

# NYMTC 2010-11 Regional Household Travel Survey

## Survey Overview



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## Overview

- Purpose
- Study Area
- Survey Specifications
- Sample Plan
- Project Status

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## Purpose

- Current /detailed measures of household travel behavior in NY/NJ/CT metro region
- Estimation of NYBPM
- Support regional transportation planning analysis

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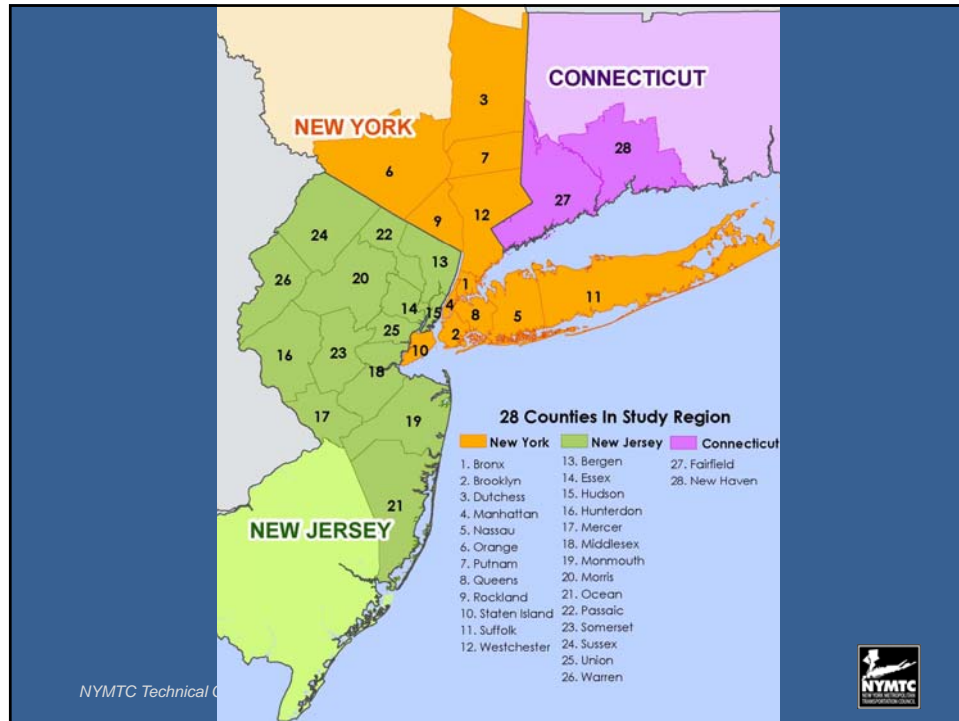


## Study Area

- New York :  
Bronx, Dutchess, Kings, Nassau, New York, Orange, Putnam, Queens, Richmond, Rockland, Suffolk, Westchester
- New Jersey:  
Bergen, Essex, Hudson, Hunterdon, Mercer, Middlesex, Monmouth, Morris, Ocean, Passaic, Somerset, Sussex, Union, Warren
- Connecticut:  
Fairfield, New Haven

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## Survey Specifications

- Address based sample frame
- Total Sample size: 18,800 HHs
  - GPS Component 1,880 HHs
  - 3,800 HHs under a separate contract with NJTPA
- 9 Months (typical weekday – schools open)
- 24 hour period average weekday

## Survey Specifications

- Incentives:
  - Pre-test: Unmatched (\$50/HH), GPS (\$25/HH)
  - Main Survey: Unmatched (\$50/HH), GPS (\$25/HH)  
Matched: (\$250 monthly raffle)
- Other Languages: Spanish, Russian, Chinese
- Multiple modes of data collection that permits household recruitment and travel day information retrieval :
  - Mail
  - Telephone
  - Web

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## Survey Specifications

- Data:
  - Household - income, # persons, # veh, primary language, landline/cell, etc.
  - Person - demographics such as age, gender, work, school, disability status, etc.
  - Trip/Activity Variables - Places visited, activities, mode usage, etc.
  - Vehicle - vehicle year, fuel type, body type, E-ZPass Tag, etc.

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## Survey Specifications

- Seven Data Collection Stages
  - Sample Generation and Geocoding
  - Advance Mailing
  - Household Recruitment
  - Diary or GPS Placement
  - Reminder Messages
  - Retrieval Calls for Diary Households
  - GPS-Prompted Recall

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## Sample Plan

- Minimum Sample Size - 271 HHs for County (+/- 5 percent at the 90% Confidence Limit for a proportional measure)
  - Ensure that a basic profile of travel by the residents of each county can be developed from the data with what will be accepted as a reasonable levels of sampling errors

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## Sample Plan

- Aim to over-sample 3 types of travel behavior for increasing value of the data for modeling
  1. Longer distance trips within the region (i.e., Very long - greater than 50 miles, Long - greater than 20 miles),
  2. Work trips to Manhattan and to counties other than where the worker resides,
  3. Selected travel modes that are important to model accurately but with relatively small overall shares, including: walk-to-premium bus, drive-to-premium bus, walk-to-ferry, drive-to-ferry, walk-to-LRT, drive-to-LRT, and drive-to-Subway/PATH.

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## Sample Plan

- Composition of two dimensions:
  - 1) by Jurisdiction (i.e., counties) &
  - 2) by Sub-areas (i.e., groups of NYBPM Transportation Analysis Zones)
- Sub-areas : Two different classifications of sub-areas applied in the NYBPM for the modeling of regional travel
  - 1) 11 - Area Types
  - 2) 4 - Transit Accessibilities
- ➔ ***44 groups of sub areas transformed to 21 Bins from combining groups of similar oversampling rates.***

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HHS_SAMPLE_TFF																						Acceptable Sample per County Households			
SAMPLE_BIN SAMPLE_RATE_1000 (Binned)																						Min	Max		
NYM_CO	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	Total			
1 MANHATTAN						309				586	266	15					92	56		186		1,511	8.0%	1,480	1,541
2 QUEENS				424					252			523				32	61					1,292	6.9%	1,266	1,317
3 BRONX							530					147		168				0	173		76	1,094	5.8%	1,072	1,116
4 BROOKLYN			424					673				172				14	28		13			1,323	7.0%	1,296	1,349
5 STATEN ISLAND	13	6		34								100				69	148	78				448	2.4%	439	457
6 NASSAU					255							257				419	75	22	34			1,062	5.6%	1,041	1,083
7 SUFFOLK			220								165					710	16		19	80		1,211	6.4%	1,187	1,235
8 WESTCHESTER		75								266			179				189			10	51	770	4.1%	755	786
9 ROCKLAND			24							22				149		15	11				91	312	1.7%	306	319
10 PUTNAM																			231		40	271	1.4%	266	276
11 ORANGE								151								52		65	82			349	1.9%	342	356
12 DUTCHESS														234				82		117	25	458	2.4%	449	467
13 FAIRFIELD	172									135			119			32						456	2.4%	447	466
14 BERGEN			128									107			154		368	10		179	42	989	5.3%	969	1,009
15 PASSAIC				74								47				104	207					432	2.3%	424	441
16 HUDSON																498		321	147		75	1,042	5.5%	1,021	1,062
17 ESSEX						184	26						206				154	39		29	120	758	4.0%	743	773
18 UNION			53									68				122	248				58	548	2.9%	537	559
19 MORRIS			85									43				125	43	32		160		488	2.6%	479	498
20 SOMERSET						84						16					157	41				297	1.6%	286	298
21 MIDDLESEX				60								278				177	122		112			749	4.0%	734	764
22 MONMOUTH	47	40								32				104		183			26		272	704	3.7%	690	718
23 OCEAN	98						3						102		105					293		602	3.2%	590	614
24 HUNTERDON																73		56		11	147	287	1.5%	286	298
25 WARREN																	171			40	60	271	1.4%	266	276
26 SUSSEX															116						210	326	1.7%	320	333
27 NEW HAVEN		207								69				181				10				467	2.5%	458	477
28 MERCER									171							59			51			282	1.5%	276	287
Total	330	328	934	592	255	577	560	673	573	822	554	1,356	803	1,020	895	1,931	2,450	916	806	1,079	1,347	18,800	100.0%		
1.8% 1.7% 5.0% 3.1% 1.4% 3.1% 3.0% 3.6% 3.0% 4.4% 2.9% 7.2% 4.3% 5.4% 4.8% 10.3% 13.0% 4.9% 4.3% 5.7% 7.2%																									
Per Stage 3 Sample Bin																									
Minimum	314	312	887	562	242	548	532	639	545	781	526	1,288	763	969	851	1,835	2,328	870	766	1,025	1,279				
Maximum	347	344	980	621	267	606	588	706	602	863	582	1,424	843	1,071	940	2,028	2,573	962	846	1,133	1,414				
5% Tolerance Factor - Sample Bins																									
(a) Re-allocation of 5 sample households to balance Somerset and Hunterdon samples, per NJTPA request																									
Tolerance Factor - Counties																									
2%																									

## Project Coordination & Mgmt

- Project Team:
  - ✓ NYMTC
  - ✓ NJTPA
  - ✓ Consultant Team: NuStats, GeoStats, PB, DataSource.
- Technical Advisory Committee: National Survey Experts
- Steering Committee: NYMTC members, stakeholders



## Project Mgmt Tool: Basecamp

The screenshot shows the Basecamp interface for the "NYMTC Regional Household Travel Survey" project. The top navigation bar includes links for Overview, Messages, To-Do, Milestones, Whiteboards, and Files. The main content area is titled "Project overview & activity" and includes a welcome message, a "Late Milestones" section, and a list of recent file uploads categorized by date (Friday, 24 December 2010; Thursday, 23 December 2010; Wednesday, 22 December 2010; Tuesday, 21 December 2010). Each upload entry shows the file name, upload date, and the user who uploaded it. A sidebar on the right features the NYMTC logo, a "Stay up to date on this project" section with a subscription link, and a "People on this project" list with user avatars and last activity dates.

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## Project Website: regionaltravel survey.org

The screenshot shows the homepage of the "Regional Travel Survey" website. The header includes the site title, a tagline "For a better transportation future.", and a language selector (English, Español). The main navigation bar contains links for Welcome, Invited to Join?, Report Travel, FAQs, Materials, and Contact Us. The content area is divided into several sections: a "Invited to join the survey?" section with a "Start Here" button, a "Finished your travel day?" section with a "Report Travel" button, a "Welcome!" message, a "Hear more about the survey" section with a video player, a "Why your participation matters" section, and a "The Study Region" section with a map of the tri-state area (New York, New Jersey, Connecticut).

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## Project Status

- Pre-Test: mid-April to mid-June 2010
  - Total Recruited: 1,187 HHs (173 GPS HHs)
  - Total Retrieved : 719 HHs (115 GPS HHs) with 1,339 Persons
  - Pilot Non-Response Follow-Up (NRFU)
- Main Survey: September 2010 to June 2011
  - As of Dec 21 2010
  - Total Recruited: 6,875 HHs
  - Total Retrieved : 3,114 HHs (including 347 GPS HHs)
  - Interim Data delivered:
    - ✓ 1,919 HHs (168 HHs for GPS Samples) & 3,806 Persons retrieved
    - ✓ Recruitment: 236 (12.3%) by Web, and 1683 (87.7%) by CATI
    - ✓ Retrieval: 250 (13%) by Web, 990 (51.6%) by CATI, and 679 (35.4) by Mail Back

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Questions??

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