

**Township of Princeton**

**Borough of Princeton**

**Exclusion Request from the  
New Jersey Access Network**

for

**Routes 206 and 27  
and  
Routes 583 and 571**

**February 9, 2007**

**PHYLLIS L. MARCHAND, MAYOR**

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February 9, 2007

**Kris Kolluri, Commissioner**

NJ Department of Transportation  
PO Box 601  
1035 Parkway Avenue  
Trenton, NJ 08625

Dear Commissioner Kolluri:

Please find attached the response of Princeton Township and Princeton Borough to the Truck Access regulations (NJAC 16:32). We are hereby requesting, as detailed in the attached packet of material, that Routes 206 and 27 and Mercer Road/Mercer Street (Route 583) and Washington Road (Route 571) be excluded from the New Jersey Access Network.

Pursuant to Section 1.7 of the proposed regulations, we have provided a comprehensive request that the above-referenced roadways be excluded from the New Jersey Access Network. We strongly believe that all blue routes—roads currently excluded from the New Jersey Access Network, on New Jersey's State Highways and County Routes map and listed in the appendices of NJAC 16:32—should be evaluated for exclusion by a standard that is consistent across the State, and that if a consistent standard is applied, Princeton's roads clearly qualify for exclusion from the New Jersey Access Network.

We are under no illusion that the State can ban all large trucks from our roads, but we do believe that the state is entitled to limit access to our roads by all 102" wide and double-trailer trucks (interstate and intrastate) unless they are making a delivery and we know that the Maryland state law works perfectly well in this regard and has done so for many years. We recommend that approach for your consideration.

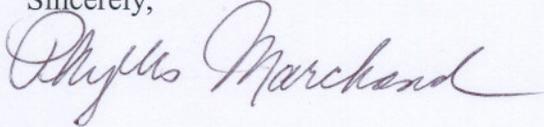
Our submission to you details the many ways in which our roads are unsafe for double trailer truck combinations and 102" wide standard trucks—the residential density, the road geometry and the accident rates included among other criteria as outlined in section 1.7 of the proposed regulations. We want particularly to highlight certain dangers: the 10 foot travel lanes in Princeton Borough, the lack of shoulders or inadequate shoulders for safe stopping throughout Princeton Borough and Township, the intersections of Routes 206 and 27, and

Routes 27 and 571 at which trucks cannot turn without invading oncoming lanes or riding over the curbs, the intersection of Ewing and Route 206 with an accident rate many times that in any other location in Princeton Township, the colonial era bridge inadequate to carry heavy traffic on Route 206, and the high level of pedestrian and bicycle traffic on these roads.

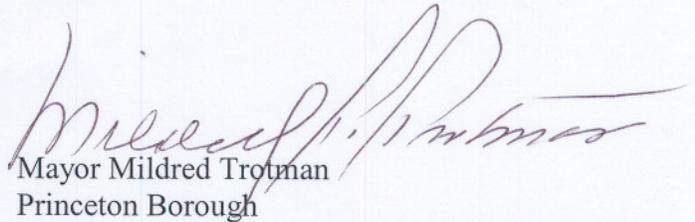
We enjoyed meeting with you last month and were impressed with your openness to finding a solution to this issue. As we discussed, we will be sending to you, under separate cover, comments on Section 1.6 of the regulations and we may be sending comments regarding other portions of the rule that we feel need clarification as well.

We are grateful to you for your attempt to improve the truck access rules and stand ready to answer any questions you may have about the points we raise in these documents or about Princeton, its roads and the community through which they travel. Thank you in advance for your full consideration.

Sincerely,



Mayor Phyllis Marchand  
Princeton Township



Mayor Mildred Trotman  
Princeton Borough

c: The Honorable Jon S. Corzine, Governor of New Jersey  
Thomas Shea, Chief of Staff, State of New Jersey  
U.S. Representative Rush Holt  
Senator Shirley Turner  
Assemblyman Reed Gusciora  
Assemblywoman Bonnie Watson-Coleman  
Assemblyman Peter Biondi  
Senate Transportation Committee  
Assembly Transportation Committee  
Brian M. Hughes, Mercer County Executive  
Princeton Township Committee  
Princeton Borough Council  
Montgomery Township Mayor and Committee  
Lawrence Township Mayor and Council  
Hillsborough Township Mayor and Committee  
Robert Durkee, Princeton University  
Kristin Appleget, Princeton University  
Robert P. Bzik, AICP/PP, Director of Planning, Somerset County  
Miriam Crum, Administrative Practice Officer, NJDOT  
John Fuller, Assistant Administrative Practice Officer, NJDOT

**Request to the New Jersey Department of Transportation Re: NJAC 16:32  
From Princeton Township and Princeton Borough  
January 2007**

**To Exclude Routes 206 and 27 in Princeton  
From the New Jersey Access Network for Trucks**

***Executive Summary***

The municipal governments of Princeton Township and Princeton Borough are requesting the New Jersey Department of Transportation to **exclude Routes 206 and 27 from the New Jersey Access Network for Trucks** under NJAC 16:32, Truck Access Rules, published in the *New Jersey Register* on December 18, 2006. **Alternatives** to Routes 206 and 27 exist in Route 1 and the New Jersey Turnpike, which connect I-295/95 and I-287 and are built to carry large trucks. While we are aware that the rules add no new roads to the New Jersey Access Network, **some roads have been excluded—in whole or in part—from the New Jersey Access Network for structural, safety, contextual and other reasons. We request that the same standards be applied to our roads.** For example, Routes 206 and 27 have higher accident rates than many of those roads recently excluded.

- First, the geometric characteristics of these roads combined with the residential patterns and geographic characteristics of Princeton make us fear for the **safety** of people in our town if double-trailer truck tractor combinations and 102-inch wide standard trucks have more than minimal access. Routes 206 and 27 in Princeton are narrow two-lane highways without shoulders for emergency stops or for law enforcement. Large trucks are dangerous to Princeton because of the town's **high residential density, high levels of pedestrian and bicycle activity, high numbers of uncontrolled access points and poor sight distances for heavy vehicles.** Further, the geometry of the intersection where Route 206 meets Route 27 causes low-speed **off-tracking**—trucks must swing into oncoming or adjacent lanes or over the curb to turn the corner. **The travel lanes of Route 206 approaching Route 27 from the north are only 10' wide, which does not meet any published engineering standard for large trucks.** The width of these travel lanes is controlled by the road width, which only measures 30.4' curb to curb. A very high number of accidents occur at this location as indicated by the "red zone" crash rate designation documented in the NJDOT Route 206 Vision Plan. By keeping Route 206 on the New Jersey Access Network for Trucks, and knowing that the geometry of this intersection is substandard for large trucks, the Department would be knowingly exacerbating a currently unsafe condition.

- Secondly, the intersection of **Ewing Street and Route 206 is currently unsafe with accident rates almost three times higher than the next highest accident rate intersection in the Township.** Many of these accidents involve rear end southbound Route 206 collisions. By keeping Route 206 on the New Jersey Access Network for Trucks and knowing that large trucks need significantly more time to stop, the Department would be knowingly exacerbating a currently unsafe condition.

- Thirdly, Princeton's economic importance to this part of New Jersey makes it **essential for the State to preserve the quality of life in this town, which is an important magnet for tourists and commercial interests alike.** Located in one of the fastest growing parts of New Jersey, Princeton is one of New Jersey's top historic, athletic, and cultural attractions. More than a half million people visited Princeton University alone last year, bringing substantial economic benefit to this region. Also, continued heavy truck traffic on Routes 206 and 27 would cause property values to decline on and near those roads; which would lead to lost local revenues or to shifting the already substantial tax burden onto other properties to compensate.

- Fourthly, **Princeton is a unique historic resource for the State** and the Nation, an important environmental asset that is already threatened by high levels of air and noise pollution from large trucks and the vibrations they cause. Miles of the right of way of Route 206 and the entire length of Route 27 in Princeton and Kingston are included *on* the National Register of Historic Places as **the King's Highway (Upper Road and Lincoln Highway) Historic District**, the colonial post road. One important monument, **the Stony Brook Bridge** carries Route 206 and all its heavy traffic. This stone arch bridge, which was constructed in 1792, is the oldest in the State; it is on Preservation New Jersey's list of most endangered historic sites and it will deteriorate further. It is also in a National Landmark area.

- Fifthly, keeping Route 206 and 27 in Princeton on the New Jersey Access Network **conflicts with the expressed wishes of large numbers of Princeton residents.** It would undermine the good effects of **other NJDOT initiatives (including the Route 206 Vision Plan)** that have involved hundreds of area residents in planning context sensitive improvements to Route 206 and pedestrian improvements to both state roads. In addition, it would contradict important principles in the Federal TEA-21 legislation pertaining to preserving environmental, scenic, community, and historic values, providing for consideration of the context of the locality, and encouraging access for other modes of transportation. Princeton is asking this exclusion based on these and other points further developed in the attached document and supported by data in the appendices.

**Request to the New Jersey Department of Transportation  
From Princeton Township and Princeton Borough  
January 2007**

**To Exclude Routes 206 and 27 in Princeton  
From the New Jersey Access Network for Trucks**

The municipal governments of Princeton Township and Princeton Borough are hereby requesting the New Jersey Department of Transportation to **exclude Routes 206 and 27 in Princeton from the New Jersey Access Network for Trucks** under NJAC 16:32, Truck Access Rules, published in the *New Jersey Register* on December 18, 2006.

**History of Trucks using Routes 206 and 27**

**The Previous Ban on Large Trucks**

It was in good part due to the demonstrable ill effects of large truck traffic in Princeton that Governor Christine Todd Whitman in the 1990s issued an executive order banning certain large trucks from Route 206 and 27 in Princeton and from other similar area roads. This rule was recently successfully challenged in the courts by the trucking industry because it applied differently to interstate and intrastate trucks and that, the courts found, violated the Interstate Commerce Clause requirements.

**The protections did reduce the number of large “through” trucks that were using Routes 206 and 27 in Princeton, but it didn’t go far enough and the number of large trucks on our roads has been steadily increasing ever since.** Nonetheless, the lesson of the 1990s was how effective the State can be in directing truck traffic onto the kind of roads built to carry large trucks. The Whitman executive order, combined with new signage on the interstates, effectively guided some trucks off Princeton’s roads, and truck drivers, who have no incentive to drive in difficult or dangerous conditions, complied. For many out-of-state truckers, the guidance offered them by the State is highly influential in choosing a good route; Princeton residents talked to Canadian drivers in the early 1990s who were lost in Princeton and regretted ever having come down Route 206 because it so clearly was taking them over winding, hilly, often congested roads through residential areas. How could they know; they were only following the maps. The State’s efforts in the late 1990s to move the heaviest trucks to roads built to carry them helped both truck drivers and the communities through which they would otherwise have driven.

## The Geography of the Problem

Princeton residents began to notice the problem with large trucks on Princeton roads after the federal government completed construction of I-287, connecting that road to other interstates further north and west. Interstate 287 began to move truck traffic south from interstates in New England and New York State and east from interstates through northern Pennsylvania and the Midwest. During the same period, the New Jersey Turnpike began raising its tolls, and **truck drivers, especially independent truckers who operate close to the margin and whose trucks are often less well maintained, were motivated to find “free” interstates** to replace the Turnpike. That was the demand side of the problem. (One that may increase, if, as is being discussed, the NJ Turnpike is leased or sold; the new leaser/owner will undoubtedly be permitted to raise tolls periodically, at least to cover inflation.)

The supply of roads to meet that growing demand was slightly inconvenient for truckers. Because construction of a missing link of I-95 to the west of Princeton had been stopped in the 1960s, trucks started using a variety of inappropriate cut-throughs on area roads to reach I-295/95 to the south. In 1987, the State placed Routes 206 and 27 on the New Jersey Access Network, so truckers reading the maps may have begun to use these roads more often as a result. Nonetheless, the best roads for them to take were always Route 1 and the New Jersey Turnpike, the former a multi-lane road with shoulders and the latter part of the National Network for Trucks and both designed to carry heavy vehicles. This was recognized in the Whitman executive order, and some through trucks adapted to the change, once the state took a strong position on it.

The reason for noting geography in this submission is that **if Routes 206 and 27 are left as part of the New Jersey Access Network, the demand to use this secondary truck route will quickly push large numbers of large trucks onto Princeton’s segment of the state highways.** Any deliveries to Hillsborough or points north on Route 206 will bring large populations of trucks through Princeton; any trucker making a delivery on Route 27 will also be tempted to make the connection to Route 206 in Princeton and on to one of the interstates.

## A History of Poor Enforcement

As will be noted in further detail below, Routes 206 and 27 in Princeton are narrow, two-lane roads without shoulders. After the State prohibited municipalities from conducting their own inspections of trucks using their roads without probable cause (and **local police will not, nor should they, invent reasons to pull trucks over**) and after the number of through trucks on Princeton’s main roads increased dramatically in the 1990s, Princeton began to plead with the State Police to come to town to inspect trucks that were traveling through Princeton. (Previously, the Borough of Princeton had conducted inspections by pulling large trucks into the drive in front of Borough Hall and had

found safety violations to be so serious that  $\frac{3}{4}$  of the trucks inspected had to be taken off the road.) Unfortunately for Princeton, the **State Police found Route 206 to be an unsafe location for truck inspections.** They expressed concern that their officers, in trying to stop trucks on these narrow roads, would be endangered by other fast-moving traffic. If the road is too narrow for safe truck inspections, some might suggest that the road is too narrow for trucks.

If the town's main roads are excluded from the New Jersey Access Network, as we request, and if large trucks are limited to taking the shortest distance to and from the National Network when making deliveries, it will be difficult *enough* to enforce the truck access rules. If Princeton's state roads are left on the New Jersey Access Network—if they appear on the State's truck route maps—it will be almost impossible to keep through trucks from joining the large numbers of large trucks continuing their journeys on Princeton's roads. **Hard experience has taught Princeton to expect little or no State law enforcement of the truck access rules.** This explains the town's insistence that the State now exert its authority to protect the town and its citizens from large trucks not making deliveries close by.

### **Overlapping Impacts**

**Princeton's experience with heavy truck traffic is that the total negative impact of heavy truck traffic on Routes 206 and 27 in town is greater than the sum of negative impacts.** Negative impacts overlap and multiply: for example, air and noise pollution result in a depreciated tax base and reduced revenues to the municipality, which discourage businesses and individuals from locating in Princeton and tourists from visiting, which causes hardship to downtown small business people, which further undermines the tax base. Truck traffic in the 1990s got Princeton linked with trucks in nationally distributed articles and television news pieces—not ideal for a downtown commercial sector struggling to compete with the malls. For a town like Princeton, which is built close to the old roads that gave it life in the colonial period, to remain on the State's secondary truck network is a prescription for the continuation of serious problems.

**Factors That Should Cause the NJDOT to Exclude  
Routes 206 and 27 from the New Jersey Access Network for Trucks,  
as Outlined in the Proposed Rules**

Many factors make it inappropriate to keep Routes 206 and 27 in the New Jersey Access Network for Trucks. These factors include—in addition to the town’s history with trucks—roadway geometrics, the sight distance at intersections (including large numbers of uncontrolled intersections and driveways), accident levels, traffic volumes, the roadside environment (the proximity of homes, historical properties, and the town’s main commercial district to the roads), and the existence of alternate routes.

**I. The Existence of Alternate Routes**

First, large trucks traveling between I-287 and I-295/95 have more appropriate choices: they can travel on Route I. They must travel a bit further to do so, but that is a small price to pay for protecting an important town. They can also travel on the New Jersey Turnpike. Both these roads are already part of the National Network for Trucks and they are built to carry heavy traffic. Princeton does not advocate shifting this large truck traffic to area roads not on the National Network.

**II. Roadway Geometrics**

**A. The Intersection of Routes 206 and 27**

This intersection is **an important crossing point for Princeton residents walking** between the downtown and Borough Hall, the Senior Center, and the residential neighborhoods of Princeton’s Western Section. The intersection also separates those same neighborhoods from the Mercer Street residential area, the Princeton Seminary, the Princeton University campus, and the train to New York City. So, despite the fact that pedestrians perceive, and accident statistics show, that this is a dangerous crossing point, there are often people crossing or standing at the curb and waiting to cross here.

More important for this discussion is the fact that the intersection is simply not large enough to accommodate large trucks. The operating characteristics of double-trailer combination trucks and 102” inch wide standard trucks combine with the geometry of the road to create a safety hazard here both to pedestrians and people in cars. **Large trucks must engage in excessive low-speed off-tracking**—overriding the curbs or swinging wide and into adjacent or oncoming lanes—in order to make the turn.

**The travel lanes at this intersection, which are only 10 feet wide, and the low speeds, which are required because of the surrounding residential**

**areas**, make this turn especially difficult for large trucks. As the modeling in Appendix A-1 shows, standard WB-62 trucks (trucks with one 102" wide by 48' long trailer) turning from Route 27 north on Route 206 must override the curb if they don't use the opposing travel lane. The same thing happens when trucks of this size turn from the northern leg of Route 206 onto the southern leg of Route 206. Finally, the off-tracking characteristics of a standard WB-62 truck attempting to turn left from the southern leg of Route 206 onto the northern leg of Route 206 are such that a 48' trailer does not clear the opposing lane of traffic for a distance of 163 feet from the center of the intersection. Please note, N.J.S.A. 39:3-84(3) and (4) allows a trailer length between 48' and 53'; a longer trailer would only further compound the maneuvering issues at this intersection. The danger to cars, in adjacent or oncoming lanes and to pedestrians by the curb, is present every single time a large truck turns the corner here.

The intersection, which is located in the middle of a historic district, with Princeton University's early 19<sup>th</sup> century Palmer House on one corner and 19<sup>th</sup> century private homes on the other two sides, is bound by its context. Its historical significance and designation make this crossroad **inappropriate and dangerous for large trucks**.

## **B. On-street Parking in Downtown Princeton**

Route 27/Nassau Street is not just Princeton's oldest road—the postal route between Philadelphia and New York City—it is the town's main street, **lined with parked cars** on both sides. Route 206 on Stockton Street is also part of that old post road, and it too has parking, though just on one side of the street. (See the map in Appendix B.) The parking supports essential economic activity and tourism in Princeton.

This is the center of Princeton Borough—with the commercial district on one side of Nassau Street and Princeton University on the other. Shoppers and tourists are regularly coming and going in the two-hour parking places; cars are constantly pulling in and out; car doors are opening and people are standing in the road beside their cars; pedestrians are attempting to cross the street between parked cars; cyclists, even if they travel close to the parked cars, present a challenge for drivers to see and avoid. Princeton University students and staff regularly move back and forth between the campus and the retail heart of the town. These are just a few of the safety challenges that large trucks encounter on this road.

On Nassau Street, the **space available for travel is reduced by the need to maintain a safe distance from people and bikes in the road**. There is great potential for a sudden deadly movement that would lead to a collision. Drivers of large trucks often **cannot see pedestrians or cyclists close to the front or to the right of the cab and even when they can see, the size of these trucks**

**makes it difficult for drivers to maneuver and stop safely in conditions in which multiple hazards exist.**

### **C. Narrow or Nonexistent Shoulders/Proximity of Pedestrians, Cyclists and Houses to the Road**

The NJDOT categorizes the cross section of Routes 206 and 27 in Princeton as **“two lanes without shoulder” for most of its length**. The lack of shoulders coupled with the dense residential nature of the community through which these roads travel (see Appendix C) are important reasons why these roads should not remain on the New Jersey Access Network for trucks. In the very center of Princeton, 11' travel lanes are reduced to 10' travel lanes, which can barely accommodate large trucks and which provide even less latitude for driver error or safe recovery in case a car brakes suddenly or a child runs out into the road.

School buses, postal vehicles, and garbage trucks make frequent stops along Routes 206 and 27; pedestrians walk on sidewalks close to the road and sometimes *on* the road where sidewalks are missing; school children wait for their buses beside the road; cyclists compete with vehicles for road space. **A lot of activity occurs on a daily basis beside and close to Routes 206 and 27 in Princeton.**

Added to the mix of constrained space and lack of shoulders for trucks to use in case of an emergency, is the presence of old houses close to Routes 206 and 27, structures that could easily be struck in an accident involving a large truck—as a video store was struck (with fatal results) on Route 29. In Princeton's residential, commercial, and historic areas, buildings surround the road; large trucks have no room to avoid an accident if they encounter a problem and any accident may, lethally, involve people near or in the buildings beside the road.

### **D. Stony Brook Bridge**

The rare 18<sup>th</sup> century stone-arched Stony Brook Bridge, which supports a section of Route 206 on the King's Highway, is the oldest bridge in New Jersey. Stony Brook Bridge is in three historic districts: the Princeton Battlefield Stony Brook Village Historic District, The King's Highway Historic District, and The Princeton Battlefield National Landmark.

State officials have acknowledged that the bridge is being stressed by the heavy vehicles it regularly carries. The stress is aggravated by the way in which those vehicles approach the bridge from the south—speeding downhill, then bouncing onto the bridge at the bottom. In **1999 Preservation New Jersey put the Stony Brook Bridge on its list of endangered historic sites**. They wrote that the bridge “is structurally threatened by the large number of tractor-trailer trucks that cross it at speeds approaching 55 miles per hour each day.”

In 1996, an engineer at Pennsylvania State University **found that the bridge was in fair condition** (See Appendix D) with instances of cracking in some of the stones in the arch ring. He found that erosion of the mortar joints had occurred in parts of the bridge and that re-pointing in the spandrel wall had resulted in fractures in the stones and breaking off and “spalling” of corners of the stones. He also observed **large longitudinal cracks**. “The cracks continue along most of the length of the arch barrel,” he wrote. “There appears to be one major crack within about 6’ to 10’ of each spandrel wall in each arch.” He said that those cracks represented “an area of concern and require careful monitoring.” He further noted bulges in the wall on the south side of the bridge.

Subjecting this bridge to further pounding by large trucks will precipitate further damage to this historical structure.

### **III. Safe Sight Distances and Stopping Distances of Large Trucks**

The road geometry along Route 206 and 27 in Princeton often challenges safe sight distances for truckers. Route 206 in particular travels over curves and hills, which combine with frequent uncontrolled access points to create a situation in which vehicles can suddenly come across other vehicles stopped to turn or turning into travel lanes. Route 206 alone has **more than 180 driveways and uncontrolled access points in Princeton**. Route 27 has **187 uncontrolled access points** in Princeton (101 in the Township and 86 in the Borough).

One intersection—the **intersection of Ewing Street and State Road/Route 206**—has an **accident rate that is almost three times higher than the next highest accident rate intersection in the Township**. At that location, vehicles traveling from the north are going downhill and around a corner when they suddenly come upon an intersection at which cars are often stopped to turn left. There is no shoulder and no turning lane. At the Ewing intersection, a utility pole, the fence in front of a private house, and the trees in front of that house have been frequently damaged or destroyed as vehicles have attempted to avoid hitting other vehicles. As the accident statistics demonstrate, the sight distance of 330 feet (even less when there is a queue of cars waiting to turn left) is difficult enough for an automobile to negotiate, but for a fully loaded, large truck traveling at close to 50 miles per hour (not uncommon in off-peak hours), stopping safely here is a challenge—the larger the truck, the greater the challenge. Less than 100 feet south of this intersection are school bus stops, homes on ¼ acre lots or less, and driveways, some hidden, that enter the roadway from both sides. (See Appendix E for further information.)

Two other locations also challenge drivers of heavy vehicles: the cross streets at the bottom of the northbound hill on Bayard Lane/Route 206; and Quaker Road at the bottom of the hill on northbound Stockton Street/Route 206. The hills mean faster speeds and in both locations the road turns at the bottom of the hill.

While AASHTO does not recognize differential stopping distances for cars and trucks in gauging whether trucks are appropriate at given locations, the Canadian government does make that distinction. One study finds that to stop safely, **a large truck needs a sight distance 17.5 to 135 percent longer than that needed by a car. This is a function of the vehicle's braking performance and its length and weight to power ratio.** The heavier the truck (and this, of course, is pertinent in evaluating whether to allow access by large trucks not making nearby deliveries) and/or the less in tune the brakes, the longer the stopping distance required. **National statistics show that 1 in 4 trucks have badly adjusted brakes.** It has already been noted that less well maintained trucks are often the very vehicles whose drivers are avoiding Turnpike tolls by traveling on roads like Route 206.

#### **IV. Accident Rates and Potential for Accidents Involving Pedestrians and Cyclists (Intermodal Implications)**

In the 3 ½ years between July 1, 2003 and December 13, 2006, Princeton Township reported 546 accidents on Routes 206 and 27; Princeton Borough, 183. **At their worst sections, these roads have higher accident rates than the worst sections of several roads excluded from the New Jersey Access Network.** For example, the highest crash rate for a section of Route 206 is 14.6; the highest crash rate for a section of Route 27 is 17.2 while the comparable figure for Route 91 is 4.3; for Route 147, 4.2; for Route 161, 7.7; and for Route 495, 2.8. See Appendix F for this and other accident data.

The very size of the vehicles the State would allow here would aggravate the potential danger in accidents. More than 100,000 people are injured each year in heavy truck crashes, but multi-trailer trucks are notably more dangerous. They have a **fatal crash rate at least 11 percent higher than single trailer trucks: they have poorer stability and they can be carrying much heavier loads.** Extra size would greatly increase the dangers in this challenging environment for highway safety.

Local drivers are endangered by these large vehicles, but pedestrians and cyclists are even more at risk. As has been noted, drivers of large trucks have difficulty seeing pedestrians, especially to the front or the right of the cab. But Princeton has a lot of pedestrians walking beside the roads: **Princeton Borough has more people who commute to work on foot than any other town in New Jersey.** According to the 2000 Census, 35.6 percent of all workers in Princeton Borough walked to their place of employment. That compares to 3.1% in New Jersey overall. The Princeton rate was more than 11 times the statewide rate and almost 9 times the county-wide rate of people walking to work. (See Appendix G for the data.) This statistic **demonstrates how different Princeton Borough is from other communities in New Jersey in this respect and why very large trucks are so inappropriate on the town's main streets.**

In absolute terms, more than 2,000 pedestrians commute to work each weekday and, of course, many of them must cross Routes 206 and 27. Quite aside from the pedestrians walking to work, many more pedestrians drive or cycle to town and then walk: most of the nearly 7,000 students and 5,400 benefits eligible employees of Princeton University, the largest private sector employer in Princeton, walk or cycle around town. This includes those who drive into Princeton, park—sometimes in relatively remote parking lots—and then walk to their destination.

**Routes 206 and 27 are already a danger to these pedestrians.** Route 27 had 19 accidents involving cars and pedestrians from 2001 to 2005, 18 of which caused injury and one of which resulted in death; Route 206 had 12 such accidents in the same period in which 5 pedestrians were injured.

Princeton Borough on Route 27 has six crosswalks without traffic signals, crosswalks regularly used by pedestrians. Due to the success of a campaign to have traffic yield to pedestrians in crosswalks, pedestrians in Princeton are accustomed to stepping into a crosswalk and having vehicles stop for them. This is yet another example of how the environment in Princeton demands creates a dangerous situation when fully loaded 102"-wide trucks are on the roads.

**Cyclists too are endangered by large trucks.** Many Princeton residents commute to work on their bicycles, some because they have no other means of transportation. Here, too, Princeton Borough has a larger percentage of people cycling to work than the comparable rate countywide or statewide (2.6 percent in Princeton Borough, 0.5 percent in Mercer County, and 0.2 percent in the New Jersey). Since Route 206 has no shoulders and Route 27 is lined with parked cars, cyclists are frequently forced well into the travel lanes of these roads, and they cannot easily get out of the way of big trucks.

## V. Infrastructure Concerns: Road Maintenance

Portions of Route 206 in Princeton Borough are **bituminous pavement on concrete slab**. Heavy vehicles rock these slabs as their weight passes over them, breaking the road surface from the bottom up. As a result the surface in this section **requires regular and costly repaving**. (See pictures taken prior to the most recent repaving in 2005 in Appendix H.) According to the US Department of Transportation, a five-axle tractor-trailer registered at the 40 ton federal limit pays only 80 percent of its highway maintenance costs. Further, as the Federal Highway Administration has noted, one fully loaded 102' wide truck does as much damage to the road surface as nearly 10,000 cars. The State can ill-afford regular expenditure of the millions of dollars required to repair damage to a road that is simply not built to carry heavy vehicles.

## VI. Roadside Environment

### A. Proximity of Homes and Businesses to the Road

If Routes 206 and 27 remain part of the New Jersey Access Network, not only is the proximity of homes and businesses to the road a concern for safety it is also a **concern for public health**. Foremost among the negative effects of increased truck traffic on Princeton's main roads will be **increased levels of air pollution**. These large vehicles put large quantities of ozone, particulate matter, nitrogen oxides, carbon monoxide, sulfur dioxide, and toxins into the air—potential sources of respiratory irritation and infection, and even cancer. Children are more sensitive to this kind of pollution than adults, according to the Union of Concerned Scientists. Under current standards, diesels are allowed to send more than twice the amount of nitrogen oxides and 10 to 100 times the particulate matter into the air as cars. Diesel vehicles account for nearly half the nitrogen oxides and more than 2/3 of the particulates from U.S. transportation. Particulates have been found in recent years to be especially harmful to human health.

**Also harmful to human health is the noise pollution from heavy trucks.**

Trucks account for  $\frac{3}{4}$  of the noise level experienced by urban dwellers, according to one study. This noise, when it is persistent, contributes to irritation, stress, and sleep interference. According to the EPA, hills can contribute to noise from trucks because of sounds connected to gear changes and acceleration. Another source of noise on hills—of which Route 206 in Princeton has several—is engine braking or “Jake braking,” which Princeton Township residents near Route 206 frequently reported hearing during the 1990s and still hear today. “**Jake braking**” on hills saves wear and tear on standard wheel brakes in trucks but it also emits a roaring staccato noise that is even louder when mufflers are improperly maintained. (See the point above about maintenance.)

### B. Proximity of Historic Properties to the Road

Princeton is a historic community and **many of its best known historic buildings and structures are closely linked to the town's oldest road, the King's Highway**: Route 27 and the southern leg of Route 206 in Princeton (See Appendix I). This old stage coach route is the oldest road in colonial New Jersey, built on a Native American trail. Degradations to historic properties are likely if the roads around which they were built remain part of the New Jersey Access Network. These old buildings cannot be subjected to the vibrations and air pollution from passing large trucks without ill effects, as the experience in the 1990s showed.

Some of the National Landmarks along the King's Highway include: 18<sup>th</sup> century Nassau Hall (site of meetings of the U.S. Continental Congress) and Maclean House, the 18<sup>th</sup> (colonial) century Morven (the former Governor's Mansion) and

Drumthwacket, the early 19<sup>th</sup> century house that is the official Governor's Mansion. All the historic districts abutting the road are on the National and New Jersey Registers of Historic Places. These districts include many old private houses such as Princeton University's Palmer House, built for the grandson of the signer of the Declaration of Independence in 1823-4. Close to Route 206 in Princeton are former presidents' houses, including houses owned by Grover Cleveland and Woodrow Wilson. These historic properties—including Stony Brook Bridge, mentioned above—will continue to be subject to damage by truck traffic if the State does not exclude Routes 206 and 27 from the New Jersey Access Network. (See Appendix B.)

### C. Proximity of Princeton's Downtown to the Road

If Princeton's main roads remain on the New Jersey Access Network then **economic activity at the center of town will be hurt**. Route 27 in particular is Princeton's main street—many of the town's shops and restaurants are arrayed along a broad sidewalk. In recent years, some restaurant owners have moved tables outside, and as people stroll along Nassau Street, stopping to look in shop windows or to sit on the benches underneath the trees and next to the flowers that have been planted nearby, they are contributing to a sense of place that is attractive and welcoming. If customers cannot shop or stroll without being assaulted by the fumes and noise of heavy trucks, then they will go elsewhere; small businesses in town will suffer as a result. Loss of tourist dollars, a related threat, is discussed below.

## VII. Traffic Volumes

In 2004, **Route 206 carried nearly 21,500 vehicles per day; Route 27 carried nearly 11,300**. The patterns of use involve fairly heavy traffic—often “slow and go” near major intersections—around the rush hours and then a steady flow of traffic during the other weekday and Saturday hours from about 5:30 am until 10:30 pm. A lot of large truck traffic on these roads occurs during the day. However, at night when traffic thins out, large trucks often drive rapidly through Princeton, especially on Route 206, to the detriment of residents' safety and sleep; this problem eased when the State banned large through trucks from area roads but has not disappeared, and has been increasing in recent years. As noted above, enforcement of the existing law is so poor that any truck can still make the connection between the interstates this way.

At any hour, however, an accident or fire or medical emergency can quickly paralyze the roads; they are so narrow that it may sometimes be impossible for police to route traffic around the incident on the affected roadway. Police have expressed the concern that if there were to be an accident involving an large vehicle on Route 206 in particular, because the crash footprint of these vehicles is considerably larger than other vehicles, not only would the accident close the road and require clean-up that would take hours of police time, but getting rescue

vehicles to and from the site might be extremely difficult and finding an appropriate detour route for other heavy vehicles in Princeton would also be difficult. If Routes 206 and 27 in Princeton are unsafe for large vehicles, other town roads are even more inappropriate.

### **Overarching Concerns**

The above contraindications of truck route status for Routes 206 and 27 make it clear: double-trailer combination trucks and 102" wide standard trucks not making deliveries close by do not belong on these roads. If these roads remain on the New Jersey Access Network for trucks and Section 1.6—which allows these trucks to continue from one delivery point to the next on this “secondary” network of truck routes—remains in the rules, then the safety of the people in Princeton will continue to be jeopardized and the roads will see continued accelerated degradation. The new rules are potentially damaging to Princeton in four major ways: the danger to safety, the threat to the local economy, the threat to the town’s historic fabric, and the contradiction to important principles of transportation planning and initiatives undertaken by the State already. All of these considerations affect the quality of life in town and the ineffable value that attracts or repels residents, visitors, and prosperity.

#### **1. Danger to Safety**

As noted above, the geometric characteristics of Routes 206 and 27 and the residential patterns and geographic characteristics of Princeton do not mix safely with double-trailer truck tractor combinations and 102-inch wide standard trucks. Princeton’s **high residential density, high levels of pedestrian and bicycle activity, high numbers of uncontrolled access points and poor sight distances for heavy vehicles are incompatible with large trucks, especially given also the roads’ narrow travel lanes and lack of shoulders.** There is also excessive low-speed **off-tracking by large vehicles** at the Route 206/Route 27; Route 27 and County Route 571, and Route 27 and County Route 583 intersections where trucks must swing into oncoming or adjacent lanes or over the curb in order to get around the corner. Sections of these roads already have **high accident rates**, and that should serve as a warning for even more serious problems if heavy trucks not making deliveries close by continue to use Princeton’s roads regularly. This is not a casual concern. More than 100,000 people are injured each year in heavy truck crashes.

The trucking industry might argue that these roads, as state highways, have always carried trucks and that therefore they should not be excluded from the New Jersey Access Network. However, **the size of trucks and the volume of truck traffic have increased substantially since these state roads first started carrying trucks** (see Appendix J) and the enormous size and weight of today’s vehicles do not belong on these historic roads.

- A standard-sized truck has grown from the mid-20<sup>th</sup> century standard of a 10 foot tractor with a 25 foot trailer to the current standard of a 17 foot tractor with a 53 foot trailer today. **Increased size is a real threat to safety:** as weights rise from 65 to 80 tons (today's standard), the risk of accidents involving a fatality goes up 50 percent, according to the US Department of Transportation. Now the State is asking these roads to carry double-trailer truck tractor combinations not making deliveries close by. As previously noted, the fatal crash rate for these combination vehicles is at least 11 percent higher than for single trailer trucks. And when their brakes are out of adjustment, as they have been found to be in at least a quarter of trucks on the road, their stopping distances double or triple.
- Additional size leads to problems with rollover stability and steering difficulty.
- The larger crash footprint of large trucks can spread the effects of an accident, with lethal consequences.
- The US Department of Transportation has reported that the number of trucks driving through city streets and towns increased twice as fast as the number of trucks using the interstate highways in the decade between 1988 and 1998.

Time-tested Maryland State law on the question of truck access handles this problem by requiring large trucks to take the shortest safe distance between the National Network and the point of delivery and to travel on state highways with four or more lanes as much as possible.

## 2. Threat to Local Economy

Princeton is an important center in one of the fastest growing parts of New Jersey. Moreover it is one of New Jersey's top historic, athletic, and cultural attractions. Princeton's **local economy is threatened by large numbers of big trucks on its roads** in several ways: first, because its central business district is located directly on Route 27; secondly, because many of its tourist attractions, particularly its historic properties, are located near or on both roads; and thirdly, because the proximity of homes and businesses to truck routes has a negative impact on property values and sales, which in turn depletes tax revenues.

As noted above, **attracting shoppers and tourists to the town center depends upon preserving an attractive destination.** Both groups are notoriously fickle, easily convinced that an experience is unpleasant if they find that their visit is blighted by large trucks a few feet away and easily persuaded to spend their money elsewhere.

The **central business district** must already compete with the malls where parking is free and plentiful. Princeton does not also want shoppers to have to brave driving and parking around large trucks not making deliveries close by, and does not want them, once they reach their destination, to find the air full of fumes and noise as they walk around town. This scenario can spell trouble for local merchants. We do not want shoppers and tourists to take their business elsewhere.

Tourism brings thousands of people Princeton each year and their expenditures have an effect not only on the businesses they patronize directly but also indirectly on businesses that provide those merchants with their goods and services. The **value of this tourism to the local economy** is best understood by taking visitors to Princeton University as an example. The University—one of the state's main cultural, athletic, and historic attractions—welcomed more than 550,000 people last year for athletic games, theater, reunions, commencement and other events. Those visitors to Princeton University alone contributed substantial sums to the regional economy last year, and that figure does not even take into account the thousands of other people who visit Princeton each month to see historic properties or to stroll on the streets on a Sunday afternoon. All this activity would be jeopardized by keeping Routes 206 and 27 on the New Jersey Access Network.

Finally, if these roads remain part of the New Jersey Access Network the **negative impact on property values** around Routes 206 and 27 can be expected to continue. Even houses two or three blocks off these roads may be affected, creating a large band of devaluated property along the two main roads around which Princeton is built. Lower property values in this large swath of Princeton means lower tax valuations and therefore lower tax revenues to the municipalities. Princeton governments may either have to compensate for that lost revenue by offering fewer services or raise already high taxes on other property owners.

### 3. Threat to Historical Heritage

Princeton is a **unique historic resource for the State** and the Nation, an important environmental asset that is threatened by increased levels of air and noise pollution from large trucks and the vibrations they cause.

Parts of Routes 206 and 27 in Princeton are even **on** the National Register of Historic Places: **the King's Highway**, which was placed on the New Jersey Register of Historic Places in October 2000 and on the National Register in December of that year, includes the south leg of Route 206 in Princeton and Route 27 in Princeton. The process by which the road received historic designation involved five municipalities and many area residents working together. Designation recognized not only the long history of the road itself, as the main colonial post road and stage coach route between Philadelphia and

New York, but also the unique relationship between the road and the communities around it.

The importance of another important monument, **the Stony Brook Bridge**, which carries Route 206 and all its traffic, has already been mentioned. If Routes 206 and 27 remain on the New Jersey Access Network, then the oldest bridge in the State will be severely damaged by the continued pounding by heavy truck traffic.

Finally, **all those historic homes, all those historic districts, will have to absorb the destructive effects of large truck traffic.** The National Park Service's Office of Technical Preservation Services notes that historic structures may be "particularly vulnerable to the effects of vibrations generated" nearby. The publication notes, "Historic finishes, such as plaster walls and ceilings, lack the flexibility to accommodate abnormal movement, while shallow foundations (common in historic buildings) may lack the rigidity to resist vibration-induced movement." Historic structures near the roads suffer deterioration as a result of the heavy truck traffic on Routes 206 and 27; therefore these roads should be excluded from the New Jersey Access Network.

#### **4. Conflict with Important Federal Principles and NJDOT Initiatives**

Keeping Routes 206 and 27 on the New Jersey Access Network would contradict **principles in the Federal TEA-21 legislation** about preserving environmental, scenic, community, and historic values, providing for consideration of the context of the locality, and encouraging access for other modes of transportation. While the principles apply to new projects, they are part of a **new culture of transportation management** that should determine the writing of new rules. They speak to the importance of making roads serve communities rather than the other way around.

One important example of how keeping Routes 206 and 27 as part of the New Jersey Access Network would undermine community values is the substantial effort, funded by NJDOT's Statewide Local Transportation Planning Assistance Program, to develop **a comprehensive vision for the northern leg of Route 206 in Princeton.** This planning effort, an initiative undertaken cooperatively by residents and the Princeton municipalities, culminated in a **broad-based community-wide vision of an improved Route 206 corridor**, the outlines of which were only recently adopted by the Regional Planning Board of Princeton, Princeton Borough Council and Princeton Township Committee.

In this project, residents and officials **worked together to define problems on the road** (among them, piecemeal changes to the roadway, which over the years changed the relationship of the road to the community around it; the high accident rate, safety concerns generated by the volume and speed of traffic; the barrier effect of the road dividing once unified neighborhoods and discouraging

people from walking or cycling; and concerns about the adverse effects of truck traffic on the road). As a result, the Route 206 Joint Vision Plan and Traffic Calming Study (see attachment A) recommended a series of integrated objectives, including **a smoother, calmer flow of traffic, a better relationship between the road and the community, improved resources for pedestrians trying to cross the road safely, preservation of the tree canopy, and better defined gateways to Princeton.** The culmination of an exhaustive community effort, this plan will be effectively undermined if Route 206 remains on the New Jersey Access Network and its traffic continues to split Princeton in two.

Another example of how keeping Routes 206 and 27 as part of the New Jersey Access Network would undermine community values comes from **recent citizen involvement in trying to mitigate the barrier effect of state roads for pedestrians.** Residents have for years identified the state roads as barriers to community cohesiveness, dividing neighborhoods, pushing people into cars for short trips.

- Community action: Residents of Princeton Borough identified this problem and decided to survey the community about pedestrian issues. In 2004, they gathered the public opinions about factors that prevented people from walking around town. One constant in the answers residents submitted was a fear for their safety and the safety of their children when they crossed the state roads. (See Appendix K .)
- The problem: Since Routes 206 and 27 run through the middle of town, most of Princeton's pedestrians have to cross or walk along Route 206 or 27 at some point in a journey. Only six of the intersections on the six miles of Route 206 through Princeton have stoplights. Fast-moving traffic and no stoplights discourage residents from trying to cross Route 206. Even Route 27, with slower moving traffic, presents problems for pedestrians needing to cross. Only seven of the many intersections along its three miles in Princeton have stoplights. The many crosswalks that have no stoplights become dangerous when drivers ignore them or have difficulty stopping for them.
- Response: The Borough requested, and NJDOT's Office of Bicycle and Pedestrian Programs decided to support, a study of Princeton's crosswalks—an inventory of existing crossings, a recommendation of places in which crosswalks were needed or where they required improvement, and a close study of pedestrian behavior in a sampling of locations. These recommendations will be issued in the next couple of weeks; they include the proposal that crosswalks be added on Routes 206 and 27. The new crosswalks would not be associated with stoplights. Of course, if Routes 206 and 27 remain part of the New Jersey Access Network, the safety of pedestrians would depend upon the capacity of heavy trucks to brake and stop safely—something the average pedestrian

is loathe to test. Despite the new crosswalks, therefore, Routes 206 and 27 will be, if anything, a more substantial barrier to people in town and the truck traffic would undermine NJDOT's efforts to improve conditions for pedestrian safety in Princeton.

Another citizen-run survey, this time initiated by Princeton Township residents, sought to determine how children travel to school and what the obstacles were to larger number of kids walking or cycling to school. (See Appendix K) Once again the answers highlighted the barrier effect of state roads.

The level of citizen involvement on these varied aspects of the state roads and the ways in which they affect the daily behaviors of people in Princeton shows that, independent of the question currently under discussion here, **Princeton residents are seriously concerned that their main roads are hurting community cohesiveness and undermining the town's environment** to the detriment of all residents and merchants (see Appendix K.) If Routes 206 and 27 remain on the New Jersey Access Network, large truck traffic would be one more impossible burden to the roads and the community. Allowing these roads to remain on the "secondary" network would undermine NJDOT's own initiatives to improve conditions in our town.

### **Request to the State**

Princeton Township and Princeton Borough have **jointly passed a resolution** requesting that the State exclude Routes 206 and 27 from the New Jersey Access Network. Earlier the mayors of both municipalities wrote a letter to the Commissioner indicating that their towns would be taking this position. Those documents are included in Appendix L.

This submission from Princeton Township and Borough can only request the exclusion of Routes 206 and 27 *in Princeton* from the New Jersey Access Network, but for most of the reasons mentioned above and especially because of poor state enforcement of existing laws, the **Township and Borough urge the State to exclude all of Routes 206 and 27 from the New Jersey Access Network** so that large trucks do not use Princeton as a "shortest distance" or "most direct route" link to the next terminal under Section 1.6 as currently written. As we understand the rule, even if Princeton is excluded from the "secondary" truck route network, large trucks could use our roads as pass throughs "as necessary."

Promoting public safety, preserving the economy, protecting our historic heritage, and supporting the values that shape our community all require that Routes 206 and 27 be taken off the Access Network in their entirety so that segments of these roads in Princeton are off limits to all but the most local deliveries.

**Request to the New Jersey Department of Transportation Re: NJAC 16:32  
From Princeton Township and Princeton Borough  
January 2007**

**To Exclude Mercer Road, Mercer Street, and Washington Road in Princeton  
From the New Jersey Access Network for Trucks**

The municipal governments of Princeton Township and Princeton Borough are asking the New Jersey Department of Transportation to **exclude Routes 583 and 571 from the New Jersey Access Network for Trucks** under NJAC 16:32, Truck Access Rules, published in the *New Jersey Register* on December 18, 2006. We are asking for exclusion of these roads from the New Jersey Access Network on the following grounds.

- Mercer Street (Route 583) and Washington Road (Route 571) are local roads in Princeton Borough; Mercer Road (Route 583) is a local road in Princeton Township; Washington Road (Route 571) is a county road in Princeton Township. **Mercer Street/Road has a 4-ton weight limit posted for its entire length through both the Township and Borough.** Please see Appendix L for the letter dated February 1, 2007 from Mayor Marchand documenting these weight restrictions and requesting the exclusion of Mercer Street/Mercer Road/ Princeton Pike. Washington Road has a 20-ton weight limit posted on its bridge. These roads are *totally* inappropriate for heavy truck traffic.
- Princeton Pike, as it continues out of town, is also part of Lawrence Township and a local road. Although the road falls out of Princeton's jurisdiction, we would also request that **Princeton Pike be excluded** from the New Jersey Access Network. Its inclusion in the New Jersey Access Network would lead to regular improper use by large trucks traveling to and from I-295. These trucks would expect to connect through Princeton on Princeton's local road, Mercer Road/Street onto segments of Routes 206 and 27, for which we have also requested exclusion.

**Safety/Road Geometry**

- These roads are narrow, two-lane roads without shoulders. Mercer Street and Mercer Road are densely residential, with houses set close to the roadway. All of these roads are regularly used by pedestrians and cyclists. They are simply unsafe for use by large trucks.
- The roadbed of Mercer Street in Princeton Borough is concrete slab construction and it is in poor repair. Because heavy trucks rock concrete slabs back and forth as their weight passes over them, the road will quickly deteriorate with large trucks using it regularly. The repair of these

concrete slabs is extremely expensive. Should Princeton Borough have to pay for repairs to road damage done by trucks making deliveries in other municipalities and continuing along Route 206? It is wrong for the State to allow this street to remain on the access network.

- **The geometry of the intersection of Nassau and Washington is substandard for large trucks.** Trucks currently off-track into oncoming lanes of traffic attempting to make the turn (see Appendix A-2). Also, the approaches to the Mercer Road Bridge over the Stony Brook, require low-speed off-tracking by trucks when they turn the corner. Mercer Road Bridge and the property around it have been damaged repeatedly over the last 10 years by trucks. This is a historic bridge; it is part of a National Register of Historic Places district and part of a National Landmark.
- The county bridge over the Stony Brook has sharp curves. The bridge is not built to carry 40 ton trucks and it would quickly deteriorate. The Washington Road bridge has a 20 ton weight limit. It too should not carry 40 ton trucks.
- The intersection of Washington and Nassau is usually crowded with pedestrians crossing and with cars so that if the truck overrides the curb it runs the danger of hitting people. If it goes into oncoming or adjacent lanes it runs the risk of hitting another car. The intersection is surrounded by parked cars on Nassau and by pedestrians on every corner.
- Encouraging trucks to take Washington Road would endanger large numbers of people. The road cuts through the Princeton University campus, which is crowded with pedestrians at most times of the day and even at night, as students make their way back and forth—for example, from labs back to dorms or from the campus back to graduate student housing. Pedestrians crossing Washington Road also can only currently do so at a few signalized crossings but the demand to cross is high for the entire stretch of the road that abuts the campus, and students are notoriously impatient.
- Princeton University's current parking situation requires that a large majority of spectators attending Princeton University athletic events park in areas located on the west side of Washington Road. This means that a large amount of additional pedestrian traffic must cross Washington Road on foot at Armory Drive when athletic events are scheduled.
- The geometry at the corner of Nassau and Mercer Street is not much better for turns by large trucks and the intersection, which has no traffic signal, has a left turn lane from westbound Nassau Street that is dangerously short for trucks. Trucks would find it hard to negotiate this intersection without hitting adjacent cars. The intersection is difficult even

for cars to negotiate because it is extremely close to two other signalized intersections on Nassau Street, both of which have lines of cars that stack on Nassau waiting for lights. Cars turning left from Nassau to Mercer must insert themselves between cars in the eastbound lane of Nassau in order to get through. Cars turning right from Mercer onto Nassau must insert themselves into the moving traffic—often a difficult maneuver. This maneuvering would be almost impossible for a trailer or a double-trailer combination truck. The intersection is also surrounded by parked cars.

- Pedestrians crossing Mercer Street and Mercer Road can only do so at a few signalized crossings. Princeton Theological Seminary straddles Mercer Street and its students frequently cross the road. To allow large trucks on this road would endanger pedestrians and increase the barrier effect of a busy road.
- The majority of accidents on Washington Road occur during the winter months in times of inclement weather when the bridge surface spanning Carnegie Lake freezes prior to the rest of the road surface. These accidents are usually minor 'rear end' accidents but it is the experience of local police that there are not many 'minor' accidents of any kind when a truck is involved.

### **Proximity of houses to the road**

- Mercer Street and Mercer Road are closely surrounded by houses. The health of people in those homes can be expected to suffer from increased air and noise pollution associated with truck traffic. Particulate matter from truck exhaust and vibrations from the trucks can be expected to damage historic homes.
- Property values of homes in a several block area around the road can be expected to fall as a result of proximity to the heavy truck traffic. This loss of value would lead to reduced local revenues and possibly increased tax burdens on other property owners in Princeton to compensate.

### **Historic preservation and tourism**

- Tourism makes an important contribution to Princeton's economy. The air and noise pollution from large trucks and unpleasant levels of traffic can be expected to have a negative impact on tourism near these roads.
- Einstein's house, which is located on Mercer Street, is frequently visited by tourists, who would be less likely to make the trip if they have to contend with trucks.

- Mercer Street is part of Princeton Borough's Mercer Hill Historic District, which includes a number of dwellings designed by Princeton's noted architect-builder, Charles Steadman, and clusters of Victorian houses extend to Springfield Road. Other architectural styles located here include houses in the Greek Revival, Gothic Revival, Italianate, Second Empire, Queen Anne, and Colonial Revival styles.
- Mercer Road goes through the Princeton Battlefield Stony Brook Village Historic District in the Township and includes the County of Mercer's Mercer Bridge over the Stony Brook. These properties are not just in historic districts: the area is also a National Landmark.
- Princeton Battlefield Park, which is on Mercer Road, is another important tourist destination and it too would be subjected to the degradations of pollution from trucks. Any unpleasantness can deter tourists from visiting this area.
- Once Washington Road crosses the canal and travels to Route One, Washington Road is on the National Register of Historic Places as the "Washington Road Elm Allee".
- The Delaware and Raritan Canal over which Washington Road travels is also on the National Register.

### **Infrastructure and Other Costs**

- When unreported accidents occur on local roads, the locality is charged with paying for any repairs. When, as is frequently the case, trucks cannot negotiate the Mercer Road bridge, the Princeton Township Department of Public Works and/or the Mercer County Department of Transportation are responsible for paying for the damage. Accidents of this kind also tie up traffic on narrow roads and require a local police response team to manage traffic, write summonses and reports.

## Appendices and Attachments

### **Exclusion Request – Routes 206 and 27 and Routes 583 and 571**

#### 1. Roadway Geometrics

Appendix A-1: **Intersection of Routes 27 and 206  
Truck Turning Abstracts**

Appendix A-2: **Intersection of Routes 27 and 571  
Truck Turning Abstracts**

Appendix B: **On-street Parking in Princeton Borough**

Appendix C: **Narrow Roads and Lack of Shoulders**

Appendix D: **Route 206 Stony Brook Bridge Study**

#### 2. Roadway Safety

Appendix E: **• Truck Stopping Distances  
• Road Geometry – Ewing Street/Route 206 Intersection**

Appendix F: **Accident Rates**

#### 3. Intermodal Concerns

Appendix G: **Intermodal Concerns: Travel to Work, Princeton Borough**

#### 4. Infrastructure Concerns

Appendix H: **Infrastructure Concerns: Asphalt on Route 206 prior  
to 2005 Repaving**

#### 5. Roadway Environment

Appendix I: **• Land Use character along Route 206  
• Community Resources in Princeton Borough  
• Historical Significances of Routes 206 and 27  
• Historic Properties in Princeton Borough and Township  
• Map of the Historic Districts of Princeton Borough  
• Historic Districts and Sites Designated by Princeton Township**

6. Changes in Use by Trucks and Related Safety Concerns

Appendix J: **Changes in Use: Increased Size of Trucks on Routes 206 and 27 and Increased Danger as Truck Sizes Grow**

7. Community Concern About Trucks on Routes 206 and 27

Appendix K: **Broad Grassroots Concern regarding Traffic on Routes 206 and 27 and its Negative Impact on Princeton as a Town**

- **Princeton Borough Pedestrian Report 2004**
- **Princeton Township Study on Transportation to School 2006**
- **Petitions campaign on Route 206 Safety 2005**

8. Requests for Exclusion by Municipalities

Appendix L: **Exclusion Request from the Elected Governments of Princeton Township and Princeton Borough**

- **Letter of January 18, 2007**
- **Borough of Princeton Resolution**
- **Township of Princeton Resolution**
- **Letter of February 1, 2007**

9. Route 206 Vision Plan:

Attachment A: **Route 206 Joint Vision Plan and Traffic Calming Study**