NEW JERSEY DEPARTMENT OF TRANSPORTATION

New Jersey
Department of
Transportation

LARGE TRUCK ORIGIN/DESTINATION SURVEY

NJ Department of Transportation
Bureau of Trucking Services

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF FREIGHT SERVICES

US ROUTE 206 AND US ROUTE 202/NJ ROUTE 31
LARGE TRUCK ORIGIN/DESTINATION SURVEY

I. INTRODUCTION – STUDY PURPOSE AND NEED

Located within one of the most densely populated, richest consumer markets in the world, and home to the largest maritime port on the east coast (the Newark/Elizabeth Seaport complex), New Jersey represents a key region in the national goods movement logistics chain. The goods movement industry represents a major component of the regional and statewide economy, providing hundreds of thousands of jobs for New Jersey residents. However, the economic vitality that goods movement represents comes at a price.

At some point in their travels between production centers and points of consumption, virtually all goods are transported by truck. The truck transport component may be lengthy (cross-country) or short (local distribution between a warehouse and a retail outlet). However necessary, whether long distance of local distribution, trucks moving along local and regional roadways have an impact of transportation network operations, mobility, and the quality of life throughout New Jersey. This condition remains even after the goods have been consumed. One often overlooked component of the goods movement logistics chain is the need to dispose of the residual waste that is created by each and every resident and business.

Not every roadway or community is affected to the same extent. Areas that are primarily residential in character typically experience lesser truck activity levels than areas characterized by dense industrial, commercial or retail development. Further, neighborhoods along or adjacent to local and regional arterial roadways are typically affected to a greater extent that rural, more secluded locations. It is certainly understandable when specific communities express concerns related to the nature and extent of trucking activity on the local roadways that affect their daily lives.

The key question to be asked may be paraphrased as:

> ***"Is it really necessary for the trucks traveling along a particular roadway to be there, or are there reasonable alternative travel paths available for use by these trucks".***

In preparation for the adoption of new regulations governing the movement of 102-inch wide trucks in New Jersey, NJDOT has launched an initiative that will closely monitor the volume and patterns of large truck movements throughout the state over the next 5 years. The new regulations have been designed to require 102-inch wide trucks to utilize the National Network to the greatest extent possible when making their trip. This 5 year program will provide NJDOT with much needed data on the volume and patterns of trucks along key freight corridors.

As a mechanism for addressing the key question above, as well as provide additional data to inform the decision making process, the New Jersey Department of Transportation commissioned a face-to-face interview survey of large trucks traveling along US Route 206 in Hillsborough, Somerset County, New Jersey, and along US Route 202/NJ Route 31 in West Amwell, Hunterdon County, New Jersey. These two roadway corridors are locations where concerns about large trucks have historically been raised.

The primary purposes of this survey effort were to:

- Establish a baseline of truck volumes and origin/destination patterns in advance of the adoption of the new statewide regulation governing operations of 102-inch wide trucks.
- Identify how many of the trucks traveling along these roadways would be affected by the pending regulations.
- Quantify the proportion of large trucks that have a legitimate local business need to utilize these roadways versus how many are utilizing these roadways for through trips.
- Determine the potential for diverting longer-distance through trips away from these local arterials onto the national highway network.

It is anticipated that additional surveys will be conducted at these and other locations in the future to assess the effectiveness of these new regulations.

II. LARGE TRUCK REGULATORY CONTEXT

Regulations which were enacted in 1999 and were in effect at the time of the survey (Fall of 2007) restricted 102-inch wide standard trucks and double–trailer truck combinations from making through trips (trips that do not have an origin or destination within New Jersey) to specific roadways. This regulation was codified in the New Jersey Administrative Code, 16:32-1.1.

> ***CHAPTER 32 TRUCK ACCESS SUBCHAPTER 1 DESIGNATED ROUTES FOR DOUBLE-TRAILER TRUCK COMBINATIONS AND 102-INCH WIDE STANDARD TRUCKS 16:32-1.1 Purpose: This chapter outlines the standards and procedures applicable to double-trailer truck combinations and 102-inch wide standard truck operations within the State of New Jersey with regard to permitted routes, width restrictions, length requirements, access to terminals and other facilities, and appeal procedures. The purpose of this chapter is to protect the public interest by assuring that specified vehicles are operated on suitable roadways.***

The 1999 regulations generally restricted 102-inch wide and double-trailer trucks from using state highways that have physical characteristics that detract from suitability to be included in the truck network. When making a trip that does not include a local delivery of pick-up, these trucks are generally permitted to travel up to two miles from the national network to facilities providing food, fuel, rest and repairs. However, they were restricted from doing so using highways, roads, streets, public alleys or other thoroughfares that cannot safely accommodate a truck wider than 96 inches as designated by the NJDOT.

The 1999 truck regulations were challenged, with a lower court ruling that New Jersey's truck routing rules violated the provisions of the Commerce Clause of the U.S. Constitution. This decision was subsequently upheld by the U.S. Third Circuit Court of Appeal. Under the direction of Governor Jon S. Corzine, this decision was raised to the U.S. Supreme Court, which declined to hear the appeal on October 2, 2006.

Current New Jersey Department of Transportation rules apply the routing requirements equally to both interstate and intrastate 102-inch wide standard trucks and double-trailer truck combinations. These rules were developed through consultation with a truck task force, chaired by the Commissioner of Transportation, consisting of affected constituency groups, including the League of Municipalities, the North Jersey Transportation Planning Authority, the New Jersey State Police and the New Jersey Motor Truck Association. These rules, as adopted, appeared in the January 22, 2008 *New Jersey Register*, where they were effective upon publication. In summary, these rules state that large trucks are permitted to use the New Jersey Network as well as the National Network regardless of their origin and destination, with a provision that they utilize the most direct route between their origin and destination. The New Jersey Network consists of roadways secondary to the National Network. These roadways often traverse populated areas (both residential and commercial), and include such key roadways as US Route 9, NJ Route 31, US Route 130, US Route 206 and US Route 202.

While trucks traveling through New Jersey are generally required to utilize the national network and designated roadways, the new regulations focus on allowing “reasonable access to

terminals and other facilities". This extends to the consideration of a route's reasonableness for use even if the origin or destination of the trip is outside of New Jersey in nearby portions of Pennsylvania and New York State.

Currently, there is no mechanism in place by which the effects of the revised truck regulations may be quantified and assessed. To address this shortcoming, a face-to-face truck interview survey program was developed to clarify the travel patterns of large trucks along key roadways, and to quantify the number of large trucks that may be affected by the new regulations.

III. SURVEY METHODOLOGY

A strict, detailed survey methodology was developed for implementation to ensure:

- Delays to the truck drivers was minimized.
- The highest proportion of trucks possible was captured.
- Collected data was consistent and reproducible.

Traffic control plans compliant with the Manual on Uniform Traffic Control Devices (MUTCD) were developed for each survey location to ensure the safety of the survey personnel and the motoring public. These plans incorporated advanced signage directing tractor trailers to exit the roadway and enter a channelized lane within the survey area. The approach to the survey area will be limited to a single travel lane. A traffic director (state police) will direct large trucks (96" or wider) to enter the work area. The work areas have been configured to provide space for a minimum of four trucks with trailers. Surveyors will conduct the face-to-face interviews within a designated zone which will be protected by impact attenuation vehicles and cones.

Within the lane, the trucks were brought to a stop, where survey technicians measured the truck and posed a list of pre-prepared questions to the driver. In addition to the formal questions, the surveyors took photographs of each truck and recorded additional information obtainable from the truck via brief visual inspection. The process was designed to be completed in approximately 60 seconds per interviewed vehicle. The survey form utilized in the survey process is depicted on Figure 1.

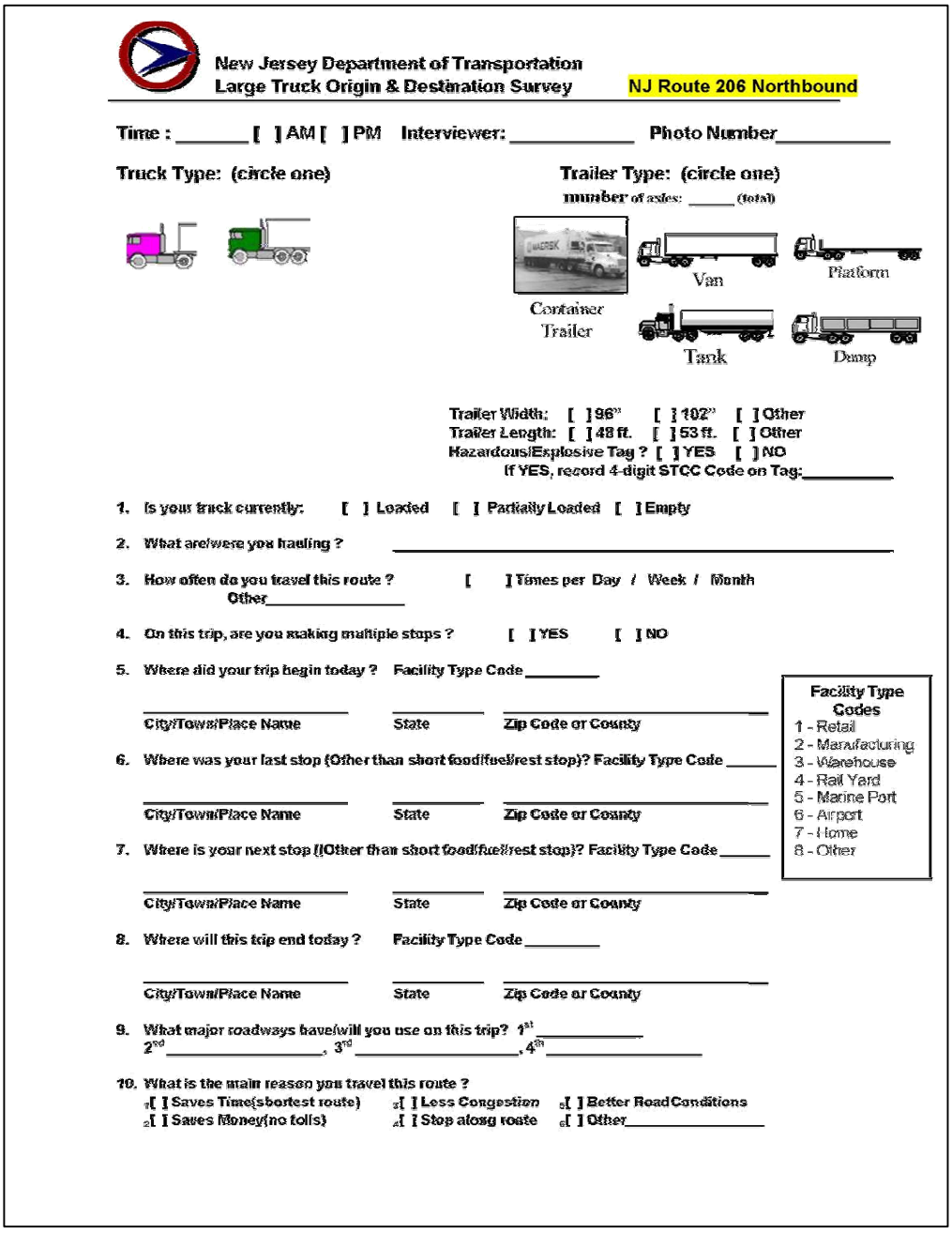
Driver interviews were conducted from the driver's side of the vehicle. Each surveyor was provided with a binder of survey forms and instructions. Following is a summary of the process followed for each interview:

1. Approach the truck only after it has come to a complete stop.
2. Offer a friendly greeting.
3. Brief explanation of the survey. For example, **"We are conducting a brief survey to identify the travel patterns of large trucks in New Jersey in an effort to better understand the needs of the trucking industry and concerns of the public. The survey is only a few questions and should take about 1 minute."**
4. Ask the listed questions in order.
5. Do not engage in excess discussion. If the driver has difficulty understanding or answering a question, skip to the next question and leave the previous response blank.
6. If the driver behaves or speaks in an inappropriate manner, simply say "Thank you for your time" and step away from the truck. Notify the State Police Trooper on site of the incident.
7. Upon completion of the interview, offer a closing "Thank You" for your help with the survey and step away from the truck.
8. Resume your assigned position and await the next vehicle.

9. The State Troopers on the site assumed exclusive control in directing trucks into and out of the survey area.

While a wide array of data were collected, emphasis was placed upon obtaining detailed information related to the drivers trip origin(s) and destination(s). As a mechanism for reducing and analyzing the survey responses, each survey form was coded and entered into a MS-Access Database. This database allowed tabulation of a wide array of statistics, and extraction of key patterns and trends exhibited by the surveyed truck drivers.

Figure 1
Sample Survey Form



New Jersey Department of Transportation
Large Truck Origin & Destination Survey — NJ Route 206 Northbound

Time : _____ [ ] AM [ ] PM Interviewer: _____ Photo Number_____

Truck Type: (circle one)

Trailer Type: (circle one)
number of axles: _____ (total)

Container Trailer · Van · Platform · Tank · Dump

Trailer Width: [ ] 96" [ ] 102" [ ] Other
Trailer Length: [ ] 48 ft. [ ] 53 ft. [ ] Other
Hazardous/Explosive Tag ? [ ] YES [ ] NO
If YES, record 4-digit STCC Code on Tag:_____

1. Is your truck currently: [ ] Loaded [ ] Partially Loaded [ ] Empty
2. What are/were you hauling ? _____
3. How often do you travel this route ? [ ] Times per Day / Week / Month
   Other_____
4. On this trip, are you making multiple stops ? [ ] YES [ ] NO
5. Where did your trip begin today ? Facility Type Code _____
   City/Town/Place Name _____ State _____ Zip Code or County _____
6. Where was your last stop (Other than short food/fuel/rest stop)? Facility Type Code _____
   City/Town/Place Name _____ State _____ Zip Code or County _____
7. Where is your next stop (Other than short food/fuel/rest stop)? Facility Type Code _____
   City/Town/Place Name _____ State _____ Zip Code or County _____
8. Where will this trip end today ? Facility Type Code _____
   City/Town/Place Name _____ State _____ Zip Code or County _____
9. What major roadways have/will you use on this trip? 1st _____
   2nd _____, 3rd _____, 4th _____
10. What is the main reason you travel this route ?
    [ ] Saves Time(shortest route) [ ] Less Congestion [ ] Better Road Conditions
    [ ] Saves Money(no tolls) [ ] Stop along route [ ] Other_____

Facility Type Codes
1 - Retail
2 - Manufacturing
3 - Warehouse
4 - Rail Yard
5 - Marine Port
6 - Airport
7 - Home
8 - Other

IV. SURVEY LOCATION – US ROUTE 206

Survey Site Description

The first roadway identified for observations through the survey was US Route 206 in Montgomery Township and Hillsborough Township. Due to limitations presented by the physical space needed to conduct the surveys, the survey of trucks traveling along northbound and southbound US Route 206 was conducted in two separate locations. On October 23, 2007, from 7:00 AM to 5:00 PM, the northbound trucks diverted from the highway onto Bridgepoint Road in Belle Mead, while the southbound trucks were diverted into the former Veterans Administration Supply Depot property located south of Brown Avenue in Hillsborough. These locations are depicted on Figures 2 through 4 below.

Figure 2
US Route 206 Survey Locations
Northbound: MP 59.0 Montgomery Twp
Southbound: MP 68.3 Hillsborough

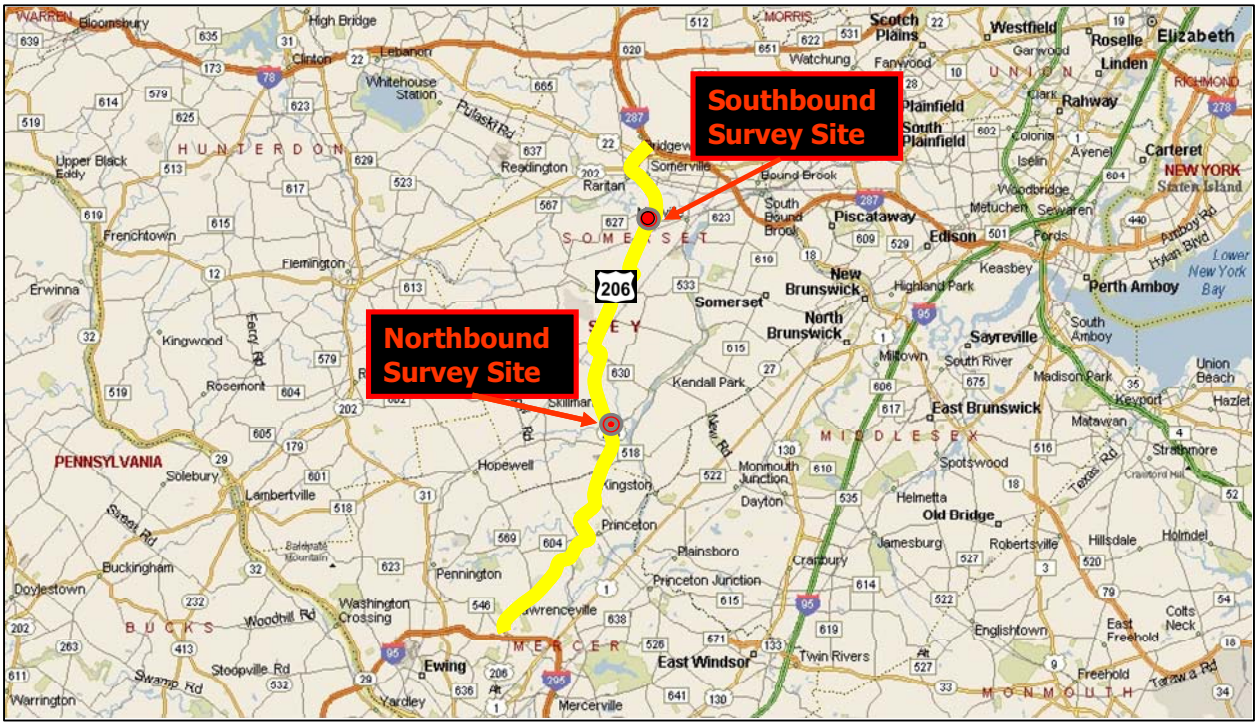


Figure 3
US Route 206 Northbound Survey Detour MP 59.0

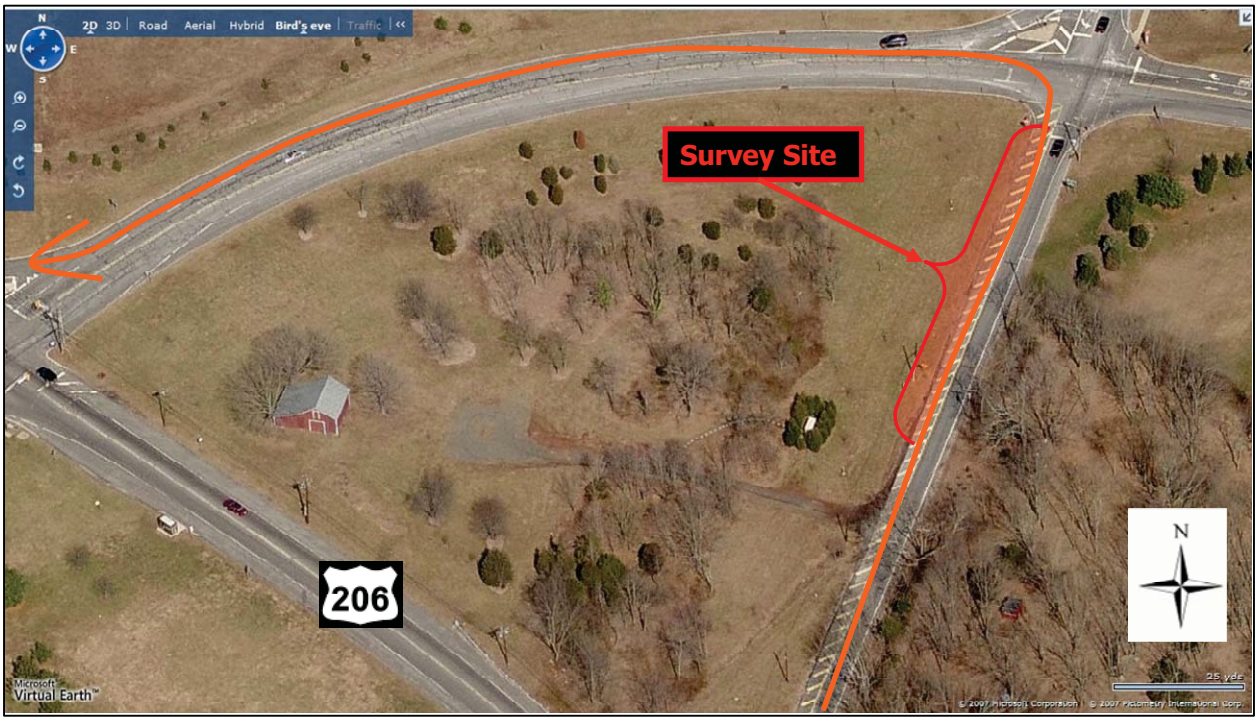
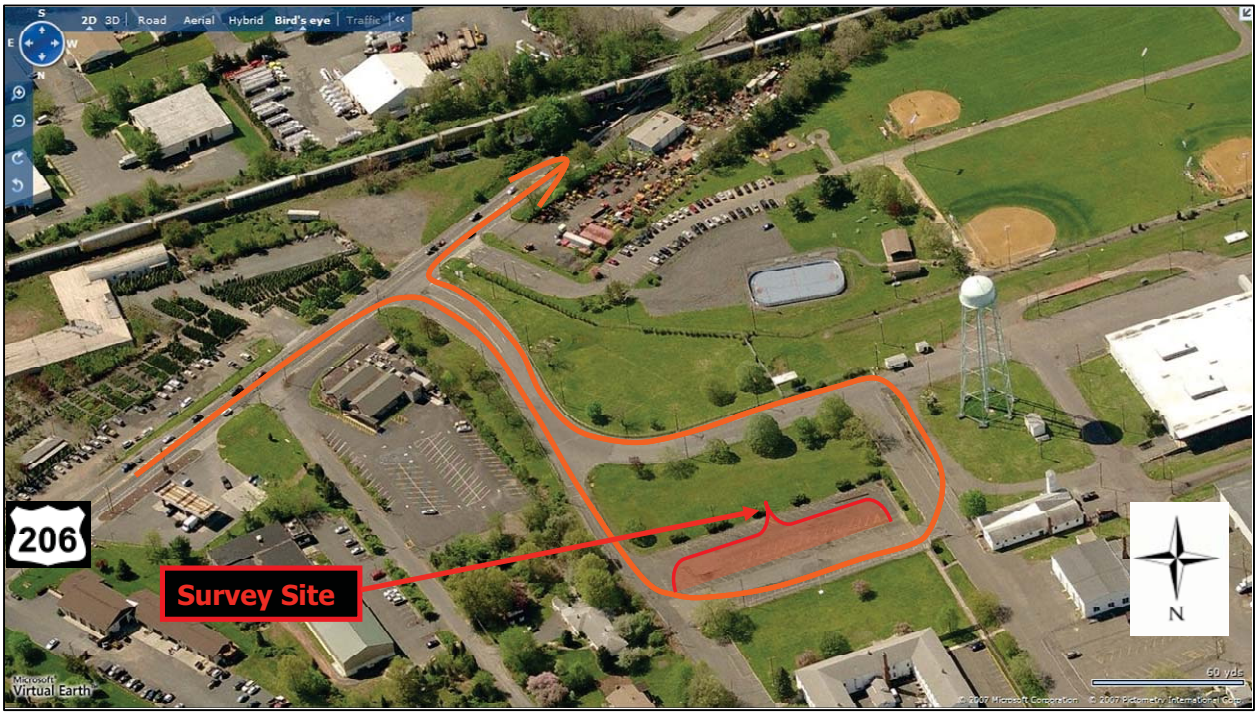


Figure 4
US Route 206 Southbound Survey Detour MP 68.3



Pre-Survey Traffic Volumes Data – US Route 206

As a preliminary assessment prior to conducting the actual survey of large trucks, existing and available data were assembled and reviewed to determine: the overall magnitude of traffic volumes on the survey corridors; percentage of large trucks in the traffic stream; and hourly distribution patterns of the large truck flows. These data were applied in identifying the survey location, designing a survey staging area with adequate space for queuing of trucks, and determining the appropriate staffing level for each survey location.

Table 1 summarizes the assembled traffic count and vehicle classification data at various locations along the US Route 206 corridor near the northbound survey location. As shown in the table, large truck volumes are substantially lower along the Route 206 corridor than along the Route 31 corridor. On average, large trucks comprised approximately 2 percent of the total traffic volumes. During the survey period, approximately 10 large trucks travel in each direction during each hour.

Table 1
Vehicle Classification Count Summary – US Route 206

				Weekday Averages				
Timeframe	**MP/ Source**	**Township / Location**	**Date(s)**	**Direction**	**TOTAL**	**Cars and Lt Trucks**	**Large Trucks ***	**Lg Trk %age**
6-7 years prior to O/D survey	**MP 59.5** Automatic Vehicle Class.	Montgomery Twp. (just south of Opussum Rd)	**Apr. 2001 to Sep. 2002**	NB	8,311	7,729	171	2.1%
				SB	8,919	8,364	184	2.1%
				TOTAL	17,230	16,093	**355**	2.1%
2 Years Prior to O/D survey	**MP 56.6** Class. By Tubes	Princeton Twp. Arreton Rd. (east of Ewing St.)	**Nov. 11, 2005**	NB	11,682	9,797	154	1.3%
				SB	11,360	9,667	172	1.5%
				TOTAL	23,042	19,464	**326**	1.4%
9 Months Prior to O/D survey	**MP 55.8** Class. By Tubes	Princeton Twp. @ Hilltop Dr (near Ewing St.)	**Jan. 30, 2007 to Feb. 1, 2007**	NB	11,210	10,598	176	1.6%
				SB	10,416	9,829	177	1.7%
				TOTAL	21,626	20,427	**353**	1.6%
Fall 2007 @ time of O/D survey	**MP 59.5** Portable Weigh-in-Motion	Montgomery Twp. (just south of Opussum Rd)	**Oct. 19, 2007 to Dec. 12, 2007**	NB	8,960	8,548	155	1.7%
				SB	8,572	8,201	152	1.8%
				TOTAL	17,532	16,749	**307**	1.8%
1 Year after O/D survey	**MP 59.5** Weigh-in-Motion	Montgomery Twp. (just south of Opussum Rd)	**Oct. 1, 2008 to Oct. 23, 2008**	NB	9,469	9,019	154	1.6%
				SB	9,175	8,607	148	1.6%
				TOTAL	18,644	17,626	**302**	1.6%

* Large Trucks = Class 8 and larger

Survey Day Traffic Volumes

In addition to the historic count information, traffic volume and classification data was collected during the week of the actual survey effort. These data were reviewed to ensure that the survey was conducted on a day when total travel demand and the proportion of trucks were consistent with typical operations.

During the survey period, a total of 93 northbound US Route 206 tractor-trailer trucks were stopped and surveyed. Due to safety considerations and space limitations within the survey area, 4 Trucks bypassed the site and were not surveyed. The total volume of traffic, including trucks, was heavier in the southbound direction than in the northbound direction. During the survey period, 193 southbound US Route 206 tractor-trailer trucks were stopped and surveyed. A total of 22 trucks were allowed to bypass the site and were not surveyed. Figures 5 and 6 depict the hourly proportion of trucks surveyed.

Figure 5
Proportion of Trucks Surveyed – US-206 Northbound

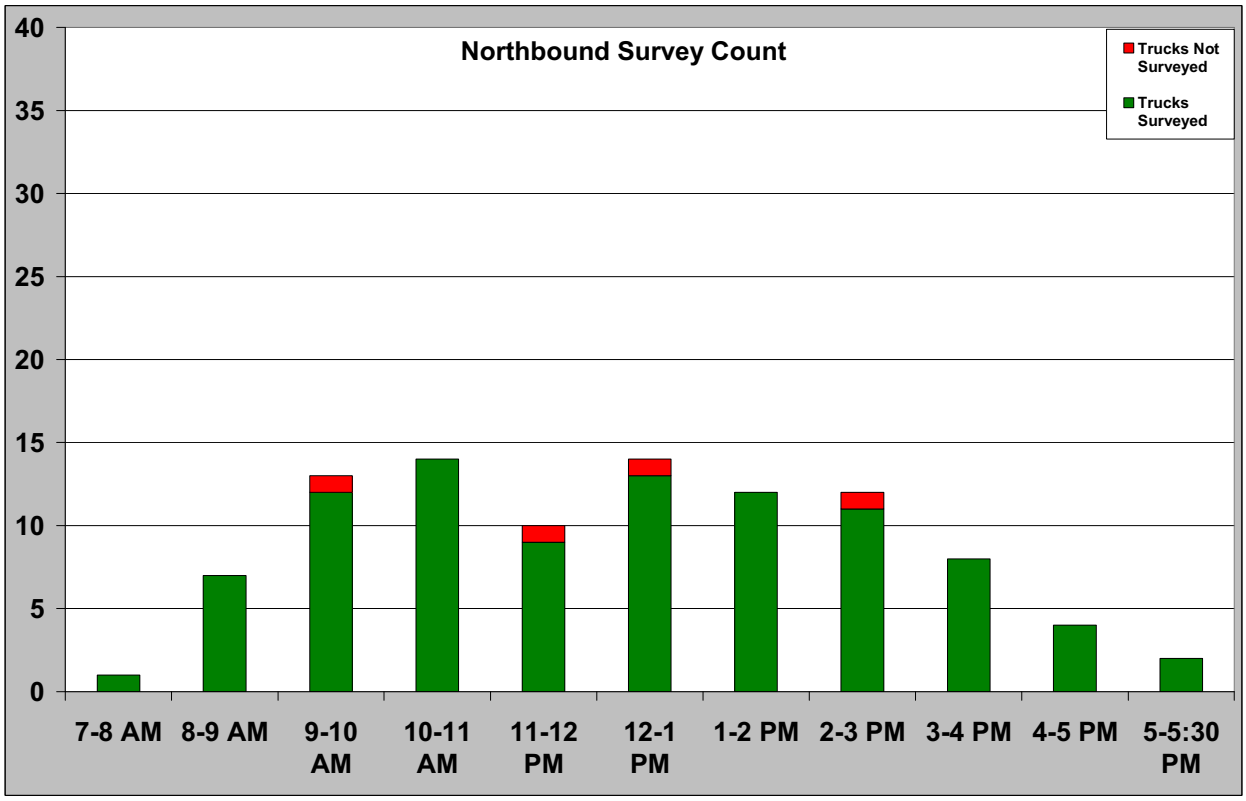
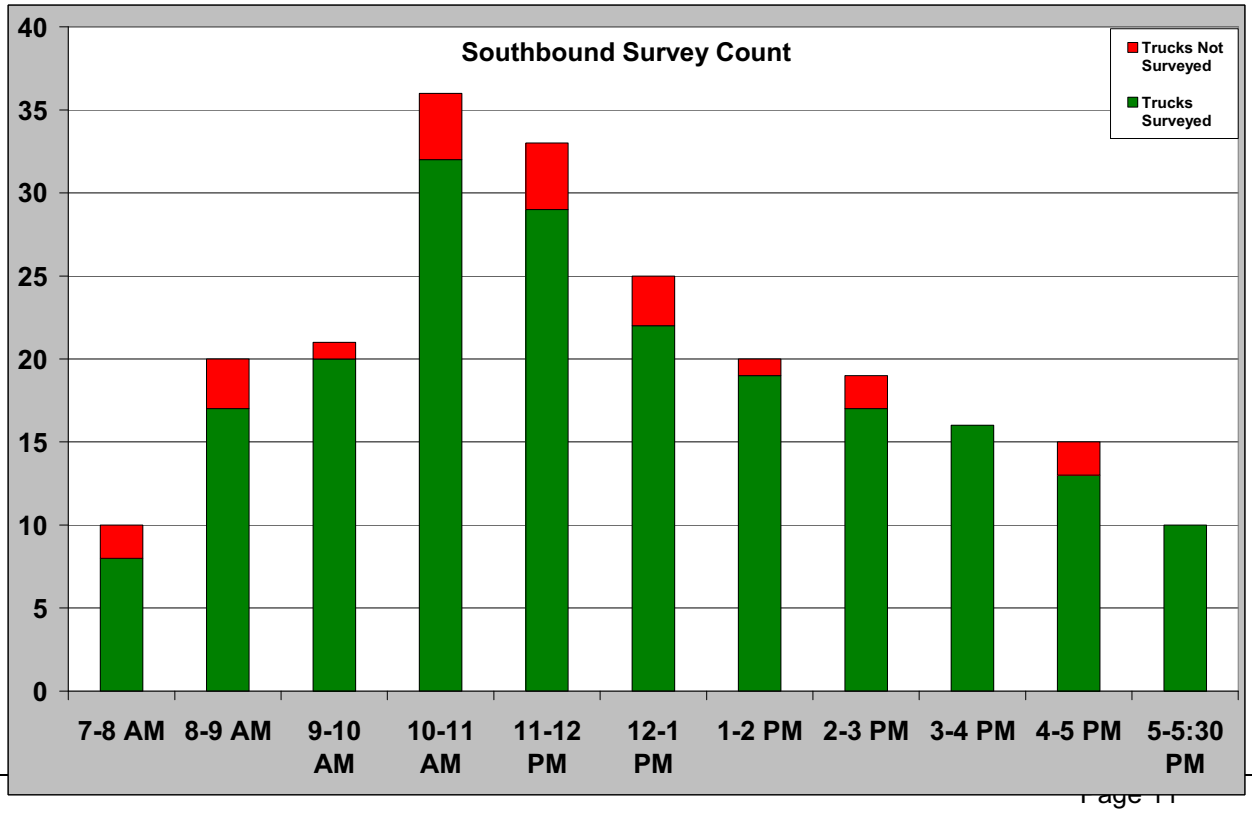


Figure 6
Proportion of Trucks Surveyed – US-206 Southbound



V. SURVEY FINDINGS - US ROUTE 206

The survey of tractor trailers was conducted along US Route 206 described above on October 23, 2007. The survey period encompassed daylight hours only, with interviews being conducted from approximately 7:30 AM to 5:00 PM. The surveys were conducted in the two locations described above. Northbound traffic was surveyed in Montgomery Township at the intersection of US Route 206 and Bridge Point Road. Southbound traffic was surveyed in Hillsborough Township at the Veterans Industrial Park (formerly the Veterans Administration Supply Depot).

The primary purpose of this survey was two fold: To understand the large truck traffic on the US Route 206 corridor and estimate the proportion of the truck traffic that has a purpose being on 206 (i.e.: What proportion of the truck traffic along this roadway would be affected by the pending large truck regulations).

Weigh in Motion ("WIM") traffic volume and vehicle classification data was extracted and reviewed for the week covering the survey day. The daily traffic volumes and proportion of trucks in the traffic stream were compared on a day to day basis to ensure that the survey day traffic flows were typical. The WIM data were further utilized to quantify the total volume of trucks along the surveyed roadway, and the proportion of trucks captured in the interviews. Key findings in the comparison of typical daily traffic patterns along US Route 206 northbound between 7:00 AM and 5:00 PM are summarized in Table 2.

Table 2
Daily Weekday Volume from WIM Station
US Route 206 MP 59.0 (Northbound Survey Location)

Large Trucks

- Average Daily Truck Volume: 106 (*1.7% of total traffic)*
- Daily Truck Volume Standard Deviation: ± 16 (15.1%)
- Range in Daily Truck Volume: 52-133 ± 26-51%
- Peak Truck Volume period: 9:00 Am through 1:00 PM

Cars

- Average Daily Automobile Volume: 5,811
- Daily Automobile Volume Standard Deviation: ± 321 (5.5%)
- Range in Daily Automobile Volume: 4,508 – 6,408 ± 10-22%
- Peak Automobile Volume Period: NB (7:00-8:00AM), SB (5:00-6:00PM)

In addition to validating the survey day as being "typical", the assembled data were analyzed to determine the hourly volume of trucks captured in the survey versus the typical hourly volumes. Key comparisons on an hourly basis are depicted on Figures 7 and 8 for the northbound and southbound survey locations, respectively.

Figure 7
Average Hourly Weekday Large Truck Volume Compared to Survey Day
with one standard deviation vertical bars
US Route 206 Northbound

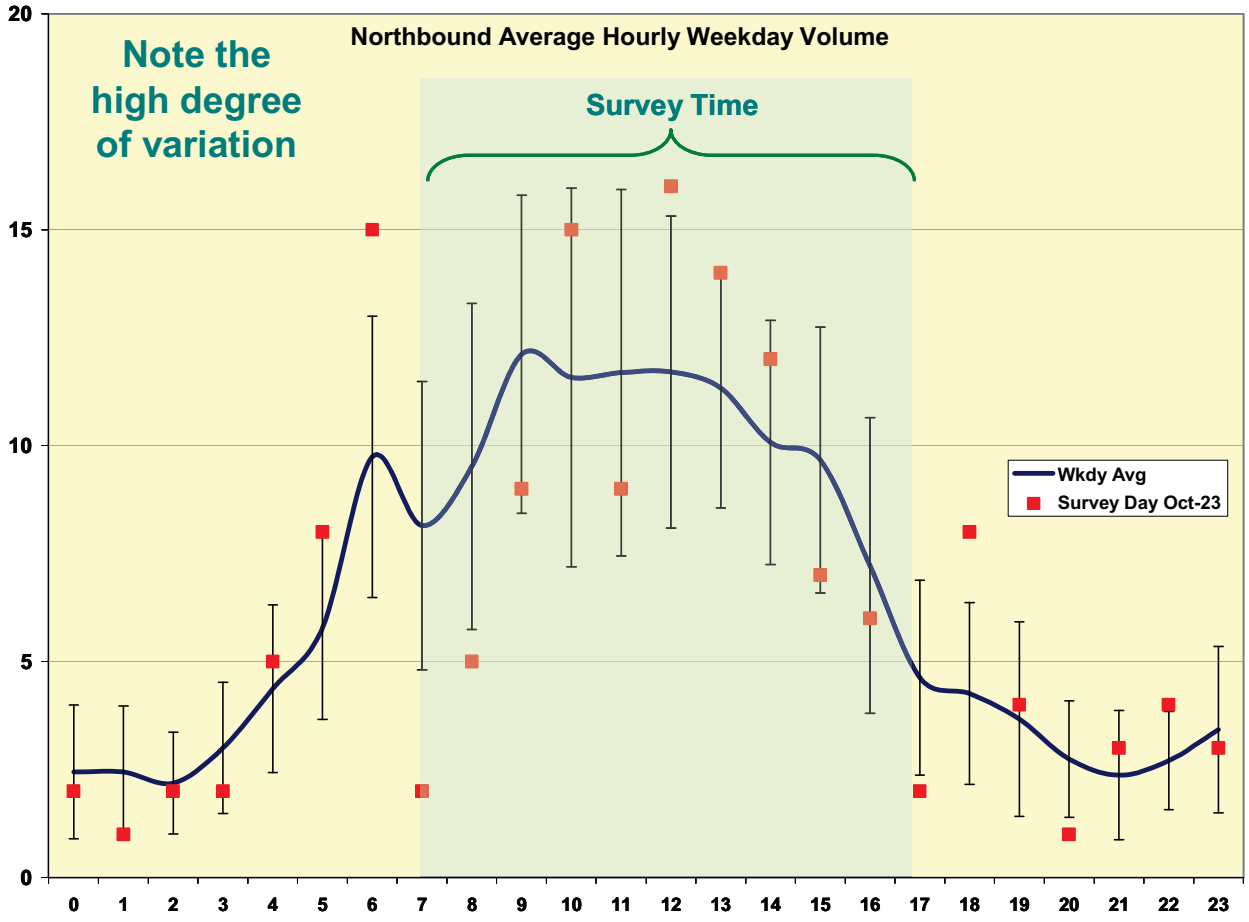
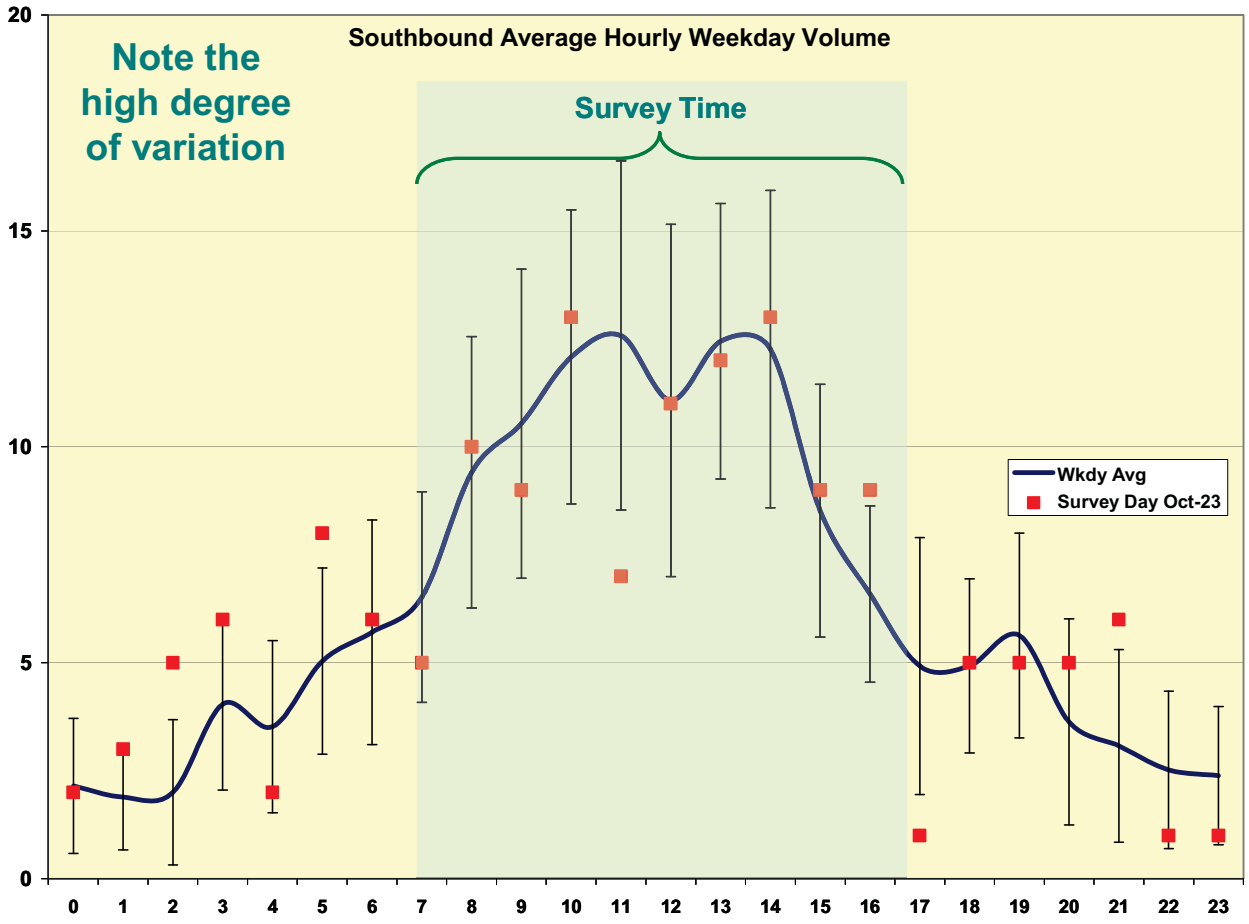


Figure 8
Average Hourly Weekday Large Truck Volume Compared to Survey Day
with one standard deviation vertical bars
US Route 206 Southbound



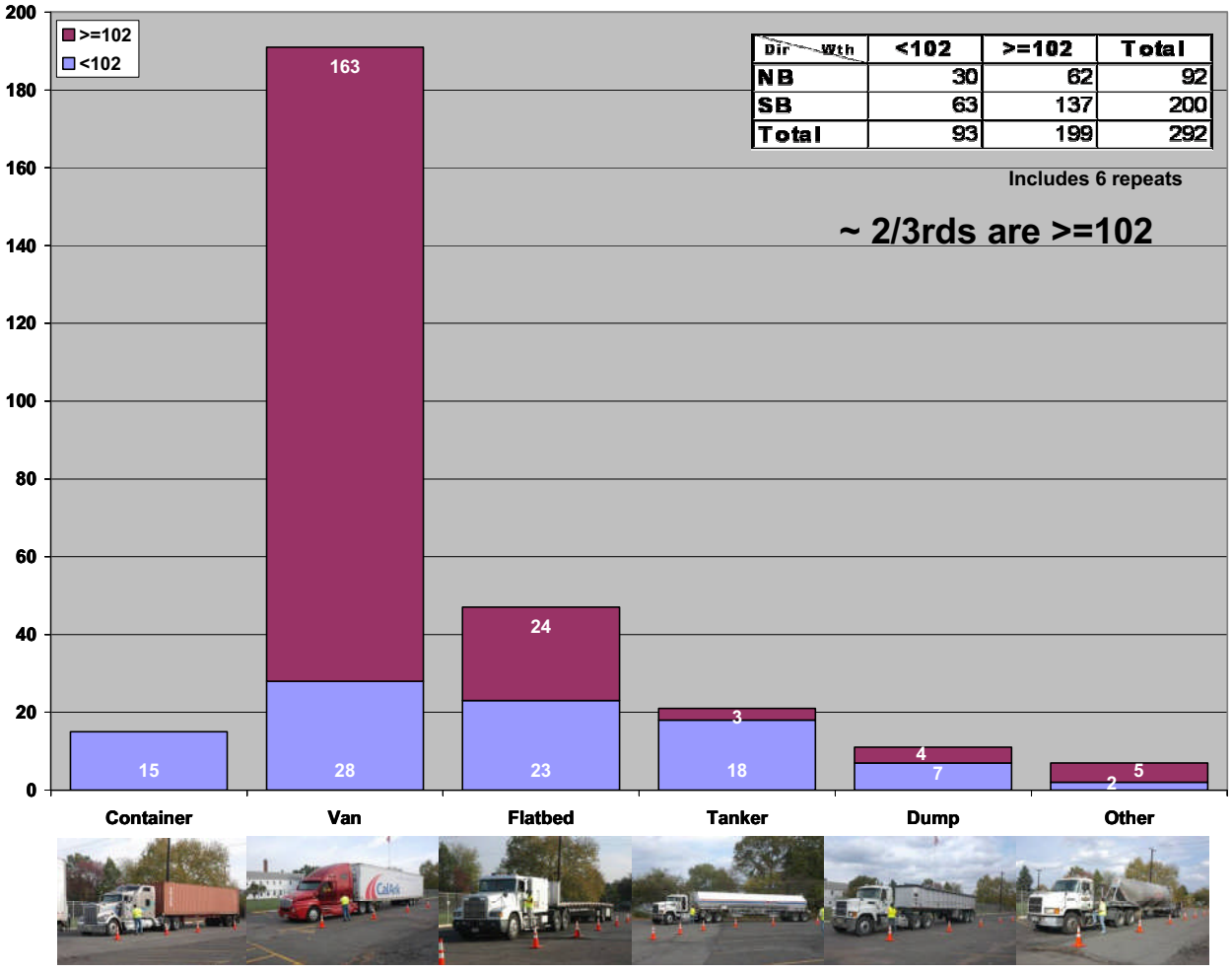
Survey Findings

Once it was determined that the total traffic volumes, hourly distribution and proportion of trucks in the traffic stream during the survey day were reflective of typical conditions, the responses to the survey questions were entered into a MS-Access database for statistical analysis. The primary focus of the analysis was placed upon the responses to survey questions 5 through 8 relating to the trip origin, destination and interim stops/activity. The truck trip origin/destination analysis focused primarily upon the responses to the questions regarding the trucks previous and next stops. Prior to discussing these key findings, a number of additional findings from the analysis of the survey responses were found to be pertinent to the understanding of truck activity along the surveyed roadways.

One of the key statistics extracted from the survey responses and was the distribution of truck types and dimensions (primarily width) of the trucks traveling through the survey area. During

the survey process, the type of truck was noted along with a measurement of the width of the truck itself. Truck types were aggregated into six (6) categories, with the distribution of truck types at the US Route 206 survey locations summarized in Figure 9. Also included in Figure 13 is a summary of the width of the trucks surveyed.

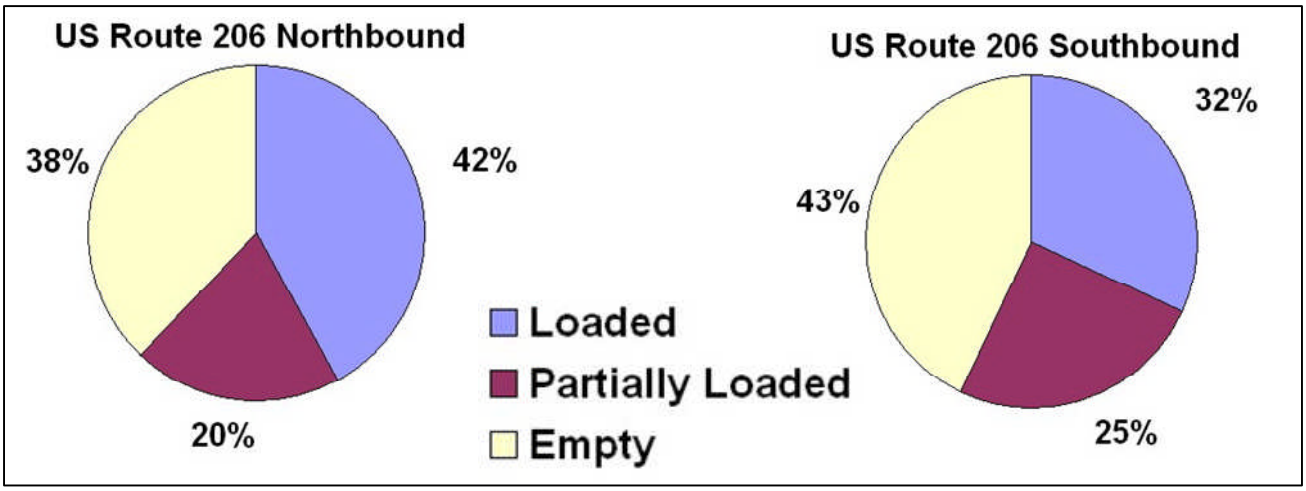
Figure 9
Distribution of Truck Types and Dimensions
US Route 206 Northbound and Southbound



The width of the truck is a key consideration in whether or not the pending large truck regulations would be applicable to a particular vehicle. The regulations will only apply to trucks in excess of 96-inches in width. During the survey process, each truck was physically measured to determine its width. As summarized in Figure 13, of the total trucks surveyed, 199 of the 292 trucks, or approximately 68 percent, would potentially be governed by the pending regulations. The nature of the individual trips, most notably their points of origin and/or destination, would determine just how many of these 199 trucks (6 of them were repeat local trips) would be regulatable, and could be diverted onto an alternative travel route utilizing the Interstate system.

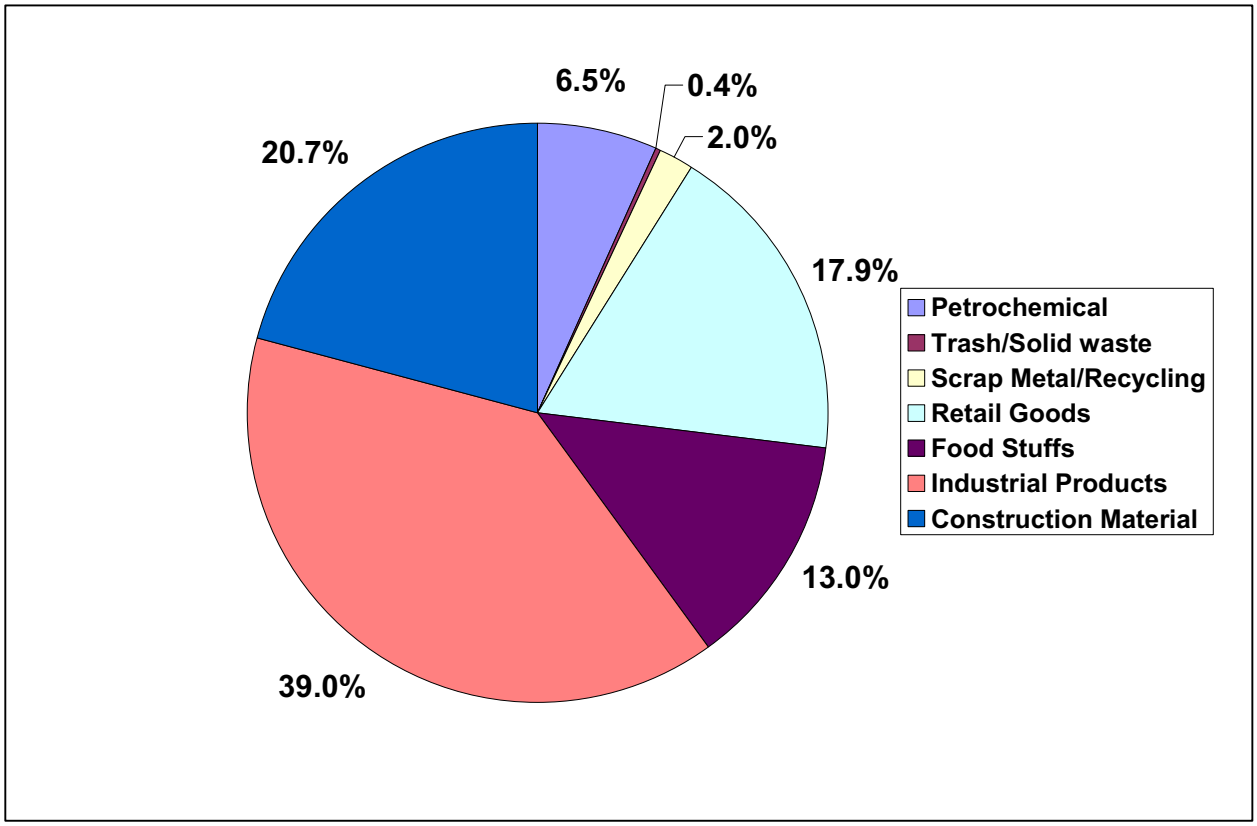
While not directly applicable to the regulation of trucks and the roadways they travel upon, drivers were queried as to whether or not they were currently loaded, partially loaded or empty. The proportion of loaded vs. non-or partially loaded trucks are summarized on Figure 10.

Figure 10
Proportion of Loaded vs. Empty trucks
US Route 206



Queries were also posed as to the type of commodity they were currently (or if empty, were previously) carrying. Figure 11 summarizes the distribution of commodity types being transported by truck along US Route 206.

Figure 11
Distribution of Commodity Types



As detailed previously, the pending truck regulations will only be applicable to trucks 102-inches in width or double-trailer trucks. Along the US Route 206 corridor, approximately 63 percent of the large trucks fall into this category and would be potentially regulatable. Key to the determination of the applicability of the regulations comes down to the individual truck trip origins and destinations, and whether there is a direct need for the trucks to utilize the US Route 206 corridor.

The responses to survey questions 5 through 8 were tabulated and analyzed to determine just how many of the trucks would potentially be affected by the regulations. Table 3 summarizes the origin/destination patterns of the surveyed trucks, with the patterns summarized graphically on Figure 12.

Table 3
Truck Trip Origin/Destination Patterns
US Route 206

Local: Mercer and Somerset Counties
NJ North: Middlesex, Hunterdon and all counties north thereof
NJ South: Monmouth and all counties south thereof
Phila Metro: Philadelphia, Bucks, Montgomery and Delaware Counties
External North: New York, New England, Eastern Canada
External South: rest of Pennsylvania, Delaware and all other states west and south

Color coding — to match Figures 12 through 15
Greens NJ (shades distinguish Local, North and South, Phila Metro)
Orange Trips with one end in NJ or Phila Metro, but NOT in Local area
Red External-External trips: those potentially subject to regulation

Total Trucks

NB	Local	NJ North	NJ South	Phila Metro	External North	Exteral South	Total
Local	10	5		1	1		17
NJ North	12	4		1	1		18
NJ South	15	2			8		25
Phila Metro	13	5			4		22
External North	1	1					2
Exteral South	4				5		9
Total	55	17	0	2	19	0	93

SB	Local	NJ North	NJ South	Phila Metro	External North	Exteral South	Total
Local	30	2	2	2	1	4	41
NJ North	64	3	3	5		2	77
NJ South	6	1	1	1	1		10
Phila Metro	7		1				8
External North	18		4	8		7	37
Exteral South	17	1	1	1			20
Total	142	7	12	17	2	13	193

102s: Subject to Regulation

NB	Local	NJ North	NJ South	Phila Metro	External North	Exteral South	Total
Local	4	1		1	1		7
NJ North	7	2		1			10
NJ South	9	2			7		18
Phila Metro	10	4			3		17
External North	1	1					2
Exteral South	2				4		6
Total	33	10	0	2	15	0	60

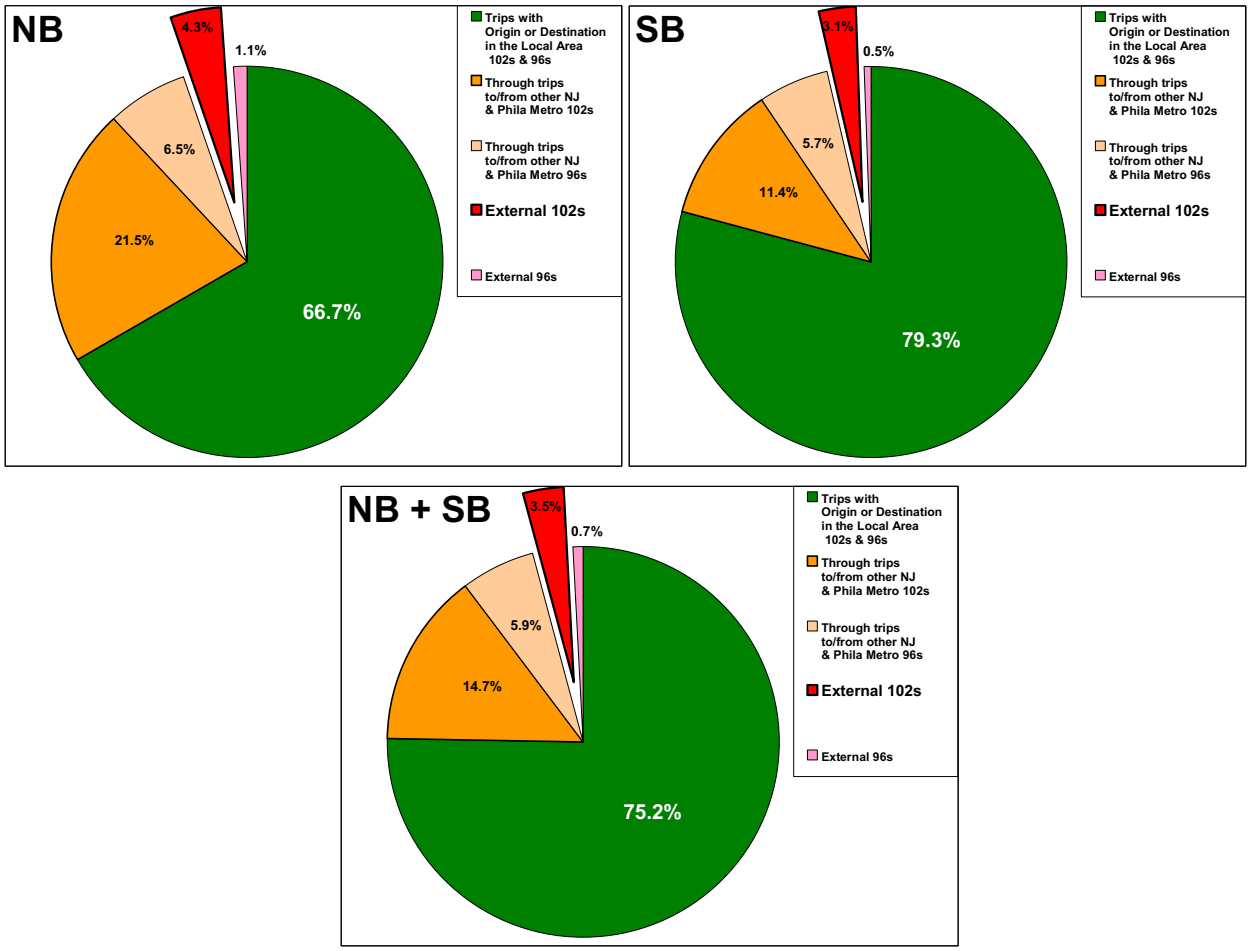
SB	Local	NJ North	NJ South	Phila Metro	External North	Exteral South	Total
Local	21		2		1	1	25
NJ North	34	3	2	3		2	44
NJ South	6	1			1		8
Phila Metro	4		1				5
External North	9			7		6	22
Exteral South	14		1	1			16
Total	88	4	6	11	2	9	120

Several key findings emerged from the tabulation and analysis of the survey responses. A total of 180 (62.9 percent) of the 286 trucks surveyed were 102-inch wide trailers. Regulations apply to 102-inch wide trailer and tandem trucks, and do not affect 96-inch wide single trailer trucks.

Of the 180 102-inch wide trucks surveyed, 128 (71.1 percent) had either an origin or a destination (or both) within the local area. These trucks are serving local businesses and industries and are therefore not subject to regulation. The regulations include a "reasonableness test" that is particularly applicable when addressing trips that have an origin or a destination just outside of the New Jersey state border. A total of 42 102-inch wide trucks (23.3 percent) had origins and/or destinations outside of the immediate local area, but within New Jersey or the Philadelphia metropolitan area. These trucks are also not subject to regulation.

Of the 180 102-inch wide trailer trucks surveyed, 10 (5.6 percent) did not have an origin or a destination in the local, New Jersey or nearby Pennsylvania area. These 10 trucks, or approximately 3.5-percent of the total trucks surveyed along the US Route 206 corridor, are affected by the new regulations. This equates to less than 1 truck per hour being subject to the current regulations during the typical day.

Figure 12
Northbound and Southbound Origins / Destinations



Drivers were queried regarding their choice of travel routes. As borne out by the data, and verified by the drivers, a majority of the trucks had little or no choice in the route driven due to their trip origins and/or destinations. The truly external through trips being made by the 102-inch trailers (those that did not have an origin or a destination along the corridor, or in nearby areas), provided several different responses as to why they were raveling along the US Route 206 corridor. Typically, these drivers were not driving a regular route, and had picked up a contract load for transport, and had only been provided with information related to the pick-up and a drop-off point. Most indicated that they were utilizing portable GPS systems for navigation and that the identified routing was the most direct and reasonable route. These systems were typically purchased in a retail outlet, and were not tailored to identify designated truck routes. Following is a series of maps (Figures 13 through 16) depicting the observed and recorded origin/destination patterns of the trucks along the US Route 206 corridor in the survey area.

Figure 13
Local Origin/Destination to/from all
(Trips with at least one trip end in Mercer or Somerset County)

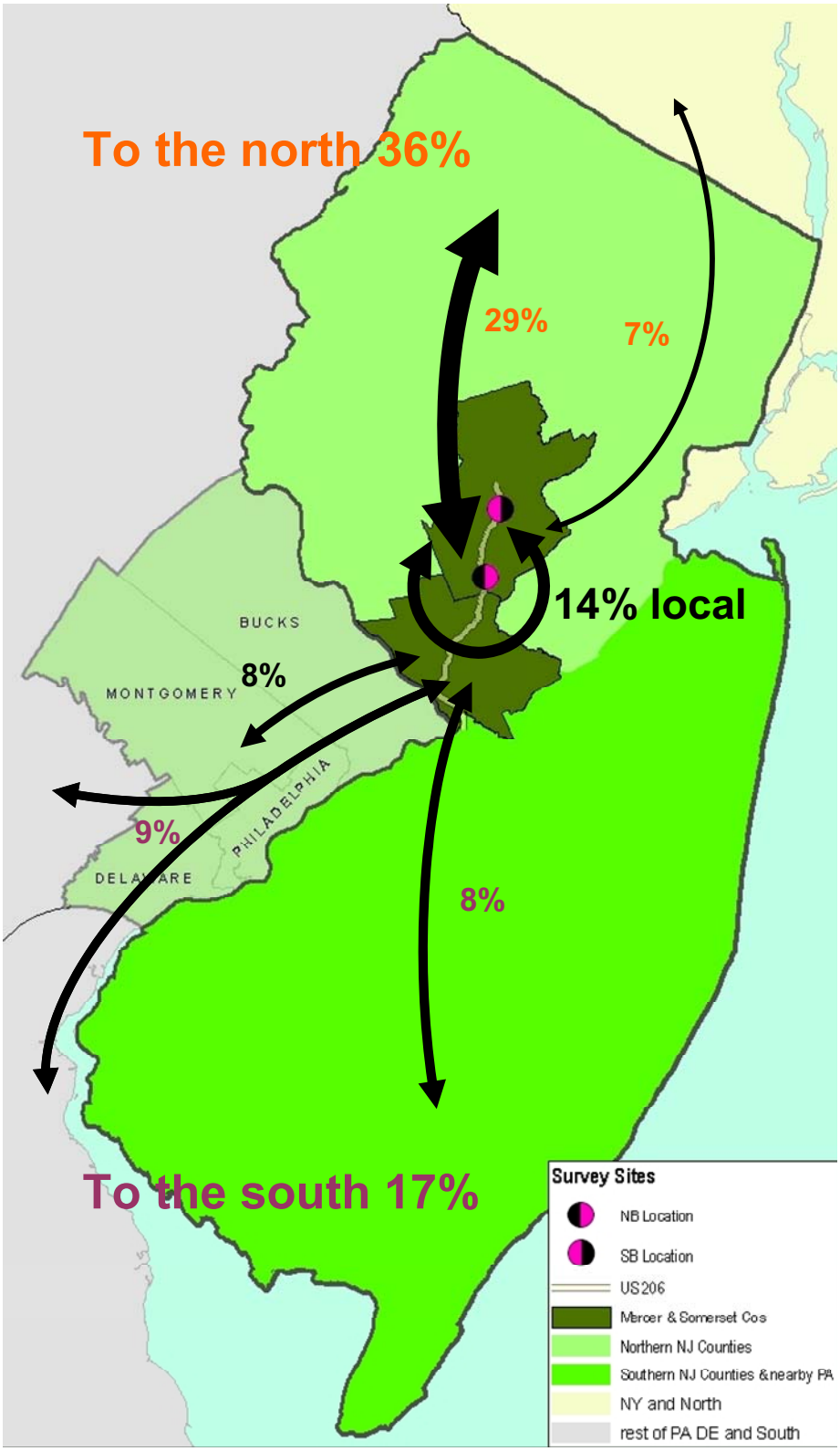


Figure 14
Through Local Area to/from elsewhere in the Region
(Trips with one or both trip ends in NJ or Philly Metro area)

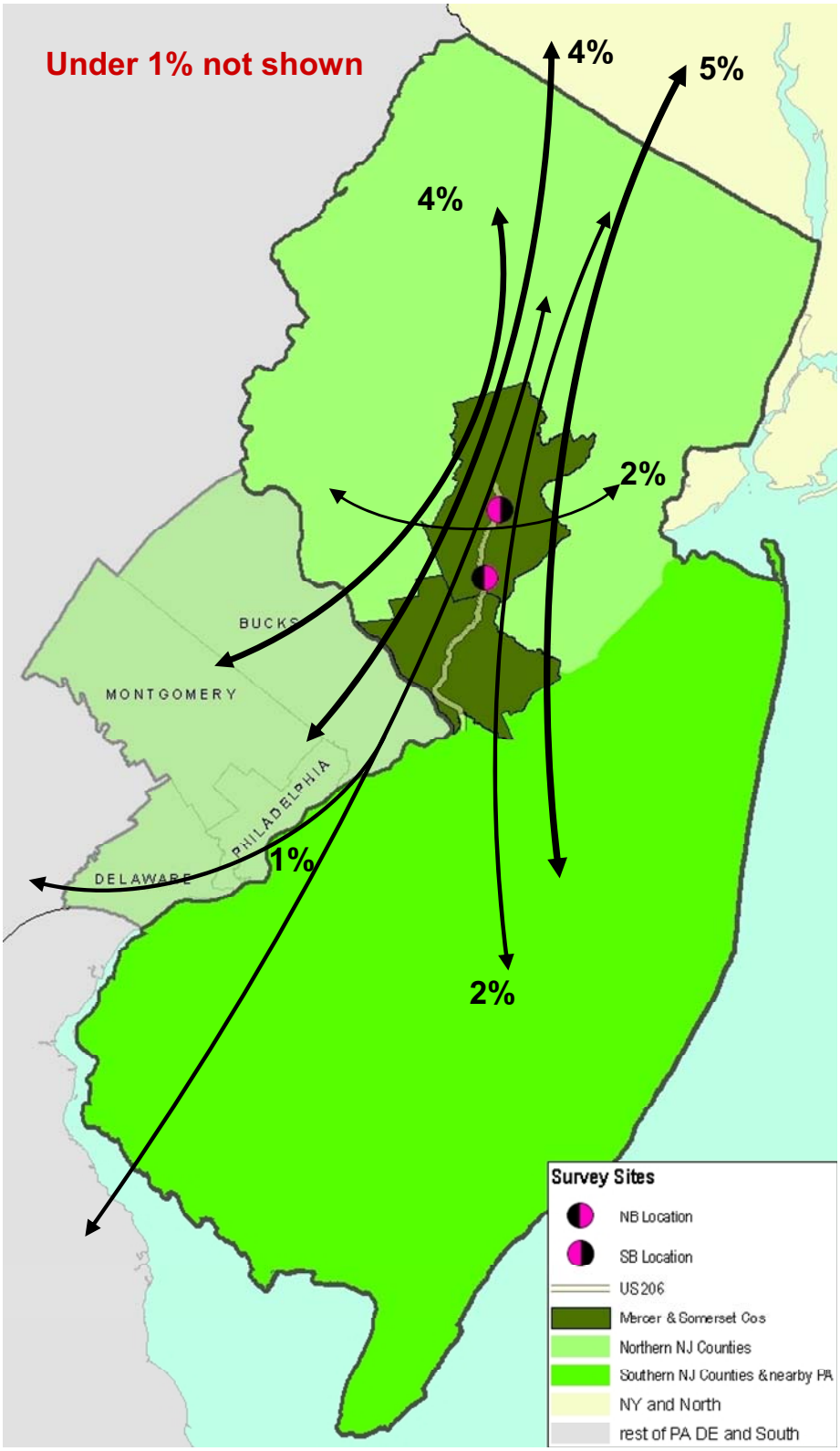


Figure 15
External to the Region Origin/Destination
(Trips traversing through NJ and Philly Metro region)

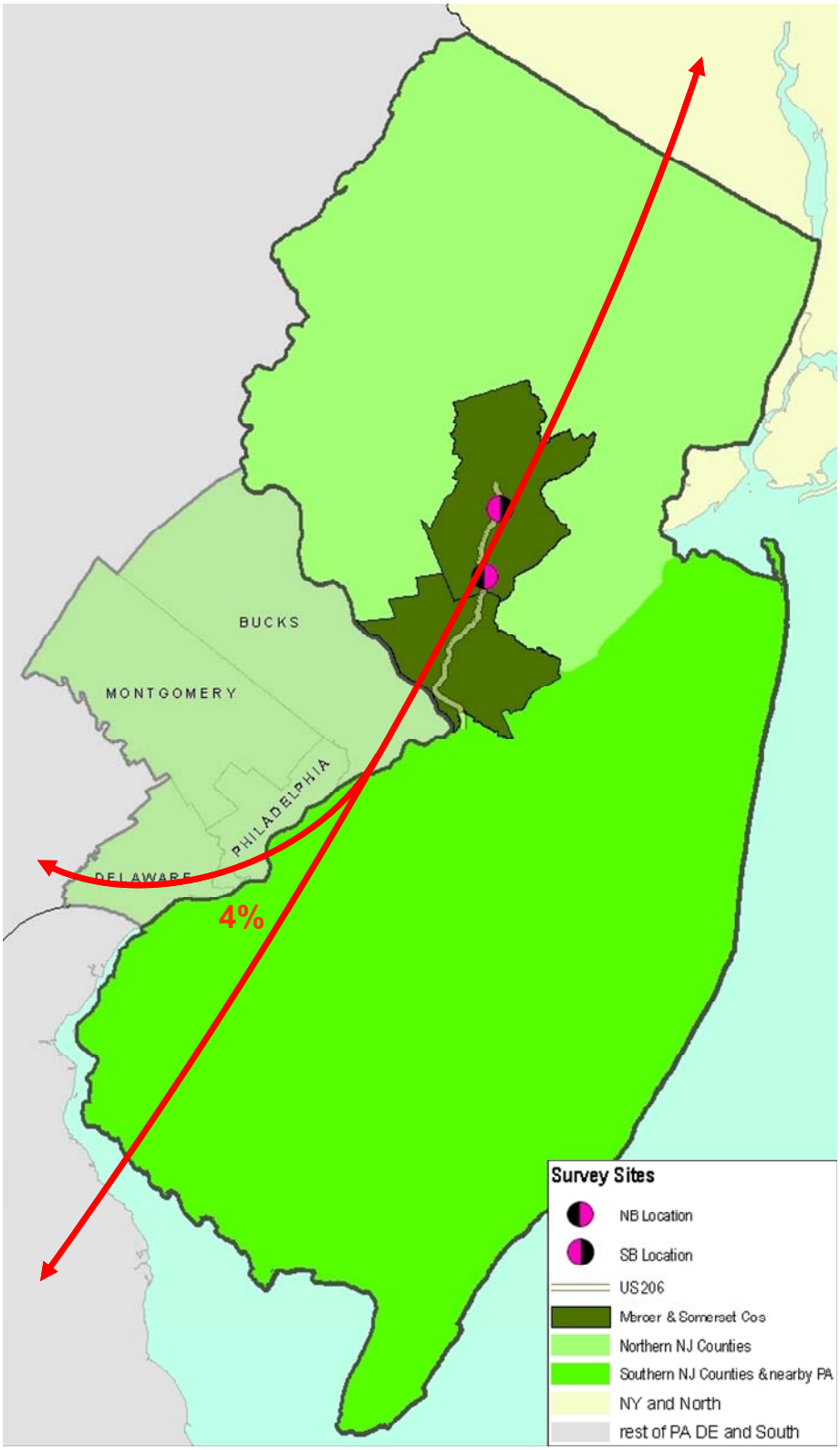


Figure 16
Number of 102" Truck Trips Potentially subject to regulation
(23 trips with one trip end non-local & the other External to the Region
And 10 trips traversing through NJ and Philly Metro region)

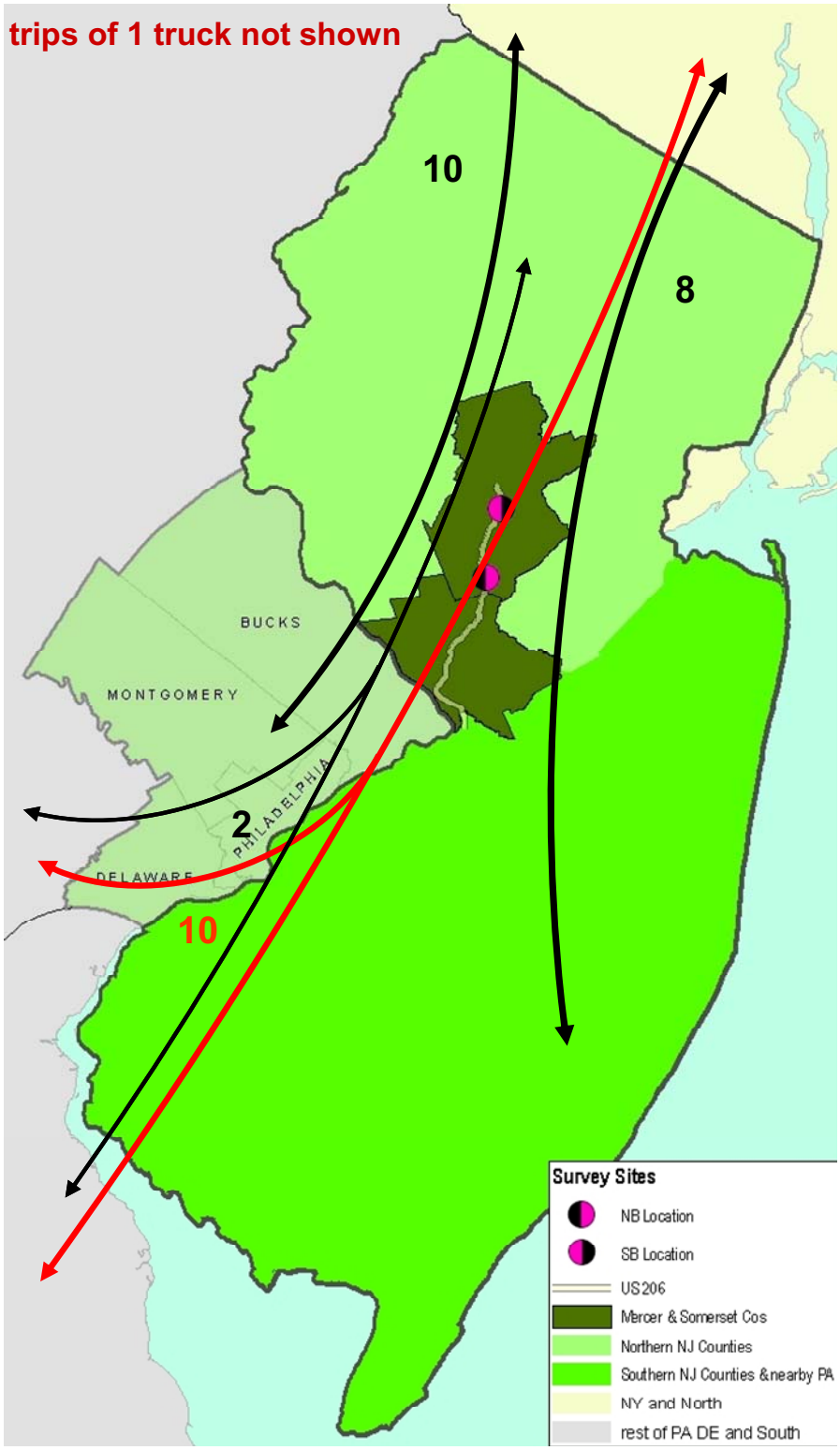


Figure 17
Distribution of Northbound Origins and Destinations By Municipalities

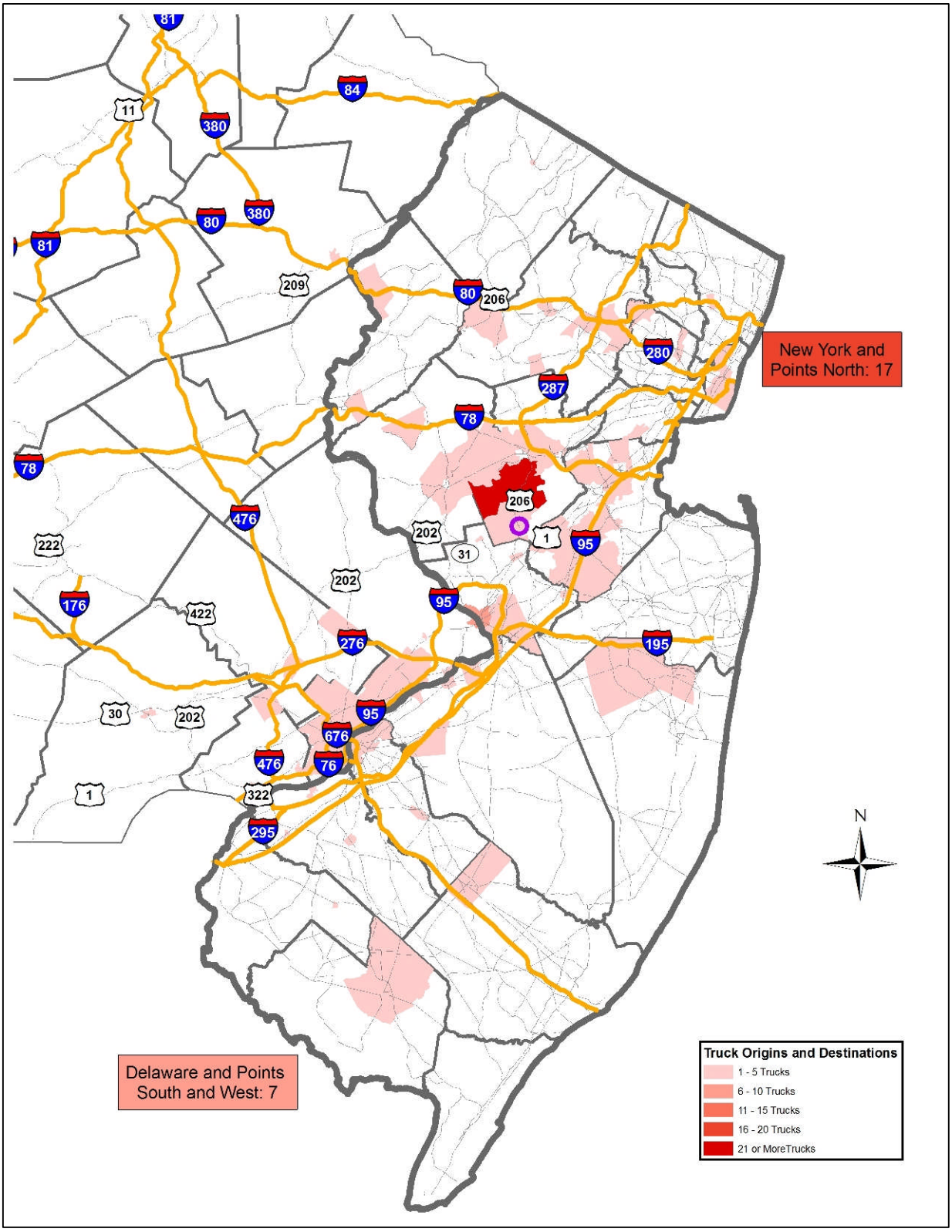
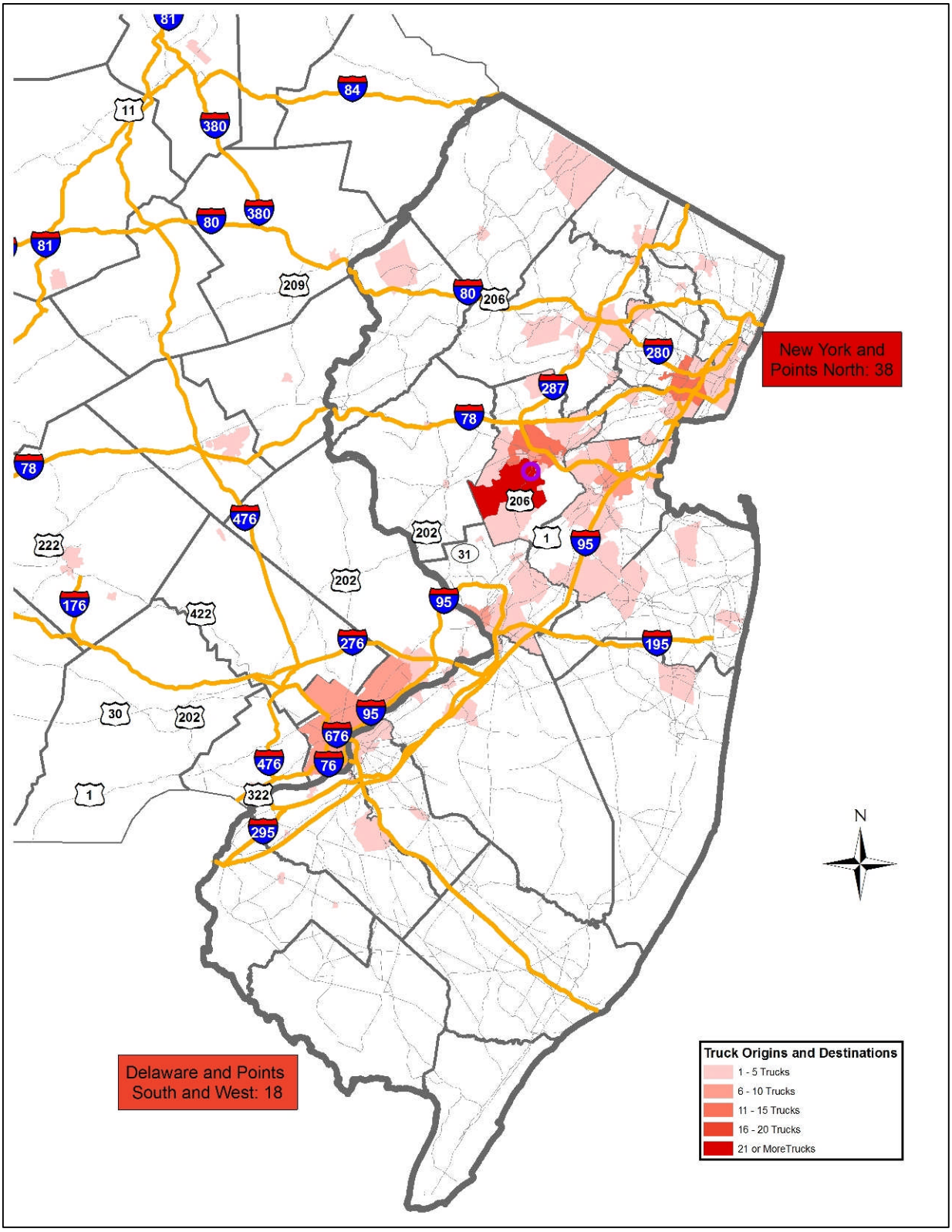


Figure 18
Distribution of Southbound Origins and Destinations By Municipalities



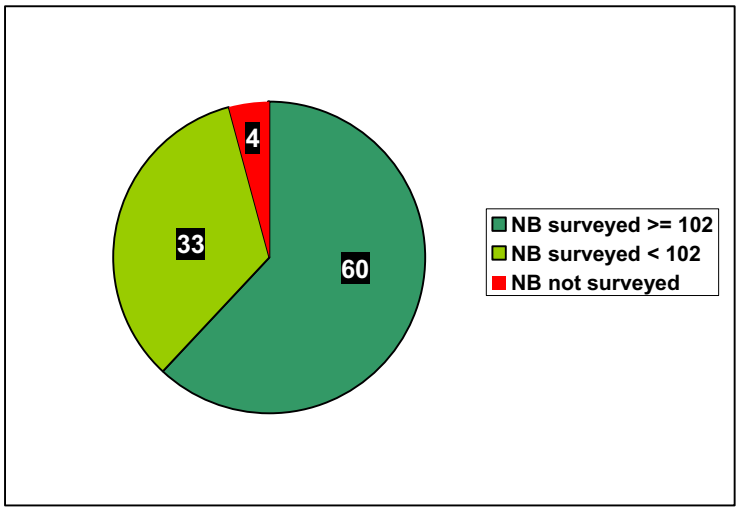
Summary of Key Findings – US Route 206 Truck Patterns

Subsequent to coding and entering the survey responses into the database, a number of key findings emerged.

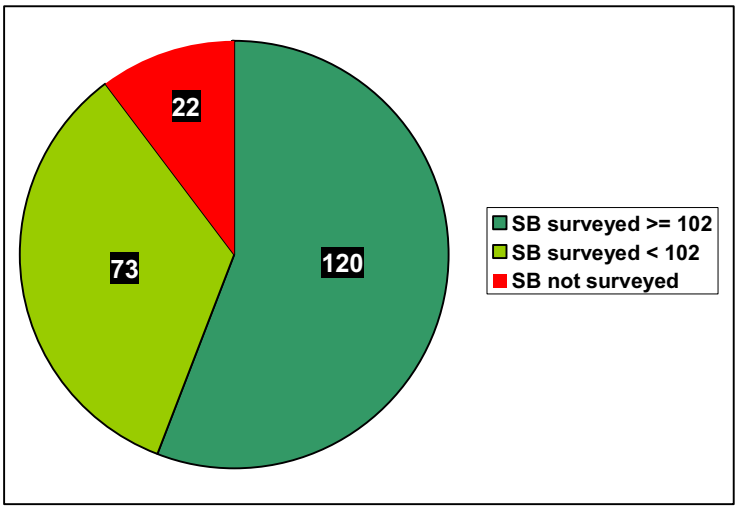
1. Total of **312** trucks observed, of which **286** trucks were surveyed: (**93 NB** and **193 SB**)

Figure 19

NB



SB



2.a. **215** trucks, or **75%**, had either an origin or a destination in the local area: Mercer or Somerset County.

2.b. an additional **26** trucks had an origin or destination in Hunterdon; for a total of **241** or **84%**.

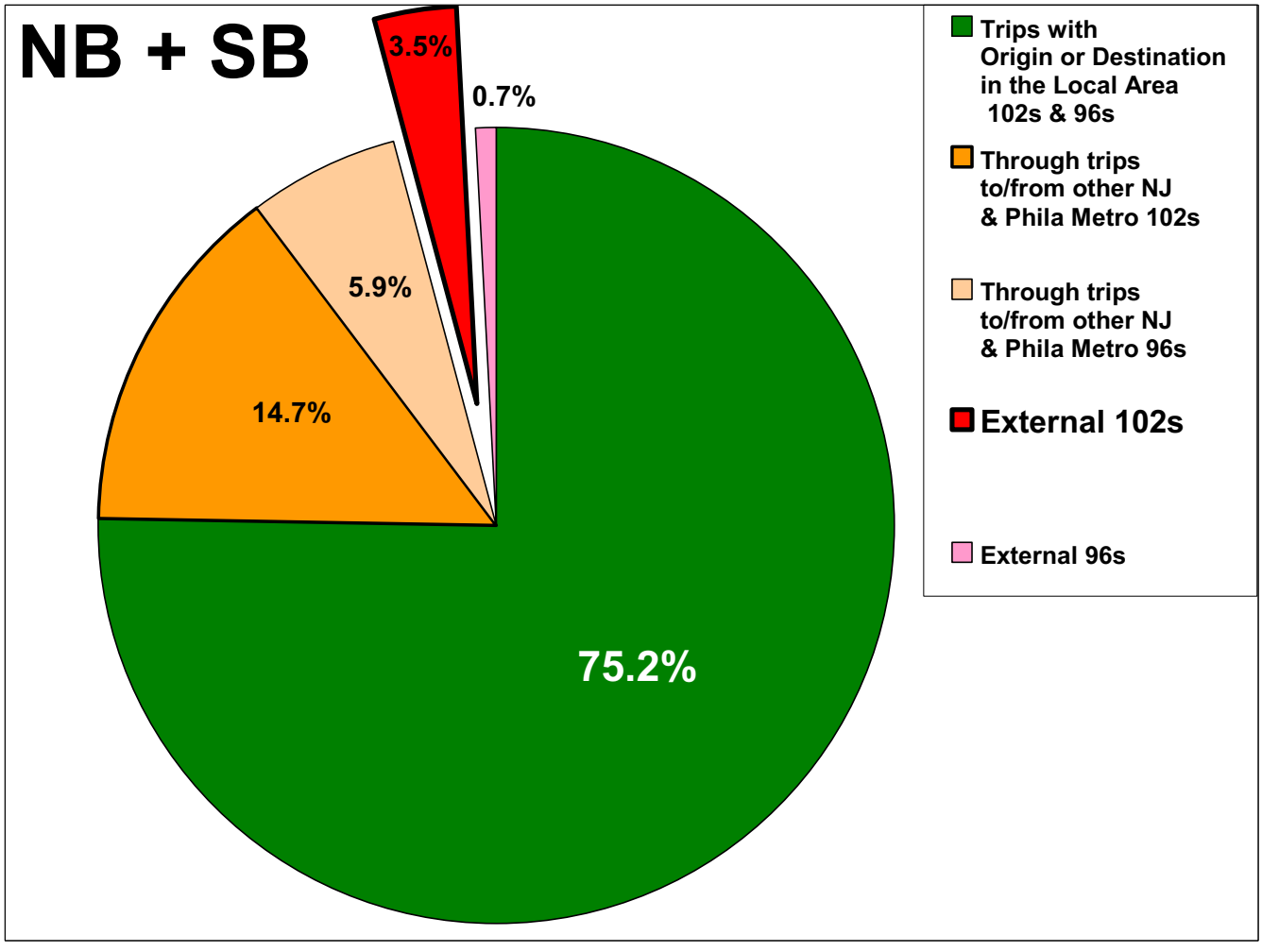
3.a **59 (21%)** of the trucks had a stop elsewhere in New Jersey or the Philadelphia Metro area, of these **42 (14.7%)** ***were 102s***

3 b. of those 102s **23 (8%)** had one trip end outside the region.

3 c. of the remaining 102s **10 (3.5%)** had no stop in NJ or the Phila Metro area.

3 c. Therefore the total potential regulated trips accounted for only **33 (11.5%)** of the total of **286**.

Fig 20



4. Only **9** Trucks reported an origin or destination in Eastern Canada (Ontario or Quebec)
Of those, 5 (1.7%) were 102s.
- ***2 had local destinations.***
- ***3 (1%) were through moves (item 3 c above).***

5. **122** of **193 (63%)** of Southbound Trucks surveyed reported a destination in ***Hillsborough or Belle Meade NJ***, therefore ***only 71 had destinations further south.*** The number observed by video travelling ***southbound at the northbound survey location*** was **119**. This shows some trucks ***(approximately 50)*** originated south of the southbound survey location. The count is verified by the match to the WIM count located nearby.

Table 4

Top Destinations Southbound

Hillsborough, NJ	**102**
Belle Meade, NJ	**20**
Trenton, NJ	9
Philadelphia, PA	7
Baltimore, MD	5
Morrisville, PA	3
Princeton, NJ	3
Burlington, NJ	2
Fairless Hills, PA	2
Somerville, NJ	2

Top Destinations Northbound

Hillsborough, NJ	**25**
Belle Meade, NJ	**15**
Bridgewater, NJ	4

Of the 5 trucks destined for Baltimore, MD, only 3 were 102s;
- 1 originated in Bridgewater, NJ,
- 2 were through moves.

VI. SURVEY LOCATION – US ROUTE 202/NJ ROUTE 31

Survey Site Description

The survey of trucks traveling along both the northbound and southbound directions of US Route 202/NJ Route 31 was conducted on November 8th, 2007 from 6:45 AM to 4:45 PM. The specific location of the survey was within the town of West Amwell, Hunterdon County, approximately midway between the intersections of CR 602 (Wertsville Road) and CR 514 (Old York Road). This location is depicted on Figures 19 and 20 below.

Figure 21
US-202/NJ-31 Survey Locations: US-202: MP 6.4 East Amwell Township

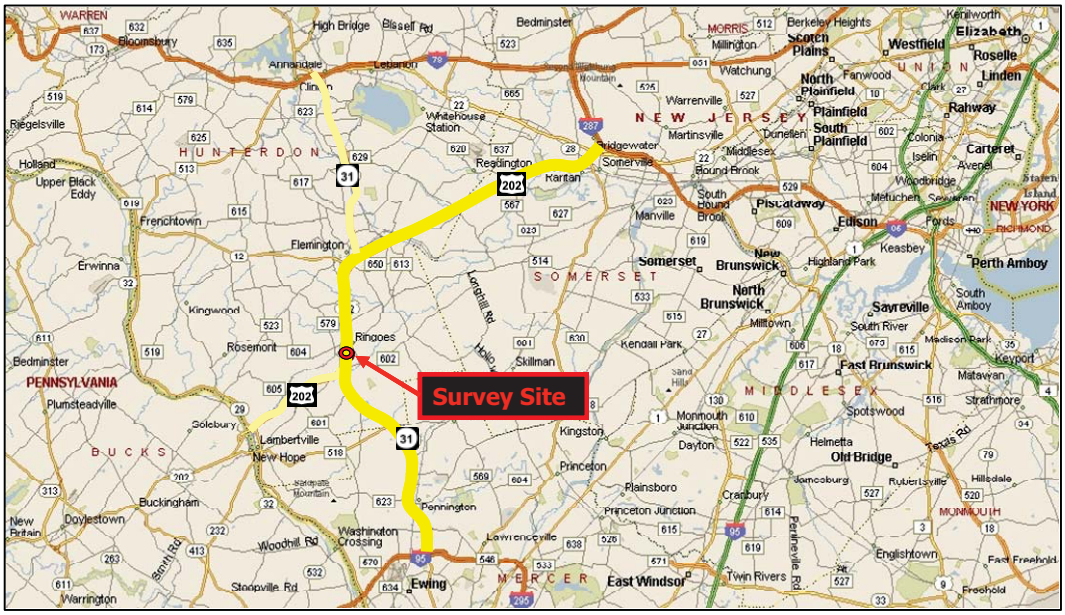
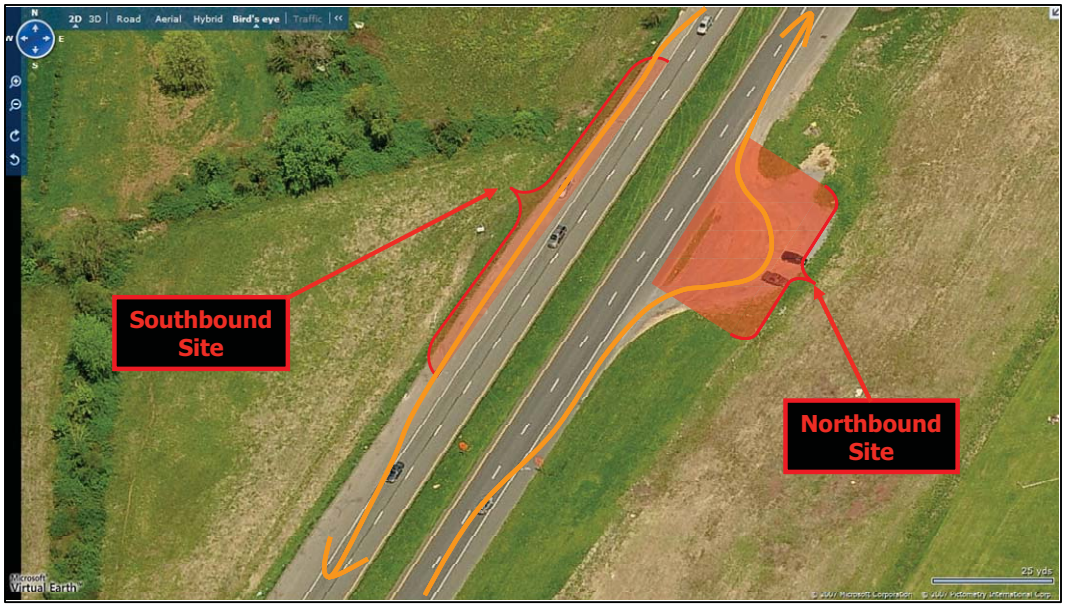


Figure 22
US-202/NJ-31 Survey Detours



Pre Survey Data- Traffic Counts

As part of the overall truck data collection program, existing and available data were assembled and reviewed to determine: the overall magnitude of traffic volumes on the survey corridors; percentage of large trucks in the traffic stream; and hourly distribution patterns of the large truck flows. These data were applied in identifying the survey location, designing a survey staging area with adequate space for queuing of trucks, and determining the appropriate staffing level for each survey location.

Table 5

	Route 31/202 Northbound; MP 6.0- 7.0 March 2007 Weekday Average								
	Cars + Lt. Trucks			Heavy Trucks			TOTAL		
	Rte 31+202	Rte 31	Rte 202	Rte 31+202	Rte 31	Rte 202	Rte 31+202	Rte 31	Rte 202
12:00 - 1:00 am	45	27	18	14	12	2	62	41	21
1:00 - 2:00	33	14	19	16	14	2	52	30	22
2:00 - 3:00	27	11	16	18	15	3	49	28	21
3:00 - 4:00	35	9	26	23	18	5	65	31	34
4:00 - 5:00	101	32	69	23	20	3	136	58	78
5:00 - 6:00	337	104	233	28	21	7	384	135	249
6:00 - 7:00	990	311	679	34	30	4	1,074	364	710
7:00 - 8:00	1,429	468	961	34	30	4	1,521	529	992
8:00 - 9:00	1,206	416	790	37	32	5	1,307	484	823
9:00 - 10:00	753	317	436	47	42	5	859	390	469
10:00 - 11:00	593	275	318	49	47	2	699	362	337
11:00 - 12:00	594	279	315	46	43	3	697	359	338
12:00 - 1:00 pm	561	265	296	38	34	4	650	333	317
1:00 - 2:00	580	293	287	37	34	3	674	367	307
2:00 - 3:00	630	355	275	33	31	2	712	420	292
3:00 - 4:00	772	492	280	37	36	1	851	557	294
4:00 - 5:00	873	576	297	22	21	1	923	617	306
5:00 - 6:00	993	664	329	20	19	1	1,037	695	342
6:00 - 7:00	761	476	285	16	15	1	792	498	294
7:00 - 8:00	515	315	200	14	14	0	543	336	207
8:00 - 9:00	341	215	126	16	15	1	370	239	131
9:00 - 10:00	277	167	110	12	12	0	298	184	114
10:00 - 11:00	192	117	75	13	12	1	213	134	79
11:00 - 12:00	113	70	43	13	12	1	130	85	45
24 Hr TOTAL	12,751	6,268	6,483	640	579	61	14,098	7,276	6,822
Survey Period	9,974	4,711	5,263	434	399	35	11,004	5,477	5,527

AM Peak Hour NB

Large Truck Survey Period

PM Peak Hour NB

	Route 31/202 Southbound; MP 6.0- 7.0 March 2007 Weekday Average								
	Cars + Lt. Trucks			Heavy Trucks			TOTAL		
SB	Rte 31+202	Rte 31	Rte 202	Rte 31+202	Rte 31	Rte 202	Rte 31+202	Rte 31	Rte 202
12:00 - 1:00 am	55	26	29	18	16	2	77	44	33
1:00 - 2:00	26	12	14	15	13	2	44	27	17
2:00 - 3:00	20	10	10	17	16	1	42	30	12
3:00 - 4:00	17	11	6	20	18	2	46	37	9
4:00 - 5:00	49	37	12	28	25	3	88	69	19
5:00 - 6:00	174	134	40	38	33	5	232	181	51
6:00 - 7:00	502	374	128	35	30	5	584	432	152
7:00 - 8:00	850	624	226	36	29	7	954	686	268
8:00 - 9:00	931	670	261	44	38	6	1,052	753	299
9:00 - 10:00	639	433	206	52	45	7	757	514	243
10:00 - 11:00	516	317	199	54	48	6	627	404	223
11:00 - 12:00	521	295	226	51	46	5	631	379	252
12:00 - 1:00 pm	505	263	242	49	42	7	616	346	270
1:00 - 2:00	554	291	263	44	38	6	651	365	286
2:00 - 3:00	640	322	318	43	38	5	737	400	337
3:00 - 4:00	829	406	423	36	31	5	915	472	443
4:00 - 5:00	1,082	487	595	31	28	3	1,154	536	618
5:00 - 6:00	1,280	472	808	27	23	4	1,351	508	843
6:00 - 7:00	1,125	385	740	24	21	3	1,198	416	782
7:00 - 8:00	691	249	442	23	21	2	751	277	474
8:00 - 9:00	392	144	248	24	22	2	436	170	266
9:00 - 10:00	317	134	183	25	22	3	359	160	199
10:00 - 11:00	213	92	121	21	19	2	248	115	133
11:00 - 12:00	120	52	68	22	18	4	148	72	76
24 Hr TOTAL	12,048	6,240	5,808	777	680	97	13,698	7,393	6,305
Survey Period	8,849	4,954	3,895	502	436	66	10,029	5,795	4,234

AM Peak Hour SB

Large Truck Survey Period

PM Peak Hour SB

In July of 2007 an average of 723 large trucks (Vehicle Classifications 8 thru 13) traveled southbound along NJ Route 31 (at MP 13.0) on a typical weekday. This volume represents an average of 8.9% large trucks in the total traffic stream. Of the 723 large trucks, 478 were recorded between the hours of 6:00 AM and 6:00 PM. Truck volumes remained relatively stable throughout the survey period, with approximately 40 large trucks each hour, or one truck every 90 seconds. Similar patterns were observed on the northbound side of the roadway.

Survey Day Traffic Volumes

In addition to the historic count information, traffic volume and classification data was collected during the week of the actual survey effort. These data were reviewed to ensure that the survey was conducted on a day when total travel demand and the proportion of trucks were consistent with typical operations.

During the survey period, a total of 514 tractor-trailer trucks were stopped and surveyed. Due to safety considerations and limited space within the survey area, a total of 440 trucks bypassed the site and were not surveyed. The percentage of hourly truck volumes captured in the survey ranged from 37% to 82%, as depicted on Figures 21 and 22 below.

Figure 23
Proportion of Trucks Surveyed – US Route 202/NJ Route 31 Northbound

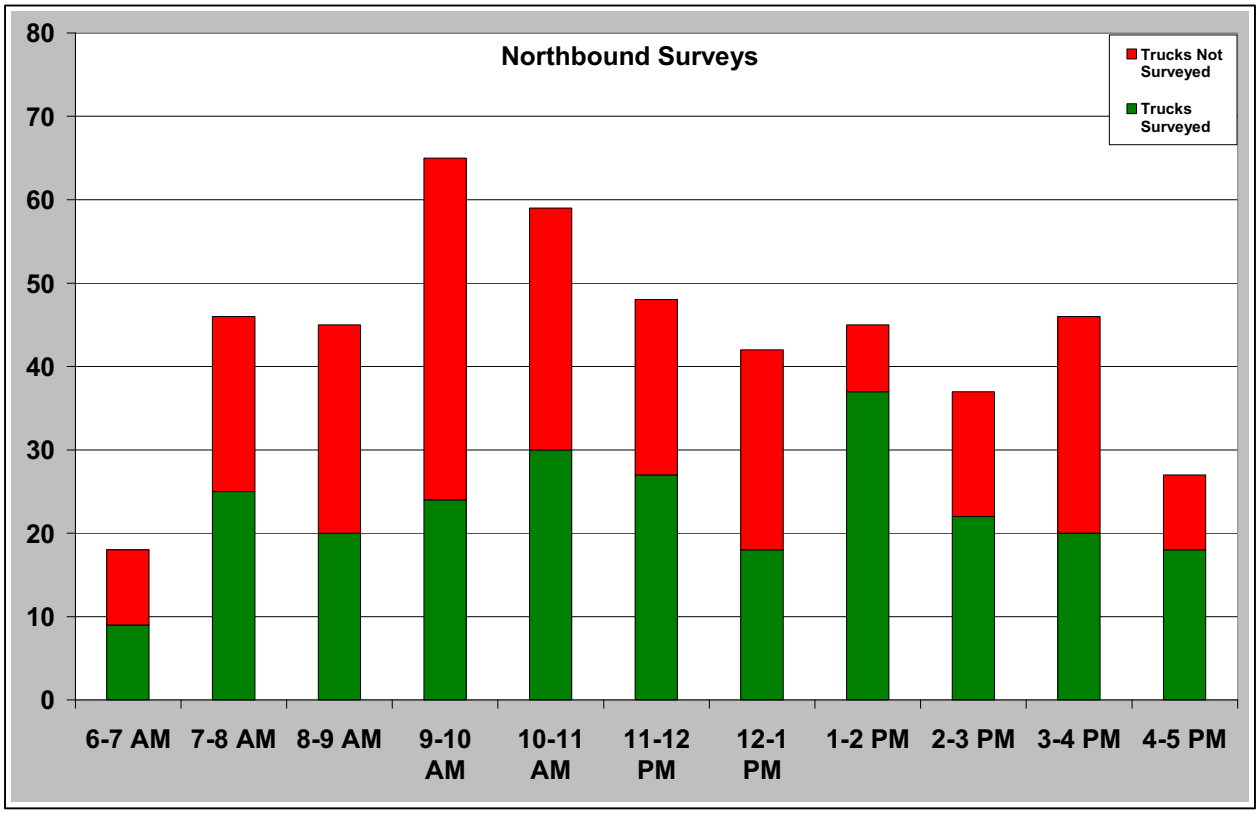
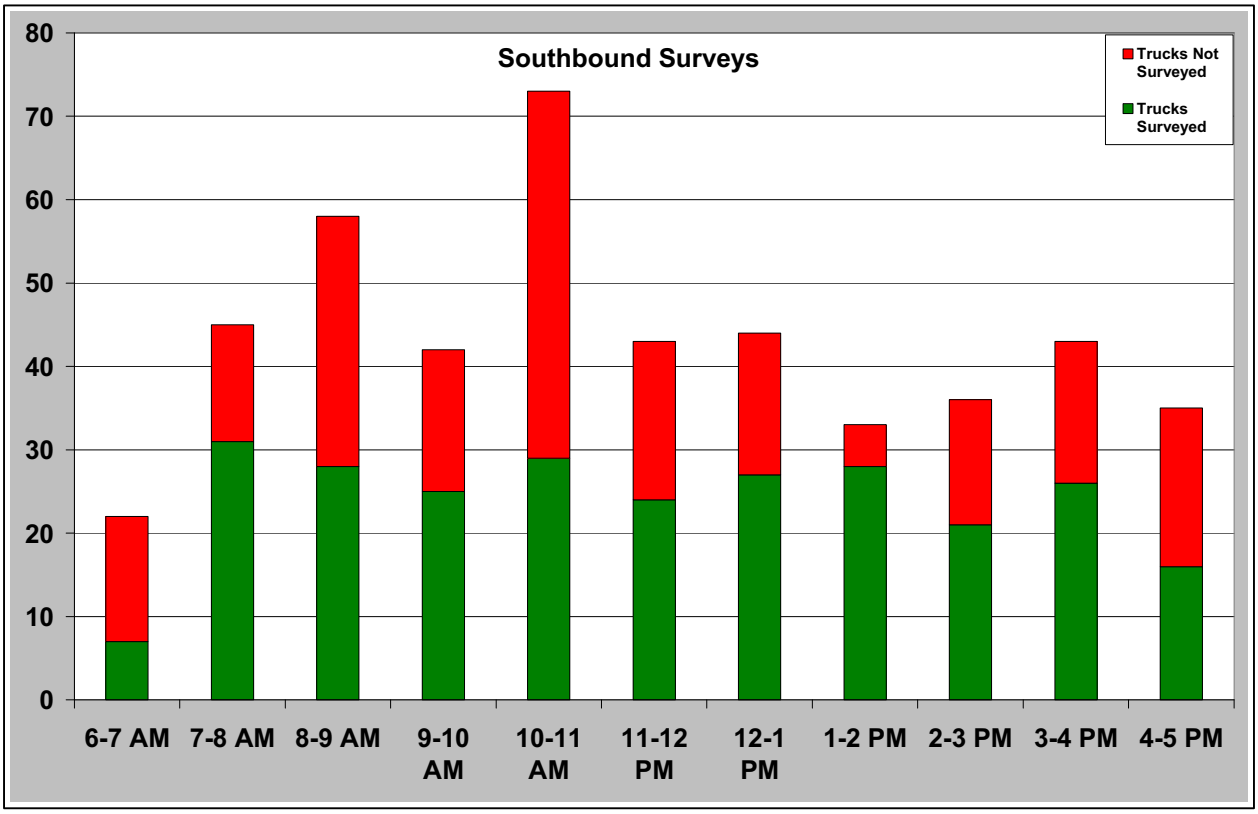


Figure 24
Proportion of Trucks Surveyed – US Route 202/NJ Route 31 Southbound



VII. SURVEY FINDINGS – US ROUTE 202 / NJ ROUTE 31

The survey of tractor trailers was conducted along US Route 202/NJ Route 31 described above on November 8, 2007. The survey period encompassed daylight hours only, with interviews being conducted from approximately 6:45 AM to 4:45 PM. The surveys were conducted in the two locations described above. Both directions were surveyed in West Amwell Township midway between the intersections of CR 602 (Wertsville Road) and CR 514 (Old York Road).

The primary purpose of this survey was two fold: To understand the large truck traffic on the US Route 202/NJ Route 31 corridor and estimate the proportion of the truck traffic that has a purpose being on the corridor (i.e.: What proportion of the truck traffic along this roadway would be affected by the pending large truck regulations).

Weigh in Motion ("WIM") traffic volume and vehicle classification data was extracted and reviewed for the week covering the survey day at nearby locations along US Route 202/NJ Route 31. The daily traffic volumes and proportion of trucks in the traffic stream were compared on a day to day basis to ensure that the survey day traffic flows were typical. The WIM data were further utilized to quantify the total volume of trucks along the surveyed roadway, and the proportion of trucks captured in the interviews. Key findings in the comparison of typical daily traffic patterns are summarized in Table 4.

Table 6
Weekday Volume from WIM Stations 7:00 AM to 5:00 PM
NJ Route 31 MP 13.0 and US Route 202 MP 3.5

Large Trucks

- **NJ Route 31 - Average: 1,182 – *8.2% of total traffic 14,424***
- **US Route202 - Average: 160 – *1.2% of total traffic 13,159***
- **Combined - Average: 1,342 – *4.9% of total traffic 27,583***

Cars

- **Average: 24,703**
- **Total: 27,853 (included light-medium trucks and buses)**
- **Directional split of total traffic**

South of survey	**NJ-31 / US-202**	**52% / 48%**
North of survey	**NJ-31 / US-202**	**35% / 65%**

In addition to validating the survey day as being "typical", the assembled data were analyzed to determine the hourly volume of trucks captured in the survey versus the typical hourly volumes. Key comparisons on an hourly basis are depicted on Figures 23 and 24 for the northbound and southbound survey locations, respectively.

Figure 25
Average Hourly Weekday Large Truck Volume Compared to Survey Day
with one standard deviation vertical bars
NJ ROUTE 31 / US ROUTE 202 Northbound

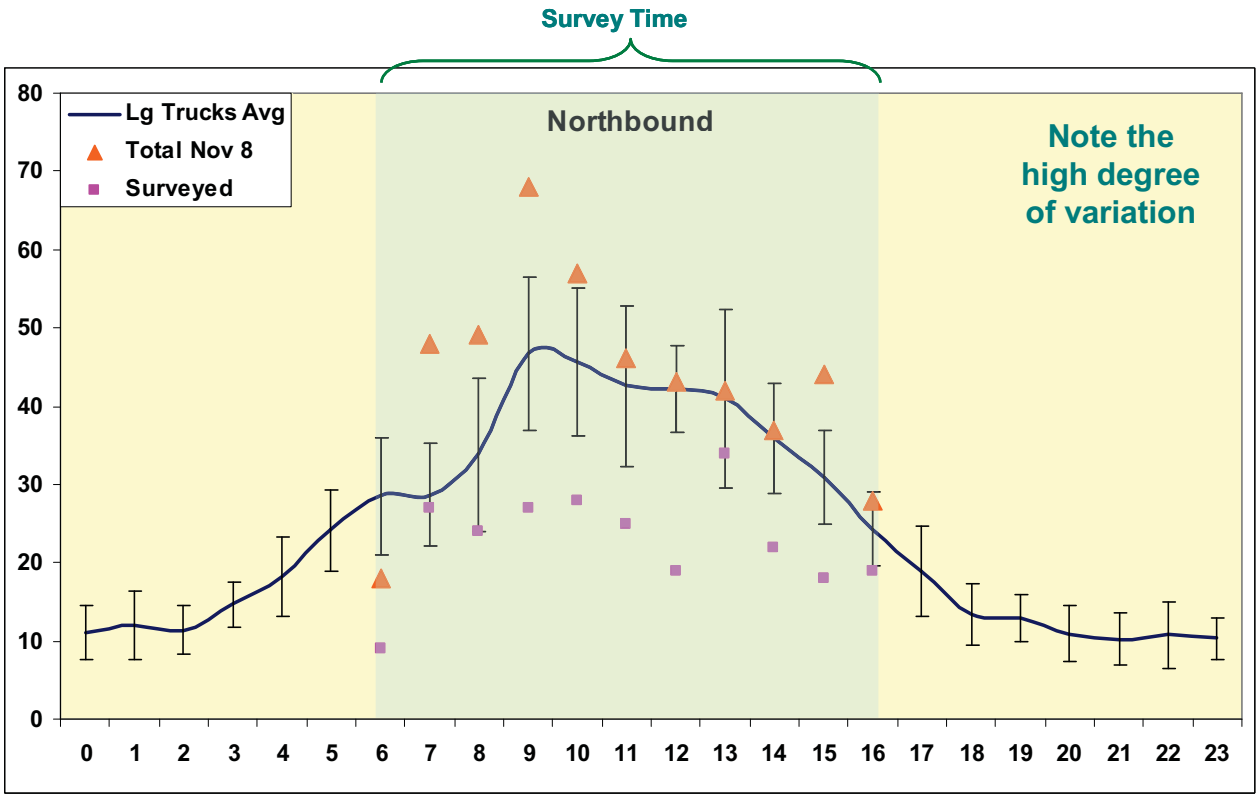
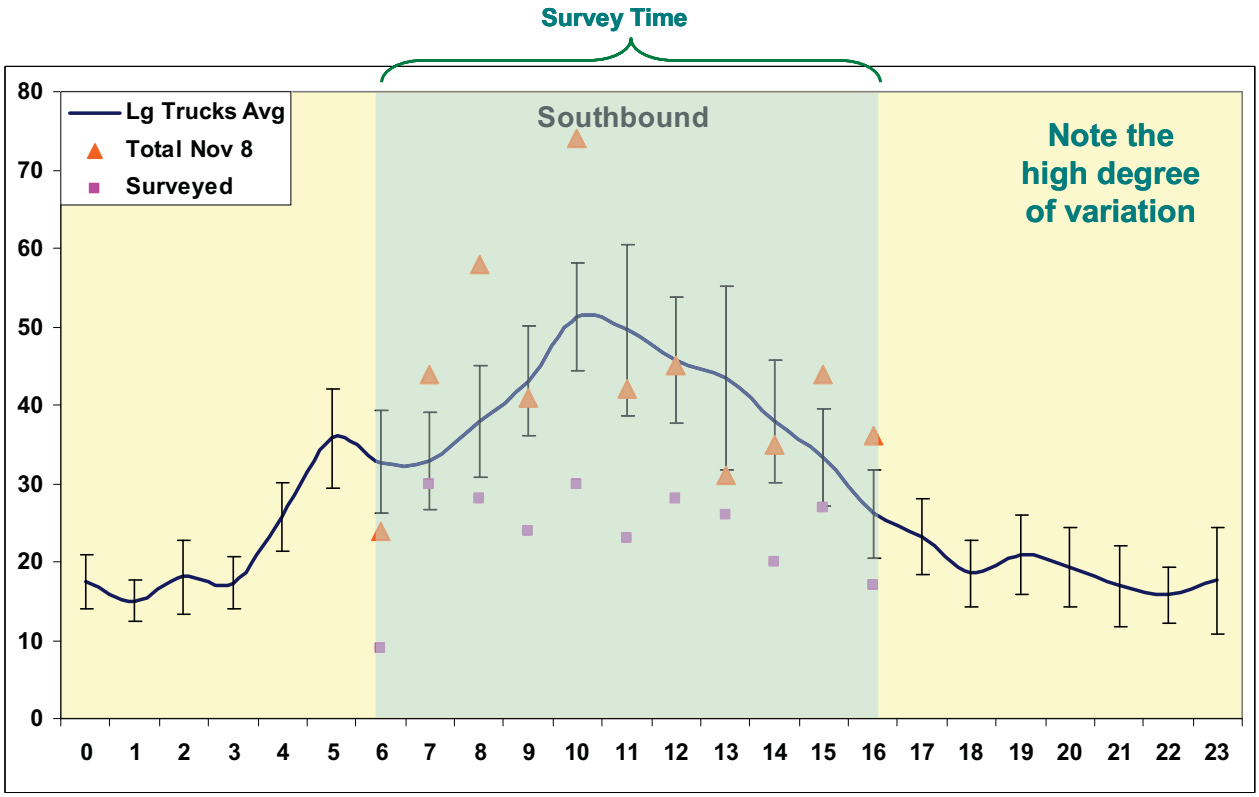


Figure 26
Average Hourly Weekday Large Truck Volume Compared to Survey Day
with one standard deviation vertical bars
NJ ROUTE 31 / US ROUTE 202 Southbound

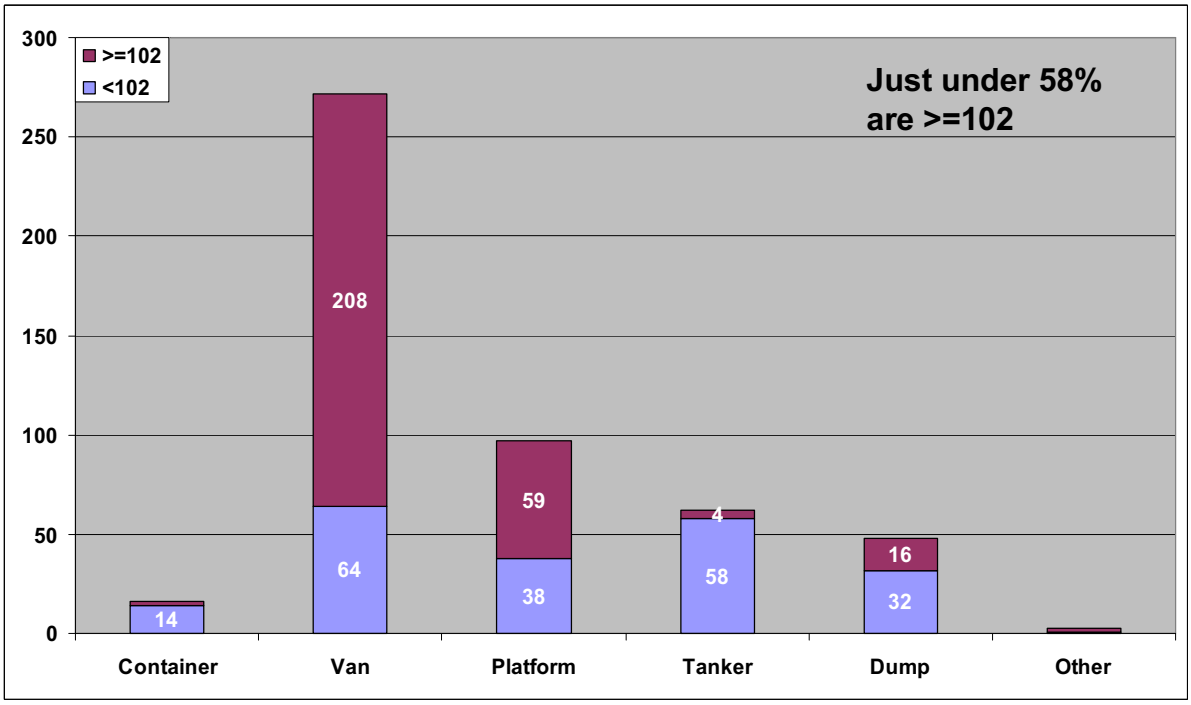


Survey Findings

Once it was determined that the total traffic volumes, hourly distribution and proportion of trucks in the traffic stream during the survey day were reflective of typical conditions, the responses to the survey questions were entered into a MS-Access database for statistical analysis. The primary focus of the analysis was placed upon the responses to survey questions 5 through 8 relating to the trip origin, destination and interim stops/activity. The truck trip origin/destination analysis focused primarily upon the responses to the questions regarding the trucks previous and next stops. Prior to discussing these key findings, a number of additional findings from the analysis of the survey responses were found to be pertinent to the understanding of truck activity along the surveyed roadways.

One of the key statistics extracted from the survey responses and was the distribution of truck types and dimensions (primarily width) of the trucks traveling through the survey area. During the survey process, the type of truck was noted along with a measurement of the width of the truck itself. Truck types were aggregated into six (6) categories, with the distribution of truck types at the US Route 202/NJ Route 31 survey locations summarized in Figure 25. Also included in Figure 25 is a summary of the width of the trucks surveyed.

Figure 27
Distribution of Truck Types and Dimensions
US ROUTE 202 / NJ ROUTE 31 Northbound and Southbound

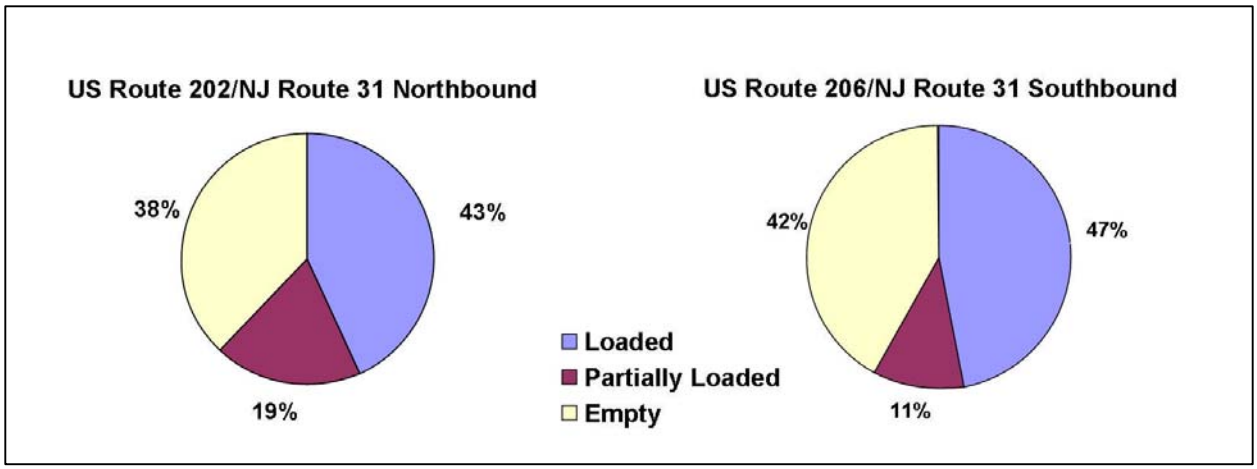


The width of the truck is a key consideration in whether or not the pending large truck regulations would be applicable to a particular vehicle. The regulations will only apply to trucks in excess of 96-inches in width. During the survey process, each truck was physically

measured to determine its width. As summarized in Figure 25, of the total trucks surveyed, 297 of the 514 trucks, or approximately 58 percent, would potentially be governed by the pending regulations. The nature of the individual trips, most notably their points of origin and/or destination, would determine just how many of these 297 truck would be regulatable, and could be diverted onto an alternative travel route utilizing the Interstate system.

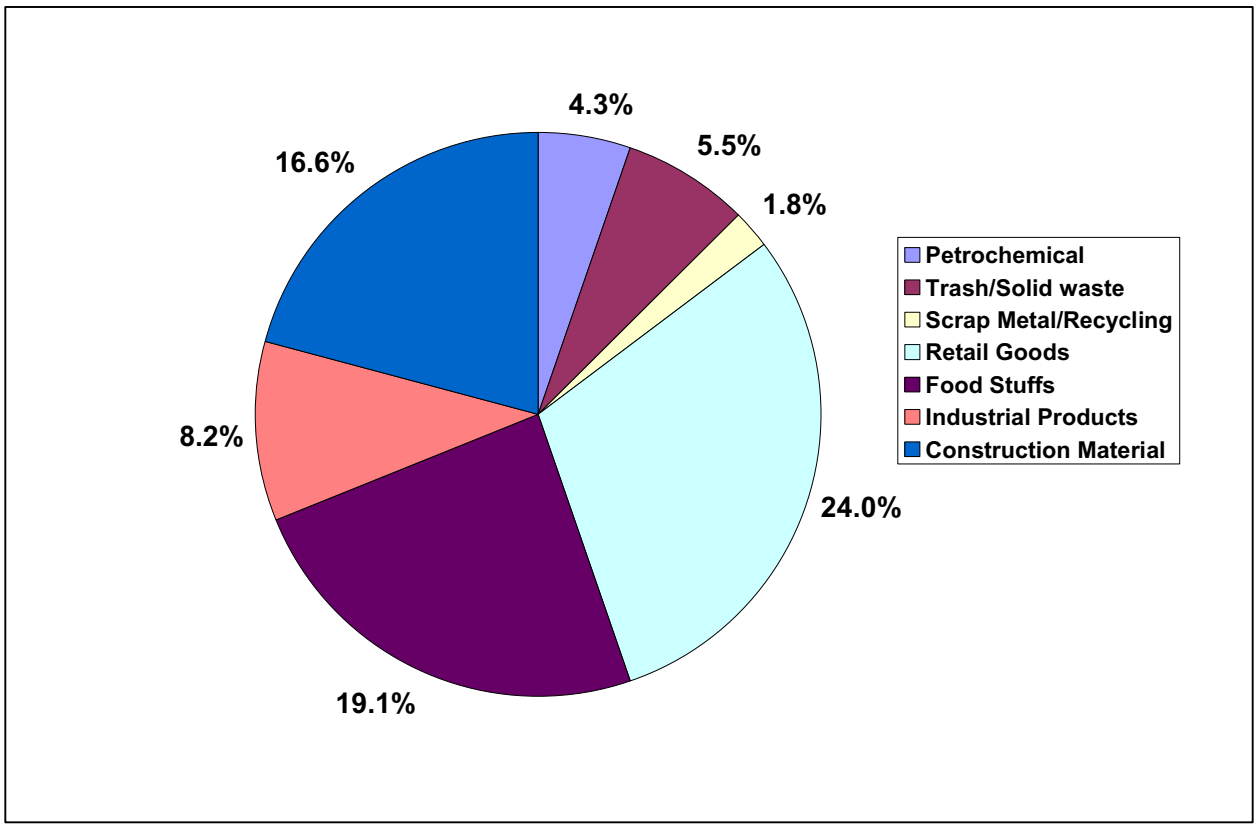
While not directly applicable to the regulation of trucks and the roadways they travel upon, drivers were queried as to whether or not they were currently loaded, partially loaded or empty. The proportion of loaded vs. non-or partially loaded trucks are summarized on Figure 26.

Figure 28
Proportion of Loaded vs. Empty trucks
NJ ROUTE 31 / US ROUTE 202



Queries were also posed as to the type of commodity they were currently (or if empty, were previously) carrying. Figure 27 summarizes the distribution of commodity types being transported by truck along US Route 202 / NJ Route 31.

Figure 29
Distribution of Commodity Types



As detailed previously, the pending truck regulations will only be applicable to trucks 102-inches in width or double-trailer trucks. Along the US Route 202 / NJ Route 31 corridor, approximately 58 percent of the large trucks fall into this category and would be potentially regulatable. Key to the determination of the applicability of the regulations comes down to the individual truck trip origins and destinations, and whether there is a direct need for the trucks to utilize the US Route 202 / NJ Route 31 corridor.

The responses to survey questions 5 through 8 were tabulated and analyzed to determine just how many of the trucks would potentially be affected by the regulations. Table 5 summarizes the origin/destination patterns of the surveyed trucks.

Table 7
Truck Trip Origin/Destination Patterns
US Route 202 / NJ Route 31

Local: Mercer, Somerset, Hunterdon and Bucks Counties
NJ North: Middlesex, Warren and all counties north thereof
NJ South: Monmouth and all counties south thereof
PA Southeast: Philadelphia, Montgomery, Delaware & Lehigh, Northampton Counties
External North: New York, New England, Eastern Canada
External South: rest of Pennsylvania, Delaware and all other states west and south

Color coding — to match Figures 30 through 34
Greens NJ (shades distinguish Local, North and South, PA Southeast)
Orange Trips with one end in NJ or PA Southeast, but NOT in Local area
Red External-External trips: those potentially subject to regulation

Total Trucks

NB	Local	NJ North	NJ South	PA Southeast	External North	Exteral South	Total
Local	40	32		10	9	4	95
NJ North	1	5		1	3	1	11
NJ South	12	18	1	13	6	12	62
PA Southeast	15	24	1	2	10	1	53
External North		1			1	1	3
Exteral South	12	7			8	1	28
Total	80	87	2	26	37	20	252

SB	Local	NJ North	NJ South	PA Southeast	External North	Exteral South	Total
Local	53	2	18	16		14	103
NJ North	47	5	11	12	1	13	89
NJ South							0
PA Southeast							0
External North	20	3	7	10		9	49
Exteral South	14		5	1		1	21
Total	134	10	41	39	1	37	262

102s: Subject to Regulation

NB	Local	NJ North	NJ South	PA Southeast	External North	Exteral South	Total
Local	26	19		4	6	2	57
NJ North	1	1		1	1	1	5
NJ South	5	11	1	5	5	7	34
PA Southeast	6	15		1	8		30
External North		1			1	1	3
Exteral South	6	3			8		17
Total	44	50	1	11	29	11	146

SB	Local	NJ North	NJ South	PA Southeast	External North	Exteral South	Total
Local	27	1	13	6		9	56
NJ North	28	2	7	6	1	9	53
NJ South							0
PA Southeast							0
External North	8	2	1	9		7	27
Exteral South	10		3	1		1	15
Total	73	5	24	22	1	26	151

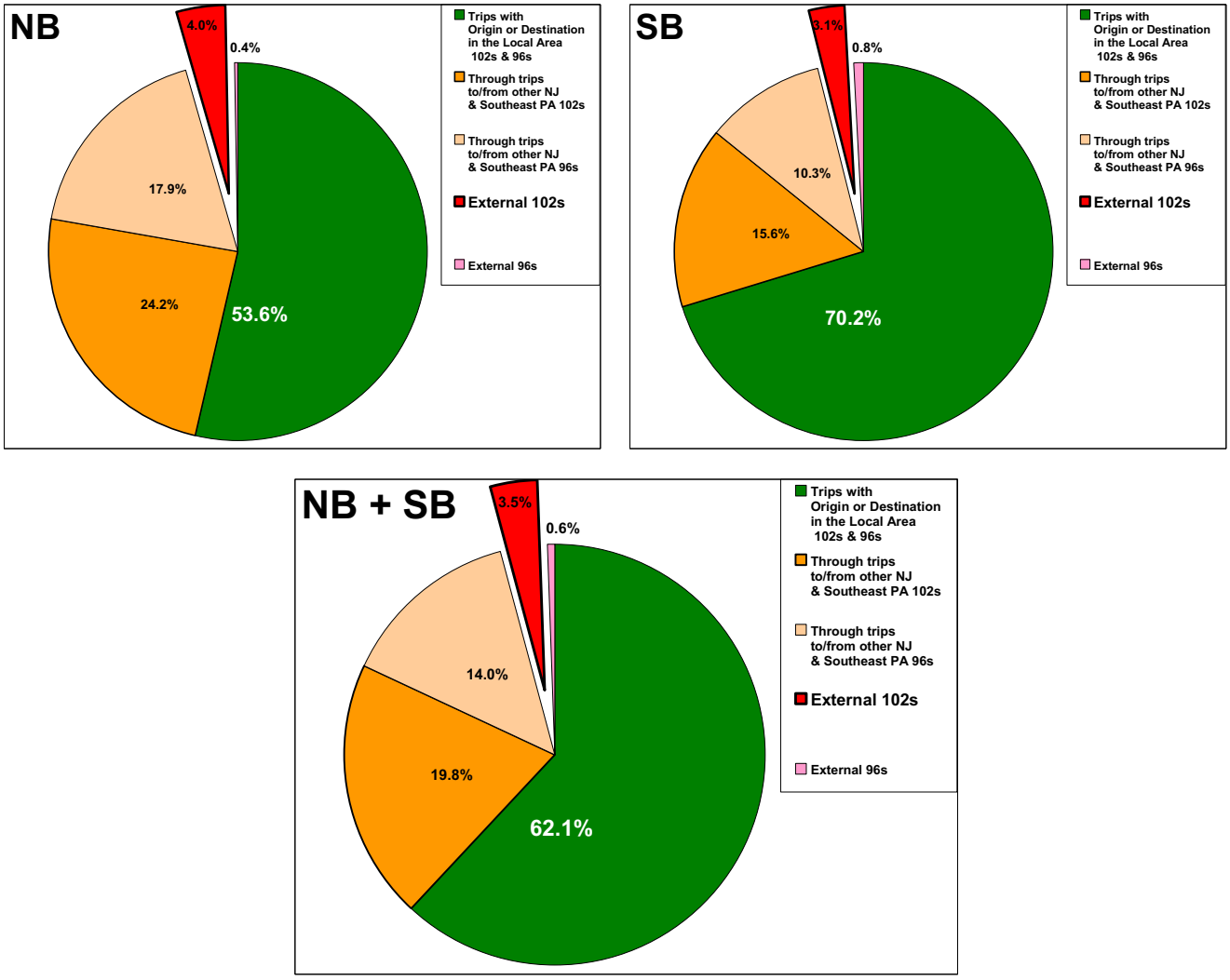
Several key findings emerged from the tabulation and analysis of the survey responses. A total of 297 (57.8 percent) of the 514 trucks surveyed were 102-inch wide trailers. Regulations apply to 102-inch wide trailer and tandem trucks, and do not affect 96-inch wide single trailer trucks.

Of the 297 102-inch wide trucks surveyed, 177 (59.6 percent) had either an origin or a destination (or both) within the local area. These trucks are serving local businesses and

industries and are therefore not subject to regulation. The regulations include a "reasonableness test" that is particularly applicable when addressing trips that have an origin or a destination just outside of the New Jersey state border. A total of 102 102-inch wide trucks (34.3 percent) had origins and/or destinations outside of the immediate local area, but within New Jersey or the nearby southeastern Pennsylvania area. These trucks are also not subject to regulation.

Of the 297 102-inch wide trailer trucks surveyed, 18 (6.1 percent) did not have an origin or a destination in the local, New Jersey or nearby southeastern Pennsylvania area. These 18 trucks, or approximately 3.5-percent of the total trucks surveyed along the US Route 202 / NJ Route 31 corridor, are affected by the new regulations. This equates to approximately 1.5 trucks per hour being subject to the current regulations during the typical day.

Figure 30
Northbound and Southbound Origins / Destinations



Drivers were queried regarding their choice of travel routes. As borne out by the data, and verified by the drivers, a majority of the trucks had little or no choice in the route driven due to their trip origins and/or destinations. Those that did not have an origin or a destination along the corridor, or in nearby areas, provided several different responses as to why they were on the roadway. Typically, these drivers were not driving a regular route, and had picked up a contract load for transport, and had only been provided with information related to the pick-up and a drop-off point. Most indicated that they were utilizing portable GPS systems for navigation. These systems were typically purchased in a retail outlet, and were not tailored to identify designated truck routes. Therefore, the drivers utilized the US Route 202 / NJ Route 31 corridor for through trips, even though sections of their travel placed them on roadways not necessarily suitable for large trucks.

Following is a series of maps (Figures 31 through 34) depicting the observed and recorded origin/destination patterns of the trucks along the US Route 202 / NJ Route 31 corridor in the survey area.

Figure 31
Local Origin/Destination to/from all
(Trips with at least one trip end in Mercer, Somerset, Hunterdon, Bucks Counties)

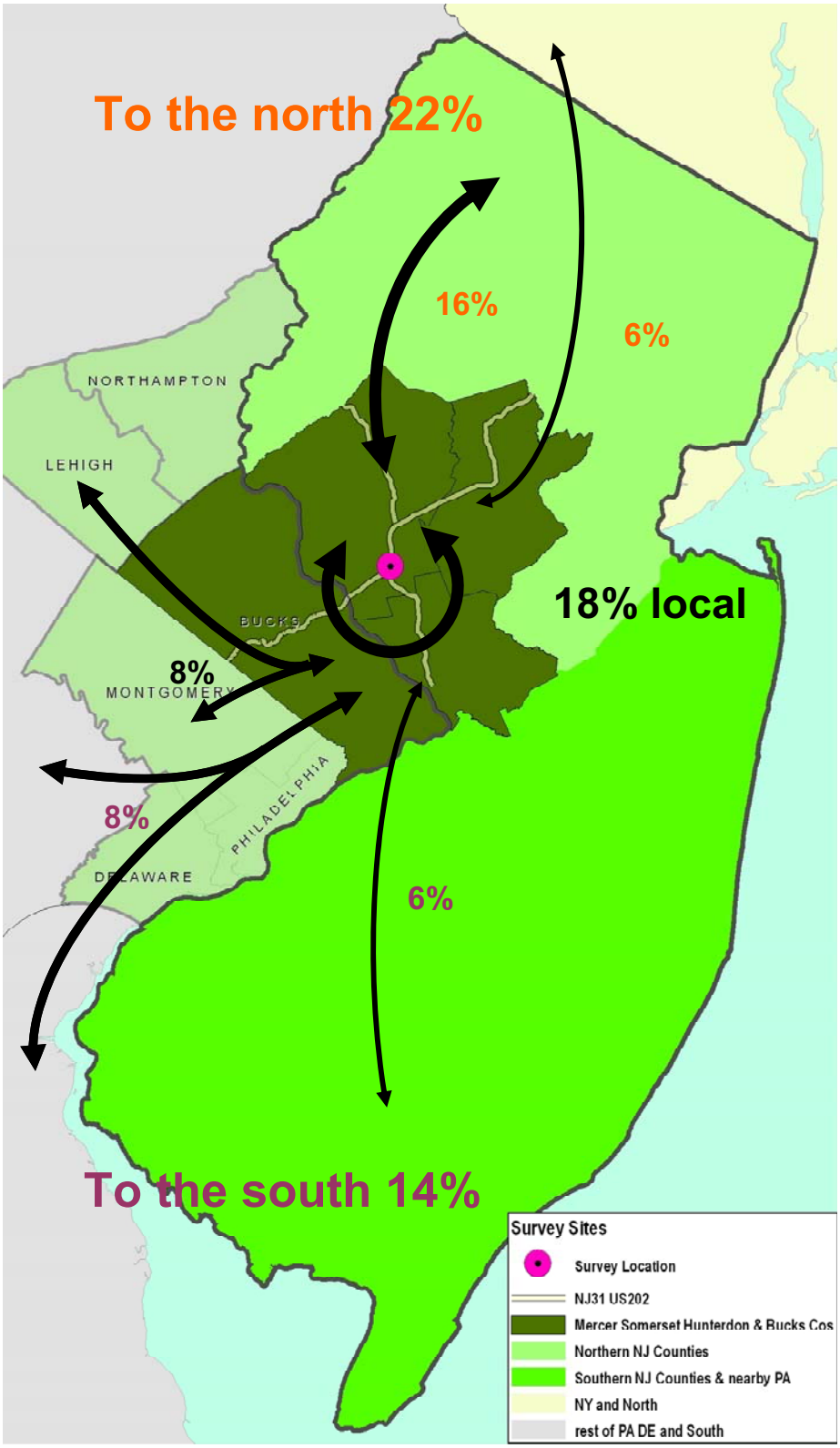


Figure 32
Through Local Area to/from elsewhere in the Region
(Trips with one or both trip ends in NJ or PA bordering NJ area)

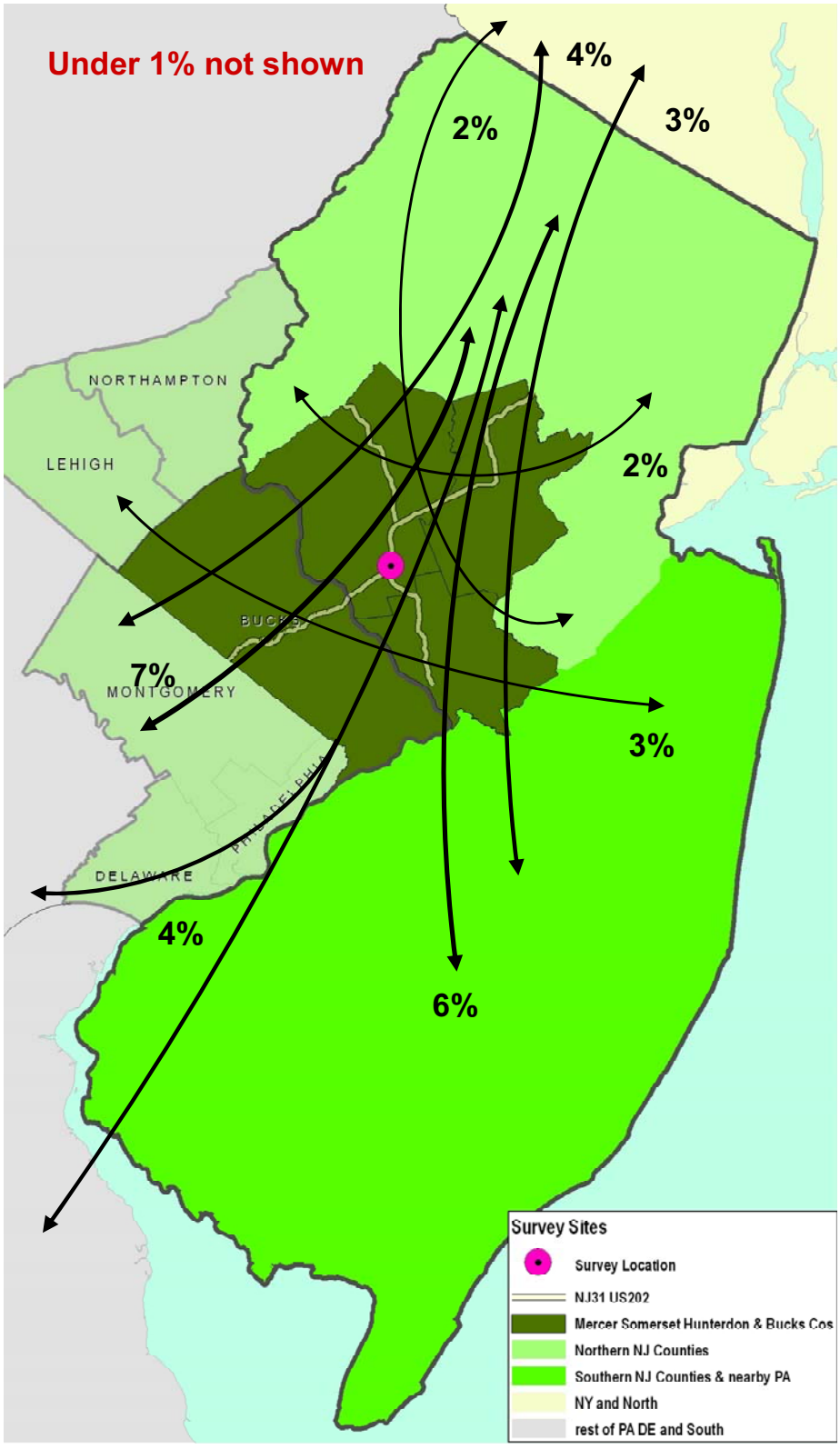


Figure 33
External to the Region Origin/Destination
(Trips traversing through NJ or PA bordering NJ area)

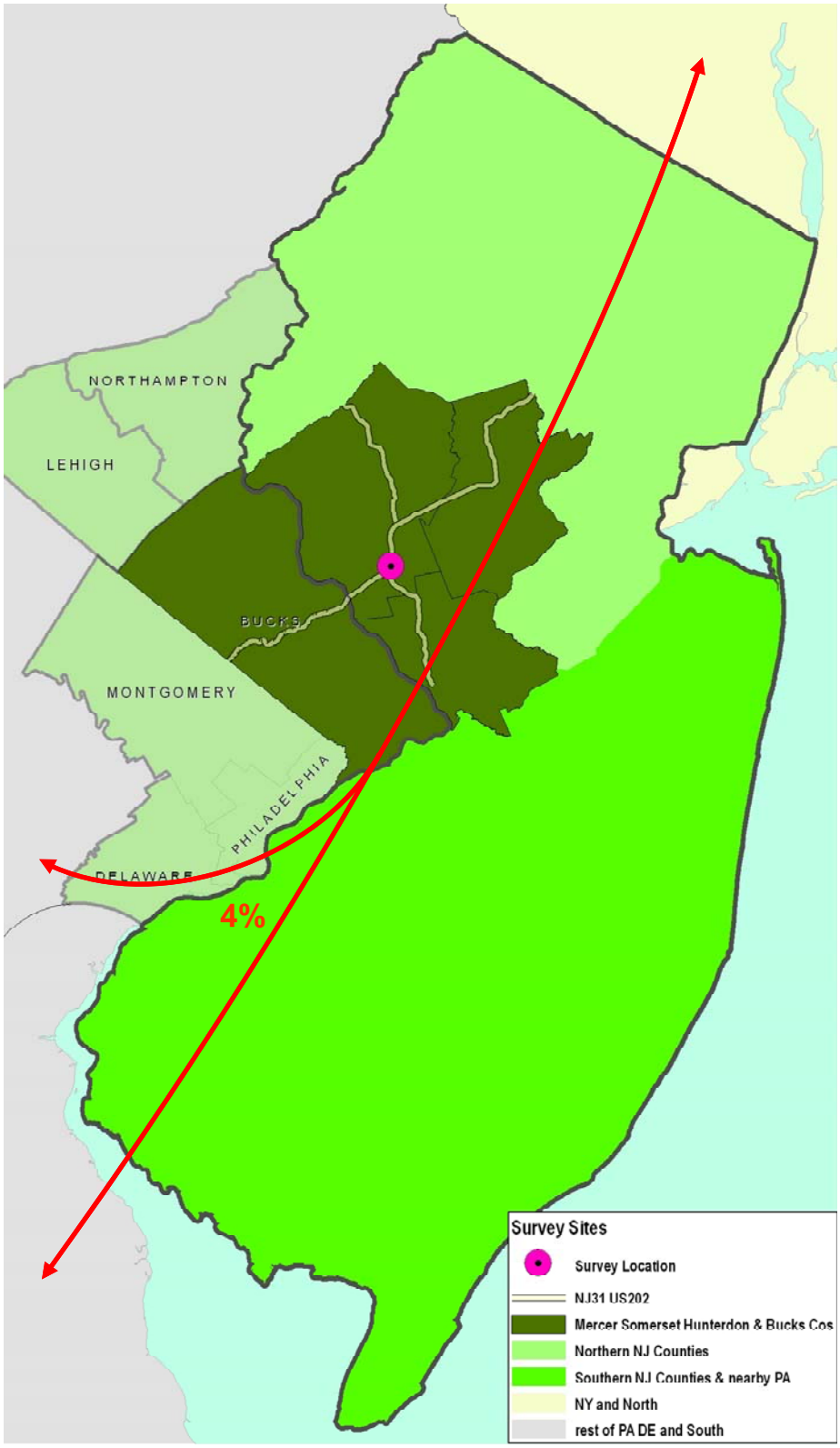


Figure 34
Number of 102" Truck Trips Potentially subject to regulation
(53 trips with one trip end non-local & the other External to the Region
And 18 trips traversing through NJ or PA bordering region)

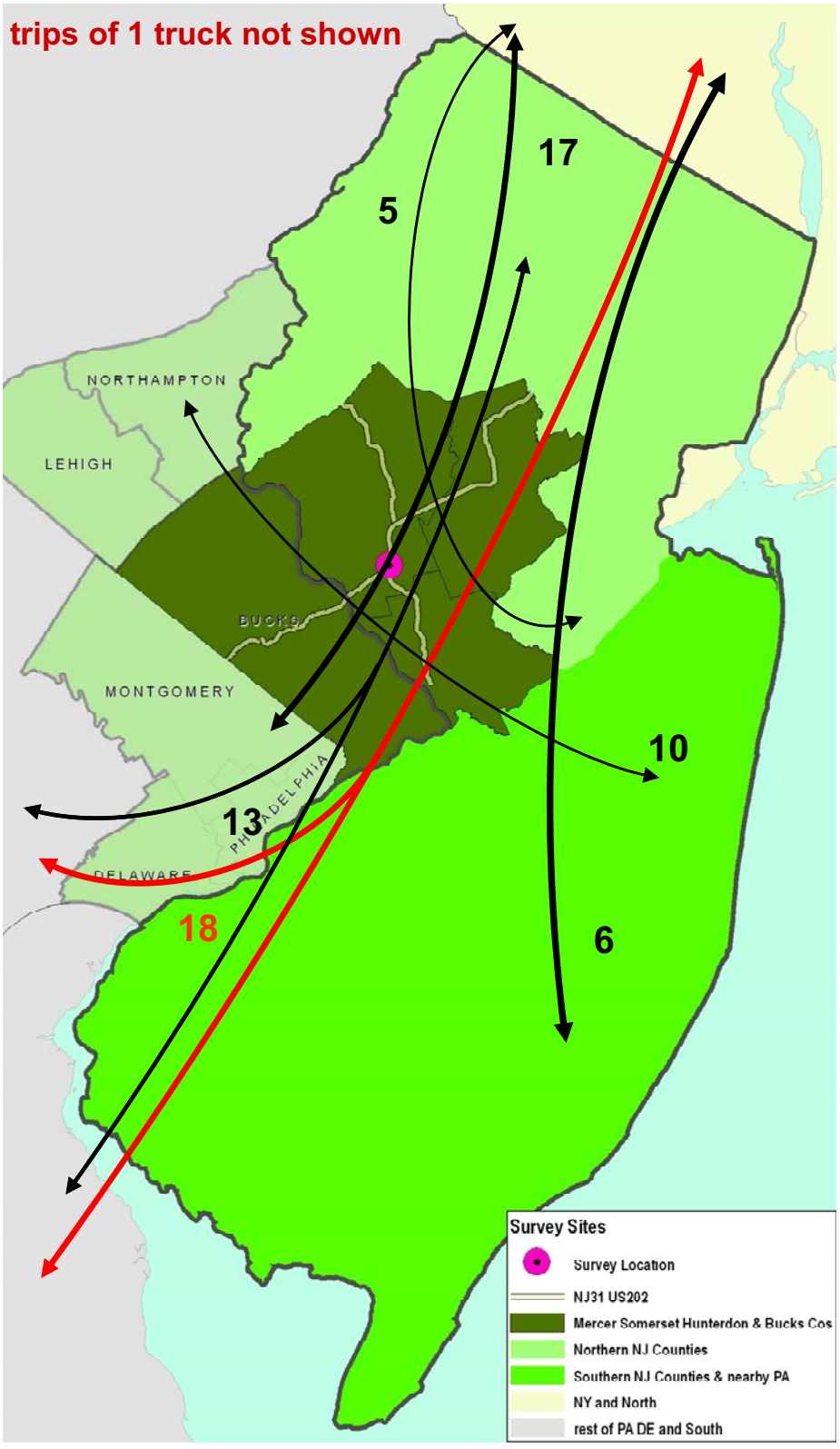


Figure 35
Distribution of Northbound Origins and Destinations By Municipalities

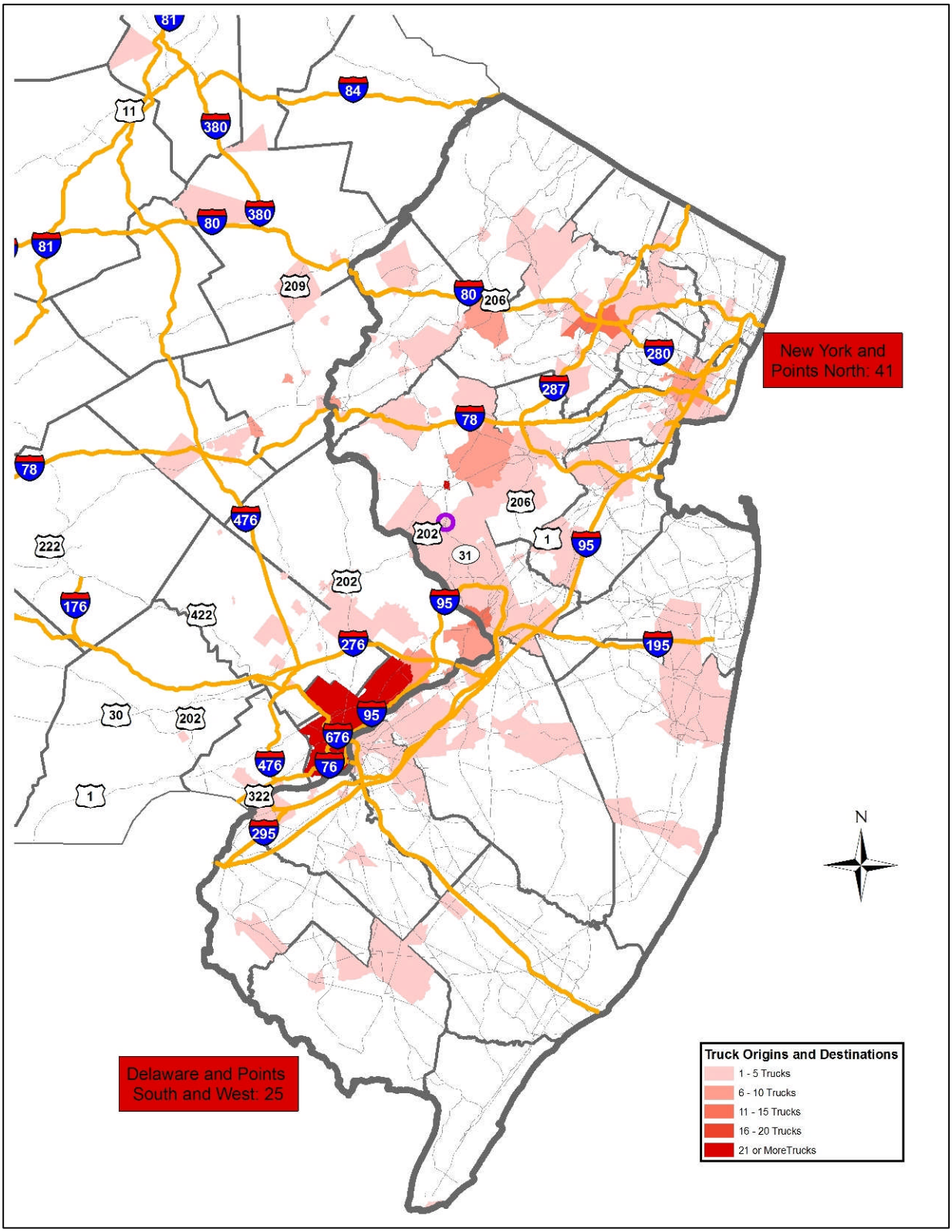
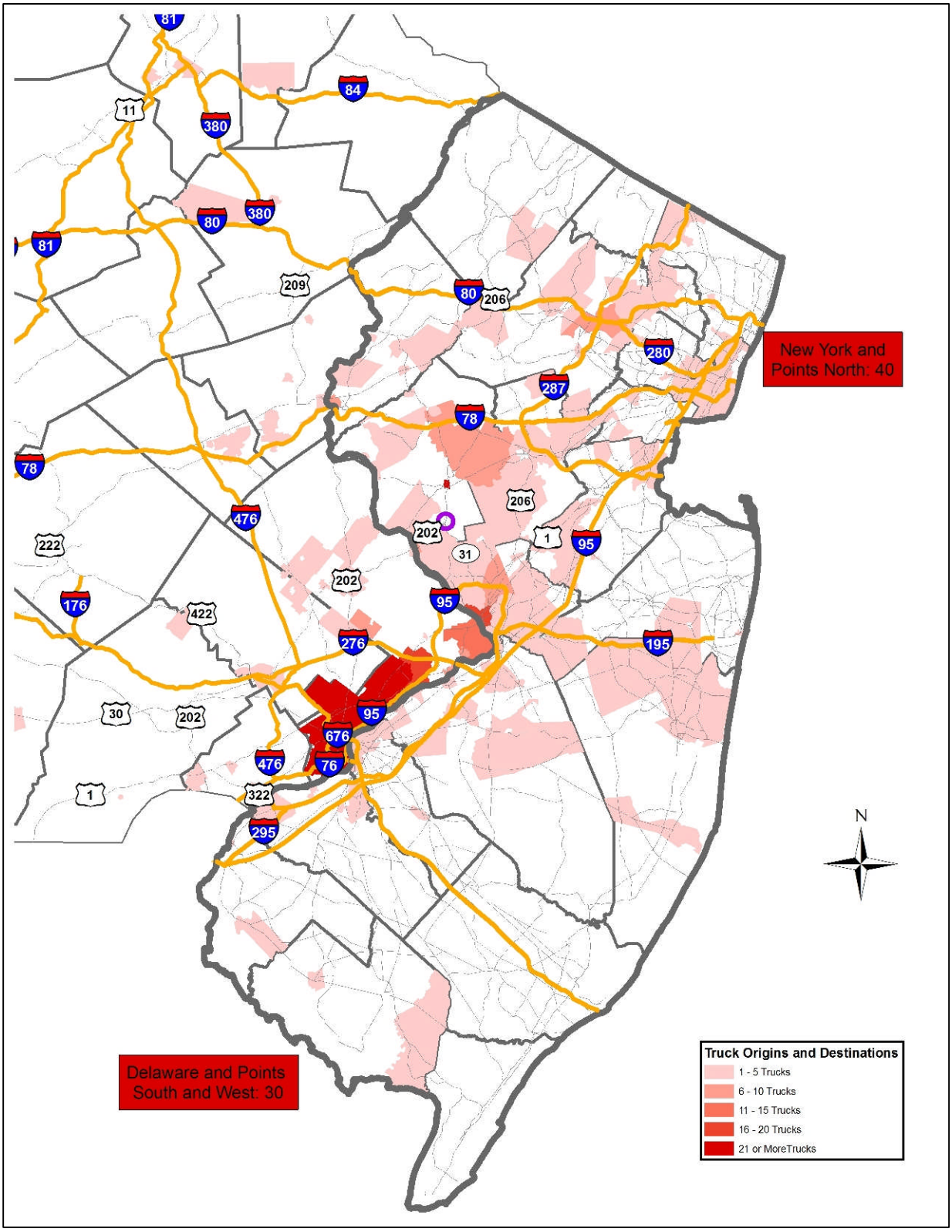


Figure 36
Distribution of Southbound Origins and Destinations By Municipalities



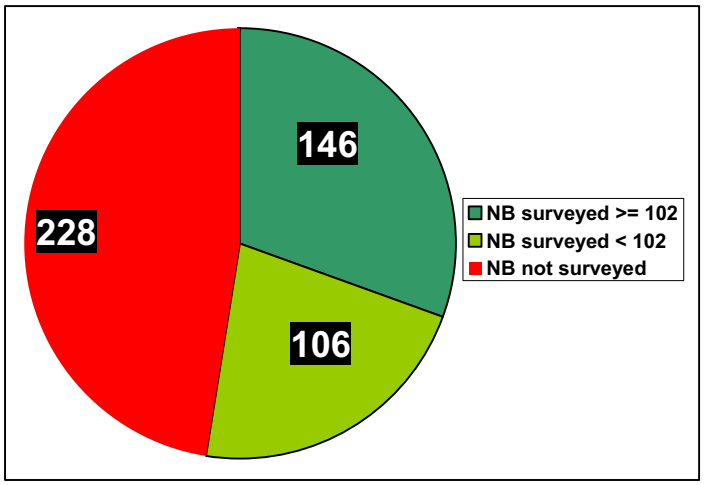
Summary of Key Findings – US Route 202 / NJ Route 31 Truck Patterns

Subsequent to coding and entering the survey responses into the database, a number of key findings emerged.

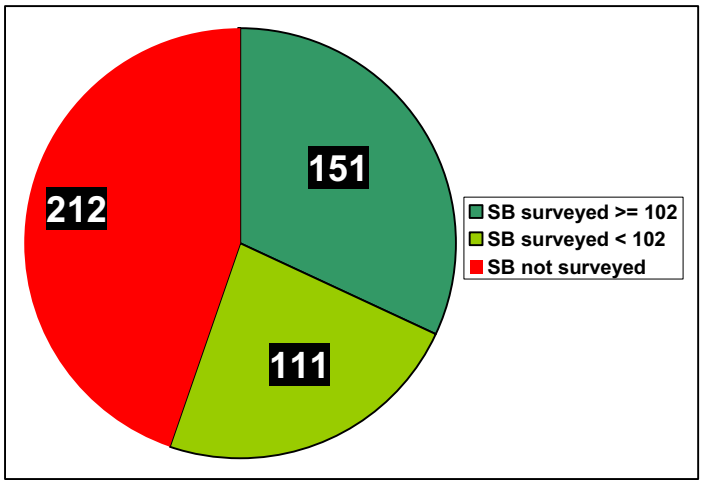
1. Total of **514** trucks surveyed (**252 NB** and **262 SB**)
297 (**146 NB** and **151 SB**) were **102s** *(about **58%**)*

Figure 37

NB



SB



2.a **245** ***(48%)*** trucks had ***BOTH*** an origin or destination in the local area (Mercer, Hunterdon, Somerset, Bucks Co, PA).

2.b **319** ***(62%)*** trucks had on origin ***or*** destination in the local area (Mercer, Hunterdon, Somerset, Bucks Co, PA).

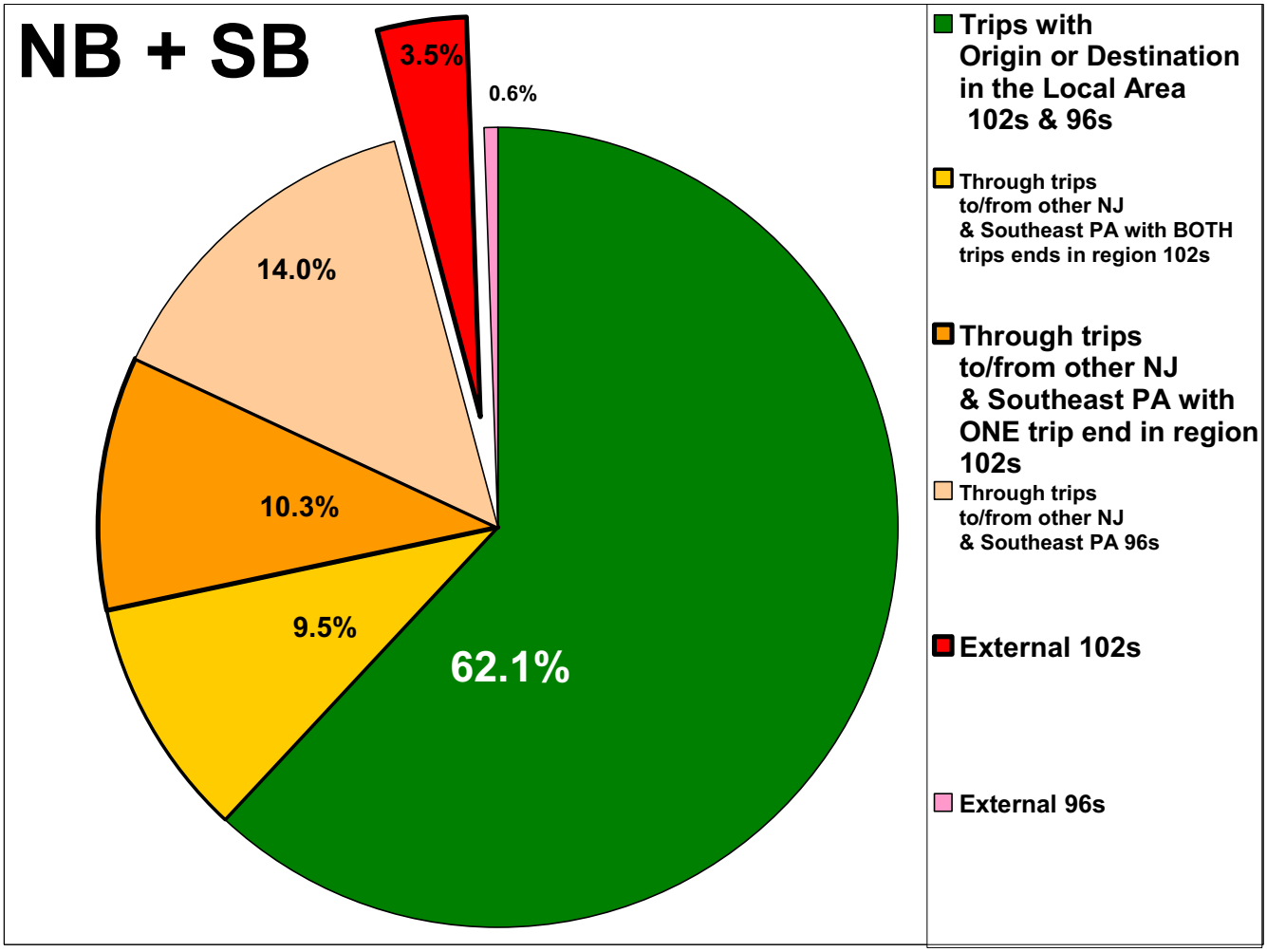
3.a an additional ***174 trucks (33.8%)*** had either an origin or a destination elsewhere in New Jersey or Southeastern Pennsylvania for a total of **495** trucks, or **96%.**

- Of the 495, ***328*** were ***102s***
- Of the 174, ***101 (19.6% of the total of 514)*** were ***102s***

3.b **21** Trucks ***(4%)*** had no stop in New Jersey or nearby Pennsylvania counties

- ***Of those, only 18 (3.5%) were 102s***

Figure 38



4. Northbound **5** (2%) Trucks were headed to Eastern Canada (Ontario or Quebec)

Of those, 3 (1.2%) were 102s

- ***2 were coming from nearby PA***
- ***1 was a through move from MD***

Southbound **3** Trucks originated in Eastern Canada (Quebec)

Of those, all 3 (1.1%) were 102s

- ***2 were headed to Bucks Co, PA***
- ***1 was a through move to MD***

5. Trucks utilizing the US Route 202 / NJ Route 31 corridor have origins and destinations farther afield from the local area than those on US-206. The top origins and destinations in each direction are:

Table 8

Origins

NB

Philadelphia, PA	29
Trenton, NJ	12
Morrisville, PA	11

SB

Flemington, NJ	39
Clinton, NJ	9
Phillipsburg, NJ	7
North Branch, NJ	6
Parsippany, NJ	6

Destinations

Flemington, NJ	35
Parsippany, NJ	10
Phillipsburg, NJ	9
Bethlehem, PA	7
Newark, NJ	6
Whitehouse, NJ	6

Philadelphia, PA	23
Bensalem, PA	17
Morrisville, PA	13
Trenton, NJ	13
Fairless Hills, PA	12
Lambertville, NJ	11
Bristol, PA	6
Lawrenceville, NJ	6
Tullytown, PA	6
Warminster, PA	6
Burlington, NJ	5
Langhorne, PA	5
Pennington, NJ	5
Doylestown, PA	4
Hatfield, PA	4

VIII. SUMMARY AND CONCLUSIONS

While extensive and detailed data were assembled through the conduct of the truck origin/destination survey, a key finding is that only a relatively small proportion of the trucks utilizing the local highways will be affected by the pending regulations. The new regulations incorporate consideration of the "reasonableness" of the route for use by trucks dependent upon the origin and/or destination of the trip. While the specific language of the regulations requires truck to enter and exit the state utilizing the US Interstate system, the reasonableness test may easily be applied to those trips that have origins and/or destinations in areas immediately adjacent to New Jersey (ex: Bucks County, PA). While technically having out-of-state origins and destinations, these trips would be considered approved for the use of roadways such as the US Route 202 corridor.

As identified through the survey findings, a significant percentage of the existing truck trips along both US Route 206 and US Route 202 / NJ Route 31 have a local origin and/or destination, and would not be affected by the truck Route regulations, regardless of the width of the specific truck in question. On casual observation, recognizing whether a truck is a 96" or 102" is not immediately obvious. Which of these is a 96" and which is a 102"? Although not obvious, the Shop Rite truck is 102" wide and the Coca-Cola truck is 96" wide.

Of the 514 trucks surveyed along the US Route 202 / NJ Route 31 corridor, 272 were cargo vans of the type shown in the pictures above. Of these 272, 202 (74% of the vans, but *only* 39% of the total large trucks) were pulling 102" wide trailers, thus subject to the Large Truck regulations. Of the 514 total trucks surveyed, only 45 (9%) would be considered as external NJ through trips (with no local business in NJ). If we break down these truck trips even further, we find that only 35 trucks surveyed were 102" wide ***and*** were traversing through NJ. This represents only 7% of the total number of trucks surveyed along the US Route 202 / NJ Route 31 corridor. Only this small subset of trucks would be affected by the Large Truck regulations.

If nearby PA is included as part of our local NJ region, these numbers drop even further. Only 20 (4%) trucks would be considered external NJ trips, of which 18 (or less than 3.5%) were 102" wide trailers. NOTE: Bucks County was considered "local" as per the recent court decision that required New Jersey to revise its Large Truck regulations.

Subsequent to implementation of the new regulations, conduct of a follow-up origin/destination survey would allow quantification of the exact effect of the regulations, and would provide the foundation for a focused consideration of additional steps that may be taken to facilitate goods movement and truck mobility while remaining sensitive to the concerns of the communities through which these trucks travel.

Additional technologies and methods for collecting truck origin/destination data, and tracking compliance with the New jersey truck regulations are available and should be considered for application in the future. Weigh-in-Motion stations have been installed at numerous locations throughout New Jersey. Data obtained from these permanent count stations may be readily applied to track trends in the volume of large truck traffic along key highway corridors. As a supplement to this data collection system, portable EZ-Pass readers could be located at key locations throughout the state to record the passage of trucks, and allow determination of the vehicle's extent of travel along the corridor. With this (or a similar) process in place, compliance with the Statewide truck regulations would be readily monitored, with enforcement measures implemented as required.

APPENDIX A – ORIGIN/DESTINATION TRENDS OF TRUCKS TRAVELING ALONG US-206

Figure A-1
US-206 Southbound Truck Origins and Destinations

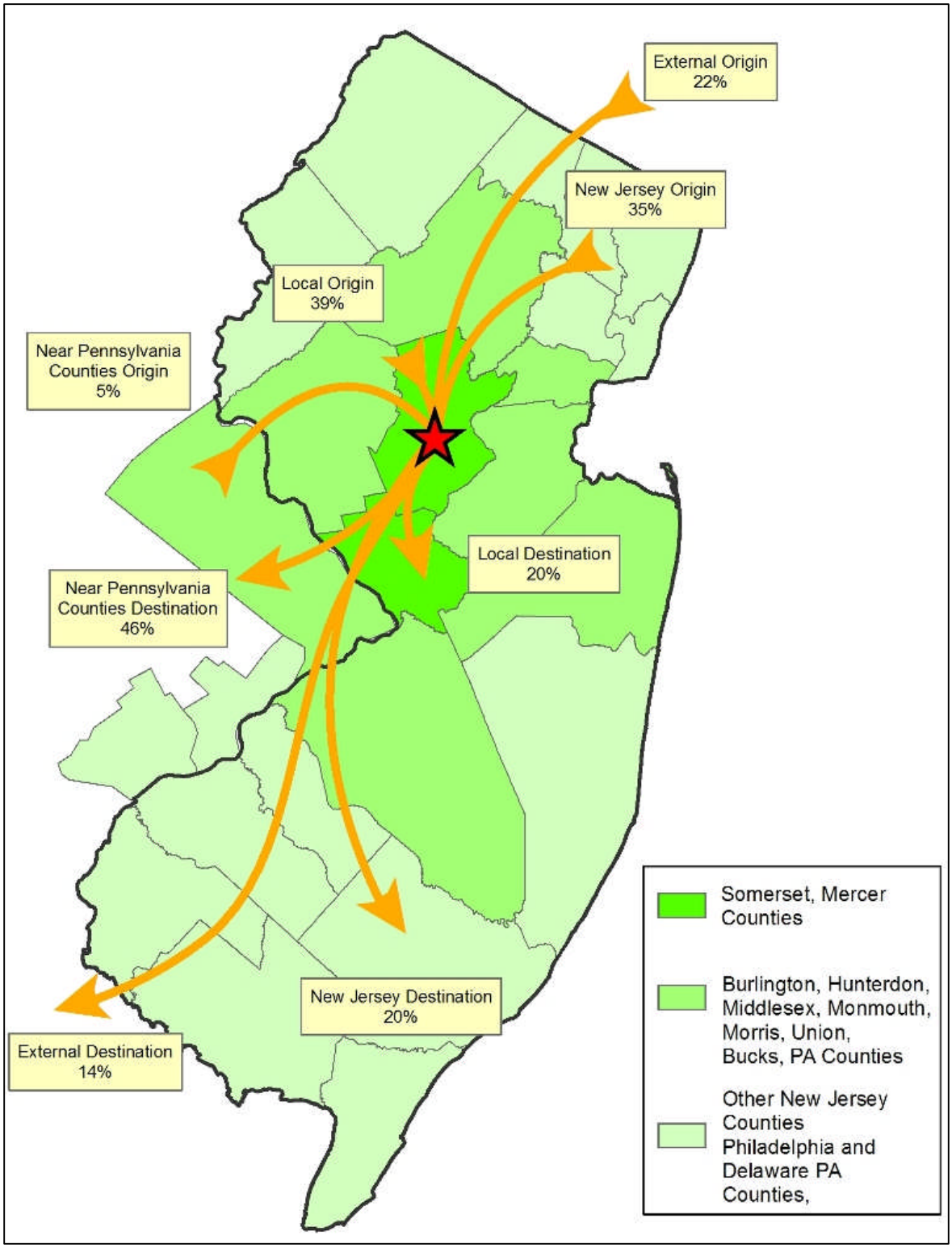
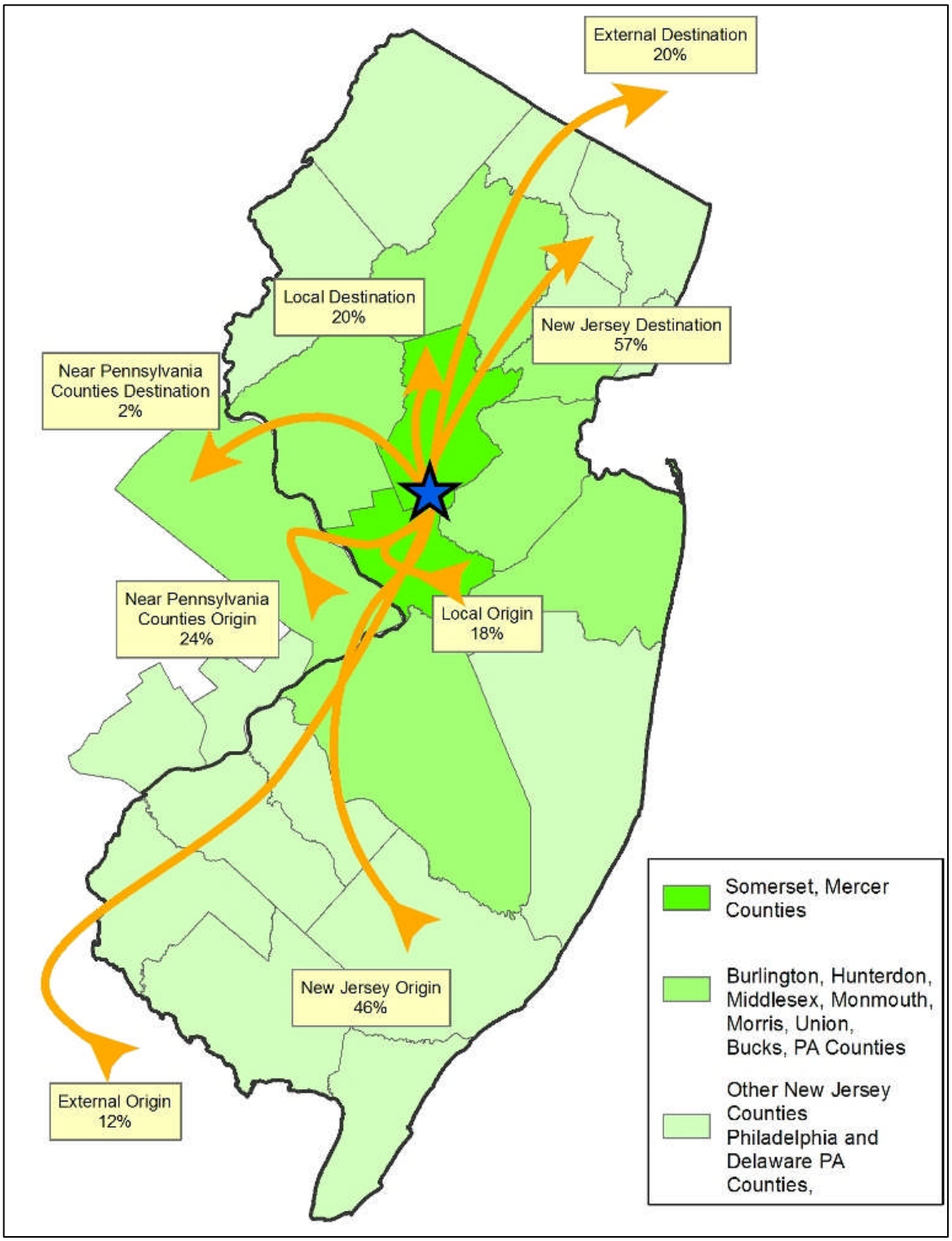


Figure A-2
US-206 Northbound Truck Origins and Destinations



APPENDIX B – ORIGIN/DESTINATION TRENDS OF TRUCKS TRAVELING ALONG US ROUTE 202 / NJ ROUTE 31

Figure B-1
US ROUTE 202 / NJ ROUTE 31 Southbound Truck Origins and Destinations

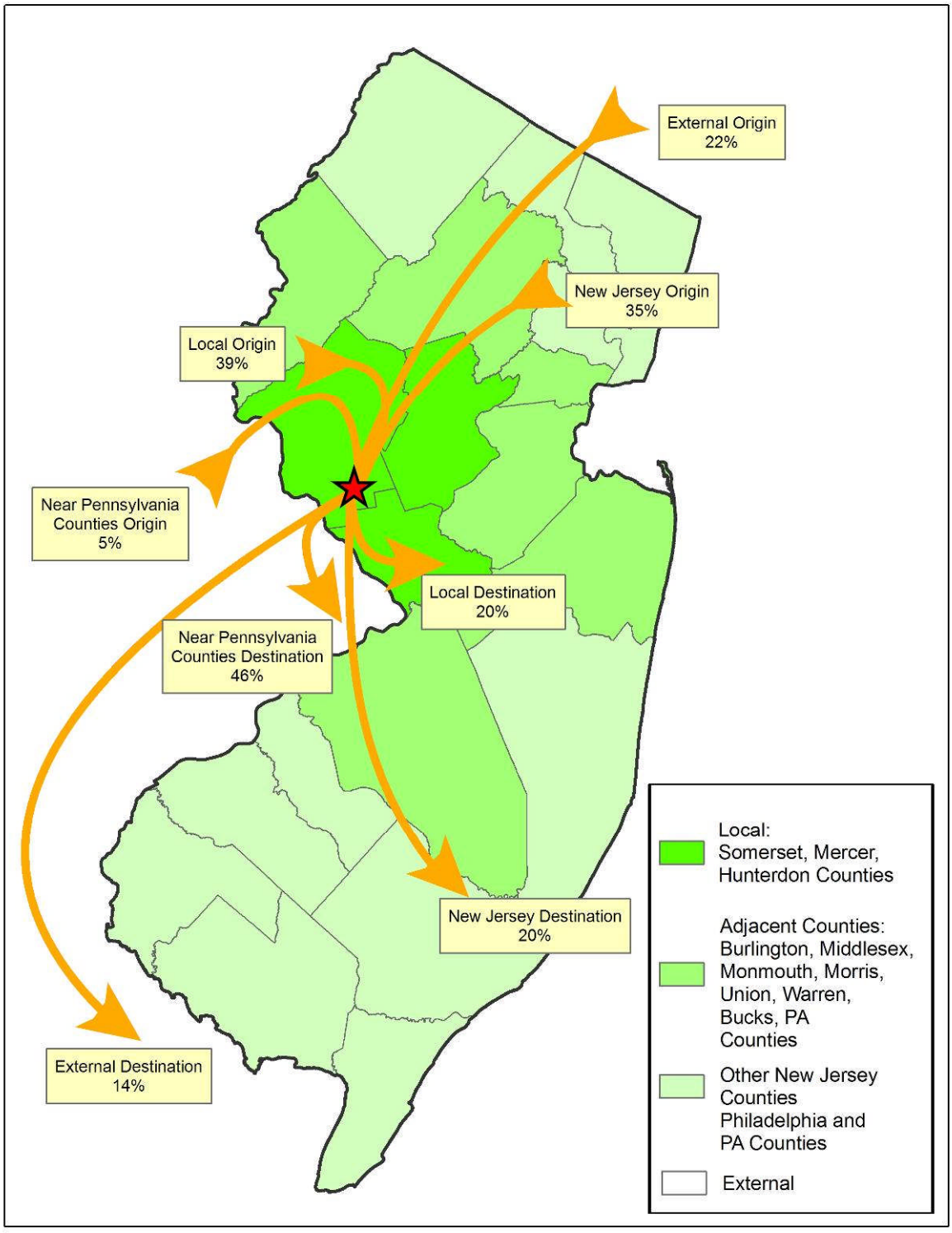


Figure B-2
US ROUTE 202 / NJ ROUTE 31 Northbound Truck Origins and Destinations