

# East Campus Development Traffic Impact Study Clarifying Questions and Recommendations – v1 March 18, 2020

Princeton University responses in red dated May 8, 2020

## Clarifying Questions

### 1. What are the peak hours?

In the study there is reference to AM Peak Hours and PM Peak Hours. When are these specified times? Do they apply only Monday-Friday or also on Saturday-Sunday?

Are the “network peak” hours of 8-9am and 5-6pm, as shown on P 10 of the study, what you’re referring to?

IF SO, THEN IT WOULD BE HELPFUL FOR YOU TO PLEASE SPECIFY THIS THE FIRST TIME THAT THE REPORT REFERENCES “NETWORK PEAK” HOURS.

**The peak hours referred to in the report are defined throughout the study as “network peak hours”. These are weekdays (Monday to Friday) in the morning from 8:00 to 9:00 am and in the afternoon from 5:00 to 6:00 pm.**

### 2. No study of high volumes of traffic after large major events at Jadwin Gym and at Princeton Stadium.

At the January 2020 open house, community members asked university staff if this TIS would include current statistics and projections for traffic flow to/from Lots 21 and also include the traffic flows to the projected new garage when major events occur. We also discussed that these heavy traffic flows will regularly occur after sporting events, tournaments, and other large convened gatherings with attendees coming in high numbers of vehicles.

However, we are concerned that there is no reference to this whatsoever anywhere in this report. We believe that this may not have been included because of the following data gathering timing described on page 1 of the report.

*“This TIS is based on an extensive traffic counting program that started in September 2018 and was supplemented by traffic counts focusing on the neighborhood streets undertaken in September of 2019. BFJ also performed traffic generation counts of the various parking lots and user groups to quantify the traffic loads of the parking lots and future garage.”*

WHAT CAN BE DONE TO PROVIDE THIS IMPORTANT DATA? PLEASE BE SURE TO INCLUDE THIS IN A REVISED AND UPDATED VERSION OF THIS REPORT PRIOR TO A REVISED VERSION OF THIS FINAL IS SUBMITTED TO THE PRINCETON PLANNING BOARD.

Following general industry and NJ Department of Transportation guidelines, this TIS addresses traffic conditions in the study area during the critical “network peak hours.” These are the conditions that occur about 170 times per year (Mondays through Fridays, when the University is in session) at about the same time at all the intersections studied. It is these daily commuting conditions that become the design basis for roadway and intersection improvements and for mitigation measures.

Traffic impacts related to athletic and special events are less frequent and the impacts vary from one event to the next. The traffic loads created by large athletic events generally do not become the basis for roadway or intersection improvements, even though they may generate significant traffic surges. Traffic generated by athletic and sporting events are generally controlled through supplemental operational management procedures such as barrier controls, access limitations, and interventions by on-site parking event management staff and the University Public Safety officers.

The proposed expanded street system includes a new Stadium Drive with plans for a future street connection between Western Way and Prospect Avenue. The street system has been designed to provide maximum flexibility for event-related traffic management.

The proposed 1,567-space parking garage on Lot 21 will consolidate daily commuter and event parking, which will enable the University to improve parking management. Traffic surges generated by vehicles leaving the garage after an event will be managed with a parking event management team and the assistance of University Public Safety officers, manually controlling the traffic lights (as needed) on Faculty Road, Washington Road and Harrison Street, which will reduce the number of vehicles travelling on neighborhood streets.

3. **Will the existing unnamed road (*shown in the circle below*) next to DeNunzio pool and going to Faculty Road continue?**

We see in the map below on page 9 of the report, that there is an existing road from Jadwin Drive to Faculty Road. Will this continue to exist as a one or two-way thoroughfare?

IF SO, THEN CAN DRIVERS ENTERING AND EXITING THE GARAGE USE THIS ROAD TO DRIVE IN AND OUT TO FACULTY ROAD WHEN THE ROAD IS BACKED UP AT THE FITZRANDOLPH – FACULTY ROAD INTERSECTION?

The existing road connecting Lot 21 to Faculty Road located east of DeNunzio will be eliminated. This access road from Faculty Road will be shifted further east and will run along the west side of the future garage. It will have direct access into the garage, and will therefore represent a second connection from the garage to Faculty Road in addition to the connection via FitzRandolph. The connection highlighted in the oval circle is an anticipated pedestrian and cycling connection, one of many new paths that will be constructed as part of the project to encourage biking and walking.



4. **An element that was not properly included in the study is the intersection of Faculty and Harrison.** In the Executive Summary there is no indication of fresh turning lanes on Faculty to enter FitzRandolph or the new Stadium Drive coming from the west. Rush hour flow on Faculty will be significant, as well as traffic after major sporting events, including non-University events that happen on weekdays occasionally. While an interim traffic coordinator may help, making a left turn onto Faculty, Western Way or Prospect off Harrison coming from Rt. 1 can jam northbound traffic significantly. Same is true for left turns off Prospect, Western Way and Faculty going north on Harrison. People will inevitably find routes that work coming from other directions, but those in particular seem problem fraught, especially at Harrison and Faculty where residential units are so close to the roads.

**The traffic impact study analyzed future traffic conditions at all the intersections mentioned above. The analysis shows that the traffic volumes projected for the new parking garage do not warrant the addition of new turning lanes at any of the intersections mentioned. The traffic surges referred to in the report that are related to special events occur infrequently and do not justify widening street approaches to intersections. Unless traffic conditions warrant the changes, we would not seek to widen approaches on streets that are residential in character, or that connect directly to a residential neighborhood, as the widenings may have an undesirable outcome of attracting more traffic onto that street and the widened crossing could have negative impacts on pedestrian convenience and safety.**

5. **You can see the increases in Figures 2.1 and 4.15, but the deltas are less worrisome than the actual intersection configurations to minimize back-ups when cars are trying to make left turns from a one lane road.** And since access to Rt 1 from Harrison is already a rush hour disaster, I hope the state can engage some creative programmers to make that signalization work better during rush hour. In other areas, signal timing regularly switches during rush hours, and flashing yellow left turn lights during green light periods to allow left turns when there is no traffic coming from opposite direction, not to mention that signals at “minor” intersections go to flashing red and green from 11pm to 5am.

**Princeton University has long been a partner with the NJDOT and Mercer County in working to achieve improvements to the intersection of Harrison Street and Route One. Most recently the University worked collaboratively with the State and County when a new eastbound turn lane was added to the Harrison Street intersection with Route One. The University continues to monitor NJDOT’s progress towards making planned improvements that will add additional travel lanes to the section of Route One from the Dinky overpass to the Millstone River. This near-term project includes improvements to the jughandle at Harrison Street, the Fisher Place jughandle, and the circle at Washington Road. This project will improve access conditions from Harrison Street onto Route One.**

## Recommendations

1. **There’s an important need for manual officer override of selected traffic lights during peak times when large numbers of cars exit the garage after the conclusion of major events attend by many people in vehicles.**

At the two January Open House meetings many residents expressed concern that when a basketball game, football game, soccer match, or any other Eastern Campus event attended by many people concludes, that there will be a high volume of vehicular traffic leaving the proposed 1,567 car parking garage. This problem will be particularly acute at the stoplight intersections of:

- a. Faculty Road and Washington Road (#14), and
- b. Hartley Avenue and Harrison Street.

We do not believe that the currently proposed change to the timing of the “left turn on green arrow” light will resolve this intermittent heavy load problem.

We were told by University staff at this meeting that this could and would be addressed by Princeton University by either University staff or Princeton Police department officers to always have an officer at these busy intersections to manually control the timing of the lights to speed the vehicular traffic along optimally. This regular periodic event might take about 30-60 minutes after the event concludes.

**As discussed above the TIS addresses traffic conditions and mitigation measures for typical weekdays when University classes are in session. As is currently done for large athletic and special events, the University will implement supplemental traffic management interventions**

**as needed. Depending on the size of a particular event, this might involve parking event management staff in in coordination with Public Safety officers assisting with traffic control at the intersections identified above.**

**2. Build the new road from Western Way to Prospect Avenue and have it completed before the new garage is opened.**

There is no reference in the report's Executive Summary about the closing of vehicular traffic on Roper Lane. This is first presented on page 8.

We understand that the current Roper Lane roadway isn't wide enough for TigerTransit and trucks. We agree that it certainly needs to be replaced with a widened roadway between Western Way and Prospect Avenue. This will be through the land currently occupied by the Ferris Thompson apartment and parking lots as described on page 8 as follows.

*"The current access off Faculty Road will shift further east adjacent to the new garage. Roper Lane will continue to function as access route for deliveries to the new ES and SEAS buildings, but will not carry commuter traffic. In a later phase of the development plan, a new north-south connection will be proposed between Western Way and Prospect Avenue west of FitzRandolph Road."*

We're concerned that this road is only described as "will be proposed" vs. the University now seeking approval and getting rights to build this important access road as an integral part of the Planning Board proposal to build the garage with all and new and expanded roadways.

**PLEASE AMEND YOUR OVERALL RECONSTRUCTION PLAN TO INCLUDE MUNICIPAL APPROVAL TO ALSO BUILD THIS NEW ROAD**

Also of note is the following description on the report's page 31.

*... the introduction of Stadium Drive connecting the new garage to Ivy Lane will affect the distribution of traffic on the western side of the study area and reduces the percentages of vehicles using Fitzrandolph Rd and Murray Place."*

We are certainly pleased that the University will be building the new two-way stadium drive to facilitate vehicular traffic coming/going to the large new garage. The construction of a new road from Western Way to Prospect Avenue will also need to be done.

However, our community is concerned that delaying the construction of this new road from Western Way to Prospect Avenue will cause vehicle drivers to begin, and continue, using Fitzrandolph Road and Murray Place to access the new garage. If this new approach road is completed earlier, then the traffic coming from Prospect Avenue will flow down using this new road instead of using the other smaller residential streets.

**WE REQUEST THAT YOU PLEASE CONSIDER THIS RECOMMENDATION, SEEK APPROVAL TO BUILD THIS NEW ROAD SOONER, AND COMPLETE THE CONSTRUCTION OF THIS NEW ROAD BY THE TIME THAT THE NEW GARAGE IS OPENED FOR VEHICULAR TRAFFIC.**

The new connection between Western Way and Prospect Avenue is currently included in the design for new facilities for Environmental Studies (ES) and School of Engineering and Applied Science (SEAS). New buildings for ES and SEAS are to be constructed along Ivy Lane/Western Way where parking lots and the Ferris Thompson Apartments are currently located. The new roadway connection is an integral part of the ES and SEAS project design and will be constructed as part of that project. The University commits that this connection will be included in the plans submitted to the Princeton Planning Board for approval in the first phase of the ES and SEAS project

It should be noted that when the new East Campus Garage opens in fall 2022, the new ES and SEAS buildings will not yet exist. Only after the ES and SEAS buildings and new roadway connection between Western Way and Prospect Avenue are constructed, will the garage operate closer to its capacity.