
Insights from CTA's 2007 Origin Destination Survey

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Introduction

- Driven by FTA's requirement for New Starts projects
- Administered between April 2007-June 2007
- 84,664 surveys distributed onboard CTA vehicles
- Survey questionnaire in English and Spanish
- Telephone completion option in Polish and Chinese
- Unique password provided on every questionnaire for online survey completion

Survey Instrument Structure

- Start of Trip
 - Origin location, trip purpose, access mode and time, parking cost and CTA boarding location
- Middle of Trip
 - CTA transfer information - station and line/bus route
- End of Trip
 - CTA alighting location, egress mode and time, destination location, trip frequency, fare media, number of transit vehicles
- Demographic Questions
 - Household size, employment, number of drivers, number of vehicles, household income, sex, age, ethnicity

Sampling Plan & Survey Response

	Rail	Bus
Routes	8	154
Total trips	382	2190

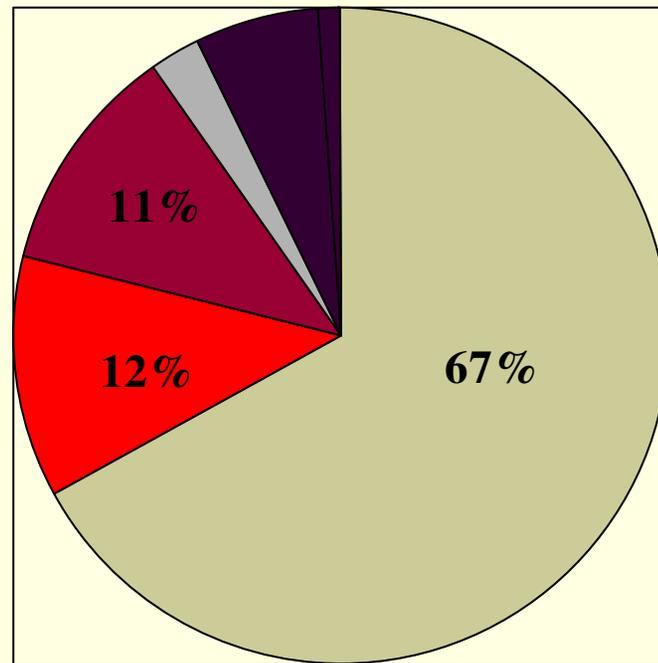
- Survey Response Rate 40%
 - Onboard 34%
 - Business reply Mail 5%
 - Online 1%

Weighting Criteria

- Total Records – 34,102
- General Weight Records – 28,084
- Model Weight Records – 18,269

Weighting Criteria	General Weight	Model Weight
OD Zip codes		✓
Trip Purpose		✓
Access-Egress Mode		✓
Route Name	✓	✓
Boarding Station Name	✓	✓
Trip Time Period	✓	✓

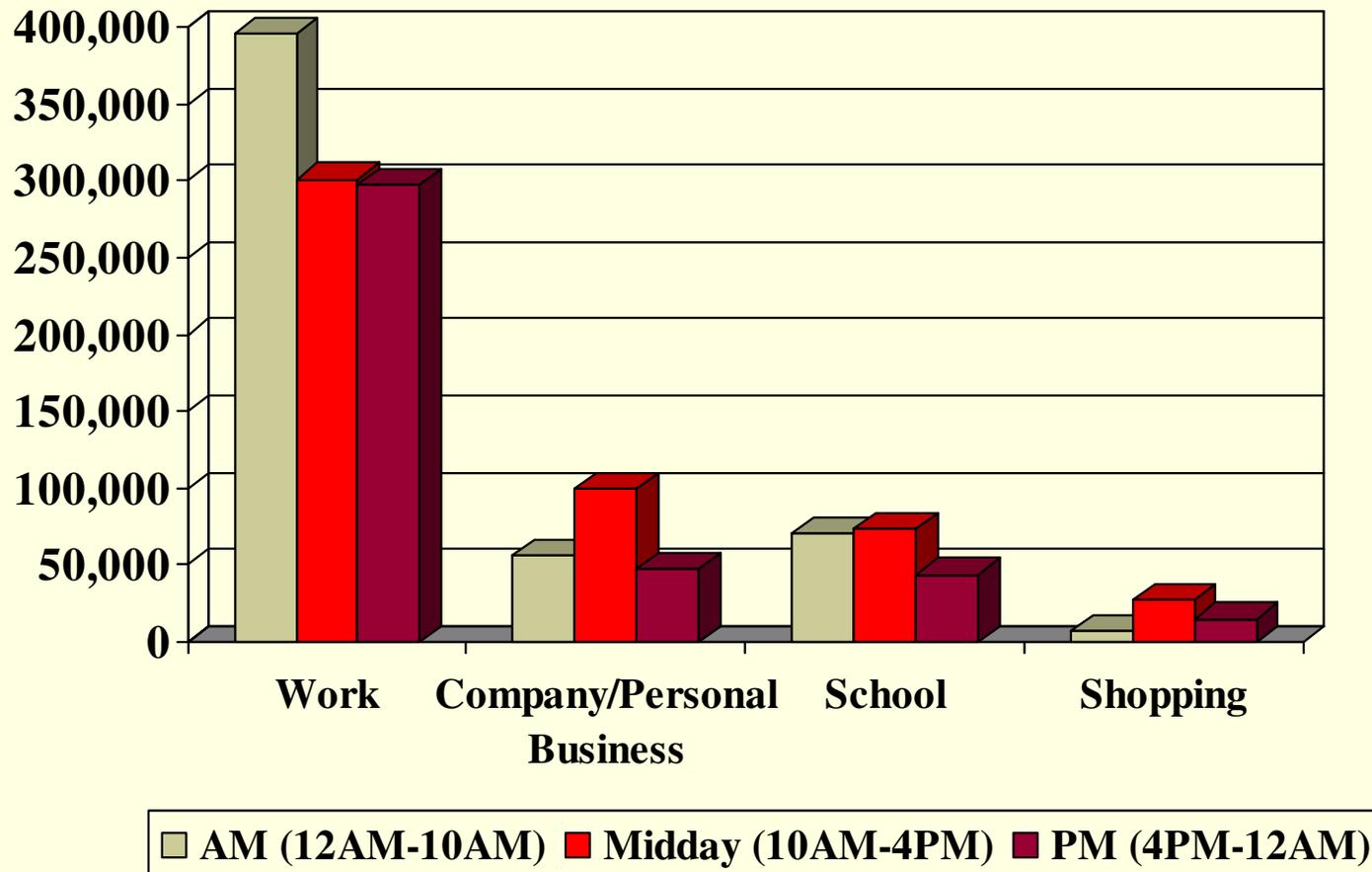
Trip Purpose



- Work/Commute
- Company/Personal Business
- School
- Shopping
- Recreation & Social Visits
- Other

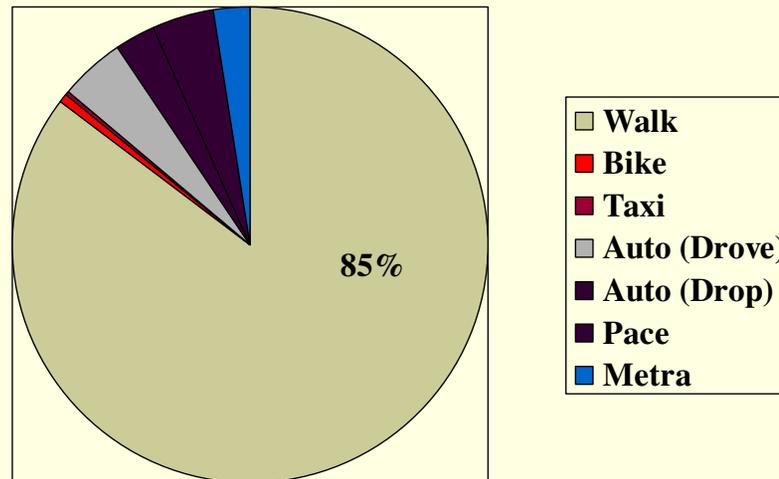
- Customer Satisfaction Survey:
 - Commute to work – 50%
 - Commute to school – 10%

Trip Purpose by Time of Travel

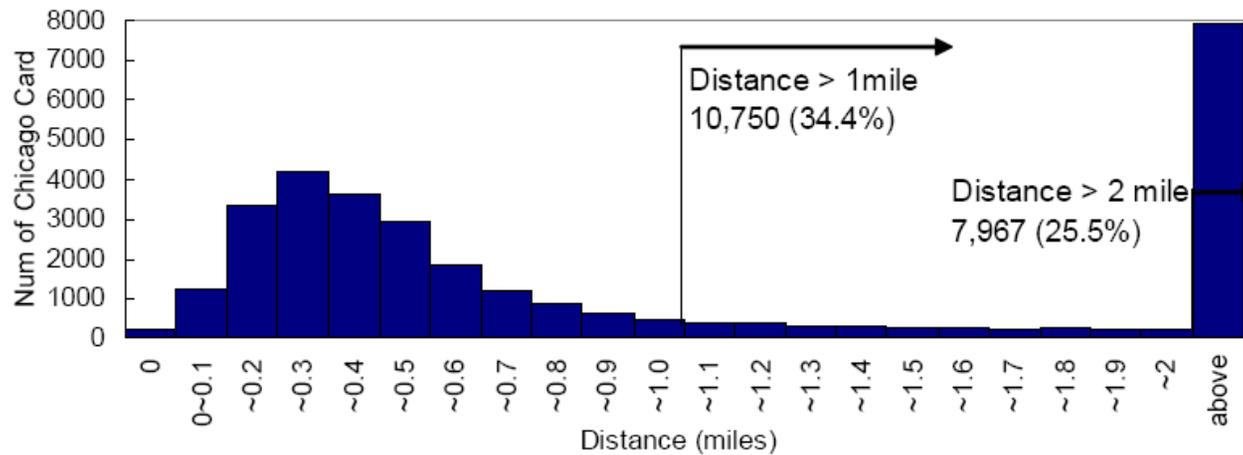


Access & Egress Mode

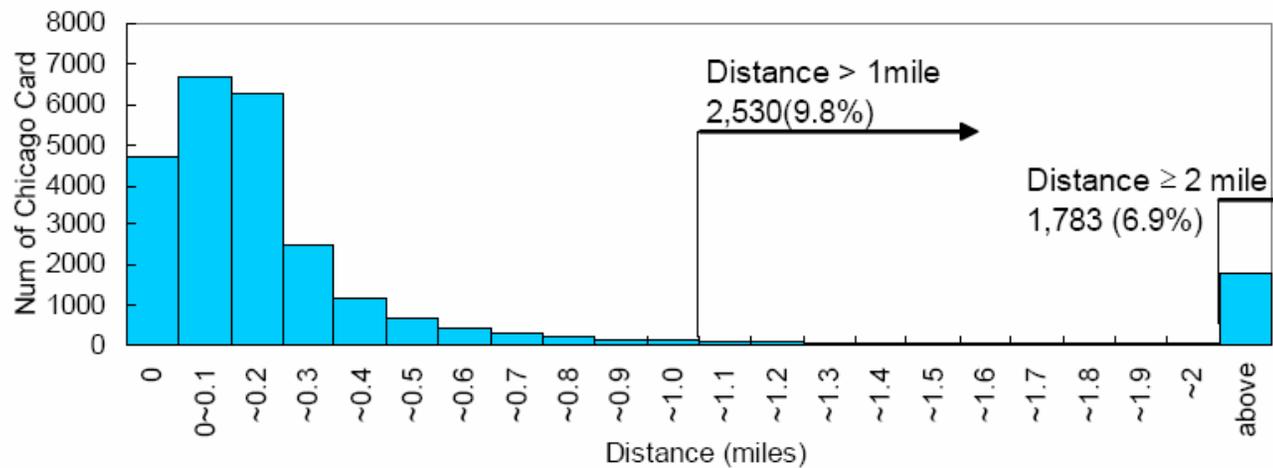
- 85% and 89% riders reported accessing and egressing CTA by walking
- Weighted average of reported access and egress walk time is 9 minutes (assuming responses > 30 minutes and unweighted records as invalid)
- Unweighted mode and median is 5 minutes



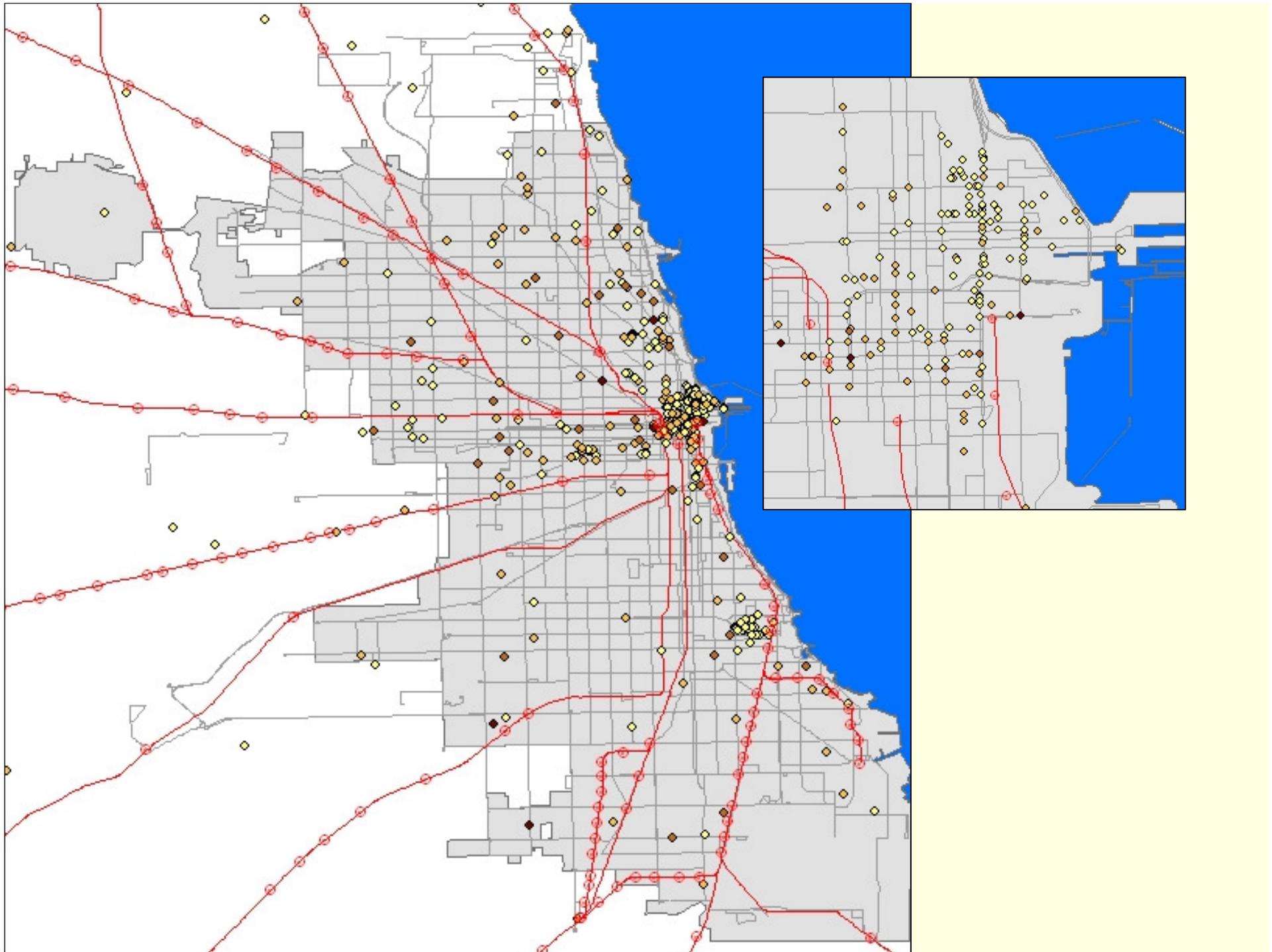
Inferred Access Distance – CC Analysis



Rail



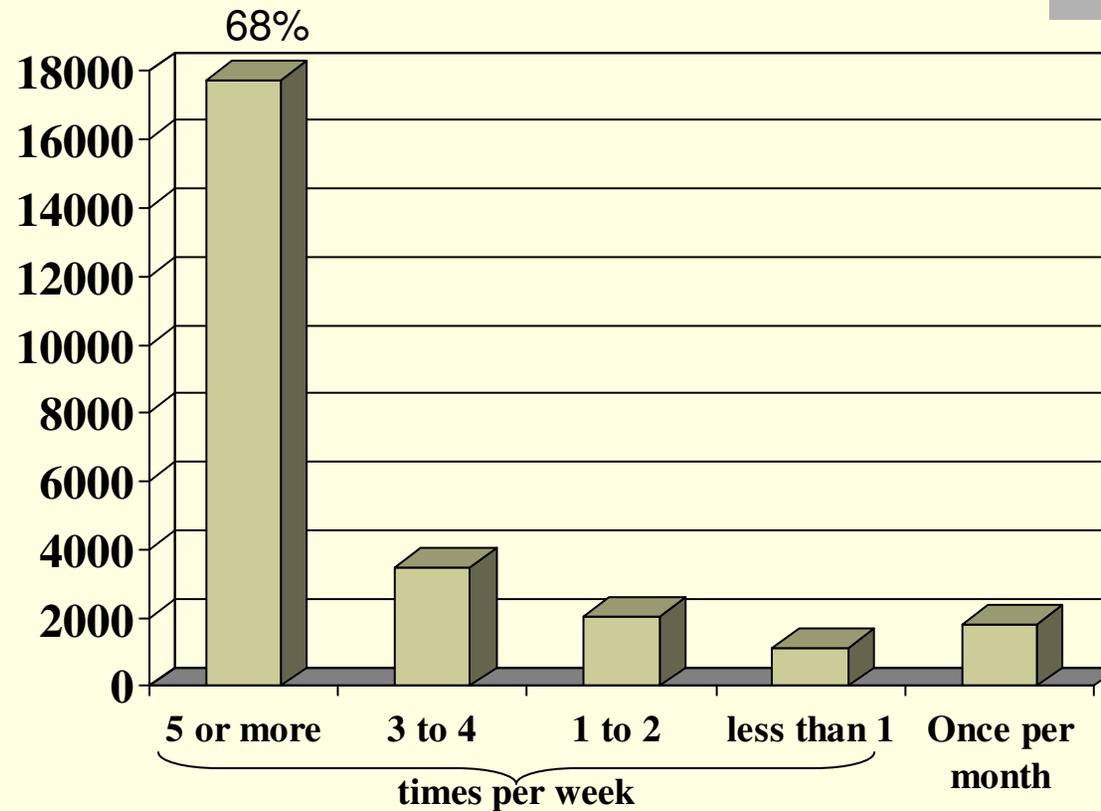
Bus



Reverse Trip

- 81% riders reported that they'll make a reverse trip (take the same train or bus on their next trip as in the last leg of reporting trip).
 - Same Train : 48%
 - Same Bus : 33%
- Some of the rest 19% probably represents trip chaining.
- 85% of riders who had a train link in their trip reported that they'll make a reverse trip. This compares well with 79% estimate from CTA's OD model.

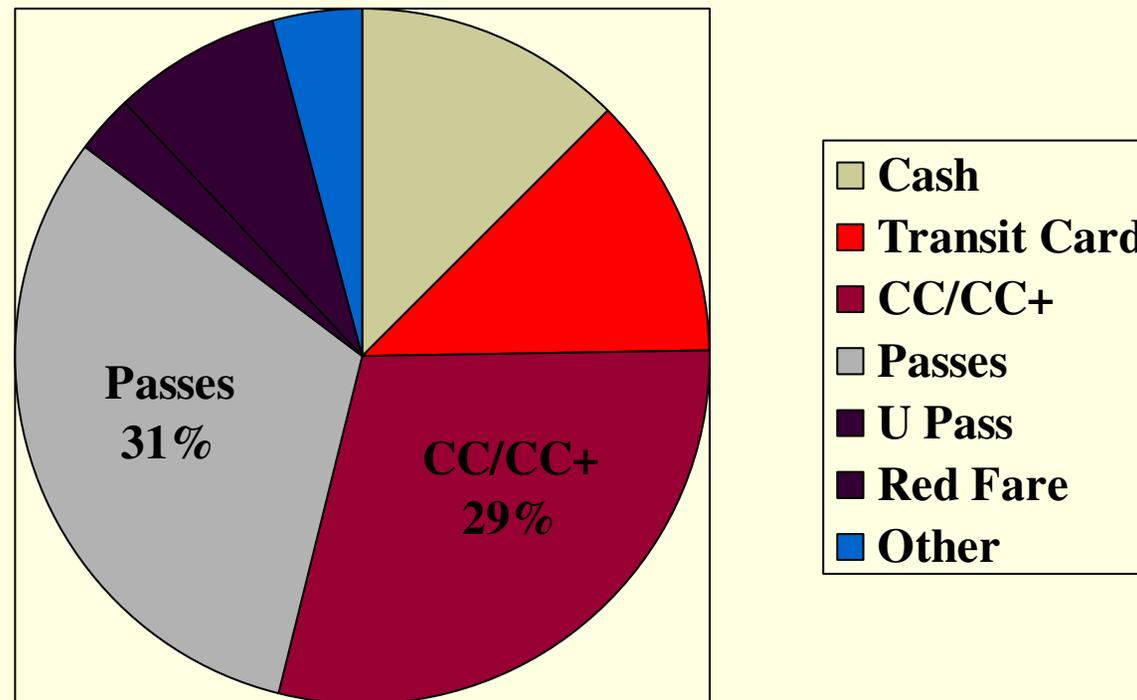
CTA Riding Frequency



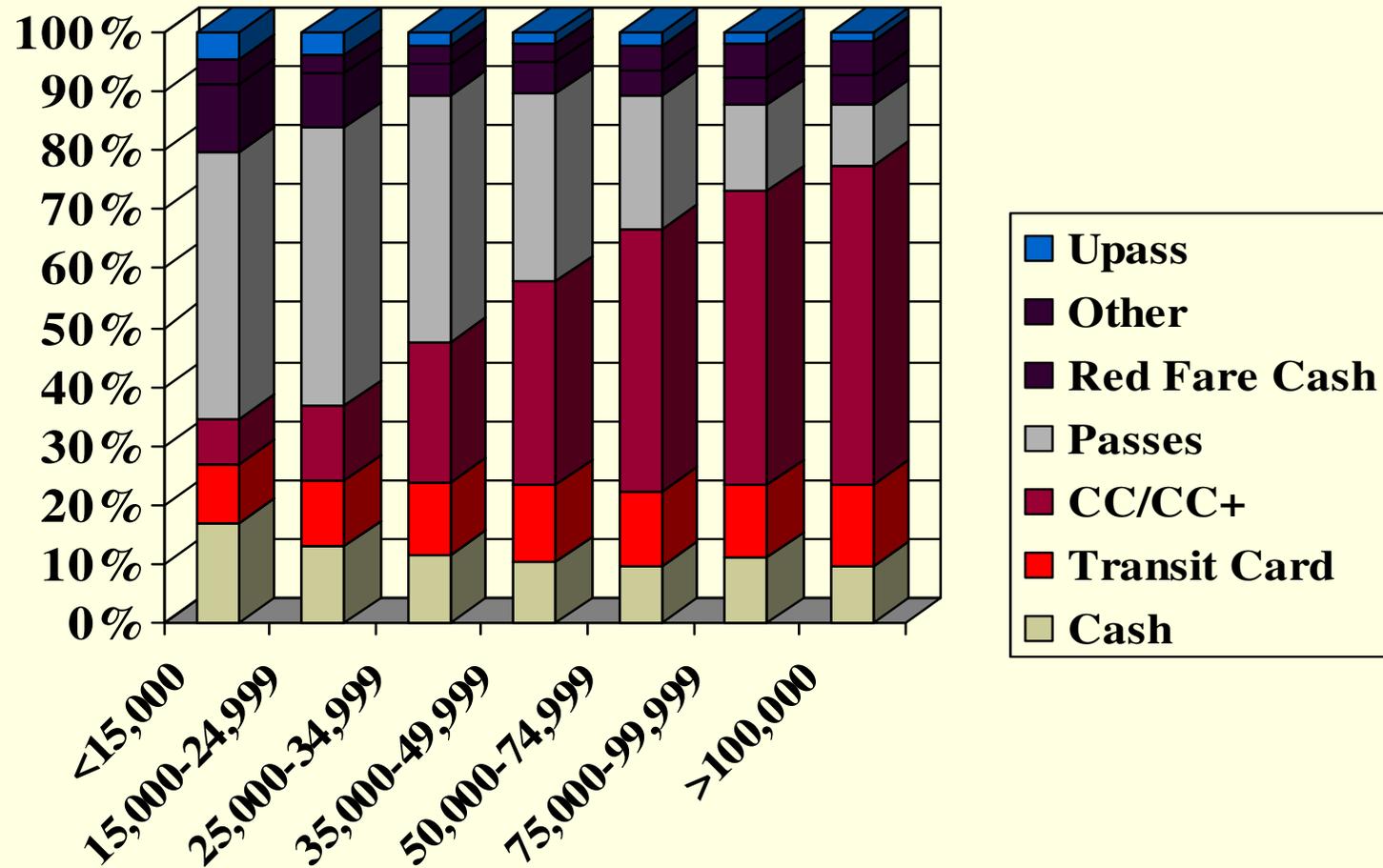
- Customer Satisfaction Survey: 47% customers ride CTA 5 or more days per week.

Fare Media Usage

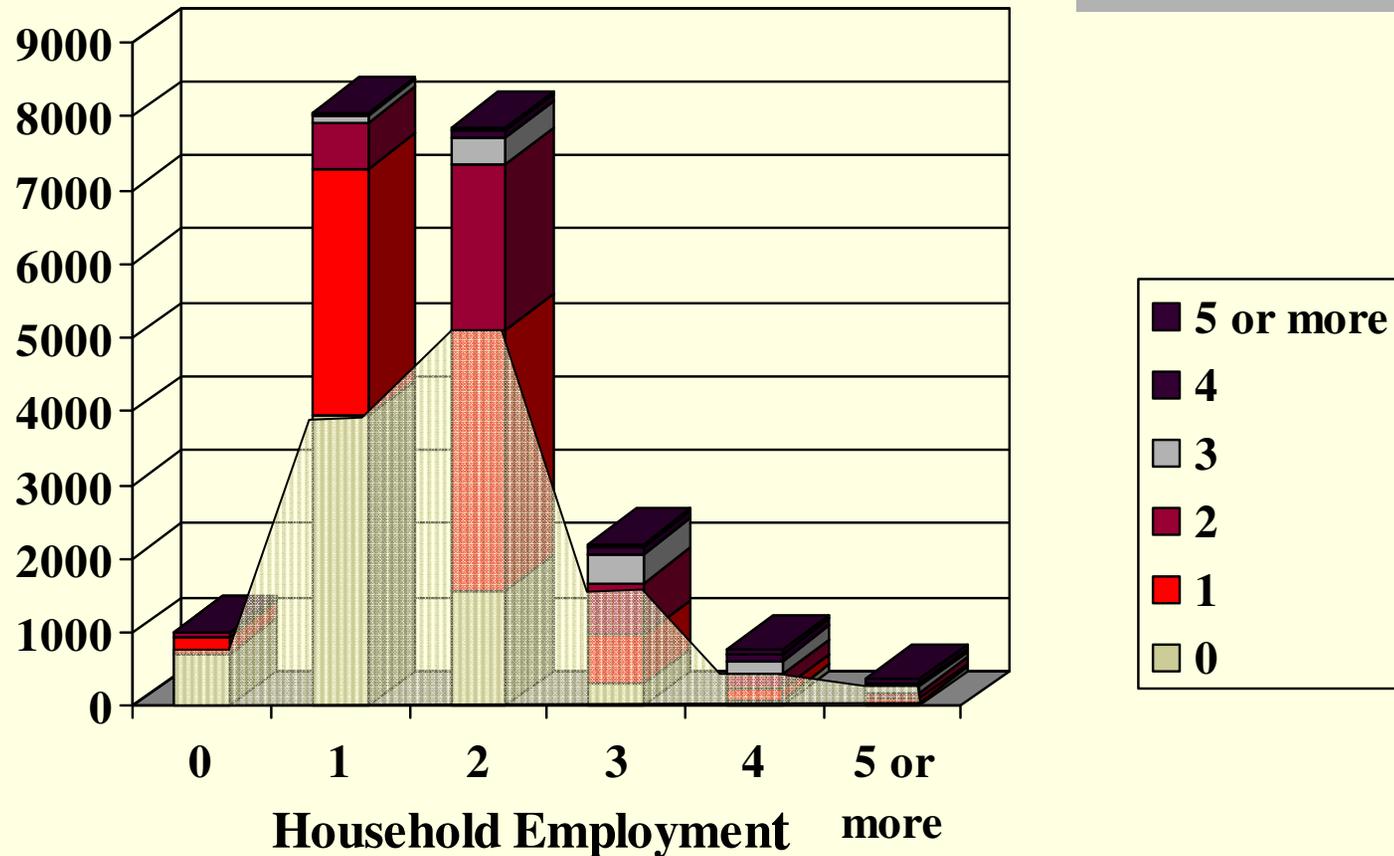
- Passes and CC/CC+ together capture 60% of CTA's market share.



Fare Media Usage by Income Group

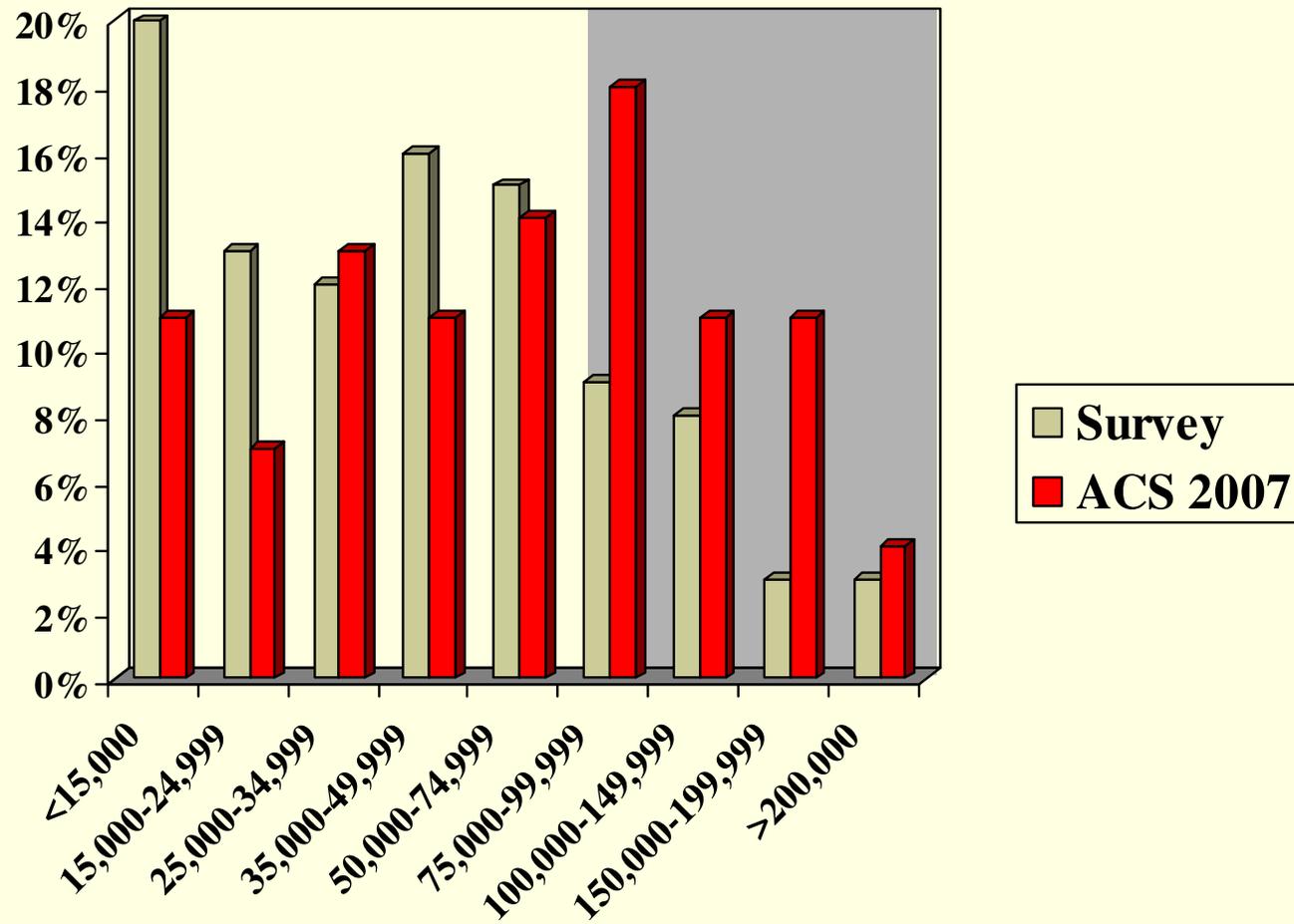


Vehicle Ownership by Household Employment

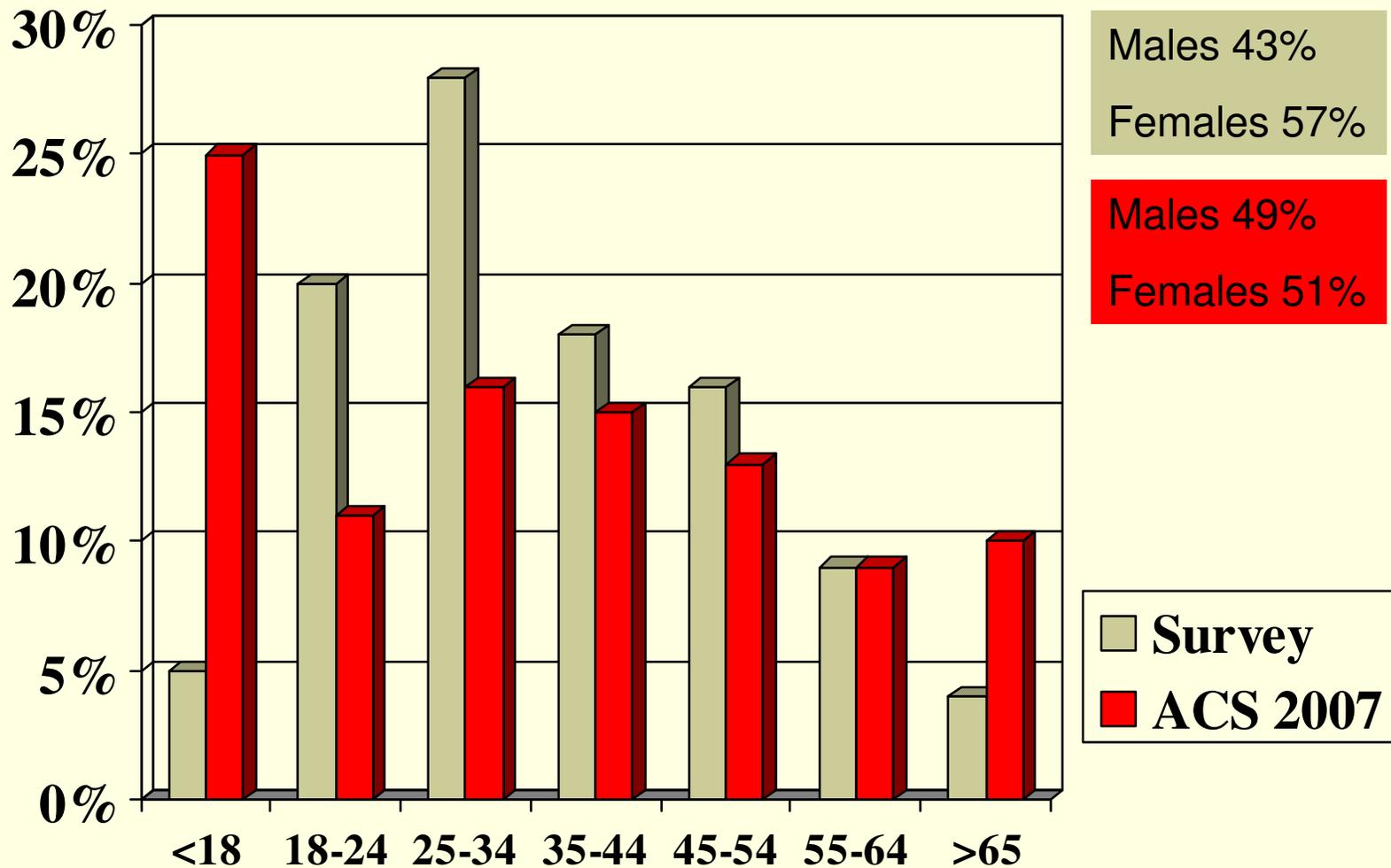


- 61% of CTA customers have shortage of vehicles. 66% reported in the survey having no car available for that trip.

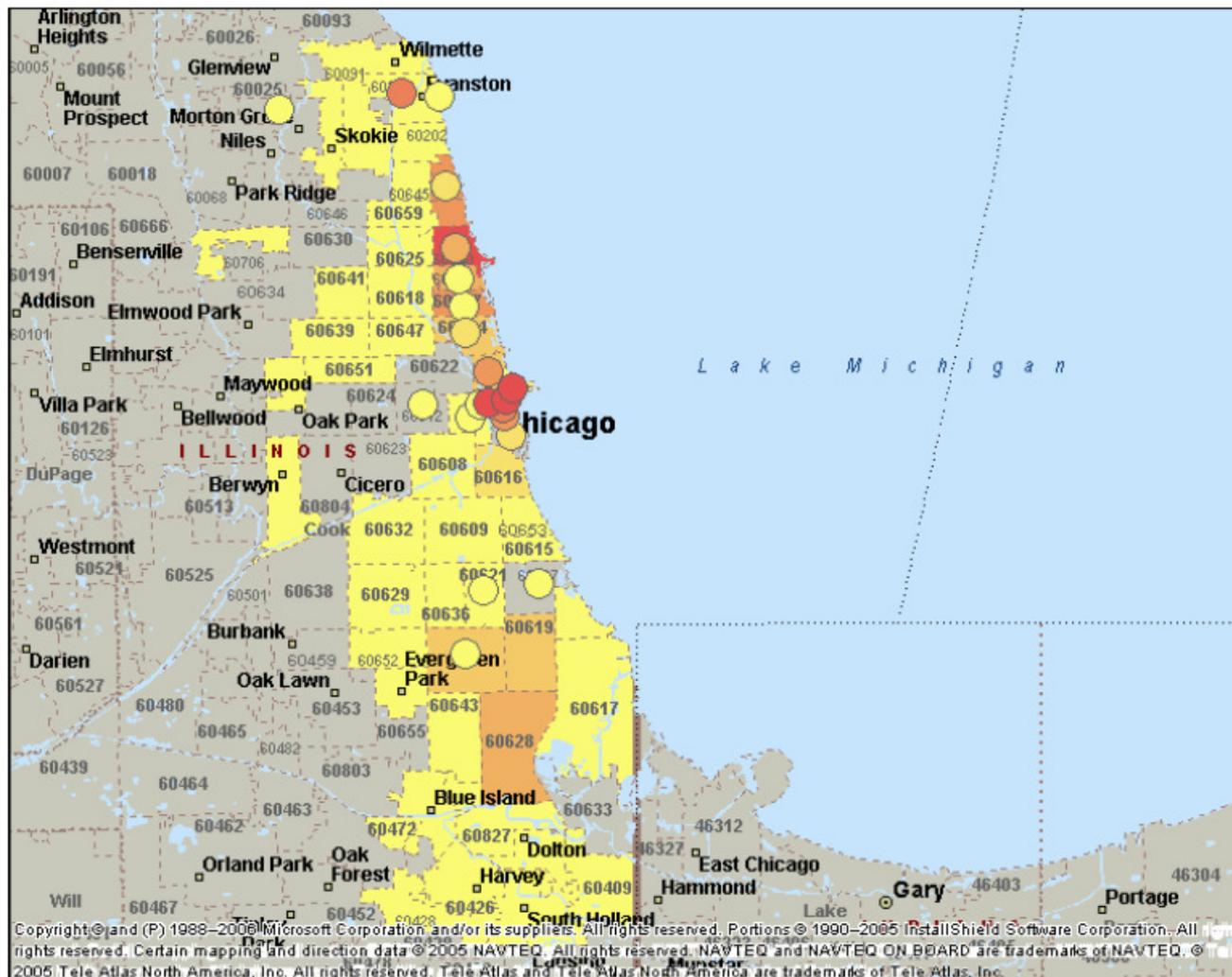
Household income



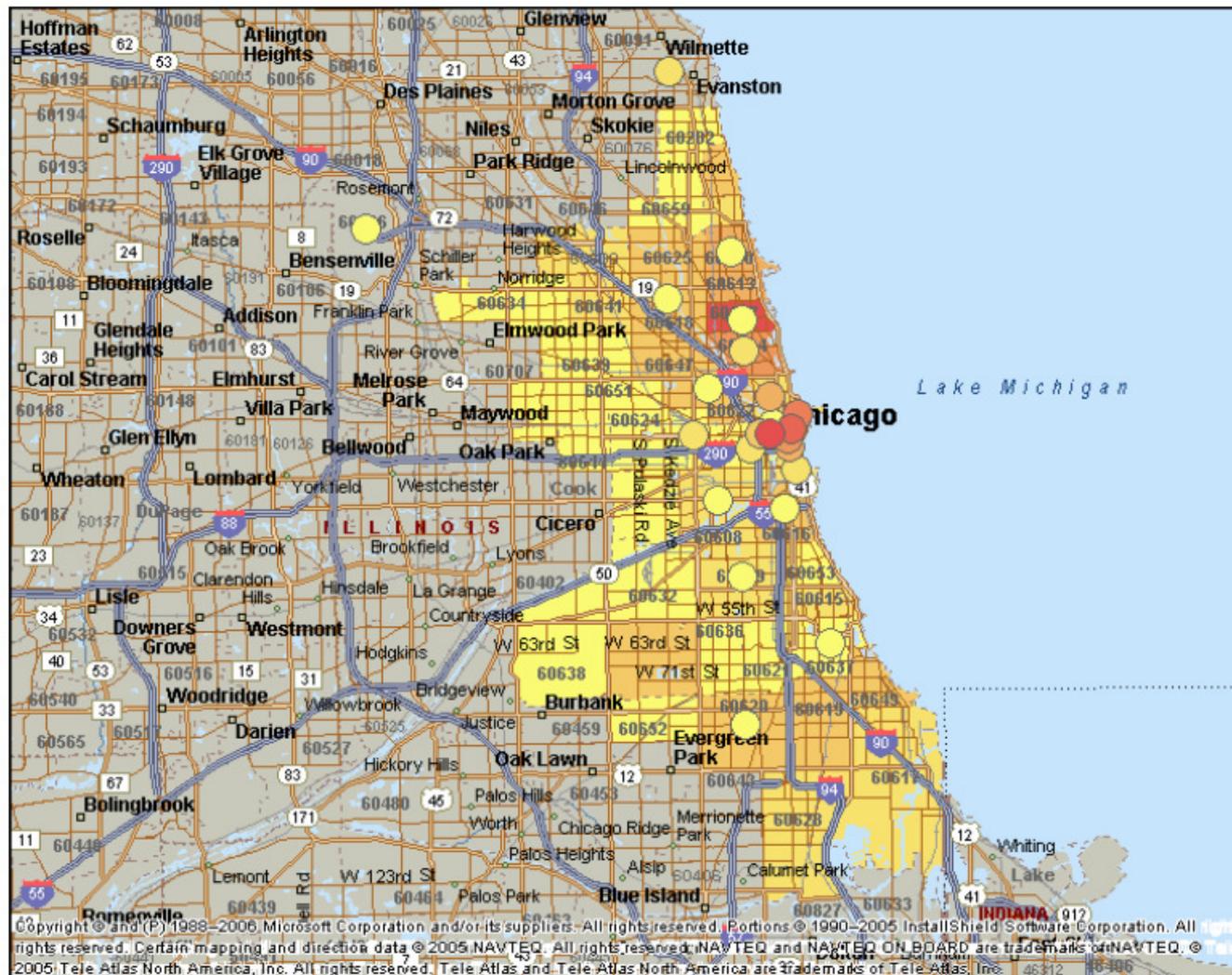
Age and Sex



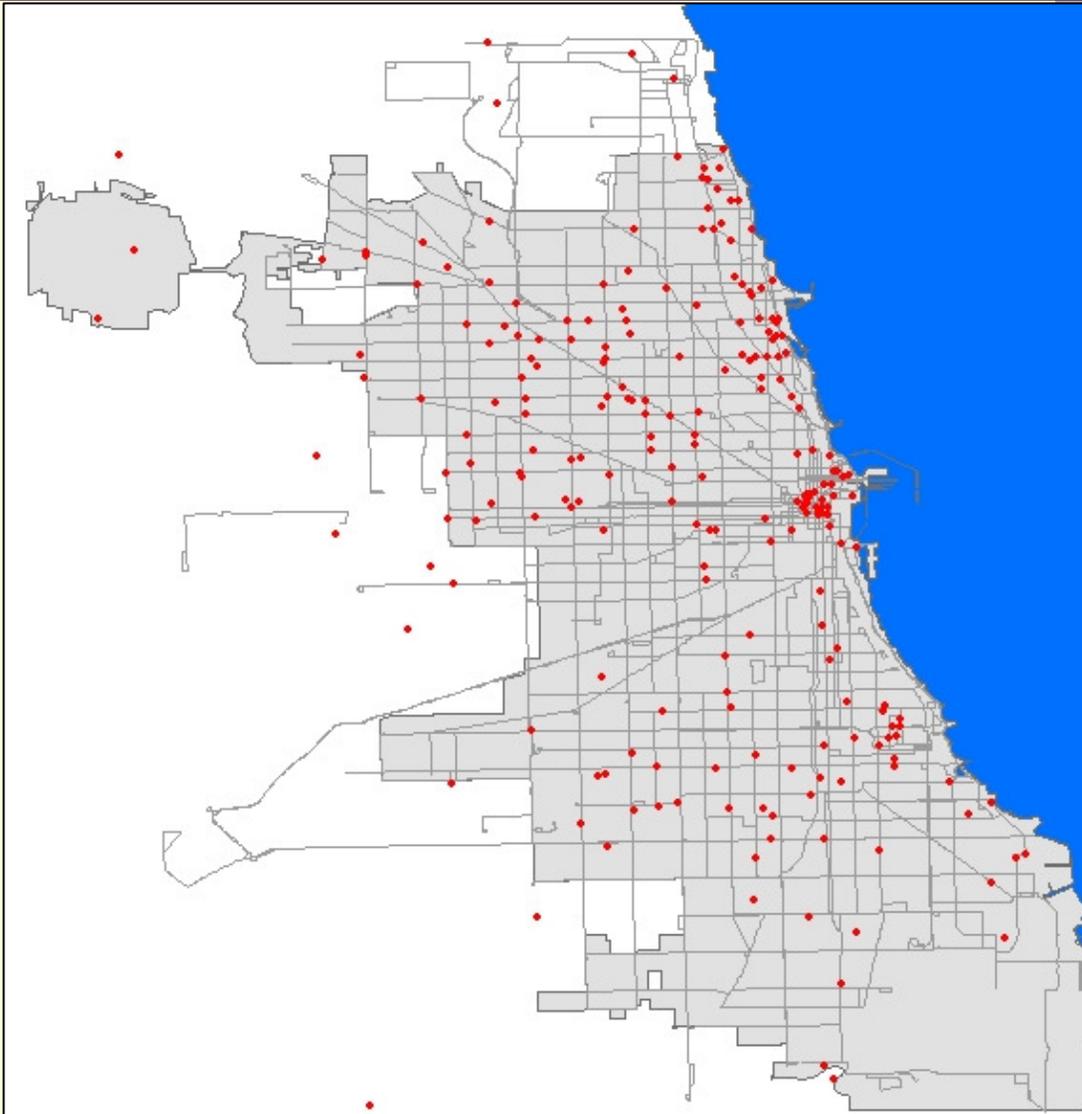
Origins and Destinations for AM Peak Work Trips on Red Line



Origins and Destinations for Trips with Ridership Greater than 1500

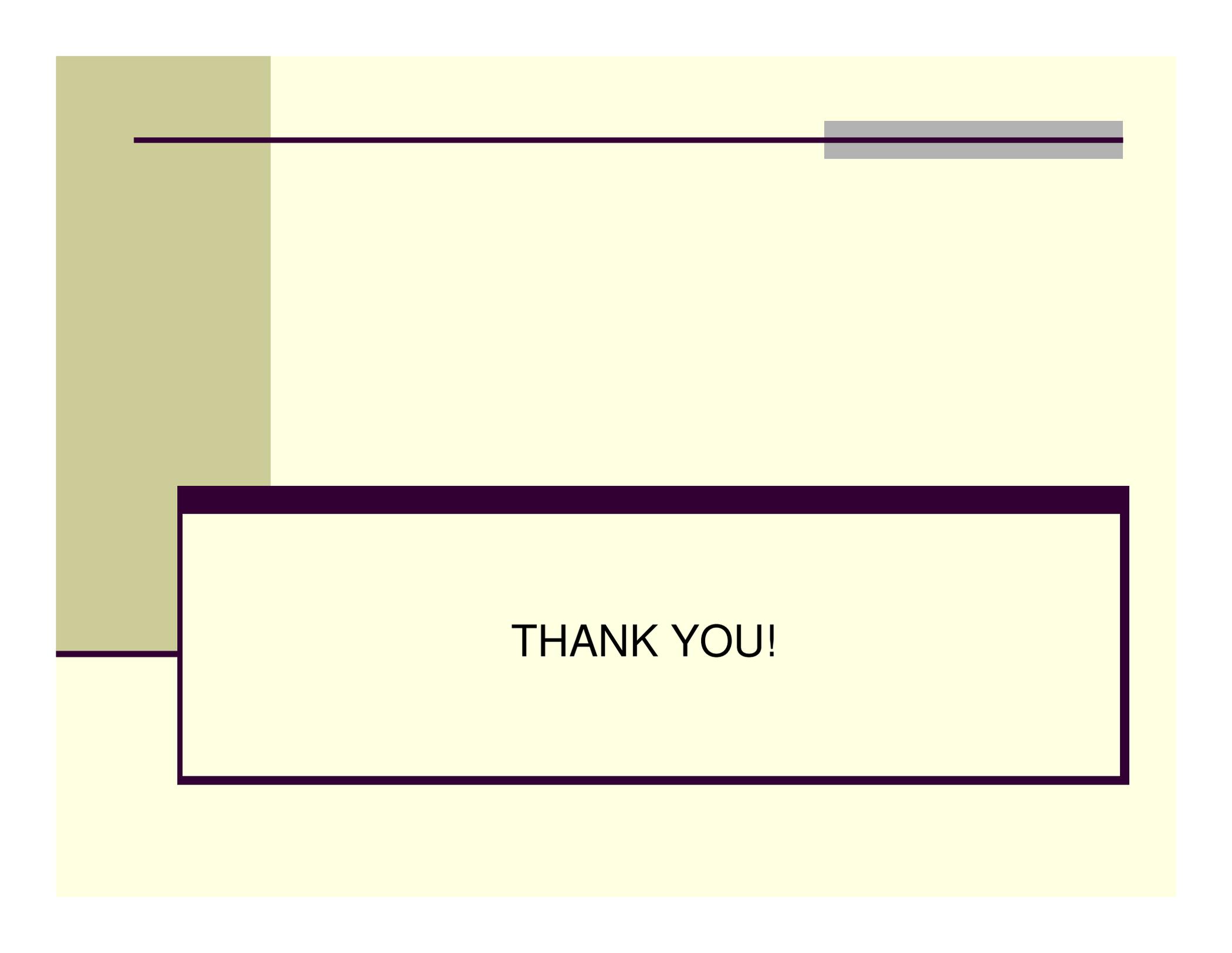


Origin of CTA Trips Ending at O'hare Terminal



Survey Purpose and Other Uses

- Update the New Starts model
- Validate CTA's OD model in conjunction with another survey, which is a requirement for NTD reporting
- Use OD data for in house sketch models and planning
- Inform rider's characteristics and ridership patterns in the proposed BRT routes
- Inform CTA about its customers and market



THANK YOU!