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.

3.5.1.3 Environmental Impacts

Options A and D are located in a highly developed area and, therefore, have relatively minor impacts to wetlands, floodplains, threatened or endangered species, forested lands, or surface waters (see Table 3-16). For both wetlands and surface waters, the impact would be less than one-half acre for either Option A or D. For forested land and floodplains, both options impact less than one acre, and neither option would impact threatened and endangered species.

TABLE 3-16
Environmental Consequences of Options A and D

Resource	Option A	Option D
Wetlands (acre)[a]	0.1	0.4
Stream crossings (total number)	3	3
Surface waters (acre)[a]	0.4	0.3
Floodplain encroachments (acre)	0.6	0.6
Threatened or endangered species (number)	0	0
Forested lands (acre)	0.9	0.3

[a] Totals include impacts to potentially jurisdictional areas, such as stormwater facilities. Subject to regulatory review, several manmade stormwater facilities may be exempt from regulation.

3.5.1.4 Social Impacts

The number of structures displaced, the number of individual businesses displaced, and the tax base impacts were considered for Options A and D. As show in Table 3-17, Option A has a greater number of structures displaced (37 buildings versus 26 buildings), but relatively fewer (277 fewer) employees displaced as these businesses are smaller than those along Option D. The tax base impact is also lower for Option A than Option D. However, given that Option A is adjacent to residential areas in Bensenville, there is a potential for impacts to noise sensitive areas. Conversely, Option D is located wholly within non-residential areas, and the Village of Franklin Park considers the implementation of Option D as an opportunity to revitalize the adjacent industrial uses through improved access.

TABLE 3-17
Socioeconomic Consequences of Options A and D

Resource	Option A	Option D
Residential structure displacements (number)	7	0
Commercial or industrial structure displacements (number)	30	26
Business displacements (number)	47	23
Employee displacements (number)	708	985
Tax revenue loss ($)	$1.3M	$2.7M

3.5.1.5 Stakeholder Input

Overall, stakeholder comment clearly favors Option D. Bensenville has stated that Option A would be in conflict with the community's vision and passed a resolution in support of Option D. The Village of Franklin Park also has passed a resolution endorsing Option D. As noted above, the Village of Franklin Park foresees the implementation of Option D as an opportunity to enhance the viability of the adjoining land uses through improved access, as well as address existing flooding concerns through drainage improvements.

3.5.1.6 Conclusion

Travel performance and environmental impacts are not distinguishing factors, and the social impacts, for Option D, while higher, are viewed by the local community as an opportunity to revitalize the adjoining land uses through improved access and drainage improvements. Lastly, the communities have weighed in on the issue through the stakeholder involvement process, with a consensus position favoring Option D. Therefore, Option D is included in the Preferred Alternative.

3.5.2 Build Alternative

3.5.2.1 Travel Performance

The travel performance of the two build alternatives is comparable, with Alternative 203 offering slightly better travel performance than Alternative 402 in every category, including both local and regional measures (see Table 3-18).

TABLE 3-18
Build Alternatives Systemwide Travel Performance Comparisons

	Alternative 203	Alternative 402
Percent Increase in Regional Travel Efficiency in Study Area	10%[a]	8%[a]
Percent Decrease in Congested VMT on Secondary Roadways (P.M. Peak)	15.2%	12.3%
Percent Increase in Network Speeds on Principal Arterials (P.M. Peak)	8%	7%
Improve O'Hare West Access—Travel Time Savings from the Study Area West to O'Hare	49%	47%
Improve Accessibility—Percent Increase in Trips within Five Minutes to Interstate/Freeway facilities	50%	41%
Percent Increase in Transit Trips	37%	34%

[a] Measures represent improvements over the No-Action Alternative.

3.5.2.2 Environmental Impacts

The environmental analysis shows a comparable level of impacts for Alternatives 203 and 402 with Alternative 402 having slightly lower impacts (see Table 3-19). Avoidance and minimization techniques throughout the process have reduced environmental resource impacts, and the impact difference between alternatives is small. Only a few acres of impact separate the alternatives with only three acres difference for wetlands, surface waters, and floodplains. Effects on 4(f) resources such as DuPage and Cook counties forest preserve

properties and municipal parks represent small impacts to the edges of these resources that do not impair any functional aspects of the properties. There is no effect on threatened and endangered species, historical structures, and archaeological resources. During the Draft EIS comment period, the USFWS suggested that traffic noise could impact wildlife species. General information regarding noise impacts to wildlife was added to this Final EIS. The SHPO has concurred that the proposed improvements will have no effect on architectural and archaeological resources, and no further study is required in Tier Two.

In the final analysis, most unavoidable environmental impacts are common to both alternatives, with only the north leg of each alternative accounting for slight differences. Thus, from the perspective of environmental resources there are no effects that materially distinguish the alternatives.

TABLE 3-19
Summary of Environmental Consequences

	Alternative 203 with Option D	Alternative 402 with Option D
Wetlands (acre)[a]	39.1	36.5
Stream crossings (total number)	22	20
Surface waters (acre)[a]	18.1	15.1
Floodplain encroachments (acre)	24.7	27.2
Threatened or endangered species (number)	0	0
Noise-sensitive resources	74	68
Architectural and archaeological resources	0	0
Acres of Section 4(f) and non-Section 4(f) special lands impacts (number of properties)	2.95(4)	0.95 (3)
Special waste sites	245	240

[a] Totals include impacts to potentially jurisdictional areas, such as stormwater facilities. Subject to regulatory review, several manmade stormwater facilities may be exempt from regulation.

3.5.2.3 Socioeconomic Impacts and Costs

Socioeconomic impacts favor Alternative 402 with slightly fewer displacements of residential, commercial and industrial structures, fewer job displacements, and lower tax revenue losses (see Table 3-20).

In the examination of socioeconomic benefits, both Alternatives 203 and 402 show ability to generate significant economic benefit in terms of value added to the economy and job creation. With the use of an econometric model, it was estimated that with either alternative the total economic effect is greater that the initial roadway investment. The spending and consumption of project investment dollars would be greatest with Alternative 203 with an added value to the regional economy of $5 billion. Alternative 402 would provide an added value of $4 billion. The measure of employment growth includes changes in direct, indirect and induced employment. Alternative 203 provides greater job growth with 21,600 jobs during the three-year construction period of the project, whereas Alternative 402 would create 16,600 jobs. With the assistance of CMAP, a special analysis was performed estimating the year 2030 employment with the project improvements. The improved access

to the study area would increase the competitive advantage of businesses located there, by improving access to the interstate system, shortening travel times to industrial areas within the study area, reducing traffic on local roads by shifting non-local trips to higher capacity roads, and enhancing the possibility for the redevelopment of underused properties. For the purposes of this analysis, the 2030 job forecasts are considered as long term jobs. As compared to the No-Action Alternative, the effect of Alternative 203 would be an additional 62,500 employees in the study area by 2030, while Alternative 402 would add 48,500 employees to the study area by 2030. In terms of project costs, Alternative 402 is lower in cost, due to its design, which includes an arterial connection to the north instead of a full bypass. However, as noted below, the layout and design of Alternative 203, while having a higher cost, satisfies a critical stakeholder concern with respect to community planning and cohesion.

TABLE 3-20
Summary of Socioeconomic Impacts and Benefits

	Alternative 203 with Option D	Alternative 402 with Option D
Residential, commercial and industrial displacements	51	47
Employees displaced	1,277	1,114
Roadway construction costs (1999 $)	$2.99B	$2.33B
Value added to the regional economy	$5B	$4B
Short-term job creation	21,600	16,600
Long-term job creation	62,500	48,500
Tax revenue loss	$4.47M	$3.56M

3.5.2.4 Stakeholder Input

From project inception through refinement of alternatives to selection of alternatives to be analyzed in the Draft EIS, approximately 130 meetings were held with established stakeholder groups, communities, transportation service providers, federal and state resource agencies, business owners, and the general public. The result has been a consensus on which alternative and south bypass connection option should be selected as the Preferred Alternative (see Table 3-21 for a summary of public comments). Over the course of those public events, the overwhelming majority of stakeholder comments were in support of Alternative 203 and South Bypass Connection Option D. The strong consensus for Alternative 203 is squarely aligned with a plan to manage traffic relatively better, and is consistent with the concerns about traffic congestion in the study area. The study area is rich in commercial and industrial development, which is the economic engine of many communities in the area. Stakeholders favor Alternative 203 because of better access and greater potential for reinvestment in aging properties in the area. Lastly, communities agree that Alternative 203 is most compatible with their land use policies, particularly Elk Grove Village. For example, Alternative 203 would serve their community without disrupting existing land use patterns.

The public hearing for the Draft EIS held in October 2009 produced more comments from agencies, municipalities, and other stakeholders (general public). Ninety-four percent of

comments that indicated support for an alternative or south bypass connection option named Alternative 203 and/or South Bypass Connection Option D as preferred (see Table 3-21). Five agencies (USEPA, USFWS, USACE, IDNR and IEPA) submitted comments on the Draft EIS, with virtually all agencies commenting that the build alternatives resulted in comparable adverse impacts and identifying details that should be addressed in the Tier Two document. No comments require reconsideration of the range of alternatives considered or the technical analyses contained in the document. The USEPA assigned a rating of "Lack of Objections" to the Draft EIS. The USFWS had positive comments on the document and the rigorous agency involvement process. Additional information was requested by USFWS pertaining to potential noise impacts on wildlife species. General information regarding noise impacts to wildlife was included in this Final EIS in response to the agency's comment. USACE noted that all agency comments on the project had been successfully addressed. Comments that did not identify a preference for an alternative or option requested further information or clarification on the design. Eight local government agencies in the study area submitted letters or resolutions, four of which were supportive of Alternative 203 and/or Option D, and one identified Alternative 402 as the Preferred Alternative. Others focused on issues important to the communities in the next phases of the project such as noise abatement, stormwater management, and preserving transit as a part of the solution. Fifty-seven comments were received from the public at-large, and most comments (41) supported Alternative 203 and/or Option D. Other comments included requests for specific information or clarification of the proposed concept.

TABLE 3-21
Summary of Public, Municipality, and Agency Comments and Resolutions

	Support Alternative 203 and/or Option D	Support Other Proposed Alternatives	Other Comments
March 2009 Public Information Meeting Comments	36,700	NA	NA
October 2009 Public Hearing	47	3	24

3.5.3 Conclusion

Extensive technical studies and stakeholder involvement throughout the process resulted in informed decisions that led to a transportation solution that best fit the needs of the area. As the process narrowed the field of the build alternatives, travel performance and environmental impacts proved to be comparable. Whereas, social impacts were mixed, economic benefits clearly favored Alternative 203. Furthermore, the project's stakeholder involvement achieved a degree of partnership in the process that is not often achieved, and resulted with consensus amongst the stakeholders that is rare with such an expansive study area. Over the two-year planning process, communities in the area united in their support for Alternative 203 with Option D. They believe this solution best serves their transportation needs and future land use opportunities, while maintaining their current overall community and land use structure. In consideration of all the technical analysis and stakeholder input to this process, the Preferred Alternative has been identified as Alternative 203 with South Bypass Connection Option D.

3.5.4 Implementation Strategy and Tier Two Studies

The EO-WB Tier One Study considered various highway projects and improvements to other modes of transportation as being part of the solution to satisfy the travel needs of the study area. The study brought together various transportation providers who have interests in improved transportation in the study area. They have participated at a high level of involvement, allowing a broad range of transportation improvements to be considered through the process. The study results that have evolved from Tier One serve as a platform for highway agencies and for other transportation providers to prioritize and potentially initiate their respective processes for advancing projects in the plan.

Because the implementation of the Preferred Alternative will be costly, the work would likely be completed over time in phases or sections. Phased construction of highway projects are guided by the definition of operational independence—an operationally independent phase of work is a portion of the work described in this environmental document that can be built and function as a viable transportation facility even if the remainder of the work is never built. Environmental commitments (wetland mitigation, relocation assistance of residents or businesses, etc.) associated with the phase of work to be built must be implemented as part of the project. Potential phased implementation scenarios for proposed highway projects will be considered in detail with future Tier Two studies. At that time, funding scenarios will also be explored in detail, including tolling options and public private partnership opportunities. Ultimately, a detailed implementation plan for improvements will be developed, per Section 6002 guidance, establishing a proposed sequence for implementing highway projects with operational independence based on funding scenarios and schedules.

The preferred transportation system alternative, specifically the proposed package of highway projects identified in Tier One, will be advanced for Tier Two studies. Tier Two will consist of detailed Phase I engineering and environmental studies of the proposed highway improvements, including consideration of design alternatives and of complementary improvements (e.g., travel demand management strategies and transportation system management improvements), their environmental consequences, and of proposed environmental mitigation measures. Study findings will be presented in the *Tier Two Environmental Impact Statement* and *Record of Decision*.

The development of a phased improvement plan can only be generally defined in Tier One. Many more details are required to sequence the development of a project of this magnitude. Further work will be done in Tier Two to prepare a development plan for overall implementation of the project.

The EO-WB study has considered a variety of modes of transportation in attempting to satisfy the travel needs of the study area. It has brought together various transportation providers who have interests in improved transportation in the study area. They have participated at a high level of involvement in the transit improvements and others that have been identified as part of the plan. The study results that have evolved from Tier One and to be further developed in Tier Two serve as a platform for other transportation providers to initiate their respective processes for advancing projects in the plan.