Dynamic Mapping of Job and Labor Access for the New York Metropolitan Region

Mandu Sen | Senior Planner | RPA
Kevin Webb | Principal | Conveyal
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Agenda

• Fourth Regional Plan – new needs
• How the tool works
• Live demonstration
• Methodology
We cover a large region

3 states
31 counties
783 towns and cities
23 million residents
11 million jobs
Fourth Regional Plan Goals

- create **communities** that are dynamic, livable and resilient
- expand the region’s economic **prosperity** in an equitable and sustainable way
- **reform** the financial, institutional and regulatory structures necessary to implement smart planning decisions
Challenges

• Create research tools that are relevant to people and communities across the region

• Relate large scale, long term regional issues to immediate, place specific concerns

• Reach many people at the same time
Product

Two interactive maps:
Access to Jobs

Access to Workforce
http://library.rpa.org/interactive/access-to-workforce/
Example I: How geography and demographics are related
140,000 jobs for someone with a high school degree in Smithtown.
272,000 Jobs for someone with a college degree in Smithtown
Example II:
An economic development argument for transit expansion
85,000
Healthcare workforce within a 45 minute transit commute of Hicksville
278,000
Healthcare workforce within a 60 minute transit commute of Hicksville
Example III:
A public health argument for density
18,000
Jobs within a 20 minute bike commute of Glen Cove
592,000
Jobs within a 20 minute bike commute of Crown Heights
Example IV:
A corporate location strategy
12,000
Jobs within a 60 minute transit commute of Trumbull
70,000 jobs within a 60 minute transit commute of Bridgeport.
Example V: Testing scenarios
What if we added a new train line?
0.5 million
Additional jobs accessible within a 60 minute transit commute with a new train line
Access to jobs
How many jobs can you get to in the tri-state region? Move the pin to a new location and see the number change. Click on your preferred travel mode and filter by industry or education level to learn more.

Data sources & methodology

Jobs
2011 LEHD Origin-Destination Employment Statistics (LODES)

Travel times (approximate a typical morning commute)
Public transit: publicly-available GTFS data sets
Biking and Walking: OpenStreetMap data set
Driving: OpenStreetMap (road infrastructure), OpenTripPlanner (travel times)

*NYMTC and NJTPA Regional Transportation model used to determine rush hour travel times.
Challenges

• Travel times are an estimate and combine multiple transit preferences.

• Drive times: morning rush hour drive time estimates available for NY and NJ but CT only has daily average drive times (does not reflect rush hour commute).

• Public Transit: calculated using fastest travel time via any combination of walking and public transit use.
Thank you!