

# Data Visualization in Transportation: GIS and Planning Tools at NJTPA

November 29, 2018

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# Agenda

- ViZtools
- NOTIS
- Freight Activity Locator
- County Profile App
- Open Data Portal



# ViZtools

A web-based tool to illustrate how a wide range of factors relate to the multiple facets of regional planning.



# ViZtools: The Need

- Needed a tool to support the Regional Transportation Plan in both analysis and visioning.
- Looking for a better way to engage the public and partner agencies in planning activities in the NJTPA region.
- Wanted a more interactive and dynamic way to disseminate data to the user.

# ViZtools: Overview

- Assess Current Conditions.
- View Forecast Tools.
- Sketch a Future Scenario.

The screenshot displays the NJTPA ViZtools web application. The top navigation bar includes links for Facebook, Twitter, NJTPA, User Guide, User Tutorial, Glossary/Acronyms, and Contact Us. Below this, a secondary bar offers options to 'Assess Current Conditions', 'View Forecast', and 'Sketch A Future Scenario'. The main interface is divided into several panels. On the left, the '1 Study Area' panel prompts the user to 'Please wait for the map to refresh after you make each selection.' and provides dropdown menus for 'Select County', 'Select Municipality', and 'Select Local Study Area (optional)'. The central panel, titled 'ABOUT NJTPA VIZTOOLS', features the NJTPA logo and a detailed description of the tools' purpose: to help residents understand transportation factors and contribute to the development of the NJTPA Regional Transportation Plan (RTP) for 2040. It also includes a 'View Disclaimer' link and a 'Lightweight Version' button. The bottom of the central panel shows a map of the region with labels for Cumberland and Cape May. On the right, a 'Layer Visibility/Legend' panel allows users to toggle various data layers, including 'Study Area', 'Municipalities by Place Type', 'Counties/Municipalities Labels', 'NJTPA Local Study Area (TAZ)', 'Demographics', 'Economic', 'Jobs-Housing Balance', 'Environmental', 'Transportation', and 'Roads'. A legend below this panel defines place types: Urban Center, Urban Area, Mature Metropolitan, Metropolitan with Industry, Metropolitan with Office, and Metropolitan with Shopping Centers. The bottom right corner of the interface shows a scale bar (0 to 30 miles) and a copyright notice: 'test | Copyright © 2014 Esri'.

# ViZtools: Functionality



## Planning and visualizing the future.

Making the technical knowledge of planning agencies more accessible to the general public and set the stage for meaningful dialogue about planning challenges.

Search by Address, Municipality, or County

Not sure where to start? Try your town or address.

Search for areas by Interests >

Try the Advanced ViZtool >

## How to use ViZtools (it's easy!)

Learn all about transportation in northern New Jersey – town, or compare between them. More open space? When maps, charts, search tools

Do these tools start you here? What you'd like to working on the NJTPA 2040 – a plan that quality funding each year – and



Bradley Beach

★ Overview

Live

Work

Get Around

+ Compare

+ Share

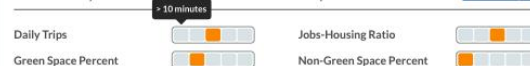
Download

### About this Place Type

Bradley Beach is an example of a Mature Metropolitan Place in Monmouth County. Although they have diverse land uses, including local commercial and service activities, they are predominantly residential in nature. Like Urban Areas, they do not serve as economic centers of regional significance. Their housing stock is mainly comprised of multi-family and single-family houses, and their residential density is higher than newer suburban areas.

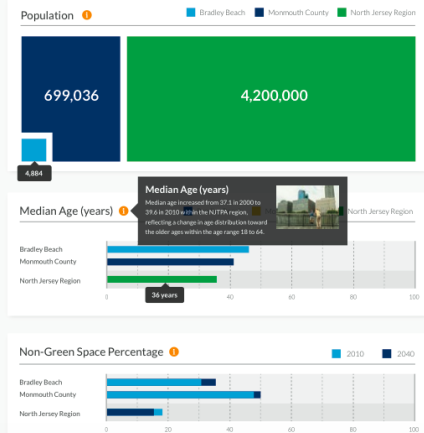


### How Bradley Beach compares to all other Municipalities



Work  
Get Around

+ Compare  
+ Share  
Download  
Print Report




## Compare Areas

Add an Area + Download Data Print Report

	Asbury Park × Mature Metropolitan	Hoboken × Urban Area
Place Type	<b>Economic Activity:</b> Local <b>Dominant Land-Uses:</b> Residential, Local Commerce and Service <b>Key Planning Objectives:</b> Promote development and redevelopment, Growth of Retail Employment, Mixed Use Development	<b>Economic Activity:</b> Local <b>Dominant Land-Uses:</b> Residential, Local Commerce and Service <b>Key Planning Objectives:</b> Continue Growth at Current Pace, Redevelopment, Continue to be Residential and Create/Retain Parks
Work	CURRENT FORECAST Jobs 2,154 2,478 Near Job Centers 0 0 Jobs Housing Ratio 42 53 Retail Space 353.87 487.2	CURRENT FORECAST Jobs 2,154 2,478 Near Job Centers 1 2 Jobs Housing Ratio 42 53 Retail Space 353.87 487.2
Live	CURRENT FORECAST Green Space % 2,154 2,478 Non-Green Space % 0 0 Population 42 53 Median Age 353.87 487.2	CURRENT FORECAST Green Space % 2,154 2,478 Non-Green Space % 1 2 Population 42 53 Median Age 353.87 487.2



# ViZtools: Functionality



NJTPA Planning Visualization Tools

Assess Current Conditions ?

View Forecast ?

Sketch A Future Scenario ?

Facebook

Twitter

NJTPA

User Guide

User Tutorial

Glossary/Acronyms

Contact Us

About: ViZtools

Place Types

Lenses

Topics

Indicators

Scenarios

1 Study Area ?

Please wait for the map to refresh after you make each selection.

Select County

Select Municipality

Select Local Study Area (optional)

Select a Local Study Area on the map to narrow the study area.

Continue

Map

Tables

Key Indicators

Identify

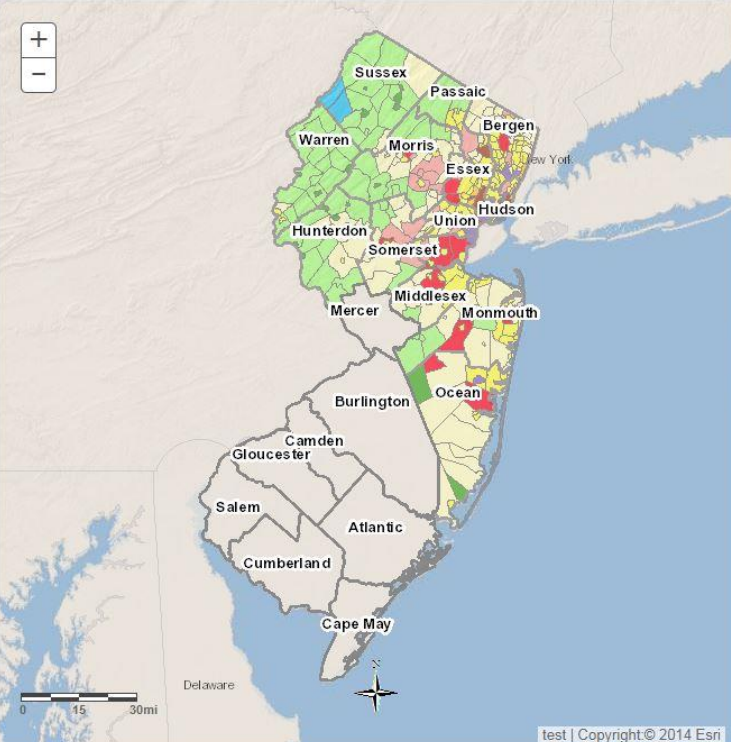
Select County

Select Municipality

Select Local Study Area ?

+

-



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Layer Visibility/Legend

☐ Study Area

☒ Municipalities by Place Type

☒ Counties/Municipalities Labels

☐ NJTPA Local Study Area (TAZ)

☐ Demographics

☐ Economic

☐ Jobs-Housing Balance

☐ Environmental

☐ Transportation

☐ Roads

Legend

Municipalities by Place Type

Counties

☐

Municipalities

Urban Center

Urban Area

Mature Metropolitan

Metropolitan with Industry

Metropolitan with Office

Metropolitan with Shopping

1 Study Area

Change

County: Hunterdon

Municipality: Bethlehem

Place Type: Rural Area

2 Lens or Topic ?

Select a Lens

All

Land Use

Economic

Equity

Environment

Transportation

or

Select a Topic


All

Livability

Transportation Investment

< Back

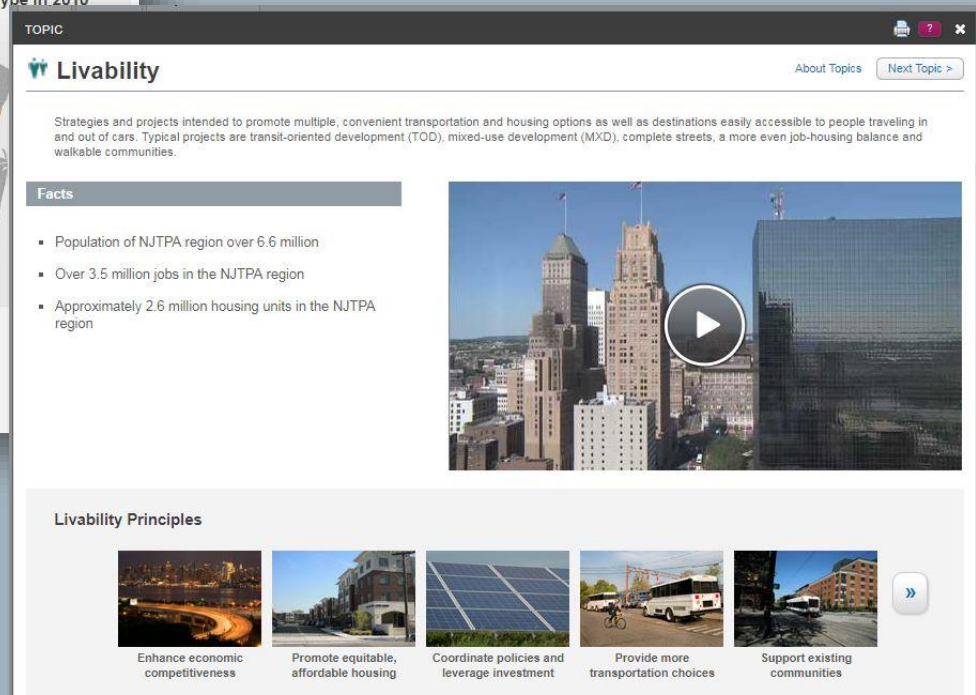
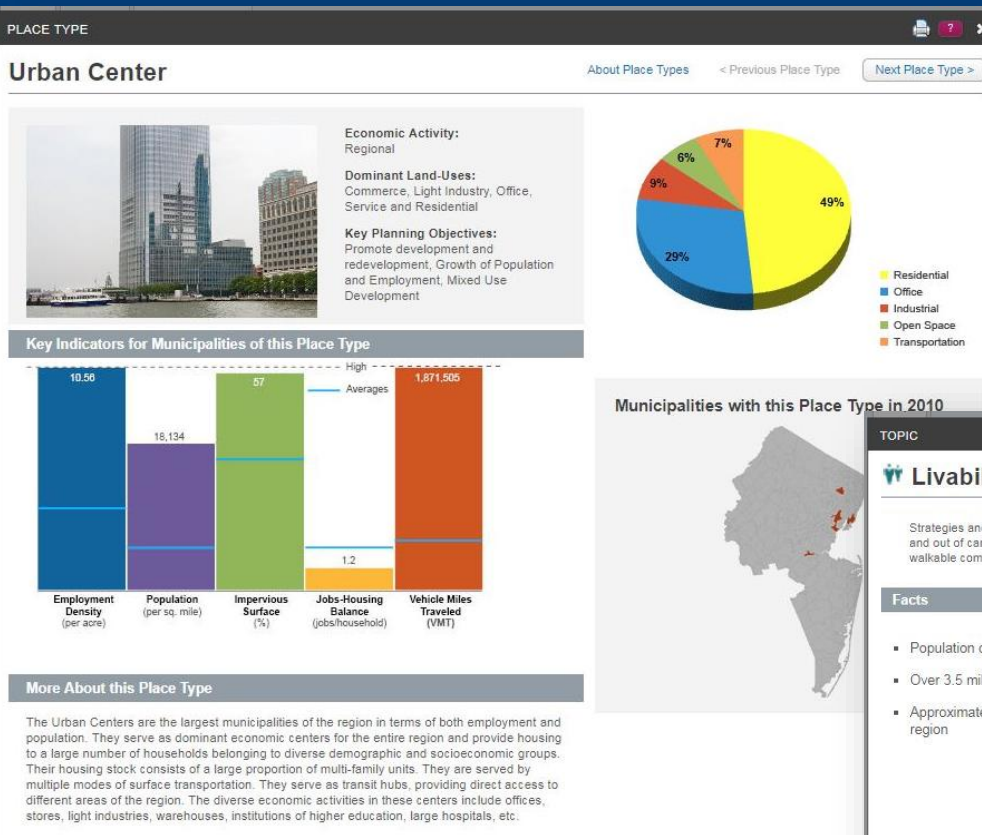
Continue >



7



# ViZtools: Functionality





# ViZtools: Functionality

LENS

## Economic

About Lenses < Previous Lens Next Lens >

Indicators that have to do with the overall economic health and prosperity, particularly with respect to employment and economic self-reliance of an area.

### Indicators in this Lens

Not all Indicators will be applicable to 2040 Forecast or Future Scenario.

Indicator Name	Description
Access for Disadvantaged	An index measuring the distance from disadvantaged neighborhoods to parks, water bodies, and employment.
Brownfields	The term "brownfield site" means real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. This indicator counts the number of brownfield sites in the study area.
Employment (Jobs)	Jobs are documented tasks, assignments, charges, duties, enterprises, functions, and get paid to perform.
Employment Density	Employment density is the total number jobs divided by the total area (in acres) of the study area.
Jobs-Housing Balance	The ratio between the total number of jobs and the total number housing units within the study area.
Retail Space	Retail spaces are where you shop and dine. They include everything from grocery stores to food to fine dining. To consumers, retail stores are a part of everyday life. To employees, retail stores are a source of jobs. A typical specialty shop represents a few thousand square feet of retail, while a big box store represents a few hundred thousand square feet. On average, 450 sq. feet of retail space correspond to 1 retail job.

ECONOMIC INDICATOR

## Brownfields [2010]

About Indicator < Previous Indicator Next Indicator >

### Middlesex County / New Brunswick

**75** brownfields

Compared to study areas in NJTPA region of like geographic levels:

Category	Low	Avg	High
2010	0	17	383

#### About this Indicator & Why it Matters

Brownfields are defined as any former or current commercial or industrial site, currently vacant or underutilized, on which there has been, or there is suspected to have been, a discharge of a contaminant. According to the US Environmental Protection Agency (EPA), the term "brownfield site" means real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant.

#### Putting This Number in Context

##### Brownfields

Brownfields per Municipality	Number of Municipalities
0	100
1-10	130
11-20	60
21-30	10
>30	40

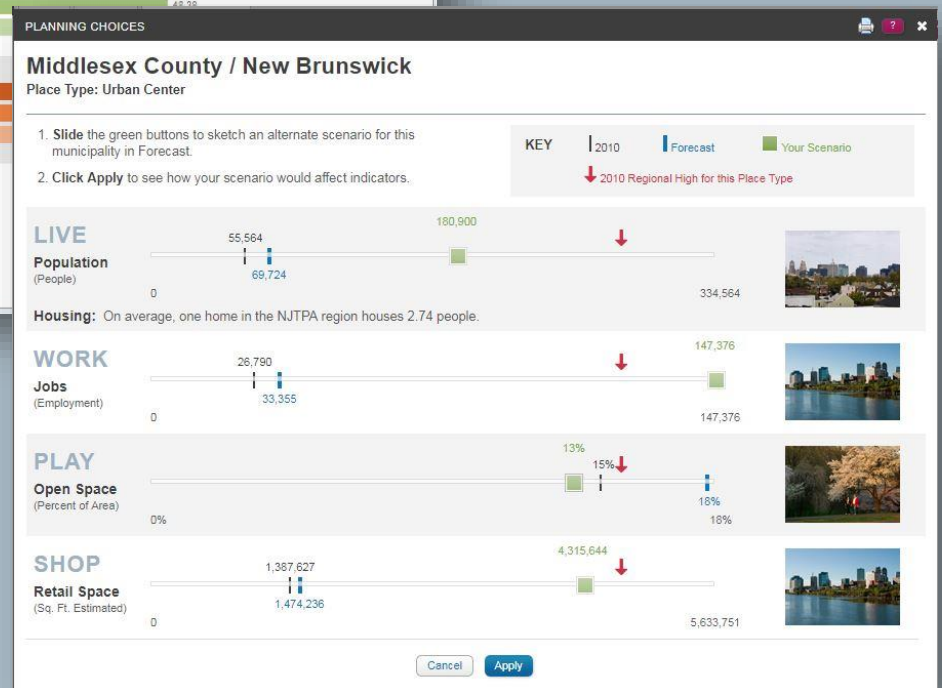
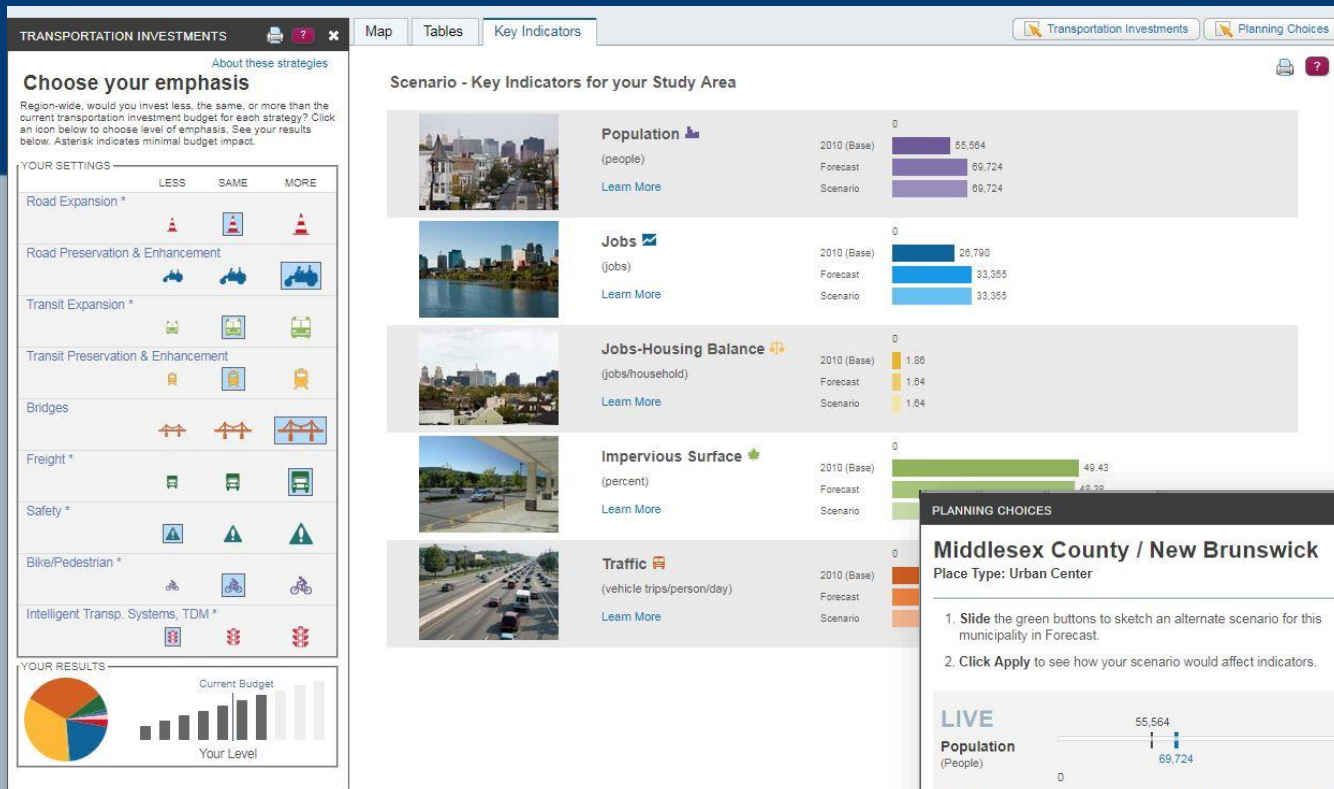
#### Regional Comparisons

Regional trend data is not currently available for this indicator.

#### Strategies for Improvement

- Target for land revitalization
- Promote redevelopment opportunities
- Reuse properties into productive land uses

# ViZtools: Functionality



# ViZtools: Next Steps

- Update data to reflect new demographic and forecast data.
- Research new techniques for delivering data to the user.
- <http://viztools.njtpa.org/>



# NJTPA Online Transportation Information System: NOTIS

An interactive tool that allows you to explore how your state and federal tax dollars are being invested to improve the transportation system in the 13-county northern New Jersey region.



# NOTIS: The Need

- Changing mapping technology.
- Outdated code.
- Antiquated interface.



MAP-BASED SEARCH | TEXT-BASED SEARCH | NJTPA | FEEDBACK | FAQ | GLOSSARY

**NJTPA**  
NORTH JERSEY  
TRANSPORTATION  
PLANNING AUTHORITY

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MAP-BASED SEARCH | TEXT-BASED SEARCH

Search map by County/Status:

County:  Status:

☐ ARRA projects

Search map by project ID:

Project ID:

**Search results**

**Summary of Selected Project(s)**

There are 444 projects.

1 2 3 4 5 6 7 8 9 10 ...

**Project ID:** [00314](#)

**Title:** Route 21 Interchange Improvements

**Funding:** [TIP](#)

**Location:** Rt. 280

**County:** Essex

**Municipality:** Newark City Harrison Town

**Description:** This study will examine solutions to operational and safety problems west of the Stickel Bridge on I-280. Possible solutions include addition, relocation or removal of ramps and/or addition of auxiliary lanes and shoulders to I-280.

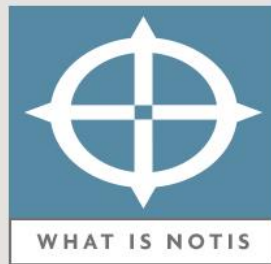


# NOTIS: Overview



# NØTIS

NJTPA ONLINE TRANSPORTATION INFORMATION SYSTEM



Quick County Selection





# NOTIS: Functionality

## NOTIS

HOME MAP SEARCH TEXT SEARCH FAQ

**About**

Welcome to NOTIS. Use the search filters on the right panel to identify projects by their database number (DBNUM), project name, or route. You can also find projects within a specific geographic region (either county or municipality).

Click on projects on the map to get a popup with that project's information. Use the legend below to turn the map layers on or off.

**Legend**

- ☒ TIP Projects
  - Proposed Route
  - Existing Routes
- ☒ TIP Projects (points)
- ☒ TIP Projects (areas)
- ☒ Local Safety Projects (routes)
- ☐ Local Safety
- ☐ High Risk Rural Roads
- ☒ Local Safety Projects (points)
- ☐ NJT Rail Lines
- ☐ Rail Stations
- ☐ Light Rail Lines
- ☐ Light Rail Stations

Scranton

Zoom to a city or address

Switch Basemap

Bridgeport

York

NEW YORK

Philadelphia

Trenton

Reading

Allentown

Harrisburg

Philadelphia

Tom's River

NEW JERSEY

Baltimore

Annapolis

Dover

Delaware Bay

Washington

Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and others

DBNUM	Name
11409	Route 22, EB, Route 78 Interchange to Country Club Road

### Find Projects

Choose one of the search filters below to search for projects. Projects that match your criteria will be highlighted on the map, and will appear in the table at the bottom as well. Click on a DBNUM field in the table to zoom to that project on the map.

Keyword:  
Type keyword

Database Number:  
Select a DBNUM

Project Name:  
Select a Project

## NOTIS

HOME MAP SEARCH TEXT SEARCH FAQ

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NEW JERSEY

Baltimore

Annapolis

Dover

Delaware Bay

Washington

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DBNUM	Name	Route
11409	Route 22, EB, Route 78 Interchange to Country Club Road	22

### Find Projects

Choose one of the search filters below to search for projects. Projects that match your criteria will be highlighted on the map, and will appear in the table at the bottom as well. Click on a DBNUM field in the table to zoom to that project on the map.

Keyword:  
Type keyword

Database Number:  
11409

Project Name:  
Select a Project

Route:  
Select a Route

**Find projects in a specific Area**

County:  
Select County

Municipality:  
Select Municipality

### TIP/SD Project

DBNUM: 11409

Project Name: Route 22, EB, Route 78 Interchange to Country Club Road

County: Route 22

Municipality: [Click for Description](#)

Status: [Click for Status](#)

[Zoom to](#)

# NOTIS: Functionality

NOTIS

HOME

MAP SEARCH

TEXT SEARCH

FAQ



COUNTY



ROUTES



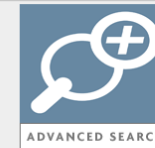
MUNICIPALITIES



PROJECT ID



TRANSIT PROJECTS



ADVANCED SEARCH

## Select County

- |  |                                   |                                 |                                    |
|--|-----------------------------------|---------------------------------|------------------------------------|
| <input checked="" type="checkbox"/> Bergen | <input type="checkbox"/> Essex    | <input type="checkbox"/> Hudson | <input type="checkbox"/> Hunterdon |
| <input type="checkbox"/> Middlesex         | <input type="checkbox"/> Monmouth | <input type="checkbox"/> Morris | <input type="checkbox"/> Ocean     |
| <input type="checkbox"/> Passaic           | <input type="checkbox"/> Somerset | <input type="checkbox"/> Sussex | <input type="checkbox"/> Union     |
| <input type="checkbox"/> Warren            |                                   |                                 |                                    |

Get Projects from Selection

View	DBNUM	COUNTY	Project Name
<a href="#">Details</a>	02346	Bergen	Route 4, Hackensack River Bridge
<a href="#">Details</a>	065C	Bergen	Route 4, Bridge over Palisade Avenue, Windsor Road and CSX Railroad
<a href="#">Details</a>	08410	Bergen	Route 4, Grand Avenue Bridge
<a href="#">Details</a>	103A1	Bergen	Route 17, Essex Street to South of Route 4
<a href="#">Details</a>	103A2	Bergen	Route 17, Williams Avenue to I-80
<a href="#">Details</a>	11355	Bergen	Route 208, Wyckoff Twp., Bergen Co., Culvert Replacement
<a href="#">Details</a>	11357	Bergen	Route 17, Sprout Brook, Culvert Replacement
<a href="#">Details</a>	11381	Bergen	Route 208, Bergen County Drainage Improvements
<a href="#">Details</a>	11406	Bergen	Route 9W, Palisades Avenue to New York State Line
<a href="#">Details</a>	11415	Passaic, Bergen	Route 80 WB, McBride Avenue (CR 639) to Polify Road (CR 55)
<a href="#">Details</a>	12428	Bergen	Route 46, Bergen Boulevard to Main Street
<a href="#">Details</a>	12431A	Bergen	Route 4, River Drive to Tunbridge Road
<a href="#">Details</a>	12431B	Bergen	Route 4, Tunbridge Road to Route 9W
<a href="#">Details</a>	14319	Bergen	Route 17, Bridges over NYS&W RR & RR Spur & Central Avenue (CR 44)

## Quick Text Search Summary:

NOTIS allows you to conduct custom text searches about locations and aspects of the transportation system that are of special concern to you.

The NOTIS text-based key features allow you directly interact with our most current transportation information system data. You can use the text-based search to find all the projects in a particular county or on a particular route.

## Text-search key features:

1. **County Search**
  - Lets you look for projects in specific counties.
2. **Routes Search**
  - Lets you look for projects in a specific road.
3. **Project ID Search**
  - Lets you look for a specific project.
4. **Municipality Search**
  - Lets you look for projects in specific municipalities.
5. **Transit Project Search**
  - List transit projects.
6. **Advanced Search**
  - Lets you look for specific projects by county, fiscal year, funding source and/or status

The online database queries provide a summary of results. These results allow users to access "Detail" information, including funding sources, year-by-year schedules and status reports.

## Search results

### Summary of Selected Project

1 project(s) matched your search criteria.

**Project ID:** 065C  
**Title:** Route 4, Bridge over Palisade Avenue, Windsor Road and CSX Railroad  
**Sponsor:** NJDOT  
**Location:** 4  
**Project Description:** This is a breakout of the Route 4 Corridor Multi-Bridges and Roadway Improvement project. The project will replace the existing Route 4 Bridge over Palisade Avenue, Windsor Road, and CSX Railroad. Approach roadway work and improvement of Belle Avenue intersection will be part of the project as well.

[ZOOM TO PROJECT](#)

[PROJECT DESCRIPTION](#)

[PROJECT STATUS](#)

# NOTIS: Next Steps

- Enhancements of user interface.
- Maintenance/Updating.
- <http://notis.njtpa.org>



# Freight Activity Locator

A web-based application providing an overview of goods movement activity in the NJTPA region.



# Freight Activity Locator: The Need

- 900,000 regional jobs directly related to or highly dependent on freight
- Over 100,000 daily truck trips on region's major highways
- Over 800 million square feet of warehousing and distribution facilities




# Freight Activity Locator: Overview


- Application built on Esri platform
  - Story map template
- Eight tabs
  - Overview
  - Rail Network
  - Roadway Network
  - Truck Parking
  - Facilities
  - Commodity Profiles
  - Waterborne Opportunity Sites
  - County Data





# Freight Activity Locator: Functionality

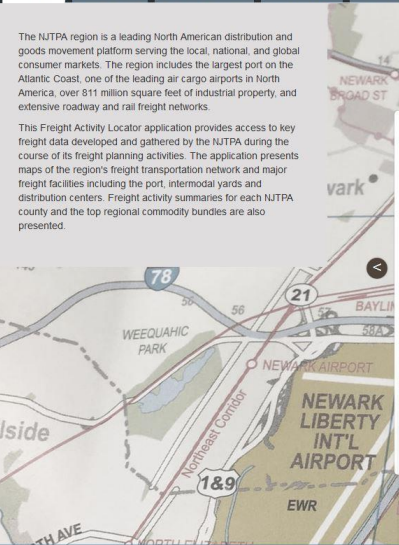

**NJTPA Freight Activity Locator**

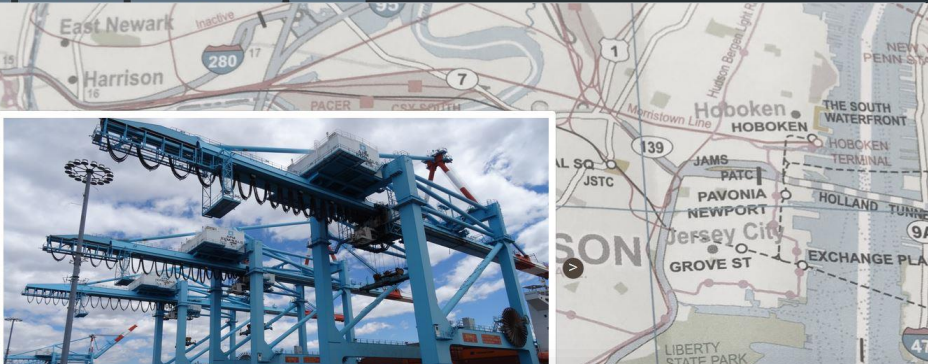

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[Overview](#)
[Rail Network](#)
[Roadway Network](#)
[Truck Parking](#)
[Facilities](#)
[Commodity Profiles](#)
[Waterborne Opportunity Sites](#)
[County Data](#)


The NJTPA region is a leading North American distribution and goods movement platform serving the local, national, and global consumer markets. The region includes the largest port on the Atlantic Coast, one of the leading air cargo airports in North America, over 811 million square feet of industrial property, and extensive roadway and rail freight networks.

This Freight Activity Locator application provides access to key freight data developed and gathered by the NJTPA during the course of its freight planning activities. The application presents maps of the region's freight transportation network and major freight facilities including the port, intermodal yards and distribution centers. Freight activity summaries for each NJTPA county and the top regional commodity bundles are also presented.








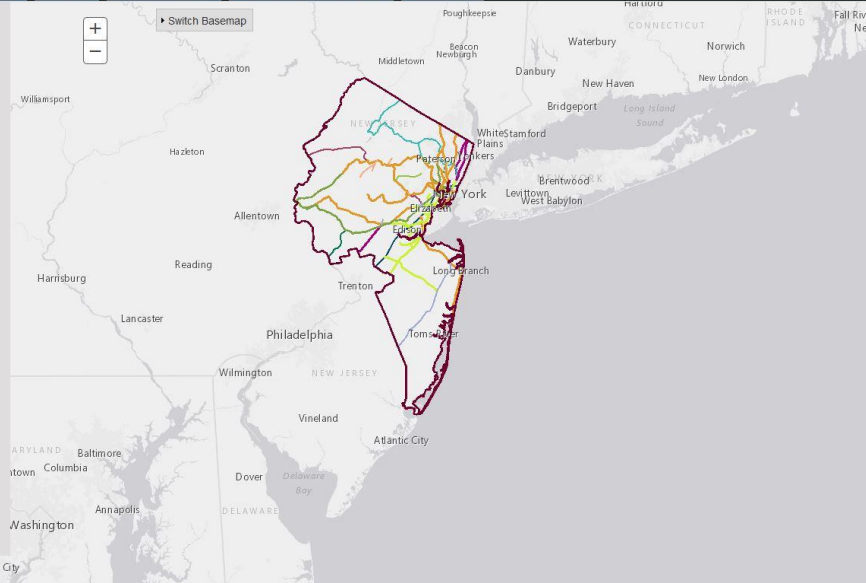

**NJTPA Freight Activity Locator**

[Overview](#)
[Rail Network](#)
[Roadway Network](#)
[Truck Parking](#)
[Facilities](#)
[Commodity Profiles](#)
[Waterborne Opportunity Sites](#)
[County Data](#)

The region has an extensive freight rail network and is served by two Class I railroads—CSX and Norfolk Southern. This system includes the Conrail Shared Assets Area, extensive on- and near-dock rail operations that serve the Port, and several short line railroads. Dozens of freight trains utilize the region's rail network every day.

**About this Map**  
The map shows the region's extensive rail network. Norfolk Southern serves the region from the west via the Lehigh Line through Phillipsburg in Warren County. CSX serves the region from the north via the River Line through Bergen County and the south via the West Trenton Line in Mercer County. The Conrail Shared Assets Area covers parts of Bergen, Hudson, Essex, Union, Middlesex and Somerset Counties. Conrail operates this territory for both Norfolk Southern and CSX customers. There are also several shortline railroads that provide last mile service to customers throughout the region. Additionally, freight trains operate over parts of the NJ TRANSIT system.






**Toggle Layers On/Off**

- ☒ NJTPA Region
- ☒ Freight Rail Lines
  - Other
  - Amtrak
  - Belvidere & Delaware River Railway Company, Inc.
  - Black River & Western R.R.
  - CSX
  - Conrail
  - Morris County
  - Morristown & Erie RR, Inc.
  - NJ Transit
  - NJDOT
  - NYS&W
  - New York & Greenwood Lake Railway
  - Norfolk Southern
  - Port Jersey R.R. Co.

[Contact Us](#)
[Tutorial](#)
[FAQ](#)
[Glossary](#)
[Sources](#)


# Freight Activity Locator: Functionality


**NJTPA Freight Activity Locator**

[Overview](#) [Rail Network](#) [Roadway Network](#) [Truck Parking](#) [Facilities](#) [Commodity Profiles](#) [Waterborne Opportunity Sites](#) [County Data](#)


The NJTPA Regional Freight Commodity Profiles study, completed in 2015, enhanced the NJTPA's freight modeling tools, analyzed and identified gaps in existing freight and industry data, collected data and information to fill those gaps, and prepared summary data products, including a set of Regional Commodity Profile documents for the top regional commodity groups. The summary of key information for each commodity bundle is presented here and includes commodity bundle composition by tonnage (2010), commodity bundle composition by value (2010), commodity bundle inbound tonnage by county (2010 and 2040), and commodity bundle outbound tonnage by county (2010 and 2040). The data source is the NJTPA Freight Forecasting Tool, 2012.

### Commodity Bundles






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[Overview](#) [Rail Network](#) [Roadway Network](#) [Truck Parking](#) [Facilities](#) [Commodity Profiles](#) [Waterborne Opportunity Sites](#) [County Data](#)

### Commodity Selected: CONSTRUCTION MATERIALS

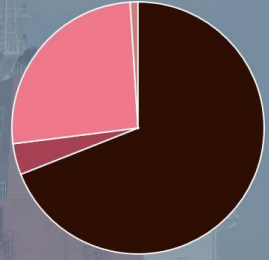


This bundle consists of nonmetallic minerals: clay, concrete, glass, or stone products, lumber or wood products, and metallic ores. Nonmetallic minerals include sand, gravel, stone, and broken stone. Clay, concrete, glass, or stone products include a variety of products made from those materials. Lumber or wood products include dimensional lumber and other wood products excluding furniture. Metallic ores include iron, copper, lead, zinc, and other ores.

[View the Complete Commodity Profile](#)

### Commodity Data Summary

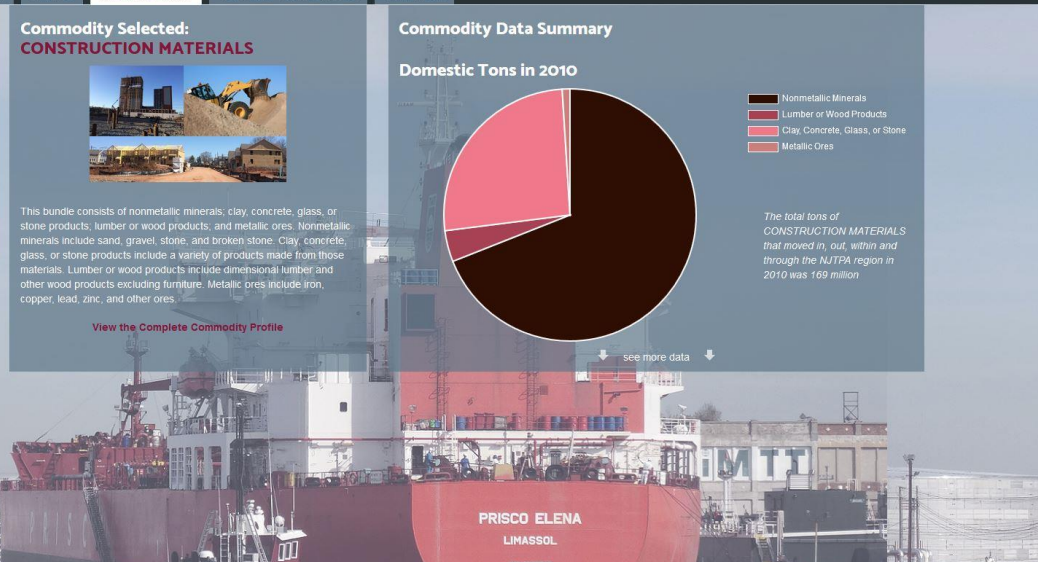

#### Domestic Tons in 2010




Commodity Type	Percentage of Domestic Tons in 2010
Nonmetallic Minerals	~65%
Lumber or Wood Products	~15%
Clay, Concrete, Glass, or Stone	~15%
Metallic Ores	~5%

The total tons of CONSTRUCTION MATERIALS that moved in, out, within and through the NJTPA region in 2010 was 169 million

[see more data](#)



**NJTPA**

[Contact Us](#) [Tutorial](#) [FAQ](#) [Glossary](#) [Sources](#)



# Freight Activity Locator: Functionality

**NJTPA Freight Activity Locator**

Overview Rail Network Roadway Network Truck Parking Facilities Commodity Profiles Waterborne Opportunity Sites County Data

**Select a county**

The 2040 Freight Industry Level Forecasts project, completed in 2012, developed an accurate picture of where concentrations of goods movement activity can be expected to occur in the region in the future, the types of commodities that will be moving, and where strategic investments should be made. County level summaries of freight activity developed during this study are presented here and include: county industry employment (2010 and 2040) from R/ECON; top 10 commodities for the county (2010 and 2040) from IHS Global Insight; freight transportation mode split for the county (2010) from IHS Global Insight.

[View the Regional Freight Profile](#)

**NJTPA Freight Activity Locator**

Overview Rail Network Roadway Network Truck Parking Facilities Commodity Profiles Waterborne Opportunity Sites County Data

**Morris**

**Population**  
People 492,276

**Economy**  
Businesses 30,828  
Jobs 281,200

**Freight Facilities**  
Warehouse Buildings 400  
Manufacturing Buildings 180

[View the Complete County Freight Profile](#)

**County Data Summary**

**Industry Employment Forecast, 2010-2040**

Industry	2010 (Thousands of Jobs)	2040 (Thousands of Jobs)
Agriculture & Mining	~1	~1
Chemical	~1	~1
Computer & Electronics	~1	~1
Construction	~1	~1
Fabricated Metal	~1	~1
Federal and State Government	~1	~1
Food & Drink	~1	~1
Information	~1	~1
Machinery	~1	~1
Other Durable	~1	~1
Other Nondurable and Unlabeled	~1	~1
Professional Services	~1	~1
Paper	~1	~1
Pharmaceuticals	~1	~1
Printing	~1	~1
Retail Trade	~1	~1
Transportation Warehousing	~1	~1
Utilities	~1	~1
Wholesale Trade	~1	~1

[see more data](#)

**NJTPA** NORTH JERSEY TRANSPORTATION PLANNING AUTHORITY  
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Contact Us Tutorial FAQ Glossary Sources

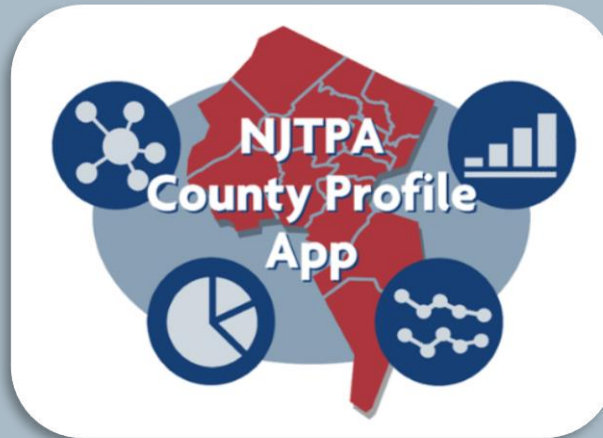
# Freight Activity Locator: Next Steps

- Integrate Video
- Additional Mapping Tabs
- Additional Data Summary Tabs
- <http://freightactivitylocator.njtpa.org/>



# County Profile Application

A web-based mapping tool that provides county level demographic data for the NJTPA region.



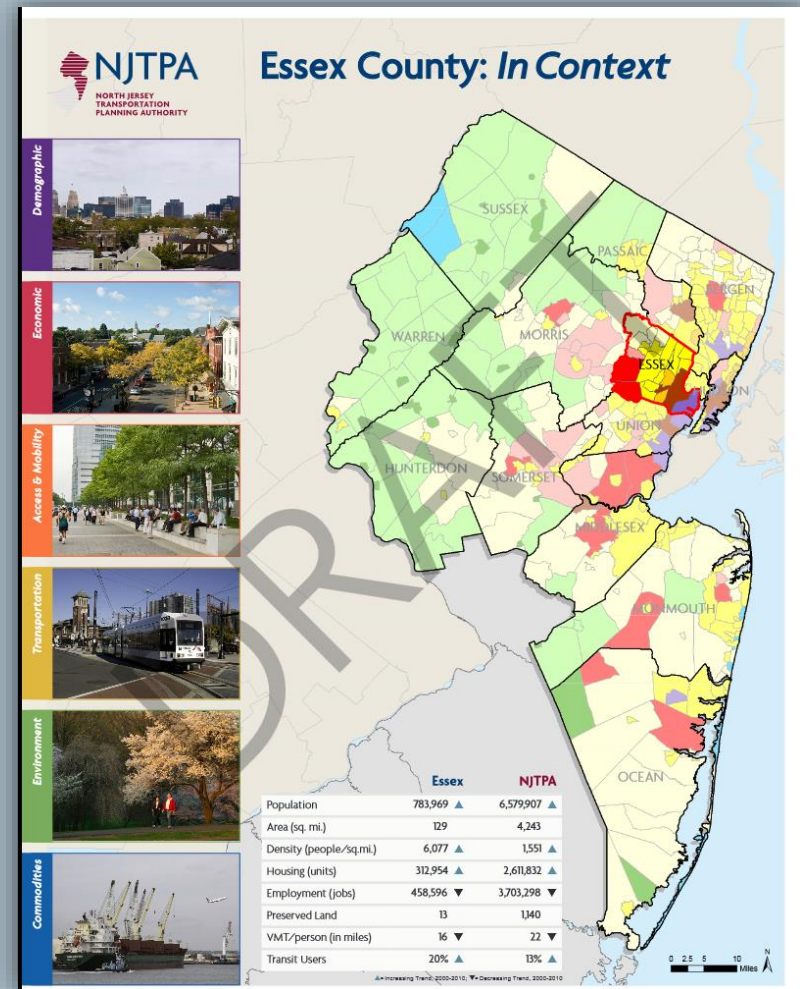
# County Profile Application: The Need

- Increased requests for demographic data.
- Ability to present data in a more user friendly way.



# County Profile Application: Overview

- Developed using the Esri Platform.
- Design and content based on PDF booklets created.
- Dynamic vs. Static interaction.



# County Profile Application: Functionality

## Planning Topics

### Demographic



### Economic



### Access and Mobility



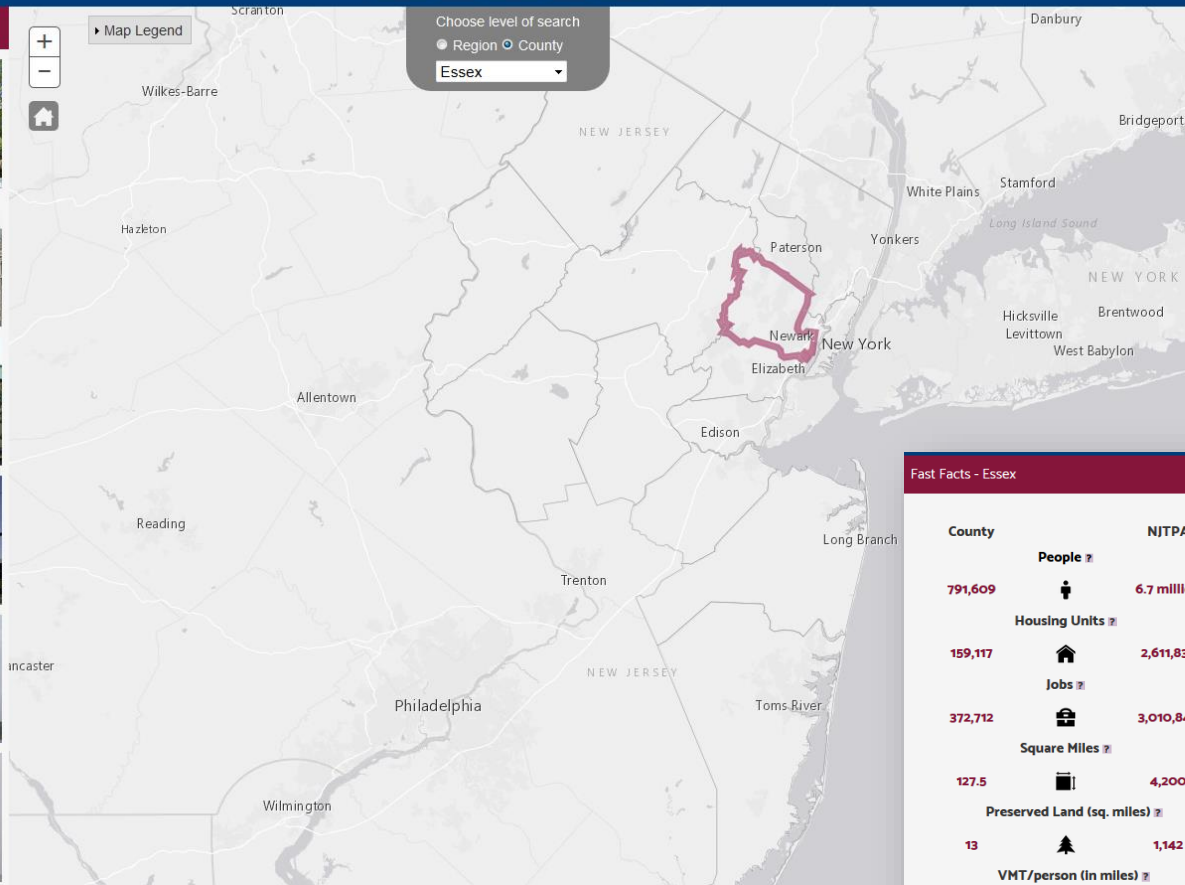
### Transportation



### Environment



### Commodities



## Fast Facts - Essex

### Essex



County Seat: Newark  
[County Website](#)  
[VizTools Link](#)  
[Open Data Portal Link](#)  
[InContext Report](#)  
[Regional Household Travel Survey](#)

see more data

## Fast Facts - Essex

County		NJTPA
791,609	People	6.7 million
159,117	Housing Units	2,611,832
372,712	Jobs	3,010,848
127.5	Square Miles	4,200
13	Preserved Land (sq. miles)	1,142
16	VMT/person (in miles)	22
20%	Transit Users (%)	12.8%

see more data

# County Profile Application: Functionality

- Six Planning Topics
  - Demographic
  - Economic
  - Access and Mobility
  - Transportation
  - Environment
  - Commodities
- Data displayed using infographics, charts, and graphs.



## Demographics for Essex

### Total Population

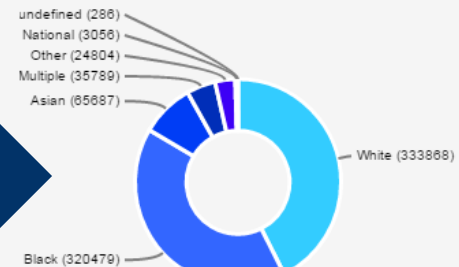
County Figure

783,969

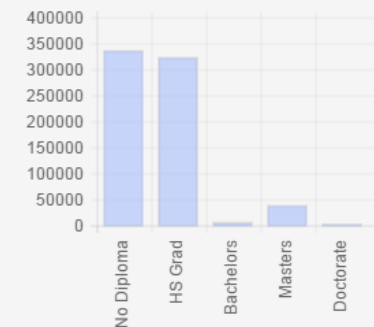
NJTPA Figure

6,579,907

### Racial Composition



### Educational Attainment



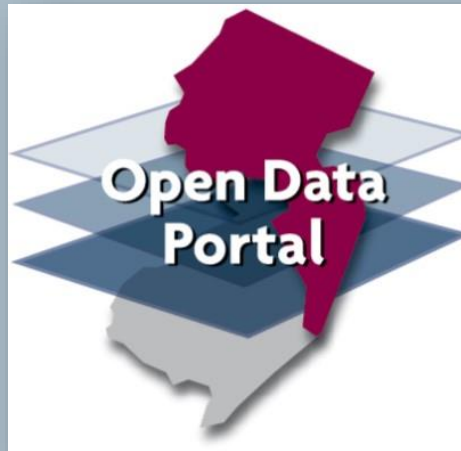
# County Profile Application: Next Steps

- Populate data for other geographic areas; Municipalities and census tracts.
- Develop a report template.
- Integration of Census API.
- <http://countyprofiles.njtpa.org/>



# Open Data Portal

Central repository for publically available  
geospatial data.



# Open Data Portal: The Need

- Increased requests for data.
- Need for central repository of data.
- Ability to share and collaborate with subregions and partner agencies.



# Open Data Portal: Overview

NJTPA Open Data Site



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## NJTPA Open Data Portal

Connecting People with Information

The NJTPA Open Data Portal provides datasets that are commonly requested by our partner county and state planning agencies. The datasets include spatial data, tabular data, web maps, and web applications, and are free to download and use. The datasets range in several subject areas that align with NJTPA's core focus areas. To start browsing the Open Data Portal, click on one of the subject areas below to see datasets.

### Search by Keyword, Location, or Category


Search by Keyword

Search by Location



# NJTPA Open Data Portal: Functionality

Search by Keyword, Location, or Category

Search by Keyword Search by Location 



Transportation



Economy



Equity



Environment



Land Use

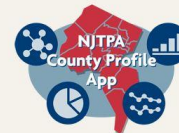
## Planning Tool Spotlight: Freight Activity Locator

Every few months we will feature a different project that uses open data. This month puts the spotlight on the Freight Activity Locator. This web application provides access to key freight data developed and gathered by the NJTPA during the course of its freight planning activities. The application presents maps of the region's freight transportation network and major freight facilities including the port, intermodal yards and distribution centers. Freight activity summaries for each NJTPA county and the top regional commodity bundles are also presented. Try out the tool at <http://freightactivitylocator.njtpa.org/>.



## Featured Planning Tools

Click on the projects below to see how open data is used to support NJTPA's interactive web applications.



### County Profiles

The NJTPA County Profiles App is an interactive tool to help residents of northern New Jersey better understand key factors that influence transportation and quality of life in their county and in the region overall.

[Open App](#)



NJTPA Planning Visualization Tools

### Viztools

The NJTPA Planning Visualization Tools, or "Viztools," illustrates how a wide range of factors relate to the multiple facets of regional planning.

[Open App](#)

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- [Support](#)

# NJTPA Open Data Portal: Functionality

NJTPA Open Data Site

county profile

My Data

Gabrielle

Filter By

Tags

Environment (31)

Air (30)

Built Environment (30)

Environmental Protection Agency (30)

Environmental Public Health Division (30)

More

Source

GeoPlatform.gov (30)

Esri (1)

Content Type

spatial dataset (33)

web mapping application (2)

web map (1)

1 - 10 of 36 results

Relevance

**County Profile Application - Table**

Shared by gfausel

The data contained with this GIS table can be found on the NJTPA County Profile Application. The data contains information ranging from population, race, means of travel, and other items dealing with environmental justice and transportation. Sources of the data are from the following-US Census, 2010; American Community Survey.

Custom License 8/23/2018 Spatial Dataset 1 Rows

**NJTPA County Profiles**

Shared by gfausel

The organization that shared this dataset did not provide a description.

No license specified 8/28/2017 Web Mapping Application

**County Profile Application Data, ACS 2011-2015**

Shared by gfausel

The data contained with this GIS layer can be found on the NJTPA County Profile Application. The data contains information ranging from population, race, means of travel, and other items dealing with environmental justice and transportation. Sources of the data are from the following: US Census, 2010; American Community Survey.

Custom License 8/28/2017 Spatial Dataset 1 Rows

county profile


My Data

Gabrielle

County Profile Application Data, ACS 2011-2015

Favorite Download APIs

contains justice and ey.



Hint: Click on ▼ to filter columns.

	STATEFP	COUNTYFP	COUNTYNS	GEOID	NAME	NAMESAD	LSAD	CLASSFP	
1		037	00882236	34037	Sussex	Sussex County	06	H1	C
2	3	039	00882235	34039	Union	Union County	06	H1	C
3	7	023	00882230	34023	Middlesex	Middlesex County	06	H1	C
4	8	017	00882278	34017	Hudson	Hudson County	06	H1	C
5	10	025	00882910	34025	Monmouth	Monmouth County	06	H1	C
6	11	035	00882234	34035	Somerset	Somerset County	06	H1	C
7	12	029	00882279	34029	Ocean	Ocean County	06	H1	C
8	15	027	00882231	34027	Morris	Morris County	06	H1	C
9	16	013	00882276	34013	Essex	Essex County	06	H1	C

# Open Data Portal: Next Steps

- Continued maintenance and data update.
- Staying on-top of new releases and functionality from Esri.
- <http://data-njtpa.opendata.arcgis.com/>



# Thank you

*Defining the Vision. Shaping the Future.*



# NJTPA

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