

Trip Chaining Trends in the U.S.

—

Understanding Travel Behavior for Policy Making

Nancy McGuckin, Travel Behavior Analyst

N_McGuckin@Rocketmail.com

Johanna Zmud, PhD, President, NuStats

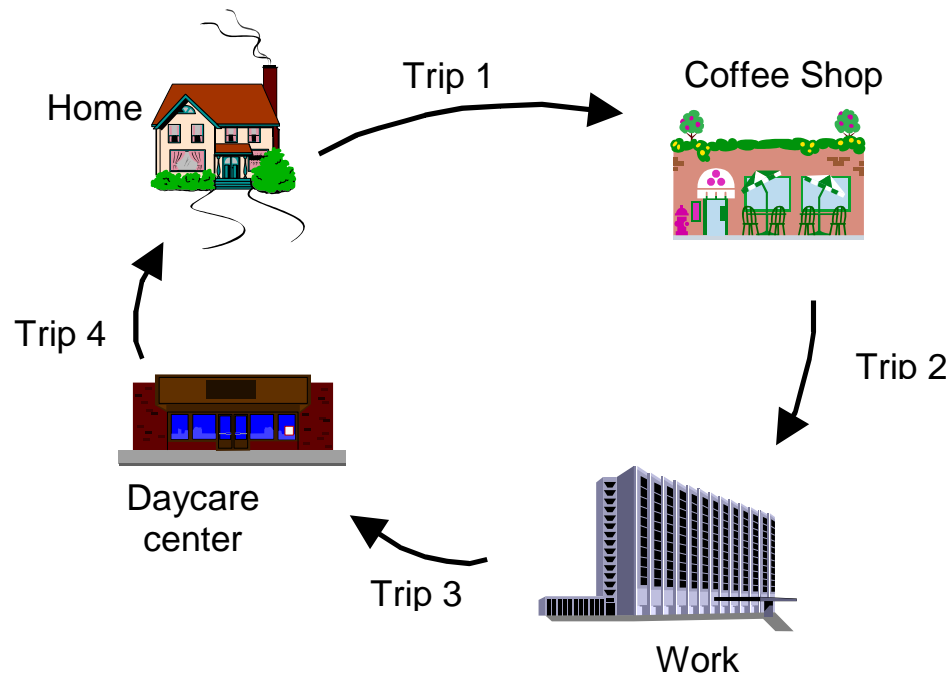
Jzmud@nustats.com

Yukiko Nakamoto

Yuki_Z@earthlink.net

McGuckin, Zmud, Nakamoto
TRB 2005

This Research used the FHWA's* definition of a trip chain as a stop of 30 minutes or less between Home and Work



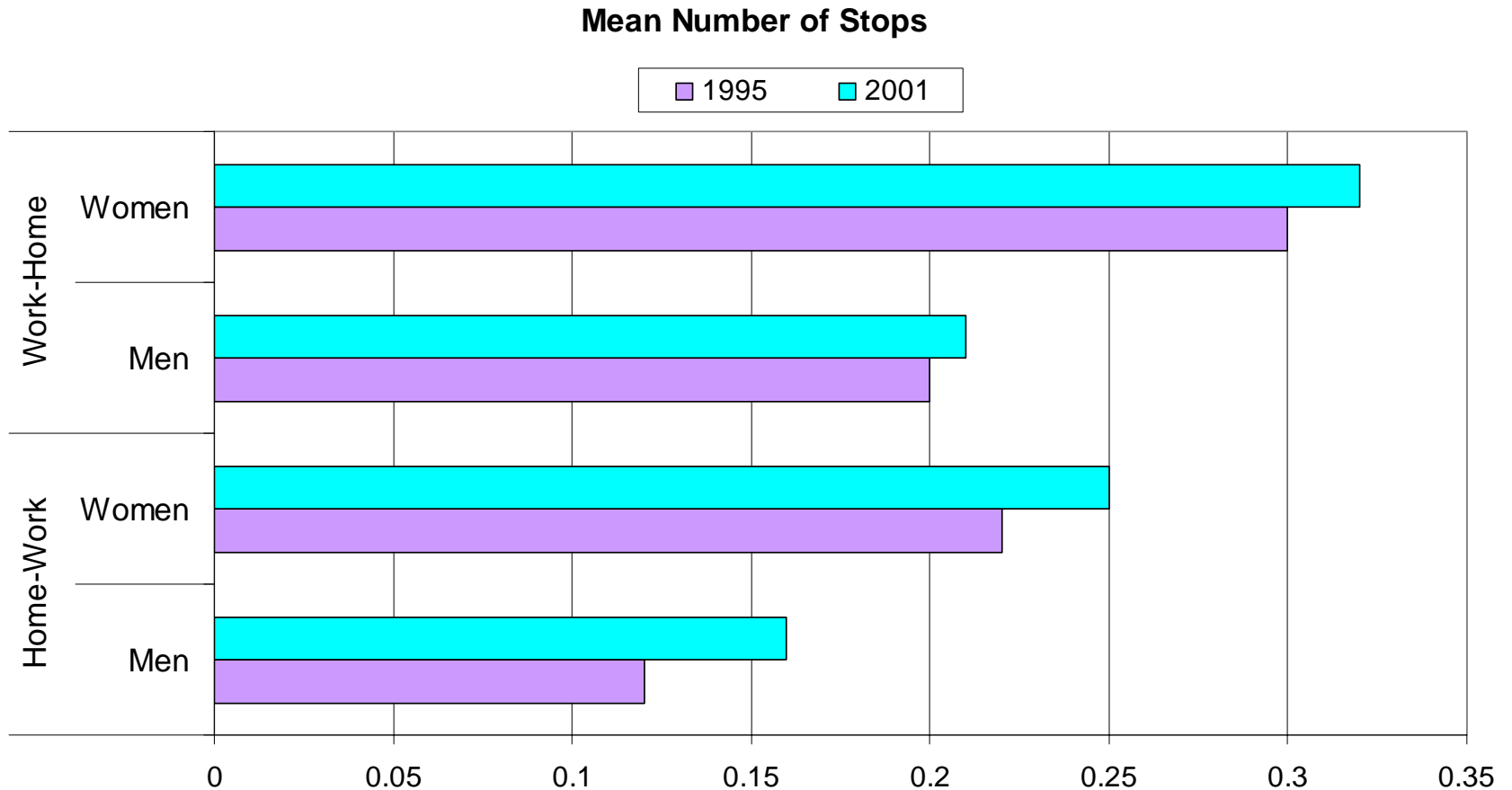
* See Trips, Chains, and Tours at <http://nhts.ornl.gov>

We looked at travel by weekday workers to see the trends between 1995 and 2001 using the NHTS....

	1995	2001	Numeric Change 1995-2001	Percent Change 1995 - 2001
Number of Weekday Workers	68,760,000	68,990,000	230,000	0.33%
Did Not Chain	31,290,000	31,660,000	370,000	1.18%
Chained Work Trips	17,276,045	18,842,670	1,566,625	9.07%
Chain Home-to-Work Trip Only	5,929,237	7,158,844	1,229,607	20.74%
Chain Work-to-Home Trip Only	7,762,956	7,659,436	-103,520	-1.33%
Chain Both	3,583,852	4,024,390	440,538	12.29%

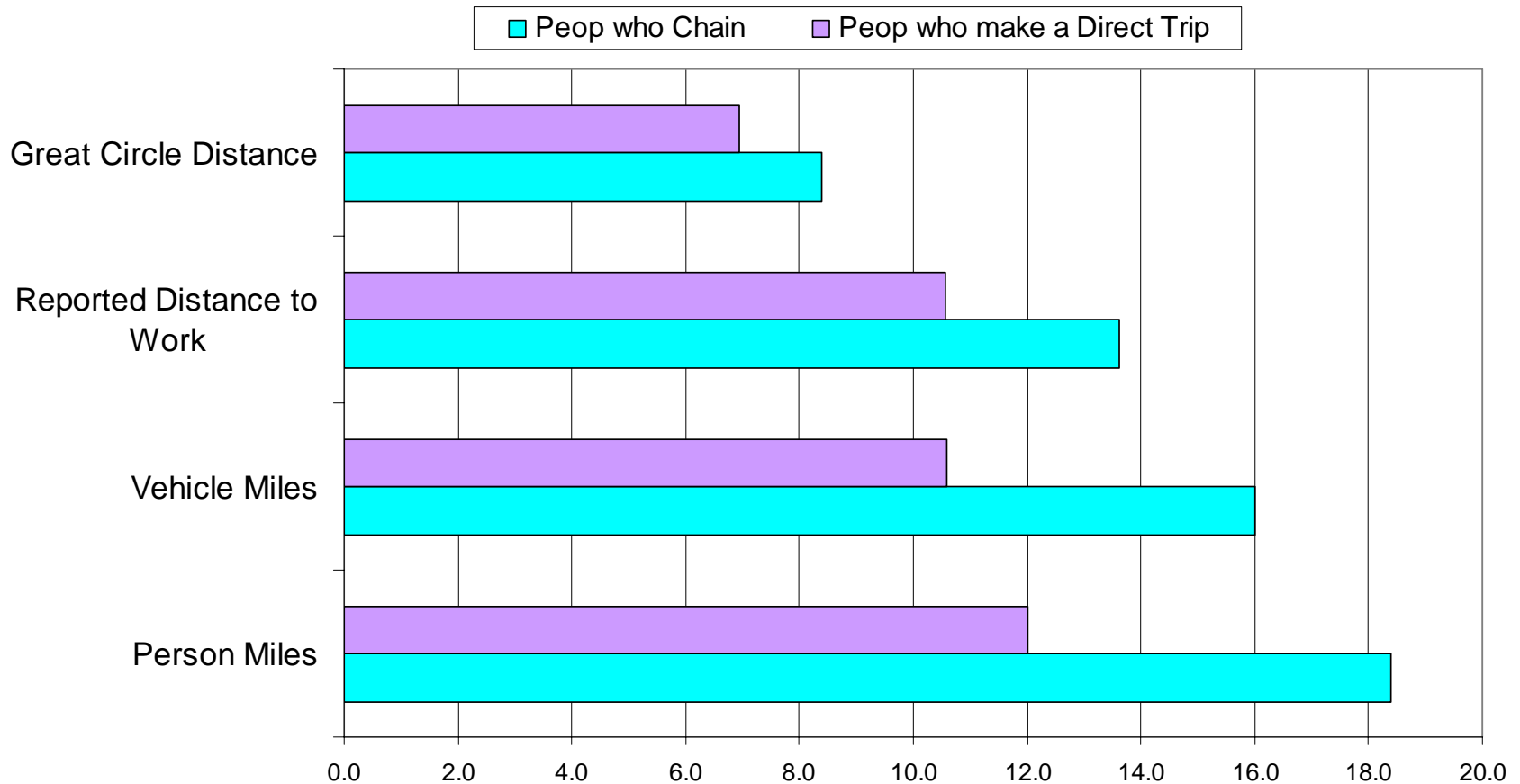
McGuckin, Zmud, Nakamoto
TRB 2005

Both the incidence and the number of stops increased in just that short time...



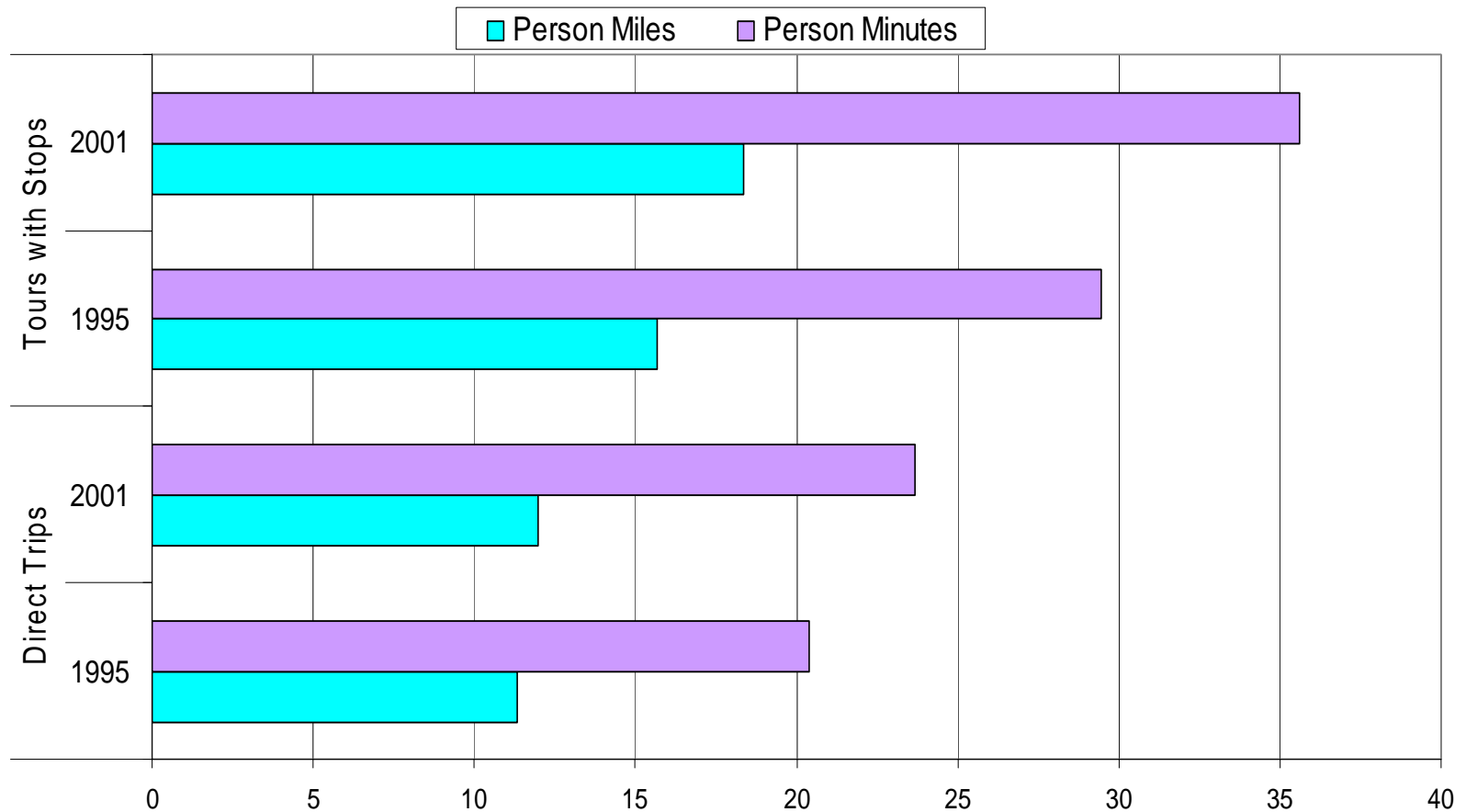
McGuckin, Zmud, Nakamoto
TRB 2005

People who chained their trips live further from work (or do people who live further trip chain?)



McGuckin, Zmud, Nakamoto
TRB 2005

Miles and minutes for weekday commutes have increased since 1995, especially for trip-chainers...



McGuckin, Zmud, Nakamoto
TRB 2005

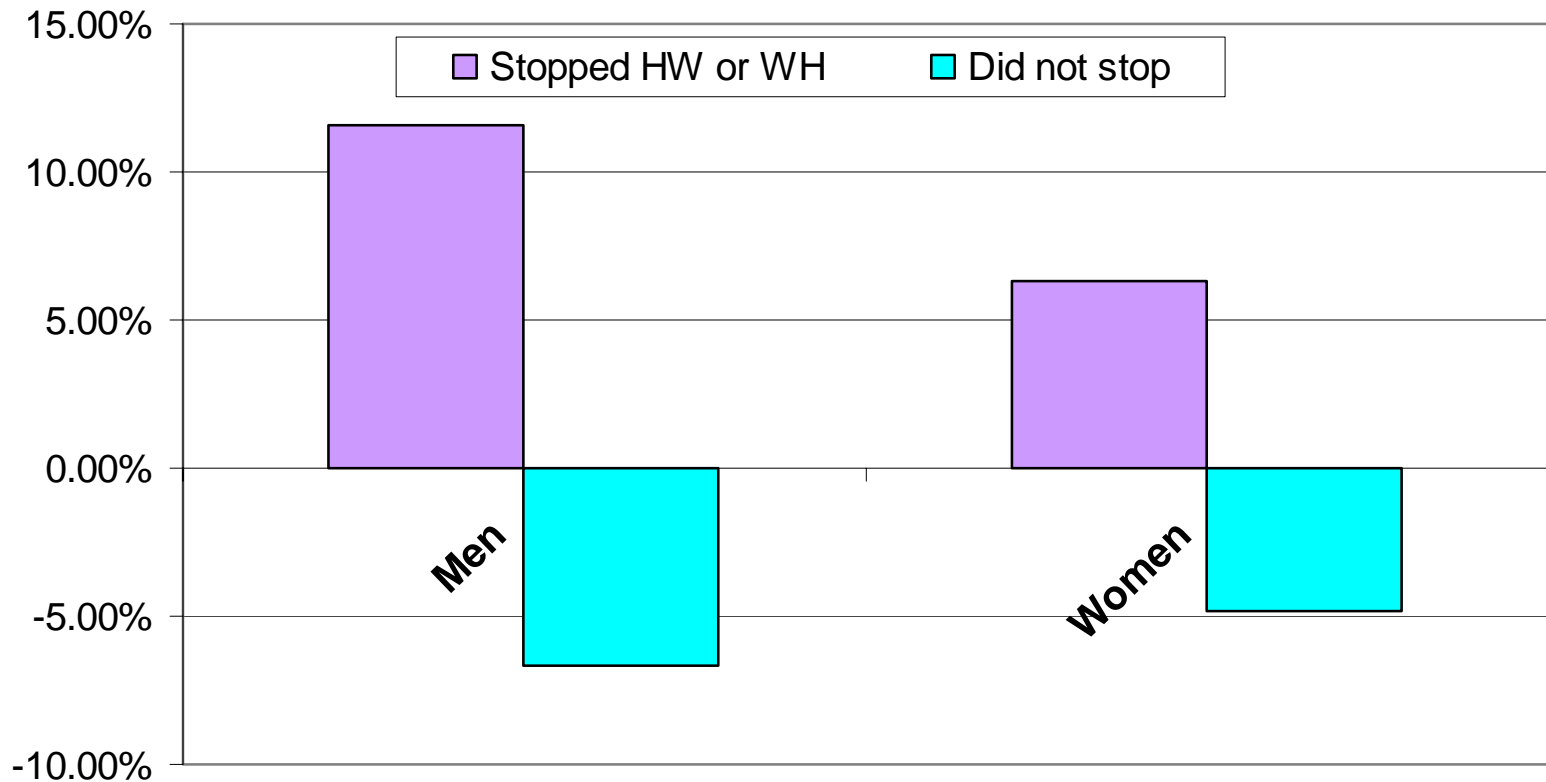
The effect of trip chaining on weekday commuting mode needs more research...

	POV	Transit	Walk/Bike	Other
Direct Trip	83.7	6.3	2.9	7.1
Home-Work Chain	88.1	3.4	1.1	7.5
Work-Home Chain	87.9	3.7	1.9	6.6
Chain Both Directions	90.7	3.5	0.6	5.2
Other	86.1	4.0	2.2	7.7

McGuckin, Zmud, Nakamoto
TRB 2005

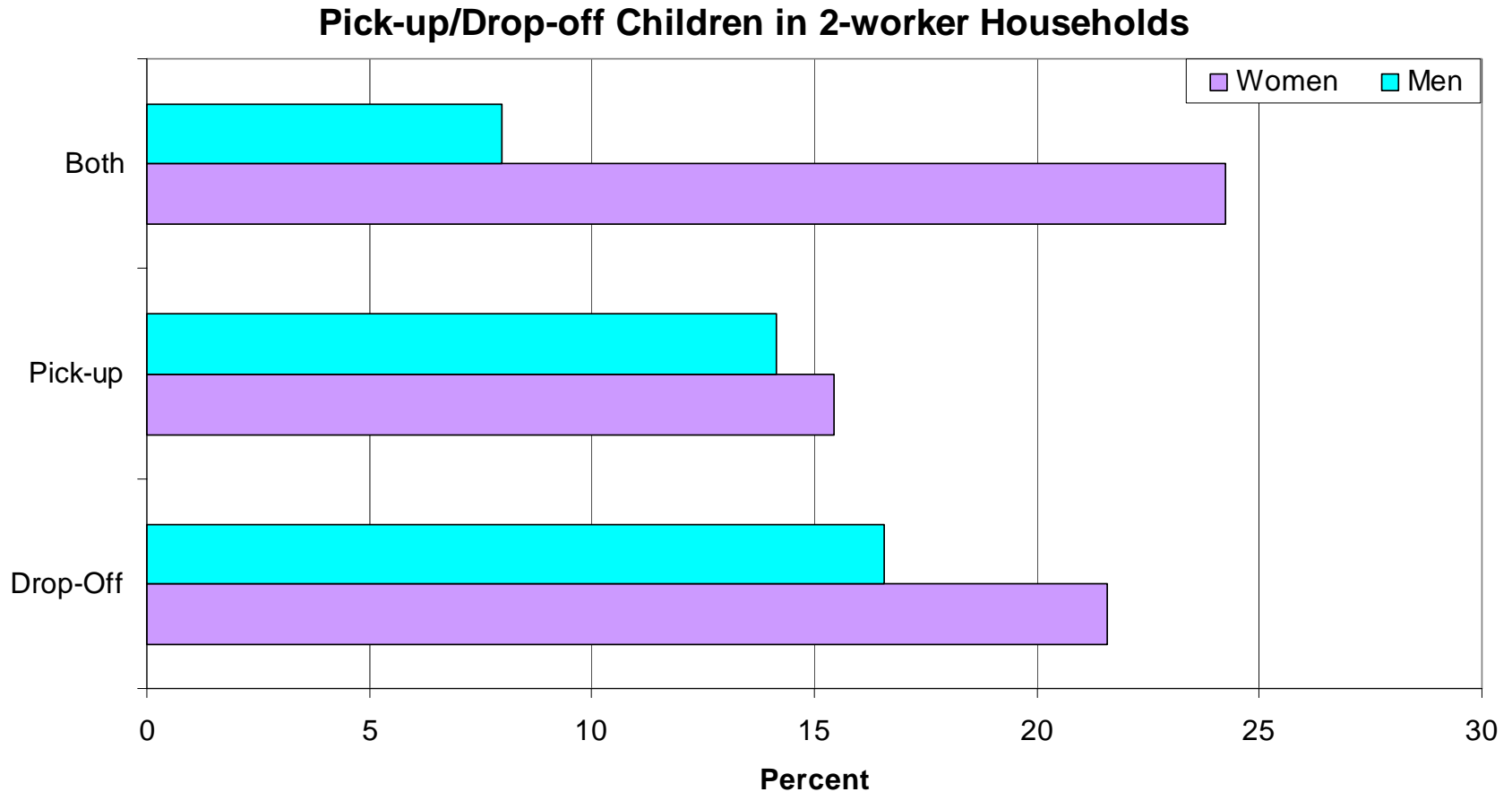
Men have increased trip chaining in commute tours at nearly twice the pace of women since 1995...

Percent Change in Trip Chaining by Men and Women, 1995 -2001



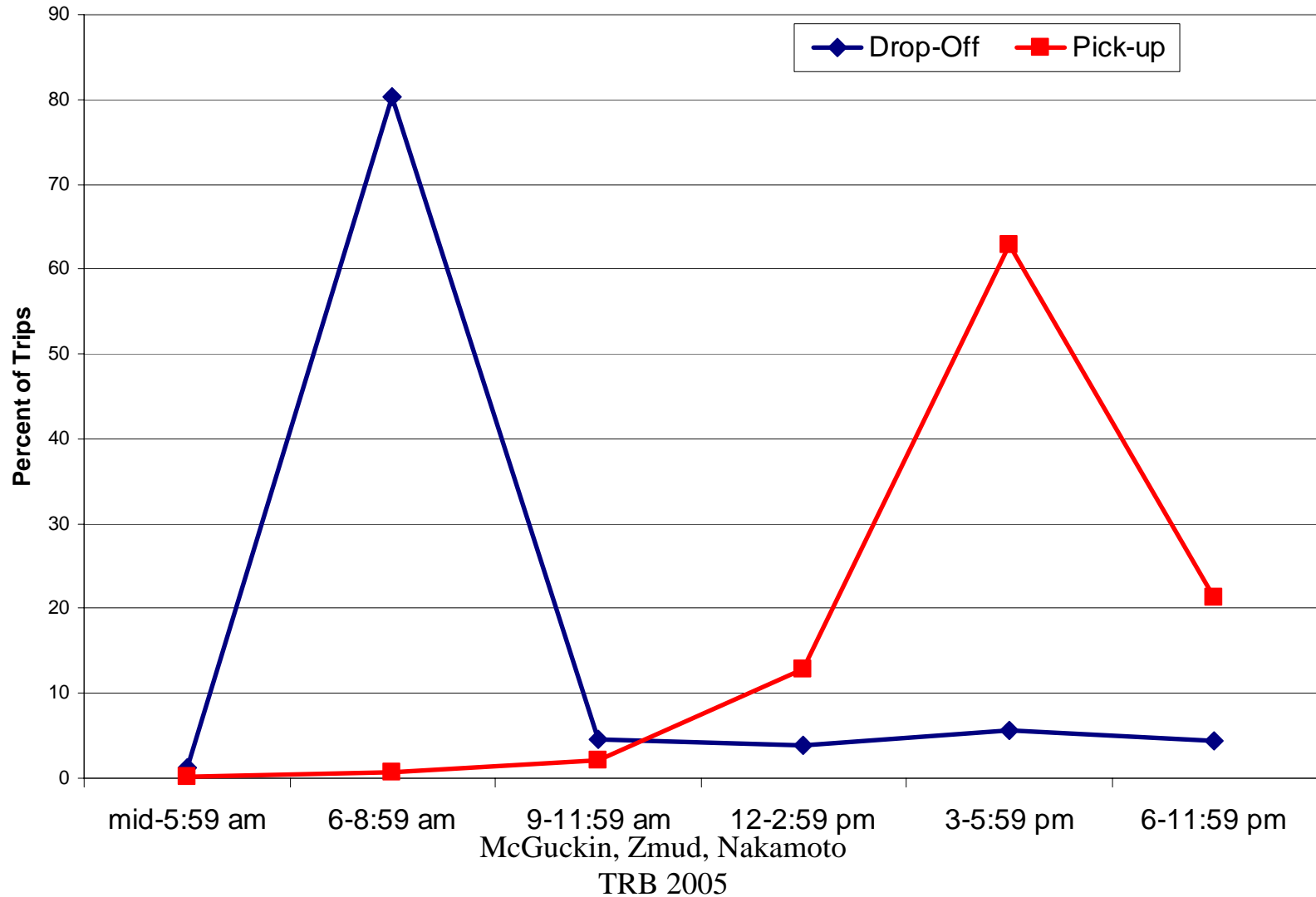
McGuckin, Zmud, Nakamoto
TRB 2005

But women are still more likely to drop children at school...even in two-worker households.

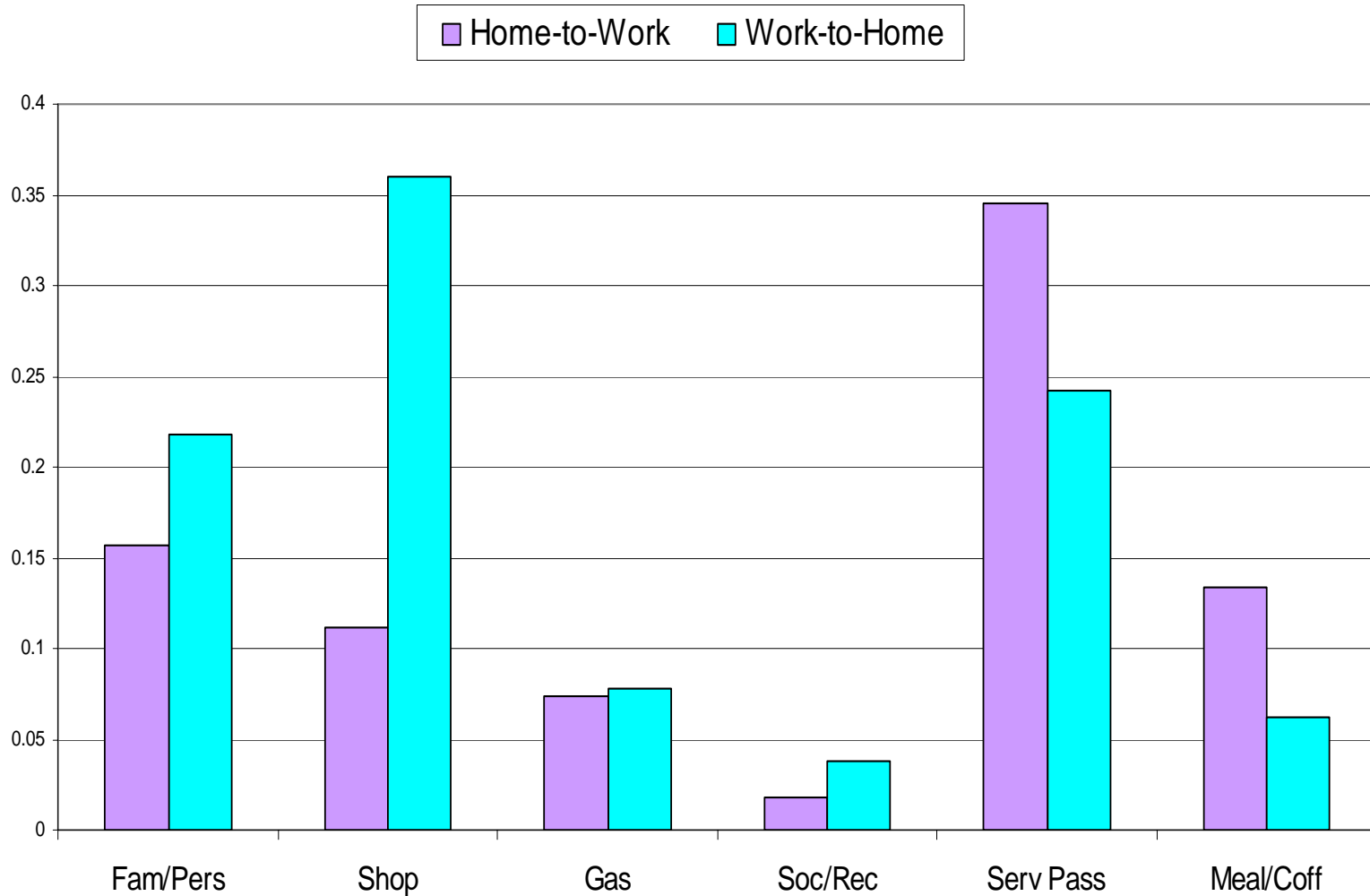


McGuckin, Zmud, Nakamoto
TRB 2005

And that may constrain their departure time, especially in the morning...



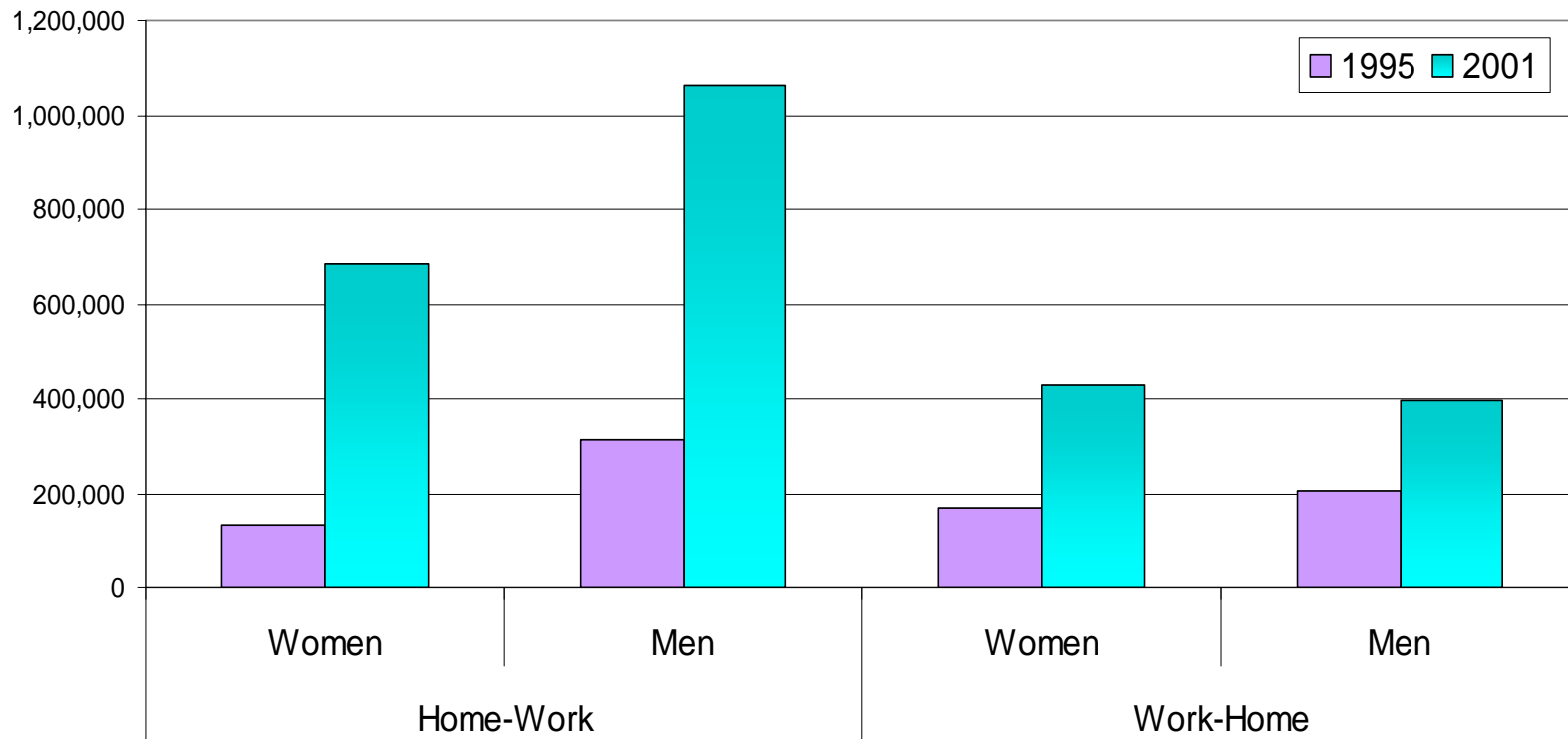
Mostly, workers stop to shop, pick-up or drop someone off, or run errands...



McGuckin, Zmud, Nakamoto
TRB 2005

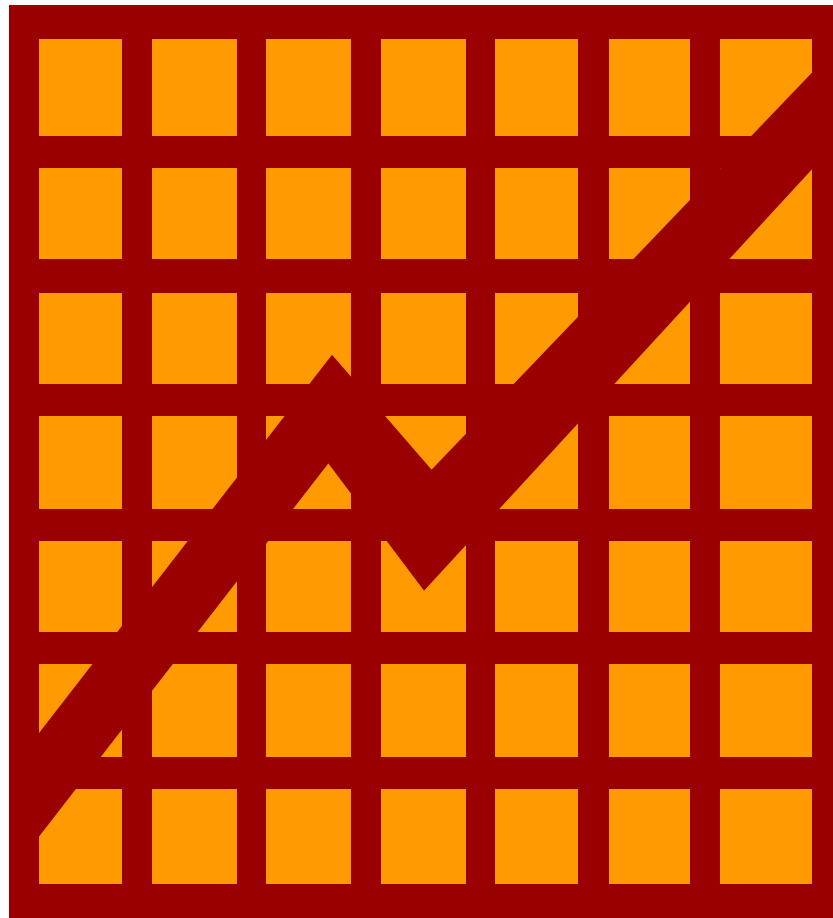
But the number of stops to get a meal/coffee showed surprising growth...

Number of Daily Trips to Stop for Coffee/Meals During Commute



McGuckin, Zmud, Nakamoto
TRB 2005

We call this the “Starbucks” effect!



McGuckin, Zmud, Nakamoto
TRB 2005

Make mine a venti!