75th Street & Washington Street

Comments and Questions from the July 23, 2003 Public Hearing

TRAFFIC ISSUES

Q: Why is the intersection of 75th and Washington the only project of its kind in the city?
The intersection of 75th and Washington is only one in a list of many intersections that the city is working to improve. Some similar locations are currently under study such as Naper and Chicago, Ogden and Aurora, Route 59 and North Aurora, and Route 59 and Diehl Road. While many others have already been studied and completed such as Route 59 and Ogden or Diehl and Raymond.

Q: Why doesn't the city look at other alternatives such as widening Plainfield-Naperville Road, Book Road, or constructing a bridge at 87th street?
The city recently completed a comprehensive analysis of its entire transportation system. The existing roadway network and land uses were inventoried to create a transportation model. The model was used as a tool to study traffic growth over the next 20 years and to review different improvement options to minimize traffic congestion. The city found that improvements to other arterials such as Plainfield-Naperville Road, Book Road, or even 87th Street did little to change the anticipated traffic levels at Washington and 75th Street. The model did show that without improvements to arterials, motorists took alternate routes through local side streets rather than alternate routes on other arterials.

Q: Why is the city proposing such a large intersection in the middle of a residential neighborhood?
Although two of the four quadrants at the 75th and Washington Street intersection are residential developments, the intersection itself is not defined as a "residential" intersection by any means. 75th Street is a county highway designated as a Strategic Regional Arterial serving all of southern DuPage County. Washington Street is designated by the city as a Major Arterial roadway designated to carry large volumes of traffic to destinations throughout the city and adjacent areas. It is not uncommon for residential neighborhoods to abut major roadways as they do throughout the city. Maplebrook I and Maplebrook II were developed in anticipation that these two roads would be major thoroughfares. This is evidenced by the fact that all of the homes in these subdivisions access a separate network of internal neighborhood streets.

Q: Why does the intersection need to be so many lanes?
When two major roadways such as Washington and 75th Street meet at an intersection there is a major disruption of traffic flow as one roadway must yield to another. Because both roads must share the same real estate, traffic from each roadway only gets to proceed through the intersection about 50% of the time. The best way to let the greatest number of vehicles pass in a limited time is to provide additional lanes. Traffic analysis for today and 20 years into the future indicate that all four legs of the intersection need three through lanes, double left turn lanes, and a dedicated right-turn lane to provide acceptable levels of service (measure of intersection efficiency) to the vehicles.

C: I feel that three lanes merging back to two past the intersection will only create four new bottlenecks.
During heavy traffic conditions, traffic will slow down in the right two lanes as these cars merge into one lane. Although this "bottleneck" condition will occur, it will only occur briefly because the number of vehicles on this section of roadway will be limited by the traffic signal. This minor area of congestion will have cleared long before the next wave of vehicles is permitted through the intersection.

C: I feel that three lanes merging back to two past the intersection will encourage people to speed up and race to be first.
Whether you are merging onto an expressway, or simply losing a lane of traffic on a city street, the act of merging is a very common occurrence. Unfortunately, there will always be aggressive drivers that try to use the situation to pass other vehicles. Generally, though, by the time the traffic has performed the merge, vehicles will be traveling the same speed that they would have in a situation were there was no merge.

C: I think that providing additional lanes will bring more traffic to the intersection resulting in more noise and pollution.
It is common human nature to search out the quickest route from one location to another. If the intersection of 75th and Washington is improved to save vehicles time, then motorists will undoubtedly experiment by taking a route through the new intersection. However, experience with intersection improvements has shown that there are actually very few people, that currently take a different route, who can save time by changing their path to include the new intersection. The few minutes saved at the new intersection is usually less time than it takes for them to divert to the new route. Additionally, it is important to note that as other transportation improvements are made throughout the

city, some vehicles may be drawn away from the intersection of 75th and Washington. Therefore, the proposed improvements are not anticipated to increase traffic, noise or pollution.

Q: Why not just extend the existing left turn lanes rather than creating double turn lanes?
Although a longer turn lane would allow more cars to stack up in the left turn bay and keep them from impacting the through traffic lanes, it would still limit the number of vehicles that could pass through the intersection on a single green turn arrow. By creating a double turn lane, more vehicles can turn left in less time. By reducing the time dedicated to left turn vehicles, the intersection can be optimized to allow more green time for the rest of the traffic.

Q: Why doesn't the city look at retiming/coordinating the traffic signals before it expands the roadway?
Large and expensive intersection expansions are never the first solution that engineers look at when faced with a congestion problem. Initially, they work with the traffic signals to optimize the timing. The signals at 75th and Washington and at Hobson and Washington are connected with a series of traffic signal along 75th street. All of these signals have been coordinated and repeatedly optimized to minimize vehicle delays through the area. Eventually, due to the large traffic volumes at the intersection, simply changing signal timings does not do enough to reduce the existing congestion.

Q: Why spend so much money to address a problem that only occurs during rush hour?
The traffic data that is used for the design of the intersection improvements is the peak hour flow typically measured on a Tuesday, Wednesday or Thursday in the summer months. This design requirement is a standard practice in urban and suburban areas because it accurately represents typical traffic flows that occur on a daily basis under normal conditions. The volumes used for design are not the "worst case" situation that many think. Factors such as bad weather, construction on or near the intersection, an emergency vehicle passing through the intersection, an accident or stalled vehicle, or even the repeated use of pedestrian walk signals will create delays that can be substantially worse than a "normal condition" rush hour. Also, different days at different times of the year can yield much worse traffic. The afternoon traffic on the last day before a holiday weekend is good example.

Q: Why should Naperville improve its roadways so people from Aurora, Plainfield, or Bolingbrook can save a few minutes on their way to the interstates?
The city of Naperville works hard to maintain a functional transportation system for its residents, businesses, and visitors. Residents from other communities are welcome to travel through Naperville just as motorists from Naperville are welcome to travel through those communities. Although 75th Street and Washington Street are designated as regional arterials, a recent survey revealed that over 80% of the vehicles that travel through the intersection have a point of origination or a destination within the city of Naperville.

C: I think that the city should use the federal funding for a different project.
The City of Naperville has applied for federal funding for the 75th and Washington Street intersection. Any funding that has been secured or will be secured to complete this project has been granted based on the merits of this project in competition with others throughout the region. Therefore, federal money can only be allocated for construction of this intersection and not diverted for another project. Furthermore, in order to qualify for the funding, the project must be completed in accordance with the guidelines set forth for such projects. These funds are not the motivating factor to complete this project, but are a great benefit to the city in financing projects that have already been identified as critical improvement locations.

NEIGHBORHOOD ISSUES

C: The larger intersection will make it more difficult for pedestrians to cross at the lights.
One of the downsides to expanding the size of intersections is that it is more difficult for pedestrians to cross. To help combat this problem, the city is taking measures to assist pedestrians and bicyclists in this area. First of all, the extension of the DuPage River Trail is planned to pass underneath 75th Street along the river. This trail is expected to be the major route for pedestrians through the area. For the pedestrians that need to cross Washington Street, pedestrian countdown signals will be installed at the intersections. Once activated, these signals will alter the traffic signal timing and provide additional time for people to cross.

C: I think that the underpass for the bike trail will be dangerous and prone to crime.
A study prepared by the National Park Service found that demographically, the people that use recreational trails are the same as the people that live near the trail. Incident rates for major crimes on and along trails were found to be dramatically lower than the national rate for the same type of location, and minor crimes such as littering and graffiti were also low. If the underpass is found to experience criminal behavior, the transportation department will work with the Naperville police department to develop means to deter those activities.

C: I am concerned that the proposed plan will reduce access to my neighborhood.
As a result of the proposed expansion, there are two side streets that are proposed to have restricted access. Clyde Drive at Washington Street and Bunting Lane at Washington Street would be restricted to right-in/right-out only. This is necessary due to their close proximity to the main intersections. Left turns, which are currently difficult to make, would only become more difficult with the additional lanes on Washington. If these restrictions result in significantly more vehicles using the signalized intersections of Olympus, Bailey, and Gartner, then the timing of these lights will be adjusted to allow more traffic to enter the arterial streets.

C: I think the noise study should include 24/7 noise monitoring to be accurate.
The noise study that was conducted for the intersection of Washington and 75th Street was prepared in accordance with both professional standards and the federal requirements for such studies. The noise levels that were used in the study were based upon real-world traffic noise levels that have been established through extensive national testing. The noise study uses these accepted noise levels and adjusts them according to the total volume of traffic, the number of trucks, and the geometry of the intersection. This method of study provides a standard upon which all transportation projects can be judged. In accordance with the requirements of the study, actual noise measurements were briefly taken at the intersection to help ensure that the area was modeled correctly. These field measurements were not the basis for the levels of noise used in the study.

C: I think that the city should install noise walls around the residential neighborhoods.
The noise study that was prepared for the proposed intersection project indicated that the proposed improvements will not noticeably increase noise levels in the adjacent residential neighborhoods. As such, noise walls would not be recommended for inclusion in this project. However, the existing noise levels measured at some of the adjacent properties is currently quite high. With the support of the residents, the city and county would be happy to work with the effected neighborhoods to develop a strategy to reduce noise levels. The funding for these improvements would need to come from the city, the county, and/or the benefited residents.

C: I am worried that the project will lower my property value.
The impacts of the proposed intersection project are generally minor. The increase in traffic levels is anticipated in be negligible, the overall level of pollutants is anticipated to drop, and the increase in noise has been shown to be very small. Washington Street will not be constructed any closer to the residential neighborhoods, and the pavement on 75th Street will still be well within the existing 200 foot wide right-of-way. The value of the homes in Maplebrook I and II have steadily increased over the last few decades because of the desirability of the community as a whole. We feel that transportation improvements such as the one proposed are necessary to maintain Naperville's appeal, and that any minor negative impacts that might result from the proposed intersection will be offset by the benefits realized through positive community development.

Q: What can be done to help protect the swim club users?
Although the news is often filled with reports of vehicles leaving the roadway and injuring and killing pedestrians, their occurrence is still extremely rare given the number of vehicle trips that are made each year. Of the pedestrians killed or injured by vehicles each year, overwhelmingly, these pedestrians were either in the road or on the edge of the roadway. Engineers have taken steps to keep vehicles on the roadway by installing guard rail in locations where vehicles may be likely to leave the road such as sharp curves or unexpected jogs in the road alignment. However, it is not practical to install guardrail along all roadways. As such, each property owner must make their own assessment of the risks that nearby traffic poses and take the steps they feel are necessary to ensure their own safety.

Q: Why is the city not doing anything about the intersection of 75th Street and Olympus?
Although the intersection of 75th and Olympus is outside the limits of the project, the safety issues at this intersection have been given quite a bit of consideration by the City, the County, and the school district over the last few years. The speed limit has been reduced on 75th Street and additional lighting has been installed. The police department has been working with the school to better educate students on how to cross streets, and the school district has implemented a busing option for student north of 75th Street. The city and county have studied the feasibility of installing a pedestrian bridge at this location, but found that its installation would not only require the demolition of existing homes but also take pedestrians hundreds of feet out of their way to use it. It was determined that it was unlikely that students would take the extra time to use the bridge.

This list represents the most common remarks made in response to the proposed intersection project. All comments received were noted and considered, but have not been addressed here due to space limitations.