

2006 TRUCK TOLL VOLUMES

November 2007





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The 2006 Truck Toll Volumes report is another valuable resource from NYMTC. It's part of a series that monitors freight vehicle movements in the New York metropolitan region. The comparative performance tables and graphical analyses capture the most significant truck activity at major toll barriers/plazas over the last 20 years.

The information presented in this report is also used in part to measure the region's performance toward achieving the mobility, freight transportation and decision-making goals of the Regional Transportation Plan (RTP), which was adopted by the Council in 2005. This plan outlines several goals:

- (1) to provide adequate mobility for people and freight by 2030;
- (2) to maximize the transportation system's level of service;
- (3) to manage demand to the extent possible; and
- (4) to minimize costs and improve the region's reliability and safety of freight movement.

In addition to the RTP, the 2006 Truck Toll Volumes report contains data and analysis that is used in a number of ways. It's produced to support the planning process and is often used by consultants, transportation agencies/providers and consumer advocacy organizations. The data in this report is also an excellent resource for those involved in the analysis and planning of future truck routes in the region.

We hope that it is useful and becomes an important tool for you.

Joel P. Ettinger Executive Director, NYMTC

About NYMTC:

The New York Metropolitan Transportation Council (NYMTC) is an association of governments, transportation providers and environmental agencies that is a collaborative forum for regional transportation planning, and for the disbursement of federal transportation improvement funds. The NYMTC region includes New York City, Long Island and the lower Hudson Valley.

The New York Metropolitan Transportation Council (NYMTC) region encompasses an area of 2,440 square miles and a population of about 12 million, which in 2005 was approximately 64 percent of New York State's population. 826,000 people move between New York, New Jersey and Connecticut each day by rail and bus, and thousands more via roads, bridges and tunnels.

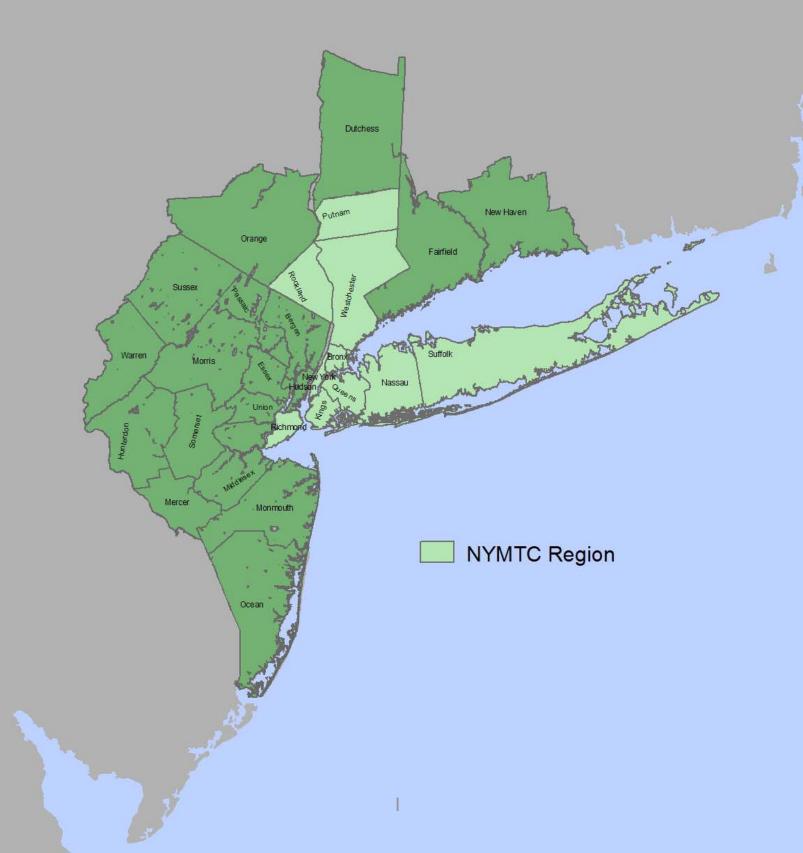
Voting Members:

- Counties of Nassau, Putnam, Rockland, Suffolk and Westchester
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- New York City Department of City Planning (NYCDCP)
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- New York State Department of Environmental Conservation (NYSDEC)
- North Jersey Transportation Planning Authority (NJTPA)
- Port Authority of New York & New Jersey (PANY&NJ)
- United States Environmental Protection Agency (USEPA)

NEW YORK - NEW JERSEY - CONNECTICUT METROPOLITAN AREA MAP



REPORT HIGHLIGHTS

TRUCK TOLL MAJOR RIVER CROSSINGS 2005-2006

Volume of truck trips

		2006	2005	Travel Lanes*	Percent of change
1	George Washington Br. (PANYNJ): I-95	8,668,890	8,478,634	14	2.2%
2	Throgs Neck Br. (MTA B&T): I-278	4,481,580	4,353,610	6	2.9%
3	Triborough Br. Bronx & Manhattan (MTA B&T)I-278	4,257,775	4,183,146	8	1.8%
4	Verrazano Narrow Br. (MTA B&T): I-278	3,896,434	3,874,824	12	0.6%
5	Newburgh-Beacon Br.(NYSBA): I-84	3,357,000	3,408,750	7	-1.5%
6	Tappan Zee Br. (NYSTA): I-278	2,979,338	3,193,988	7	-6.7%
7	Lincoln Tun. (PANYNJ): I-495	2,765,970	2,761,240	6	0.2%
8	Bronx-Whitestone Br. (MTA B&T): I-678	2,643,057	2,626,402	6	0.6%
9	Goethals Br. (PANYNJ): I-278	2,314,208	2,533,986	4	-8.7%
10	Queens-Midtown Tun. (MTA B&T): I-495	2,029,073	1,853,291	4	9.5%
11	Outerbridge Crossing (PANYNJ): N-440	1,988,636	1,737,290	4	14.5%
12	Bayonne Br. (PANYNJ): NY-440	819,396	785,852	4	4.3%
13	Brooklyn Battery Tun. (MTA B&T): I-478	796,737	681,781	4	16.9%
14	Mid-Hudson Br. (NYSBA): US-44	491,352	504,012	5	-2.5%
15	Cross-Bay Boulevard Br. (MTA B&T)	368,724	311,485	6	18.4%
16	Rip Van Winkle Br. (NYSBA): NY-23	284,916	291,304	2	-2.2%
17	Kingston-Rhinecliff Br. (NYSBA): US-209	256,562	255,324	2	0.5%
18	Marine Parkway Br. (MTA B&T)	196,585	181,021	4	8.6%
19	Holland Tun. (PANYNJ): I-78 **	189,116	201,278	4	-6.0%
20	Bear Mountain Br. (NYSBA): US-6	148,986	145,390		2.5%
21	Henry Hudson Br. (MTA B&T): NY-9A	113,952	101,424	7	12.4%
22	Atlantic Beach Br. (NCBA)	68,383	70,592	5	-3.1%
	Toll Barriers/Interchanges	2006 Volume	2005 Volume	Lanes	Percent of change '05/'06
1	NJ Turnpike Exit 7A-18	25,218,982	24,687,319	6-14 lanes~	2.2%
2	NJTA-Garden State Pkwy ^	4,636,934	4,815,318	2-4 lanes~	-3.7%
3	New Rochelle (NYSTA): I-95	4,996,582	5,288,892	3	-5.5%
4	Spring Valley (NYSTA): I-87/287	2,540,716	2,794,284	3-4 lanes~	-9.1%
5	Yonkers (NYSTA): I-87	1,995,979	2,030,843	2	-1.7%
6	Harriman (NYSTA): I-87	1,278,688	1,372,432	2	-6.8%
20 21 22 1 2 3 4 5	Bear Mountain Br. (NYSBA): US-6 Henry Hudson Br. (MTA B&T): NY-9A Atlantic Beach Br. (NCBA) Toll Barriers/Interchanges NJ Turnpike Exit 7A-18 NJTA-Garden State Pkwy ^ New Rochelle (NYSTA): I-95 Spring Valley (NYSTA): I-87/287 Yonkers (NYSTA): I-87	148,986 113,952 68,383 2006 Volume 25,218,982 4,636,934 4,996,582 2,540,716 1,995,979	145,390 101,424 70,592 2005 Volume 24,687,319 4,815,318 5,288,892 2,794,284 2,030,843	2 7 5 6-14 lanes~ 2-4 lanes~ 3 3-4 lanes~ 2	2.5% 12.4% -3.1% Percent of change '05/'0 2.2% -3.7% -5.5% -9.1% -1.7%

^ Includes trucks weighing 3.5 tons or less

* Travel lanes, not toll plaza lanes

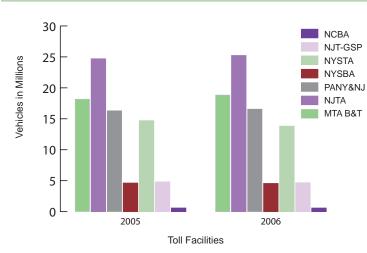
~ Depending of highway system

Source: Operating Agency monthly records.

Notes

1 For facilities with toll collected one way the volume is doubled

2 Commercial vehicles are allowed on GSP only south of interchange 105. Figure of traffic on NJT calculated as 80% of total commercial traffic on NJT.



Toll Agency Annual Truck Volumes

Glossary

** Restrictions for commercial traffic in Holland Tunnel

Metropolitan Tansportation Authority - Bridges & Tunnels
New Jersey Turnpike Authority
New Jersey Turnpike Auithority - Garden State Parkway
Port Authority of New York & New Jersey
New York State Bridge Authority
New York State Thruway Authority
Nassau County Bridge Authority

2005-2006 PANY&NJ data does not include Holland Tunnel Source: Toll agencies data

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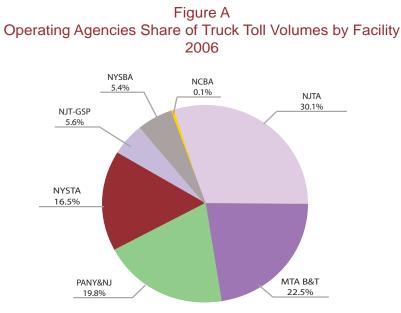
TRUCK TOLL VOLUMES IN 2006

This report presents an analysis of the movement of truck traffic over toll bridges and crossings in the downstate New York and northern New Jersey metropolitan area during the years 2005 and 2006. It also includes some truck related data from southwestern Connecticut. The report is based on truck data supplied by agencies in the region entrusted with maintaining the region's toll barriers and includes characteristics such as: number of truck trips by operating agency (in case of one-way toll collection, the volume is doubled); identification of the 27 facilities managed by the respective



authorities; types of trucks (two to eight-axle vehicles, and in case of NYSTA - by vehicle class) that use these facilities; toll rates levied for usage of the various facilities; and seasonal trips (monthly, quarterly, annually) made during the period, as well as commercial vehicle registration data. The seven operating agencies that supply monthly vehicle reports are: the Port Authority of New York and New Jersey (PANY&NJ); Metropolitan Transportation Authority Bridges & Tunnels (MTA-B&T); New York State Bridge Authority (NYSBA); New York State Thruway Authority (NYSTA); New Jersey Turnpike Authority - Garden State Parkway (GSP) Division; New Jersey Turnpike Authority (NJTA); and Nassau County Bridge Authority (NCBA). The NYCDOT-operated East River Bridges (Brooklyn, Manhattan, Queensborough and Williamsburg bridges) are non-toll bridges and therefore are not included in this report.

Major Highlights: The extent of truck travel has risen consistently but unevenly in the region over the past 20 years. In the period under review, the region's truck toll volume shows 0.4 percent increase from 2005 and totaled 84 million vehicle trips compared to 83 million in previous year. The data for 1986 to 2006 included in Table 1 indicate that in 2006, as in the last 20 years,



PANY&NJ data does not include Holland Tunnel data Source: Toll agency data

the New Jersey Turnpike Authority (NJTA) retained the highest volume of trucks, handling almost 30 percent of the region's truck trips (0.5 million more truck trips than last year), followed by MTA B&T and the Port Authority of New York and New Jersey, with 23 and 20 percent, respectively (see Table 1). The New York State Thruway Authority (NYSTA) facilities handled 16 percent of all truck volumes in 2006, similar to counts over the past five years. The contribution of the New York State Bridge Authority (NYSBA), the Garden State Parkway and the Nassau County Bridge Authority (NCBA) remained mostly unchanged at approximately 5 percent for NYSBA and GSP and 0.1 percent for NYCBA.

• **River Crossings:** The nine toll bridges and tunnels that span the Hudson River carried a combined 23 million trips in 2006, 0.3 percent less than in 2005. The tenth crossing, Holland Tunnel's data are not included, because of restrictions in truck traffic for east direction, which prevent doubling the one-way collected truck trips data. The George Washington Bridge has the highest percentage increase in truck trips in 2006 over 2005 (2 percent). The GWB, followed by the VNB and the NBB were the three most heavily traveled Hudson River facilities in both 2006 and 2005.

There was a 4 percent increase to 14 million trips from the previous year in truck trips traveling via the two tunnels and three toll bridges that span the East River. Two of MTA-B&T's facilities, the Triborough Bridge and the Throgs Neck Bridge, contributed 61 percent of truck trips using the East River's crossings. These two bridges provide the most traveled link between New York City and upstate New York, other northeastern states and Canada.

Truck traffic over the Arthur Kill and Kill Van Kull waterways between Staten Island and New Jersey increased from 2005 by 1.3 percent to 5.1 million trucks. The largest increase was noted on the Outerbridge Crossing followed by the Goethals Bridge, which was the most traveled bridge over theses crossings.

Henry Hudson Bridge is closed to commercial vehicles except for emergency vehicles and those transporting material for bridge-related improvements. While the construction activity on this Harlem River crossing continued, activity increased by 12 percent from 2005.

On the South Shore's three toll bridges, number of truck trips in 2006 was 0.7 million, increase in truck volumes by 15 percent.

Vehicle Classification: Most agencies classify vehicles according to number of axles. In 2006, as in previous year, the most popular were 5-axle vehicles (33 million) and two-axle vehicles (30 million trips).

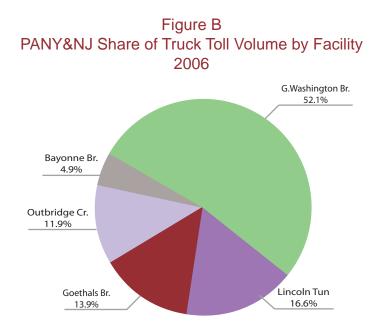
Toll was not increased in 2006. The last increase went into effect in two agencies (MTA B&T and NYSTA) during 2005. Except for NCBA, all of the operating agencies have installed E-ZPass lanes on their toll plazas and crossings. Operating agencies allow a discount to EZPass' holders when an account is established. To fight congestion, some agencies (PANY&NJ) have introduced flexible tolls depending on the time of day and if the trip is made on a weekday or weekend.



Facilities operated by PANY&NJ

The Port Authority of New York and New Jersey operates six bridges and tunnels connecting New York City with different areas in New Jersey. The facilities under the PANY&NJ's jurisdiction are: George Washington Bridge (GWB), Goethals Bridge (GB), Bayonne Bridge (BB), Outerbridge Crossing (OC), Lincoln Tunnel (LT) and Holland Tunnel (HT). In 2006, facilities operated by PANY&NJ account for 20 percent of all truck toll trips in the New York metropolitan area.

Overall, during 2006 the six bridges and tunnels under the PANY&NJ's jurisdiction handled a total of 16.6 million truck trips, an increase of 1.6 percent or 260,000 trips from 2005. The five-axle truck remained the most popular type of commercial vehicle on four of the Port Authority's six bridges, while the two-axle truck was the most popular type going through the Lincoln and Holland Tunnels. These two types of vehicles represent 78 percent of all trucks using the PANY&NJ facilities in both 2005 and 2006.



Note: Holland Tunnel has restrictions for commercial traffic and therefore is not included

DESCRIPTION OF FACILITIES

GEORGE WASHINGTON BRIDGE (GWB)

The GWB opened to traffic in 1931. This two-level suspension bridge crosses the Hudson River between upper Manhattan and Fort Lee, New Jersey, and forms part of Interstate Highway 1-95.



It also provides connection to highways U.S.-1&9, U.S.-46, NJ-4, 1-80, 1-95 and Palisades Interstate Parkway. The length of this bridge totals 4,760 feet long and 119 feet wide, with a 90 foot wide roadway, plus 12 toll lanes of traffic on the upper and lower levels. Seven lanes lead to Palisades Parkway. In 2006, truck and trailer traffic using the GWB increased by 2 percent to 8.7 million trips. The Class 5 trucks are still the most popular type, with 52 percent of all GWB trips or 4.5 million trips in 2006. The trips over GWB still represent over 50 percent of the total PANY&NJ truck traffic. It

maintained its place as the Port Authority's leading truck route of the northern corridor, from New Jersey and southeastern states to New York, Connecticut, Massachusetts and Canada. Also, the loads arriving at northern New Jersey by water or by rail and destined to New York or northern states are usually reloaded on trucks and moved through the GWB on the route leading north and east.

LINCOLN AND HOLLAND TUNNELS (LT AND HT)

The Lincoln Tunnel is the world's only three-tube underwater vehicular tunnel facility. The tunnel was opened to traffic between December 1937 (center tube) and May 1957 (south tube). It provides a vital link between midtown Manhattan and

central New Jersey and forms part of New Jersey Route 495. In New Jersey, this highway connects the tunnel with U.S. Routes 1 & 9, 3 and the New Jersey Turnpike. The permanent restrictions state that no trucks are allowed in center tube, and special permits are required for trucks 102 inches or wider. The width of each tunnel roadway is 21 feet 6 inches and operating headroom is 13 feet. The external diameter of the tunnel is 31 feet and the length of tubes range from 7,482 feet (north tube) to 8,216 feet (center). In 2006, truck traffic reached 2.8 million trips, an increase of 0.2 percent from 2005. It represents



about 11 percent of all PANY&NJ truck trips. The most popular type of trucks was Class 2, which accounted for 67 percent of the total truck trips and Class 3, which accounted for 19 percent.

The Holland Tunnel opened to traffic in November 1927. The roadway ihas an external diameter of 29 feet 6 inches and operating headroom of 12 feet 6 inches. The length of the tunnel is 8,558 feet (north tube) and 8,371 feet (south tube). After 9/11 all trucks were prohibited in the NYC-bound direction,

while tractor-trailers were excluded from NJ-bound lanes. The ban on trucks at the Holland Tunnel was partly lifted in 2002 but reinstated in August 2005 for safety reasons. As the remaining toll crossings traffic is calculated by multiplying the collected one-way data by two, the difference between east-bound truck traffic and west-bound traffic is too significant to use this method for the Holland Tunnel, therefore, the HT data are not included in this report analysis. Holland Tunnel truck volume in an eastern



direction has decreased by 6 percent from 2005, and in 2006 it accounted for 95,000 trips. Small trucks account for 80 percent of all trips over this tunnel.

STATEN ISLAND CROSSINGS

Staten Island Crossings cover the three spans that link Staten Island to Hudson and Union counties in New Jersey: Bayonne Bridge (BB), the Goethals Bridge (GB) and the Outerbridge Crossing (OC). These crossings traverse the waterways known as the Arthur Kill and Kill-Van Kull.

The Goethals Bridge (GB), opened to traffic in 1928, links Elizabeth in Union County, (NJ) with the Howland Hook area of Staten Island. The GB leads directly to the New Jersey Turnpike

(Interchange 13) and is accessible to Route 1 & 9 and other New Jersey highways. It is a major route for traffic moving between Brooklyn and New Jersey with direct connections across the Staten Island Expressway to the Verrazano Narrows Bridge. The bridge's length totals 7,100 feet with a width of 62 feet and 4 lanes of traffic, and channel clearance at mid-span of 135 feet that permits passage of deep-sea vessels through the Arthur Kill. In 2006, the truck traffic on the GB reached 2.3 million truck trips and accounts for 15 percent of all PANY&NJ truck



toll volumes. The most popular type of trucks on GB were Class 5 trucks with 1.1 million truck trips, which accounted for 47 percent of total truck trips over the bridge.

The Bayonne Bridge (BB), opened to traffic in 1931, links Bayonne in Hudson County, NJ, with the Port Richmond area of Staten Island. This bridge is an important part of the regional highway

system, leading to the Verrazano Narrows Bridge via the Martin Luther King Expressway and to the eastbound Staten Island Expressway (1-278). It also leads to GB and OC via westbound 1-278. This bridge measures 5,780 feet long and 85 feet wide with four lanes of traffic. Channel clearance at midspan is 150 feet which permits ocean-going vessels to use this entrance to Port Newark/Port Elizabeth without interference. The Bayonne Bridge (BB) had the lightest truck volumes of the Staten Island crossings in 2006 with 0.8 million truck trips,



accounting for 5 percent of all PANY&NJ truck toll volumes. The most popular type of trucks on BB was Class 5, which accounted for 43 percent of total truck trips.

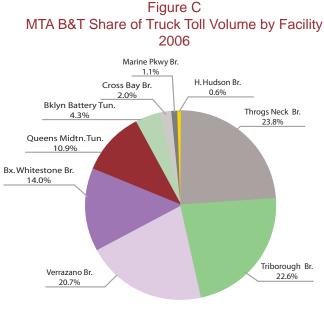
The Outerbridge Crossing (OC), located at the southern tip of Richmond County, links Perth Amboy, NJ, with the Tottenville section of Staten Island and the New Jersey shore. On the New York side, OC leads to the Verrazano Narrow Bridge via the West Shore Expressway and Staten Island Expressway. On its New Jersey side it leads to the New Jersey Turnpike and Garden State Parkway via Highway 440. This bridge, which opened to traffic in 1928, is 8,800 feet long and 62 feet wide, has four lanes of traffic and channel clearance of 145 feet at mid-span. The Outerbridge Crossing (OC) had a total 2006 volume of 2 million trips, an increase of 14 percent over 2005. The most popular type of trucks on the OC was Class 5 which accounted for 47 percent of total truck trip. The OC traffic accounts for 12 percent of all PANY&NJ truck toll volumes.

PANYNJ Toll Structure: in 2006, round trip tolls on the PANY&NJ's six facilities for truck classes 2-6 were \$6 per axle while paying cash during peak hours,\$5 per axle during the off-peak hours, and \$3.50 overnight for holders of E-ZPass. In 2001, PANY&NJ instituted value pricing on its bridges and tunnels. For trucks with E-ZPass, the current discount was 17 percent for off-peak hours and 42 percent for overnight hours. Tolls are only collected for eastbound traffic, therefore, truck traffic data are doubled to reflect total trips. This method could not be used for Holland Tunnel, because of commercial vehicles restrictions in east direction. Therefore, HT data are not included in 2006 report.

Metropolitan Transportation Authority -Bridges & Tunnels (MTA B&T)

The MTA-B&T operates seven bridges and two tunnels in New York City: Triborough Bridge (TB, Bronx and Manhattan toll Plazas), Throgs Neck Bridge (TNB), Verrazano Narrows Bridge (VNB), Bronx Whitestone Bridge (BWB), Henry Hudson Bridge (HHB), Marine Parkway/Gil Hodges Memorial Bridge (MP), Cross Bay/Veterans Memorial Bridge (CB), Brooklyn Battery Tunnel (BBT) and Queens-Midtown Tunnel (QMT). Facilities operated by MTA B&T account for almost 23 percent of all truck toll trips in the New York metropolitan area.

During 2006, the facilities under the MTA-B&T's jurisdiction handled a total of 19 million truck trips, an increase of 3.7 percent from 2005. The highest increase in percentage gain was on the Brooklyn Battery and Midtown Tunnels (18 and 11 percent increase respectively). Two-axle trucks were the



Source: Toll agency data

most popular and accounted for 57 of the total trips. The two-axle truck was the most common truck type on all the MTA-B&T facilities, with the exception of the Throgs Neck Bridge, which was dominated with five-axle trucks.

Description of Facilities:

Triborough Bridge (TB) opened in 1936. It consists of three bridges, a viaduct and 14-mile approach roads connecting Manhattan, Queens and the Bronx. The three branches are: Manhattan branch linking Franklin D. Roosevelt Drive and Harlem commercial centers; Bronx Crossing leading

north via the Bruckner and Deegan expressways; and East River suspension bridge to Queens, which connects with the Grand Central Parkway and Brooklyn-Queens Expressway. The three branches meet on Randall's Island interchange, where there are two toll plazas and traffic is sorted out in 12 directions. In 2006, this bridge handled 4.3 million truck trips or 23 percent of all truck traffic over the MTA B&T bridges and tunnels. Between 2005 and



2006, the increase in truck traffic reached 1.8 percent (on both Manhattan and Bronx toll plazas). The most popular type of trucks on TB was smaller Class 2 trucks, which accounted for 67 percent of total truck trips on the bridge, followed by Class 5, which accounted for 15 percent of total truck trips on the bridge.

Bronx Whitestone Bridge (BWB): The Bronx Whitestone Bridge opened to traffic in April

1939 and provides a vehicular connection between Queens and the Bronx. On the Bronx side, the bridge provides access to the Hutchinson River Parkway along with the Bruckner and Cross-Bronx Expressways. On the Queens side, the bridge provides access to the Whitestone and Malba communities in addition to a connection to the Cross Island Parkway and the Whitestone Expressway. In 2006, this bridge handled 2.6 million truck trips and accounts for 14 percent of all truck traffic over the MTA B&T bridges, an increase of 1 percent from 2005. The most popular type of trucks was Class 2, which accounted for 49 percent of the total truck trips and Class 5, which accounted for 31 percent.



The Throgs Neck Bridge (TNB) connecting the Bronx and Queens boroughs opened in 1961. This heavily used bridge serves as an important link in the city's interstate highway system. On

the Bronx side, it provides access to New Jersey, upstate New York and New England via the Cross Bronx and Bruckner expressways, Hutchinson River Parkway and New England Thruway. On the Queens side, it provides access to Cross Island Parkway, Grand Central Parkway and Clearview and Long Island expressways, which lead to Long Island, Manhattan, Brooklyn and points west. In 2006, the Throgs Neck Bridge handled the largest share of MTA-B&T total truck traffic: 4.5 million trips or 24 percent. The most popular type of trucks was Class 5, which accounted for 43 percent of total truck trips, followed by Class 2 which accounted for 39 percent of total truck trips.



Verrazano Narrows Bridge (VNB) opened in 1964 and was then the world's longest suspension span with the distance between the two 695 foot high towers measuring 4,260 feet. The bridge, located on the Upper New York Bay, connects Brooklyn to Staten

Island and provides a major link in the interstate highway system. In Brooklyn, it connects to the Belt Parkway and Brooklyn-Queens Expressway and by extension to Long Island, and on Staten Island to the Staten Island Expressway, providing direct access to the New Jersey highway system and the Middle-Atlantic states. In 2006, this bridge handled 3.9 million trips and accounts for 21 percent of all traffic over the MTA B&T facilities. The most popular type of trucks were Class 2, which accounted for 49 percent of total truck trips on VNB and was followed by truck Class 5, which accounted for 31 percent of total truck trips on the bridge.



8

The Marine Parkway/Gil Hodges Memorial Bridge, later named in honor of the Brooklyn Dodgers first baseman and Mets manager, opened in 1937 to provide access to the Rockaway Peninsula, which previously could be reached only by ferry. When it

Class 2, which accounted for 98 percent of total trips, and was followed

by truck Class 3.

The Brooklyn Battery Tunnel (BBT) opened in 1950 and was then the longest continuous, underwater vehicular tunnel in North America. The tunnel links Brooklyn and Manhattan. On the Brooklyn side is the community of South Brooklyn, comprising Red Hook, Columbia Terrace, Carroll Gardens, Cobble Hill and Boerum Hill districts. The Manhattan end leads to the Financial District, including Wall Street, the South Street Seaport, Battery Park City and the World Financial Center. In 2006, this tunnel handled 800.000 truck trips and accounted for four percent of all truck traffic over MTA B&T facilities. The most popular type of truck was Class 2, which accounted for 77 percent of total trips, followed by Class 3.

Tunnel to accommodate the wider cars of the period. In 2006, this tunnel handled 2.1 million truck trips, 10 percent increase from 2005. It accounted for 10.9 percent of all truck traffic over MTA B&T facilities. The most popular type of truck was Class 2. which accounted for 80 percent of total trips, followed by Class 3.

Henry Hudson Bridge (HHB) was named in honor of the 17th

century explorer. This bridge opened in 1936, connecting northern Manhattan

to the Bronx as part of the Henry Hudson Parkway. Built by the Henry Hudson Parkway Authority, the bridge became part of MTA B&T after a series of mergers. When it opened, it was the longest plate girder arch and fixed arch bridge in the world. Only a restricted number of commercial vehicles, such as authorized delivery vehicles (U.S. Post Office, UPS, FedEx), tow trucks and school buses and

contractor vehicles for HHB road and infrastructure improvements are allowed to cross the bridge. All other unauthorized vehicles are "turned around" on the plaza. Commercial traffic on HHB in 2006 totaled 114,000 trips, and accounts only for 0.6 percent of all truck trips over MTA B&T bridges. The most popular type of trucks was

providing access to Long Island City and highways leading in the east-north direction. The tunnel links Murray Hill residential neighborhood in Manhattan to the Hunters Point district of Long Island City on the Queens side. The diameter of each of the QMT's twin tubes is one and a half feet wider than the older Holland

The Queens Midtown Tunnel (QMT) opened in 1940 by the New York City Tunnel Authority (later replaced by MTA B&T) to relieve congestion on the city's East River bridges. It represented the most advanced tunnel engineering techniques of its day. The tunnel serves as a major connection between midtown Manhattan and Queens,



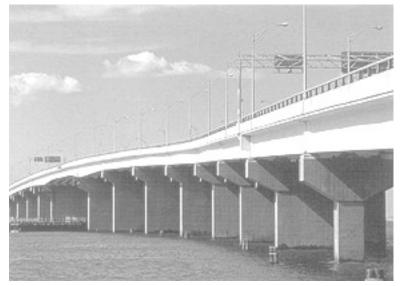




was built, the bridge's vertical lift span was the longest in the world. The tapering, curled tops of its towers added a special aspect to the bridge's design. Today, the land at both ends of the bridge are part of the Gateway National Recreation Area. The bridge has direct connection to the Shore Parkway and Flatbush Avenue. In 2006, the Marine Parkway Bridge handled 200,000 truck trips and accounts for less than 1 percent of all truck trips on MTA B&T facilities. The most popular type of trucks was Class 2, which accounted for 83 percent of total trips, and was followed by truck Class 3.



The Cross Bay/Veteran Memorial Bridge, completed in 1970, sits four miles east of the Marine Parkway Bridge. It connects the Rockaway Peninsula to Queens, the Belt Parkway and the Southern State Parkway on Long Island. It is a high level bridge which permits boats to pass underneath. In 2006, this bridge handled 383,000 truck trips and accounts for 2 percent of total MTA-B&T trips. The most popular type of trucks was Class 2, which accounted for 80 percent of total trips, followed by truck Class 3.



MTA-B&T Toll Structure: Truck tolls were collected in both directions at each of the MTA-B&T's facilities except for the Verrazano Narrows Bridge, where tolls are collected from westbound traffic only. Latest toll rates increase was in 2005. For the Bronx-Whitestone, Triborough, and Throgs Neck Bridges, as well as the Queens Midtown and Brooklyn-Battery tunnels, the one-way trip fee was \$4.50 for 2-axle trucks with a maximum gross weight of 7,000 lbs or under, with \$2 for additional axle, and \$9.00 for 2-axle trucks greater than 7,000 lbs. (\$5 for each additional axle). For the Verrazano Narrows Bridge, the toll collected is \$4.50 or \$9.00. For small bridges (Marine Parkway and Cross Bay bridges) the cost for 2-axle trucks with a maximum gross weight of 7,000 lbs or under is \$2.25 with \$1.25 for each additional axle. Discount for E-ZPass. No changes in 2006.

Facilities operated by the New York State Bridge Authority (NYS BA)

New York State Bridge Authority (NYSBA), created by then Governor Franklin D. Roosevelt in 1932, operates five toll bridges spanning the Hudson River: Rip Van Winkle Bridge, Kingston-Rhinecliff Bridge, Mid-Hudson Bridge, Newburgh-Beacon Bridge, and Bear Mountain Bridge. These facilities operated by the NYS BA account for 5.4 percent of all truck toll trips in the New York metropolitan area. In 2006, NYSBA handled 4.5 million truck trips, one percent less than in 2005. Two and five-axle trucks were the most prevalent.

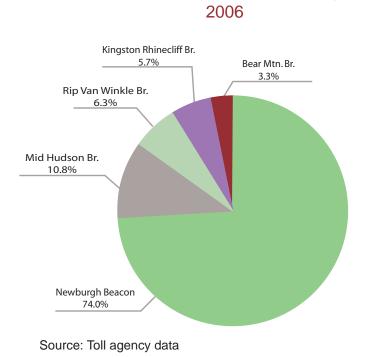


Figure D NYS BA Share of Truck Toll Volume by Facility

Description of Facilities:

Newburgh-Beacon Bridge (NBB), the two-lane bridge between Beacon and Newburgh, was first opened to traffic in November 1963 as a part of the interstate network. The overall length of the bridge is 7,855 feet (north) and 7,789 feet (south), and the main span length is 1,000 feet. Clearance above the river is 135 feet. The bridge is supported by an articulated deck truss. In 2006, this bridge was traveled, with 3.4 million truck trips which accounted for 74 percent of total NYSBA truck trips. -The most popular truck type was Class 5 (2.2 million trips) which accounted for 65 percent of total truck trips over this bridge.

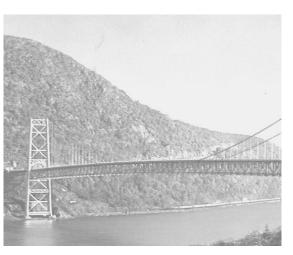
Mid-Hudson Bridge (MHB) with 0.5 million truck trips annually was opened to traffic in August 1930. It provides a vital route across the Hudson, between Poughkeepsie and Highland, and was the second

span across the Hudson below Albany after the completion of the Bear Mountain Bridge. Its overall length is 3,000 feet, the main span measures 1,500 feet, and its clearance above river is 135 feet. This is a parallel wire cable suspension bridge, with suspended side spans. In 2006, the Mid-Hudson Bridge accounted for 11 percent of all NYSBA truck traffic. The most popular truck type was Class 2 (0.3 million trips) which accounted for 63 percent of total truck trips over this bridge.



Bear Mountain Bridge (BMB) was the first vehicular bridge on the Hudson south of Albany, opened in November 1924, and was then listed as the longest suspension bridge in the world. Though its title

has been lost, the BMB continues to provide an important link to Bear Mountain State Park, the centerpiece of the Palisades Interstate Park System. Unlike most suspension bridges, the side spans are relatively short and are not supported by the main cables but by the ground beneath, which rises at a sharp angle from the river. Its overall length is 2,255 feet, with main span length of 1,632 feet, and clearance from the river at 155 feet. It provides a vital route between New York City and Albany. In 2006, the BMB accounted for only 3.2 percent of all NYSBA truck traffic, with 149,000 truck trips. The most popular truck type was Class 2 (80,000 trips) which accounted for 53 percent of total truck trips over this bridge.



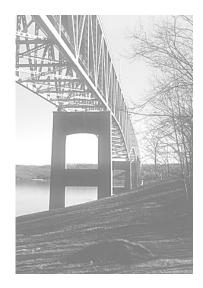
Rip Van Winkle Bridge (RVW) built during the Great Depression, this bridge was opened to traffic in July 1935. The bridge was designed as cantilevered and has suspended deck trusses. It has an overall length of 5,041 feet, main span length of 800 feet, and clearance above river of 145 feet. In

2006, this bridge accounted for 6.3 percent of all NYSBA truck traffic, with 285,000 truck trips. The most popular truck type was Class 2 (139,000 trips) which accounted for 49 percent of total truck trips over this bridge.

Kingston-Rhinecliff Bridge (KRB) was opened to traffic in February 1957 to replace the Kingston-Rhinecliff ferry which was abandoned. It still serves as a vital link across the Hudson. The structure is supported by a continuous under-deck trusses. The overall length is 7,793 feet, the main span length is 800 feet, and clearance above river is 250 feet. In 2006, this bridge accounted for 5.6 percent of all NYSBA truck traffic, with 257,000 truck trips. The most popular truck type was Class 2 (163,000 trips) which accounted for 64 percent of total truck trips over this bridge.



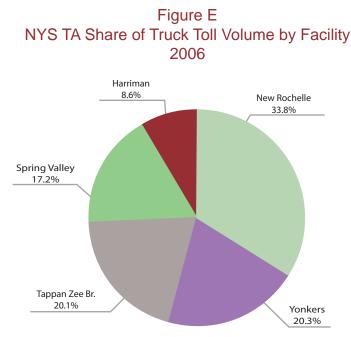
NYSBA Toll Structure: Truck tolls were collected in one direction at each of the NYSBA facilities. In order to calculate total truck volume, one-way traffic is doubled for the five Hudson spans. The toll rate was not changed in 2006.



Facilities operated by the New York State Thruway Authority (NYS TA)

The Governor Thomas E. Dewey Thruway, the 641-mile New York State superhighway crossing operated by the New York State Thruway Authority, is the longest toll highway system in the United States, connecting with several major highways in New Jersey and Pennsylvania. In the New York metropolitan region, the Thruway connects with the Major Deegan Expressway at the New York line, the Connecticut Turnpike (I-95) near Port Chester, New Jersey Garden State Parkway near Spring

Valley in Rockland County, and Interstate 287 in northern Rockland County. Only the 14-mile part of the Thruway between the Garden State Parkway in New Jersey and Cross-Westchester Expressway (I-287 connection) was considered for this report. The Thruway is generally a four-lane (two lanes in each direction) highway. The Harriman-New York City stretch has six lanes, and the part between Nyack and the Tappan Zee Bridge has eight lanes. Facilities operated by the NYS TA account for 16.5 percent of all truck toll trips in the New York metropolitan area. Toll facilities include New Rochelle, Yonkers, Spring Valley and Harriman Barriers, and Tappan Zee Bridge and accounted for 13.8 million toll truck trips in 2006.



Source: Toll agency data

Description of Facilities:

Governor Malcolm Wilson Tappan Zee Bridge (TZB), the three-mile long one of the longest bridges in the U.S., carries the New York Thruway's mainline across the Hudson River, about 13 miles north of

New York City. It was opened to traffic on December 1955. In 2006, the TZB carried 3 million truck trips and accounts for 22 percent of all NYS TA truck toll volume. Because of different classification system, it is difficult to compare truck class with other agencies. In 2006, the most popular truck type was large trucks category which accounted for 65 percent of total truck trips over this bridge.



New Rochelle and Harriman toll

barriers truck trips accounted for 36.2 percent and 9.3 percent of all truck traffic registered by the New York State Thruway Authority. In 2006, the most popular truck type was large trucks category which accounted for 59 and 52 percent of total truck trips over this bridge, respectively.



Yonkers Barrier and Spring Valley Barrier

accounted for 14 and 19 percent of all truck traffic registered by the New York State Thruway Authority. In 2006, the most popular truck type was large trucks category which accounted for 57 and 62 percent of total truck trips over this bridge, respectively.



NYSTA Toll Structure: The Thruway's vehicle classification system does not reflect direct correlation between classification of vehicles and number of axles. This system incorporates the ability to use axle offsets for vehicles that deviate from the standard number of axles. The classification system was changed in May 2005 and cover two categories: trucks under 7 feet 6 inches height (type 2L through 4L, depending of number of axles) and trucks 7 feet 6 inches or greater (type 2H through 7H, depending of number of axles). Toll volume depends of vehicle class. On the New Rochelle barrier, Spring Valley barrier and Tappan Zee Bridge the round-trip toll is collected only in one direction (eastbound-trip on New Rochelle, northbound on Spring Valley, and southbound on TZB). Tolls are collected in both directions at the Yonkers and Harriman barriers. There is a significant discount for E-ZPass, and time of day incentive pricing on Spring Valley and Tappan Zee Bridge, with a discount during the weekend and off peak period.



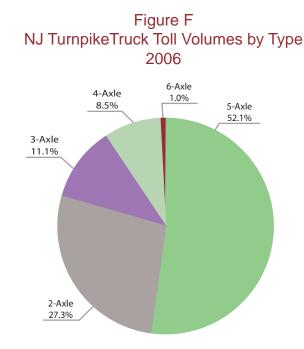
New Jersey Turnpike Authority (NJTA)

Running through one of the nation's busiest regions, **the New Jersey Turnpike** is a major thoroughfare in the New York metropolitan area, linking southeastern states with New York, New England and Canada. Two tunnels and three bridges connect it to New York City. The first section of New

Jersey Turnpike was officially open to traffic in November 1951. Fifty-five years later, the New Jersey Turnpike annually serves almost 250 million vehicles traveling 5.7 billion miles. It has expanded to 28 interchanges and covers 148 miles. The lanes have been widened and additional lanes added, making the turnpike as wide as 14 lanes in some areas. Since September 2000, when E-ZPass became operational, the agency has issued over 2 million transponders. NJTA placed limitations on vehicles by height (13 feet 6 inches), width (8 feet



6 inches), length (semitrailer in excess of 53 feet in length when in a tractorsemitrailer combination), and weight (80,000 lbs). A new Secaucus Interchange completed in 2004 (between interchanges 15E and 16E) provides direct access to New Jersey Transit Secaucus rail station and the nearby warehouse district. In 2003, the agency consolidated NJTA and New Jersey Highway Authority governing the Garden State Parkway. In 2006, NJT (I-95) truck traffic north of exit 7A (northeastern part of New Jersey, included in the NY metropolitan region) represented 30.1 percent of all of toll truck movement in the New York metropolitan region. This report includes an analysis of only the northern part of the turnpike, starting from interchange 7A up to the exit for George Washington Bridge. Truck usage of the



New Jersey Turnpike (I-95) between interchanges 7A and 18W increased by 2 percent between 2005 and 2006. In 2006, truck toll traffic registered 25.2 million commercial vehicles, up from 24.7 million in 2005. These trips represent an estimated 80 percent of the commercial vehicle traffic using the NJT. In 2006, the share of five-axle trucks as a percent of total Turnpike traffic was reported to be 52 percent, similar to 2005. Class 5 truck volume reported increase by 2.6 percent from 2005.

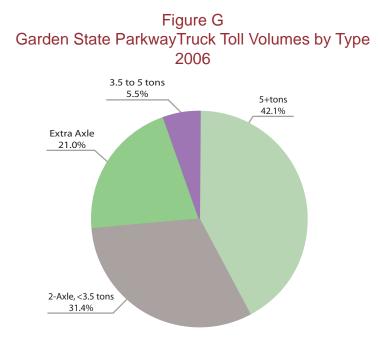
NJTA Toll Structure: Toll for travel between interchanges is determined by the cost of construction and maintenance of the roadway between these points. Vehicles are divided into classes determined by number of axles, while buses have their own qualification system. The toll was not raised in 2006. It is established on a distance-based and varies by vehicle class. It recognizes peak and off-peak travel time differences and offers a significant discount for vehicles using E-ZPass and entering during off-peak hours.

New Jersey Turnpike Authority – Garden State Parkway (GSP) Division:

The 173-mile **Garden State Parkway (GSP)** runs north-south through 50 municipalities in 10 counties, from the New York border to Cape May in the south. The Parkway maintains 359 exits and entrances. Heavy trucks (3.5 tons or more, 6 tires or 3- or more axles) are prohibited north of interchange 105,



unless on special permit. Therefore, this report covers only part of GSP and interchanges south of Asbury toll plaza. In 2006, the GSP truck traffic south of exit 105 represented 5.6 percent of all of toll truck movement in the New York metropolitan region. Between 2005 and 2006 truck volumes on Garden State Parkway decreased by 2.8 percent, from 4.8 million to 4.7 million truck trips. This data reflects the 14 of 43 toll plazas on the GSP that carry commercial traffic. -Only half of the plazas (seven) recorded an increase in truck traffic, from 2 percent (Toms River) to 21 percent (Berkeley). The most popular facilities were Asbury with 843,000 trips, Toms River Plaza, which registered 772,000 truck trips, and Barnegat, with 708,000 trips. Wildwood and Somers Point, as in former years, had the lightest truck traffic (19,000 and 62,000 trips, respectively). The most utilized type of trucks were those weighing 5 tons and over (2 million trips) which account for 42 percent of all truck trips on GSP, and 2-axle trucks (1.5 million trips), which made up 31 percent.



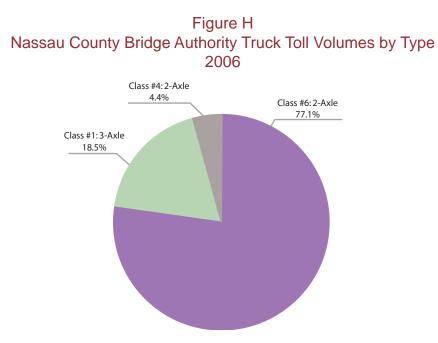
NJTA - GSP Toll Structure: Most operators classify trucks according to the number of axles, except for the Garden State Parkway, where both weight and axles are used. Truck tolls are collected for both directions of travel. There was no change in toll in 2006. There are 14 toll plazas within the described area, but not all are mainline toll plazas. There are six mainline toll plazas and eight ramp plazas. No E-ZPass discount was offered for trucks in 2006.

Nassau County Bridge Authority

The only toll-collecting drawbridge in Nassau County is the Atlantic Beach Bridge located along the South Shore on Long Island. It was opened to traffic in July 1950. The bridge is 1,173 feet long and 68 feet wide (on roadway), with 6 traffic lanes (three in each direction). There are special restrictions for



trucks. In 2006, this bridge accounted for only 0.1 percent of all of toll truck movement in the New York metropolitan region, with 68,000 annual trips. The most popular was Class 6 (2-axle truck) which accounted for 77 percent of all truck trips on the bridge. NCBA Toll Structure: The only trucks allowed on the bridge are Commercial Class 4 with 2-axle Truck-Car; Class 6 with 2-axle truck, and Class 1 with 3-axle trucks. Tolls vary according to the vehicle class (number of

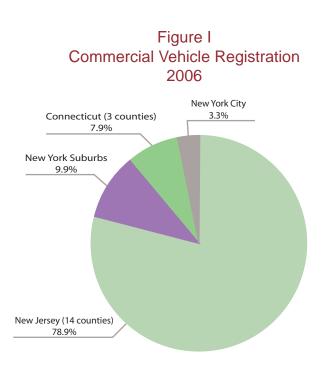


truck axles). The tolls were not increased in 2006. Cash fares for light-duty trucks range from \$1.25 for a Class 4, 2-axle truck to \$3.75 for a Class 1, 3-axle truck. For Class 6 (2-axle trucks) the toll is \$2.50. At this time, the Atlantic Beach Bridge does not utilize the E-ZPass system.

Commercial Vehicle Registrations

In 2006, there were a 2.7 million vehicles with commercial license plates registered in the tri-state New York Metropolitan region, a 5 percent (0.12 million) increase from 2005. New Jersey had the highest number of registrations (2 millions or 79 percent of total commercial registrations) accounting

for 5 percent of increase in the region. The downstate New York area had 356,000 commercial registrations, 13 percent of total, increase of one percent from 2005. In the New York suburbs, registrations decreased by 0.8 percent, to 267,000. The Hudson Valley suburbs registered a 3.1 percent decrease (mostly in Rockland and Orange counties), and Long Island counties registered increase of 0.8 percent, mostly in Suffolk. The southwest Connecticut counties, with 214,000 commercial registrations, accounted for 8 percent of all tri-state truck registrations, and registered a 0.8 percent decrease. Starting from 1999, the Connecticut recording system lists vehicle registration by county (Fairfield, Litchfield and New Haven), rather than by six planning regions, as was before 1999.



Trucking Industry Share in the Metropolitan Region

Vehicle mode choice revolves around two to eight-axle trucks, although the classification system of some agencies is based on different approaches. For example, the New York State Thruway Authority classification system incorporates the ability to use axle offsets for vehicles that deviate from the standard number of axles. The NJT-Garden State Parkway uses both number of axles and weight in its vehicle classification. For example, the smallest (Class 2) are trucks with 2-axles and less than 3.5 tons, while Class 3 includes trucks weighing 3.5 to 5 tons. Class 4 contains trucks weighing 5 plus tons, and Class 5 covers trucks with extra axles. The Nassau County Bridge Authority permits only light trucks on its toll bridge: 2-axle truck/car (Class 4 by NCBA classification), 2-axle regular trucks (NCBA Class 6), and 3-axle trucks (NCBA Class 1). The vehicle classification system is discussed in the text and in Attachment C.

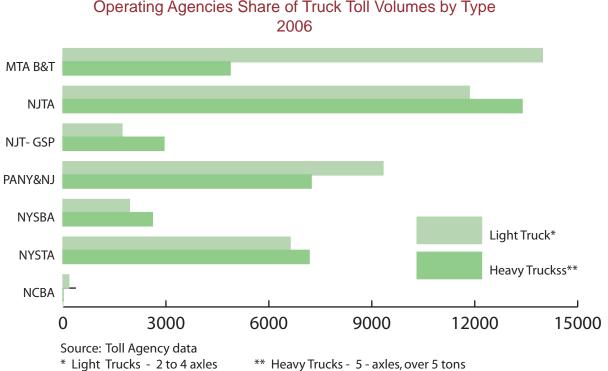


Figure J Operating Agencies Share of Truck Toll Volumes by Type