AGENDA
TRANSPORTATION AND ROAD IMPROVEMENT COMMITTEE
Village of Hoffman Estates
November 3, 2008

Immediately Following Village Board Meeting

Members: **Ray Kincaid, Chairperson**
Gary Pilafas, Vice Chairperson
Karen Mills, Trustee

I. Roll Call

II. Approval of Minutes – October 13, 2008

NEW BUSINESS

1. Discussion regarding Village Comprehensive Bicycle Plan.

2. Request acceptance of Transportation Division Monthly Report.

III. President's Report

IV. Other

V. Items in Review

1. Discussion regarding lead agency for Barrington Road Interchange.

VI. Adjournment

The Village of Hoffman Estates complies with the Americans with Disabilities Act (ADA). For accessibility assistance, call the ADA Coordinator at 847/882-9100.

Village of Hoffman Estates **DRAFT**

TRANSPORTATION & ROAD IMPROVEMENT COMMITTEE MEETING MINUTES **October 13, 2008**

I. Roll Call

Members in Attendance:
Ray Kincaid, Chairman
Gary Pilafas, Vice-Chairperson
Karen Mills, Trustee

Other Corporate Authorities in Attendance:
Trustee Cary Collins
Trustee Jackie Green
Trustee Anna Newell
Mayor William McLeod

Management Team Members in Attendance:
James Norris, Village Manager
Arthur Janura, Corporation Counsel
Daniel O'Malley, Deputy Village Manager
Mark Koplin, Asst. Vlg. Mgr., Dev. Services
Peter Gugliotta, Director of Planning
Don Plass, Director of Code Enforcement
Michael Hankey, Director of Transportation
Patrick Seger, Director of Human Resources
Gary Skoog, Economic Development Coord.
Bruce Anderson, CATV Coordinator

Reporter from Tribune

The Transportation and Road Improvement Committee meeting was called to order at 8:11 p.m.

II. Approval of Minutes

Motion by Trustee Pilafas, seconded by Trustee Collins, to approve the Transportation and Road Improvement Committee meeting minutes of August 4 and September 8, 2008. Voice vote taken. All ayes. Motion carried.

OLD BUSINESS

1. Discussion regarding Kingsdale Road traffic studies.

An item summary sheet from Mike Hankey was presented to Committee.

Mike Hankey addressed the Committee and presented an overview of the studies completed this year. After the June Committee meeting this year, staff was asked to look at the cut-through traffic patterns through the Pie neighborhood. A license plate study that recorded the plate numbers and times of vehicles entering and exiting the neighborhood was conducted and

vehicles found to be entering and exiting the neighborhood within a short period of time were classified as cut-through traffic. Counts were done in both the morning and afternoon during July and September and data from these two months allows some assessment of the influence of school year traffic and the amount of cut through traffic. Goal was to identify the primary patterns of cut-through traffic in the neighborhood as well as to try to quantify how many vehicles were cutting through. Data was collected by how vehicles turned in and out of the neighborhood by each entrance and exit point. There were 3 primary paths identified going from between Golf and Higgins.

On average, during the summer period without school, there was about 1 vehicle per minute. During the school year, there were about 1.5 vehicles per minute. This is a total for all entry and exit points within the Pie neighborhood. Fairmont and Kingsdale saw the majority of traffic for cut-through movements that ranges from .5 vehicles per minute to 1.5 vehicles per minute on Kingsdale. Relatively speaking, staff feels this is a small amount of cut-through traffic and would not recommend any changes at this time. Input from the neighbors in the area would be necessary to make any changes. School buses are using Fairmont to go between Higgins and Golf. The School District was contacted a number of years ago and they said they would reroute the buses, but recently the buses are cutting through again. The School District will be contacted again.

Trustee Mills stated that Armstrong School creates the internal stops within the neighborhood and the buses are for Hoffman Estates High School. The concern is that the high school students do not always use caution when pulling into traffic on either Golf or Higgins Roads.

Trustee Pilafas stated that the roads are not made to withstand heavy traffic, especially the buses, and there is an elementary school in the neighborhood. He would like to see the Board take the next step and look at options in the future to correct or address the cut-through traffic.

Trustee Collins asked if the traffic was all school-related and not people avoiding lights on Golf or Higgins. Mr. Hankey responded that it was a mixture of reasons and that people going east on Golf Road in the morning do cut through the area. There is a timing issue with the lights at Gannon/Golf. As a policy, the State has not addressed any timing issues to date.

Mr. Norris stated that direction is necessary, either to continue to monitor the situation or directing staff to look at what potential physical changes to be made in the future.

NEW BUSINESS

1. Discussion regarding request for stop sign on Briarcliff Lane at Gentry.

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

Trustee Collins inquired where this request came from and Mr. Hankey responded that the request came from a resident in the neighborhood. Mr. Hankey stated that after the request, surveys were mailed to 12 residents in the area of the intersection. A total of 7 surveys were returned with 6 in favor of the stop sign and one resident opposed to the installation. Staff indicated that due to the limited visibility at this intersection, a stop sign is warranted on Briarcliff Lane at Gentry Road and that it was not a stop or speed issue at this intersection.

Pat Barch, 550 Briarcliff Lane, addressed the Committee and stated that she does not think a stop sign is necessary since Briarcliff is one block long and when heading west on Briarcliff, vehicles do slow down at Gentry and continue with the turn. There is then a stop sign at Cambridge.

Trustee Green indicated that there are a lot of children in this area due to the proximity of Vogelei Park and if visibility is bad at this location, a stop sign is necessary.

Motion by Trustee Mills, seconded by Trustee Green, to approve ordinance for stop sign on Briarcliff Lane at Gentry. Voice vote taken. All ayes (Nays: Collins & Pilafas). Motion carried.

2. Request acceptance of Transportation Division Monthly Report.

The Transportation Division Monthly Report was submitted to the Committee.

Motion by Trustee Collins, seconded by Trustee Mills, to accept Transportation Division monthly report. Voice vote taken. All ayes. Motion carried.

III. President's Report

IV. Other

V. Items in Review

1. Discussion regarding lead agency for Barrington Road interchange.

VI. Adjournment

Motion by Trustee Pilafas, seconded by Trustee Collins, to adjourn the meeting at 8:30 p.m. Voice vote taken. All ayes. Motion carried.

Minutes submitted by:

_____ _____

Debbie Schoop, Executive Assistant Date

COMMITTEE AGENDA ITEM
VILLAGE OF HOFFMAN ESTATES

SUBJECT: **Discussion regarding Village Comprehensive Bicycle Plan**

MEETING DATE: **November 3, 2008**

COMMITTEE: **Transportation and Road Improvement**

FROM: **Michael Hankey / Nathan Roseberry**

PURPOSE:

Follow-up information from previous Committee discussions on bicycle facilities is presented.

BACKGROUND:

In February 2008, the Transportation and Road Improvement Committee discussed bicycle facilities. The Committee directed staff to begin the development of a comprehensive bicycle plan. Information is presented here on various elements that could be included in the plan as well as an overall outline of what eventually could be incorporated into a plan.

Previous discussions on bicycle plans have covered the Village involvement with the Northwest Municipal Conference efforts, recent legislation related to accommodating bicyclists and pedestrians in State projects, facilities in neighboring communities, and policy implications.

At the February 2008 Committee meeting, the Village Board was presented some preliminary information on streets which have conditions for which bicycle facilities could be suitable.

DISCUSSION:

The following information is provided on what activities have occurred since the last Committee meeting. An overall direction for the comprehensive bicycle plan is also presented. An outline of these primary components of a bicycle plan is attached. A brief description of tasks completed and to be done is included.

Steps in Creating a Bicycle Plan

The comprehensive bicycle plan can evolve over time as needed. The recent update of the Village Comprehensive Plan did not identify specific facilities on Village streets but did reflect the goal of improving bicycle and pedestrian access. Initially, a bicycle plan could focus on logical connections with adjacent existing facilities. Bike paths maintained by the Forest Preserve, existing and planned routes on the Northwest Municipal Conference map, and existing facilities in Schaumburg are all examples of the first order of connections that could be considered. Links to Park District buildings and parks, shopping areas, schools, and other destinations should be considered too.

DISCUSSION: (Continued)

The bicycle plan would be developed to meet certain goals for the community. A desire that arose from the Comprehensive Plan Update was to improve pedestrian and bicycle connections. From that overall goal more specific objectives can be developed for inclusion in the plan. Linking to popular destinations, especially for bicyclists to serve recreational and transportation needs is one example. Ultimately, a comprehensive network of connections within the Village and with other bicycle facilities would be created. Users should be provided information along the route about the destinations that can be reached and how to connect to other systems. The plan itself will evolve over time in response to opportunities to expand the system. The first component is an initial map of existing and future bicycle facilities by type (route, lane, or path).

The comprehensive bicycle plan should also contain elements on safety, enforcement, encouragement of bicycling, and public information. While these components are not discussed in detail at this time, the outline for the plan allows these to be added as they are created. Several brief examples in each of these areas are highlighted below. Sample plans from Batavia, Park Ridge, Schaumburg, Chicago, and Kane County were reviewed as well as other selected examples from around the country.

Inventory of Existing and Potential Village Facilities

At the February 2008 Committee meeting, a preliminary list of locations for bike facilities was discussed. This was presented as representative samples of which street segments and off-street locations might be considered for designation as certain types of bicycle facilities. This list was expanded based on discussions with representatives of adjacent communities and further data collection. A field review was conducted of each to verify physical conditions such as width, where on-street parking is allowed, speed limits, number of driveways, and pavement conditions. The existing facility exhibit (Figure 1) is attached. Currently there is a total of about 26.5 miles of existing off-street path within the Village.

The Village has been developing a database of traffic volumes and vehicle classifications over the past few years. In addition, new traffic volume and vehicle classification data was collected for streets where current traffic information was not available. This data was used for a majority of the candidate streets. For the remaining streets, traffic volumes from similar type streets were used to approximate their volumes. This effort also included documenting the characteristics of the existing facilities in Hoffman Estates. This along with the data obtained from the agency coordination discussed next led to the creation of an exhibit depicting the existing bicycle facilities by type in the Village and surrounding area.

Agency Coordination

Meetings were held with several other agencies and organizations to learn what bicycle planning efforts are occurring. The Village is an active member of the Northwest Municipal Conference Bike and Pedestrian Committee. Last year, the NWMC Bike and Pedestrian Committee was charged with updating the Northwest Municipal Conference Bicycle Plan. The NWMC regional plan was discussed at previous meetings. One element identified in that plan was a designation of Higgins Road as a desirable corridor for bicycle facilities. Other components were the need for facilities to cross the Tollway. Individual meetings were held with Schaumburg, Kane County, and East Dundee as well as the Hoffman Estates Park District and the Chicagoland Bicycle Federation. Follow-up meetings will be held with these and other adjacent communities.

DISCUSSION: (Continued)

Bicycle Level of Service

Objective methods to measure the comfort or compatibility of a street for use by bicyclists have been developed through research by different agencies. The method adopted by the League of Illinois Bicyclists was selected to evaluate Village streets. This Bicycle Level of Service (BLOS) takes a quantitative approach to classify the comfort level for bicycle use of a certain street in categories of A through F, similar to a grading scale. Streets with a LOS A have a high level of compatibility for bicyclists of nearly all abilities. LOS F indicates that the street is not compatible under the assumed physical and operating conditions. It is applied for the evaluation of the on-street designations (shared use, bicycle route, bicycle lane).

A number of different physical and operating characteristics are considered in the BLOS. These include the volume of traffic, presence of trucks, posted speed limit, pavement condition, width of the street, presence of on-street parking, widths of shoulder or marked on-street parking areas, and number of lanes. The BLOS rating is intended to reflect the users' perception of the comfort level of the street for bicycle travel. Further evaluation of each candidate is required as not all criteria are included in the BLOS, such as inlet type and visibility.

The initial set of streets and corridors identified at the February 2008 Committee meeting served as the starting point for applying BLOS. As such not all streets were evaluated in this set of facilities. Some streets such as Beverly Road are not suitable for on-street bicycle use due to the combination of volume, truck traffic, and speed. The attached exhibit (Figure 2) shows the results of the BLOS for current conditions.

The results of the BLOS found only a few locations where the street would not be compatible for on-street use under current physical and operating conditions. The following street segments where the BLOS was D or below, along with the primary causes for the low rating, are listed below.

Street	Begin	End	Causes of Low BLOS
Hassell Road	Barrington Road	Huntington Boulevard	Volume, heavy vehicles, amount of on-street parking, pavement condition, pavement width
Hillcrest Boulevard	Jones Road	Pierce Road	Volume, on-street parking, pavement width
Glen Lake Road	Higgins Road	Chippendale Road	Pavement condition
Gannon Drive	Higgins Road	South of Golf Road	Volume, heavy vehicles, posted speed
Bode Road	Gannon Drive	East of Salem Drive	Volume, pavement condition, pavement width

DISCUSSION: (Continued)

Some conditions such as reconstructing Glen Lake Road to improve pavement condition would change its BLOS to an acceptable level. In the case of Hillcrest Boulevard, other routes could be signed to reach essentially the same destinations via lower volume streets. The section of Hassell Road is the most significant challenge. Hassell Road could serve as a connector between the Poplar Creek Forest Preserve trails and large residential areas. However, the combination of traffic volumes and number of trucks makes it a less desirable route to travel on-street. Options might include off-street paths or reducing the number of lanes to allow marking bike routes. However, these both require significant evaluation to determine the costs and benefits before any decision could proceed.

Types of Facilities

Bicycle facilities can be grouped into one of three types: bike routes, bike lanes, and bike paths. Bicycle facilities are planned and developed for both recreational use and to offer a travel mode option. Short trips may be more attractive to the bicycle user if a continuous system is planned and implemented.

The type of facility does not have to be the same in adjoining jurisdictions. A bike route in one community can connect to a bike path in a forest preserve or to a bike lane in another community. More important than the type of facility is the continuity provided by connecting adjacent systems. Equally significant are the destinations that can be accessed via the bicycle facility. It is suggested that there be some logical connection or terminus before designating a bicycle facility. Bicyclists may choose to use undesignated facilities as permitted users as they currently may do.

Bode Road is a good example of the need to carefully evaluate physical conditions when considering candidate locations for bicycle routes. A Bode Road bike route would provide connectivity between Roselle Road on the east and the Schaumburg path on Bode Road to the west that leads into the Poplar Creek Forest Preserve path system. It would also link to the Braintree bike lane and Springinsguth bike path. However, the pavement condition on Bode Road between Salem Drive and the curve west of Gannon Drive needs to be addressed before any designation for bicycle use could be considered. The change in the number of lanes on Bode Road also is a factor to consider.

Draft Bike Facility Plan

A description of each type of bike facility, some general characteristics, and items for consideration are listed below. Examples of potential facilities in Hoffman Estates for each category are included as well. These were based on the initial list of potential facilities discussed at the Committee earlier this year. The BLOS was applied for each on-street segment being considered for inclusion in the draft of the bike facility plan. A more general assessment of bike paths (sidepaths) was done for possible off-street facilities.

An exhibit (Figure 3) is attached which shows a draft of the future bicycle facility plan for the Village. It shows the location and type of facility to be considered as well as the connecting or nearby bike facilities in the surrounding area. More detailed exhibits (Figures 4-6) are shown for each geographic area of the Village. Future on-street facilities could total about 47.8 miles if all locations shown on the draft plan are implemented over time. Of this, bike routes would constitute about 44.8 miles, with the remaining 3.0 miles being streets with bike lanes.

DISCUSSION: (Continued)

In total, there is about 14.8 miles of future off-street path identified through the plan. Of this amount, about 2.7 is programmed, meaning there is or will be work done to implement the path in the near future. The type of information in the draft facility plan could serve as a good basis for public review and input.

Bike Routes
Bike routes are designated by "Bike Route" signs on the road, which identify it as such. At intersections, turn signs for the bike route may be provided to inform cyclists how to stay on the route. Signs indicating distances to primary destinations and points of interest that are on the route should be used. Bicyclists share the road with other vehicles, and aside from the bike route signs, there are no other traffic controls used. Bike routes are typically considered where there is not enough room to designate bike lanes or in cases where there is not a need to specifically identify a space for bicyclists due, for example, to low traffic volumes.

Considerations for Implementation of Bike Routes
The primary items to consider are the physical and operating characteristics of the road. Traffic volumes should be in the low to moderate range with a very low percentage of trucks such as found on nearly all Village streets. High turnover parking areas should be avoided; however this situation does not typically occur on most Village streets. Operating speeds on the road should be low as found on most Village streets. Primary arterials such as State or County routes are not compatible for on-street bicycle traffic. Pavement conditions on the streets where bicyclists will ride are of importance. Conditions including cracking, surface smoothness (pavement rutting, raveling, settlement), drainage inlet types, joint between the pavement and gutter, etc. all need to be evaluated to determine if bicycles can be reasonably accommodated. Good visibility at intersections and along the route needs to be maintained.

Draft Bike Facility Plan – Bike Routes
Based on the initial assessment, the majority of Village streets which could be considered as bicycle facilities would be designated as routes. These streets do not have to be striped to be signed as a bike route, which also reducing installation and maintenance costs. Both local and collector streets would qualify as bike routes. General practice is that bike routes are good alternatives where there is not adequate width or demand for designating bike lanes. The Bicycle Level of Service rating was used to determine the desirability of on-street use as a bike route. The street segments shown in Figure 3 are recommended for consideration to designate bike routes.

Bike Lanes
Bike lanes are identified by a longitudinal white pavement stripes on the road and may be supplemented by signing and pavement marking symbols. There are design guidelines for the width of the bike lane as well as the combined width of the roadway lane that must be met. Bike lanes are typically five feet wide including the gutter and are designated on each side of the road. Bicyclists share the same road as vehicles but the striped bike lane identifies the space for use by cyclists. There are design criteria for bike lanes, which specify width, presence of parking, and other features, such as inlet grate design. Parking is not permitted in marked bike lanes. The area of the bike lane should be swept more frequently due to the build up of debris.

DISCUSSION: (Continued)

Considerations for Implementation of Bike Lanes

The primary items to consider for bicycle lanes are similar to bicycle routes; the physical and operating characteristics of the road. Traffic volumes should be in the low to moderate range with a relatively low percentage of trucks such as found on nearly all Village streets. High turnover parking areas should be avoided; however this situation does not typically occur on most Village streets. Since bicyclists share the road with vehicles, operating speeds should be relatively low. Primary arterials such as State or County routes are not compatible for on-street bicycle traffic. Similar evaluation of the pavement conditions on streets where bike lanes are contemplated must be made. Edge of pavement conditions including cracking, surface smoothness, drainage inlet types, joint between the pavement and gutter, etc. all need to be evaluated to determine if bicycles can be reasonably accommodated or if repairs are needed. Good visibility at intersections and along the route needs to be maintained. Particular attention should be paid to the condition of pavement in the space actually delineated by the bike lane striping. Bike lanes are typically 4 feet wide, not including the gutter. If parking is permitted on-street where a bike lane is to be marked, the bike lane must be located to the left of the area used by vehicles parked on-street.

The bike lane and on-street parking should not occupy the same space. The street width required for two vehicle travel lanes, two bike lanes, and on-street parking on both sides is greater than the width of a typical Village collector street. Where parking is prohibited on collector streets, a bike lane may be an option. At intersections with right turn lanes, the bike lane is located between the right turn lane and the adjacent through lane not adjacent to the outside curb.

Draft Bike Facility Plan – Bike Lanes

Based on the initial assessment, only Village collector streets where parking is not allowed would generally be wide enough for bike lanes. Local streets are too narrow with parking allowed on one side to stripe a bike lane. Even collector streets where parking is allowed on both sides do not have sufficient width to stripe bike lanes. This leaves a relatively small number of locations where bike lanes could be considered. The Bicycle Level of Service rating was also used to determine the desirability of on-street use. The following street segments are recommended for consideration on designated bike lanes.

Street	Begin	End
Moon Lake Boulevard	Higgins Road	Golf Road
Volid Drive	Higgins Road	Moon Lake Boulevard
Huntington Boulevard	Higgins Road	Hassell Road
Salem Road	Bode Road	Village boundary
Bode Road	Bode / Braintree	East of Salem

The first three streets are all divided boulevards where the pavement width on each side would allow a bike lane to be signed and striped. There is no parking allowed on these streets so sufficient pavement is available to designate a bike lane for each direction of travel. The pavement condition on Volid Drive may preclude designating a bike lane until repairs are made. All of these locations have LOS C or better ratings indicating they are acceptable as on-street facilities based on their physical and operating characteristics.

DISCUSSION: (Continued)

Salem Road has no parking allowed and would actually be an extension of the existing bike lane in Schaumburg to the south. Portions of Bode Road have no parking and adequate space for striping a bike lane such as from the Bode / Braintree intersection to east of Gannon. Continuing east on Bode is a current four lane cross section through the Salem intersection. There is not adequate space to mark a bike lane under current conditions, but there would be adequate space by changing the section to a three lane cross section with a center turn lane.

Bike Paths
Bike paths are physically separated from the road. They are typically parallel to the road, but may also be on a completely separate alignment. They are typically bi-directional whereas bike lanes are not. Design criteria are specified for width of the path, grade, curvature, clearance distance, visibility, traffic controls, etc. In addition, where the path crosses driveways and streets, the bicycle traffic may be controlled by signs.

Considerations for Implementation of Bike Paths
Similar issues as for routes and lanes are considered when evaluating placement of a bike path. A significant additional question is the amount of right of way available. The combination of bike path width (typically 10 feet), adjacent flat clear area (1 to 2 feet), and separation from obstacles or roadway, can mean that the parkway must be quite wide. In addition to a bike path or sidewalk, the parkway also typically provides space for a comfortable separation between the path and the road, for landscaping to mature, to accommodate utilities below and above ground, for traffic signs or light poles, among other functions. Traffic volumes are not a direct factor because the bike traffic is physically separated from the road traffic. Bike paths are more suited to corridors adjacent to higher volume arterial roads. The design of the path can be independent of the road alignment, such as those existing in forest preserves. An important issue when the path closely parallels an adjacent street is the frequency of driveways and intersections that are crossed. These crossing points tend to be the locations where operational concerns arise. The number, spacing, turning volumes, cross slope, etc. of driveways and intersections that cross the bike path must be carefully studied. Good visibility at intersections and along the route needs to be maintained. Sometimes, traffic on the bike path is controlled at stop signs at major intersection crossings.

Draft Bike Facility Plan – Bike Paths
There are several locations where off-street paths could be considered. These are sometimes called "sidepaths" and typically used where traffic volumes, heavy vehicle percentage, speed, etc are high. Examples of off-street path currently in the Village are along Algonquin Road and portions of Shoe Factory Road. Completion of the Shoe Factory Road path system should be one goal of the bike plan and will be done by the Developers who build out the adjacent parcels. Once complete this would link to Elgin and the Fox River Path on the west and to the Poplar Creek Forest Preserve path systems on the east. Another location is the vacant Huntington Boulevard right of way between Golf and Higgins Roads. Building a path in this location would establish a link to other bike facilities to the north and south. Finally, the Higgins Road path between Basswood Road and Roselle Road is currently being designed by the Village. The Village received approval of a CMAQ grant that will pay for 80% of the construction costs of the path and sidewalk project. A portion of the local share will come from TIF funds and the Village of Schaumburg.

DISCUSSION: (Continued)

Shared Lane Use Marking (Sharrow)
The shared lane pavement marking is an experimental treatment that is undergoing some reviews. The City of Chicago is using these markings on some streets. The purpose of this special pavement marking is to indicate to both motorists and cyclists that they will share the space available on street. To date, this application has been considered when the minimum required bike lane width cannot be provided. Where used, the marking is placed outside the parking lane to suggest to cyclists a position on the street that is not immediately adjacent to parked vehicles. This is not a bike lane marking which designates a specific dimensioned space to be used by bicyclists. Instead, the shared lane marking gives more general guidance to bicyclists and motorists on the bikes' position within the road.

Considerations for Implementation of Sharrows
The shared lane pavement marking is believed to have significant potential for application to streets where adequate width does not exist to stripe a bike lane without removing on-street parking. Until such time as the federal government approves expanded use of this marking, the treatment is considered experimental. As with the other on-street treatments, the same physical and operational considerations apply.

Draft Bike Facility Plan - Sharrows
There are no streets for which the Sharrow treatment is recommended at this time. These might be considered at some point in the future once adopted as an official treatment if conditions warrant.

Estimated Costs and Phasing
As mentioned above, Higgins Road was identified as a desirable east-west corridor for bicycle travel. The proposed 2009 to 2013 Capital Improvements Plan includes construction of a bicycle path and sidewalk in the area generally from Basswood Street to east of Roselle Road. The Village received initial approval of Congestion Mitigation Air Quality funds for the construction of the path and sidewalk. The design work will be done in house and Village staff will also oversee construction inspection, as has been done on previous CMAQ projects. There is currently nothing else in the budget for 2009 for implementation of bicycle facilities. Upon completion and adoption of the bicycle plan, specific projects as desired by the Village Board may be funded.

The estimated cost for signing a bicycle route per mile is about $2,500 to $3,500. This cost uses estimates provided by Public Works and includes bike route signs, destination signs, the sign post, fabrication, and installation times. The cost for signing and marking a bicycle lane per mile is about $8,500 to $9,500. In addition to the items noted for bike routes, the cost estimates includes the painted bicycle lane and related striping. The majority of this cost is due to striping the edgeline that delineates the bike lane. The cost to construct an off-street path will vary widely depending on the conditions encountered. The cost to construct bicycle path per mile is about $800,000, excluding any right of way acquisition, major utility conflicts, significant grading modifications, large bridge expanses, etc.

DISCUSSION: (Continued)

Based on the draft Bicycle Facility Plan, the on-street facilities could be implemented for about $175,000. This includes the cost of signing and striping. Some additional review would need to occur with respect to other pavement and physical conditions before proceeding, so the costs could be higher in some cases. There may be opportunities to secure grants to install the on-street facilities lowering the Village cost further. The off-street facilities come at a much higher cost and require a longer time to implement. Some will involve very costly structures crossing the Tollway, others will likely need some modification to bridges, while others will be simpler to construct such as locations where sidewalk already exists and the construction would only require adding 5' parallel to the sidewalk. In general all the off-street facilities are in locations within the public right of way so this is not a cost issue. Some will require approval by other agencies that have road jurisdiction. Costs of about $10 million could occur for the off-street facilities included in the draft plan. Most if not all of these will be contingent on receiving funding from federal or state programs. Additional information is included in the Financial Impact section. The design and construction inspection needed for implementation of these projects is planned to be done in house, saving funds for implementation.

Other Components of the Comprehensive Bicycle Plan

Besides the facility plan there are other useful pieces of a comprehensive approach to the bicycle planning. Some of the more significant items are listed below.

Guide Signs for Bicycle Users

Regardless of the type of bicycle facility, serious consideration should be given to installing guide signs to inform users of the destinations that can be reached via the facility. Bicyclists should be afforded the same guidance information as is typically available for motorists. Destination signs, which can be supplemented with mileages, should be mounted along with the Bike Route signs. As trips by bicycle are typically shorter than by vehicle, a variety of destinations in particular of interest to cyclists can be identified. The *Manual on Uniform Traffic Control Devices* provides guidance on the design of bicycle signs.

Bicycle Safety Program

This could build upon the programs conducted by the Police Department. Programs for schools and the general public can present information on safe riding practice, proper equipment and use. The Safe Routes to School Program, which is a federal initiative through IDOT, offers access to funds that can be used for the efforts to improve safety through education, enforcement, or construction of new facilities.

Education, Enforcement, and Encouragement

There is some correlation with the safety program noted above as well as funding opportunity through the Safe Routes to School for these activities. Police Department classes on bicycle rules, creating new Village ordinances for bicycle facilities, and incentive programs to encourage bicycle use are examples of specific programs that might be considered as parts of the overall plan. These can be developed and considered for implementation as the plan evolves.

DISCUSSION: (Continued)

Evaluation
As the plan will evolve over time, periodic evaluations of level of use, performance, maintenance costs, etc. should be performed. This knowledge will improve future decisions related to bicycle planning.

Bicycle Parking
It is important for bicyclists to have a secure place to lock their bike at their destinations. Other communities have included requirements in their municipal code requiring minimum quantities of bicycle parking, similar to ratios for vehicular parking. The Village Bike Plan should include a section evaluating the existing supply of Bike Parking and goals to expand in the future.

Public Information
The primary product would be creating a bicycle facility map for the Village. It could show the current bicycle routes, lanes, and paths in the Village as well as connections to adjacent communities and Forest Preserve paths. The map could be produced in print and electronic form. A desirable goal would be to incorporate regional facilities into one map, similar to the Northwest Municipal Conference effort.

A public information component can also be part of a comprehensive bicycle planning effort. Items could include bicycle maps showing existing and planned facilities in the Village, bicycle rider and safety programs such as conducted by the Police Department for schools, and other community programs could also be developed in the future. The public information element could include coordination with other agencies, the Forest Preserve, bicycle groups, and others. It is recommended that if an overall map is developed, then it should clearly distinguish between existing and planned facilities. The implication for the existing facilities is that they are able to accommodate bicycle users. The planned facilities represent locations where improvements are needed or new construction is required in order to accommodate bicycle use. Existing facilities are those where bicyclists are included as "intended" users; on planned facilities or any street not designated, bicyclists remain "permitted" users.

As implementation of the plan continues, longer term goals such as connectivity across the Tollway should shift to a shorter term focus. Some future projects such as the STAR Line station planning near Barrington Road and the Barrington Road full interchange will offer the opportunity to determine how pedestrian and bicycle accommodations can be included with these projects. These larger projects will require coordination with other agencies and should be eligible for funding assistance through federal or state programs. The Village's recent CMAQ application for a pedestrian / bicycle path on Higgins Road is one example of the possible funding for links along busier travel routes. The short term implementation of routes and paths should be done in support of the longer term vision of establishing connectivity at desired locations across the Tollway.

FINANCIAL IMPACT:

If directed by the Village Board to proceed, the next step in implementation of the plan elements would be to include these requests in the capital and operating budget processes. There are costs associated with establishing and maintaining the bicycle designation such as striping, signing, and improving pavement conditions where needed. Some of these changes could be implemented with the annual street project but could require additional funding beyond the scope of the pavement rehabilitation work. Others modifications would be proposed as part of the Capital Improvement Program. The operating budget should include the ongoing maintenance of all striping and signing installed specifically for bicycle facilities. The bike route and lanes will also need to be routinely swept.

The amount and timing of funding needs will depend upon the direction provided by the Village Board. As noted under the section on Creating a Bicycle Plan, implementation of the plan elements will result in requests for future capital projects. It may be possible to include some work within the scope of the annual street project. Repairing edge of pavement conditions is an example of work that might be done on a particular street regardless of the potential designation as a bicycle facility.

Potential funding sources include both federal and state programs. The federal Congestion Mitigation Air Quality (CMAQ) program was mentioned previously. The Village has been very successful in the past obtaining CMAQ funds for sidewalk projects and most recently for the Higgins Road bike path / sidewalk work. CMAQ requires a 20% local match. Illinois Transportation Enhancement funds are another federal source that comes through IDOT. Bicycle and sidewalk improvements as well as streetscape, preservation, historic renovation of transportation facilities are eligible, with a 20% local match. Competition has been very strong for the limited funds available through ITEP. The Illinois Department of Natural Resources has Bike Grant and Recreational Trails Programs. These have primarily been for off-street projects and typically require a 50% local match. The federal Safe Routes to School program administered by IDOT is another possibility. This typically requires cooperation by a school or school district. The program pays 100% of the cost of eligible projects, with the sponsor paying these up front and being reimbursed.

It may be possible to fund some of the missing links in the system through the Community Development Block Grant program. Specific locations and costs would be developed within geographic areas that qualify for these funds. It would be possible to include such requests as part of a future year's CDBG program. An exhibit (Figure 7) showing the CDBG areas with potential bicycle facilities is attached.

RECOMMENDATION:

The next steps if directed by the Village Board would be:

1. Plan public meetings to receive input and feedback on bicycle planning.
2. Continue developing the other components of the comprehensive bicycle plan such as safety, enforcement, etc.
3. Create a phasing and implementation plan for budgeting purposes.
4. Develop ordinances related to bicycles in the Village.
5. Further identify costs for specific projects.
6. Determine the process and funding cycles for federal and state programs and submit applications as approved by the Village Board.

DRAFT
Village of Hoffman Estates
Comprehensive Bicycle Plan

Outline

I. Introduction

II. Elements, Components, and Relevance
   a. Physical plan – on street and off-street designations
   b. Safety plan – Police Department programs
   c. Public information – maps, brochure, online
   d. Relationship to Comprehensive Plan
   e. Relationship to NWMC
   f. Relationship to CMAP

III. Goals of Bicycle Plan
   a. Identify desired locations / destinations for bicycling
   b. Types of trips to be served – recreational, transportation
   c. Identify streets / paths that are intended for bicycle use
   d. Create network, identify plan to fill gaps
   e. Connect to Village destinations
   f. Inform of how to reach destinations via bike
   g. Connect to other local systems
   h. Connect to regional system

IV. Types of Bicycle Facilities to be Considered
   a. Shared
   b. Route
   c. Lane
   d. Path
   e. Performance measures of each
   f. Cite local statistics where available
   g. Reference to AASHTO / IDOT Guides
   h. Pros / cons of each
   i. Example applications

V. Evaluation Method for on-street facilities
   a. Collect data on traffic volume, truck percentages speed, on-street parking, pavement condition, edge condition, grates, driveways, visibility, turning volumes, street class, street width
   b. Determine Bicycle level of service – measure of comfort and compatibility
   c. League of Illinois Bicyclists / FHWA / TRB documents
   d. Determine ratings applicable to Village streets – collectors and locals

VI. Destinations / Connections
   a. Municipal – Village Hall, CRC, Police, schools
   b. Recreation – HEPD, aquatic center, parks, IDOT and Forest Preserve trails
   c. Shopping near other destinations
   d. Links to VOS system and Elgin / Kane County
   e. Long term across tollway – interchange and crossings
   f. Under Tollway along EJ&E corridor
   g. Grade separations
   h. Incorporation into interchange plans
   i. STAR Line

VII. Existing & Planned Facilities in Village
   a. Paths – Forest Preserves
   b. Shoe Factory Road – portions in place
   c. Existing Adjacent – paths, lanes, routes
   d. Planned by others in Village – Cook County Forest Preserve
   e. Planned by others adjacent – NWMC, CMAP, CCFP, VOS, East Dundee
   f. NWMC plan – identified corridors
   g. CMAP – database
   h. Relationship to regional documents / plans for funding
   i. Reference to Village Comprehensive Plan Update
   j. Data observations on levels of use

VIII. Proposed Plan
   a. Proposed shared use
   b. Proposed route
   c. Proposed lane
   d. Proposed path
   e. On-street vs. off – awareness, visibility, crossings, conflicts, etc.
   f. Experience level of rider
   g. Proposed signing for destinations – seal, # destinations, distance
   h. Trailblazing, relate to maps
   i. Bicycle parking – existing and proposed

IX. Public / Agency Input
   a. TARI Committee
   b. HE Park District
   c. Schaumburg
   d. Elgin
   e. Palatine
   f. Streamwood
   g. East Dundee
   h. Cook County Forest Preserve
   i. Kane County
   j. Schools

k. Schaumburg Bicycle Advisory
l. Chicagoland Bicycle Federation / League of Illinois Bicyclists
m. Community meeting(s)
n. CBF members in the area

X. Costs and Phasing
   a. Short term – signs and striping
   b. Short term – planning – identify gaps
   c. Mid / long term – street needs / repairs before designation
   d. Mid / long term – build new path connections, widen sidewalk to path if low exposure to crossings
   e. Mid / long term – fill gaps
   f. Long term – tollway crossings
   g. Installation – signs, markings typical costs, frequency
   h. Construction costs, ROW / easement
   i. Funding sources – CMAQ, ITEP, developers, Illinois State Bike Grant DNR, Recreational Trails Program DNR, SRTS, CDBG some areas

XI. Safety
   a. School programs by Police Department
   b. Safe Routes to School – federal funds through IDOT
   c. Park District
   d. Public
   e. Equipment – helmets, reflectors, lights, bike locks, etc.
   f. Classes/Programs – riding classes, bike registration, community rides, etc.

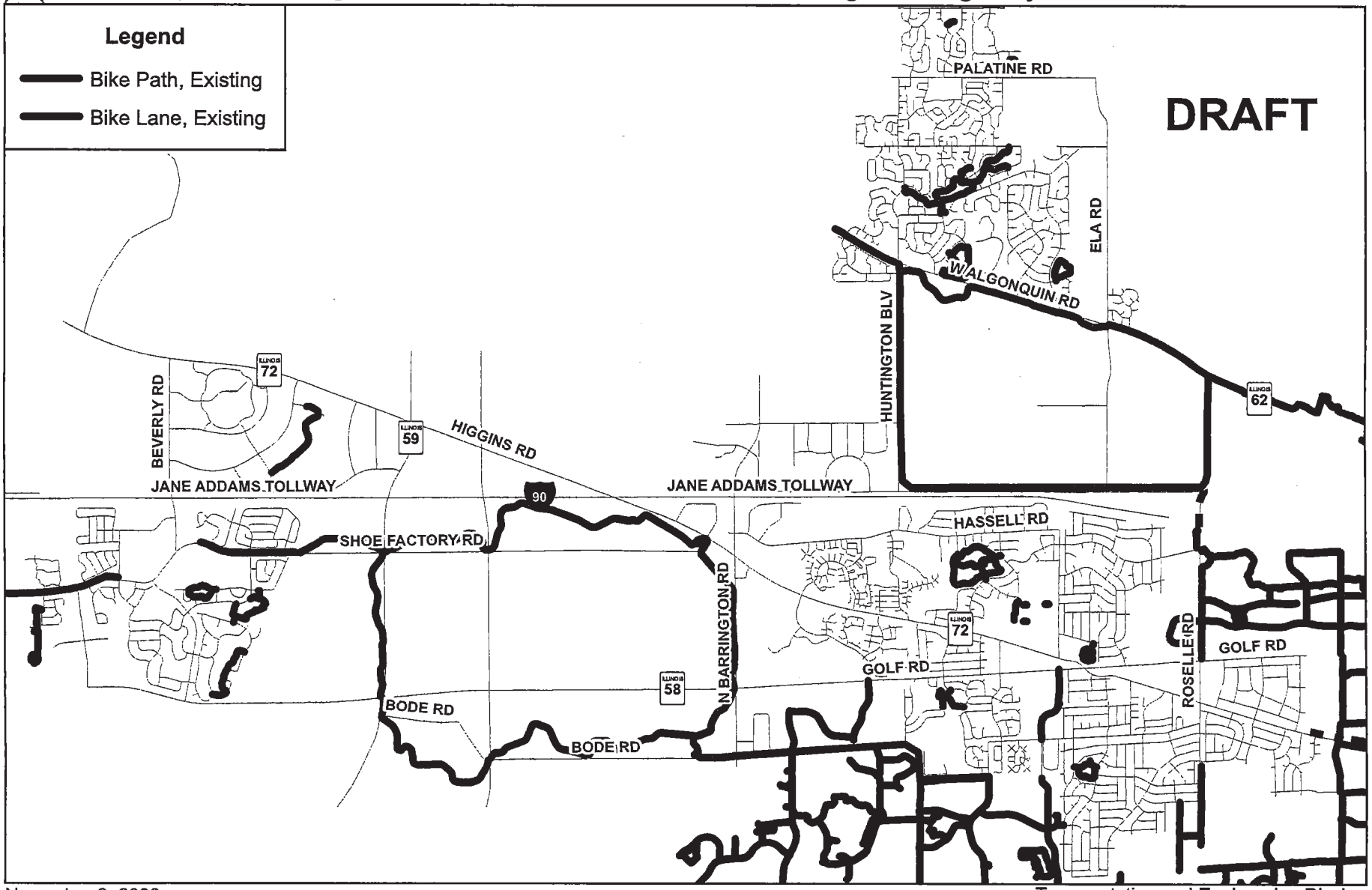
XII. Education, Enforcement, Encouragement
   a. Police classes
   b. Park District
   c. Safe Routes to School programs
   d. Police – focus on safety and encouragement
   e. Tie in with cycling / inline events

XIII. Information Products
   a. Map
   b. Online
   c. Share with other resources
   d. Brochure / pamphlet

XIV. Sample Plans
   a. Batavia
   b. Des Plaines
   c. North Aurora
   d. Kane County
   e. Champaign County

N

Figure 1. Village of Hoffman Estates and Surrounding Existing Bicycle Facilities



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Village of Hoffman Estates

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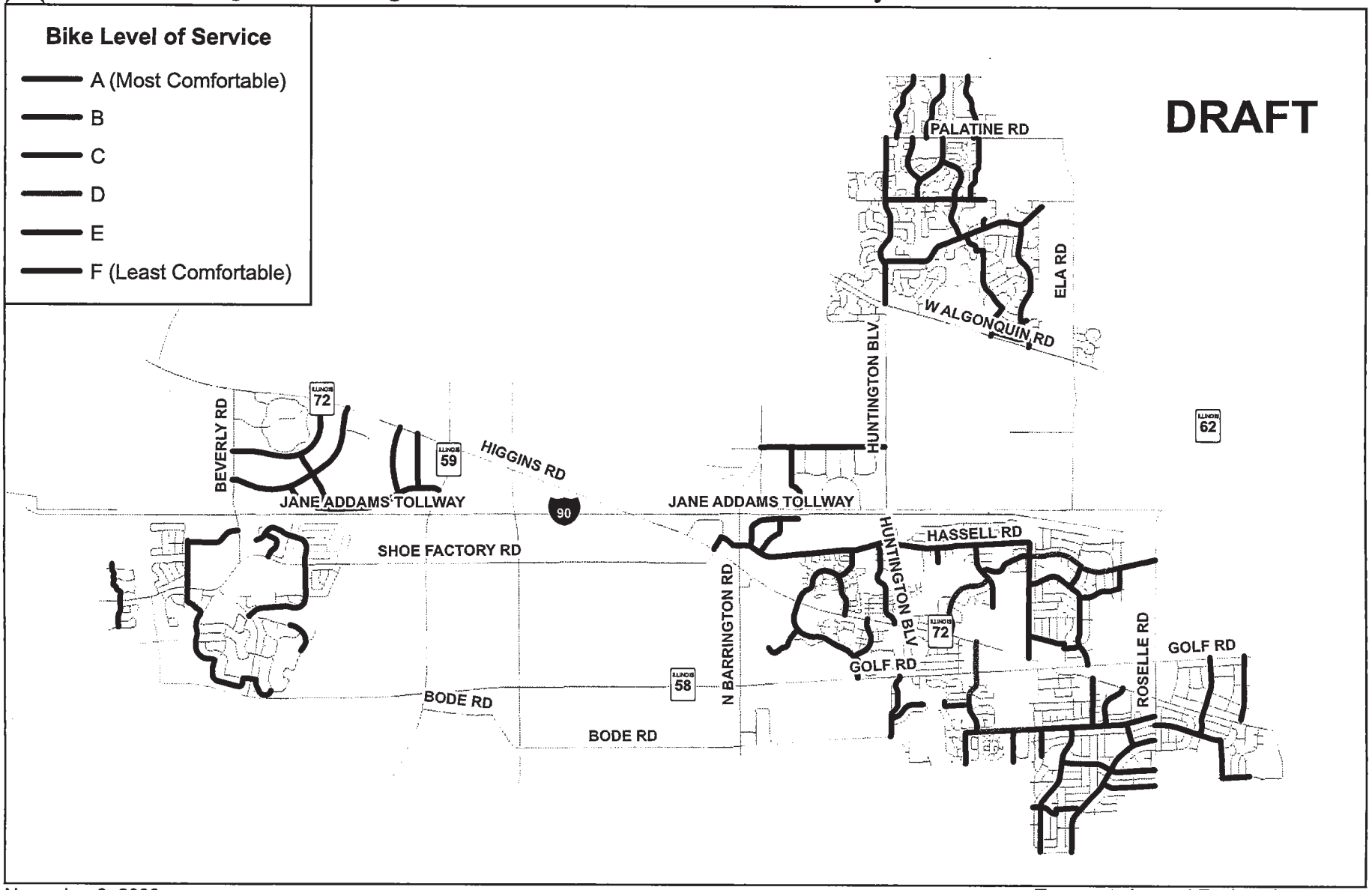
Figure 2. Village of Hoffman Estates On Street Bicycle Level of Service



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Village of Hoffman Estates

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Figure 3. Village of Hoffman Estates Existing and Future Bicycle Facilities

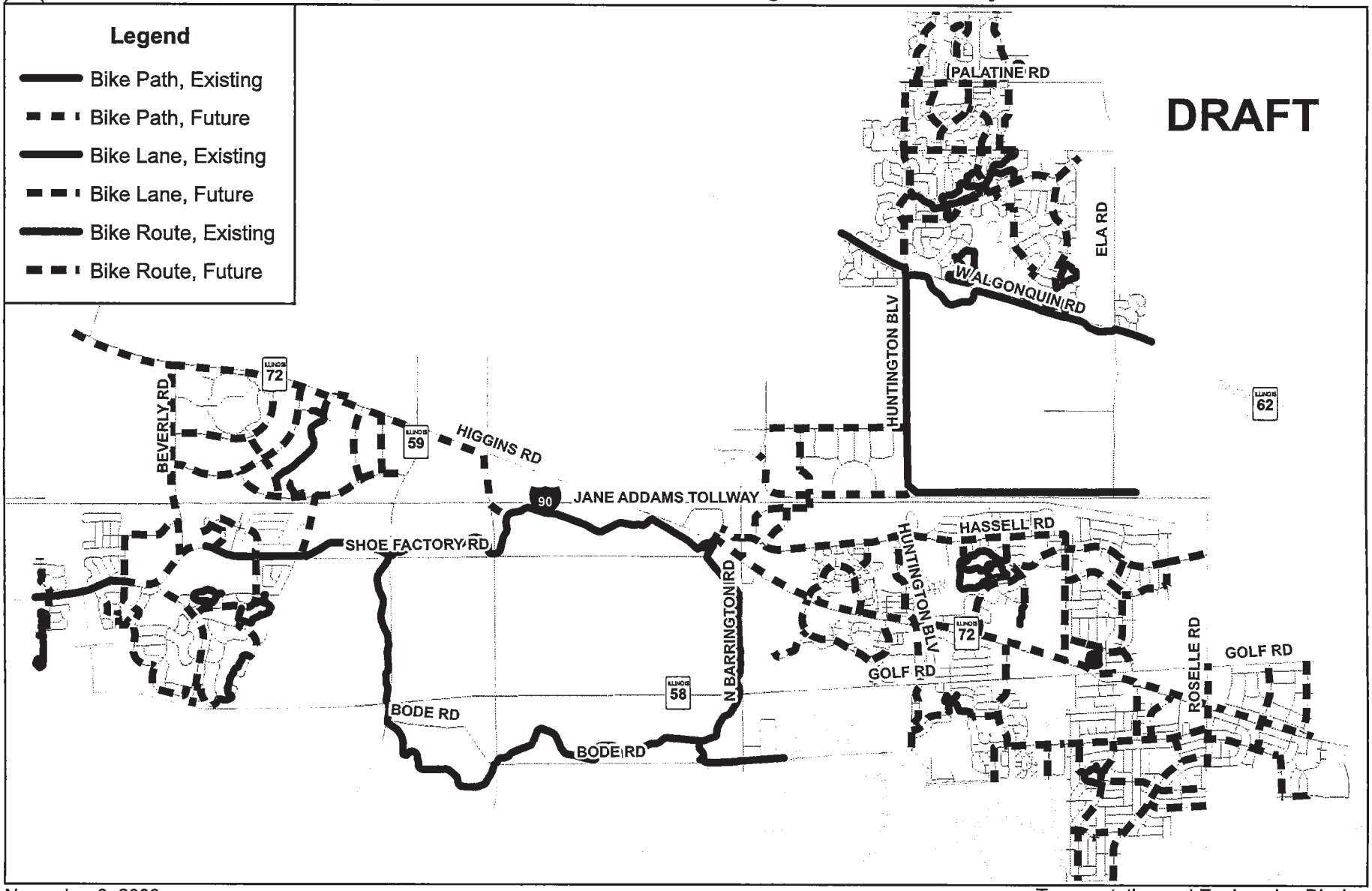

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Figure 4. Village of Hoffman Estates Existing and Future Bicycle Facilities (CENTRAL SECTION)

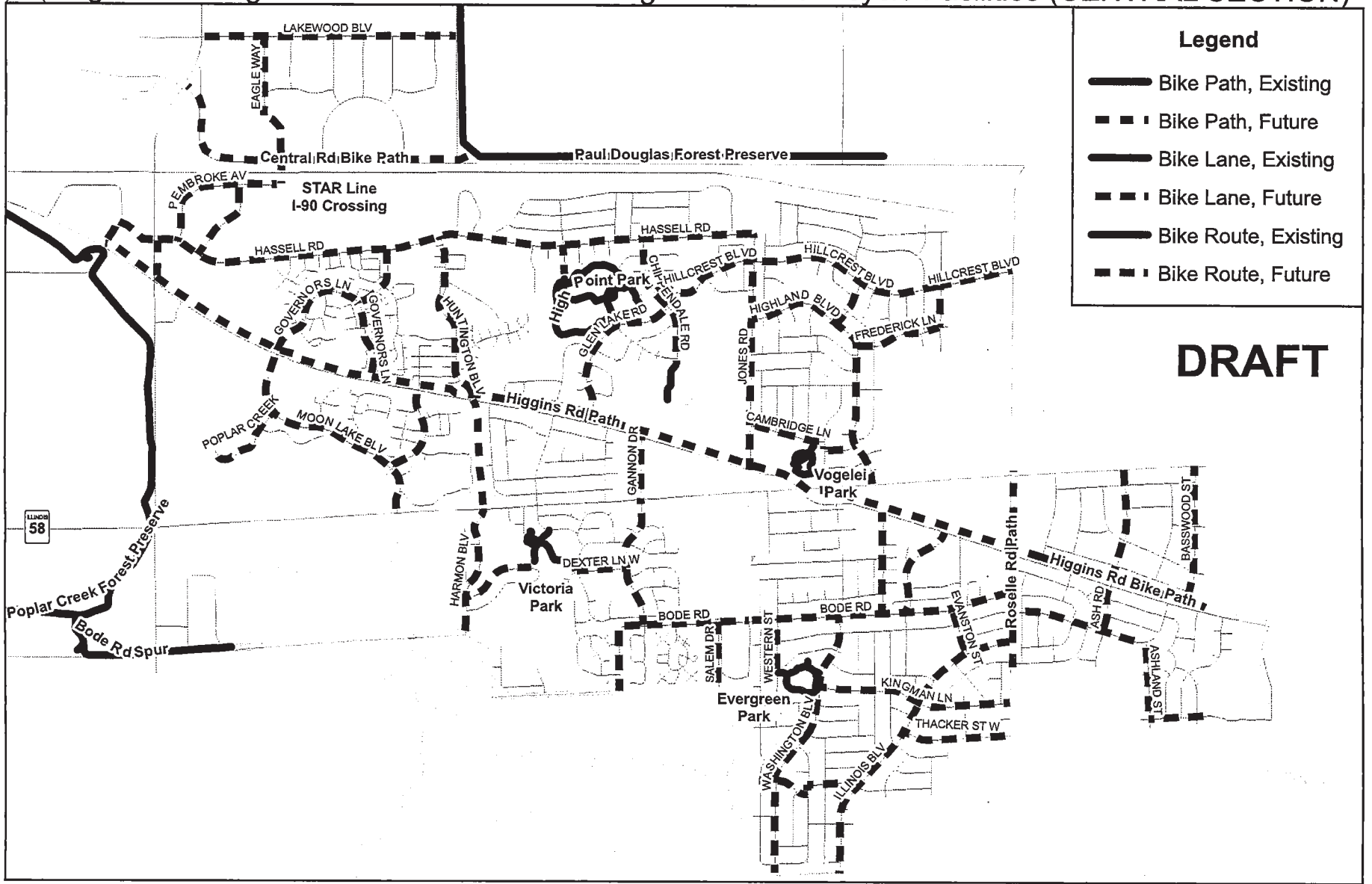

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Figure 5. Village of Hoffman Estates Existing and Future Bicycle Facilities (NORTH SECTION)

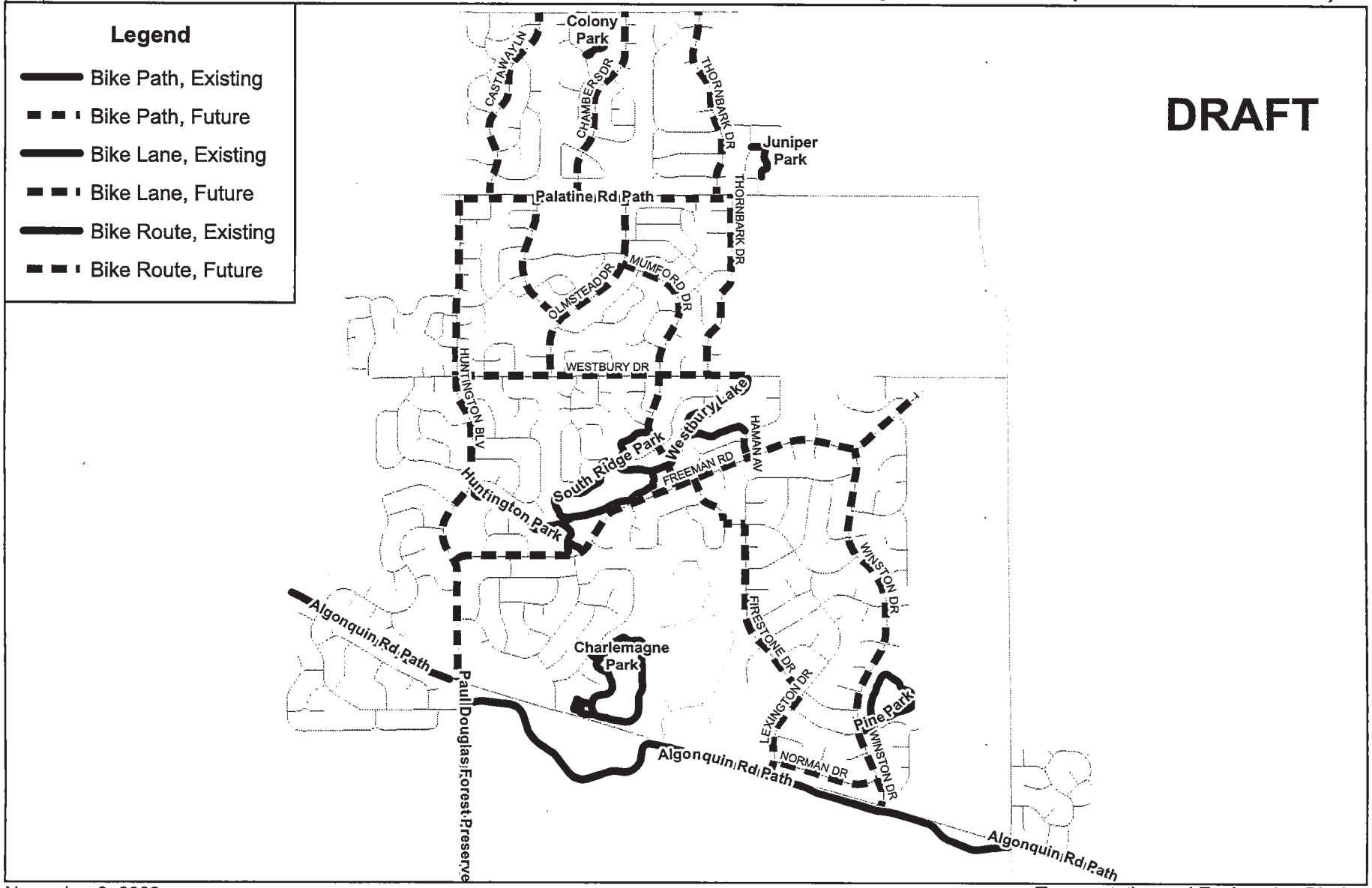

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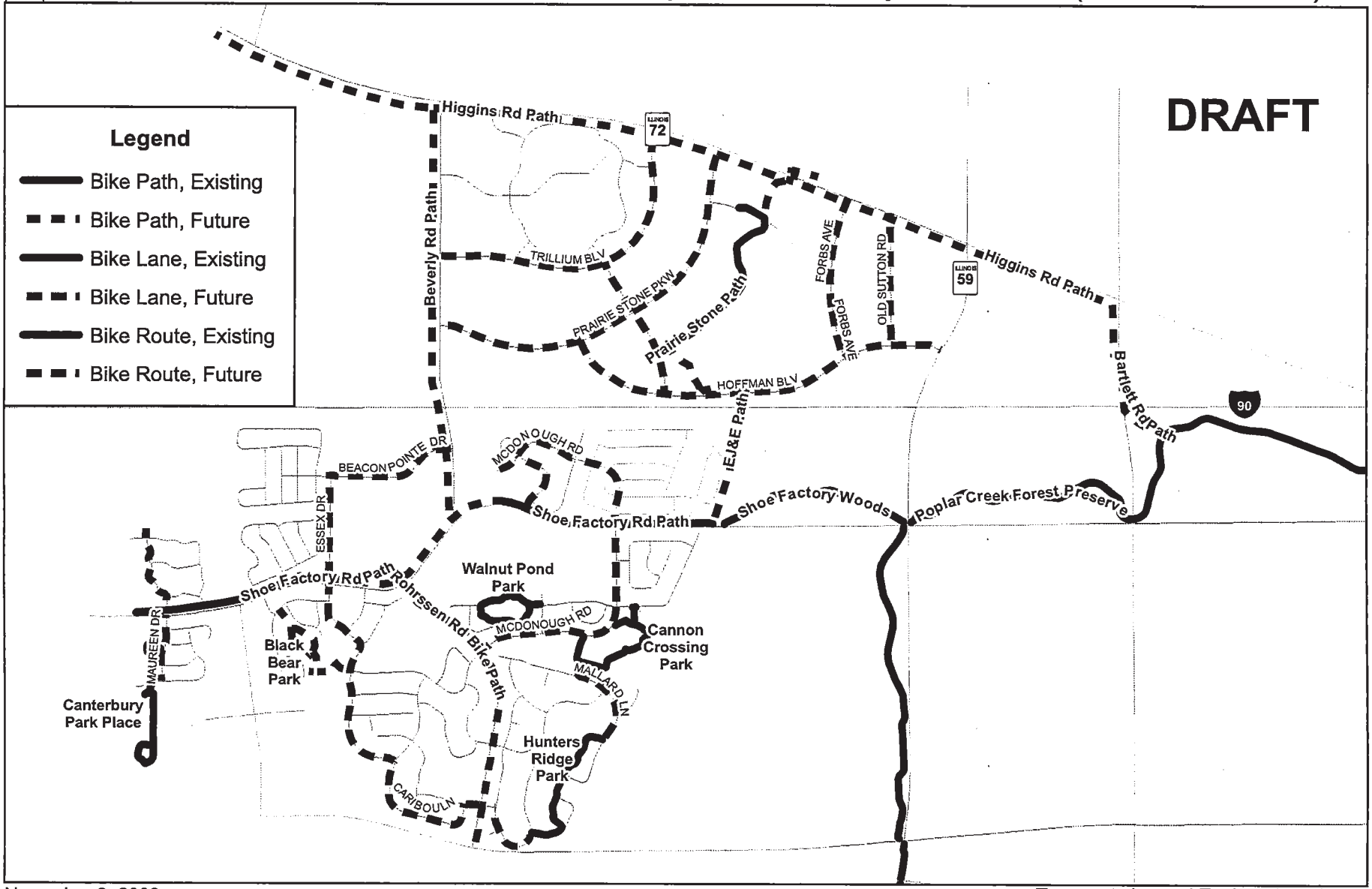
Figure 6. Village of Hoffman Estates Existing and Future Bicycle Facilities (WEST SECTION)



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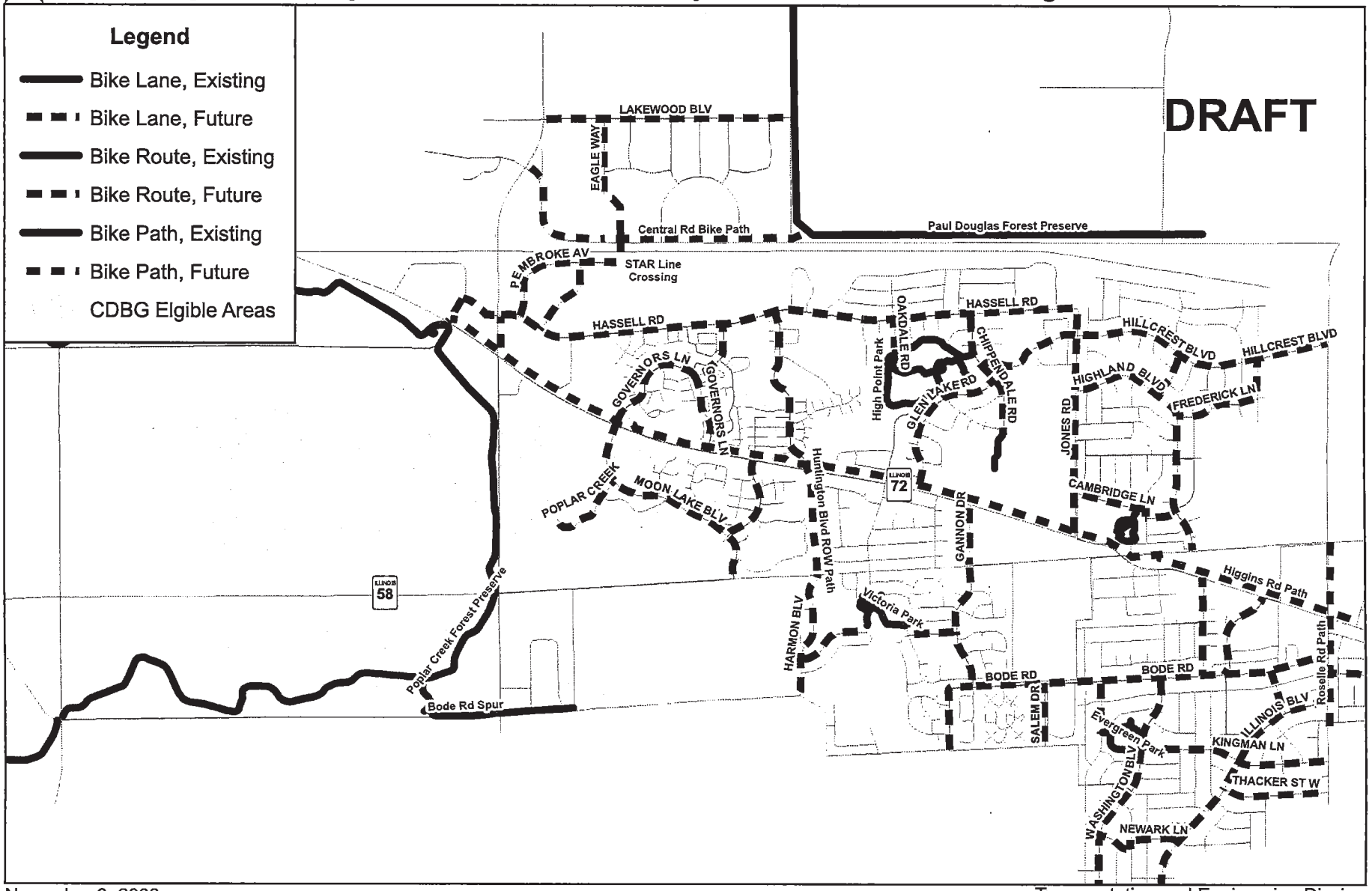

Figure 7. Village of Hoffman Estates Bicycle Facilities in CDBG Eligible Areas

November 3, 2008

Transportation and Engineering Divsion
Village of Hoffman Estates

TRANSPORTATION DIVISION
DEPARTMENT OF DEVELOPMENT SERVICES

OCTOBER MONTHLY REPORT

Attached is the Department of Development Services' Monthly Report for the Transportation Division for the period ending October 31, 2008.

Michael Hankey, P.E.
Director of Transportation and Engineering Division

1. NEW DEVELOPMENTS

Reviewing traffic data and site plans for:

Cabela's Outlots	Plum Farms
Cardone	Turf Room
Huntington Woods Corporate Center	Village Police Station Site
JCL Bioassay	

2. ONGOING COORDINATION

Barrington Road Interchange

- Tollway expected to complete first phase of draft master plan for Northwest Tollway in the near term. This should provide guidance on next steps for interchange plans. Tollway will provide traffic forecast data to Village.
- Meeting with Tollway executives to be scheduled.

Northwest Tollway (I-90) Corridor Study

- Next meeting expected in several months.

O'Hare Noise Compatibility Commission

- No new information.

Pace HOT Line Bus Service (Route 557)

- The most recent ridership data provided by Pace is from June, July and August 2008. The monthly totals were 935, 1033 and 1003 riders, respectively.
- Average daily ridership is trending slightly higher in recent months.
- Monthly totals vary due to the number of weekdays in the month and seasonal variations in transit ridership.
- Set and held transit fair meetings at AT&T and Siemens. Coordination with other HOT Line companies continues.
- Cost information sent to companies for continuation of HOT Line in 2009.

Pace Route 554

- Most recent ridership data provided by Pace for Route 554 was for June and July 2008. Average daily use was 134 and 149 respectively, about 4% higher than 2007 on a comparable year to date basis.
- Status meeting held with Pace and other participating communities. Pace has recommended changes to the route to attract additional riders that would travel through Hanover Park. Hanover Park has agreed to participate. Pace agreements for 2009 service are being reviewed.
- Depending on ridership, Pace will evaluate the possibility of assuming the cost of route, not likely until 2011 or 2012.

Roselle Road Traffic Signal

- To satisfy State and County needs, an update of the previous technical studies related to the intersection was completed by the Village's project consultant.
- New traffic counts were performed by the consultant. Signal warrants are met and the analysis of the interaction between this signal, Golf/Roselle Roads and Higgins/Roselle Roads is proceeding.
- The reports have been submitted to IDOT and Cook County requesting their review and approval of a new traffic signal. Village consultant to follow up on status.
- Discussion with property owners regarding easements for the signal have begun.

STAR Line

- The Task Force met on September 18, 2008 to hear an update from Metra. Work continues on the ridership model to satisfy FTA requirements. Meetings between Metra and the Tollway continue. No timeline is available on next steps. The lack of a State capital bill is a major constraint now. The lack of state matching funds that would be provided through a new capital spending bill precludes the project from moving ahead.
- The Village expressed concern along with Northwest Municipal Conference on the potential implications of the Canadian National Purchase of EJ&E on the STAR Line. These have been communicated to the STB. Metra is discussing with CN representatives.

Taxi Discount Program

- Registration continues with identification cards and coupons sent to residents. To date, a total of 132 residents have registered for the program. Another 20 applications are pending due to scheduling of permanent identification photos.
- Information on program registration provided on Village website.
- Direct mailing distributed to over 2,000 seniors who participate in GROOT program. Fifty-One (51) residents have completed the registration process for the Taxi Discount Program. An additional nine (9) applications are pending due to scheduling of permanent identification photos.
- New agreements with taxi companies to allow trips to the airports were processed.
- Working on contacts for potential additional providers. One company is Spanish speaking while the other operates lift-equipped vehicles.

Transit Information

- Received zero (0) questions regarding public transit information.
- Keeping log of public transit related requests, inquiries, phone calls, etc.
- Public transit information provided on Village website. Information recently expanded to include more links and a map of transit services in the Village.
- Staff is developing an informational brochure on transit services offered in the Village.

- Coordinated Transit Fairs at AT&T and Siemens with Pace. Information on HOT Line and new rideshare program was provided to employees.

3. PRAIRIE STONE TRAFFIC MANAGEMENT

- Event planning and coordination with Police Department, Standard Parking, and Sears Centre staff continues for Sears Centre.

4. TRAFFIC STUDIES / OTHER

- Additional information has been included on the website for engineering services as well as posting new transportation data.
- Gathering traffic volumes on Village collector streets for use in Village GIS database.
- Village ADT Map posted to website.

5. VILLAGE PROJECTS

Algonquin Road Sidewalk

- Staff has met with IDOT to conduct an audit of the project.
- IDOT will prepare invoices. Final invoice received.

Neighborhood Speed Watch Program

- Several residents are considering speed watch. No sites are currently scheduled.

Pavement Management System and Street Revitalization

- 2008 Project is complete. Work has begun on punch list items.
- All streets have been rated for the 2009 project. Presented proposed street lists to the CIB on Monday, October 27, 2008.

Shoe Factory Road - Cook County

- Waiting for response from County on alignment options. County estimates a reply in November.

Higgins Road Pedestrian / Bicycle Project

- CMAQ application submitted to CMAP for 80% Federal Grant Funding. Project received preliminary approval. Staff has started field survey work.

Bicycle Planning

- See agenda item for this month.
- Developing GIS database of surrounding bicycle facilities.
- Gathering bicycle plans from surrounding communities.
- Assessing possible bicycle facilities along specific streets in the Village.
- Keeping log of bicycle related requests, inquiries, phone calls, etc.
- Met with Kane County, Village of Schaumburg, Hoffman Estates Police Department, and Chicagoland Bicycle Federation to discuss Bike Planning.

6. CN PURCHASE OF EJ&E

- Submitted comments on Draft Environmental Impact Statement to STB.
- Attended open house meeting on Draft Environmental Impact Statement held by STB.
- Final EIS from STB expected between December 2008 and January 2009 (target).
- Final STB Board decision following Final EIS.
- CN representatives met with Village officials to discuss and review local concerns.
- Information posted on Village website.