

MTA Surveys: Facts and Findings

NYMTC Brown Bag March 12, 2014 Julia Seltzer, MTA Planning





MTA Planning Survey Program

- Why survey?
- Who was surveyed?
- Challenges
- Methodologies
- Findings
- Uses for data

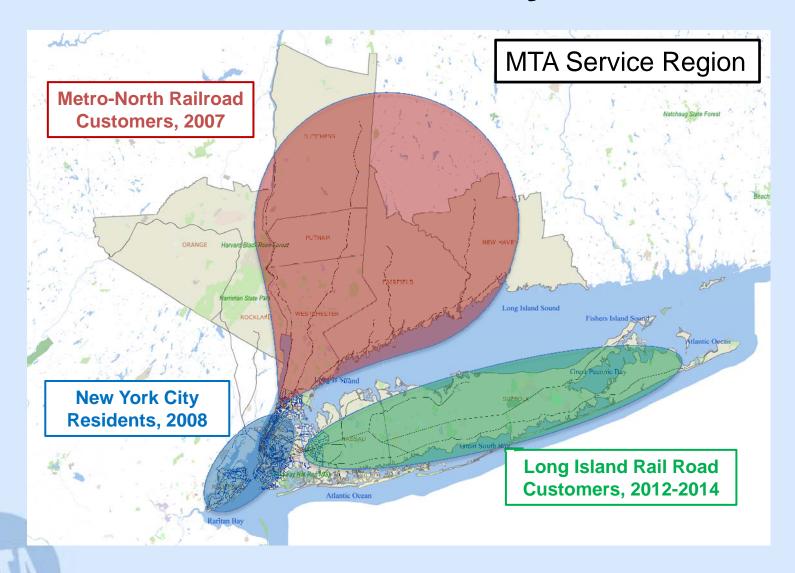


Why Survey?

- Integrate household and demographic data with travel data
- Inform service and capital planning decisions
- Understand the growing and evolving uses and users of the system
- Understand market opportunities
- Maintain federal funding eligibility
- Recalibrate MTA's regional forecasting model
- Create a "system of surveys" for the entire region



Who was surveyed?



Unique Challenges

- Commuter railroad systems are extensive and diverse
 - Complex travel patterns
 - Commuter sheds that extend over 100 miles
 - Diverse travel markets with different characteristics and demographics
 - Need for ridership counts for every station
- NYCT network is vast and heavily used
 - 23 subway lines with 468 stations; thousands of bus stops surveying on board would be difficult and expensive
 - Distribution and collection of surveys— i.e. short trips, transfers to other lines, crowded conditions

Metro-North Origin & Destination Survey



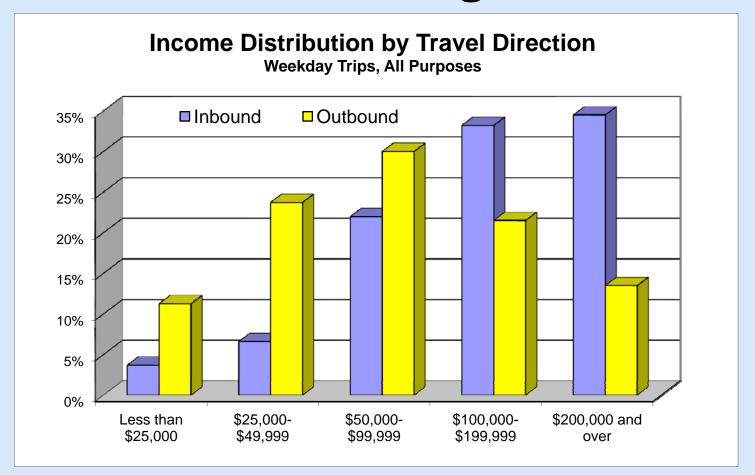
Methodology: MNR

- Fieldwork conducted in spring and fall of 2007
- On-board survey distribution for all Manhattanbound trains
 - 45% response rate: 206,000 distributed, 93,000 returned
 - Surveys in English and Spanish
- On board ridership counts for all trains
 - Total of 1,378 trains counted
 - Later used to expand survey data
- Asked about current and return trips
- First O&D survey for MNR; first time Internet used as a response option

MNR Snapshot of Travel Markets

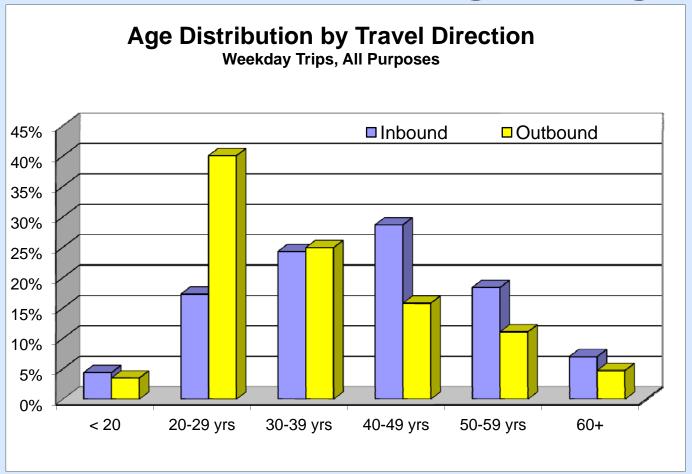
	Work Travel to Manhattan	Non Work Travel to Manhattan	Intermediate Travel	Reverse Work Travel	Outbound Discretionary Travel
Number of Travelers	75,500	21,200	14,400	11,500	3,200
Car Available?	86%	74%	59%	27%	41%
Primary Access Mode	Drive Alone (51%)	Drive Alone (36%)	Drive Alone (29%)	Subway (39%)	Subway (60%)
Primary Egress Mode	Walk (62%)	Subway (45%)	Walk (60%)	Walk (61%)	Picked Up (40%)
Predominant Ticket Type	Monthly (86%)	Round Trip (32%)	Monthly (56%)	Monthly (62%)	One Way (29%)
Gender	F (40%) M (60%)	F (54%) M (46%)	F (49%) M (51%)	F (55%) M (45%)	F (56%) M (44%)
Median HH Income	\$173,800	\$120,200	\$80,000	\$72,000	\$86,800
Median Age	40	38	35	33	33

MNR Customer Insights: Income



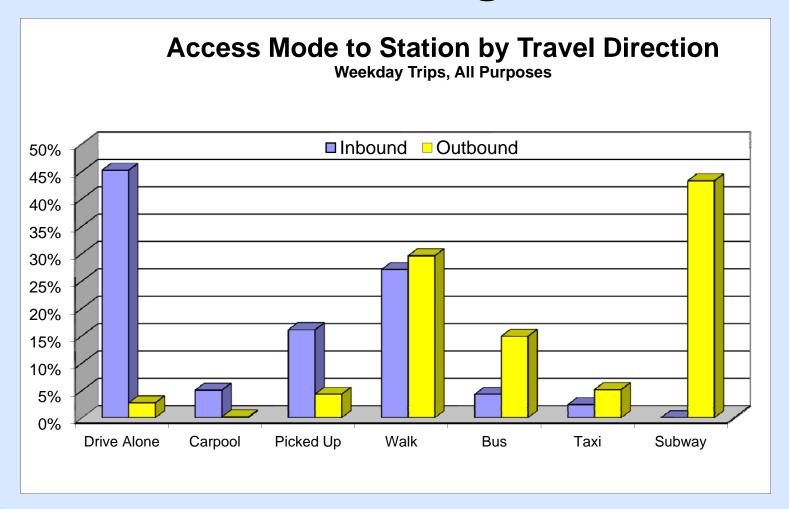
- Inbound customers tend to be more affluent; over 2/3 have median household incomes of \$100,000 or more.
- More than 1/3 of outbound customers have median household incomes < \$50,000.

MNR Customer Insights: Age



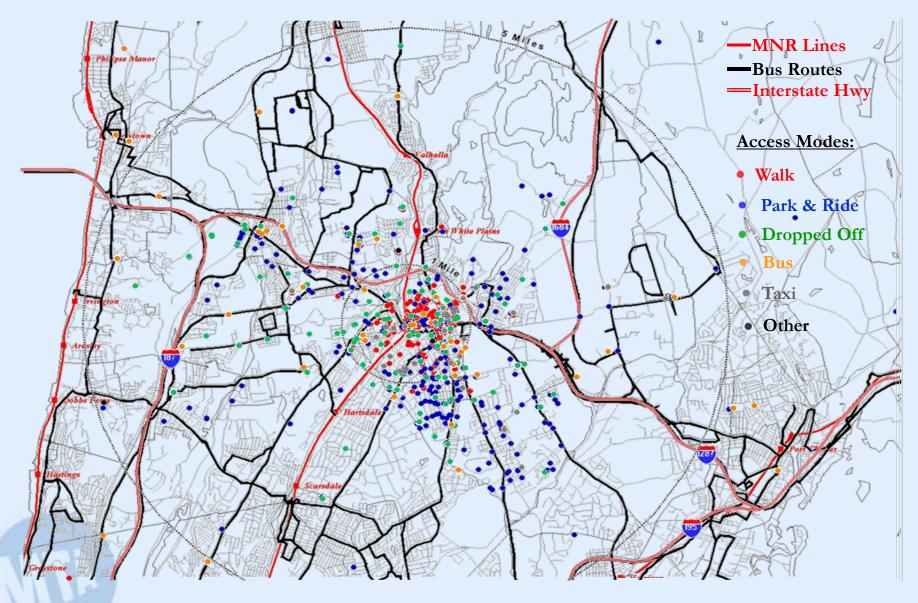
- Outbound customers tend to be younger, with more than 40% under 30.
- Inbound customers tend to be older, with more than 50% over 40.

MNR Customer Insights: Access



- More than half of outbound customers rely on transit to access MNR.
- Inbound customers' primary mode of access to the train is by car.

Access to White Plains Station



NYC Travel Survey

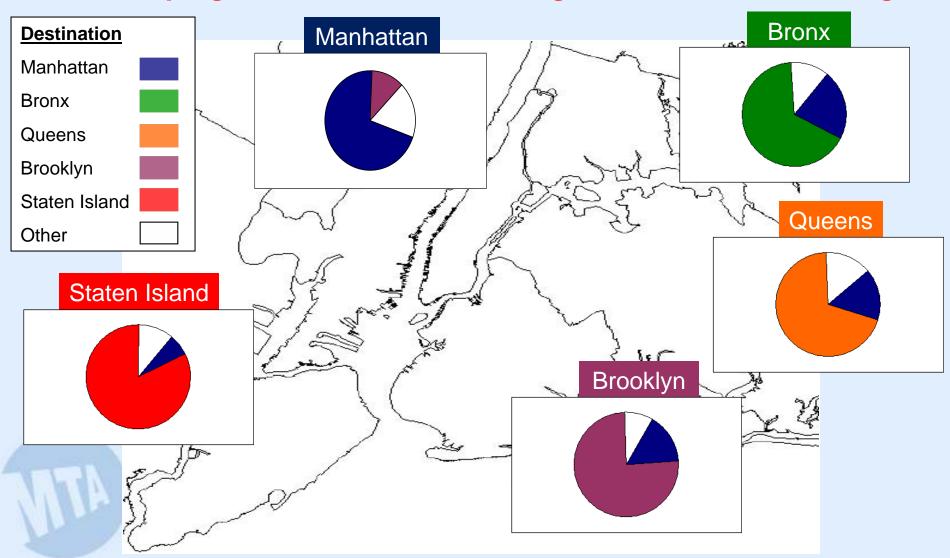


Methodology: New York City Survey

- Conducted in spring and fall of 2008
- Mainly telephone-based; land lines and cell phones
- Over 16,000 NYC residents aged 18+; 13,500 randomly selected households
 - All households contacted by mail
 - Non-landline households offered incentives to call
- Asked about all travel via all modes in the previous 24 hours
- Travel confirmation
 - MetroCard serial # records
 - Immediate electronic geocoding

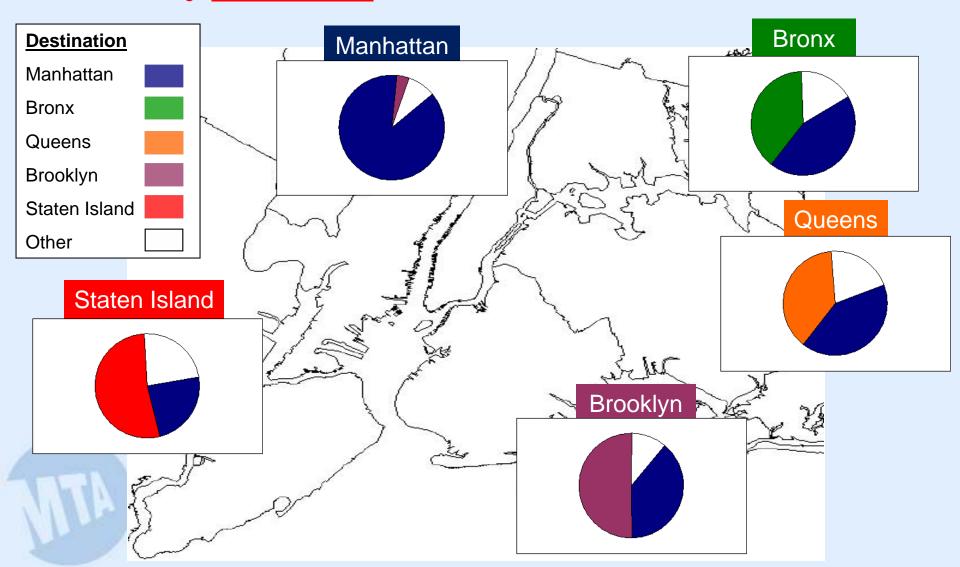
NYC Insights: Trip Destinations All Days, Purposes & Modes

Overall, trips generated in each borough remain in that borough.



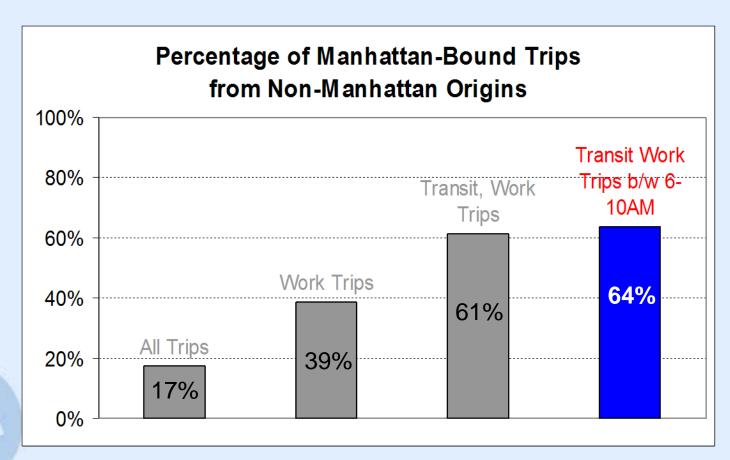
NYC Insights: Trip Destinations Weekdays, Work Trips, All Modes

Weekday work trips tend to be more Manhattan-centric



NYC Insights: Manhattan Destinations Weekdays, All Modes

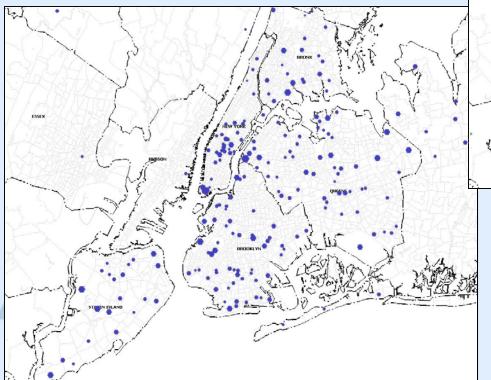
Trips to Manhattan increase significantly when looking at the following four types of trip markets

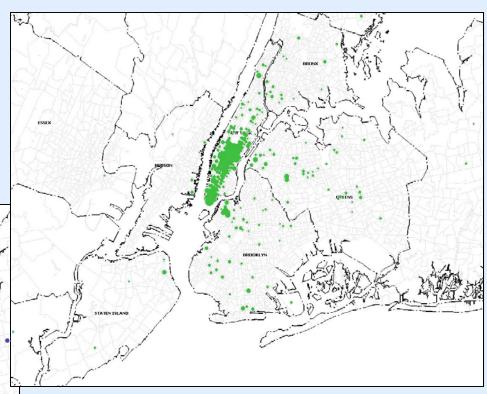




Auto & Transit Trip Destinations Weekdays, Work Trips, 6-10 AM

Auto Trip Destinations

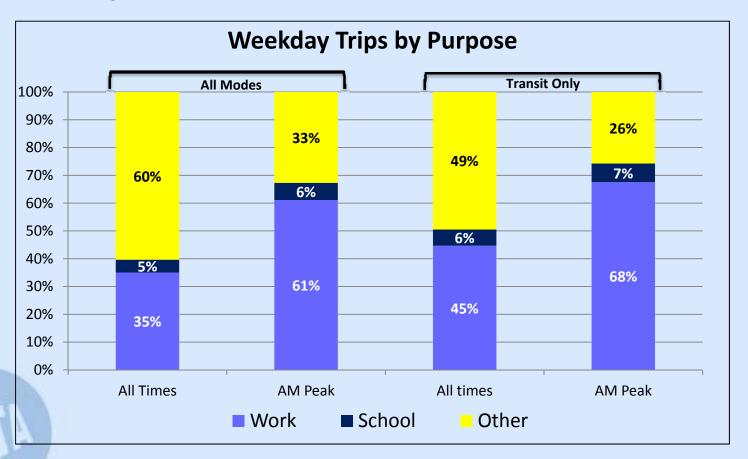




Transit Trip Destinations

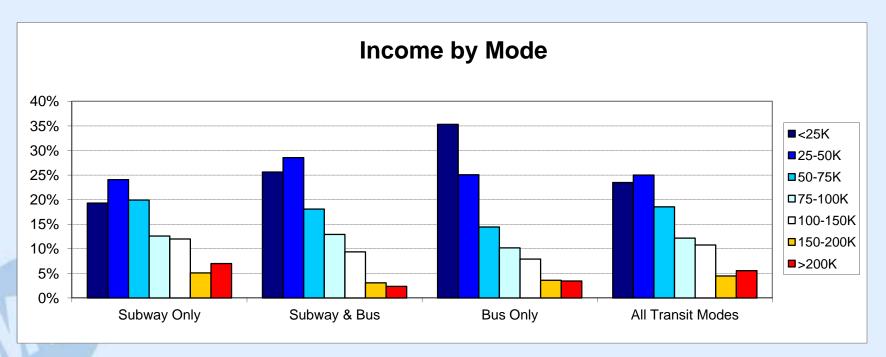
NYC Insights: Trip Purposes Weekdays, by Mode & Time of Day

- Most weekday trips are NOT for work
- Work is the predominant purpose for all trips between 6 and 10 AM on weekdays
- Even during the AM Peak, non-work trips account for up to a third of travel.



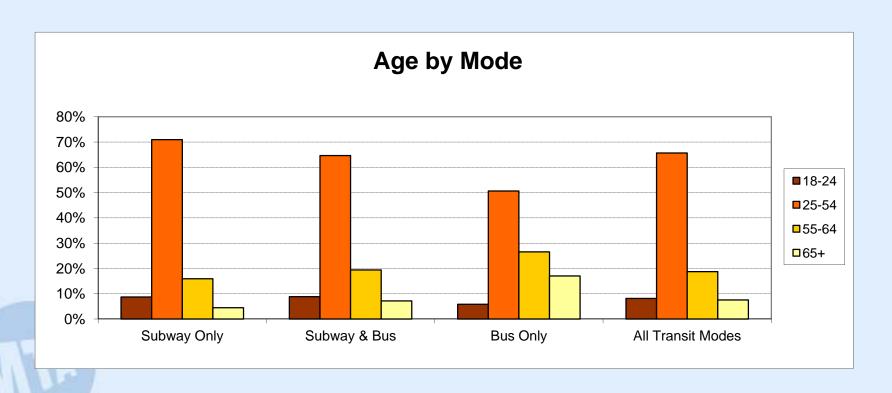
Income Distribution by Mode (Weekdays)

	Subway	Subway &		All Transit
Income Range	Only	Bus	Bus Only	Modes
Less than \$25,000	19%	26%	35%	23%
\$25,000 to \$50,000	24%	29%	25%	25%
\$50,000 to \$75,000	20%	18%	14%	19%
\$75,000 to \$100,000	13%	13%	10%	12%
\$100,000 to \$150,000	12%	9%	8%	11%
\$150,000 to \$200,000	5%	3%	4%	4%
\$200,000 or more	7%	2%	3%	6%
Total	100%	100%	100%	100%
Median Income	\$58,300	\$46,300	\$39,600	\$52,042



Age Distribution by Mode (Weekdays)

		Subway &		All Transit
Age Range	Subway Only	Bus	Bus Only	Modes
18-24	9%	9%	6%	8%
25-54	71%	65%	51%	66%
55-64	16%	19%	27%	19%
65+	4%	7%	17%	8%
Total	100%	100%	100%	100%
Median Age	41	42	49	43



Long Island Rail Road Origin & Destination Survey



Methodology: LIRR

- Fieldwork began in fall 2012
- On-board survey distribution for all westbound trains
 - Almost 90,000 surveys returned (as of 2/28/14)
 - Estimated response rate of 43%
 - Surveys in English and Spanish
- On board ridership counts for all trains
 - Total of 1,662 trains (when complete)
 - Ridership counts to be used for survey data expansion
- Complexity of Jamaica transfer hub
- Work expected to be completed by mid-2014

Uses for Survey Data

MNR O&D Survey

- Station access and parking improvement analyses
- Better understand how customers use system
 - West of Hudson customers using East of Hudson service
 - Intermediate riders, other market segments
- Compliance with Federal reporting requirements

NYC Survey

- Inform service planning and policy decisions
- Better understand demographics of transit users
- Knowledge about station usage, including access to transit, propensity of transfers, etc.
- Update travel forecasting models; check model results

Data Available on MTA Website

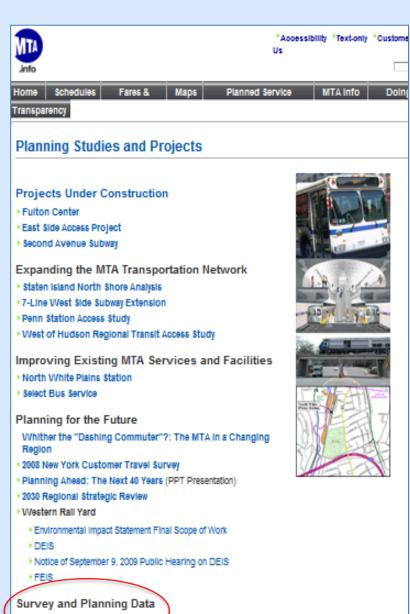
MNR and NYC Surveys are now posted on the MTA Website and include:

- Databases
- Data Dictionaries
- Final Reports

http://web.mta.info/mta/planning/index.html







MTA Origin-Destination Surveys

For more information contact Julia Seltzer at jseltzer@mtahq.org

To listen to the webinar recording go to https://meetny.webex.com/meetny/lsr.p/
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