

**AGENDA**  
**TRANSPORTATION AND ROAD IMPROVEMENT COMMITTEE**  
**Village of Hoffman Estates**  
**September 13, 2010**

**Immediately following General Administration and Personnel**

<b>Members:</b>	<b>Ray Kincaid, Chairperson</b>	<b>Karen Mills, Trustee</b>
	<b>Gary Pilafas, Vice Chairperson</b>	<b>Jacquelyn Green, Trustee</b>
	<b>Cary Collins, Trustee</b>	<b>Anna Newell, Trustee</b>
		<b>William McLeod, Mayor</b>

**I. Roll Call**

**II. Approval of Minutes – August 31, 2010**

**NEW BUSINESS**

1. Discussion regarding the physical and traffic conditions at the Jones Road / Hassell Road curve.
2. Discussion regarding the Hassell Road Surface Transportation Project.
3. Request acceptance of Transportation Division Monthly Report.

**III. President's Report**

**IV. Other**

**V. Items in Review**

**VI. Adjournment**

**TRANSPORTATION & ROAD IMPROVEMENT  
COMMITTEE MEETING MINUTES**

August 31, 2010

**I. Roll Call**

**Members in Attendance:**

**Ray Kincaid, Chairperson  
Trustee Cary Collins**

**Other Corporate Authorities  
in Attendance:**

**Trustee Karen Mills  
Trustee Jacquelyn Green  
Trustee Anna Newell  
Village President William McLeod**

**Management Team Members  
in Attendance:**

**Jim Norris, Village Manager  
Nancy Harbottle, Corporation Counsel  
Dan O'Malley, Deputy Village Manager  
Mark Koplin, Asst. Vlg. Mgr., Dev. Services  
Peter Gugliotta, Director of Planning  
Gary Skoog, Director of Economic Development  
Gary Salavitch, Director of Engineering  
Patrick Seger, Human Resource Mngmnt Dir.  
Robert Gorvett, Fire Chief  
Clint Herdegen, Police Chief  
Algean Garner, Director of H&HS  
Ken Hari, Director of Public Works  
Bruce Anderson, Cable TV Coordinator  
Rachel Musiala, Asst. Director of Finance  
Gordon Eaken, Director of IS  
Bev Romanoff, Village Clerk  
Nathan Roseberry, Traffic Engineer  
Ben Gibbs, GM - Sears Centre Arena**

**Others in Attendance**

**Reporter from *Chicago Tribune***

The Transportation & Road Improvement Committee meeting was called to order at 7:00 p.m.

**II. Approval of Minutes**

Motion by Trustee Mills, seconded by Trustee Newell, to approve the Transportation & Road Improvement Committee meeting minutes of July 26, 2010. Voice vote taken. All ayes. Motion carried.

**NEW BUSINESS**

**1. Review a request for stop signs on Aberdeen Street at East Thacker Street.**

An item summary from Nathan Roseberry was presented to the Committee.

Trustee Kincaid and Nathan Roseberry discussed the history of stop sign requests for the intersection.

Motion by Trustee Collins, seconded by Trustee Green, to approve a stop sign on Aberdeen Street at East Thacker Street. Voice vote taken. All ayes. Motion carried.

**2. Review of request for change in intersection control on West Berkley Lane at Washington Boulevard.**

An item summary from Nathan Roseberry was presented to the Committee.

Motion by Trustee Collins, seconded by Trustee Mills, to replace existing yield signs with stop signs on West Berkley Lane at Washington Boulevard. Voice vote taken. All ayes. Motion carried.

**3. Request acceptance of Transportation Division Monthly Report.**

The Transportation Division Monthly Report was presented to Committee.

Motion by Trustee Mills, seconded by Trustee Collins, to approve the Transportation Division Monthly Report. Voice vote taken. All ayes. Motion carried.

**III. President's Report**

**IV. Other**

**V. Items in Review**

**VI. Adjournment**

Motion by Trustee Collins, seconded by Mayor McLeod, to adjourn the meeting at 7:05 p.m. Voice vote taken. All ayes. Motion carried.

Minutes submitted by:

---

Emily Kerous, Director of Operations  
Office of the Mayor & the Board

---

Date

**COMMITTEE AGENDA ITEM  
VILLAGE OF HOFFMAN ESTATES**

**SUBJECT:** Review of the Jones Road / Hassell Road curve  
**MEETING DATE:** September 13, 2010  
**COMMITTEE:** Transportation and Road Improvement Committee  
**FROM:** Michael Hankey

---

**PURPOSE:** A discussion of the physical and traffic conditions at the Jones Road / Hassell Road curve is presented.

**BACKGROUND:** A request to review the curve on Hassell Road at Jones Road was made at a recent Village Board meeting and discussed at the May 10, 2010 Transportation and Road Improvement Committee. Further review on potential costs occurred at the June Committee meeting. The direction from the Committee from the June meeting was to identify a set of traffic control changes with a budget of \$5,000.

A variety of signing and pavement marking options were identified and presented at previous meetings. From these, the Committee requested investigation of No Parking within the curve, curb top reflectors, a radar activated LED Turn Sign, and standard Chevron signs with associated costs for each.

The area of the curve is shown in the attached exhibit. A driveway to Eisenhower School is located on the outside of the curve. The streets are connected by an approximately 90 degree curve. The radius of the curve combined with the cross slope is designed for approximately 15 to 20 mph. The Hassell Road approach to the curve is relatively level while the Jones Road approach is on a 5% downgrade from south to north. Both streets are the typical collector design although there is extra pavement width within the curve at the school driveway. The posted speed limit is 25 mph with a school zone speed limit of 20 mph. Double yellow centerline markings are present and other pavement markings delineate the school crosswalk.

Crash records were checked in the vicinity of the curve for the last six years. The review found four crashes were reported over the last six years that occurred in the curve involving a northbound vehicle losing control near the curve. Contributing circumstances to these crashes include driving without a license, improper speed, and drivers operating with a learner's permit. Three crashes involved a northbound to westbound vehicle while the fourth was an eastbound to southbound vehicle.

**DISCUSSION:**

Based on the Committee's direction from the last meeting, the following describes the potential traffic control changes and associated costs. Three options were developed for cost estimating and comparison purposes. Each option has common elements of No Parking signs, curb top reflectors / markers, reflective post strips, and signs. The sections below describe the traffic controls under consideration and their applicability under certain scenarios.

*Create a No Parking Zone on the inside of the curve*

Signs fabricated and installed by Public Works – 2 signs - \$300

These would be installed on the inside of the curve at Hassell Road and Jones Road for a No Parking zone about 100 feet long.

*Install curb top reflectors and markers in both directions through the curve*

Purchased and installed by Public Works – 12 reflectors - \$125; 4 solar LED markers - \$225

Install on both the inside and the outside of the curve. Approximately 100 feet of curb at 25 foot spacing (5 markers) on the inside of the curve plus two solar LED markers at each end of the curve. Approximately 120 feet of curb on the outside of the curve at 25 foot spacing (7 markers) plus two solar LED markers at each end of the curve.

*Reflective strips on sign posts*

Purchased and installed by Public Works – up to 10 sign posts - \$300

Install the reflective strips on a total of 10 sign posts, both existing and proposed, in the vicinity of the curve.

*Install standard Chevron signs for the curve*

Fabricated and installed by Public Works – 6 signs - \$900

Three Chevron signs on the outside of the curve for each direction would replace the existing Large Arrow signs. The Chevron signs would be spaced at 40 feet between posts. The Chevron or Large Arrow signs are recommended by the *Manual on Uniform Traffic Control Devices* since the advisory speed in the curve is 10 miles per hour below the posted speed limit on the approach to the curve. Chevrons are recommended since they installed throughout the curve rather than in a single point location. Other enhancements such as wide patterned borders could be considered to improve conspicuity of the signs.

Another traffic control item discussed in the next section is a LED turn sign which has ramifications on the need for additional alignment signs like Chevrons in the curve. The LED turn sign background is reflective just like other traffic signs. It also has the enhanced lighting in the border that will dominate the view of the curve when illuminated. If an LED turn sign is installed the Chevron signs for that direction of travel for the curve could be eliminated, at least initially. If later observations indicate that Chevrons would be beneficial, these could be added. The options including LED turn signs reflect the exclusion of the Chevrons for the direction of travel covered by the turn sign.

*Install a radar activated LED turn warning sign*

Purchased and installed by Public Works - \$2,500 to \$4,000+ per sign

There have been more reported crashes (3) at the curve for the northbound to westbound direction than crashes (1) for the eastbound to southbound direction. To respond to this pattern, if the LED Turn Sign is installed, it should be used for the northbound to westbound movement. Approach speeds vary for each direction entering the curve and are higher than the advisory speed for the curve. The LED signs could be installed for both directions, but starting with the sign for northbound traffic is recommended due to the crash pattern.

The LED sign is recommended to be installed in a head-on position as directly as possible in line with the approach traffic to the turn to maximize visibility. The existing standard advance turn warning signs would remain about 100 feet in advance of the beginning of the curve for each direction. The LEDs are located in the border of the sign and will be activated when the detected approach speed exceeds a preset threshold. Some calibrating of the threshold level will likely be required for a period following installation. The depth of field detection for the radar unit may have to be adjusted to measure speeds closer to the curve.

*Installation Options*

The following Options 1, 2, and 3 present the traffic controls and associated material costs for each. The material costs for all the items except for the LED radar activated turn sign were confirmed with Public Works. The range of quotes received from vendors for the LED sign was from about \$2,000 to \$2,700 to about \$3,750 per sign. The variation reflects different manufacturers' products and features.

**Traffic Control Option – 1  
Standard Traffic Control Signs and Markers**

<b>Item</b>	<b>Material Cost</b>	<b>Comments</b>
No Parking Zone Signs (2)	\$300	fabricated and installed by Public Works
Curb Top Reflectors		
Retroreflective Markers (12)	\$125	purchased from vendor and installed by Public Works
LED Solar Markers (4)	\$225	purchased from vendor and installed by Public Works
Reflective strips on sign posts (10)	\$300	purchased from vendor and installed by Public Works
Chevron Signs (6)	\$900	fabricated and installed by Public Works
<b>Total</b>	<b>\$1,850</b>	

**Traffic Control Option – 2**  
**Add One LED Turn Warning Sign – for northbound traffic**

Item	Material Cost	Comments
No Parking Zone Signs (2)	\$300	fabricated and installed by Public Works
Curb Top Reflectors		
Retroreflective Markers (12)	\$125	purchased from vendor and installed by Public Works
LED Solar Markers (4)	\$225	purchased from vendor and installed by Public Works
Reflective strips on sign posts (10)	\$300	purchased from vendor and installed by Public Works
Chevron Signs (3)	\$450	fabricated and installed by Public Works
Radar Speed Activated LED Turn Sign (1)	\$2,500	purchased from vendor and installed by Public Works
Total	\$3,900	

**Traffic Control Option – 3**  
**Add Two LED Turn Warning Signs – One in each direction**

Item	Material Cost	Comments
No Parking Zone Signs (2)	\$300	fabricated and installed by Public Works
Curb Top Reflectors		
Retroreflective Markers (12)	\$125	purchased from vendor and installed by Public Works
LED Solar Markers(4)	\$225	purchased from vendor and installed by Public Works
Reflective strips on sign posts (10)	\$300	purchased from vendor and installed by Public Works
Radar Speed Activated LED Turn Sign (2)	\$5,000	purchased from vendor and installed by Public Works
Total	\$5,950	

*Other Potential Treatments for Future Consideration*

At previous meetings, an incremental approach to implementing changes at the curve was discussed. This could begin with the more low cost and simple treatments such as curb top reflectors, sign post strips, and standard signing. If desired, then other devices could be considered. The direction from the Committee meeting was to develop a package of changes including the items above for a set budget amount. Other treatments identified in previous meetings but not included in this set of changes include the following:

### Pavement Striping

To more effectively delineate the proper path through the curve in the portion where the pavement widens, pavement striping could be added. This would visually narrow the approach to the curve for northbound vehicles. It would also help to more clearly show the edge of the travel lane through the curve. Finally the striping could better define the area designated for No Parking at the school crosswalk. The estimated cost is about \$1,000 to \$1,500 for the striping using a pavement marking contractor.

### Radar Actuated Signs for Speed Limits

Similar to the radar feedback sign on the Police trailer, speed displays are available to mount on sign posts. Some are separate sign enclosures attached to existing sign posts while other installations have the feedback display built into the sign face. The sign can be solar powered. The purpose is to give feedback to drivers whose speed is measured to be above the applicable speed limit. The advantage for some of the separate display units is that they can be moved to other locations if needed. The cost of these signs varies and can range from up to \$2,500 to \$4,000 depending on power supply, features, portability, and size.

### **FINANCIAL IMPACT**

The cost would be paid from the MFT balance or Traffic Improvement Fund. Based on the option selected, final prices will be determined to fit the budget amount.

### **RECOMMENDATION**

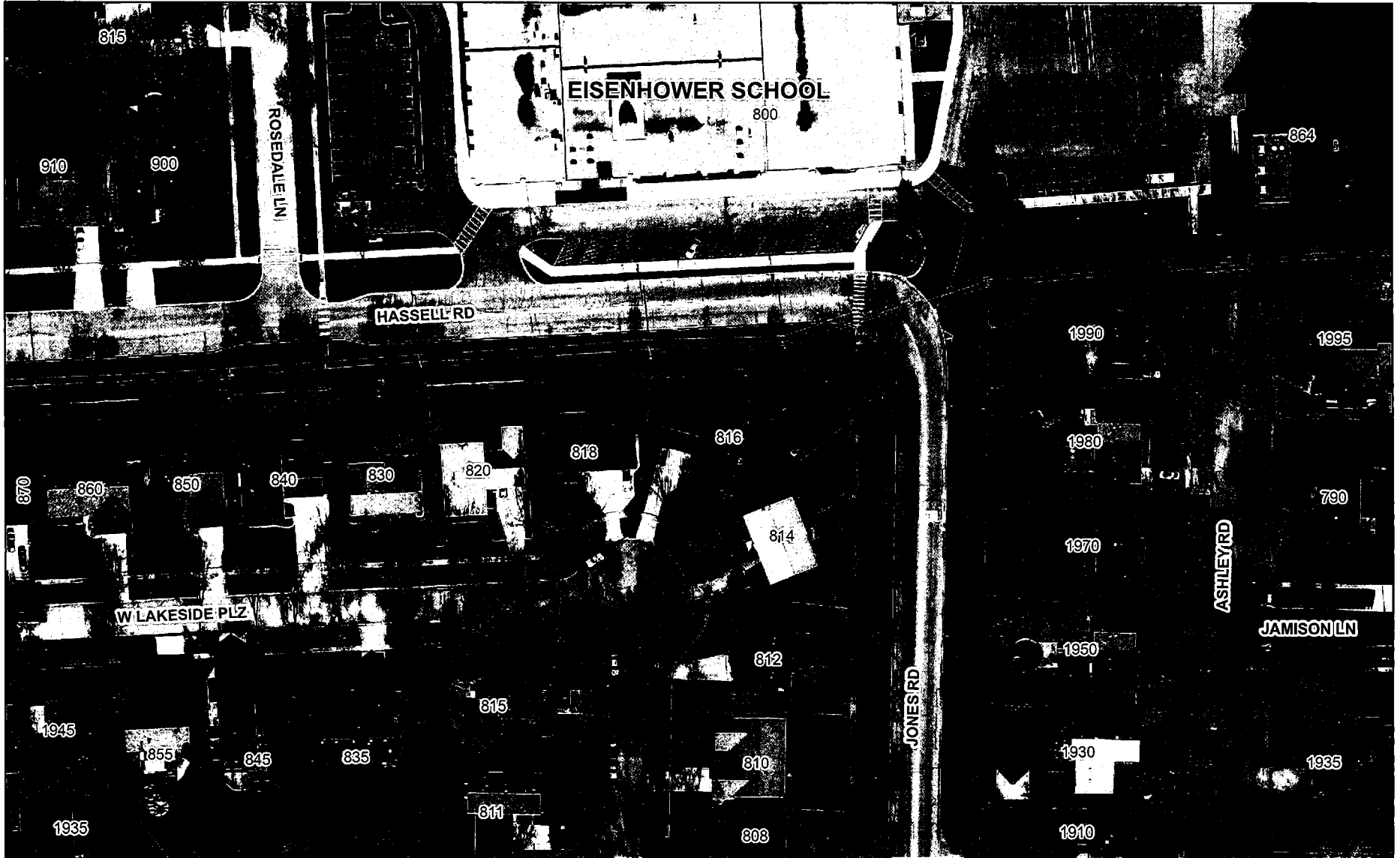
For discussion. Option 2 is under the defined budget amount and addresses the predominant direction for which crashes have been reported.

Attachments







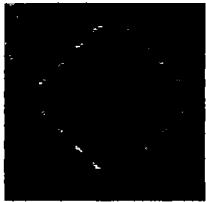
# Hassell Road and Jones Road Curve - Location Aerial



1 inch = 100 feet

Transportation and Engineering Division  
Village of Hoffman Estates

# Potential Traffic Controls

- No Parking Signs
- Curb Top Reflectors and Markers
- Reflective strips on sign posts
- Chevron Sign  
- Radar Activated LED Turn Warning Sign 

**COMMITTEE AGENDA ITEM**  
**VILLAGE OF HOFFMAN ESTATES**

**SUBJECT:** Review recommendations from the Bicycle and Pedestrian Advisory Committee for bicycle and pedestrian components to Hassell Road STP Reconstruction Project

**MEETING DATE:** September 13, 2010

**COMMITTEE:** Transportation and Road Improvement

**FROM:** Mike Hankey / Nathan Roseberry

---

---

**PURPOSE:** Provide an update on the status of the Hassell Road Surface Transportation Program (STP) Reconstruction Project, request authorization to supplement the project scope to increase likelihood of funding, and review recommendations from the Bicycle and Pedestrian Advisory Committee for on-street bicycle facilities and pedestrian components of the project.

**BACKGROUND:** The request to apply for STP funds to reconstruct Hassell Road was originally presented to the Village Board on April 13, 2009. The following is background information on the project and a status of work completed since the April 13, 2009 meeting. This section of Hassell Road from Barrington Road to Fairway Court has deteriorated to the point where it requires a full reconstruction. There are also three large culvert crossings of Hassell Road that should be replaced with any reconstruction. The Village has applied for STP funds through the Northwest Municipal Conference (NWMC). The STP program typically funds projects with 70% of the cost (up to \$3,500,000) and 30% local match. The current estimate for the Hassell Road project is approximately \$4,600,000 (potentially \$3,220,000 STP funds and \$1,380,000 local funds). The project is currently on the Multi Year B (MYB) list with a project ranking score of 55 points. Also on the Multi Year B list is an estimated \$165,000 for the Phase II engineering design. As the design will be done primarily in house with Village staff, these funds will be paid to the Village to reimburse up to 50% of the design costs. Projects on the Multi-Year B list do not have funds programmed at the current time. Projects can be moved from the MYB list to the active list, based project readiness, available funds in the program and their project ranking score.

The NWMC Technical Committee uses the project ranking score to help select projects using a set of criteria to rank projects for funding. The criteria are meant to promote projects that fulfill a set of goals to fund projects that impact the most residents, improve safety, air quality, pavement condition, congestion, intergovernmental cooperation, and the use of transportation control measures.

**BACKGROUND: (Continued)**

Hassell Road reconstruction currently has a project score of 55 points. A candidate project's rating can range from 30 to above 90, with selected projects typically having scores 70 and above. For instance, the Bode Road reconstruction project is in the active list with a score of 85 points. In an effort to increase the project ranking score, staff has evaluated options to expand the reconstruction scope to meet the criteria set by the NWMC Technical Committee. One component of the project that can increase the project ranking score is by incorporating pedestrian and bicycle accommodations.

The Bicycle and Pedestrian Advisory Committee reviewed the information for pedestrian and bicycle facilities provided below at the August 25, 2010 meeting. Projects cannot receive STP funds unless they are a part of the Federal Aid Urban System (FAUS). The Village was successful in obtaining a federal designation for Hassell Road, along with Jones Road and Hillcrest Boulevard. Use of federal funds also means that federal design criteria and procedures must be followed. The Village has also selected Hey & Associates and Civiltech Engineering as a consultant team to assist with the design of the three culverts as part of the project. Village staff is prepared to complete all other design for the project.

**DISCUSSION:***Project Need*

As noted above, by adding bicycle and pedestrian elements to an STP application, the project ranking score can be increased making the project more attractive for funding. The options provided below can increase the project score to 70, potentially 80 points. Both of these scores for a ready to go project would mean that it has a better chance to receive funds. In addition, the inclusion of all users with a transportation project is good practice and meets goals of the Village outlined in the Comprehensive Bicycle Plan and resolution of creation for the Bicycle and Pedestrian Advisory Committee. Hassell Road is located along some of the denser developments of the Village and has some of the highest number of pedestrians. There is a gap in the sidewalk on the north side of Hassell Road from Pembroke Avenue to Barrington Road. The intersection of Barrington Road and Hassell Road could also be improved for pedestrians (there is only one pedestrian crossing located on the south leg).

Hassell Road is also a critical east / west corridor for bicycles. A bicycle facility is listed in the Comprehensive Bicycle Plan along the entirety of Hassell Road from Barrington Road to Jones Road. The west limits are less than ¼ mile from an entrance to the Poplar Creek Forest Preserve at the Shoe Factory Road / Greenspoint Parkway and Higgins Road intersection. The east limits connect with proposed bicycle routes continuing on Hassell Road, Jones, Road and Hillcrest Boulevard.

The draft NWMC Bicycle Plan has designated Hassell Road as part of a regional corridor extending across suburban Cook County. Hassell Road is also proximate to a future Tollway crossing near a future Barrington Road STAR Line station, linking to the Paul Douglas Forest Preserve and northern Hoffman Estates.

**DISCUSSION: (Continued)***Existing On-Street Conditions (for vehicles and bicycles)*

Hassell Road is not currently designated as a bicycle facility, but bicycles are permitted on the street. The current Bicycle Level of Service (BLOS) throughout the project ranges from E to C (west to east). The existing pavement condition in the project limits is poor to very poor. The Average Daily Traffic (ADT) ranges from 10,000 at the west limits to 4,500 at the east limits.

Most of the traffic on Hassell Road is to and from Barrington Road and turns off before Huntington Blvd. There are two travel lanes in each direction from Barrington Road to Huntington Boulevard although on-street parking is allowed in some sections effectively resulting in operations of one travel lane in each direction. Parking is utilized in the middle section of the project, generally adjacent to the Barrington Square residential, the west half of Barrington Lakes, ADP, and proximate to the Hassell and Huntington Intersection. The west limits of the project are the traffic signal at Barrington Road and Hassell Road.

*Existing Off-Street Conditions (for pedestrians and bicycles):*

There is an existing 5' concrete sidewalk on both sides of Hassell Road for a majority of the project. There are gaps in three locations. There are two gaps on the north side, from Barrington Road to Pembroke Avenue along the Assembly restaurant frontage and from Kensington Lane to Huntington Boulevard along the Hilldale Golf Course frontage. The Village chose to remove this link intentionally a number of years ago due to the potential hazard from the adjacent golf course. The gap on the south side is from Huntington Boulevard to Fairway Court. There is an existing open ditch on the south side, located in a floodplain that prevents the installation of sidewalk. This is also adjacent to the golf course. The character of the street shifts from Commercial on the west to residential on the east. There are twenty-three commercial driveways and eleven intersections, but no residential driveways west of Huntington Blvd. East of Huntington, there is one commercial driveway, three intersections, and seven residential driveways. There are existing parkway trees between the sidewalk and street throughout the majority of the project. There are existing street lights on the south side of the street, towards the west end of the project. There are utility poles on the north side of the street in the middle of the project. Some of the utility poles are north of the sidewalk, while others are between the sidewalk and the street, more in the middle of the parkway.

*BPAC Recommended Pedestrian Improvements*

The BPAC reviewed the existing deficiencies for pedestrians and recommended the following two amenities be included with the Hassell Road STP project.

1. Install the missing gap of sidewalk on the north side of Hassell Road from Barrington Road to Pembroke Avenue
2. Improve the pedestrian accommodations at the intersection of Barrington Road and Hassell Road with sidewalk on all four corners and pedestrian heads and push buttons for crossings of the west, north, and east legs.

The group also discussed filling in the other two missing gaps, but decided to leave them as is. Installing sidewalk along the north side of Hassell Road along the Hilldale Golf Course frontage posed concerns for liability and delaying the project. The sidewalk gap on the south side of Hassell Road east of Huntington Boulevard appeared infeasible to construct. The incremental cost estimate to include both of these improvements is approximately \$200,000. The total project cost would increase to \$4,800,000, with a local match of \$1,440,000.

**DISCUSSION: (Continued)***Bicycle Facilities Options: On-Street*

The standard dimensions for on-street bicycle facilities are a 5' bicycle lane, 11' travel lane, 14' shared lane, 8' parking lane. These dimensions are required by IDOT for any project receiving state or federal monies, such as STP projects. The method to incorporate on-street bicycle facilities on Hassell Road is referred to as a "Road-Diet". The number and / or width of vehicular lanes are reduced to provide space for bicycles. This analysis and design must be done with a sense of balancing adequate provision for vehicle traffic, turning traffic, on-street parking, and bicyclists. There are two means to provide bicycle lanes on a street such as Hassell Road with two vehicular lanes in each direction. The first is to remove one lane in each direction, provide a travel lane and bicycle lane in each direction with a center turn lane. The second is to remove one lane in each direction, provide a travel lane, parking lane and bicycle lane in each direction. Both options are generally the same pavement width, but may vary by a few feet. Parking is permitted throughout most of the project on both sides. Based on observations, on street parking demand exists east of Cardigan Place (midpoint in the project) and should be provided. West of Cardigan Place, on street parking demand does not exist and provides an opportunity to provide a center turn lane.

The incremental cost increase to the project of the on-street option listed below is \$100,000. To provide standard dimensions, the street width requires widening in some sections and could be narrowed in another section. The total cost for the project (also including pedestrian improvements) would be \$4,900,000 with a local match of \$1,470,000.

Table 1. Hassell Road On-Street Bicycle Options Summary Table

Section	Proposed Bicycle Facility	Description	Distance	Existing BLOS	Proposed BLOS
Barrington Road to Barrington Square Mall	Shared Outside Lanes	Provide two eastbound through lanes, one westbound through lane, and a center turn lane. The outside travel lanes should be wider shared bicycle / vehicle lanes with "Sharrow Markings". Provide Shared Lane Signs.	1,700'	E (5.1)	C (3.2)
Barrington Square Mall to Cardigan Place	Bike Lanes	Provide one travel lane and one bicycle lane in each direction. Provide a center turn lane. Provide bicycle lane signs.	1,600'	E (5.1)	B (2.1)
Cardigan Place to Huntington Boulevard	Bike Lanes	Provide one travel lane, one bicycle lane, and one parking lane in each direction. Provide bicycle lane signs.	3,100'	E (5 - 5.1)	A (0.6)
Huntington Boulevard to Fairway Court	Bike Route	Provide one lane in each direction. Lane is a shared travel, bicycle, and parking lane (typical collector street conditions). Provide Bicycle Route signs.	1,600'	C, (2.8)	C (2.8)

*Bicycle Facilities Options: Off-Street*

The standard dimensions for off-street multi-use paths are a 10' path, 2' shoulders, 3' clear zone, and 5' minimum parkway width between the street and path. The 2' shoulders are considered part of the 3' clear zone. The end result is a 16' – 18' cross section to provide a path. The main design constraint with improving a sidewalk to a path is the conformance with the clear zone requirements. The existing sidewalk is typically at the right of way line and the private residences have bushes and other obstacles at the edge of the right of way.

*Bicycle Facilities Options: Off-Street (continued)*

There are also utility poles and trees located within the clear zone. Multi-use path options are evaluated and presented below from Barrington Road to Huntington Boulevard.

*North side*

On the north side of Hassell Road, the sidewalk can typically be widened 5' to the street side. There are some sections where obstacles are in clear zone and a new 10' path is required. There are two difficult sections to install the path. One is between Barrington Road and the Assembly driveway, where the Right of Way is too narrow to provide a path and there is an existing retaining wall at the north side of the right of way. The second is along the Barrington Lakes and ADP frontage where utility poles and trees are between sidewalk and back of curb. Either all the utility poles or all the trees and some of the utility poles would have to be removed to provide a path. To provide the path will also require two culvert extensions. There is also one major utility box that would need to be designed around or relocated. The installation of the path would require removing approximately 50 trees throughout the project limits. The Sidepath Suitability Index (SSI) is a quantitative measure developed by the League of Illinois Bicyclists (LIB) to determine if a sidepath is suitable for bicycle travel. The composite existing SSI from Barrington Road to Huntington Boulevard is 13, not suitable for bicycle travel. The SSI of a path on the north side would be improved from a rating of 13 to 10 (not-suitable to low / medium suitability). The incremental cost increase to the project to provide a multi-use path on the north side compared to the base reconstruction is approximately \$525,000. The total cost for the project (also including pedestrian improvements) would be \$5,325,000. The maximum STP funding for a project is \$3,500,000. The remaining local match of \$1,825,000 would be solely the Village's responsibility.

*South side*

On the south side of Hassell Road, the sidewalk can typically be widened 5' to the street side. Steeper parkway slopes along the Northwest Corporate Center frontage, including steps, and the Hilldale Golf Course frontage will require constructing retaining walls. Fire hydrants are also located on the south side of Hassell Road between the sidewalk and street. The Right of Way is too narrow to construct a path in two sections; between Barrington Road and the Comfort Inn driveway and along the Hilldale Golf Course. A major utility box will need to be designed around or relocated. Similar to the option on the north side, two of the three culverts would need to be extended to install the path. To install a path on the south side, approximately 100 trees would need to be removed. The SSI of a path on the south side would be improved from a rating of 13 to 10 (not suitable to low / medium suitability). The incremental cost increase to the project to provide a multi-use path on the north side is approximately \$625,000 compared to the base reconstruction. The total cost for the project (also including pedestrian improvements) would be \$5,425,000. The maximum STP funding for a project is \$3,500,000. The remaining local match of \$1,925,000 would be solely the Village's responsibility.

*BPAC Recommended Bicycle Improvements*

The BPAC reviewed the three options for bicycle facilities and recommended proceeding with the on-street option. The discussion focused on the relative costs, concerns with obstacles and driveway crossings for side-paths, continuity of an on-street facility further to the east and the relative compatibility of each option. The group requested the option on the far west end be further evaluated to determine what, if any other bicycle amenities or design options can be installed to improve comfort for riders. One option discussed by the group was providing something like an on and off ramp for bicycles just east of the Barrington Road intersection.

*BPAC Recommended Bicycle Improvements (continued)*

This would allow bicycle riders not comfortable riding on-street to exit the road and ride on the sidewalk to cross Barrington Road. The option has been used for bicycles approaching modern roundabout intersections. This portion of the project in particular will require much more detailed analysis and design.

*Next Steps*

The next steps for the Hassell Road STP project are to schedule a kick-off meetings with IDOT and FHWA to discuss the design of the project and proceed with Phase I design. Village staff has already been working on components to the Phase I design in anticipation of these meetings. In addition, the request to NWMC for STP funds should be revised to show a project cost increase, a change to the project ranking score and a request to move the project into the active list. The NWMC Technical Committee is currently looking to program residual funds for projects that are ready to go. By starting the process with IDOT for Hassell Road this month, the project can be presented to NWMC in October with a request for program funding. Based on conceptual timelines, which will be dependent on IDOT review cycles, Hassell Road reconstruction could begin in 2012 or 2013.

**FINANCIAL IMPACT:**

Including the BPAC recommendations in the project scope to include on-street bicycle facilities and added pedestrians amenities would increase the project cost by \$300,000 (\$4,600,000 to \$4,900,000) and the local match by \$90,000 (\$1,380,000 to \$1,470,000). Village funds would need to be provided for 2012 or 2013 for the local match of the STP application. The local match would come primarily from the annual allocation of Motor Fuel Tax funds with some possible holdover MFT funds from other years.

**RECOMMENDATION:**

Include BPAC recommendations for on-street bicycle facilities and pedestrian amenities with the Hassell Road STP project. Revise STP application and request Hassell Road be moved from the MYB list into the active list.

Attachment





# Hassell Road Reconstruction Project Aerial

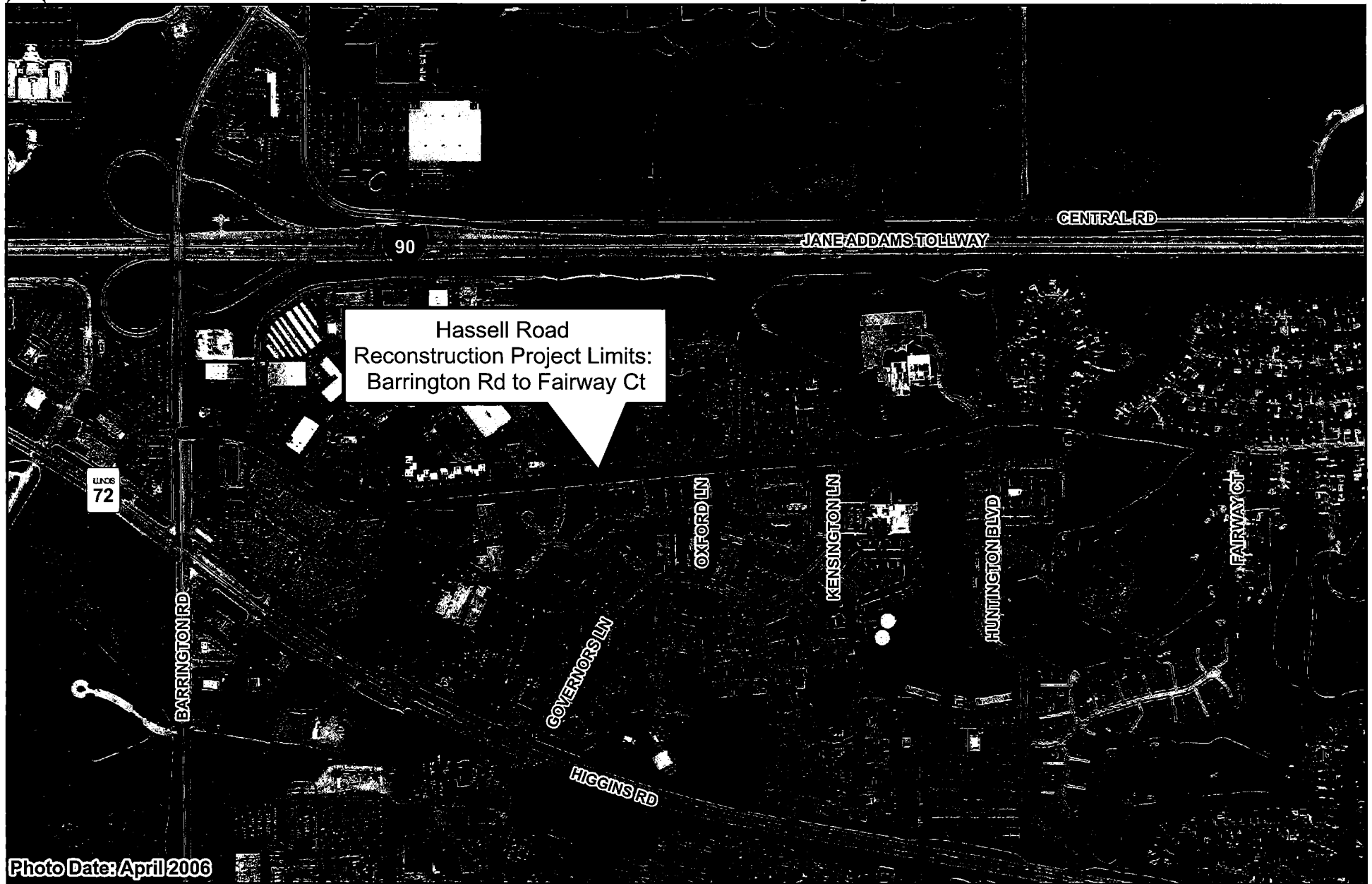


Photo Date: April 2006

1 in = 1,000 feet

Transportation and Engineering Division  
Village of Hoffman Estates

**TRANSPORTATION DIVISION  
DEPARTMENT OF DEVELOPMENT SERVICES**

**MONTHLY REPORT  
September 2010**

**New Developments**

**Traffic data and site plans are being reviewed for the following projects:**

Alliance Church	Shree Jalaram Church
Beverly Road Properties Maranatha Church	St. Alexius
Church of the Cross	5 E. Golf Road
Huntington Woods Corporate Center	

**Village Projects**

**Bicycle Planning**

The Village Board approved the Comprehensive Bicycle Plan in May. BPAC met on August 25, 2010 to discuss the previous bicycle rides, a local complete streets ordinance, a couple potential grant applications, and bicycle and pedestrian options for the Hassell Road reconstruction project. The focus of the group will be on short to long term planning for implementation.

**Barrington Road Interchange**

A letter of intent from IDOT was received. A follow-up meeting with the Illinois Tollway was held to review the full interchange project with new Tollway staff prior to signing the State's LOI. The Tollway provided a letter outlining their role and intent for the project.

Village officials, legislators, and Village staff met with Tollway and IDOT staff to discuss technical design options and the project's status. Tollway staff prepared some new concepts for interchange layouts along with preliminary traffic analysis. Based on their initial findings, providing sufficient green time for the left turns and through movements from Barrington Road will be critical for operations. A review of these options will be included as a part of the Phase I scope of services. A draft of the RFQ for Phase I services is being prepared for review by IDOT and the Tollway prior to being released.

**Roselle Road Traffic Signal**

The Village is awaiting a letter of approval from Cook County on signal installation. Right of way documents for temporary and permanent easements were received from the consultant. Discussions have occurred with property owners and continue to evaluate options.

### **Taxi Discount Program**

Registration continues with identification cards and coupons sent to residents. To date, a total of 223 residents have registered for the program. Information on the program registration is provided on Village website and appeared in *The Citizen*. Based on coupons received, about 1,170 rides were taken with the Taxi Discount Program in 2009. This is a large increase from approximately 400 rides recorded during 2008. In 2010, based on coupons received to date, about 1,426 rides were provided through approximately the first seven months of the year. Currently twenty-five residents requested to receive coupons automatically each month based on their level of use. Notices were sent to residents who have accumulated coupons but have not yet used them. Automatic delivery will stop until the coupons that have been distributed are used. Potential changes to the program are being developed for discussion and review purposes by the Village Board. As coupons are received from the taxi companies, the information is entered into a database to allow statistics on program use to be created. An article regarding the Taxi Discount Program appeared in the June Citizen.

### **Village Grant Applications**

#### *Bode – Salem Road Surface Transportation Program Project*

Staff submitted applications through the federal Transportation, Community, and System Preservation (TCSP) and Highway Safety Improvement Program (HSIP) grant programs to help fund the roundabout evaluation and analysis study. IDOT notified the Village that the HSIP application was approved. The TCSP will be announced later in the year.

Staff continues work on the in-house design of Bode Road. A joint application with the Village of Schaumburg was approved by the Northwest Municipal Conference for reconstruction, intersection improvements, and bicycle facilities. Roundabouts will be evaluated for intersections within the project limits on Bode Road from Braintree Road to Salem Drive. Proposals from experienced consultants were received for this work. On-street bicycle lanes will be evaluated along Bode Road as will restriping the pavement to create a three lane cross section. The NWMC Technical Committee assigned the project to year 2014. A status update was provided to IDOT.

#### *Diesel Retrofit Project*

The Village application for vehicle and engine replacement plus reduced emission exhaust was approved for CMAQ funds. The project cost will be covered by 80% federal funds with the balance coming from the capital replacement fund. Coordination with Public Works led to completion of the agreements and specifications for the project, which were submitted to IDOT. Both the local agency participation form and specifications have been approved by IDOT District One and have been submitted to the IDOT Springfield Office.

#### *Higgins Road Pedestrian / Bicycle Project*

The project was awarded full approval for CMAQ Federal Grant funding. Staff has met with IDOT and FHWA staff. Plans were re-submitted to IDOT following modifications as requested. The bridge over the creek in front of the bowling alley will require additional analysis to meet IDOT requirements. Adjustment to CMAQ funds to use some for bridge analysis was approved by CMAP and was approved earlier this month by IDOT. Design work for the bridge is underway.

Village staff held an open house meeting on Tuesday, March 30, from 5 p.m. to 7 p.m. at Village Hall on the Higgins Road project. Notification was sent via letters to residents adjacent to the project area. A newsletter article in the March Citizen had information on the project. Residents attended and discussed changes to landscaping that could be incorporated into the project.

#### *Palatine Road Widening Project*

Village application for Surface Transportation Program funds (\$1.3 million) was approved by NWMC. Village signed a Letter of Intent (LOI) with IDOT who will pay a significant share of the local project cost. IDOT approved the Intersection Design Study. Staff received comments from IDOT on the draft project development report. IDOT is processing an agreement for Phase II engineering for the project consistent with the LOI. This will allow reimbursement for some staff time expended for Phase II Engineering.

#### *Hassell Road Surface Transportation Program Project*

An application for STP funds was submitted to the Northwest Municipal Conference for reconstruction and culvert replacement on Hassell Road. The project limits are from Pembroke Avenue to Fairway Court. The scope of work is a total reconstruction of the pavement with incorporation of bicycle facilities. This could involve restriping the existing width to provide one lane in each direction, a center left turn lane, and bicycle lanes on each side. Other segments may be more appropriate for designation as a bicycle route if on-street parking is to be maintained. Near the Barrington Road intersection, an off-street facility may be investigated. BPAC has reviewed options and is providing a recommendation to the Village Board. Three cross road culverts are proposed for replacement as a part of this work. Contract was awarded for the culvert design. A modification to the STP application was submitted to NWMC to use some STP funds for design work. The NWMC Technical Committee did not move the project to a program year yet. It remains a multi-year list. The federal aid designation request was approved by IDOT.

#### *IL 59/Shoe Factory Road Right Turn Lanes*

The application for CMAQ funds to build right turn lanes at the intersection was approved. Funding is included for Phase I & II engineering in 2010 and 2011 with funds for construction in 2012 (total about \$1 million). The State and County will pay the local match of 20% for the work. Letters of intent from both the State and County were received. If needed, Village impact fee funds could be used for a portion of the local match. SEC Group was retained by the Village to perform all engineering phases and handle required paperwork and documentation. Engineering agreements are being processed by IDOT.

#### *Higgins / Moon Lake / Governors*

IDOT has completed all paving and sidewalk work. A final invoice from the State is pending.

### *RTA Community Planning Grant Application*

An application was submitted for 2011 funds to the RTA to develop specific operating plans for flexible transit services. The project passed the first level of RTA review and is on the draft list of potential projects. The RTA Board will make the final selection later this year. This builds on the findings from the Joint Transit Study completed for the Village in 2004. These flexible services are a hybrid of route operation and a call-in service. The goal is to create operating plans with estimates of costs, ridership, and potential funding sources. The RTA will recommend projects to include in their program later this year. There is no cost estimate at this time for the project, which has a 20% local match. Once a decision is made on projects by the RTA, specific costs will be determined through consultants under contract to the RTA.

### *Other Grant Applications*

Several other funding applications were submitted but not selected for funding. Two CMAQ bicycle projects scored very well but were not included in the primary project list by CMAP due to limited funds. One was the bicycle path under the Tollway and Hoffman Boulevard bridges adjacent to the CN right of way. The other was the Huntington Boulevard / Harmon Boulevard corridor. These projects are on a "B List" meaning that if funds become available, they could be eligible for programming. The other project was a bicycle path connection on Central Road. The application for Illinois Department of Natural Resources grant was submitted but due to limited funding from the State, no projects have been selected yet. The DNR application was resubmitted in response to a call for projects.

A federal Tiger II pre-application was submitted for the Barrington Road interchange design. This is an extremely competitive nationwide program to be decided in the fall. A full application is due by the end of August if the pre-application is approved.

Staff also submitted an ITEP application for the bicycle path project to connect Shoe Factory Road to Prairie Stone and to pave the gravel Forest Preserve path.

## **Agency Coordination**

### **CN Purchase of EJ&E**

STB approval of transaction became effective on January 23, 2009. There are several appeals pending in Federal Court. The Canadian National will provide information on expected date of increase in freight traffic when available.

STB has posted monthly and quarterly reports of status provided by the Canadian National. The STB reviewed discrepancies in reporting incidents and will rule on any additional actions and requirements. Information and links are provided on the Village website. At the request of the Village, Cook County installed a flashing beacon on an existing warning sign in advance of the hillcrest east of the railroad crossing.

The CN License Agreement for access to crossing data was approved by Village Board. The agreement for the path crossing the tracks is under review and discussion with CN. Staff met with Canadian National staff and consultants to discuss plan development and implementation of parts of the agreement such as the soundwall, changes at the track crossing, extending the existing siding, and installing an advance message sign on Shoe Factory Road. Items like the soundwall concept will undergo public review and some will require Village Board review and approval. Status information is posted on the Village Website. When information is received from CN, a public open house meeting can be scheduled.

### **Shoe Factory Road - Cook County**

Civiltech submitted plans to the Village and Cook County for review. Target is for letting in 2011; however right of way acquisition will be the primary determinant of schedule. Village is reviewing plans and will provide comments to the County and the consultants. A technical meeting is scheduled for early September.

### **Northwest Tollway (I-90) Corridor Study**

No new information.

### **O'Hare Noise Compatibility Commission**

No new information.

### **Pace HOT Line Bus Service (Route 557)**

AT&T notified the Village that they will not fund their share in 2010. Discussions with Pace and other companies led to a solution to continue service in 2010. The most recent ridership data provided by Pace is from August 2010 with a total of 1,037.

Average daily ridership using the EZ-Rider Pass was about 20 to 25 per day through June. Total ridership is closer to 40 to 45 per day based on the most recent total ridership information. Monthly totals vary due to the number of weekdays in the month and seasonal variations in transit ridership.

A coordination meeting with Pace and employers was held in March 2010 to discuss service options. Van pools, ridership, Pace performance measures, and other ideas were covered. Information from other businesses and data from Pace will be provided to employers. Companies not participating in the Hot Line were provided information on the Shuttle Service and other Pace options. Follow-up will occur to determine their interest in some forms of transit service once information is received from PACE.

### **Pace Route 554**

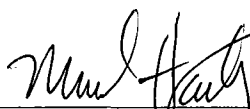
The most recent ridership data provided by Pace for Route 554 was through June 2010. Average daily use was about 130 to 150 riders which is higher than the same months in 2009. Year to date ridership is about 18% higher than the long term average ridership (2004 to 2008) through March.

**STAR Line**

A Task Force Meeting was held on July 13. Metra anticipates submitting to Federal Transit Administration in 2010. Public hearings and environmental scoping meetings will be scheduled. Coordination between Metra and Tollway continues. The Tollway is receiving various options for construction, widening, and transit improvements on I-90.

**Traffic Studies / Other**

- Additional information has been included on the website for engineering services as well as posting new transportation data.
- Village ADT Map posted to website.
- Assisted Police and Public Works for placement of programming PCMS for projects and special notices as needed.
- Event planning and coordination with Police Department, Standard Parking, and Sears Centre staff as needed for Sears Centre.
- Several residents are considering the Neighborhood Speed Watch program.
- Staff is developing an informational brochure on transit services offered in the Village.
- Keeping log of public transit related requests, inquiries, phone calls, etc.
- Public transit information provided on Village website. Information expanded to include more links and a map of transit services in the Village.
- Submitted requests to IDOT for them to investigate safety funding at several intersections on their system.



---

Michael Hankey, P.E.

Director of Transportation and Engineering Division