

3.3.3 Level Three: Refinement of Transit Corridors and Screening

At this step, the remaining transit corridors and elements were refined. For example, to reinforce the IL 83 section of the J-Line as a BRT line, its southern terminus was relocated from the future STAR line station at Naperville Road/95th Street to the I-88/Naperville Road interchange. This section of the route was replaced with a connecting shuttle service to link to the BRT service and coordinate with the BRT schedule. Another J-line refinement occurred in the section linking West O'Hare Airport to the STAR Line's Schaumburg/IKEA station. This section originally was to operate in the I-290 corridor, but it was moved to the Rowling Road/Martingale Road/IL 53 alignment to facilitate station development and access to neighboring employment and activity centers. Other refinements include modifications of station locations to accommodate parking requirements or further input from communities or transit agencies.

Other socioeconomic evaluation factors were introduced to assess the number of transit-dependent populations near proposed facilities. These factors included determining how many zero- or one-car households represent potential transit users near transit facilities; how many people are more than 65 years old; and how many households had incomes of \$50,000 or less.

Level Three screening supported the conclusions of Level Two, confirmed ridership demand and benefit based on population and employment, and confirmed the presence of a potential transit-dependent population within the area. This final analysis confirmed that all 15 remaining transit elements should be retained and combined with other multimodal elements and roadway improvements to form complete transportation system alternatives for the Tier One Draft EIS evaluation.

3.4 Alternatives Carried Forward to the Draft EIS

3.4.1 No-Action Alternative

The No-Action Alternative consists of transportation improvements to existing roadway and transit facilities in the study area that are expected to be constructed by 2030. It represents an investment aligned to current program funding levels, and thus, does not include the major transportation improvements considered in this study. Development of the No-Action Alternative required extensive coordination with the region's transportation service providers to gather information on funded or anticipated transportation improvements in the study areas. The roadway improvements identified in the 2030 RTP and in the 2007–2012 Proposed Highway Improvement Program were the foundations for developing the No-Action Alternative. Through coordination with area transportation providers, including IDOT, Illinois State Toll Highway Authority (ISTHA), Cook County, DuPage County, Chicago Department of Transportation, transit service providers, and CMAP (the MPO), it was agreed that improvements identified in the 2030 RTP for parts of the region outside the study area would be included in the No-Action Alternative modeling. Also, the federally approved OMP, including a western terminal complex, would be completed within the planning period. Recognizing that other projects likely would be implemented as part of multiple short-range programs beyond 2012, additional improvement projects were identified through the end of the planning period (2030) in coordination with transportation providers. The additional projects were added to the No-Action Alternative.

The transportation improvements for the No-Action Alternative represent 80 lane miles of additional capacity and 135 miles of rehabilitation improvements to roadways, 54 interchange/intersection location improvements, and bus and rail transit improvements (see Exhibits 3-8 and 3-9, and Table 3-11). The No-Action Alternative includes no individual bicycle/pedestrian or travel demand management (TDM)/transportation system management (TSM) improvements, although such improvements could be components of specific baseline projects included in the No-Action Alternative. The No-Action Alternative will be carried forward throughout the NEPA process to serve as the baseline for comparing the performance of the build alternatives.

TABLE 3-11
2030 Roadway and Transit Baseline Projects Included in the No-Action Alternative

| Name | Project Type | Project Limits |
|-----------------------------|---|--|
| Roadway | | |
| Balmoral Avenue | New interchange, extend roadway | Bessie Coleman Drive to east of US 12/20/45 |
| Des Plaines River Road | Bidirectional turn lane, utility/drainage relocation | River Street to Lawrence Avenue |
| IL 53 (Rohling Road) | Add lanes, bridge replacement | Elgin O'Hare Expressway to Army Trail Road |
| I-190 | Corridor improvement | US 12/20/45 to I-294 |
| I-290 | Corridor improvement, high occupancy vehicle, auxiliary lanes | St. Charles Road to IL 50 (Cicero Avenue) |
| I-294 (Tri-State Tollway) | Widening, reconstruction | Balmoral Avenue to Dempster Street |
| I-90 (Jane Addams Tollway) | Add lane, reconstruction | I-294 (Tri-State Tollway) to IL 53 |
| Meacham Road | Add lanes | IL 62 (Algonquin Road) to Old Plum Grove Road |
| Meacham Road | Add lanes, traffic signals | IL 62 (Algonquin Road) to IL 72 (Higgins Road) |
| Meacham Road | Add lanes, reconstruction w/change lane width | Kirchoff Road to IL 62 (Algonquin Road) |
| Medinah Road | Reconstruction, bidirectional turn lanes, channelization | IL 19 (Irving Park Road) to US 20 (Lake Street) |
| Thorndale Avenue | Add lane | I-290 to York Road |
| US 12/20/45 (Mannheim Road) | Widen Mannheim Road to three lanes in each direction | IL 19 (Irving Park Road) to IL 72 (Higgins Road) |
| Wood Dale Road | Reconstruction, channelization | Montrose Avenue to North of US 20 (Lake Street) |
| Arlington Heights Road | Intersection improvement | Landmeier Road |
| Arlington Heights Road | Intersection improvement | Oakton Avenue |
| Devon Avenue | Intersection improvement | Arlington Heights Road |
| Grand Avenue | Intersection improvement | York Road |
| IL 58 (Golf Road) | Intersection improvement | New Wilke Road |
| IL 62 (Algonquin Road) | Intersection improvement | New Wilke Road |
| York Road | Intersection improvement | IL 19 (Irving Park Road) |
| West Terminal Entrance | Intersection improvement | Thorndale Avenue |
| Wood Dale Road | Intersection improvement | IL 19 (Irving Park Road) |
| I-294 (Tri-State Tollway) | Add interchange ramp | Balmoral Road |

TABLE 3-11
2030 Roadway and Transit Baseline Projects Included in the No-Action Alternative

| Name | Project Type | Project Limits |
|--------------------|-------------------------------|--|
| Transit | | |
| CTA Blue Line | Express service | Dedicated line from Block 37 to O'Hare |
| Metra – UP-W Line | Capacity upgrades | TBD |
| Metra – UP-NW Line | Capacity upgrades & extension | TBD |
| Metra – STAR Line | New rail segment | O'Hare to Hoffman Estates |
| CREATE | New crossovers and signals | Franklin Park |
| | Track additions | UP Line in Bellwood |
| | Track additions | UP Line in Melrose Park |

Note: The projects listed were compiled from both the 2030 RTP (as revised in 2006) and feedback from the transit service agencies.

3.4.2 Build Alternatives

The alternatives that best satisfy project purpose and need and have lower overall impacts are Alternatives 203 and 402 (see Exhibits 3-10 and 3-11). Each is described below, with an analysis of its respective travel performance in subsection 3.5.1. Environmental and socioeconomic impacts for the two alternatives are compared in Section 4, Environmental Consequences. The two alternatives are similar except for their north connection to I-90. The following elements are the same for both:

- **Elgin O'Hare Expressway Section** includes upgrading and extending the Elgin O'Hare Expressway. The expressway would be improved with additional travel lanes in each direction for 4.4 miles from IL 19/Gary Avenue to I-290. A new expressway with three basic lanes in each direction is proposed from I-290 to the proposed O'Hare West Bypass, a distance of about 5.4 miles.
- **O'Hare West Bypass South Section** includes a new freeway facility extending 1.85 miles from the Bensenville Yard tunnel south to I-294 with four basic lanes in each direction. South Bypass Connection Options A and D occur between the Bensenville Yard and I-294.

The elements that differ for the O'Hare West Bypass are the location of the north roadway section and the connection to I-90. For Alternative 203, the north section is proposed as a freeway, located mostly on the western edge of O'Hare Airport property, consistent with a planned transportation corridor described in the Airport's adopted *Airport Layout Plan* (2005). The northern terminus of Alternative 203 alignment is the Des Plaines Oasis on the Northwest (Jane Adams) Tollway. The north section for Alternative 402 is proposed as an arterial improvement to York Road/Elmhurst Road. The proposed improvement would add a travel lane in each direction, for a total of three travel lanes in each direction. The arterial improvement would extend along York Road/Elmhurst Road from the east end of the new Elgin O'Hare Expressway to the service interchange at I-90. The partial interchange would become a full interchange and accommodate exiting and entering movements from all directions.

The roadway build alternatives were developed to a concept design level of detail sufficient to facilitate a planning level decision related to the type and location of improvements. Detail was sufficient to identify the general right-of-way footprint to ensure that the

improvements could be accommodated, develop construction and right-of-way cost estimates, and analyze the relative environmental and socioeconomic impacts.

3.4.2.1 Alternative 203

Elgin O'Hare Expressway Section. Alternative 203 consists of new freeway/tollway facility extending from the Elgin O'Hare Expressway between I-290 to the O'Hare West Bypass for about 5.4 miles. Between IL 19/Gary Avenue and I-290, the expressway would be widened and upgraded for 4.4 miles. The facility would have three basic lanes in each direction, with additional auxiliary lanes between high volume interchanges. The center median would vary between 70 to 144 feet, which could accommodate potential dedicated transit service including stations. Service interchanges would be provided at major crossroads, and to accommodate access to local road system, a frontage road would be provided between Meacham Road and Rohlwing Road and east of the I-290 interchange to York Road/Elmhurst Road.

System and service interchanges would be provided at the locations listed in Table 3-12. There would be 10 service interchanges: four would provide partial access, and six would provide full access. Partial interchanges would provide only two interchanging movements between local roads and a freeway, whereas full access interchanges would provide for all directions of movement. System interchanges are provided at two locations and provide freeway to freeway access.

Supporting crossroad improvements are planned to manage efficient traffic circulation. In some cases, the crossroad improvements would extend several hundred feet north and south of the intersections. In other situations, more extensive capacity improvements are needed for adjacent roadways. Among these are proposed widening for Meacham/ Medinah Road and Roselle Road for a short distance north and south of the expressway. Improvements to I-290 are also planned between IL 19 and Biesterfield Road, which would accommodate system ramp connections, lane balance requirements, and entering and exiting transitions. In total there are more than 12 miles of supporting improvements associated with the Elgin O'Hare Expressway section. See Appendix F for a summary of these improvements. See Table 3-12 for a summary of the system and service interchanges for Alternative 203.

TABLE 3-12
Summary of Interchange Improvements for Alternative 203 in the Elgin O'Hare Expressway Section

| Interchange | Type | Access |
|---------------------------------------|---------|---------|
| Gary Avenue | Service | Partial |
| IL 19/Springinsguth Road | Service | Full |
| Wright Boulevard | Service | Partial |
| Roselle Road | Service | Full |
| Meacham Road | Service | Full |
| Rohlwing Road | Service | Partial |
| I-290 | System | Full |
| Arlington Heights Road/Park Boulevard | Service | Partial |
| Prospect Avenue | Service | Full |
| Wood Dale Road | Service | Full |

TABLE 3-12
Summary of Interchange Improvements for Alternative 203 in the Elgin O'Hare Expressway Section

| Interchange | Type | Access |
|---------------|---------|--------|
| IL 83 | Service | Full |
| West Terminal | System | Full |

Interchange studies and FHWA approval will be required to determine interchange type and design in subsequent design phases for the project.

O'Hare West Bypass Section. Alternative 203 includes a freeway section that would extend from I-90 at the current location of the Des Plaines Oasis, south along the western edge of O'Hare Airport to the Bensenville Yard for about 4.35 miles.

The freeway would consist of four basic lanes in each direction, with additional auxiliary lanes at interchanges, and a 70-foot median to accommodate transit service north of Thorndale Avenue. System interchanges are proposed at I-90, the Elgin O'Hare Expressway, and I-294. Service interchanges are proposed at IL 72, Devon/Pratt, the proposed O'Hare West Terminal, IL 19, and Green Street/Franklin Street.

There are two alignment options for connecting to I-294 that would begin at the tunnel under the yard. They are described below and shown on Exhibits 3-12a and 3-12b.

- **South Bypass Connection Option A**— The freeway generally would proceed south along the western edge of County Line Road to a new system connection with I-294 near Grand Avenue (1.9 miles). The freeway would be located west of County Line Road. County Line Road would be retained as a one-way frontage road on the east side, and a new one-way frontage road would be provided on the west side of the proposed facility.
- **South Bypass Connection Option D**— The freeway generally would extend southeast along the southern edge of the rail yard, then cross the UPRR and proceed south, paralleling the east side of the UPRR, to a new system connection with I-294 near Grand Avenue (1.8 miles).

These options also include a new bridge that reconnects Taft Road across the Bensenville Yard, linking Franklin Avenue and IL 19. A full-access system interchange would be provided at I-294. Part of I-294, extending roughly from Grand Avenue south to North Avenue, would be improved to accommodate system ramp connections and lane balance requirements.

Service and system interchanges would be provided along the O'Hare West Bypass. System interchanges would be located at the north and south ends of the bypass. The north system interchange would exchange traffic between I-90 and the O'Hare West Bypass, and would be located in the vicinity of the Des Plaines Oasis. The full access interchange would have long flyover ramps spanning the Metropolitan Water Reclamation District of Greater Chicago flood control reservoirs near I-90. The north system interchange would also require improvements along I-90 (from Devon Avenue to Arlington Heights Road) to accommodate system ramp connections and lane balance. The south system interchange would interconnect I-294 and the

O'Hare West Bypass, and would include I-294 improvements between Grand Avenue and North Avenue to accommodate system ramp connections and lane balance requirements.

Service interchanges would be provided at Elmhurst Road and I-90, IL 72, Elmhurst Road/Pratt Boulevard/Devon Avenue, IL 19, Franklin Boulevard/Green Street/Taft Road, I-294, and IL 64. The Elmhurst Road and I-90 interchange would be a total reconstruction of the partial interchange to a full access interchange. Partial access will be provided at IL 72 through a half diamond service interchange with service to and from the south. At Elmhurst Road, partial access will be provided by ramps that form a split interchange at Pratt Boulevard and Devon Avenue. The Franklin Boulevard/Green Street/Taft Road interchange would be a partial access service interchange with an off-ramp from northbound O'Hare West Bypass to Franklin Boulevard/Green Street and an on-ramp from Franklin Boulevard/Green Street/Taft Road to southbound I-294. A full access service interchange is provided at IL 19. The northbound off-ramp to IL 19 will be offset at Greenlawn Avenue. A partial access service interchange will also be provided at IL 64. A new northbound on-ramp from IL 64 and new southbound I-294 off-ramp to IL 64 will be provided.

Local improvements would accommodate traffic circulation and would include Elmhurst Road (from Higgins Road to Oakton Avenue), IL 72 (from Elmhurst Road to Mt. Prospect Road) including grade separation of Touhy Avenue and UPRR, widening Franklin Boulevard/Green Street between County Line Road and Taft Avenue to two lanes with an 18-foot median in each direction. A new connector road would be provided from Franklin Boulevard spanning the Bensenville Yard to a connection on the north with IL 19. Supporting local improvement would total 11 miles of improved local roads associated with the bypass. See Appendix F for a summary of supporting roadway improvements.

3.4.2.2 Alternative 402

The Elgin O'Hare and south bypass sections for Alternative 203 is the same for Alternative 402. However, the north section (north of Thorndale Avenue; about 3.1 miles) for Alternative 402 is proposed as an arterial improvement to York Road/Elmhurst Road. The arterial improvement would extend along York Road/Elmhurst Road from the east end of the new Elgin O'Hare Expressway to the service interchange at I-90. The arterial facility would be upgraded to provide three lanes in each direction separated by a raised median along York Road/Elmhurst Road. Provision for double left turns will be made at large volume intersections requiring a 30-foot median. Outside the interchange influence areas, the median will be narrowed to 18 to 22 feet to avoid unnecessary right-of-way impacts. Local improvements would include grade separation of Touhy Avenue from the UPRR tracks. The interchange at York Road/Elmhurst Road and I-90 would be upgraded to full access with added access to and from the west. See Appendix F for a summary of supporting roadway improvements.

3.4.2.3 Multimodal Elements

The EO-WB Study is seeking a multimodal transportation solution for the study area. The commitment to that objective has been fulfilled throughout the process, and attention to all modes has been demonstrated. Transit, bicycle and pedestrian, and freight rail improvements are defined elements of the two build alternatives and consideration has been given to TSM and TDM strategies. Each element is common to the build alternatives carried forward in the Draft EIS analysis. As stated by stakeholders early in the study

process, more is needed from other modes to help reduce travel and congestion on area roadways. The study has established the foundation for the elements, which other transportation providers may now use to advance these initiatives. The four common elements are described below.

Transit. Part of developing a transportation plan for the study area has been to find ways to improve transit service. Stakeholders at the very earliest meetings stated the need for more transit opportunities as part of the overall solution. The project team, transit providers in the region, and other stakeholders brought forth numerous ideas that were used in developing an overall transit plan. The plan that emerged from an evaluation of 20 initial ideas was refined to a final set of 15 transit corridors and strategies, each with a specific proposed transit service – rail, heavy or commuter rail, bus rapid transit, arterial rapid transit, express bus, local bus, or local circulator – and operational criteria. Table 3-13 and Exhibit 3-13 detail each proposed corridor.

During the public comment period of the Draft EIS, Hanover Park requested consideration of extending the J-Line at the Schaumburg Metra Station to the Hanover Park Metra Station (see Page 5-28 for a description of Hanover Park’s entire comment and IDOT’s response. Hanover Park’s comment letter can be found in Appendix D beginning on page D_5-81). Preliminary study of the Village’s request showed that extending the J Line as BRT or rail to Hanover Park requires an evaluation of a number of complicating factors beyond the level of engineering conducted in Tier One; therefore, it was agreed that further study regarding the Village’s request would be conducted in Tier Two. However, the preliminary study showed that another variant of transit service between these locations, specifically a non-stop bus shuttle service, would provide the needed connectivity and easily function on local roads. As such, it was agreed that a bus shuttle service between Schaumburg and Hanover Park would be included as a planned improvement in the Tier One Final EIS until further study in Tier Two determines a final solution (see Exhibit 3-13).

TABLE 3-13
Proposed Transit Improvements

| Corridor | Route Detail | Mode and Operating Assumptions |
|--------------------------------------|--|--|
| Blue Line Extension to West Terminal | Connects O’Hare Terminal station to proposed West Terminal. These are the only two stops along this proposed corridor. | Heavy rail transit; dedicated subway tunnel with seven-minute headways. |
| STAR Line Spur | Rail spur that connects the proposed West O’Hare Terminal station to the Metra STAR Line. West terminal is the only stop along the spur section. | DMU-type vehicles that operate commuter rail service with undetermined headway times, contingent upon Metra STAR line headways. |
| J Line West to Schaumburg Metra | Connects West O’Hare Terminal station to Schaumburg Metra MDW station. Stop locations include West Terminal, Lively Boulevard, Arlington Heights Road, Rohlwing Road, Roselle Road, and Schaumburg Metra Station. | High capacity transit corridors (BRT or rail). A-B service with 15-minute headways along branches and seven-minute headways along shared section of Elgin O’Hare Expressway alignment. |
| J-Line Northwest to Woodfield | Connects West O’Hare Terminal station to IKEA store at Meacham Road. Stop locations include West Terminal, Lively Boulevard, Arlington Heights Road, Rohlwing Road, Higgins Northwest Transportation Center, and IKEA. | |

TABLE 3-13
Proposed Transit Improvements

| Corridor | Route Detail | Mode and Operating Assumptions |
|--|--|--|
| Schaumburg Metra Station to Hanover Park Metra Station | Connects Schaumburg Metra Station to Hanover Park Metra Station. | Shuttle bus service. Operating assumptions to be identified in Tier Two. |
| J Line South to Aurora | Connects West O'Hare Terminal station to Aurora. Stop locations include Elgin O'Hare Expressway and IL 83, Grove Avenue, Lake Street, North Avenue, Oakbrook Mall, 22nd and Highland, Warrenville and Naperville Road, Naperville Metra, IL 59 and Ogden Avenue, and Aurora STAR line station at 95th Street. | BRT service with few stops placed at major nodes of activity. Headways are seven-minute peak/15-minute off-peak. |
| I-355 | Connects Northwest Transportation Center with Bolingbrook. Stop locations include Higgins Northwest Transportation Center, Biesterfield Road, Devon, Lake Street, Army Trail Road, North Avenue, Roosevelt, Butterfield, Ogden Avenue, Maple, 63rd Street, 75th Street, and 87th Street. | Express bus service running exclusively along expressway lanes. Headways are 15-minute peak/30-minute off-peak. |
| Golf Road West | Local stops every two to four blocks. | Local bus service with 15-minute peak/30-minute off-peak minute headways. Upgrade to an existing Pace service. |
| Mannheim Road | Connects O'Hare East Terminal with I-55. Stop locations include East O'Hare, Irving Park Road, Grand, North, St. Charles, Butterfield, Roosevelt, Cermak, Ogden Avenue, LaGrange Metra, 55th Street (Countryside Village Hall), Joliet Road, and I-55. | Arterial Rapid Transit also can be conceptualized as an express bus that runs along a local arterial and incorporates technologies designed to five transit vehicles priority. 15-minute peak/30-minute off-peak. |
| Dempster Street | Connects O'Hare East Terminal with Skokie. Stops include East O'Hare, Mannheim and Touhy, River Road Des Plaines Metra, Carlean Court (Maine High School), Luther Road (Lutheran General Hospital), Milwaukee Avenue, Harlem, Waukegan, Central, and Skokie Yellow Line station. | Arterial Rapid Transit also can be conceptualized as an express bus that runs along a local arterial and incorporates technologies designed to five transit vehicles priority. 15-minute peak/30-minute off-peak. |
| Golf Road East | Connects Evanston to Woodfield Mall. Stop locations include Higgins (Northwest Transportation Center), Gold and STAR Line station at Northwest Highway and Golf Road, Arlington Heights Road, Elmhurst Road, Wolf Road, River Road Des Plains Metra, Greenwood Road, Waukegan Road, Gold Road and US Highway 41, Church and Crawford, Church and Dodge, and CTA Purple Line Davis Station. | Arterial Rapid Transit; also can be conceptualized as an express bus that runs along a local arterial and incorporates technologies designed to five transit vehicles priority. 15-minute peak/30-minute off-peak. |
| Irving Park Road | Connects the East and West Terminals at O'Hare Airport. Stop locations include East O'Hare, Mannheim, Post Office, and West O'Hare. | Local express service. Headways are seven-minute peak/15-minute off-peak. |
| Roselle Road | Connects Palatine UP-NW Metra Station to the UP-W Metra Glen Ellyn station. Local stops every two to four blocks. | Local bus service. Headways are seven-minute peak/15-minute off-peak. |

TABLE 3-13
Proposed Transit Improvements

| Corridor | Route Detail | Mode and Operating Assumptions |
|-----------------------------------|---|--|
| York Road Shuttle (UP-NW to UP-W) | Connects the UP-NW Metra Mt. Prospect station to the MDW Metra Elmhurst station. In addition to local stops every two to four blocks, route serves proposed STAR line, O'Hare West Terminal, and MDW Metra Bensenville station. | Local bus service. Headways are seven-minute peak/15-minute off-peak. |
| Circulators | Several proposed routes; connections include Woodfield, NW Transportation Center, Rohwing Road, and various high-level transit stations in the western part of the study area. | Local shuttle service linking residential areas to high level transit stations. Proposed headways are 15-minute peak/30-minute off-peak. |
| Employer Shuttles | Several proposed routes serving the industrial area directly west of O'Hare Airport as well as concentrated areas of commercial and industrial use within the vicinity bounded north-south by the UP-W and MDW Metra lines and east-west by IL-83 and Roselle Road. | Local shuttle service linking employment centers to high level transit stations. Peak period scheduled runs; no off-peak service. |

Upgrades to transportation centers and new transportation centers also are proposed (see Table 3-14). Transportation centers provide connections and transfer points between modal services and are vital to the overall function of the system. This component would add opportunities and convenience for improved automobile connections, passenger dropoff, bus-to-bus interconnections, bus-to-rail, and airport to bus or rail interconnections at five key locations: East O'Hare Airport, I-290/Elgin O'Hare Expressway, the Northwest Transportation Center, Schaumburg Metra, and West O'Hare Airport. Each location would include bus stands, bicycle and pedestrian access, bicycle storage, and real-time displays of service information. Timed coordination of bus schedules is important to allow easy transfer to rail services and between bus routes and transportation centers.

TABLE 3-14
Proposed Transportation Transfer/Intermodal Facilities

| Name | Intersection | Status | Park and Ride | Connecting Transit Service | | |
|-------------|--|----------|---------------|-------------------------------|----------------|----------|
| | | | | Corridor | Mode | Status |
| East O'Hare | Near Mannheim Road and E. Higgins Road | Proposed | Yes | Metra NCS | Commuter rail | Existing |
| | | | | O'Hare Airport Transit System | Fixed guideway | Existing |
| | | | | Dempster Street | ART | Proposed |
| | | | | Mannheim Road | ART | Proposed |
| | | | | Irving Park Road | Express bus | Proposed |

TABLE 3-14
Proposed Transportation Transfer/Intermodal Facilities

| Name | Intersection | Status | Park and Ride | Connecting Transit Service | | |
|-------------------------------------|--|-----------|---------------|---------------------------------|-----------------------|----------|
| | | | | Corridor | Mode | Status |
| I-290/Elgin O'Hare Airport vicinity | Rohlwing Road/Elgin O'Hare Expressway | Proposed | No | J-Line NW | High capacity transit | Proposed |
| | | | | J-Line West to Schaumburg Metra | High capacity transit | Proposed |
| | | | | I-355 | Express bus | Proposed |
| | | | | Circulator | Shuttle | Proposed |
| | | | | Employment | Shuttle | Proposed |
| NW Transportation Center | E. Higgins Road between I-290 and Meacham Road (at Mall Drive) | Existing | Yes | J-Line NW to Woodfield | High capacity transit | Proposed |
| | | | | Golf Road East | ART | Proposed |
| | | | | Golf Road West | Local bus | Proposed |
| | | | | I-355 | Express bus | Proposed |
| | | | | 11 Pace Routes | Various bus services | Existing |
| | Circulator | Shuttle | Proposed | | | |
| Schaumburg Metra | Elgin O'Hare Expressway and S. Springinsguth Road | Existing | Yes | Metra MDW | Commuter rail | Existing |
| | | | | J-Line West to Schaumburg Metra | High capacity transit | Proposed |
| | | | | #602 Pace | Local/feeder bus | Existing |
| | | | | Circulator | Shuttle | Proposed |
| West O'Hare | York Road/Elmhurst Road and Thorndale Avenue | Proposed | No | STAR Line | Commuter rail | Proposed |
| | | | | CTA Blue Line | HRT/subway | Proposed |
| | | | | J-Line West to Schaumburg Metra | High capacity transit | Proposed |
| | | | | J-Line NW to Woodfield | High capacity transit | Proposed |
| | | | | Irving Park Road | Express bus | Proposed |
| | York Road | Local bus | Proposed | | | |

Another aspect of the transit component is employer shuttles. This service helps to fill the “last mile” connection service between rail and transfer stations and employment or activity centers. The provision of frequent, convenient and direct service to employers and activity centers is central to shifting automobile trips to transit. Application of this type of service is considered critical in an area that has a large potential for attracting new transit ridership.

One aspect of the transit plan that would improve connectivity between the automobile and rail/bus is new or upgraded park and ride facilities at two existing and two new sites (see Table 3-15).

TABLE 3-15
Additional Park and Ride Facilities

| Name | Intersection | Status | Connecting Transit Service | | |
|-------------|---|----------|----------------------------|---------------------|----------|
| | | | Corridor | Mode | Status |
| Bensenville | N. York Road and W. Main Street | Existing | Metra MDW | Commuter rail | Existing |
| | | | York Road Shuttle | Local bus | Proposed |
| | | | #319 Pace | Regular/express bus | Existing |
| | | | #332 Pace | Regular/express bus | Existing |
| Bolingbrook | I-355 and I-55 | Proposed | I-355 | Express bus | Proposed |
| Countryside | LaGrange Road and Joliet Road | Proposed | Mannheim | ART | Proposed |
| | | | #330 Pace | Regular/express bus | Existing |
| Skokie | Dempster Street between Gross Point Road and Skokie Boulevard | Existing | CTA Yellow Line | HRT | Existing |
| | | | Dempster | ART | Proposed |
| | | | #250 Pace | Regular/express bus | Existing |
| | | | #97 CTA | Local bus | Existing |
| | | | #626 Pace | Regular/express bus | Existing |
| | | | #54A CTA | Limited local bus | Existing |

Bicycle/Pedestrian. Early in the study process, stakeholders identified the need for more bicycle/pedestrian opportunities within the study area as a means of reducing vehicular travel. Promoting bicycle and pedestrian facilities starts with understanding where people want to travel. Destinations for bicyclists and pedestrians are much like auto travel, but generally shorter trips (e.g., community or activity centers, places of employment, or recreational attractions). The framework for improving bicycle and pedestrian mobility in the area began with the existing trail system combined with planned improvement in the study area by others. The proposed bicycle/pedestrian improvements recommended by the EO-WB study focus on filling the gaps in bicycle trail and pedestrian paths to provide better connections to transit stations, park and ride facilities, community activity centers, regional trail systems, and employment areas. The recommendations for bicycle and pedestrian improvements are common features of both Alternatives 203 and 402.

Exhibit 3-14 shows the existing and planned regional trail system within and near the study area. The area is conveniently located near major regional trails, including the Illinois Prairie Path, the Great Western Trail, and the Des Plaines River Trail. The location of these trails in relation to the study area is shown in Exhibit 3-14. Per the comment on the Draft EIS submitted by the City of Des Plaines, this exhibit was updated to more accurately reflect the location of the regional trail through Des Plaines and correct road names (see Page 5-26 for a description of the entire comment and IDOT's response. The City of Des Plaines' comment letter can be found in Appendix D beginning on Page D_5-49). Regional trail improvements have also been planned by others, which total 10 miles of new trails. These planned

improvements provide linkages between existing trail sections to existing regional trails. The EO-WB expands on these other planned improvements to fill gaps in the system that would provide for a complete regional trail loop. It would pass through the study area extending from the Des Plaines River Trail (just north of the study area) to the west in the vicinity of Busse Road, extending south in the general vicinity of Salt Creek to a connection on the south with the Great Western Trail, and to the east with the Des Plaines River trail.

The regional trail improvements proposed by the EO-WB total an additional seven miles of trail improvements and include three primary links:

- A section in Elk Grove Village primarily on Oakton Avenue and Tonne Road extending from Higgins and Oakton, west on Oakton and south on Tonne Road (Regional Trail A).
- A section in Elk Grove Village primarily on Walnut Lane and along Salt Creek extending along Tonne Road between Pratt Boulevard and Walnut Lane, then west along Walnut, south on Ridge Avenue, west on Devon Avenue, and finally south along Salt Creek (Regional Trail B).
- A section in Elmhurst primarily on York Road connecting a proposed trail along Lake Street to a proposed trail along Wrightwood Avenue by York Road (Regional Trail C).

Exhibit 3-15 shows the principal existing and planned community trail system in the study area. The location of employment and community centers, and transit stations and facilities in relation to the trail system, is also shown in Exhibit 3-15. An examination of the existing trail network (Exhibit 3-15) shows many gaps in linking these activity nodes. Others have planned trail improvements for the area including those by DuPage County, DuPage County Forest Preserve District, CMAP, and others. The proposals by others total more than 18 miles of improvements that begin to link gaps between trails and to link trails with community and employment centers. The EO-WB study has looked at additional trail improvements beyond those recommended by others to include opportunities for bicycle and pedestrian facilities in conjunction with the roadway and transit aspects of the EO-WB plan. The EO-WB study proposes an additional 15 miles of trails that would improve access to communities, employment centers, and transit facilities.

One notable proposal included in the build alternatives is the bicycle/pedestrian trail along the existing and proposed Elgin O'Hare Expressway from the west end of the study area to O'Hare Airport (Community Trail Improvement One, see Exhibit 3-15). This link would provide intercommunity travel and easy access to transit stations proposed in the corridor. Other proposed community trail sections include a north-south link that would connect Busse Woods with Irving Park Road generally between Salt Creek and IL 83 (Community Trail Improvement Two; see Exhibit 3-15), and a proposed trail section between Lake Street and Irving Park Road in Bensenville (Community Trail Improvement Three, see Exhibit 3-15). Finally, several smaller trail improvements proposed throughout the community trail system would fill gaps between existing and proposed improvements by others.

The plan includes safe identifiable crossings for bicycle and pedestrian facilities at major roadway crossings (I-290, Elgin O'Hare Expressway, I-90, etc.) that represent a barrier to non-motorized travel. The "starred" locations in Exhibit 3-14 illustrate the locations where special design considerations are warranted to accommodate the safe movement of bicycle and pedestrian traffic for north-south and east-west travel.

The proposed community trail system would link major activity areas. In several cases, more is needed to improve bicycle and pedestrian access within the expansive commercial and industrial developments in the area. Exhibit 3-14 also shows the areas where a local trail framework should be expanded within those areas to enhance access for workers using non-motorized transportation. Further examination of these areas is recommended for the local communities to explore opportunities for bicycle and pedestrian facilities.

The planned improvements by the EO-WB study and others for both the community and regional trail system represent a comprehensive bicycle and pedestrian trail system for the study that provide non-motorized access to communities, job centers, activity centers, transit, and recreational facilities. The EO-WB study has sought to integrate bicycle and pedestrian facilities into the overall transportation plan for the study area. Bicycle and pedestrian improvements are common to both Alternatives 203 and 402. In locations where proposed bicycle improvements overlap roadway improvements, the roadway footprint has been sized to accommodate the bicycle facilities. Non-motorized facilities are an important part of the overall EO-WB plan and have a role in reducing automobile travel on the area roadways, and will be considered in further detail during Tier Two.

Freight Rail. The numerous freight rail facilities throughout the study area include a large track network (mainline tracks, industrial spur tracks, and yard tracks), classification/marshalling yards, and intermodal facilities. The numerous at-grade crossings (120) complicate automobile movement and reduce travel efficiency. In considering all the transportation modes in the study area, the project team addressed freight rail needs as part of the overall transportation solution. Three areas of freight rail improvements are proposed: separation of highway and rail at key locations, interlocking improvements, and improved access to intermodal facilities.

- **Highway-Rail Grade Crossings.** Several at-grade crossings of road and rail have been identified as key locations for grade-separating these crossings.
 - A proposed grade separation of the CPRR in Bensenville at Irving Park Road and York Road. This grade separation would improve roadway traffic where traffic delays for crossing trains can be up to 15 minutes. This location is named in the region’s CREATE program as a priority location.
 - A proposed improvement of Metra’s MDW at Irving Park Road and Wood Dale Road. This location has long traffic delays and many accidents. The improvement, consistent to an interim project, would provide for a new roadway under the Metra track connecting Wood Dale and Irving Park roads, thereby improving roadway operations at that location.
 - The UPRR and CPRR would be grade separated in many locations along the proposed O’Hare West Bypass including from north to south:
 - Improved existing grade separation of the UPRR and CPRR crossing I-90 (Jane Adams Tollway) north of O’Hare Airport
 - The UPRR and CPRR crossing Touhy Avenue on the north side of O’Hare Airport
 - The east-west spur line crossing Elmhurst Road near Pratt Boulevard

- The mainline of the O'Hare West Bypass crossing under the UPRR and CPRR near Devon Avenue
- System interchange ramps (seven ramps either over or under the railroads) at the intersection of the Elgin O'Hare Expressway and the O'Hare West Bypass
- The mainline of the O'Hare West Bypass crossing under the UPRR tracks and the CPRR tracks near the west end of the Bensenville Yard
- The UPRR crossing over Green Street near Taft Road
- UPRR and CPRR spurs service industrial areas in Franklin Park and Bensenville, south of Green Street and Franklin Avenue
- Taft Road improvement over the Bensenville Yard
- Railroad separations would be provided at two location on the Elgin O'Hare Expressway:
 - A north-south spur line east of Wright Boulevard
 - A north-south spur line east of IL 83
- **Interlock Improvements.** Track interlockings are a complex system of signals and special trackwork that ensure safe and efficient train movements between one track and another. Potential improvements to interlocking in the study area include B-17 and Bryn Mawr interlocker. Numerous trains pass daily through these interlock systems. Current operations are slowed by aged signal systems, train length, and limited track capacity. Improving these conditions would include improvements at the interlockers, or system improvements in other locations that would assist movement through the capacity limited interlockers. One benefit of these improvements would be reducing backups at railroad/roadway at-grade crossings.
- **Intermodal Considerations.** Intermodal freight operations are co-located with railroad classification/marshalling yards in the study. There are three intermodal facilities in or near the study area, where containerized freight from one mode of transportation is transferred to another (e.g., truck to rail, or rail to truck). Attention has been given to improving these connections. One example is the local access that would be provided from the south bypass connection to industrial development in Franklin Park and Bensenville. Hundreds of truck movements (more than 500 to the intermodal facility alone) that enter and leave the area daily experience circuitous travel to and from the nearest freeway connection. This single improvement will save travel time, travel and operation costs, and reduce fuel consumption. The benefit of this new access could affect the competitive attractiveness of the area, and should have a positive benefit on occupancy, land values, and development and redevelopment potential.

Transportation System Management and Travel Demand Management. TSM and TDM represent strategies that offer added efficiencies to travel on the system. TSM techniques include modernized traffic signal control systems that adjust themselves to optimize traffic flow, freeway traffic flow management, incident detection and response, system surveillance, intersection improvements, and traveler information services. TDM attempts to reduce single

occupancy automobile travel during peak periods of travel and includes strategies or techniques such as car pooling, van pooling, park and ride facilities, and alternate work hours, etc. The specific strategies that would be implemented would be developed during Tier Two. During this phase of analysis, the effects of these strategies have been approximated in the travel modeling work and have resulted in a small reduction in travel on the roadway.

3.4.3 Cost

Preliminary cost estimates, including construction and right-of-way costs, were prepared for each build alternative. Standard IDOT contingencies have been applied to the cost estimate, and to the inclusion of engineering design and construction management/inspections costs. Under either south bypass connection option, Alternative 203 is estimated to cost \$3.6 billion in 2009 dollars, and \$2.8 billion for Alternative 402. Preliminary costs to construct transit improvements were also developed and are limited to transit infrastructure improvements within the proposed roadway improvement corridors. Transit costs in 2009 dollars would be \$430 million for Alternative 203 and would be \$250 million for Alternative 402. The difference in cost is related to the north leg of Alternative 402, which is proposed as an arterial improvement. The arterial improvement would have insufficient right-of-way to incorporate the proposed STAR Line; therefore, this aspect of transit is not provided in conjunction with Alternative 402 and the cost is lower.

3.4.4 Financing Strategies

The government traditionally has financed major transportation infrastructure primarily through a combination of federal and state monies. These resources typically are combined to fund projects on a pay-as-you-go basis, meaning that projects often are built in phases or increments as funds become available over time. The pay-as-you-go approach has the benefit of simplicity and avoids the interest costs associated with debt. However, delayed implementation involves the hidden costs associated with inflation and foregone economic development, foregone safety improvement, and environmental benefits.

Project funding has been tied closely to federal and state cash management policies, with nearly exclusive responsibility for the process vested in state and local public transportation agencies.

Because public resources are limited, state and local governments are faced with the challenge of inadequate funding to meet transportation needs, and critical projects may face years of delay before funding is available. In an era of constrained public funding, new funding mechanisms are being considered across the country and the use of alternative methods is being implemented in some locales.

The alternative funding methods include the following:

- Credit Instruments
 - Transportation Infrastructure Finance and Innovation Act of 1998 (TIFIA): A new Federal transportation credit program authorized as part of Transportation Equity Act (TEA)-21 that provides direct Federal loans, lines of credit, and loan guarantees provided through U.S. Department of Transportation (USDOT) to large projects of national significance, under criteria developed by Congress. However, Illinois does

- not have enabling legislation to allow for TIFIA assistance in transportation financing.
- Section 129 Loans: Section 129 of Title 23 of U.S. Code permits states to use federal funds to make loans to any federally eligible project. The loans must be repaid with a dedicated, nonfederal source. Illinois does not have enabling legislation in place to use Section 129 loans for surface transportation projects.
 - Grant Management Initiatives and Techniques
 - State Infrastructure Banks (SIBs): A state or multistate revolving fund that provides loans, credit enhancement, and other forms of financial assistance to surface transportation projects. Illinois does not have enabling legislation in place to allow for use of the SIB at this time. Such legislation must designate how the SIB would be funded and how it would operate.
 - Grant Anticipate Revenue Vehicle Bonds (GARVEEs): A GARVEE is any bond or other form of debt repayable, either exclusively or primarily, with future federal highway funds under Section 122 of Title 23 of the U.S. Code. Although the source of payment is federal funds, GARVEEs cannot be backed by a federal guarantee but are issued at the sole discretion of, and on the security of, the state issuing entity. At this time, Illinois does not have enabling legislation to allow GARVEEs for transportation financing.
 - Tapered Match: TEA-21 section 1302 removed the requirement that federal share of project costs be applied to each progress payment, thereby allowing the FHWA to establish a more flexible matching share policy for progress payments, as long as the appropriate matching ratio is achieved by the end of the project. Tapered match may be useful when the government sponsor lacks the funds needed to match a federal project at the start but will accumulate the match over the life of the project. The state, when requesting a tapered match, should include in its request for project approval, a statement that tapered match will achieve earlier project completion, reduced project costs, or allow additional nonfederal funds to be leveraged for the project. With or without the authorization of tapered match, the state remains committed to providing the required nonfederal share of project costs. The state must also be able to control the federal share amount in its billing system.
 - Public and Private Partnerships (PPP): A contractual agreement that is formed between public and private sector partners, which allows more private sector participation in the delivery or operation of a transportation project than is traditional. The agreements usually involve a government agency contracting with a private company to renovate, construct, operate, maintain, and/or manage a facility or system. While the public sector usually retains ownership in the facility or system, the private party will be given additional decision rights in determining how the project or task will be completed. The term public-private partnership defines an expansive set of relationships from relatively simple contracts (e.g., A+B contracting), to development agreements that can be very complicated and technical (e.g., design-build-finance-operate-maintain). PPP projects are often undertaken to supplement conventional procurement practices by taking additional revenue sources and mixing a variety of funding sources, thereby reducing

demands on constrained public budgets. However, Illinois does not have enabling legislation to allow for PPPs in transportation financing.

No funding currently is committed to the project, except for the \$140 million funded by SAFETEA-LU as a nationally and regionally significant project and a \$35 million state match. Thus, there is a considerable shortfall for construction of any build alternative. Further funding requirements for the project will be given detailed attention in future steps of this project, including Tier Two environmental documents.

3.5 Module 4 – Identification of a Preferred Alternative

Many alternative transportation solutions have been developed and evaluated since the beginning of the Tier One Draft EIS for the EO-WB study in 2007. Alternatives were analyzed and screened based on travel performance, environmental and socioeconomic impacts and benefits, and public input as part of preparing the Draft EIS. As a result of comments made by stakeholders after the publication of the Draft EIS, minor modifications were made to the south portion of the O'Hare West Bypass. The alignment was shifted to the southern most edge of the Bensenville Yard (see Exhibit 3-16). This modification helped to maintain the functionality of the rail yard by preserving rail access to undeveloped lands in the yard. In addition, this modification resulted in slight changes to environmental and social resource impacts (as described in Section 4).

The build alternatives are similar, but there are differences that clearly lead to the identification of a preferred alternative. Based on an examination of all the materials available in this process including environmental and socioeconomic impacts and benefits, engineering data, comparative travel performance analyses, unanimous concurrence by regulatory resource agencies, and pertinent stakeholder input, Alternative 203 with South Bypass Connection Option D is the Preferred Alternative (see Exhibit 3-17). Other needed improvements are companion to the Preferred Alternative including transit, bicycle and pedestrian accommodations, and freight rail. TSM and TDM are not included as defined improvements in Tier One, but will be examined in detail in Tier Two of the process. The rationale for identifying Alternative 203 and Option D are described in the following sections.

3.5.1 South Bypass Connection

3.5.1.1 Design Performance

Functionally, the intersection of the freeway ramps to and from the south directly connecting with Taft Road under Option D offers more continuity in access and is more central to existing and planned industrial development in the area. Additionally, the alignment under Option D allows for a longer weaving distance between North Avenue and the I-294 system interchange than under Option A.

3.5.1.2 Travel Performance

Travel performance was not considered for the south bypass connections evaluation. The travel demand model would not produce any measurable differences in performance due to the relatively short lengths and similar locations and configurations of the south connection options.