

JUNE 2019

DVRPC

MEMORANDUM

# City of Trenton Truck Network





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**DVRPC's vision** for the Greater Philadelphia Region is a prosperous, innovative, equitable, resilient, and sustainable region that increases mobility choices by investing in a safe and modern transportation system; that protects and preserves our natural resources while creating healthy communities; and that fosters greater opportunities for all.

**DVRPC's mission** is to achieve this vision by convening the widest array of partners to inform and facilitate data-driven decision-making. We are engaged across the region, and strive to be leaders and innovators, exploring new ideas and creating best practices.

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## Introduction

The City of Trenton, hereinafter referred to as the “City,” requested technical assistance from the Delaware Valley Regional Planning Commission (DVRPC) to develop a city-wide truck network. The growth in urban deliveries, demand for road right-of-way from multiple modes, and an overall increase in freight traffic has led to this project.

The City does not have an official truck network map of priority trucking facilities; however, they do have a traffic ordinance that contains information on designated truck routes. The New Jersey Department of Transportation (NJDOT) has developed a statewide map that includes truck route designations and restrictions for certain types of trucks within the City. Also, NJDOT has adopted traffic weight regulations including prohibiting certain classes of vehicles on the roadway network. This project considers these networks and regulations to identify a city-wide truck network.

This effort seeks to define a process and establish evaluation criteria to begin developing an appropriate truck network in the City. The resulting product(s) should help lead to establishing guidelines for supporting various large, heavy vehicle truck traffic in the City. In addition, resulting products are intended to provide resources for trucks and fleet operations. These efforts will hopefully improve the planning process for managing trucks passing through and into the City, and co-exist with the pedestrian, bike, and transit networks.

## Network Components

The first step in the development of the truck network is to define the system components. A network is typically comprised of both truck-appropriate and truck-restricted routes. In addition, the City may have a need for additional network designations to support oversize/overweight permitting. DVRPC conducted a review of best practices in city truck networks and has employed this methodology elsewhere in the region.

### Truck Appropriate Routes

These represent a hierarchy of truck route designations that provide appropriate connectivity across a city. These are in addition to existing regional, state, and federal networks.

- Limited Access (*regional freight corridors*)
  - Interstates
  - Limited-access highways
  - Through routes
- Primary Truck Routes
  - Connections to major industrial locations
  - Through and local serving collectors or arterials
  - These routes should consider a Wheel Base-67 design vehicle (53' tractor trailer)
- Secondary Truck Routes
  - Neighborhood connectors
  - Low-level freight generators (small commercial corridors)
  - Primarily local-serving
  - These routes should consider Wheel Base-40 design vehicles and Wheel Base-67 control vehicles
- First/Last Mile Connectors
  - Intermodal terminal connections
  - High intensity freight center connections

## **Truck Restrictions**

These are streets that have been identified and/or signed as prohibited for some trucks based on size and weight, and time of day.

- No Through Trucks (local deliveries only)
- Trucks prohibited due to length, width, height, and/or weight restriction
  - Height restrictions may include vehicle maximum height clearance under bridges
  - Weight restrictions may include maximum ton limit for trucks

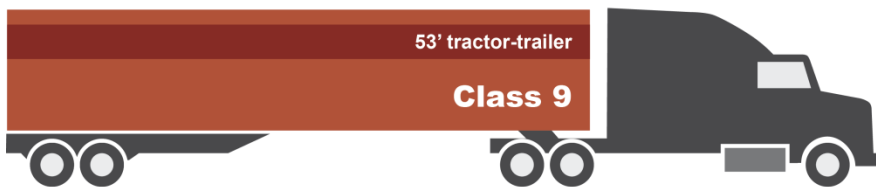
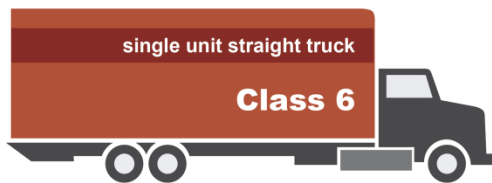
## **Internal/Special Networks**

This is a network intended for internal reference (permitting, etc.) and analysis purposes.

- Heavy-haul network
- Over-legal network

## Truck Classes

Trucks may be classified using FHWA criteria based on the number of axles and presence of a trailer. FHWA classifications are illustrated below. Class 6 are single unit trucks with three axles; class 7 are single unit trucks with four or more axles; class 8 are single trailer trucks with four or less axles; and class 9 are single trailer trucks, five axle tractor, and semitrailer. DVRPC conducts traffic counts that include separate counts for trucks using FHWA criteria, also referred to as classification counts. These counts can be used to distinguish between, for example, construction trucks and long-haul tractor trailers.



Source: DVRPC, 2017 and NJDOT

## Evaluation Criteria

The following is a collection of the inputs and sources of data related to the evaluation process that can be used for the development of a truck network.

### Freight Activity Generator Data

Data Item	Source
Freight Trip Generation Model (under development)	DVRPC
Freight centers	DVRPC
Land use	DVRPC
Intermodal terminals	DVRPC
Industrial, TOD, high density zoning	City of Trenton
Commercial corridors	City of Trenton

### Roadway Network

Data Item	Source
Frequent oversize/overweight permit routes	City of Trenton, NJDOT
Truck restricted routes	City of Trenton, NJDOT
Classification counts	NJDOT, DVRPC
Intermodal connectors	DVRPC
National networks	DVRPC
State/city networks	City of Trenton, NJDOT
Access points (interchanges)	DVRPC
Size/weight restrictions	City of Trenton, NJDOT
Travel lane dimensions – width	City of Trenton, NJDOT

## **City of Trenton Truck Network**

DVRPC identified various transportation infrastructure characteristics that may be used by the City for developing a truck network. They include: the existing national highway freight network, major freight centers, land use, roadway functional classifications, and designated and restricted truck routes in the City and surrounding region.

### **Existing National Highway Freight Network**

The core highway freight network is comprised of the Primary Highway Freight System (PHFS) and the Critical Urban Freight Corridors (see Map 1). The PHFS is composed of interstates such as I-95 and I-295 and other limited access roadways such as US 1. The Critical Urban Freight Corridors provides critical connectivity to the PHFS, and includes most of US 1 through the City. An integral part of the freight network, though not completely included in the PHFS, is the National Highway System (NHS) that is also shown on the map including Routes NJ 31, NJ 29, NJ 129, NJ 33, US 206 and parts of US 1 in the City.

### **Freight Centers and Activity**

Freight center areas are a key component of the freight network (see Map 1), which have been identified by the Delaware Valley Regional Planning Commission based on major freight trip generation and attraction characteristics. They include international gateways, distribution and logistics, high tech, and local manufacturing and distribution facilities. Several of these areas exist within the City including heavy industrial areas along US 1, and local manufacturing and distribution facilities just east of NJ 31. Distribution facilities such as FedEx and UPS are located just outside and northeast of the City. Waste truck traffic on City roadways was observed that may be related to the Waste Management landfill located just southwest of the City in Bucks County, PA.

### **Land Use**

In addition to the freight center areas, other land uses within the City have freight trip generation and attraction characteristics. Industrial and manufacturing uses exist along US 1 from NJ 129 to Olden Avenue, and along NJ 129 from US 206 to US 1 (see Map 2). The Central Business District (CBD), located just east of the Delaware River and north of US 1, contains a cluster of commercial and institutional uses a large part of which is State employment and associated activities. The CBD certainly attracts its share of truck service deliveries, but during field views there were no major conflicts observed between delivery trucks and other traffic. There were few, if any, designated truck “loading only” zones and signage.

### **Roadway Functional Classification**

Roadway functional classification, as defined by the Federal Highway Administration (FHWA), provides a framework for identifying the particular role of a roadway in moving vehicles through a highway network. Functional classification indicates information about roadway design, including its speed, capacity, and relationship to existing and future land uses. It also helps to understand which roads may be more suitable for truck movement than others. No Interstates pass through the City, but major principal arterial highways serve it including NJ 29 and US 1, which intersect just east of the Delaware River (see Map 3). US 1 is the only limited access highway traversing the City, while NJ 29 contains two traffic signals; one at South Warren Street, and the other at Cass Street. Other principal arterials include US 206, US 1 Bus, NJ 129, NJ 31, and NJ 33.

## **NJDOT Designated and Restricted Truck Routes**

NJDOT designated and restricted truck routes for size 102-inch wide trucks and double-trailer combinations were identified in the City and surrounding New Jersey vicinity based on its statewide mapping (see Map 4). Truck designated routes in the City include NJ Routes 129 and NJ 33, US 206, US 1, and County Route 606. A few signs were observed along these routes indicating they were designated routes, such as US 1 NB between the NJ 29 and NJ 33 exits (see Figure 1). Truck size restricted routes include NJ 29 through the City, and NJ 31 from the City line south to US 206.

In addition, there are NJDOT weight regulations restricting trucks on NJ 29 from NJ 129 to Ewing Township line, and the exit ramp of Perry Street from US 1 NB. Trucks or truck-trailer combinations over 26,000 pounds (13 tons) are prohibited on NJ 29 between NJ 129 and just north of the Lambertson Tunnel, except for emergency vehicles. The same trucks are prohibited on NJ 29 just north of the Lambertson Tunnel to the Ewing Township corporate line, except emergency vehicles, or vehicles which have an origin or final destination within three (3) miles of the prohibited section. See Appendix for more detailed information on weight regulations restricting truck traffic on NJ 29 and the US 1 Perry Street exit ramp.

## **Other Designated or Restricted Truck Routes**

Other designated or restricted truck routes were identified based on the City's truck route ordinance (Schedule XIV — see Appendix), and by identifying applicable signage from conducting field views and using Google Map's Street View. A complete survey would be needed to identify all potential designated or restricted signage. Designated truck routes identified in the ordinance didn't include ones on major principal arterials such as US 1, NJ 29, and NJ 129, but included most other major roadways (see Map 5). One conflict was noted on Cass Street between NJ 29 and NJ 129, which contains a designated truck route sign (see Figure 2), but is not included in the ordinance. Also, the westbound sign indicates a truck route, but there is no associated eastbound sign even though heavy truck movements were observed in both directions. One of the major restricted truck route locations in the City is due to the designated weight restriction at the NJ 29 Lambertson Tunnel. There was some debate over the engineering and/or regulatory basis of the restriction, but it could be due to both the structure of the roadway and the sharp curve just south of the tunnel. The restriction prohibits heavy trucks (over 13 tons) from using the tunnel and redirects them to use alternative local roads through the City. There are various traffic signs indicating the Lambertson Tunnel restrictions. These include signs on US 1 NB, NJ 29 NB and SB, and NJ 129 NB (see Figures 3 to 6).



Figure 1: US 1 NB between NJ 29 and NJ 33 East exits; designated doubles 102" Commercial Motor Vehicle.  
Source: Google Street View, June 2018



Figure 2: Cass Street WB between NJ 129 and NJ 29; truck route sign.  
Source: Google Street View, June 2018





Figure 3: US 1 NB at NJ 29 exit; no trucks over 13 tons except local deliveries.  
Source: Google Street View, June 2018



Figure 4: NJ 29 NB at NJ 129 split; no trucks over 13 tons.  
Source: Google Street View, June 2018



Figure 5: NJ 29 SB approach to downtown; trucks over 13 tons prohibited from using tunnel, detour is Market Street exit.  
 Source: Google Street View, June 2018

When traveling on NJ 129 NB approaching Lalor Street, an overhead sign indicates that left-turning trucks are restricted (see Figure 6). Lalor Street provides access to the NJ 29 Lambertton Tunnel, which is presumably why this turning movement is restricted. Signage could be updated to “No trucks over 13 tons except local deliveries.”



Figure 6: NJ 129 NB approach to CR 650 (Lalor Street); trucks prohibited from making left-turns.  
 Source: Google Street View, October 2018

There is a sign prohibiting trucks traveling on US 1 NB from exiting onto Perry Street (see Figure 7), but there is no similar signage on US 1 SB. This may be due to a bridge clearance at the US 1 NB Perry Street off-ramp, but there is no sign designating overhead restrictions. The sign prohibition is in accordance with the NJDOT traffic weight regulations (see Appendix); however, the City’s truck route ordinance designates Perry Street as a route (over 4 tons). So, it’s not clear why the northbound trucks are prohibited exiting onto Perry Street.





Figure 7: US 1 NB approaching Perry Street exit; trucks prohibited from exiting onto Perry Street.  
Source: Google Street View, October 2018

Another restricted truck route is on Hamilton Avenue at the NJ 129 intersection. Trucks traveling on NJ 129 NB are restricted from making left- or right-turns onto Hamilton Avenue, which is indicated by overhead signage (see Figure 8). There is similar signage on NJ 129 SB approaching Hamilton Avenue restricting trucks from making turns. However, the sign on Hamilton Avenue EB contains a conflicting sign that indicates trucks weighing 4 tons or less are allowed, which is likely confusing to drivers (see Figure 9). Signage on NJ 129 NB and SB should be updated to include “No trucks over 4 tons.” Furthermore, just a little farther east on Hamilton Boulevard starting at Clinton Ave to the City line, the truck ordinance designates Hamilton Boulevard as a truck route (over 4 tons).

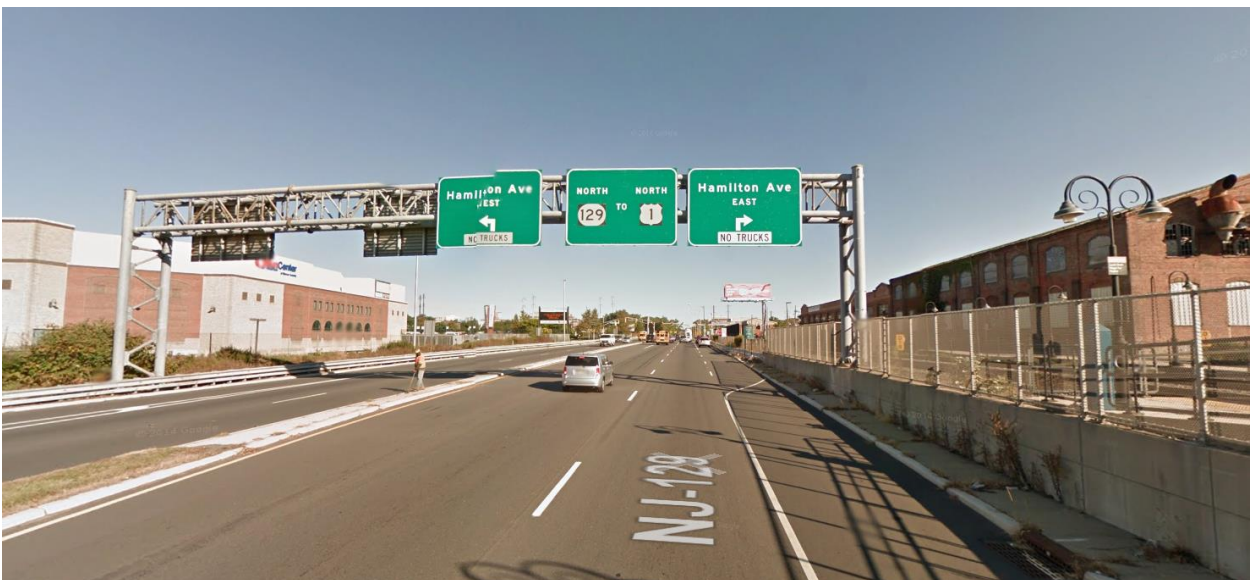


Figure 8: NJ 129 NB approach to Hamilton Avenue; trucks restricted from making turns onto Hamilton Avenue.  
Source: Google Street View, October 2018





Figure 9: Hamilton Avenue EB; no trucks over 4 tons permitted on Hamilton Avenue.  
Source: Google Street View, June 2018

There are weight and height restriction advance warning signs for bridge crossings that are typically placed far in advance to provide lead time for drivers to avoid crossings. The Lower Trenton Bridge that provides access over the Delaware River has weight restrictions over 5 tons and height restriction limits of 10 feet or more. Sign restrictions are posted on US 1 SB at the Warren Street exit and on Bridge Street (see Figures 10 and 11).



Figure 10: US 1 SB at the Warren Street exit; Delaware River Bridge 5 ton weight limit and 10 foot clearance.  
Source: Google Street View, October 2018





Figure 11: Bridge Street WB approach to Delaware River Bridge; Weight limit 5 tons.  
Source: Google Street View, October 2018

There is an advanced warning weight restriction sign on NJ 29 SB at the Morrisville, PA exit restricting trucks and other vehicles (over 3 tons) from crossing the Calhoun Bridge that spans the Delaware River (see Figure 12).



Figure 12: NJ 29 SB Bridge Morrisville, PA exit; 3 ton weight limit, trucks and buses prohibited.  
Source: Google Street View, August 2017

There are advanced warning signs posted on roadway overpasses to inform truck, and other drivers about bridge height restrictions. These sign placements sometimes do not provide drivers adequate time to detour and avoid the overpasses. US 1 NB contains signage on the State Street Bridge overpass between Market Street and Perry Street that indicates two height restrictions; one for the shoulder (13' 10") and another for the traveling lanes (14' 2") (see Figure 13). On NJ 29 SB between Parkside Avenue and the Morrisville, PA exit, a pedestrian bridge contains signage with height restrictions at 14' 1" (see Figure 14).

These height restriction signs should be reviewed to ensure they provide as much advanced warning as possible for truck drivers to detour.



Figure 13: US 1 NB at State Street; traveling lane maximum height clearance 14' 2" and shoulder 13' 10".  
Source: Google Street View, October 2018



Figure 14: NJ 29 SB between Parkside Avenue and Morrisville, PA exit; maximum height clearance for pedestrian bridge (14' 1").  
Source: Google Street View, October 2018



## Truck Parking Designations and Restrictions

There were no observed heavy truck overnight parking areas designated in the City. One restricted parking area was located at the US 1 NB Perry Street exit (see Figure 15), even though NJDOT's traffic weight regulations prohibit heavy trucks from using the exit. The sign indicates that no parking for trucks or buses is allowed between 8 pm and 6 am.



Figure 15: US 1 NB Perry Street Exit; No Parking Trucks or Buses 8 pm – 6 am.

Source: Google Street View, June 2018

## Traffic Congestion and Truck Counts

INRIX vehicle probe data was used to identify the most congested locations during peak hour traffic in the City. Some of these locations occur where there are heavy truck movements: NJ 29 from Market Street to Cass Street, NJ 129 from Market Street to Lalor Street, US 1 NB off-ramp to S. Warren Street and NJ 29, and the NJ 29 northbound off-ramp to US 1 SB (see Map 6). Classification counts, which include separate counts for trucks, were analyzed at three locations in the City; two on NJ 129 and one on Cass Street. See Appendix for detailed traffic count reports. On NJ 129 between CR 606 (Hamilton Avenue) and Cass Street, just north of Cass Street, there were 742 trucks traveling northbound and 1,570 traveling southbound at 5.3 percent and 9.5 percent of total vehicles, respectively, averaging 7.4 percent. Between Cass Street and CR 650 (Lalor Street), just south of Cass Street, there were 1,495 trucks traveling northbound and 1,703 southbound at 11.1 percent and 13.5 percent of total vehicles, respectively, averaging 12.3 percent. There were twice as many trucks traveling northbound on NJ 129 between Cass Street and Lalor than between Cass Street and Hamilton, located farther north, which indicates they are making turns on Cass Street to access NJ 29 northbound as part of their route. For the Cass Street count, there were 154 trucks recorded traveling eastbound and 633 westbound at 4.4 percent and 14.2 percent of total vehicles, respectively, averaging 9.9 percent of total vehicles. Westbound truck traffic is significantly higher than eastbound. Traffic counts should be conducted at the intersection of NJ 29 and Cass Street to determine more specific truck turning movements.



## Observed Truck Routes

### NJ 29 NB to US 1 SB

Heavy truck restrictions at the NJ 29 Lambertson Tunnel force trucks to use alternative routes through the City causing added vehicle, pedestrian, and bicyclist conflicts. Heavy trucks traveling on NJ 29 NB to access US 1 SB were observed traveling northbound on NJ 129, making a left-turn at Cass Street (westbound); making a right-turn onto NJ 29 (northbound), and then merging onto US 1 SB (see Map 7). Cass Street from NJ 129 to NJ 29 seemed to carry fairly high truck traffic during field view observations, and as is indicated by the classification counts. Cass Street is a county owned, minor arterial roadway according to FHWA functional classification mapping. It is not designated on the major roadway freight network (see Map 1). It contains a mix of neighborhood residential and commercial land uses surrounding the corridor, including a school located a short distance away. Heavy truck and other traffic on Cass Street increases exposure to vehicle-pedestrian conflicts.

### US 1 NB to NJ 29 SB

Heavy trucks traveling on US 1 NB into the City to access NJ 29 SB, and beyond to I-295 and I-195 are required to travel through local streets. One option is to exit US 1 NB at NJ 29 and follow South Warren Street and make a left-turn onto Route 29 (southbound); then make a left-turn on Cass Street (eastbound), and then a right-turn on NJ 129 (southbound) and merge onto NJ 29 SB (see Map 8 – Route 1). Limitations along this route include a tight turning radius at the US 1 NB off-ramp onto South Warren Street, and turning movement issues at the South Warren Street and NJ 29 intersection, NJ 29 and Cass Street intersection, and the Cass Street and NJ 129 intersection. Alternatively, trucks could access NJ 129 SB by exiting US 1 NB at the NJ 33 and Market Street exit; turn left on Market Street; then right on Stockton Street, and then access the NJ 129 SB entrance ramp (see Map 8 – Route 2). This requires making a number of turning movements on City streets causing added vehicle conflicts.

### Missing Moves: NJ 129 and US 1 Interchange

One potential alternative to mitigate truck movements on local City streets would be to provide a direct connection from NJ 129 NB to US 1 SB and US 1 NB to NJ 129 SB. This would do more to alleviate truck movements on City roads, but at the greatest expense. A ramp could be added from US 1 NB, over the Amtrak facilities, and connect to NJ 129 SB (see Map 9). Another ramp would connect from NJ 129 NB as a flyover to US 1 SB. This would be a tight fit given the nearby land uses including Amtrak, and other residential and commercial uses.

## Draft Recommendations

Several actions could be considered by the City to improve truck freight movements.

### 1. Determine feasibility of making truck roadway network improvements to reduce truck and other vehicle conflicts in the City.

The City, along with NJDOT, should determine the feasibility of adding moves (or ramps) from US 1 NB to NJ 129 SB and from NJ 129 NB to US 1 SB to reduce truck traffic on City streets. Adding these ramps would be a great expense, and nearby land uses may make this problematic, but would do the most to reduce truck traffic on local roads. Alternatively, the City should review making roadway improvements to accommodate truck movements on local roads, including the US 1 NB off-ramp to South Warren Street, South Warren Street and NJ 29 intersection, and NJ 29 and Cass Street intersection. Finally, consideration

should be made for opening the Lambertson Tunnel for heavy truck use which would be the least costly alternative to reduce truck traffic in the City.

## **2. Undertake a data improvement program related to truck network data**

The City should work towards the development of an improved geographic truck route dataset that incorporates all truck designations, restrictions, and size/weight limitations. This would help to identify gaps and conflicts in the current network. As a first step, the City along with NJDOT, should plan to conduct more classification counts to identify truck movements throughout the City.

## **3. Develop context sensitive design standards**

The City should work towards the development of roadway, bike, transit, and intersection design standards that properly account for the appropriate design vehicles that are expected to utilize these facilities. The truck routes can serve as a basis for defining appropriate design vehicles for various street types.

## **4. Utilize the truck network in the development of bike, transit, and pedestrian Improvements**

The City should seek to incorporate the truck network into the process of developing additional multi-modal improvements (bicyclist, transit, and pedestrian) across the City. Proper integration of this network into the process will elevate the consideration of design requirements for various non-vehicular network facilities that are proposed to coexist or interact with the truck network.

## **5. Develop and implement a truck signage plan**

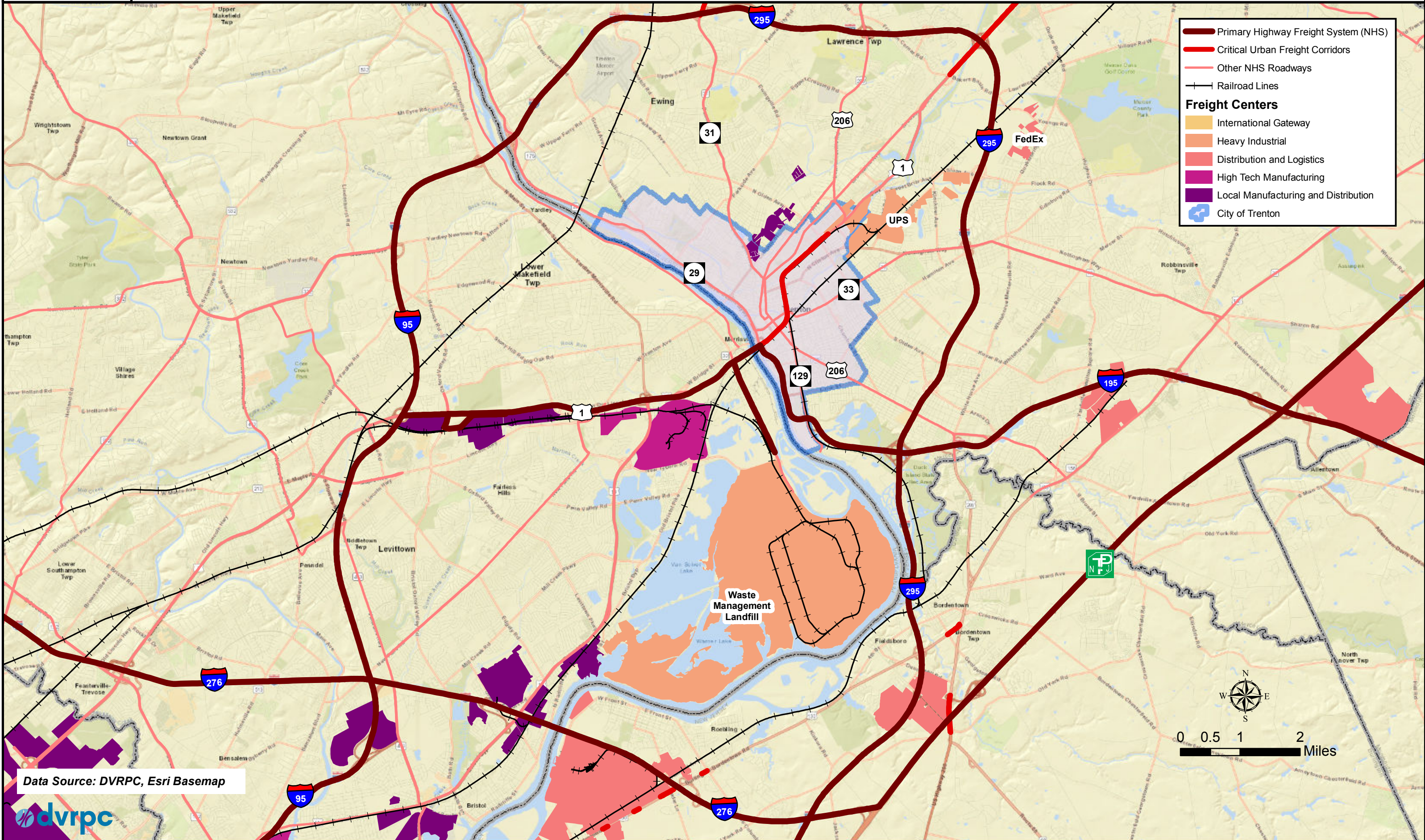
The City should seek to develop a truck signage plan. This system of wayfinding for trucks will guide drivers to the appropriate routes throughout the City, reducing the likelihood of them operating on restricted or inadequately sized streets. This plan should also include a review and improvement to the existing truck restriction and designated signage across the City to ensure consistency and completeness. Designated NJDOT access network signage should be provided on applicable roadways as part of this effort.

## **6. Develop digital and printed truck network products**

The City should seek to distribute designated and restricted truck route information in a variety of formats. This includes a better web presence for truck-related data and an online truck route map. The City should develop a downloadable and printable static version of this map for reference by truck drivers and the general public. Finally, the City, upon completion of data cleaning and validation efforts, should share all available truck network data with navigation providers who will be able to integrate this into commercial navigation products.



# Map 1 City of Trenton and Vicinity - Major Roadway Freight Network Overview



Data Source: DVRPC, Esri Basemap

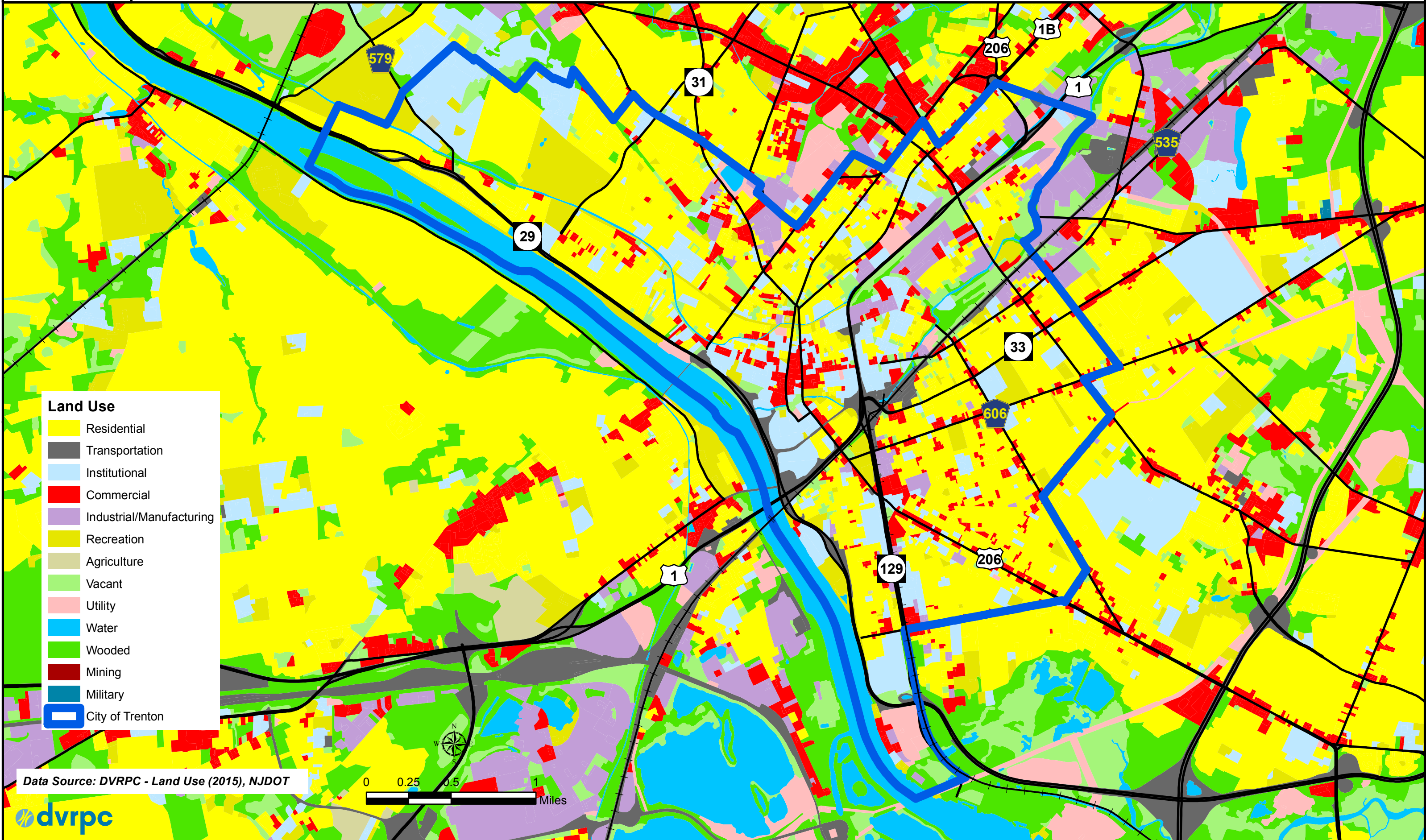






# Map 2

# City of Trenton and Vicinity Land Use



- Land Use**
- Residential
  - Transportation
  - Institutional
  - Commercial
  - Industrial/Manufacturing
  - Recreation
  - Agriculture
  - Vacant
  - Utility
  - Water
  - Wooded
  - Mining
  - Military
  - City of Trenton

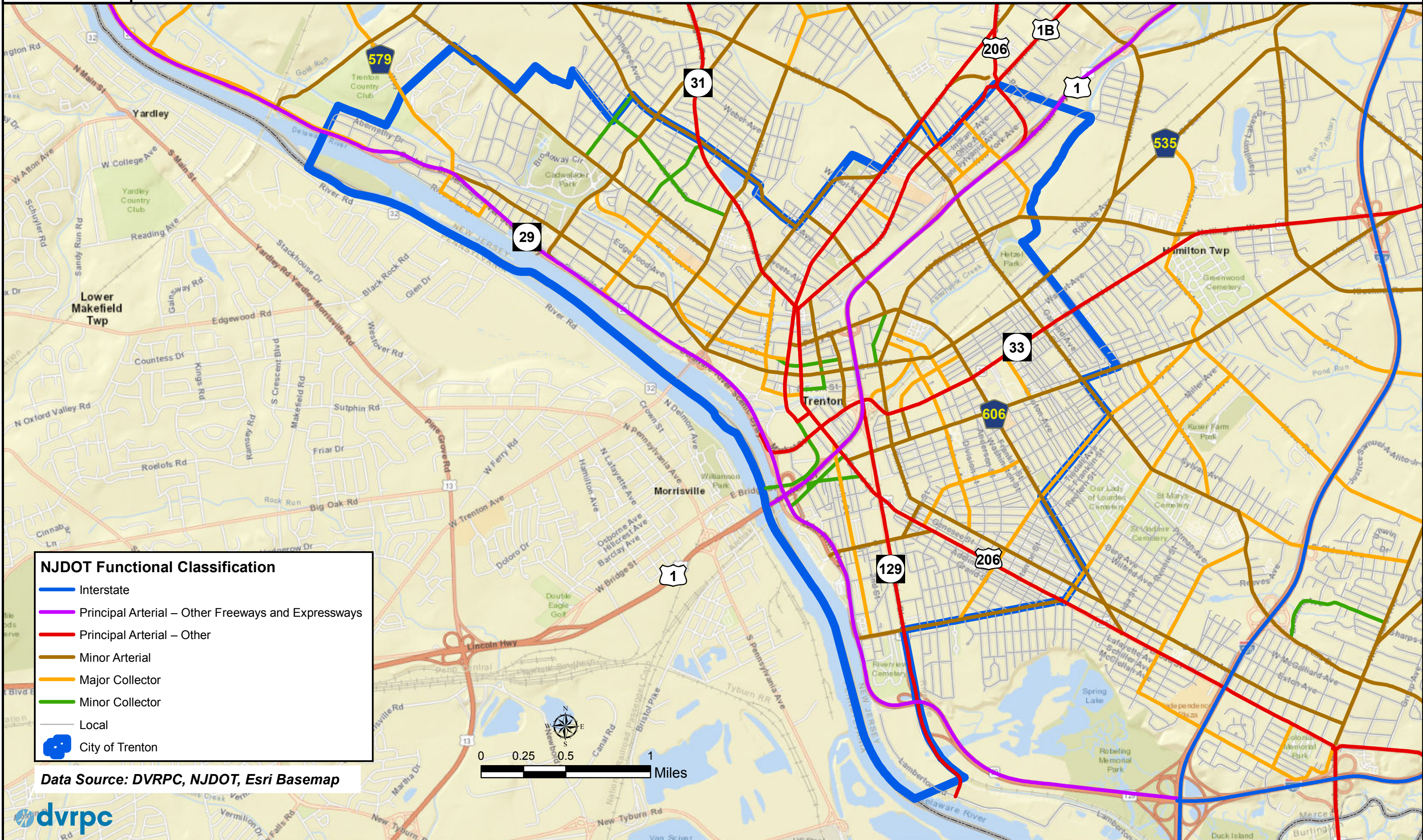
Data Source: DVRPC - Land Use (2015), NJDOT







# Map 3 Roadway Functional Classification

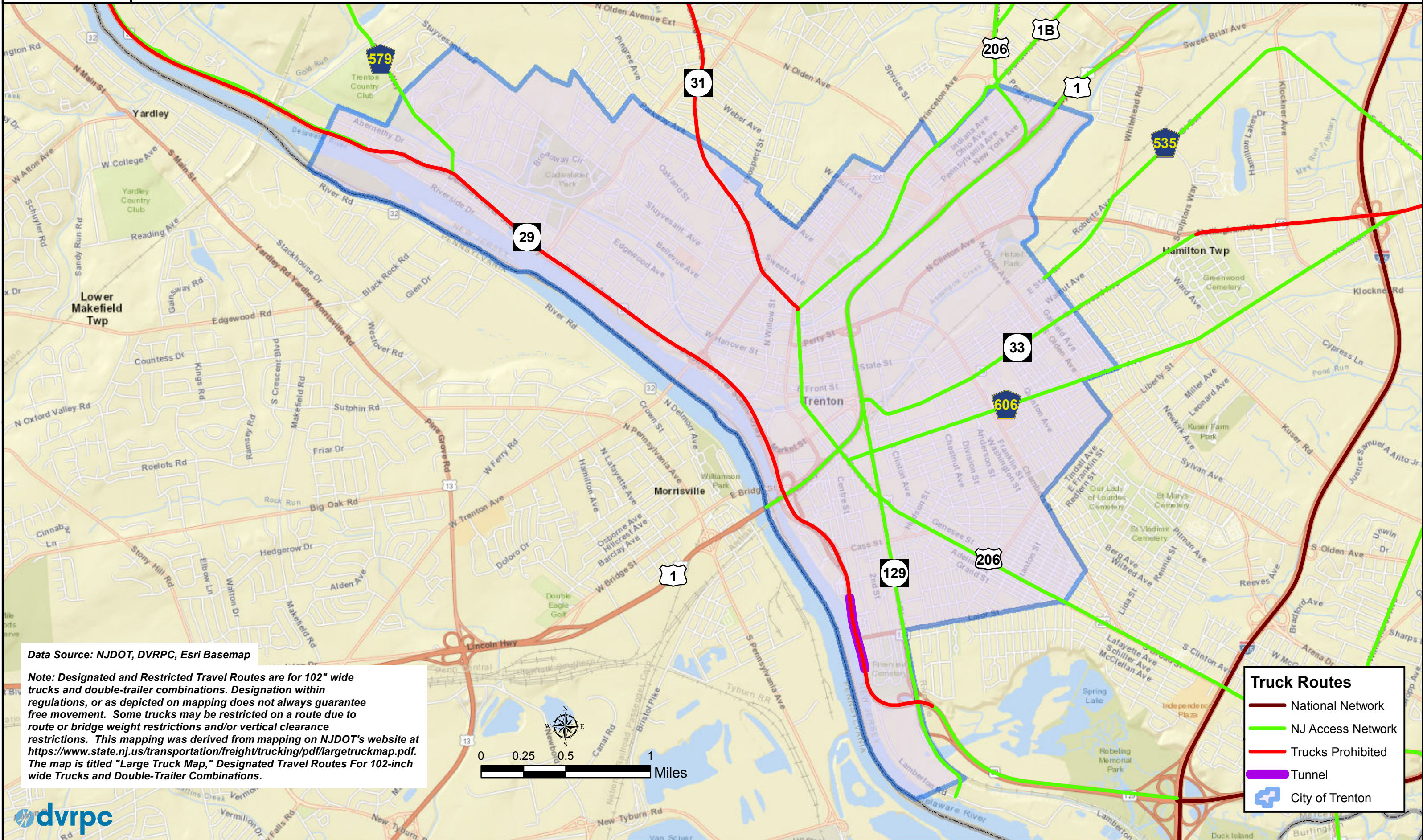






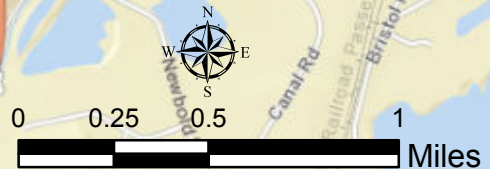


# Map 4 NJDOT Designated and Restricted Truck Routes



Data Source: NJDOT, DVRPC, Esri Basemap

Note: Designated and Restricted Travel Routes are for 102" wide trucks and double-trailer combinations. Designation within regulations, or as depicted on mapping does not always guarantee free movement. Some trucks may be restricted on a route due to route or bridge weight restrictions and/or vertical clearance restrictions. This mapping was derived from mapping on NJDOT's website at <https://www.state.nj.us/transportation/freight/trucking/pdf/largetruckmap.pdf>. The map is titled "Large Truck Map," Designated Travel Routes For 102-inch wide Trucks and Double-Trailer Combinations.



**Truck Routes**

- National Network
- NJ Access Network
- Trucks Prohibited
- Tunnel
- City of Trenton

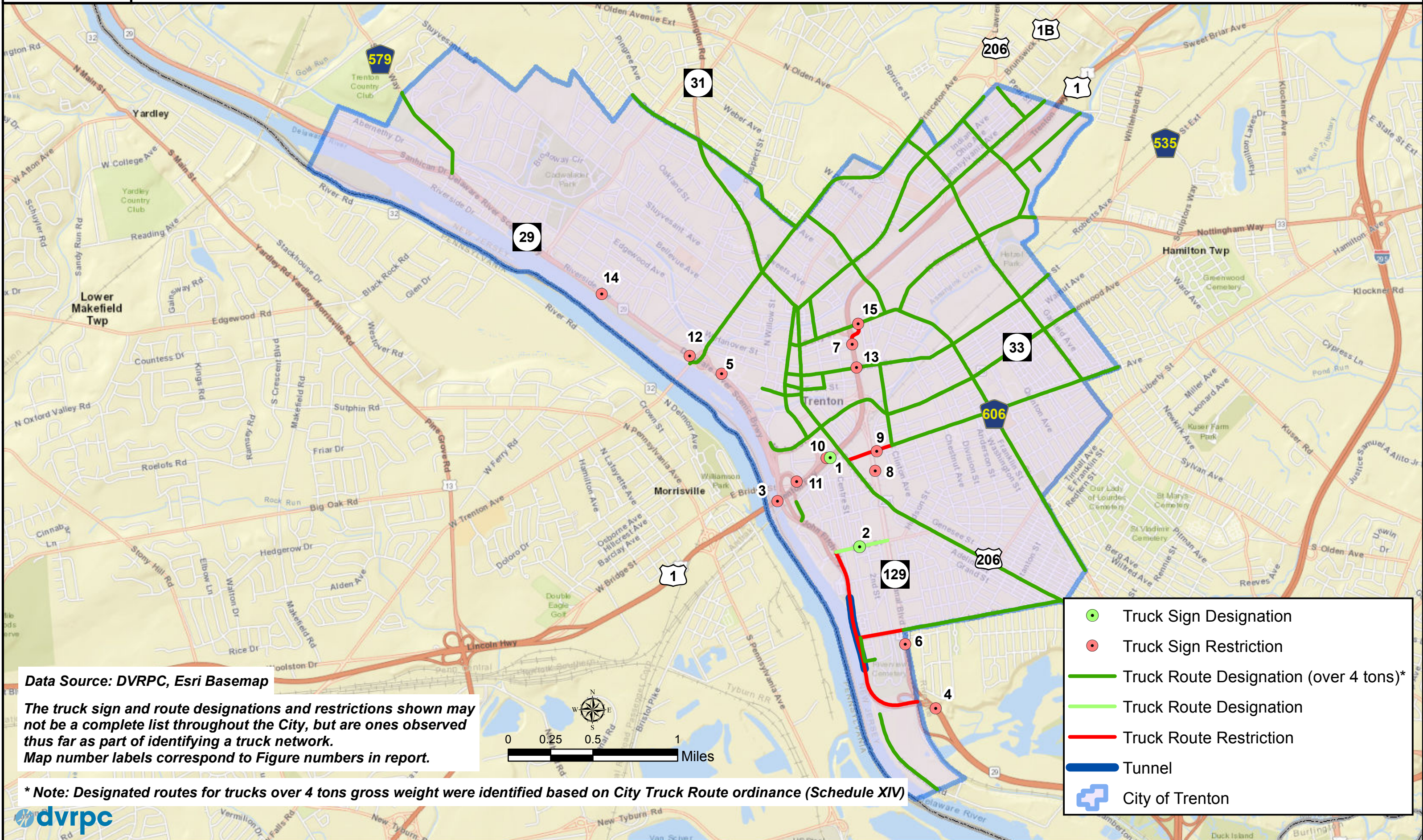








# Map 5 Other Designated and Restricted Truck Routes and Signage

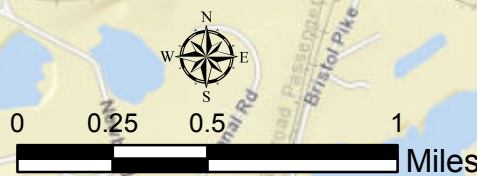


Data Source: DVRPC, Esri Basemap

The truck sign and route designations and restrictions shown may not be a complete list throughout the City, but are ones observed thus far as part of identifying a truck network.

Map number labels correspond to Figure numbers in report.

\* Note: Designated routes for trucks over 4 tons gross weight were identified based on City Truck Route ordinance (Schedule XIV)

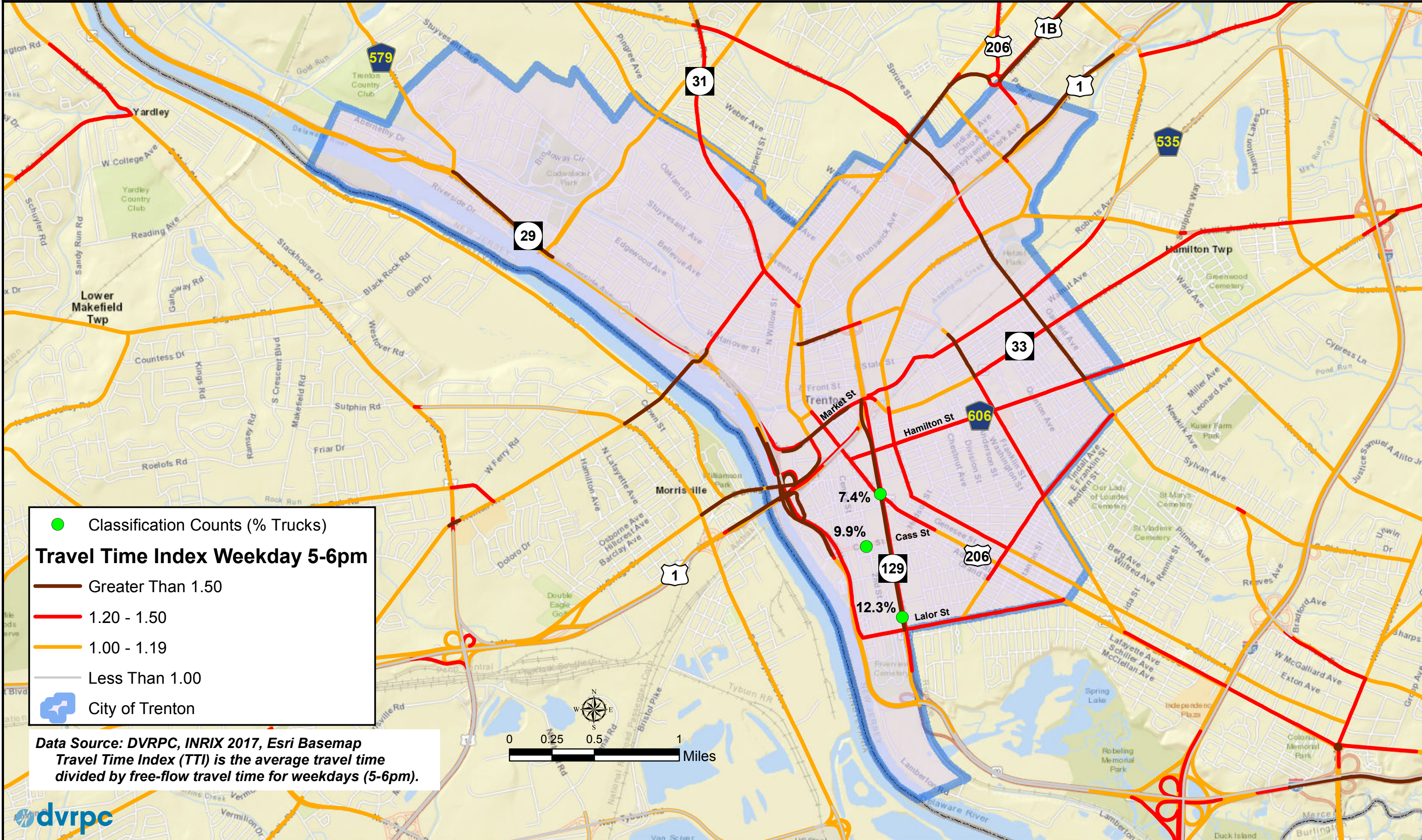








# Map 6 Traffic Congestion and Truck Counts



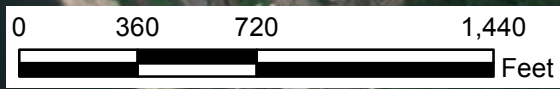
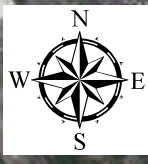
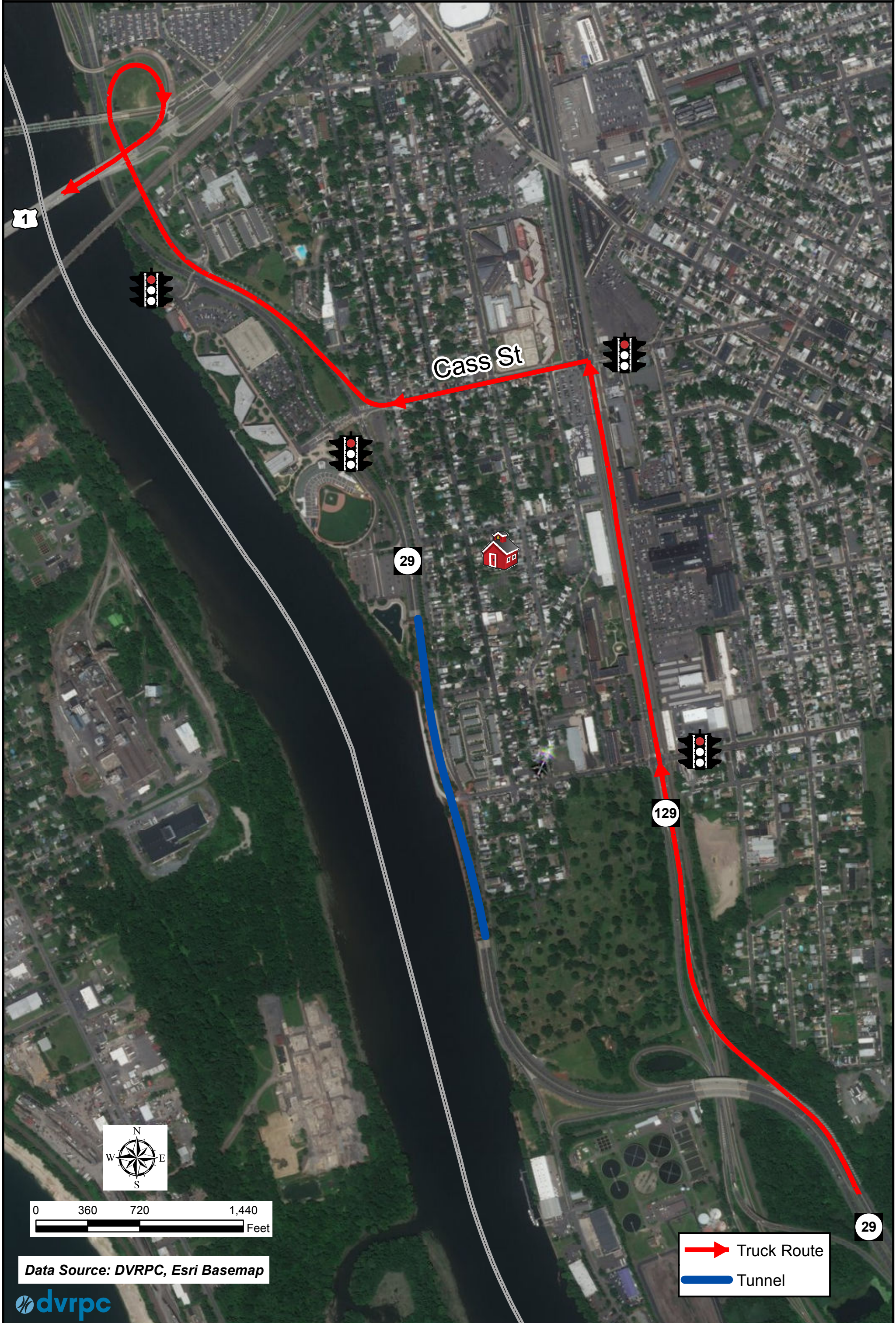






# Map 7

# NJ 29 NB to US 1 SB Truck Route



Data Source: DVRPC, Esri Basemap

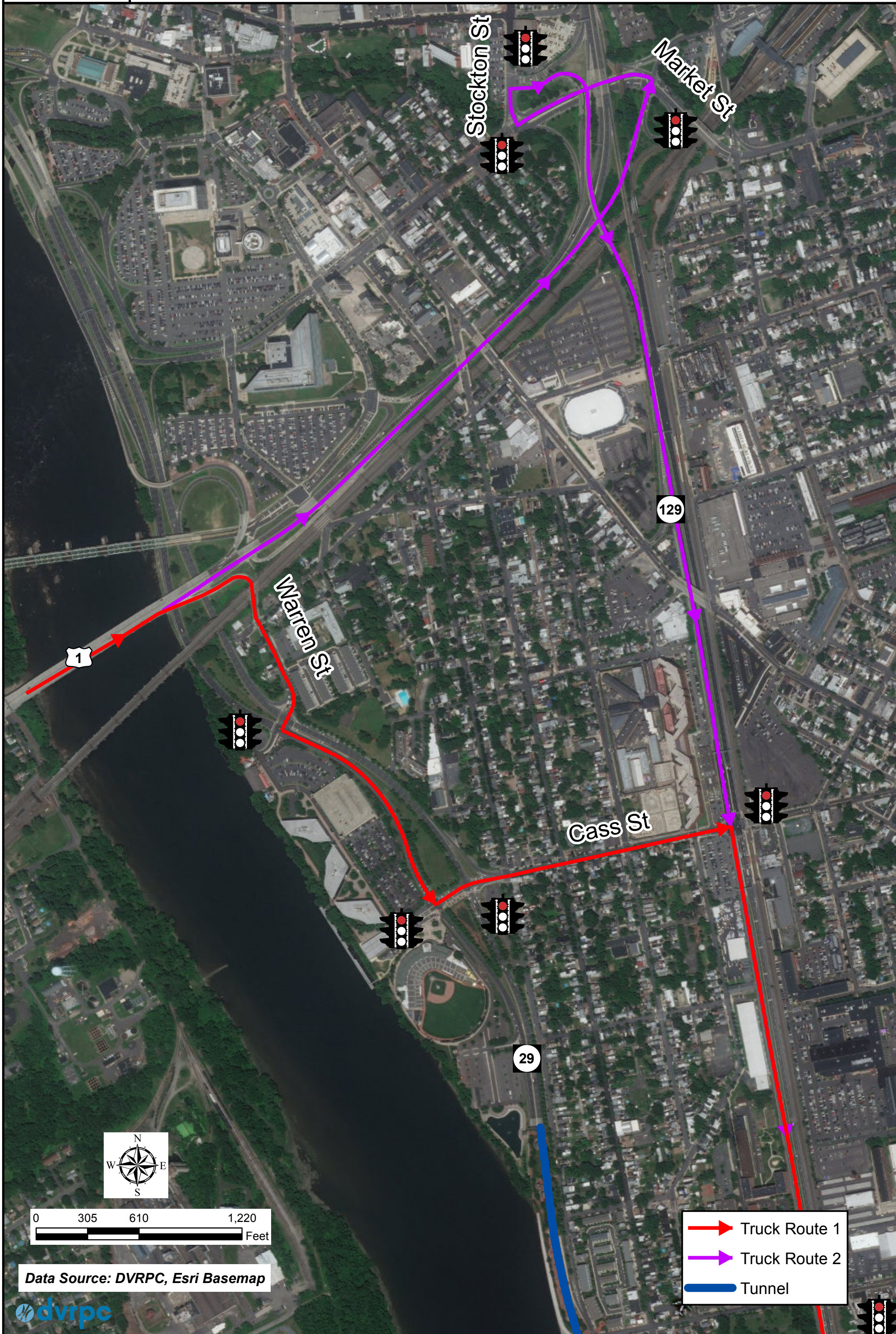


Truck Route  
Tunnel









Data Source: DVRPC, Esri Basemap

- Truck Route 1
- Truck Route 2
- Tunnel

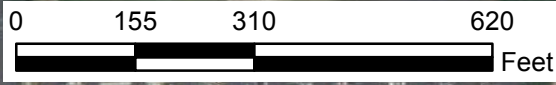
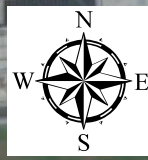
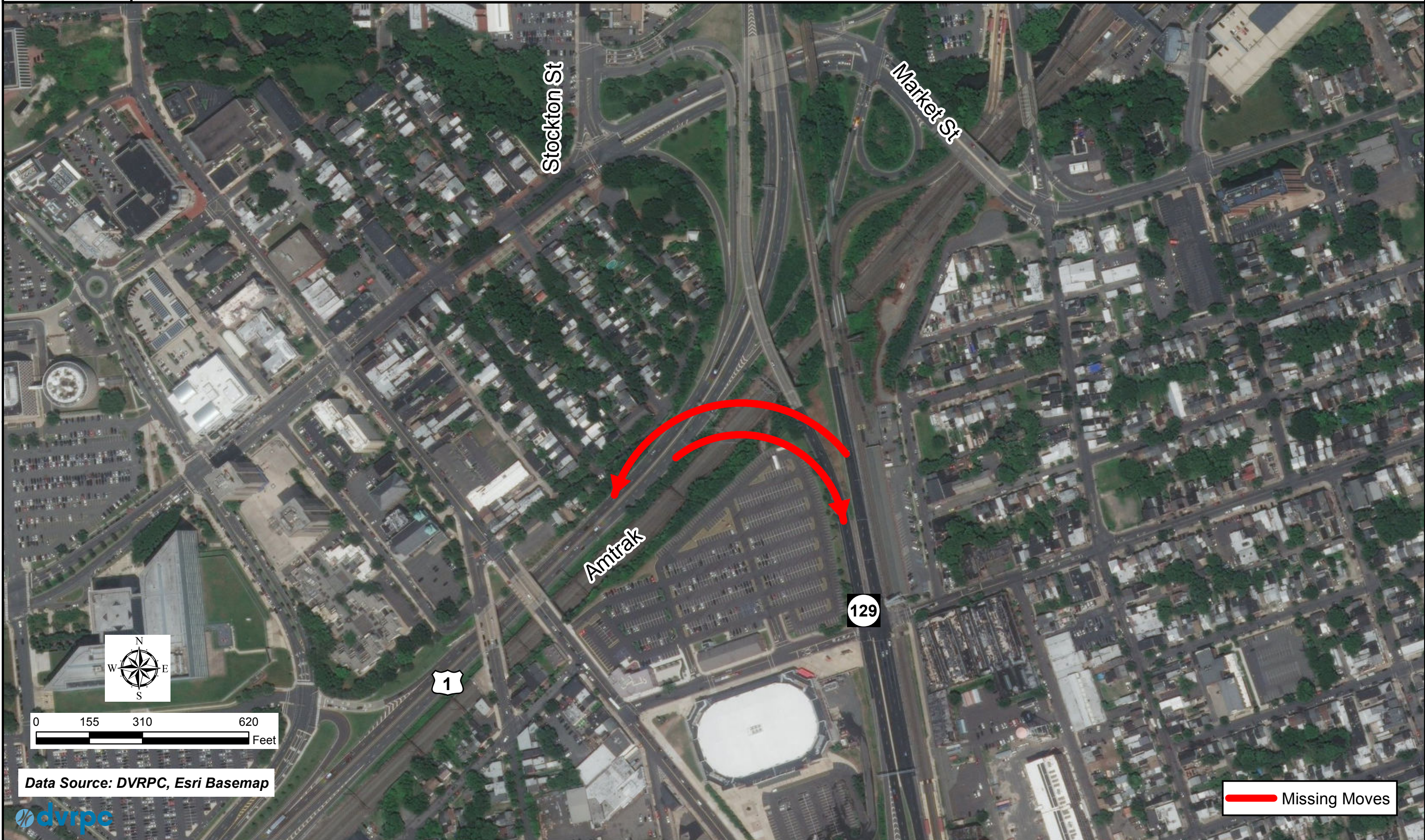






# Map 9

# Missing Moves: NJ 129 and US 1 Interchange



Data Source: DVRPC, Esri Basemap



Missing Moves





# Appendix A

## 24-Hour Traffic Count on NJ 129 Between Lalor Street and Cass Street





# New Jersey Department of Transportation

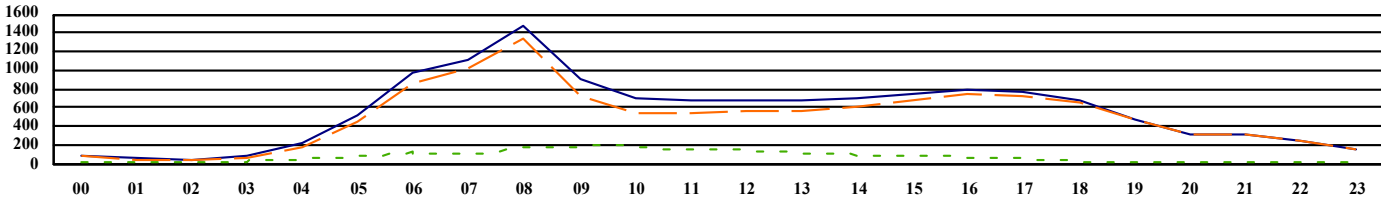
## 24 Hour Directional Summary, North Bound for Oct 11, 2016

5-5-305, , NJ 129-1.16, 00000129\_\_, Trenton City  
 FC14 MERCER County

Bet CO 650 Lalor St and Cass St

	Total	Total	Peak	Peak
Private:	11,839.8	88.4	1,327.5	90.0
Single:	1,099.5	8.2	115.5	7.8
Combo:	395.2	3.0	26.5	1.8
Trucks:	1,494.7	11.2	142.0	9.6
<b>Total:</b>	<b>13,386.0</b>		<b>1,474.5</b>	

Peak Hour: 8  
 Axle Factor: 0.92



	VOL	MC	CAR	PU	BUS	2D	SU 3	SU 4+	ST 4-	ST 5	ST 6+	MT 5-	MT 6	MT 7+
0	92.0	0	72.5	11.0	0	3.0	0	0	1.5	4.0	0	0	0	0
1	53.0	0	41.0	6.0	0	1.0	0.5	0	1.0	3.5	0	0	0	0
2	48.0	0	33.5	6.5	0	1.0	0.5	0	0	6.0	0.5	0	0	0
3	78.0	0	54.5	11.0	0	0	1.0	3.5	0.5	7.5	0	0	0	0
4	222.0	0	142.5	31.0	1.0	6.5	8.5	19.0	0.5	13.0	0	0	0	0
5	527.0	0	361.0	98.5	1.5	10.0	13.0	19.0	0.5	23.0	0.5	0	0	0
6	964.0	1.0	684.5	179.0	1.0	38.0	11.5	28.5	2.5	17.5	0.5	0	0	0
7	1,102.5	2.5	898.0	119.0	5.5	26.0	16.5	20.0	1.0	14.0	0	0	0	0
8	1,474.5	1.0	1,161.5	165.0	5.0	38.0	30.0	47.5	3.0	23.0	0.5	0	0	0
9	906.0	0.5	619.5	106.5	5.5	34.0	38.0	65.0	3.5	33.0	0.5	0	0	0
10	706.5	0.5	423.0	107.0	4.5	34.0	39.5	54.5	7.5	34.5	1.5	0	0	0
11	677.0	0.7	434.7	110.3	2.7	30.3	29.3	37.3	2.7	27.7	1.0	0	0	0.3
12	685.0	0.3	449.0	105.3	3.3	25.7	30.0	35.3	3.0	32.0	0.7	0	0	0.3
13	676.5	0.5	460.5	94.0	6.5	32.0	15.5	30.0	3.0	34.5	0	0	0	0
14	694.5	0.5	487.0	115.0	2.0	27.5	13.0	26.0	2.0	21.0	0.5	0	0	0
15	748.5	0.5	531.0	137.0	3.0	25.0	11.0	20.0	0	20.5	0.5	0	0	0
16	790.0	1.0	610.5	125.5	2.5	27.5	4.5	6.0	0.5	12.0	0	0	0	0
17	760.5	0.5	604.5	123.0	3.5	22.0	1.5	0	1.5	4.0	0	0	0	0
18	681.0	0	546.0	114.5	0.5	13.0	2.5	0	0.5	4.0	0	0	0	0
19	480.5	0	374.0	88.5	1.0	10.0	1.0	0.5	1.5	4.0	0	0	0	0
20	322.5	1.0	259.5	49.0	0.5	4.5	0.5	0	1.5	6.0	0	0	0	0
21	308.0	0.5	265.0	35.5	0.5	3.5	0.5	0	0.5	2.0	0	0	0	0
22	239.5	0	204.5	29.0	0.5	3.0	1.0	0	0.5	1.0	0	0	0	0
23	149.0	0	131.0	13.0	1.0	2.5	0	0	0.5	1.0	0	0	0	0
<b>Total</b>	<b>13,386.0</b>	<b>11.0</b>	<b>9,848.7</b>	<b>1,980.2</b>	<b>51.5</b>	<b>418.0</b>	<b>269.3</b>	<b>412.2</b>	<b>39.2</b>	<b>348.7</b>	<b>6.7</b>	<b>0</b>	<b>0</b>	<b>0.7</b>
<b>%</b>	<b>100.0</b>	<b>0.1</b>	<b>73.6</b>	<b>14.8</b>	<b>0.4</b>	<b>3.1</b>	<b>2.0</b>	<b>3.1</b>	<b>0.3</b>	<b>2.6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

# New Jersey Department of Transportation

## Daily Volume from 10/11/2016 through 10/13/2016

Site Names: 5-5-305, , NJ 129-1.16, 00000129\_\_, Trenton City  
 County: MERCER  
 Funct. Urban Principal Arterial - Other  
 Location: Bet CO 650 Lalor St and Cass St

Seasonal Factor Group: RG3\_FC14  
 Daily Factor Group: RG3\_FC14  
 Axle Factor Group: RG3\_FC14  
 Growth Factor Group: RG3\_FC14

	Sun 10/09/2016			Mon 10/10/2016			Tue 10/11/2016			Wed 10/12/2016			Thu 10/13/2016			Fri 10/14/2016			Sat 10/15/2016		
	ROAD	S	N	ROAD	S	N	ROAD	S	N	ROAD	S	N	ROAD	S	N	ROAD	S	N	ROAD	S	N
00:00										141	58	83	171	70	101						
01:00										124	65	59	98	51	47						
02:00										91	42	49	96	49	47						
03:00										140	58	82	128	54	74						
04:00										358	134	224	345	125	220						
05:00										959	444	515	986	446	540						
06:00										1,718	811	907	1,876	854	1,022						
07:00										2,310	718	1,592	1,402	783	619						
08:00										2,046	616	1,430	2,230	705	1,525						
09:00										1,391	544	847	1,554	576	978						
10:00										1,305	593	712	1,355	644	711						
11:00							1,231	584	647	1,315	633	682	1,346	634	712						
12:00							1,315	672	643	1,322	620	702	1,362	639	723						
13:00							1,431	751	680	1,425	747	678									
14:00							1,562	876	686	1,591	885	706									
15:00							2,051	1,265	786	1,948	1,232	716									
16:00							2,083	1,275	808	2,186	1,411	775									
17:00							1,773	1,014	759	1,682	920	762									
18:00							1,246	587	659	1,235	532	703									
19:00							912	403	509	861	409	452									
20:00							648	306	342	649	346	303									
21:00							630	320	310	641	335	306									
22:00							385	156	229	431	181	250									
23:00							254	114	140	286	128	158									
<b>Volume</b>							15,521	8,323	7,198	26,155	12,462	13,693	12,949	5,630	7,319						
<b>AM Peak Vol</b>										2,310	811	1,592	2,230	854	1,525						
<b>AM Peak Fct</b>										1.00	1.00	1.00	1.00	1.00	1.00						
<b>AM Peak Hr</b>										7:00	6:00	7:00	8:00	6:00	8:00						
<b>PM Peak Vol</b>							2,083	1,275	808	2,186	1,411	775									
<b>PM Peak Fct</b>							1.00	1.00	1.00	1.00	1.00	1.00									
<b>PM Peak Hr</b>							16:00	16:00	16:00	16:00	16:00	16:00									
<b>Seasonal Fct</b>							0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.965						
<b>Daily Fct</b>							0.974	0.974	0.974	0.998	0.998	0.998	0.943	0.943	0.943						
<b>Axle Fct</b>							0.500	0.500	0.500	0.500	0.500	0.500	0.500	0.500	0.500						
<b>Pulse Fct</b>							2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000						

# New Jersey Department of Transportation

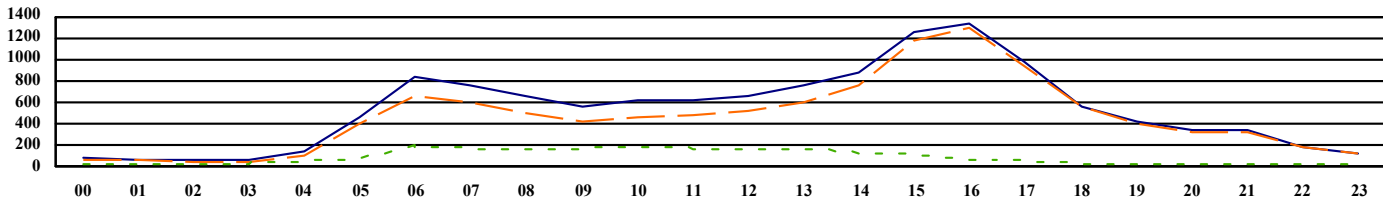
## 24 Hour Directional Summary, South Bound for Oct 11, 2016

5-5-305, , NJ 129-1.16, 00000129\_\_, Trenton City  
 FC14 MERCER County

Bet CO 650 Lalor St and Cass St

	Total	Total	Peak	Peak
Private:	10,801.0	86.0	1,293.0	96.5
Single:	1,132.0	9.0	28.5	2.1
Combo:	571.7	4.5	16.0	1.2
Trucks:	1,703.7	13.6	44.5	3.3
<b>Total:</b>	<b>12,566.0</b>		<b>1,340.0</b>	

Peak Hour: 16  
 Axle Factor: 0.90



	VOL	MC	CAR	PU	BUS	2D	SU 3	SU 4+	ST 4-	ST 5	ST 6+	MT 5-	MT 6	MT 7+
0	64.0	0	43.5	11.0	2.0	3.0	0	0	3.0	1.5	0	0	0	0
1	58.0	0	42.5	4.5	0.5	2.5	0.5	0	4.5	3.0	0	0	0	0
2	45.5	0	27.5	5.0	0.5	2.0	1.0	0	3.0	6.5	0	0	0	0
3	56.0	0	27.5	9.5	0.5	2.0	1.0	0	2.0	13.5	0	0	0	0
4	129.5	0	76.5	23.0	2.0	4.0	2.5	0	2.0	19.5	0	0	0	0
5	445.0	0	287.5	97.5	2.5	16.0	13.0	0	3.0	24.5	1.0	0	0	0
6	832.0	0	479.5	173.5	5.5	34.0	59.0	28.5	2.0	49.5	0.5	0	0	0
7	750.5	0	450.5	139.0	7.5	38.5	55.0	17.0	5.0	38.0	0	0	0	0
8	659.5	0.5	390.0	101.0	7.5	29.5	57.0	30.5	1.5	40.0	0.5	0	0	1.5
9	558.5	0.5	321.0	85.5	6.5	28.5	58.5	21.0	0.5	35.5	1.0	0	0	0
10	617.5	0	363.0	88.0	3.5	25.0	76.0	19.5	3.0	39.0	0	0	0.5	0
11	616.0	0.7	364.0	104.0	3.0	22.7	52.0	22.0	4.0	43.0	0.3	0	0	0.3
12	643.0	0.7	425.0	90.7	2.3	27.7	44.3	13.3	3.3	35.3	0	0	0	0.3
13	747.5	0.5	480.0	102.0	6.5	39.0	53.0	21.0	5.5	39.5	0.5	0	0	0
14	880.5	1.0	620.0	135.0	3.0	42.0	40.5	8.0	4.0	27.0	0	0	0	0
15	1,247.5	3.5	989.0	169.5	1.0	21.5	19.0	0.5	2.5	40.5	0.5	0	0	0
16	1,340.0	7.0	1,158.5	127.5	2.5	19.0	9.5	0	2.0	13.5	0	0	0	0.5
17	967.0	0.5	793.5	129.5	1.5	17.5	5.5	0	3.0	15.0	0.5	0	0.5	0
18	559.5	0.5	464.0	79.5	0	9.5	0.5	0	2.0	3.5	0	0	0	0
19	406.0	1.5	328.5	61.5	1.0	7.0	1.0	0	3.0	2.5	0	0	0	0
20	326.0	0.5	274.5	41.5	0.5	4.5	0	0	1.5	3.0	0	0	0	0
21	327.5	0.5	275.5	44.0	1.0	2.0	0	0	1.5	3.0	0	0	0	0
22	168.5	0.5	143.0	20.0	0	2.0	0	0	3.0	0	0	0	0	0
23	121.0	0	102.0	14.0	0.5	2.5	0	0	1.0	1.0	0	0	0	0
<b>Total</b>	<b>12,566.0</b>	<b>18.3</b>	<b>8,926.5</b>	<b>1,856.2</b>	<b>61.3</b>	<b>401.8</b>	<b>548.8</b>	<b>181.3</b>	<b>65.8</b>	<b>497.3</b>	<b>4.8</b>	<b>0</b>	<b>1.0</b>	<b>2.7</b>
<b>%</b>	<b>100.0</b>	<b>0.1</b>	<b>71.0</b>	<b>14.8</b>	<b>0.5</b>	<b>3.2</b>	<b>4.4</b>	<b>1.4</b>	<b>0.5</b>	<b>4.0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>



# New Jersey Department of Transportation

## Daily Volume from 11/01/2016 through 11/03/2016

Site Names: 5-5-306, , NJ 129-1.76, 00000129\_\_, Trenton City  
 County: MERCER  
 Funct. Class: Urban Principal Arterial - Other  
 Location: BET CASS ST AND CO 606 HAMILTON AVE

Seasonal Factor Group: RG3\_FC14  
 Daily Factor Group: RG3\_FC14  
 Axle Factor Group: RG3\_FC14  
 Growth Factor Group: RG3\_FC14

	Sun 10/30/2016			Mon 10/31/2016			Tue 11/01/2016			Wed 11/02/2016			Thu 11/03/2016			Fri 11/04/2016			Sat 11/05/2016		
	ROAD	S	N	ROAD	S	N	ROAD	S	N	ROAD	S	N	ROAD	S	N	ROAD	S	N	ROAD	S	N
00:00										224	122	102	215	120	95						
01:00										127	67	60	156	86	70						
02:00										120	67	53	112	57	55						
03:00										148	62	86	153	72	81						
04:00										288	114	174	291	124	167						
05:00										828	356	472	814	313	501						
06:00										1,810	818	992	1,756	781	975						
07:00										2,372	990	1,382	2,438	933	1,505						
08:00										2,265	832	1,433	2,381	810	1,571						
09:00										1,587	624	963	1,666	649	1,017						
10:00										1,431	697	734	1,405	691	714						
11:00										1,476	725	751	1,507	761	746						
12:00										1,527	762	765	1,573	803	770						
13:00										1,550	809	741	1,632	868	764						
14:00										1,747	1,001	746	1,584	767	817						
15:00							2,358	1,474	884	2,411	1,452	959									
16:00							2,543	1,628	915	2,540	1,594	946									
17:00							2,075	1,137	938	2,036	1,162	874									
18:00							1,544	761	783	1,569	764	805									
19:00							1,137	577	560	1,060	560	500									
20:00							849	494	355	881	476	405									
21:00							770	440	330	739	402	337									
22:00							551	280	271	532	272	260									
23:00							372	187	185	369	198	171									
<b>Volume</b>							12,199	6,978	5,221	29,637	14,926	14,711	17,683	7,835	9,848						
<b>AM Peak Vol</b>										2,372	990	1,433	2,438	933	1,571						
<b>AM Peak Fct</b>										1.00	1.00	1.00	1.00	1.00	1.00						
<b>AM Peak Hr</b>										7:00	7:00	8:00	7:00	7:00	8:00						
<b>PM Peak Vol</b>										2,540	1,594	959									
<b>PM Peak Fct</b>										1.00	1.00	1.00									
<b>PM Peak Hr</b>										16:00	16:00	15:00									
<b>Seasonal Fct</b>							1.024	1.024	1.024	1.024	1.024	1.024	1.024	1.024	1.024						
<b>Daily Fct</b>							0.961	0.961	0.961	0.944	0.944	0.944	1.027	1.027	1.027						
<b>Axle Fct</b>							0.500	0.500	0.500	0.500	0.500	0.500	0.500	0.500	0.500						
<b>Pulse Fct</b>							2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000						

## **Appendix B**

24-Hour Traffic Count on NJ 129 Between  
Cass Street and CR 606 (Hamilton Ave)





# New Jersey Department of Transportation

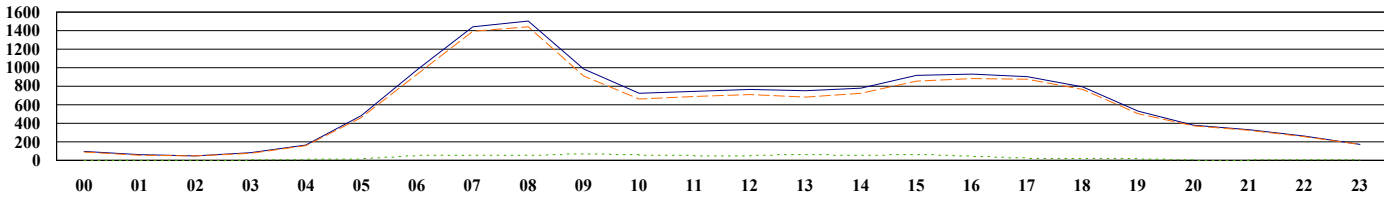
## 24 Hour Directional Summary, North Bound for Nov 1, 2016

5-5-306, , NJ 129-1.76, 00000129\_\_, Trenton City  
 FC14 MERCER County

BET CASS ST AND CO 606 HAMILTON AVE

	Total	Total	Peak	Peak
Private:	14,098.0	94.7	1,443.5	96.2
Single:	592.5	4.0	42.0	2.8
Combo:	149.0	1.0	11.0	0.7
Trucks:	741.5	5.0	53.0	3.5
<b>Total:</b>	<b>14,885.0</b>		<b>1,500.5</b>	

Peak Hour:	8
Axle Factor:	0.98



	VOL	MC	CAR	PU	BUS	2D	SU 3	SU 4+	ST 4-	ST 5	ST 6+	MT 5-	MT 6	MT 7+
0	98.5	0	85.5	10.5	0	1.0	1.0	0	0	0.5	0	0	0	0
1	65.0	0	48.5	11.5	0.5	3.0	1.5	0	0	0	0	0	0	0
2	54.0	0	42.0	7.0	0	1.5	0.5	0	0	3.0	0	0	0	0
3	83.5	0	64.0	16.0	0	1.0	1.0	0.5	0.5	0.5	0	0	0	0
4	170.5	0	131.5	28.5	0	6.5	1.5	0	1.0	1.5	0	0	0	0
5	486.5	0	361.5	104.0	1.0	11.0	1.0	2.0	1.5	4.5	0	0	0	0
6	983.5	1.0	709.5	219.0	4.5	29.5	7.0	8.0	0	5.0	0	0	0	0
7	1,443.0	0.5	1,236.0	154.0	2.0	32.5	8.0	3.0	1.0	6.0	0	0	0	0
8	1,500.5	0	1,266.5	177.0	4.0	34.5	4.0	3.5	1.5	9.0	0	0	0	0.5
9	989.0	0.5	764.5	148.5	4.5	36.0	12.0	8.5	3.0	11.5	0	0	0	0
10	723.5	0	524.5	138.5	3.0	23.5	9.0	6.5	4.5	14.0	0	0	0	0
11	748.5	0.5	561.5	128.5	5.0	22.0	7.5	4.0	4.0	15.5	0	0	0	0
12	767.0	1.0	585.0	128.0	3.0	25.5	10.5	2.0	3.0	9.0	0	0	0	0
13	752.5	1.0	562.0	120.0	3.5	36.5	13.0	6.5	3.0	7.0	0	0	0	0
14	781.5	0.5	583.5	143.0	3.5	28.5	11.0	1.0	2.0	8.5	0	0	0	0
15	921.0	1.0	709.5	145.5	3.0	38.5	11.5	5.0	1.5	4.5	1.0	0	0	0
16	930.5	1.0	741.5	142.5	2.5	27.0	8.5	0.5	1.0	6.0	0	0	0	0
17	905.5	0	728.5	149.0	1.0	21.0	2.0	0	2.0	1.5	0	0	0	0.5
18	794.0	1.0	624.0	144.5	2.0	17.5	3.0	0	0.5	1.5	0	0	0	0
19	530.0	0.5	429.5	79.0	1.5	15.5	0	0	1.5	2.5	0	0	0	0
20	380.0	0.5	316.0	57.0	0	5.0	1.0	0	0	0.5	0	0	0	0
21	333.5	0	288.0	41.0	0	4.0	0	0	0	0.5	0	0	0	0
22	265.5	0.5	218.0	38.5	0.5	4.5	0.5	0	0	3.0	0	0	0	0
23	178.0	0	157.0	19.5	0.5	1.0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>14,885.0</b>	<b>9.5</b>	<b>11,738.0</b>	<b>2,350.5</b>	<b>45.5</b>	<b>426.5</b>	<b>115.0</b>	<b>51.0</b>	<b>31.5</b>	<b>115.5</b>	<b>1.0</b>	<b>0</b>	<b>0</b>	<b>1.0</b>
<b>%</b>	<b>100.0</b>	<b>0.1</b>	<b>78.9</b>	<b>15.8</b>	<b>0.3</b>	<b>2.9</b>	<b>0.8</b>	<b>0.3</b>	<b>0.2</b>	<b>0.8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

# New Jersey Department of Transportation

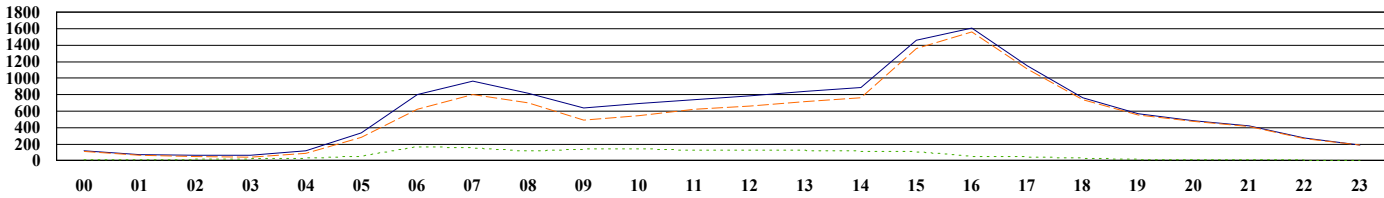
## 24 Hour Directional Summary, South Bound for Nov 1, 2016

5-5-306, , NJ 129-1.76, 00000129\_\_, Trenton City  
 FC14 MERCER County

**BET CASS ST AND CO 606 HAMILTON AVE**

	Total	Total	Peak	Peak
<b>Private:</b>	13,230.5	89.0	1,561.0	97.0
<b>Single:</b>	1,020.5	6.9	23.5	1.5
<b>Combo:</b>	550.0	3.7	23.5	1.5
<b>Trucks:</b>	1,570.5	10.6	47.0	2.9
<b>Total:</b>	14,863.5		1,610.0	

**Peak Hour:** 16  
**Axle Factor:** 0.93



	VOL	MC	CAR	PU	BUS	2D	SU 3	SU 4+	ST 4-	ST 5	ST 6+	MT 5-	MT 6	MT 7+
0	121.0	0	96.5	13.5	0.5	2.5	0.5	0	4.0	3.5	0	0	0	0
1	76.5	0	58.5	8.0	1.0	2.5	0	0	3.0	3.5	0	0	0	0
2	62.0	0	44.5	4.5	1.0	0.5	1.0	4.0	1.0	5.0	0.5	0	0	0
3	66.5	0	35.5	9.0	2.0	1.0	0.5	2.5	2.5	13.5	0	0	0	0
4	119.0	0	74.5	15.0	1.0	3.0	4.5	3.0	1.5	16.5	0	0	0	0
5	334.0	0	217.5	65.0	0.5	9.5	6.0	3.5	3.0	29.0	0	0	0	0
6	799.0	1.5	464.0	156.0	7.5	42.0	58.5	19.0	4.0	46.5	0	0	0	0
7	961.5	1.0	649.5	147.5	9.0	40.5	57.0	12.5	3.5	40.5	0	0	0	0.5
8	820.0	0	571.5	131.5	6.5	26.0	31.0	14.0	1.5	37.0	0	0	0	1.0
9	636.0	0	396.0	98.0	7.0	29.0	60.0	8.5	1.5	36.0	0	0	0	0
10	694.0	0.5	429.0	118.0	7.0	28.0	67.5	8.5	5.0	30.0	0.5	0	0	0
11	742.5	0.5	504.5	118.0	3.0	29.5	44.0	9.0	2.0	31.5	0.5	0	0	0
12	782.0	0.5	545.0	113.0	5.5	28.0	35.0	8.5	5.0	41.0	0.5	0	0	0
13	838.5	0.5	579.0	137.0	2.0	34.5	39.0	6.0	6.0	34.5	0	0	0	0
14	883.5	1.0	629.0	136.5	1.5	40.0	34.0	7.0	2.0	32.5	0	0	0	0
15	1,462.5	1.5	1,164.5	192.5	3.0	28.5	35.5	2.0	6.0	29.0	0	0	0	0
16	1,610.0	2.0	1,369.5	189.5	2.0	15.5	7.0	1.0	6.5	17.0	0	0	0	0
17	1,149.5	0	958.5	149.0	0	21.0	5.0	1.0	3.0	12.0	0	0	0	0
18	762.5	0.5	634.5	104.0	0	14.5	0.5	0	3.5	5.0	0	0	0	0
19	568.5	1.5	491.0	60.0	1.5	8.0	0.5	0	2.5	3.5	0	0	0	0
20	485.0	0	415.0	57.5	0	8.0	0.5	0	1.5	2.5	0	0	0	0
21	421.0	0	359.5	53.0	0	6.0	0	0	1.5	1.0	0	0	0	0
22	276.0	0	239.0	30.5	0	1.5	1.0	0	1.5	2.5	0	0	0	0
23	192.5	0	167.0	20.0	1.0	2.0	0.5	0	1.0	1.0	0	0	0	0
<b>Total</b>	<b>14,863.5</b>	<b>11.0</b>	<b>11,093.0</b>	<b>2,126.5</b>	<b>62.5</b>	<b>421.5</b>	<b>489.0</b>	<b>110.0</b>	<b>72.5</b>	<b>474.0</b>	<b>2.0</b>	<b>0</b>	<b>0</b>	<b>1.5</b>
<b>%</b>	<b>100.0</b>	<b>0.1</b>	<b>74.6</b>	<b>14.3</b>	<b>0.4</b>	<b>2.8</b>	<b>3.3</b>	<b>0.7</b>	<b>0.5</b>	<b>3.2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>



# Appendix C

24-Hour Traffic Count on Cass Street  
Between NJ 29 (John Fitch Way) and NJ 129





**DVRPC#** 145965    **Date** 1/23/2019    **FC** 16    **Weather** FAIR    **MCD** 3402174000 - Trenton    **Road** Cass St    **From Road** NJ 29 John Fitch Way    **To Road** NJ 129    **Speed** 25

**24 Hour Directional Summary, Eastbound for Jan 23, 2019**

HOUR	1	2	3	4	5	6	7	8	9	10	11	12	13	Total	Classification Key
0	0	22	1	0	0	0	0	0	0	0	0	0	0	23	1. Motorcycle
1	0	10	3	0	0	0	0	0	0	0	0	0	0	13	2. Cars trailers
2	0	9	3	0	1	0	0	0	0	0	0	0	0	13	3. Two axle long
3	0	5	1	0	0	0	0	0	0	0	0	0	0	6	4. Buses
4	0	21	10	0	2	0	0	0	1	0	0	0	0	34	5. Two axle, six tire
5	0	84	13	0	1	0	1	0	0	0	0	0	0	99	6. Three axle single
6	1	103	16	1	4	6	0	1	2	0	0	0	0	134	7. Four axle single
7	7	193	16	1	7	2	2	0	0	0	0	0	0	228	8. Less than five axle double
8	6	186	11	4	6	0	1	0	0	0	0	0	0	214	9. Five axle double
9	5	167	9	1	3	3	0	2	0	0	0	0	0	190	10. Greater than five axle double
10	7	122	21	1	11	3	2	0	1	0	0	0	0	168	11. Less than six axle multi
11	2	124	20	2	4	6	0	0	0	0	0	0	0	158	12. Six axle multi
12	1	178	17	0	13	7	2	0	1	0	0	0	0	219	13. Greater than six axle multi
13	4	171	25	2	9	7	0	0	3	0	0	0	0	221	
14	11	210	13	1	6	3	1	1	1	0	0	0	0	247	
15	8	284	21	1	3	2	1	0	1	0	0	0	0	321	
16	5	232	17	0	2	2	0	0	0	0	0	0	0	258	
17	2	206	18	2	5	1	0	0	0	0	0	0	0	234	
18	6	163	18	0	5	0	0	0	0	0	0	0	0	192	
19	0	125	12	0	4	0	0	0	0	0	0	0	0	141	
20	3	98	9	1	1	0	0	0	0	0	0	0	0	112	
21	3	106	7	0	0	1	0	0	0	0	0	0	0	117	
22	1	88	10	0	0	0	0	0	0	0	0	0	0	99	
23	0	58	2	0	0	0	0	0	0	0	0	0	0	60	
<b>Total</b>	<b>72</b>	<b>2,965</b>	<b>293</b>	<b>17</b>	<b>87</b>	<b>43</b>	<b>10</b>	<b>4</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,501</b>	
<b>Percent</b>	<b>2.1%</b>	<b>84.7%</b>	<b>8.4%</b>	<b>0.5%</b>	<b>2.5%</b>	<b>1.2%</b>	<b>0.3%</b>	<b>0.1%</b>	<b>0.3%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>100.0%</b>	

DVRPC# Date FC Weather MCD Road From Road To Road Speed  
 145965 1/23/2019 16 FAIR 3402174000 - Trenton Cass St NJ 29 John Fitch Way NJ 129 25

**24 Hour Directional Summary, Westbound for Jan 23, 2019**

HOUR	1	2	3	4	5	6	7	8	9	10	11	12	13	Total	Classification Key
0	0	33	3	0	1	0	0	0	0	0	0	0	0	37	1. Motorcycle
1	0	21	4	0	0	0	0	0	1	0	0	0	0	26	2. Cars trailers
2	0	12	1	0	0	0	0	1	0	0	0	0	0	14	3. Two axle long
3	2	5	2	2	1	2	0	1	1	0	0	0	0	16	4. Buses
4	0	18	3	0	0	1	0	0	3	0	0	0	0	25	5. Two axle, six tire
5	8	56	14	1	0	19	2	1	3	0	0	0	0	104	6. Three axle single
6	7	108	32	7	8	19	15	2	4	0	0	0	0	202	7. Four axle single
7	8	256	45	1	19	20	18	2	3	0	0	0	0	372	8. Less than five axle double
8	13	286	29	6	21	20	6	0	2	0	0	0	0	383	9. Five axle double
9	4	170	25	7	15	22	15	1	4	0	0	0	0	263	10. Greater than five axle double
10	11	140	28	1	9	21	16	5	4	1	0	0	0	236	11. Less than six axle multi
11	2	146	20	6	10	17	18	0	5	0	0	0	0	224	12. Six axle multi
12	3	168	21	3	16	31	12	1	9	0	0	0	0	264	13. Greater than six axle multi
13	8	189	25	3	9	15	8	3	5	0	0	0	0	265	
14	7	217	27	3	17	11	21	1	2	0	0	0	0	306	
15	8	238	22	4	16	5	13	2	4	0	0	0	0	312	
16	8	265	27	0	7	10	7	1	6	0	0	0	0	331	
17	0	194	27	2	8	2	0	0	4	0	0	0	0	237	
18	5	182	24	2	3	1	0	0	1	0	0	0	0	218	
19	2	145	19	0	7	0	1	0	1	0	0	0	0	175	
20	2	125	15	1	1	1	0	1	0	0	0	0	0	146	
21	3	111	13	1	1	3	0	0	1	0	0	0	0	133	
22	1	84	13	1	3	1	0	0	0	0	0	0	0	103	
23	2	53	6	0	0	2	0	0	0	0	0	0	0	63	
Total	104	3,222	445	51	172	223	152	22	63	1	0	0	0	4,455	
Percent	2.3%	72.3%	10.0%	1.1%	3.9%	5.0%	3.4%	0.5%	1.4%	0.0%	0.0%	0.0%	0.0%	100.0%	

# Appendix D

## NJDOT Traffic Weight Regulations: Route NJ 29 and US 1





# **Traffic Regulations**

## **Orders of the Commissioner of Transportation**

### **Weight Regulations**

#### **Route NJ 29**

**(a) The certain parts of State Highway Route NJ 29 described in this subsection prohibit certain classes of vehicles as described below:**

**1. In Mercer County:**

**i. In the City of Trenton:**

- (1) Trucks and truck-trailer combinations over 26,000 pounds gross registered vehicle weight, gross vehicle weight rating, or gross combination weight rating, regardless of their dimensions are prohibited for both directions of traffic, except emergency vehicles, government owned, or government leased vehicles:
  - (A) Between Route NJ 129 and the northerly intersection of the Trenton Tunnel (approximate mileposts 1.64 to 2.60).
- (2) Trucks and truck-trailer combinations over 26,000 pounds gross registered vehicle weight, gross vehicle weight rating, or gross combination weight rating, regardless of their dimensions are prohibited for both directions of traffic, except emergency vehicles, government owned, or government leased vehicles, or to vehicles which have an origin or final destination on or within three miles of the prohibited section, or are making an actual pickup, delivery, or providing services:
  - (A) Between the northerly intersection of the Trenton Tunnel and Route US 1 (approximate mileposts 2.60 to 3.37).
- (3) Trucks and truck-trailer combinations over 26,000 pounds gross registered vehicle weight, gross vehicle weight rating, or gross combination weight rating, regardless of their dimensions are prohibited for both directions of traffic, except emergency vehicles, government owned, or government leased vehicles, vehicles engaged in the commercial delivery of rapidly setting concrete mixtures, vehicles making an actual pickup, delivery, providing services, or have an origin or final destination on or within three miles of the prohibited sections:
  - (A) Between Route US 1 and the City of Trenton — Ewing Township corporate line (approximate mileposts 3.37 to 6.93).



# **Traffic Regulations**

## **Orders of the Commissioner of Transportation**

### **Weight Regulations**

#### **Route US 1**

**(a) The certain parts of State Highway Route US 1 described in this subsection prohibit certain classes of vehicles as described below:**

**1. In Mercer County:**

**i. In the City of Trenton:**

(1) Trucks over four (4) tons gross vehicle weight prohibited for the northbound direction of traffic:

(A) From Route US 1 onto the exit ramp of Perry Street (approximate milepost 1.34).

# Appendix E

## City of Trenton Schedule XIV Truck Routes





*14 Attachment 15***Schedule XIV  
Truck Route**

In accordance with the provisions of Subsection 14-3.4, the streets or parts of streets described in this schedule are hereby designated as a route for trucks over four tons gross weight. All trucks over four tons gross weight are hereby excluded from all other streets, except for the pickup or delivery of materials along such streets.

<b>Name of Street</b>	<b>Location</b>
North Broad Street	Entire length
South Broad Street	Entire length
Brunswick Avenue	Entire length
Calhoun Street	Entire length
Calhoun Street Extension	Between NJ Rte. 129 and South Broad Street
Cass Street [ <b>Repealed 4-2-2015 by Ord. No. 15-02</b> ]	
Chambers Street	Entire length
North Clinton Avenue <sup>1</sup>	Between East State and Perry Streets Between North Olden Avenue and City of Trenton - Township of Hamilton Line
South Clinton Avenue	Between State Street and Hamilton Avenue
Enterprise Avenue	Entire length
East Front Street	Between Warren Street and Montgomery Street
Greenwood Avenue	Between Barlow Circle and City of Trenton Hamilton Township Line
Hamilton Avenue	Between South Clinton Avenue and City of Trenton- Hamilton Township Line
Ingham Avenue	Between Calhoun Street and Parkway Avenue
Lafayette Street	Entire length
Lalor Street	Between NJ Rte. 129 and South Broad Street
Lamberton Road	Between Lamberton Street and its southerly terminus
Lamberton Street	Between John Fitch Parkway and Lamberton Road
Lincoln Avenue	Entire length

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<sup>1</sup>**Editor's Note: This ordinance shall expire and terminate with the completion of the demolition of the North Clinton Avenue "Old Stone" Bridge over Conrail and the associated reconstruction of North Clinton Avenue.**

<b>Name of Street</b>	<b>Location</b>
Market Street	Entire length
North Montgomery Street	Between Brunswick Avenue and Perry Street
South Montgomery Street	Between Front Street and State Street
Mulberry Street	Entire length
New York Avenue	Sylvester Street to City Line
North Olden Avenue	Entire length
South Olden Avenue	Entire length
Parkway Avenue	Entire length
Pennington Avenue	Entire length
Perry Street	Entire length
Plum Street [ <b>Added 4-22-2010 by Ord. No. 10-19</b> ]	Between Enterprise Avenue and Breunig Avenue (trucks are prohibited on Breunig Avenue and Klagg Avenue)
Princeton Avenue	Entire length
Southard Street	Between Perry Street and Princeton Avenue
	Between Princeton Avenue and Calhoun Street
East State Street	Entire length
Strawberry Street	Entire length
Sullivan Way	Entire length
North Warren Street	Entire length
South Warren Street	Entire length



## ABSTRACT

**Title:** City of Trenton Truck Network

**Publication Number:** TM18026

**Date Published:** June 2019

**Geographic Area Covered:**

City of Trenton, New Jersey

**Key Words:**

Freight, Truck, City of Trenton, New Jersey

**Abstract:**

DVRPC seeks to define a process and establish evaluation criteria to begin developing an appropriate truck network in the City of Trenton. The resulting product(s) should help lead to establishing guidelines for supporting various large, heavy vehicle truck traffic in the City. In addition, resulting products are intended to provide guidance for trucks and fleet operations. These efforts will hopefully improve the planning process for managing trucks passing through the City, and co-exist with the pedestrian, bike, and transit networks.

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