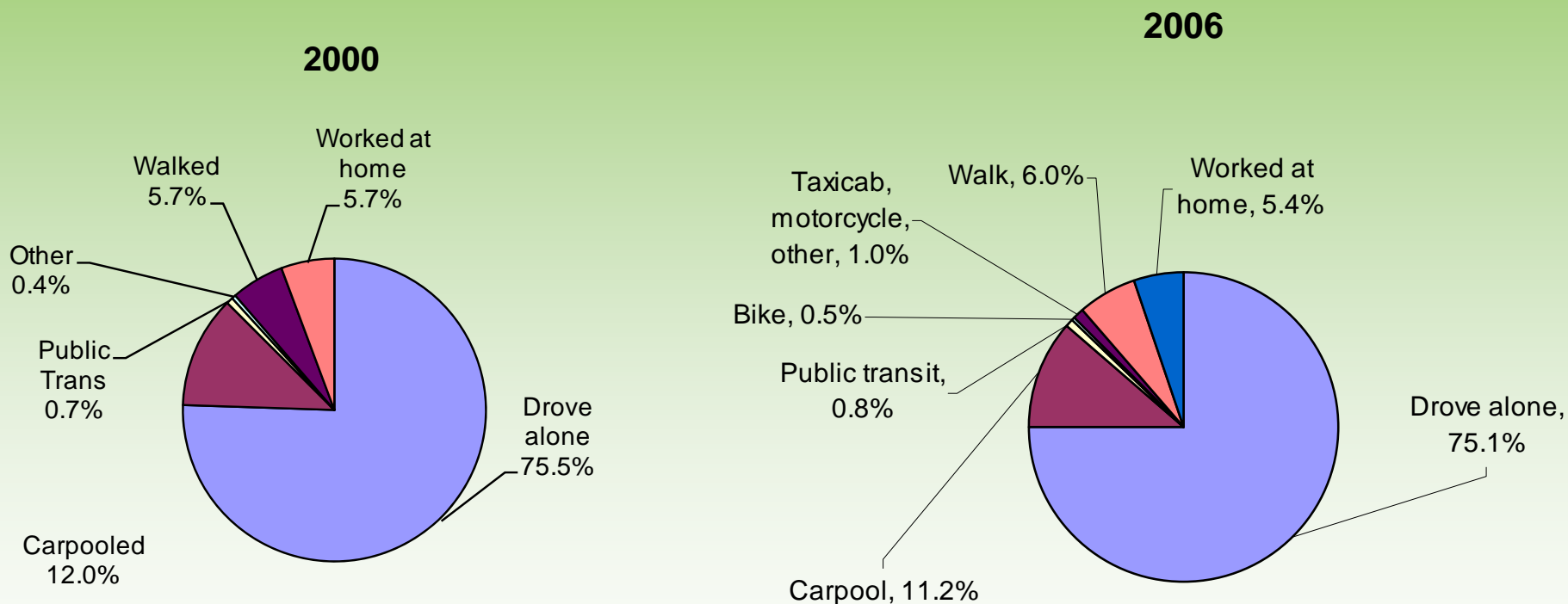
Journey to Work: US & Vermont

	1980		1990		2000	
	National	Vermont	National	Vermont	National	Vermont
Drove alone	64.4 %	56.0 %	73.2 %	77.0 %	75.7 %	75.0 %
Carpooled	19.7 %	25.0 %	13.4 %	14.0 %	12.2 %	11.9 %
Public Transportation	6.4 %	1.4 %	5.3 %	<1.0 %	4.7 %	<1.0 %
Walked	5.6 %	11.2 %	3.9 %	7.0 %	2.9 %	5.6 %
Motorcycle, bike, other means	1.6 %	-	1.3 %	1.4 %	1.2 %	<1.0 %
Worked at home	2.3 %	5.0 %	3.0 %	6.0 %	3.3 %	5.7 %

Source: U.S. Census Bureau (2000)

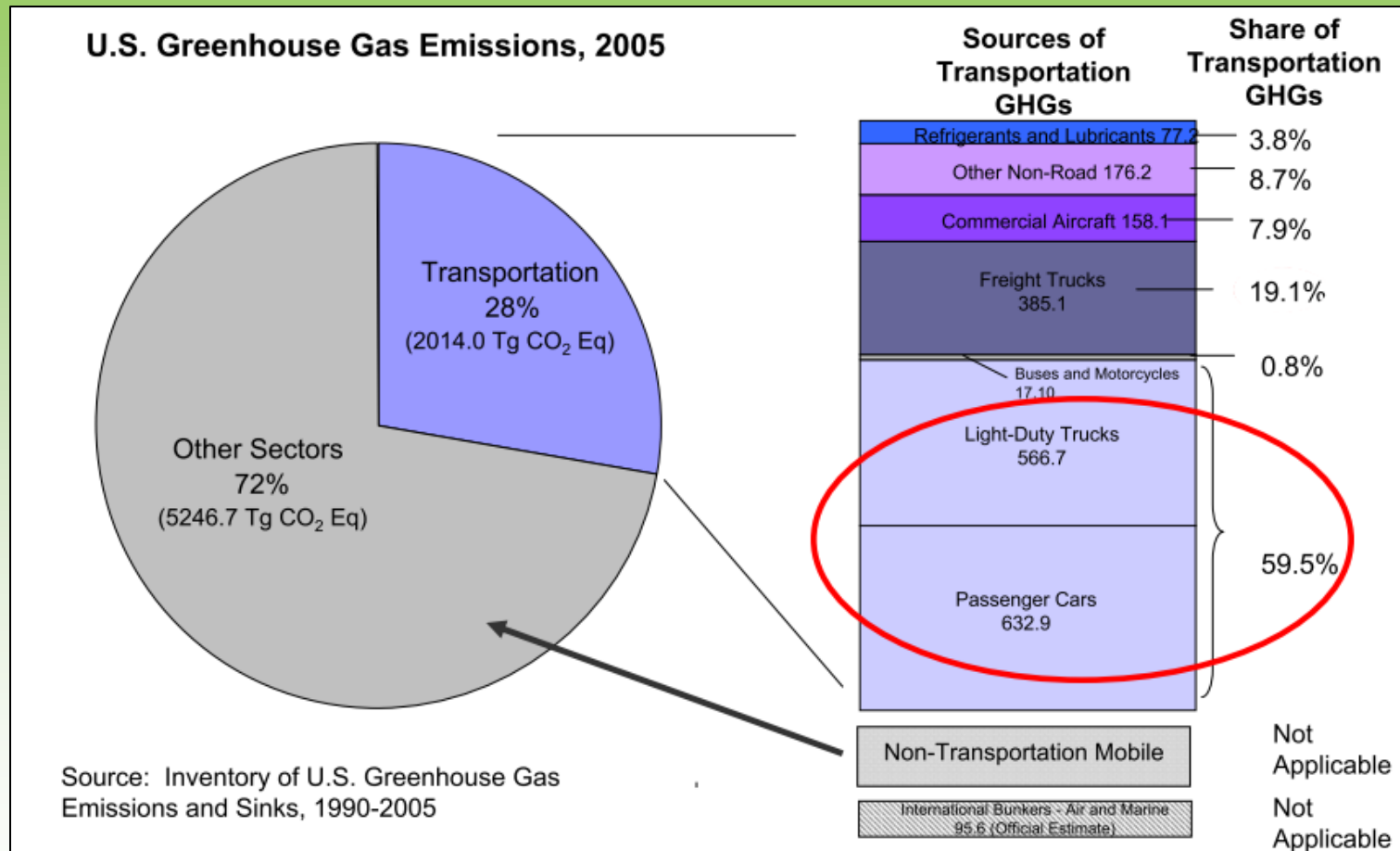
Vermont Travel Behavior – Journey to Work

Journey to Work Mode Split - Vermont



Source: U.S. Census.

US GHG Emissions by Sector



Challenges

- Car ownership rates
- Urban form/density patterns
- Changes in travel behavior over time
- Cost of energy
- Cheap parking

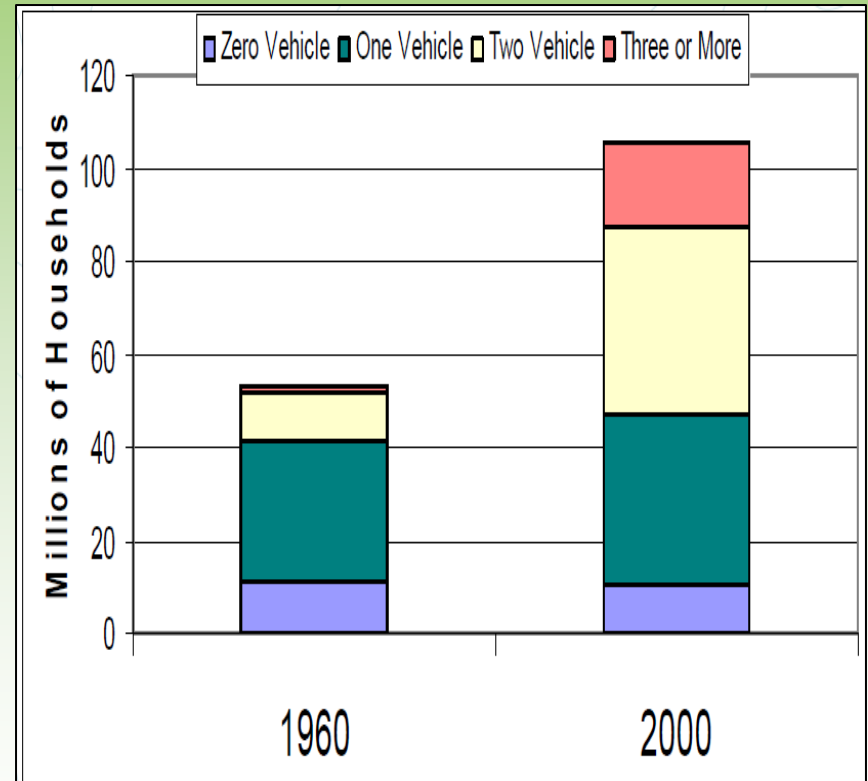


Challenges-Car Ownership Rates

Vermont

	2006-2008	2000	1990	1980
No Car	5.7%	6.8%	8.0%	10.3%
1 Car	32.9%	33.6%	34.1%	42.2%
2 Cars	41.8%	43.1%	42.3%	33.5%
3 or more cars	19.6.0%	16.4%	15.6%	14.0%

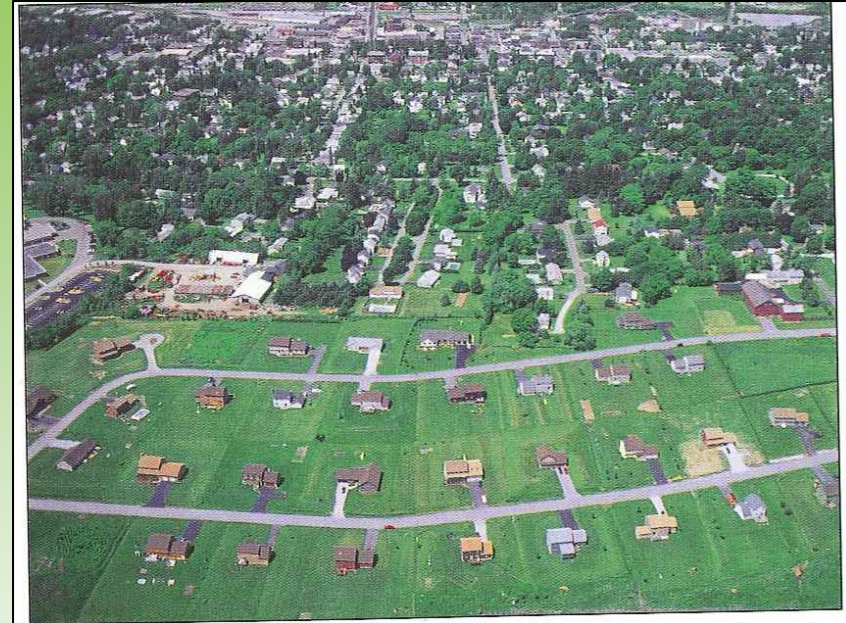
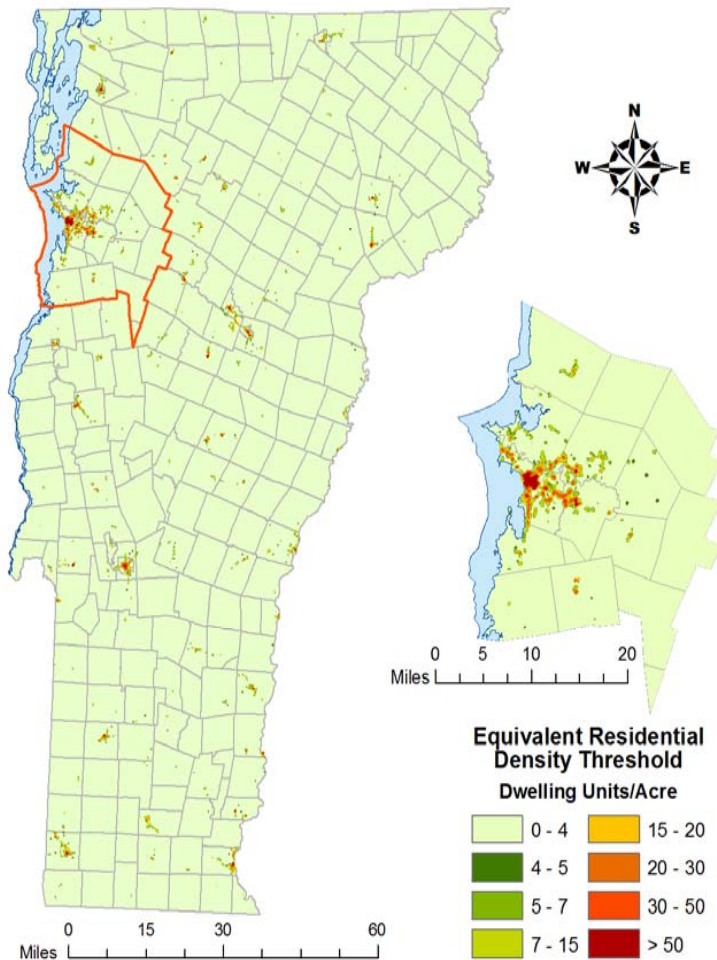
United States Trends



Challenges-Settlement Patterns

Transit Supportive Zones in Vermont

Based on Equivalent Housing Units and Residential Density Threshold



7.10 The neighborhoods of St. Albans City (top) and St. Albans Town (bottom).



Challenges; Changes in travel behavior

Family/personal business	44.6%
Social/recreational	27.1%
Work and work-related	17.7%
School/church/other	10.6%
Total	100%

Source: The 2001 National Household Travel Survey, daily trip file, US Department of Transportation.



Challenges: Energy Costs & Parking



	2005	2006	2007	2008	2009
Gasoline Price/Gallon	\$2.31	\$2.62	\$2.84	\$3.29	\$2.41
Diesel Price/Gallon	\$2.40	\$2.71	\$2.89	\$3.81	\$2.47

Go Vermont

- GoVermont
- <http://www.connectingcommuters.org/>
- \$350,000 in ad campaigns and promotion
- 2800 + registrants
- Web hits (per day) from 20 (Oct 09) to 120 (Oct 10)



Park and Ride Lots & Transit Systems



Survey Data: GoVermont Lists

County	GoVermont (1809)	Survey respondents (370)	Focus group participants (25)
Chittenden	27 %	26%	45%
Washington	17%	20%	21%
Franklin	10%	13%	4%
Lamoille	6%	6%	4%
Total (of full list)	65 %	65%	74%

Frequency of carpool	Number of respondents	Rarely/Never Carpool	Regular carpoolers
Never	115	183	
< Once/month	52		
1-2 times per month	16		
Once/wk	17		183
2-3 times/wk	61		
4+ times/wk	105		

Results: Survey

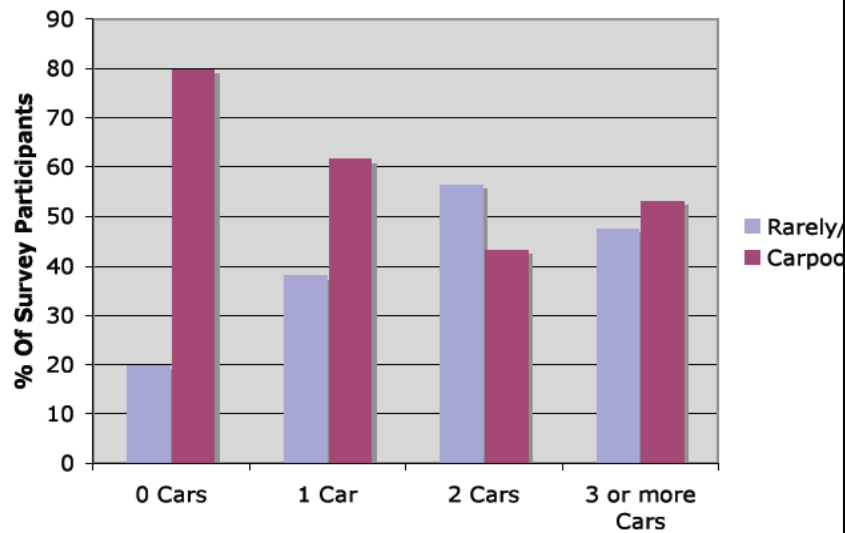


Figure 1. Carpool Frequency vs. Number of Cars Owned (%)

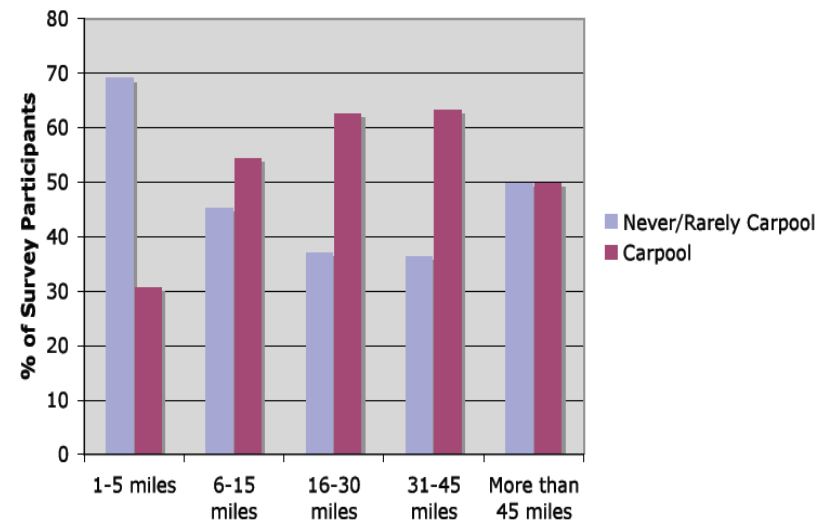


Figure 2. Miles Traveled to Work vs. Carpool Frequency

Reasons not to carpool

- *“To find people that have the same schedule is just sometimes - we all lead such crazy, busy lives, you know. We have to stop at the grocery store, at the pharmacy or whatever and sometimes it stinks. It’s (carpooling) not feasible.”*
- *“I’ve been on the State database for like five years and have no hits...So my experience is that I’ve been trying to get someone to carpool and my schedule can be kind of flexible. I can go plus or minus two hours on each end... But I have a hard time hooking up with anyone to carpool with.”*

Need to run errands during/at the end of the day	53.5%
Hard to find others to carpool from my location to my destination	50.9%
Easier to drive my own vehicle	31.3%
My job requires driving during the day	17.6%
Need to drop off (or pick up) kids on the way to work	11.7%
Parking is available at work	6.2%
Rather drive alone	5.5%
Don’t like sharing my car with strangers	2.2%

Reasons not to carpool

“If you drive into work, you feel like when you're ready...even if you do have set hours, you have the freedom to get in a little bit earlier or a little bit later. You can run out for lunch or whatever. So it's been a little bit challenging for me not having a vehicle down here.” (Focus group respondent)



Reasons to carpool (survey)



Saves money	84.3%
Saves wear and tear on the vehicle	65.3%
Good for the environment	65.3%
Convenience	21.9%
Makes me feel good	21.9%
I don't like to drive/I don't have a car	9.2%
Limited parking at work	7.3%

“If gas was five dollars per gallon, you bet I would crawl across cut glass to find a carpool partner. I would refuse to pay five dollars per gallon for gas to drive out there.”(Focus group participant)

Reasons to carpool (focus groups)



Saves money	35.3%
Social reasons	25%
Good for the environment	20%
Not drive/use car	15%

“It’s so much nicer that travel goes faster when there’s another person to chat with. Especially with me, like since I’m traveling with friends, like it’s me and a bunch of other 30-something females who I sugar with. You know, like we have a lot to talk about.” (focus group participant)

Thank you

