

Elgin O'Hare-West Bypass: Tier Two Bicycle/Pedestrian Accommodations

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Introduction

The Elgin O'Hare - West Bypass (EOWB) project consists of extensive improvements to the transportation system in DuPage and Cook Counties. The improvements include widening the Elgin O'Hare Expressway, extending the expressway from its eastern terminus near Rohlwing Road (IL 53) along the Thorndale Avenue corridor to O'Hare International Airport, constructing a West Bypass connecting I-90 (Jane Addams Memorial Tollway) with I-294 (Tri-State Tollway), and making various multi-modal improvements. In 2005, the *Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users* (SAFETEA-LU) identified the project as one of national and regional significance, resulting in a planning process that the Illinois Department of Transportation (IDOT) has advanced in two parts, or tiers. The Tier One studies focused on a comprehensive approach to evaluating a broad range of improvements in identifying a preferred transportation system alternative for the study area. Tier Two built on the Tier One Record of Decision to further define the features that fit within the corridor with the traditional level of detail of Phase I engineering and environmental studies. It has been decided that the Illinois Tollway will implement and operate the EOWB as a tolled facility under the capital improvement program, *Move Illinois: The Illinois Tollway Driving the Future* (Illinois Tollway, 2011).

Throughout the process, bicycle and pedestrian accommodations along the corridor have been an integral part of the project. Tier One conceptually defined the location and layout of the proposed bicycle and pedestrian improvements. In Tier Two, the focus has been on examining the feasibility and refining the planned bicycle and pedestrian facilities to be located within or adjacent to the Tier Two Build Alternative (planned roadway improvements). Proposed locations and the layout of these facilities have been developed in accordance with the *Illinois Highway Code* (605 ILCS 5/4-220 new), commonly known as the Complete Streets Law, and were coordinated with community interests and bicycle organizations. This memorandum identifies proposed bicycle and pedestrian facilities, but future discussion with local agencies will be necessary to identify construction cost, and maintenance and jurisdictional responsibilities. These topics will be coordinated by the Illinois Tollway during design development.

This memorandum describes the Tier Two bicycle and pedestrian refinements, including analysis methodology, stakeholder coordination efforts, the proposed concept incorporated into the overall geometric plans, and funding considerations.

Background

Early in the study process, stakeholders identified the need for additional bicycle/pedestrian facilities within the study area as a means of reducing vehicular travel.

Stakeholder involvement and the analysis of the regional and community bicycle and pedestrian network are presented in the *Tier One Alternatives Development Report* (FHWA and IDOT, 2009) and *Tier One Final Environmental Impact Statement* (FHWA and IDOT, 2010). An examination of facility conditions reveals that public transportation and nonmotorized travel was found to be a largely delayed travel mode choice because of the fragmented regional bicycle and pedestrian system. Fragmentation impairs access to transit stations and other significant nonmotorized travel generators, such as employment centers, hospitals, libraries, and parks. As a result, the Tier One improvements focused on filling the gaps in both regional and community bicycle and pedestrian facilities to provide better connectivity and continuity to travel generators in the area, and to promote future use.

Nonmotorized transportation needs and appropriate accommodations have been analyzed for conformance with the IDOT Complete Streets Policy, adopted to law in 2007. The policy applies to non-access-controlled highway facilities under the jurisdiction of IDOT. The Complete Streets Policy is based on two premises: the public right-of-way offers opportunities to improve safety, access, and mobility for all travelers; and nonmotorized travel modes are to be an integral element of the state's transportation system and safe for all users traveling along or across state roadways. Accommodations have not been recommended along access controlled freeway/tollway facilities in conformance with state law.

Methodology

Tier Two studies focused on refining the location and layout of the bicycle and pedestrian facilities identified during Tier One. Those studies began with a comprehensive review of the nonmotorized system within the study area to understand the characteristics of the system. Gaps in the nonmotorized system were identified through review of aerial photography, field survey, and input/review of data and maps by stakeholders and the project team. Then proposed location and type of nonmotorized accommodations to be included along the proposed Build Alternative were identified.

The need for pedestrian/bicycle accommodations and the design characteristics of proposed improvements were determined primarily on the basis of the *IDOT Bureau of Design and Environment Manual Chapter 17, Bicycle and Pedestrian Accommodations* (IDOT, 2011) and engineering judgment. Coordination with IDOT's State Bicycle and Pedestrian Coordinator was performed to ensure that the methodology and planned improvements follow state design criteria and guidelines. Policies and ordinances adopted by Cook County, DuPage County and local municipalities were reviewed and referenced as necessary. Extensive coordination was conducted with local agencies, interest groups, and the Illinois Tollway to obtain feedback on the proposed plan.

The bicycle and pedestrian analyses included a warrant analysis and travel needs assessment, facility type determination, and identification of needed segments outside the EOWB project limits to provide continuity/connectivity throughout the system. The bicycle and pedestrian system throughout the study area includes key corridors traversing the study area (see Exhibit 1). The evaluation effort concluded with the development of the Tier Two Bicycle and Pedestrian System Concept Plan that identifies and will help facilitate implementation of future improvements to the area's nonmotorized system (see Exhibit 2).

Warrant Analysis and Travel Needs Assessment

The review of the nonmotorized system included a detailed warrant analysis and travel needs assessment focused on non-access-controlled highways within the project limits. The analysis process included the following:

- Collecting data
- Coordinating with local agencies to discuss existing and proposed bikeways in regionally or locally adopted plans
- Identifying significant points of interest within the communities (i.e., significant generators of nonmotorized travel)
- Identifying natural or manmade barriers along the roadway corridors and crossings
- Gathering feedback on the EOWB nonmotorized accommodations process to incorporate into the plan.

The “warrants,” identified in Chapter 17 of the *Bureau of Design and Environment Manual*, indicate the minimum conditions under which the accommodations can be justified. Per the manual, bicycle and pedestrian accommodations should be provided if at least one of these five warrants exist:

1. The highway or street is designated a bikeway in a regionally or locally adopted bike plan.
2. The projected 2-way bicycle traffic volume, estimated 5 years from build out, will approximate 25 ADT or more during the peak 3 months of bicycle season where vehicular traffic exceeds 1,000 ADT.
3. The route provides access to a park, recreational area, school, or other significant destination.
4. The route provides unique access across a natural or manmade barrier.
5. The highway project will adversely affect the recreational or transportation utility of an independent bikeway or trail.

If one or more warrants apply to a specific site, it does not always mean that bicycle and pedestrian improvements should be provided. Every situation is unique, and warrant guidelines must be supplemented by the effects of specific site conditions and the application of engineering judgment. Table 1 summarizes the findings of the warrant analysis.

The travel needs assessment examined site conditions, including bicycle and pedestrian travel origins and destinations. There are numerous bicycle and pedestrian travel generators within the project area: employment and retail centers, community facilities, schools, recreational facilities, and transit stations. Travel generators were identified through the data collection process and through coordination with local agencies to identify significant points of interest within each community. Exhibit 3, *Bicycle and Pedestrian Travel Generators*, shows the locations of land uses generating high proportions of nonmotorized travelers.

TABLE 1
EOWB Corridor Crossing Warrant Analysis

| Crossroad | Jurisdiction | Posted Speed (mph) | 2040 ADT Vehicular (two-way) | Bicycle ADT (two-way) | Bicyclist (users/peak hour) | Warrants Met |
|------------------------------|--|--------------------|------------------------------|-----------------------|-----------------------------|---------------|
| Elgin O'Hare Corridor | | | | | | |
| Springinsguth Road | IL 19 to Crest Ave.: Schaumburg Township | 30 | 9,000 | >25 | >300 | 1, 2, 3, 4, 5 |
| | South of IL 19: Village of Schaumburg | | | | | |
| Irving Park Road (IL 19) | IDOT | 40 | 21,600 | >25 | >300 | 2, 3, 4 |
| Rodenburg Road | North of IL 19: Village of Schaumburg | 30 | 18,100 | >25 | >300 | 2, 3, 4 |
| | North of IL 19: Schaumburg Township | | | | | |
| Wright Boulevard | Village of Schaumburg | 30 | 12,400 | >25 | >300 | 2, 3, 4 |
| Mitchell Boulevard | Village of Schaumburg | 25 | NA | >25 | >300 | 2, 3, 4 |
| Roselle Road | Cook County | 30 | 20,400 | >25 | >300 | 2, 3, 4 |
| Plum Grove Road | Village of Roselle | 30 | NA | >25 | >300 | 1, 2, 3, 4, 5 |
| Meacham Road | Cook County | 40 | 13,400 | >25 | >300 | 2, 3, 4 |
| Medinah Road | DuPage County | 40 | 13,400 | >25 | >300 | 2, 3, 4 |
| IL 53 | IDOT | 40 | 23,400 | >25 | >300 | 2, 3, 4 |
| Park Boulevard | Village of Itasca | 35 | 8,500 | >25 | >300 | 2, 3, 4 |
| Arlington Heights Road | Village of Itasca and DuPage County | 45 | 12,700 | >25 | >300 | 2, 3, 4 |
| Prospect Avenue | DuPage County | 40 | 18,300 | >25 | >300 | 2, 3, 4 |
| Mittel Drive | City of Wood Dale | 30 | 5,700 | >25 | >300 | 1, 2, 3, 4, 5 |
| Wood Dale Road | DuPage County | 40 | 16,500 | >25 | >300 | 2, 3, 4 |
| Lively Boulevard | North of Thorndale: Elk Grove Village | 30 | 8,600 | >25 | >300 | 2, 3, 4 |
| | South of Thorndale: City of Wood Dale | | | | | |
| IL 83 | IDOT | 45 | 37,000 | >25 | >300 | 2, 3, 4 |
| York Road | DuPage County | 40 | 27,200 | >25 | >300 | 2, 3, 4 |

TABLE 1
EOWB Corridor Crossing Warrant Analysis

| Crossroad | Jurisdiction | Posted Speed (mph) | 2040 ADT Vehicular (two-way) | Bicycle ADT (two-way) | Bicyclist (users/peak hour) | Warrants Met |
|-----------------------------|--------------------------|--------------------|------------------------------|-----------------------|-----------------------------|--------------|
| West Bypass Corridor | | | | | | |
| Franklin Avenue | Village of Franklin Park | 35 | 22,000 | >25 | >300 | 2, 3, 4 |
| Irving Park Road (IL 19) | IDOT | 35 | 37,000 | >25 | >300 | 2, 3, 4 |
| Grand Avenue | IDOT | 35 | 33,800 | >25 | >300 | 2, 3, 4 |
| Touhy Avenue (IL 72) | IDOT | 45 | 50,200 | >25 | >300 | 2, 3, 4 |
| I-90 | | | | | | |
| Elmhurst Road | IDOT | 40 | 35,800 | >25 | >300 | 2, 3, 4 |

A comprehensive and integrated plan for nonmotorized facilities was developed on the basis of warrant analysis findings. The following elements were considered as part of the plan development:

- Roadway segments
- Roadway crossings
- Connections to pedestrian and bicycle corridors
- Gap elimination and prevention
- Connection among transit services and other nonmotorized travel modes

Facility Type

The selection of bicycle and pedestrian facility types is based on the type of bicycle user targeted and on site-specific travel characteristics, such as traffic volume and speed. The bicycle user targeted for the EOWB is the “basic bicyclist,” or casual or new adult/teenage riders who are less confident in their ability to operate in traffic without special provisions for bicycles. These users prefer comfortable access to destinations, preferably a direct route, using low-speed, low traffic-volume streets or designated bicycle facilities. Such users also prefer well-defined separation of bicycles and motor vehicles on arterial and collector streets or separate bike paths.

The following facility types exist or are being considered at various locations along the proposed improvement corridors:

- **Bicycle Lanes** – A bicycle lane is a section of roadway designated by striping, signing, or pavement markings for preferential or exclusive use by bicyclists. It delineates the right-of-way assigned to bicyclists and motorists, in part to provide for more predictable movements by each. IDOT policy recommends a minimum width for curb and gutter sections (including gutter pan) The recommended width of a bike lane is 5 to 6 feet depending on design year vehicular traffic and posted speed.

- **Bicycle Paths/Side Paths**—Side paths, or shared use or multi-use paths, are facilities on exclusive right-of-way with minimal or no cross flow by motor vehicles. The paths are separated from motor vehicular traffic by open space. Paths normally are two-way facilities that may be within the road right-of-way or within a park or easement. IDOT policy recommends pavement width of 10 to 12 feet, depending on the expected usage. A minimum 5-foot buffer from the curb face is recommended, and railings or barriers 3.5 feet high are required wherever a 2-way side path is proposed within 5 feet of the face of curb on an urban street.
- **Bicycle and Pedestrian Crossings**—Walkways and bikeways along a road provide mobility, but a successful bicycle and pedestrian network also provides safe and convenient crossing opportunities. As a result, IDOT seeks to provide for safe bicycle and pedestrian crossing of state roadways to increase the safety of bicycle and pedestrian users and to promote bicycle and pedestrian travel.
- **Sidewalks**—A sidewalk typically is a 5-foot-wide pathway (7 feet at back-of-curb) with a prepared surface between the curb lines or lateral lines of a roadway and adjacent property lines, intended for pedestrian use.

Selection of the appropriate facility type depends on the type of roadway improvements, traffic characteristics and other design factors. Proposed facility types in the EOWB corridor include side paths and sidewalks. Table 2 lists segments within the corridor where either type is planned as part of the overall Tier Two Bicycle and Pedestrian Plan (see Exhibit 2). The planned improvements within the project limits have been incorporated into the project geometric plans. To create a cohesive network along the corridor, some facilities beyond the EOWB improvement limits also have been identified. Those facilities would be implemented by others independently of the EOWB project. The locations that extend beyond the EOWB Tier Two Build Alternative footprint connect to a nearby intersection; an adjacent path or sidewalk; a bicycle and pedestrian network; or a public transportation facility.

Stakeholder Involvement

Extensive coordination was conducted throughout the bicycle and pedestrian studies. The coordination with local agencies included collecting information regarding existing and proposed bikeways in regionally or locally adopted bike plans; identifying significant points of interest within communities; identifying natural and manmade barriers along roadway corridors; and gathering input regarding potential bicycle and pedestrian accommodations. Reasonable effort was made to solicit input of agencies, organizations, and persons who have an interest in the project and nonmotorized accommodations in the area.

Meetings were held with affected communities and interest groups to discuss the bicycle and pedestrian comprehensive plan (see Table 3). The meetings provided an opportunity to exchange information and for the communities to weigh in and concur on the suggested improvements, as well as provide feedback and suggestions related directly to their interests.

The Corridor Planning Group meetings provided a forum for individuals to ask questions and to provide feedback. Throughout Tier Two, eight Corridor Planning Group meetings were held from August 2010 through 2012. In addition, two Public Information Meetings and a Public Hearing were held, which provided opportunity for stakeholders to provide feedback on the plan.

TABLE 2
EOWB Proposed Bicycle and Pedestrian Facility Types

| Segment | From | To | Side Path | Sidewalk |
|---|--------------------------------------|--------------------------------------|-----------|----------|
| Elgin O'Hare westbound frontage road | Springingsguth Road | Wright Boulevard | 10 feet | |
| Springingsguth Road | South of eastbound frontage road | IL -19 | 10 feet | |
| IL-19 | East of eastbound frontage road | Westbound frontage road | | 5 feet |
| Wright Boulevard | eastbound frontage road | Westbound frontage road | 10 feet | |
| Roselle Road ^{a,b} | Devon Avenue | Wise Road | 10 feet | |
| Meacham Road/ Medinah Road | Eastbound frontage road | Westbound frontage road | 10 feet | |
| Elgin O'Hare westbound frontage road | Meacham Road/Medinah Road | IL 53 | 10 feet | |
| IL 53 | Thorndale Avenue | Hamilton Parkway | 10 feet | |
| IL 53 | Norwood Ave | Hamilton Parkway | | 5 feet |
| IL 53 ^a | Hamilton Parkway | Devon Avenue | 10 feet | |
| Devon Avenue ^a | IL 53 | Nerge Road | 10 feet | |
| Devon Avenue | Nerge Road | Park Boulevard | 10 feet | |
| Park Boulevard ^{a,c} | Devon Avenue | Pierce Road | 10 feet | |
| Pierce Road | Park Boulevard | Ketter Drive | 10 feet | |
| Millers Crossing ^a | Park Boulevard | Walnut Street | 10 feet | |
| Walnut Street ^a | Bloomingtondale Road | Millers Crossing | 10 feet | |
| Bloomingtondale Road ^a | Lombard Road | Walnut Street | 10 feet | |
| Elgin O'Hare eastbound frontage road | Park Boulevard | Arlington Heights Road | | 5 feet |
| Park Blvd West | Miller Crossing | Park Boulevard North | 10 feet | |
| Ketter Drive | Pierce Road | Arlington Heights Road | 10 feet | |
| Devon Avenue | Park Boulevard | Rohwling Road | 10 feet | |
| Devon Avenue | West of I-290 | East of I-290 | | 5 feet |
| Elgin O'Hare westbound frontage road ^d | Arlington Heights Road | Wood Dale Road | 10 feet | |
| Prospect Avenue | eastbound frontage road | North of westbound frontage road | | 5 feet |
| Mittel Road | Bauman Court | westbound frontage road | 10 feet | |
| Wood Dale Road | Elgin O'Hare eastbound frontage road | Elgin O'Hare westbound frontage road | 10 feet | |
| Elgin O'Hare westbound frontage road ^e | Wood Dale Road | IL 83 | | 5 feet |
| Elgin O'Hare eastbound frontage road ^e | Wood Dale Road | York Road | 10 feet | |
| Lively Boulevard ^a | Elgin O'Hare westbound frontage road | Elgin O'Hare eastbound frontage road | 10 feet | |
| Arlington Heights Road | North of westbound frontage road | South of eastbound frontage road | | 5 feet |

TABLE 2
EOWB Proposed Bicycle and Pedestrian Facility Types

| Segment | From | To | Side Path | Sidewalk |
|-----------------------------|--------------------------------------|-------------------------------|-----------|----------|
| Elgin O'Hare ^e | York Road | West Terminal transit station | 10 feet | |
| Sivert Drive ^b | Elgin O'Hare eastbound frontage road | Central Avenue | 10 feet | |
| Central Avenue ^a | Sivert Drive | Foster Avenue | 10 feet | |
| Foster Avenue ^a | Central Avenue | Wood Dale Road | 10 feet | |
| IL 83 | South of eastbound frontage road | Tower Lane | 10 feet | |
| York Road ^b | Green Street | Foster Avenue | 10 feet | |
| York Road | Foster Avenue | Supreme Drive | 10 feet | |
| York Road ^b | Supreme Drive | Devon Avenue | 10 feet | |
| Elmhurst Road | Devon Avenue | Pratt Boulevard | 10 feet | |
| Elmhurst Road ^a | Pratt Boulevard | Touhy Avenue | 10 feet | |
| Elmhurst Road | Touhy Avenue | Oasis Mobile Home Park | 10 feet | |
| Elmhurst Road | Touhy Avenue | Oasis Mobile Home Park | | 5 feet |
| Mt Prospect | Touhy Avenue | South of Jarvis | | 5 feet |
| Higgins Road | West of Touhy | Elmhurst Road | | 5 feet |
| North Avenue | North West Avenue | Project limits | | 5 feet |
| North West Avenue | North Avenue | North of Connector A | | 5 feet |
| Grand Avenue | County Line Road | Garnet Road | 10 feet | |
| Oakton Street | West of Elmhurst Road | Elmhurst project limit | | 5 feet |
| Elmhurst Road ^f | Oasis Mobile Home Park | Oakton Avenue | | 6 feet |
| Touhy Avenue | Elmhurst Road | East of Mount Prospect Road | 10 feet | |
| Franklin Avenue | County Line Road | Wolf Road | 10 feet | |
| Taft Avenue ^g | Franklin Avenue | Irving Park Road (IL 19) | 10 feet | |

Note: Limits of the bicycle and pedestrian facilities are approximate and in some locations are estimated based on the nearest street. Identified facility locations include segments within and outside the EOWB improvement limits

^aThe proposed bicycle and pedestrian facility is outside the EOWB improvement limits; implementation would be the responsibility of others.

^bParts of the proposed accommodations are outside the EOWB improvement limits; implementation would be the responsibility of others.

^cPart of the proposed extension of Park Boulevard with bidirectional side path accommodations is included within the project limits.

^dThe westbound frontage road between Arlington Heights Road and Wood Dale Road is discontinuous from Prospect Avenue to west of Salt Creek. A bidirectional side path accommodation is proposed there, pending resolution of frontage road jurisdiction and local agency responsibilities for the side path.

^eBicycle and pedestrian accommodations to the proposed Western Terminal transit station east of York Road are beyond the proposed plan.

^fSide path includes a one-way 6-foot pair located on the east and west sides of Elmhurst Road north and south of I-90 with a 10-foot barrier protected path through the Diverging Diamond Interchange.

^gAccommodations along Taft Avenue to be verified following determination of proposed jurisdictional responsibilities for the connector roadway.

Potential Improvements Beyond Proposed Plan

A cohesive network of bicycle and pedestrian improvements are proposed along the EOWB corridor as part of the Tier Two Build Alternative and just outside the project limits. Key pedestrian and bicyclist corridors across the overall study area were reviewed, the object being to identify missing connectors or gaps throughout the key corridors crossing the study area (see Exhibit 1) and to identify linkages that would eliminate the gaps.

Using the proposed regional and community trails identified in Tier One, a suitability analysis was conducted to identify linkages in the bicycle and pedestrian network. The links were analyzed based on connectivity to the local or multimodal

network, lack of redundancy across the network, safety considerations, and potential environmental impacts (see Table 4). Stakeholder input was considered through the review process, including suggestions to add or eliminate linkages based on community priorities and plans. Seventeen potential segments were found to be suitable for implementation with appropriate mitigation. Implementation of those segments would be the responsibility of others.

TABLE 3
Bicycle and Pedestrian Comprehensive Plan Stakeholder Meetings

| Date | Meeting |
|-------------------|--------------------------------|
| October 11, 2010 | Medinah Homeowners Association |
| October 11, 2010 | Northwest Municipal Conference |
| October 11, 2010 | Active Transportation Alliance |
| October 12, 2010 | Village of Itasca |
| October 12, 2010 | Village of Elk Grove Village |
| October 13, 2010 | City of Wood Dale |
| October 14, 2010 | Village of Schaumburg |
| October 14, 2010 | Village of Hanover Park |
| October 22, 2010 | City of Des Plaines |
| November 2, 2010 | Village of Franklin Park |
| November 10, 2010 | Village of Roselle |
| November 17, 2010 | DuPage County |
| November 23, 2010 | Active Transportation Alliance |
| October 10, 2011 | Active Transportation Alliance |

Tier Two Bicycle and Pedestrian Concept Plan and Proposed Accommodations

The Tier Two Bicycle and Pedestrian System Concept Plan (see Exhibit 2) includes proposed bicycle and pedestrian side paths and sidewalks within and beyond the EOWB improvement limits, thus establishing a cohesive nonmotorized system. The following are key features of the system concept plan:

- 15 miles of side paths within the Tier Two Build Alternative footprint
- 1.67 miles of sidewalks within the Tier Two Build Alternative footprint
- 10 miles of bicycle and pedestrian facilities outside the Tier Two Build Alternative footprint; these facilities would need to be constructed by others independently of the EOWB project

The main feature of the planned bicycle and pedestrian facilities is a bidirectional side path (with a 10-foot cross-section set back at least 5 feet from the edge of the roadway) along the east-west corridor of the project extending from the west side of O'Hare Airport to Hanover Park. The route is adjacent to the paralleling frontage road system, where provided.

TABLE 4
EOWB Suitability Analysis for Segments Beyond Proposed Plan

| Proposed Tier One Improvement | Tier Two Segment | Connects to Local System | Provides Multimodal Connection | Creates Redundancy in Network | Safety | Potential Environmental Impact | Jurisdiction | Suitability |
|-------------------------------|-------------------------|--------------------------|--------------------------------|-------------------------------|-------------------|--------------------------------|---------------------|----------------|
| Regional Trail C | Segment 1 | X | | | On-road facility | Floodplain | Elmhurst | X ^a |
| | Segment 2 | X | | | Off-road facility | NA | Elmhurst | X |
| Regional Trail A | Segment 3 | X | | | Off-road facility | NA | Elk Grove Village | X |
| | Segment 4 ^b | X | | X | On-road facility | Floodplain | Hoffman Estates | X ^a |
| | Segment 5 | X | | | On-road facility | NA | Hoffman Estates | X |
| Miscellaneous Community Link | Segment 6 | X | | | On-road facility | NA | Hoffman Estates | X |
| | Segment 7 | X | | | On-road facility | NA | Hoffman Estates | X |
| | Segment 8 ^b | X | | | Off-road facility | NA | Hanover Park | X |
| | Segment 9 ^b | X | X | X | On-road facility | Floodplain | Hanover Park | X ^a |
| | Segment 10 ^b | X | X | X | On-road facility | Floodplain | Roselle/Cook County | X ^a |
| | Segment 11 ^b | X | | X | On-road facility | Floodplain | Roselle/Cook County | X ^a |
| | Segment 12 ^b | X | X | X | On-road facility | NA | Itasca | X |
| Community Trail 2 | Segment 13 ^b | X | X | X | Off-road facility | NA | Wood Dale | X |
| | Segment 14 ^b | X | | X | Off-road facility | Floodplain | DuPage County | X ^a |
| | Segment 15 ^c | NA | NA | X | NA | NA | Elk Grove Village | |
| Community Trail 3 | Segment 16 ^c | NA | NA | X | NA | NA | Wood Dale | |
| Regional Trail B | Segment 17 ^c | NA | NA | X | NA | NA | Elk Grove Village | |

^aSuitable if appropriate floodplain mitigation is performed before implementation.

^bSegment requested during public outreach.

^cRemoval of proposed segment requested during public outreach.

For the areas where a frontage road is not provided (Wright Boulevard to Meacham Road/Medinah Road), alternate routes along the bicycle and pedestrian network or those recommended as part of system linkages beyond the proposed plan serve to make the connections in traveling west to east. Another feature of the plan is a one-way pair of side paths along Elmhurst Road (each with a 6-foot cross-section) north of IL 72 to north of I-90. These side paths would connect nonmotorized traffic generators and enhance safety in an area of Elmhurst Road with reported pedestrian and bicycle related crashes.

As part of the Tier Two Build Alternative geometry, assumptions were made with respect to crossings at intersections to identify likely stop bar placement and operational characteristics related to pedestrian crossing times. Detailed signing and pavement marking plans required for pedestrian and bicycle facilities will be identified with future design efforts.

Table 5 lists Elgin O'Hare frontage road segments in the Tier Two Build Alternative where bicycle and pedestrian improvements are proposed and the local travel generators along those segments. One-way frontage roads run parallel to the corridor, with the exception from IL 53 to Prospect Avenue where the frontage road is discontinuous through the system interchange at I-290, and east of IL 83 where the westbound frontage road is two-way.

Table 6 lists the proposed bicycle and pedestrian accommodations along all roads crossing the Elgin O'Hare or West Bypass corridors. The proposed improvements on the crossroads generally are based on policy requirements, jurisdiction, and the scope and limits of proposed crossroad improvements. In some cases, accommodation is not required by policy but is proposed based on stakeholder coordination and consideration of travel generator connection opportunities. There are also cases in which improvements outside the project footprint are identified to provide an integrated plan for future accommodations.

As indicated by the warrant analysis, accommodations have been considered for roadways that provide access across a manmade barrier, which is the case for roads crossing over or under the Elgin O'Hare and West Bypass corridors. If the roadway is not under state jurisdiction or proposed for improvement with the Tier Two Build Alternative, bicycle and pedestrian accommodations are not recommended. Accommodations are not recommended along roadways close to paths (such as Irving Park Road and the Springinsguth Road trail) or if a trail already exists (such as North DuPage Regional Trail at Plum Grove Road).

Bicycle and pedestrian accommodations are not recommended along the system interchanges at I-290, I-90, I-294, and Elgin O'Hare/West Bypass. The *Illinois Highway Code* does not require a warrant analysis or travel needs assessment along fully access-controlled facilities. If the crossing road is a fully access-controlled facility, as is the case for all three locations, then pedestrian and bicycle accommodations can be excluded from consideration.

Bicycle and pedestrian accommodations are proposed south of Park Boulevard and south of Lively Boulevard. Both locations are included in the proposed plan based on coordination with local communities and findings of the needs assessment. However, as the locations are outside project limits, they would need to be implemented by others. At Park Boulevard, the proposed side path travels south from the proposed Elgin O'Hare eastbound frontage road sidewalk to Bloomingdale Road where it connects with future community trails, residential areas, and the Itasca Metra Station. At Lively Boulevard, the proposed side path runs south

from the Elgin O'Hare corridor to connect to future community trails and provides access to the City of Wood Dale's redevelopment area, parks, and residential areas.

TABLE 5
EOWB Proposed Bicycle and Pedestrian Improvements along Frontage Roads

| Frontage Road Segments | Proposed Improvement | Travel Generators ^a |
|--|---|---|
| Springinsguth Road to Wright Boulevard | Bidirectional side path along westbound frontage road. | Springinsguth Road bike trail; Spectrum Industrial Park; EOWB proposed transit station (Schaumburg Metra Station); Metra Commuter Rail Schaumburg Station. |
| Meacham Road/Medinah Road to IL 53 | Bidirectional side path along westbound frontage road. | Proposed bicycle and pedestrian accommodations at IL 53; employment centers; schools; parks; residential homes located north of the westbound frontage road. |
| IL 53 to Prospect Avenue | Bidirectional side path along Devon Avenue and Park Boulevard; sidewalk along eastbound frontage road from Park Boulevard to Arlington Heights Road. ^b | Existing bike trails; Hamilton Lakes Commercial Business Park; schools; parks. |
| Prospect Avenue to Wood Dale Road ^c | Bidirectional side path along westbound frontage road. | Existing regional and community bike trails (Salt Creek Greenway Regional Trail); employment centers; schools; parks; residential homes located north of the westbound frontage road. |
| Wood Dale Road to IL 83 | Bidirectional side path along eastbound frontage road; sidewalk along westbound frontage road. | Existing regional and community bike trails; City of Wood Dale's <i>Thorndale Corridor Master Plan</i> (Wood Dale, 2009) development area; employment center; EOWB proposed transit station (Wood Dale Road Station). |
| IL 83 to York Road ^d | Bidirectional side path along eastbound frontage road. | Proposed EOWB Western Terminal transit station; proposed Western Terminal intermodal center, providing access to other transportation modes (CTA, Pace, High Speed Rail, People Mover). |

^aThe travel generators serve as examples of major features in the area.

^bParts of the proposed improvements extend outside the EOWB improvement limits.

^cThe westbound frontage/service road between Prospect Avenue and Wood Dale Road is discontinuous from Prospect Avenue to west of Salt Creek. A bidirectional side path accommodation is proposed in this location.

^dThe connection from York Road into the proposed Western Terminal area is outside the project limits and would be the responsibility of others

Financing of Nonmotorized Improvements

Cost, maintenance, and jurisdictional responsibilities for proposed pedestrian and bicycle facilities within the Tier Two Build Alternative will be determined during final design. Because Illinois Tollway policies do not address these accommodations, IDOT policy will be used to guide discussions regarding pedestrian and bicycle facility responsibilities. Other county and municipal policies referenced previously will also be utilized as necessary.

TABLE 6
EOWB Crossing Roadway Bicycle and Pedestrian Accommodations

| Crossing Roadway | Tier Two Build Alternative | IDOT Policy Requirements ^a | Jurisdiction | Proposed Improvement | Travel Generators ^b |
|-------------------------------|-------------------------------|---------------------------------------|---------------|--|---|
| Elgin O'Hare Corridor | | | | | |
| Roselle Road ^c | Widening | Not required | Cook County | Bidirectional side path along Roselle Road from Devon Avenue to Wise Road. | Parcels north and south of the Elgin O'Hare corridor as part of the Village of Roselle's redevelopment plan; EOWB proposed transit station (Roselle Road Station); Village Town Center. |
| IL 53 ^c | Grade separation and widening | Required | IDOT | Bidirectional side path from Thorndale Avenue to Devon Avenue. | Hamilton Lakes Commercial Business Park; Itasca Manufacturing District. |
| Park Boulevard ^c | Widening | Not required | Local Agency | Bidirectional side path from Devon Avenue to Arlington Heights Road. | EOWB proposed transit station (Hamilton Lakes Station); Hamilton Lakes Commercial Business Park; community bikeways and residential areas to the south. |
| Wood Dale Road | Widening | Not required | DuPage County | Bidirectional side path connecting the westbound and eastbound frontage road. | EOWB proposed transit station (Wood Dale Road Station); City of Wood Dale's <i>Thorndale Corridor Master Plan</i> (Wood Dale, 2009) development area; community and regional trails. |
| Lively Boulevard ^c | Realigned | Not required | Local Agency | Bidirectional side path connecting westbound and eastbound frontage road. | EOWB proposed transit station (Wood Dale Road Station); City of Wood Dale's <i>Thorndale Corridor Master Plan</i> (Wood Dale, 2009) development area; community and regional trails. |
| IL 83 | Widening | Required | IDOT | Bidirectional side path from Bryn Mawr Avenue to Tower Lane. | Industrial and commercial areas to the north; residential areas to the south. |
| York Road ^c | Widening | Not required | DuPage County | Bidirectional side path from Supreme Drive to Green Street. | Industrial areas; employment centers; recreational facilities in Bensenville. |
| West Bypass Corridor | | | | | |
| Elmhurst Road ^c | Widening | Required | IDOT | Bidirectional side path from Devon Avenue to Oakton Street (width decreases to 5' from the Oasis Mobile Home Park to Oakton Street). | Mount Prospect Athletic Fields; industrial and commercial areas north and south of I-90; residential areas, such as the Oasis Mobile Home Park. |

TABLE 6
EOWB Crossing Roadway Bicycle and Pedestrian Accommodations

| Crossing Roadway | Tier Two Build Alternative | IDOT Policy Requirements^a | Jurisdiction | Proposed Improvement | Travel Generators^b |
|------------------------------------|-----------------------------------|---|---------------------|---|---|
| Touhy Avenue (IL 72) | Grade separation and widening | Required | IDOT | Bidirectional side path from Elmhurst Road to Mount Prospect Road. | Industrial, commercial and residential areas; community bikeways. |
| Irving Park Road (IL 19) | Widening | Required | IDOT | No proposed accommodations due to structure width restrictions. | Employment centers; recreational facilities in Bensenville; Des Plains River Regional Trail (planned by Franklin Park). |
| Franklin Avenue ^d | Widening | Not required | Local Agency | Bidirectional side path from County Line Road to Wolf Road. | Employment centers; recreational facilities in Bensenville; Des Plains River Regional Trail (planned by Franklin Park). |
| Taft Avenue Connector ^e | New roadway | Required | TBD | Bidirectional side path from Irving Park Road (IL 19) to Franklin Avenue. | O'Hare Airport; industrial area to the south. |

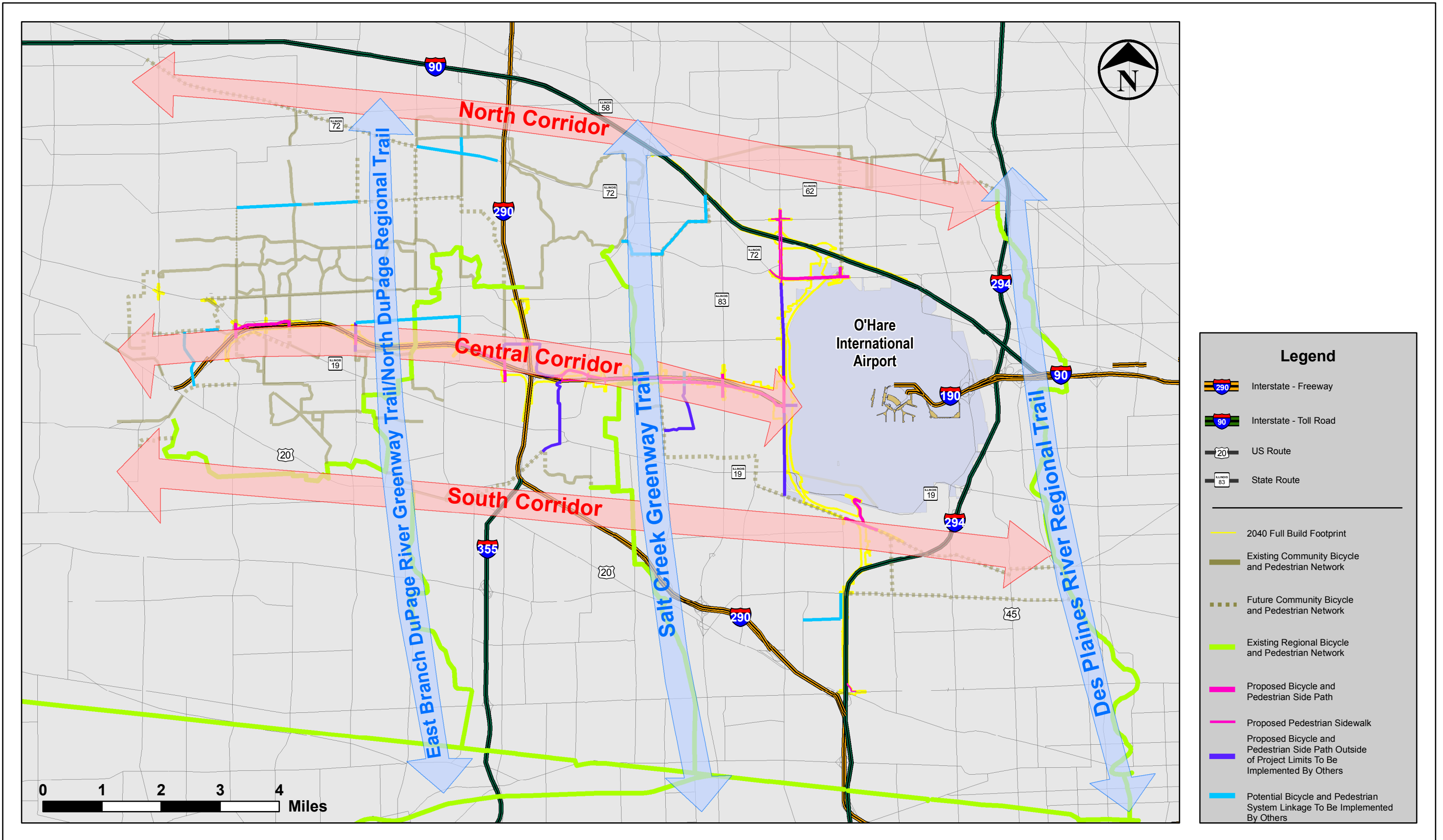
^aThe crossing roadway was analyzed based on IDOT policy requirements (jurisdiction, warrant analysis, travel needs assessment, etc.). Even if policy does not require bicycle and pedestrian accommodations in a particular location, the improvements listed are proposed based on stakeholder input and consideration of connectivity improvements.

^bThe travel generators serve as examples of major features in the area.

^cThe part of the proposed improvement that is outside EOWB project limits would be implemented independently by other agencies.

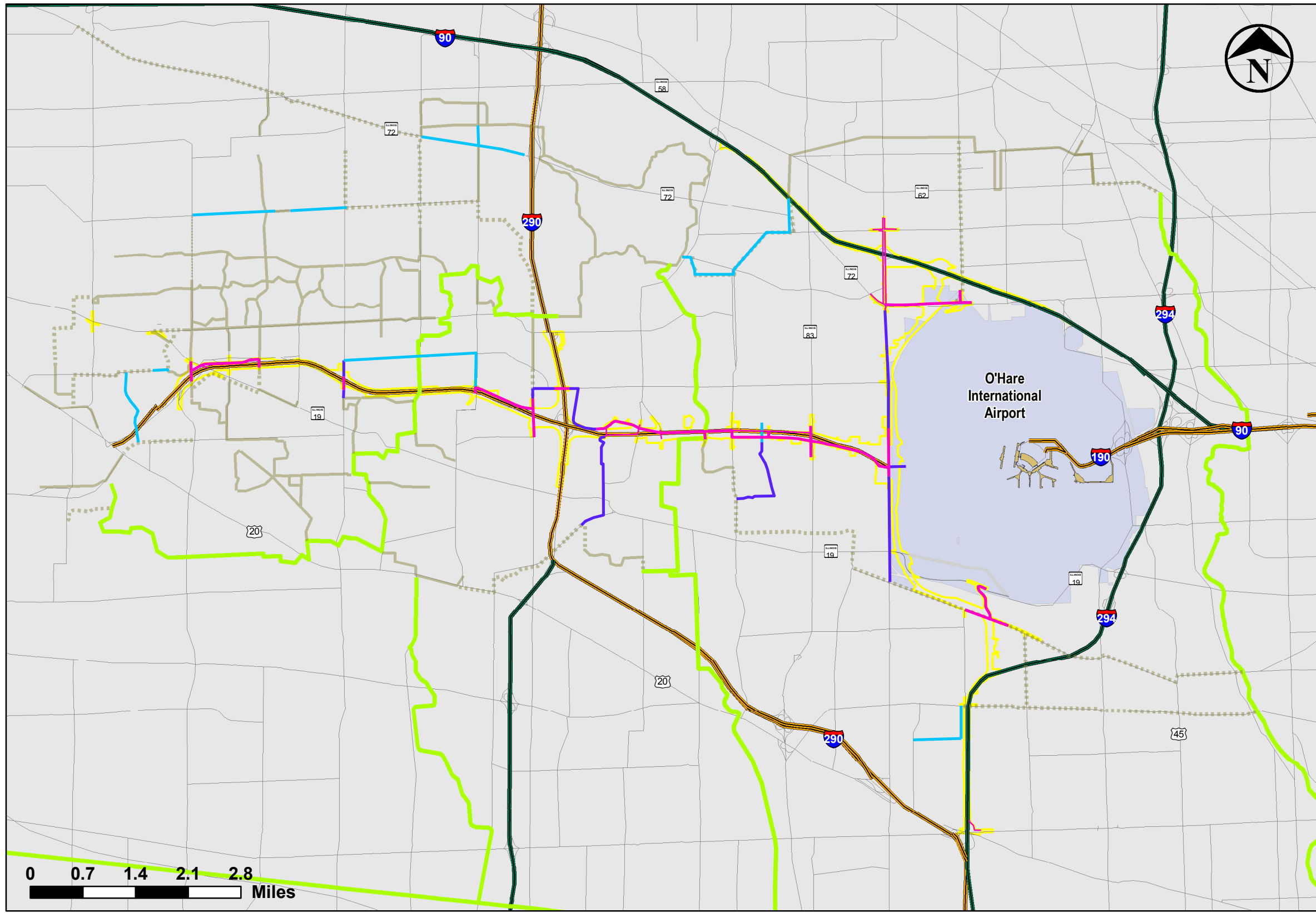
^dBecause of structure width restrictions on Irving Park Road (IL 19), the required bicycle and pedestrian accommodations are suggested to be shifted to Franklin Avenue creating consistency with the O'Hare Modernization Program design.

^eInclusion of pedestrian and bicycle accommodations contingent upon determination of Taft Avenue jurisdiction.










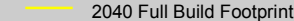
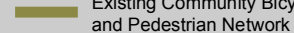
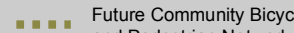
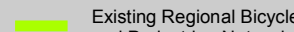
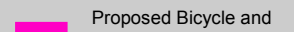
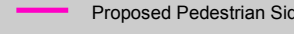
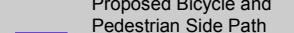
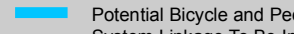
Elgin O'Hare - West Bypass
Tier Two Bicycle and Pedestrian Corridors

Exhibit 1



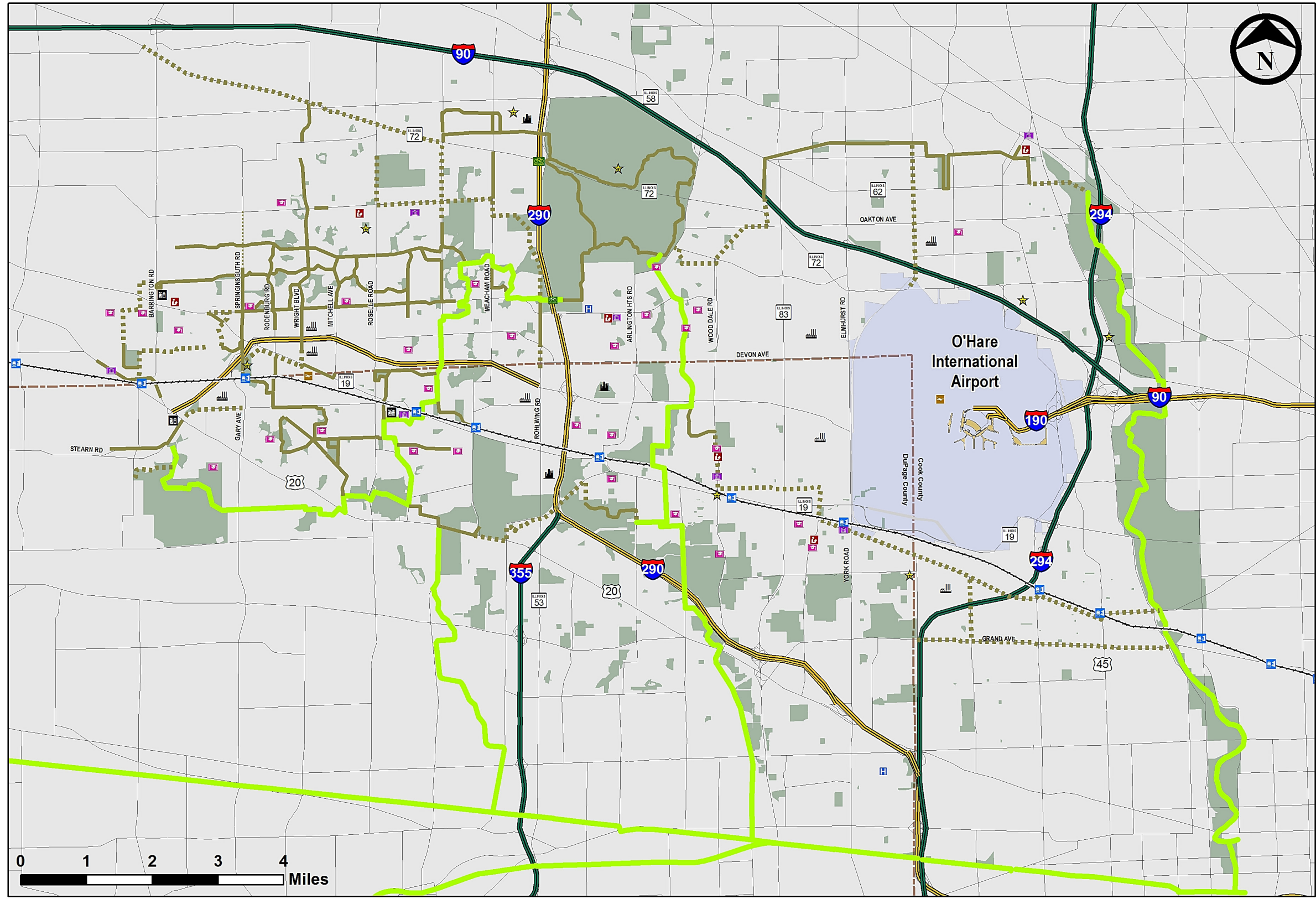
Legend

-  Interstate - Freeway
-  Interstate - Toll Road
-  US Route
-  State Route
-  Proposed Transit Station
-  Metra Commuter Rail Track
-  Metra Station

-  2040 Full Build Footprint
-  Existing Community Bicycle and Pedestrian Network
-  Future Community Bicycle and Pedestrian Network
-  Existing Regional Bicycle and Pedestrian Network
-  Proposed Bicycle and Pedestrian Side Path
-  Proposed Pedestrian Sidewalk
-  Proposed Bicycle and Pedestrian Side Path Outside of Project Limits To Be Implemented By Others
-  Potential Bicycle and Pedestrian System Linkage To Be Implemented By Others

Elgin O'Hare - West Bypass
Tier Two Bicycle and Pedestrian System Concept Plan

Exhibit 2



Legend

- Interstate - Freeway
- Interstate - Toll Road
- US Route
- State Route
- Proposed Transit Station
- Metra Commuter Rail Track
- Metra Station
- County Boundary

Travel Generators

- Existing Regional Bicycle and Pedestrian Network
- Existing Community Bicycle and Pedestrian Network
- Future Community Bicycle and Pedestrian Network
- Airport
- Bicycle Crossing
- Destination
- Employment Centers
- Hospital
- Industrial Park
- Library
- Metra Station
- Parks/Forest Preserve
- School
- Shopping Destination
- Village Hall

Elgin O'Hare - West Bypass
 Bicycle and Pedestrian Travel Generators
 Exhibit 3