# Poverty and Transportation: What does the NHTS say 

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## Motivations

\% Poor people suffer issues in health, education, employment
\% Importance of mobility to reduce poverty
:Uneven distribution of wealth and poverty more common in the United States

* Using US government definitions, 13 percent of the US were classified as poor by the end of 2008
$>$ Highest rates in the South
$>14$ million children under the age of 18 defined poor
:Spending on Transportation as share of Income
$>20.2$ percent (all households)
29.6 percent (working families with incomes $\$ 20,000$ to $\$ 50,000$ )


## WilburSmith

## 2008 Poverty Thresholds

| SIZE OF FAMILY UNIT | WEIGHTED AVERAGE <br> THRESHOLDS |
| :--- | ---: |
| One person (unrelated individual) |  |
| Under 65 years | $\$ 10,991$ |
| 65 years and over | $\$ 11,201$ |
| Two people | $\$ 10,326$ |
| Householder under 65 years | $\$ 14,051$ |
| Householder 65 years and over | $\$ 14,489$ |
|  | $\$ 13,030$ |
| Three people | $\$ 17,163$ |
| Four people | $\$ 22,025$ |
| Five people | $\$ 26,049$ |
| Six people | $\$ 29,456$ |
| Seven people | $\$ 33,529$ |
| Eight people | $\$ 37,220$ |
| Nine people or more | $\$ 44,346$ |

Source: US Census Bureau

## Sample Size

NHTS 2009 Data
: Considered Florida and New York
\% Florida has 15,884 households in the 2009 NHTS
$>$ The number is 14,402 after data cleaning
$>3,515$ households have annual household income less than $\$ 25,000$ [24.4 percent of sample]

* New York has 16,165 households in the 2009 NHTS
$>$ The number is 14,719 after data cleaning
> 3,003 households have annual household income less than $\$ 25,000$ [20.4 percent of sample]

Household Income Distribution


## Overall Household Characteristics

|  | Household <br> Income Less than <br> $\$ 25,000$ |  |  | Household <br> Income More <br> than $\$ 25,000$ |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| All Households |  |  |  |  |  |  |  |  |  |



## Number of Household Workers



## Household Vehicle Availability





| Mode | Household Income Less than \$25,000 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | HBSHOP |  | HBSOCREC | HBO NHB |  |
| Auto | 86\% | 82\% | 51\% | 74\% | 85\% |
| Transit | 8\% | 4\% | 4\% | 5\% | 3\% |
| Taxicab | 1\% | 0\% | 1\% | 0\% | 0\% |
| Bike | 3\% | 11\% | 36\% | 9\% | 8\% |
| Walk | 0\% | 1\% | 0\% | 1\% | 0\% |
| Other | 2\% | 3\% | 7\% | 10\% | 3\% |
| Grand Total | 100\% | 100\% | 100\% | 100\% | 100\% |
|  | Household Income More than \$25,000 |  |  |  |  |
| Mode | HBW H | HBSHOP | HBSOCREC | HBO | HB |
| Auto | 96\% | 96\% | 64\% | 81\% | 91\% |
| Transit | 1\% | 0\% | 1\% | 1\% | 1\% |
| Taxicab | 0\% | 0\% | 0\% | 0\% | 0\% |
| Bike | 1\% | 3\% | 29\% | 10\% | 6\% |
| Walk | 0\% | 0\% | 0\% | 0\% | 0\% |
| Other | 2\% | 1\% | 7\% | 7\% | 3\% |
| Grand Total | 100\% | 100\% | 100\% | 100\% | 100\% |

## New York Mode Distribution

|  | Household Income Less than \$25,000 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Mode | HBW | HBSHOP | HBSOCREC | HBO | NHB |
| Auto | 48\% | 50\% | 34\% | 39\% | 56\% |
| Transit | 33\% | 12\% | 22\% | 23\% | 15\% |
| Taxicab | 3\% | 1\% | 1\% | 4\% | 0\% |
| Bike | 9\% | 36\% | 38\% | 21\% | 27\% |
| Walk | 0.0\% | 0.2\% | 0.0\% | 1.0\% | 0.0\% |
| Other | 7\% | 2\% | 4\% | 12\% | 2\% |
| Grand Total | 100\% | 100\% | 100\% | 100\% | 100\% |
|  |  | Household In | come More tha | han \$25,000 |  |
| Mode | HBW | HBSHOP | HBSOCREC | HBO | NHB |
| Auto | 69\% | 69\% | 54\% | 61\% | 63\% |
| Transit | 22\% | 8\% | 8\% | 10\% | 8\% |
| Taxicab | 1\% | 0\% | 0\% | 1\% | 1\% |
| Bike | 7\% | 22\% | 34\% | 18\% | 25\% |
| Walk | 0\% | 0\% | 0\% | 0\% | 0\% |
| Other | 2\% | 1\% | 4\% | 11\% | 3\% |
| Grand Total | 100\% | 100\% | 100\% | 100\% | 100\% |

Florida Trip Length Distribution

|  | Household Income Less than \$25,000 |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Trip Distance (Miles) | HBW | HBSHOP |  | HBSOCREC | HBO |
| NHB |  |  |  |  |  |
| Less than 10 | $63 \%$ | $88 \%$ | $82 \%$ | $81 \%$ | $82 \%$ |
| 10 to 20 | $22 \%$ | $8 \%$ | $12 \%$ | $11 \%$ | $10 \%$ |
| 20 to 30 | $8 \%$ | $2 \%$ | $3 \%$ | $4 \%$ | $3 \%$ |
| 30 to 40 | $4 \%$ | $1 \%$ | $2 \%$ | $1 \%$ | $3 \%$ |
| 40 to 50 | $2 \%$ | $1 \%$ | $0 \%$ | $1 \%$ | $1 \%$ |
| 50 to 100 | $1 \%$ | $1 \%$ | $1 \%$ | $2 \%$ | $1 \%$ |
| More than 100 | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $1 \%$ |
| Grand Total | $100 \%$ | $100 \%$ | $100 \%$ | $100 \%$ | $100 \%$ |
|  | Household Income More than $\$ 25,000$ |  |  |  |  |
| Trip Distance (Miles) | HBW | HBSHOP | HBSOCREC | HBO | NHB |
| Less than 10 | $51 \%$ | $85 \%$ | $81 \%$ | $76 \%$ | $77 \%$ |
| 10 to 20 | $28 \%$ | $10 \%$ | $10 \%$ | $16 \%$ | $13 \%$ |
| 20 to 30 | $12 \%$ | $2 \%$ | $4 \%$ | $5 \%$ | $5 \%$ |
| 30 to 40 | $5 \%$ | $1 \%$ | $2 \%$ | $2 \%$ | $2 \%$ |
| 40 to 50 | $2 \%$ | $0 \%$ | $1 \%$ | $1 \%$ | $1 \%$ |
| 50 to 100 | $2 \%$ | $0 \%$ | $1 \%$ | $1 \%$ | $1 \%$ |
| More than 100 | $0 \%$ | $0 \%$ | $1 \%$ | $0 \%$ | $1 \%$ |
| Grand Total |  | $100 \%$ | $100 \%$ | $100 \%$ | $100 \%$ |



New York Trip Length Distribution

|  | Household Income Less than \$25,000 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Trip Distance (Miles) | HBW | HBSHOP | HBSOCREC | HBO | NHB |
| Less than 10 | 79\% | 93\% | 85\% | 86\% | 91\% |
| 10 to 20 | 15\% | 5\% | 5\% | 8\% | 5\% |
| 20 to 30 | 4\% | 1\% | 3\% | 3\% | 2\% |
| 30 to 40 | 1\% | 1\% | 2\% | 1\% | 1\% |
| 40 to 50 | 1\% | 0\% | 4\% | 0\% | 0\% |
| 50 to 100 | 1\% | 0\% | 1\% | 2\% | 1\% |
| More than 100 | 0\% | 0\% | 1\% | 0\% | 0\% |
| Grand Total | 100\% | 100\% | 100\% | 100\% | 100\% |
|  |  | Household In | come More than | \$25,000 |  |
| Trip Distance (Miles) | HBW | HBSHOP | HBSOCREC | HBO | NHB |
| Less than 10 | 63\% | 91\% | 87\% | 86\% | 85\% |
| 10 to 20 | 22\% | 6\% | 8\% | 9\% | 8\% |
| 20 to 30 | 8\% | 1\% | 2\% | 2\% | 3\% |
| 30 to 40 | 3\% | 0\% | 1\% | 1\% | 1\% |
| 40 to 50 | 1\% | 0\% | 0\% | 0\% | 1\% |
| 50 to 100 | 1\% | 0\% | 1\% | 1\% | 1\% |
| More than 100 | 0\% | 0\% | 1\% | 1\% | 1\% |
| Grand Totahith | 100\% | 100\% | 100\% | 100\% | 100\% |



Trip Distance (Miles)

## 100\% Worlk Trip Distance by Mode



## Brookings Transit \& Jobs Report

* How effectively does transit connects people and jobs within and across metropolitan areas
:Thought it would be interesting to see what the NHTS says in terms of travel behavior in select metros
* Selected three Metros - Only Low Income Household Work Trips
> Jacksonville, FL (Sample size = 37 trips)
> Miami-Fort Lauderdale-Pompano Beach, FL (Sample size $=198$ trips)
> New York-Northern New Jersey-Long Island, NY-NJ-PA (Sample Size = 168 trips)


## Jacksonville, FL Metro Area Missed Opportunity: Transit and Jobs in Metropolitan America

Transit Accessibility Profile


Share of working-age residents near a transit stop
100 Metro Average: 69\%


Median wait (minutes) for any rush hour transit vehicle
100 Metro Average: 10.1


Share of all jobs reachable via transit in 90 minutes
100 Metro Average: 30\%

70
Combined Access Rank
Combined ranking on coverage and job access
Rank out of 100 Metros


- Low Income: under 80\% Area Median Income (AMI); High Income: over 120\% AMI
- City is first named city in metro area name plus other cities in name with at least 100,000 residents; suburbs are the remaining portion of metro area
- Source: Brookings analysis of transit agency, Nielsen Pop-Facts 2010, and Nielsen BusinessFacts data


To see interactive maps, click here to access the online mapping application

## Miami-Fort Lauderdale-Pompano Beach, FL Metro Area Missed Opportunity: Transit and Jobs in Metropolitan America

## New York-Northern New Jersey-Long Island, NY-NJ-PA Missed Opportunity: Transit and Jobs in Metropolitan America



Coverage
Share of working-age residents near a transit stop

100 Metro Average: 69\%

4.5

Service Frequency
Median wait (minutes) for any rush hour transit vehicle

100 Metro Average: 10.1
$\overline{\underline{ }}$
Neighborhood Income and Location

Coverage


Service Frequency
Job Access



- Low Income: under 80\% Area Median Income (AMI); High Income: over 120\% AMI
- City is first named city in metro area name plus other cities in name with at least 100,000 residents; suburbs are the remaining portion of metro area
- Source: Brookings analysis of transit agency, Nielsen Pop-Facts 2010, and Nielsen BusinessFacts data


Job Access
Share of all jobs reachable via transit in 90 minutes

100 Metro Average: 30\%


To see interactive maps, click here to access the online mapping application



## Contact

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