CHAPTER 5: EVALUATION

INTRODUCTION

This chapter includes the evaluation of the access management and land use recommendations for this project. The evaluation is based on the results found in the evaluation matrix and can be found at the end of this chapter (see Figure 5-1).

ACCESS MANAGEMENT MATRIX EVALUATION AND CRITERIA

Several criteria were included in the access management portion of the evaluation matrix: congestion, safety and logistics. For congestion, information was included for 2001 AADT (vehicles per day (vpd)), 2006 AADT (vpd) 2006 peak hour LOS (A-F) 2036 AADT (vpd), 2036 Peak Hour LOS (A-F) 2006 truck percentage (%), 2006 85th percentile speed (miles per hour). The 2006 traffic information was gathered from *US 50 Gateway Study* traffic counts (Stateline Road to SR 148); 2006 LOS information was calculated from HCS 2000; and the 2001 traffic information was gathered from INDOT.

For safety, information was included for the segment length (miles), access points (number), average access spacing (feet), crashes (number) and the comparative link crash rate (accidents per 100 million vehicle miles). The access point information was gathered for this project in 2006. The average access spacing was calculated by taking an average of all the link lengths between access points in this segment. Crash data was provided by Dearborn County for 2003-2005. Due to the lack of traffic data at the intersections, the crashes coded at an intersection were split in half and assigned to the links on either side of the intersection. The comparative link rate was estimated from the 2006 and 2001 ADT's and the segment lengths. (It is intended to be a comparison of segments within the corridor and not a full crash analysis.)

The logistics evaluation of the matrix contains qualitative information. Recommended improvements were based on short to long term solutions. The short term solutions include projects built within the next five years; moderate term solutions include projects built within five to 15 years; and long term solutions include projects built in 15 or more years. Implementation difficulty qualified the proposed improvements on a simple-to-difficult scale. "Simple" projects would require little ROW and/or require access changes to the least number of properties; "moderate" projects would involve access changes to comparatively more properties; and "difficult" projects would involve more ROW and access changes to the highest number of properties. "Public support" is an evaluation on which recommendations the public supports or does not support based on comments received from the public during several public meetings and presentations. The estimated project costs are a quantitative estimate based on the preliminary information developed thus far and will become more refined as the recommendations become more defined.

LAND USE EVALUATION AND CRITERIA

The US 50 Corridor was evaluated by section and subsection to determine priority areas and timeframes for the implementation of land use and streetscape recommendations. Evaluation was based on four criteria, as described in the below table. Corridor sections were rated as "high", "moderate", or "low" for each of these criteria, based on comparisons among the corridor sections

Figure 5-2: Land Use Evaluation

Criteria	Rating	Description
Availability of Developable Land		Amount of undeveloped land along the US 50 frontage.
	High	Multiple large sites (10 or more acres) of vacant property
	Moderate	Few sites available, generally less than five acres each
	Low	Generally built-out with little or no vacant land remaining
Development Constraints		Extent to which future development will be physically constrained by steep slopes, floodplain or lot sizes.
	High	Most land in segment faces constraints; development not possible or will require significant site work or acquisition of multiple properties
	Moderate	Some small unconstrained sites are available, though mitigation of slopes or floodplain is necessary with most of remaining vacant land
	Low	Few obstacles to development relative to rest of corridor
Strategic Significance to Region		Visibility and effect of future development on the remainder of the study area and Dearborn County.
	High	Section through which most of corridor traffic travels, provides first impression of region to many motorists
	Moderate	Substantial through traffic, provides first impressions of individual communities along corridor
	Low	Separated from predominant corridor traffic flow
Planned Development Intensity		Planned development intensity type as identified on Exhibit 2-1 in Chapter 2.
	High	Areas identified as "Urban"
	Moderate	Areas identified as "High-Density Suburban"
	Low	Areas identified as "Suburban" or "Rural"

Additionally, a timeframe was assigned to each section of the corridor, based on the rate at which land use changes are expected to occur. The pace of land use change will be affected by both development pressure and access management implementation timeframes. Development pressure is based on a corridor section's suitability for commercial development, as well as observations of recent

development activities. High development pressure indicates that real estate demand is high and development activities are imminent.

The number and timeframe of access management recommendations are also considered because access changes would create opportunities for streetscape improvements. For example, eliminating a curb cut would create an opportunity to replace pavement with a section of treelawn.

Timeframe is rated as short, moderate, or long. Short indicates that land use change will occur within five years. Moderate indicates five to 15 years, while long indicates greater than 15 years.

In general, land use and streetscape recommendations should be given a higher priority in sections of the study area that have ample developable land, few development constraints, high strategic significance and planned development intensity, and a short time frame for land use change. It is in these areas where the adjustment of land use policies, targeting of incentives and planning and funding for streetscape improvements would have the greatest impact and should occur the soonest.

The evaluation is summarized in Figure 5-1, and is also described in detail for each section of the corridor.

SECTION 1

Stateline Road to I-275/SR 1

Access Management

This segment of Section 1 has an AADT of 12,800 vehicles per day (vpd) in 2006 and a projected volume of 16,700 vpd in 2036. It currently functions at LOS A and is projected to function at LOS A in 30 years. Twenty-three percent of the vehicles traveling this roadway are trucks and the 2006 85th percentile speed is 55 mph. So this segment, although experiencing a high percentage in trucks, has smooth traffic flow and functions at an optimal LOS now and well into the future.

There are currently 22 access points in this segment, resulting in an existing access point density of 11 accesses per mile, which is the lowest density for the project area. The existing average access spacing of 509 feet exceeds the minimum goal of 350 feet, so this segment has an ideal number and spacing of access points. Implementation of these recommendations would reduce the number of access points to 20, resulting in a lower density of 10 access points per mile and a higher access spacing of 528 feet.

There were 92 crashes on this segment over a three-year period, equating to a crash rate of 328 crashes per 100 million vehicle miles. Compared to a statewide average crash rate of 187 (1997-1999 rate), this crash rate is very high. It is also important to note that 26 or 28 percent of those crashes are associated with "animals or objects" in the road. These crashes are not associated with the access points in this area. As this area becomes more developed and less rural, this statistic should decrease. In addition, 20 accidents occurred at the Stateline Road/US 50 intersection. While not included in the scope of this study, improvements should be made to this crossroads to ensure safety in the future, especially as traffic continues to increase.

Logistically, these recommendations would be built in the long term (15 or more years) and would be require a moderate effort to implement. This area is still developing and there is a large portion of land available. Therefore, the changes suggested in this area would take place over time. This sub-section was deemed as moderate to construct not because of the location or changes to driveways, but because of the realignment of Oberting Road to 90 degrees with US 50. With its relatively high cost it is likely that these changes would take place incrementally as the area develops, not as a single project. The estimated project cost for the access management recommendations would be approximately $3.5 million in 2006 dollars, excluding right of way.

Land Use

Most of the US 50 frontage properties in this subsection are undeveloped, primarily because substantial portions of these properties are constrained by floodplain, steep slopes and I-275 ROW. With the exception of properties located closest to the I-275

interchange, this subsection is separated from the predominant traffic flow in the corridor. This characteristic will moderate development pressure. Development intensity is planned to be low for this subsection, because of its distance from existing urban centers and infrastructure.

Relatively low development pressure and a low number and long time frame of access management recommendations indicate this section of the corridor has a moderate timeframe for land use changes.

I-275/SR 1 to Argosy Parkway

Access Management

This segment of Section 1 has an AADT of 31,800 vehicles per day in 2006 and a projected volume of 41,400 vpd in 2036. It currently functions at LOS C and is projected to function at LOS C in 30 years. Trucks make up 23 percent of the traffic, and in 2006 the 85th percentile speed was 55 mph. This segment has a high percentage of trucks but functions at an average LOS now and in the future.

There are currently 31 access points in this segment, resulting in an existing access point density of 22 accesses per mile. This is mainly due to the fact that the levy borders the south side of US 50. Even with only one side of the road being developed, the existing average access spacing of 185 feet is below the minimum goal of 350 feet, so this segment does not have an ideal spacing of access points. If the study's recommendations are implemented these numbers will be improved and exceed the minimum 350 feet goal. Access points would be reduced to 20, resulting in a lower density of 14 accesses per mile and a higher access spacing of 377 feet.

There were 119 crashes on this segment over a three-year period, equating to a crash rate of 244 crashes per 100 million vehicle miles. Compared to a statewide average crash rate of 187 (1997-1999 rate), this crash rate is high. However, the improvements associated with this segment should reduce the crashes based on the modification of some of the access points and construction of a raised median. This segment is three lanes in each direction with a center left turn lane. Each access point enjoys full access currently, meaning drivers may turn left or right at will. The interaction of each of the access points creates conflict points, increases the likelihood of accidents. Reducing the number of access points would reduce the number of conflict points and thereby create a safer roadway.

Logistically, these recommendations would be built in the short-term (0-5 years) and would be moderately easy to implement. This segment is fairly wide and the space is available to construct a raised median, but the land is mostly developed. As mentioned previously, access changes only affect only one side of the roadway for most of this segment, making changes less complicated. The estimated access management project cost would be approximately $3 million.

Land Use

Although most of the western frontage of US 50 in this subsection is constrained by a floodwall, there are several large vacant development sites along the western frontage. This subsection is highly significant to the region, since it represents a "front door" for much of the traffic entering Dearborn County and southeastern Indiana. The appearance of this subsection will be critical in defining the first impression that many motorists have of this region. Development intensity is planned to be moderate for this area, due to the development potential and its proximity to the urban cores of Greendale and Lawrenceburg.

Development pressure is high due to proximity to I-275 and the high traffic volume that includes visitors to the Argosy Casino. This factor and the high number and short timeframe of access management recommendations indicate this corridor section has a short time frame for land use changes.

SECTION 2

Argosy Parkway to Walnut Street/Stadium Lane

Access Management

This segment of Section 2 had an AADT of 41,900 vpd in 2001, a 2006 AADT of 44,000 vpd, and a projected volume of 57,200 vpd in 2036. It currently functions at an LOS of B and is projected to function at an LOS of C in 30 years. Twenty-three percent of the vehicles traveling this roadway are trucks and the 2006 85th percentile speed is 55 mph. So this segment has a high percentage of trucks but functions at a good LOS now and at an average LOS in the future.

There are currently eight access points in this segment, resulting in an existing access point density of 13 accesses per mile. The existing average access spacing of 368 feet exceeds the minimum goal of 350 feet, so this segment has an ideal number and spacing of access points. While this average spacing does exceed the goal of 350 feet, there are some individual access points that currently violate the guidelines and increase the potential for traffic crashes. The proposed access points would be reduced to seven, resulting in a lower density of 12 accesses per mile and a higher average access spacing of 440 feet.

There were 75 crashes on this segment over a three-year period, factoring to a crash rate of 259 crashes per 100 million vehicle miles. Compared to a statewide average crash rate of 187 (1997-1999 rate), this crash rate is high. Over half (57) of these accidents occurred at the intersections of Argosy Parkway/US 50 and Arch Street/US 50. By protecting the functional area of these interchanges by reducing access points, the safety should improve.

Logistically, these recommendations would be built in the long-term (15 or more years) and would be simple to implement due to their relatively small number. However, current access densities do not warrant an immediate action as do other sections of the corridor and will likely take place as redevelopment opportunities present themselves. The estimated access management project cost would be approximately $1 million. These costs are primarily related to the replacement of the drainage system and construction of a curb. These costs could be reduced dramatically by not constructing a new curb.

Land Use

Much of this subsection is constrained by steep slopes on either side of US 50, and by the passage of US 50 over the Lawrenceburg Floodwall. As a result, there are few opportunities for development or even redevelopment. The strategic significance of this subsection is somewhat limited relative to the lack of Casino traffic, although a large volume of traffic does pass through the section. However, the constrained nature of this section would limit opportunities for streetscape improvements, except for a small section from Arch Street to Stadium/Walnut Street. This

subsection is within the historic core of Lawrenceburg, which is planned for high development intensity.

Few access management improvements are proposed here. Little development pressure is anticipated due to physical constraints. So, there is a relatively long timeframe for land use change in this subsection.

Walnut Street/Stadium Lane to Front Street

Access Management

This segment of Section 2 had an AADT of 41,900 vpd in 2001, a 2006 AADT of 44,000 vpd and a projected volume of 57,200 vpd in 2036. It currently functions at LOS B and is projected to function at LOS C in 30 years. Twenty-three percent of the vehicles traveling this roadway are trucks and the 2006 85th percentile speed is 55 mph. So this segment has a high percentage of trucks but functions at a good LOS now and at an average LOS in the future.

There are currently 18 access points in this segment, resulting in an existing access point density of 86 accesses per mile, which is the highest density for the project area. The existing average access spacing of 30 feet is well below the minimum goal of 350 feet, so this segment does not have an ideal density or spacing of access points.

There were 33 crashes on this segment over a three-year period, equating to a crash rate of 326 crashes per 100 million vehicle miles. Compared to a statewide average crash rate of 187 (1997-1999 rate), this crash rate is very high.

Recommendations for this section of the corridor are complicated and also highly dependent on the selected alternative for the INDOT US 50 Environmental Assessment study. Further study is required to determine the proper mix of access management improvements. Possibilities for improvements include; raised medians, consolidation of driveways, right in/right out driveways, shared parking and the creation of supplemental parking. Due to the nature of this area and relationship to the INDOT US 50 Environmental Assessment Study, detailed recommendations for this section of the corridor were not made at this time.

Land Use

Future development in this highly urban subsection of the corridor will be constrained by the lack of available properties and small lot sizes. However, redevelopment and high development intensity are encouraged in this area, and some clusters of underutilized properties may provide redevelopment opportunities. The strategic significance of this section has been hampered by the lack of casino traffic, although a large volume of traffic passes through.

The challenges of redevelopment along with loud truck traffic, narrow sidewalks,

and lack of off-street parking will continue to limit the pressure for both pedestrian- and automobile-oriented development.

Front Street to SR 48

Access Management

This segment of Section 2 has a 2006 AADT of 43,800 vpd, and a projected volume of 57,000 vpd in 2036. It currently functions at LOS B and is projected to function at LOS C in 30 years. Twenty-three percent of the vehicles traveling this roadway are trucks and the 2006 85th percentile speed is 55 mph. So this segment has a high percentage of trucks but functions at a good LOS now and at an average LOS in the future.

There are currently eight access points in this segment, resulting in an existing access point density of 25 accesses per mile, which is toward the lower end of densities for the project area. The existing average access spacing of 188 feet is below the minimum goal of 350 feet, so this segment does not have an ideal density or spacing of access points. Implementing the recommendations would improve but these numbers but they would still be just under the minimum goal of 350 feet. Access points would be reduced to six, resulting in a lower density of 19 accesses per mile and a higher access spacing of 278 feet.

This area of US 50 is also a concern. There were 105 crashes on this segment over a three-year period, equating to a crash rate of 684 crashes per 100 million vehicle miles. Compared to a statewide average crash rate of 187 (1997-1999 rate), this crash rate is very high and is the highest in all four Sections. This is the most confined area of the corridor, thus it is not surprising that the accident rate is high. In this only .32 mile segment of the corridor, there are over 100 crashes, with over 60 percent at the intersections. This area of US 50 is a safety concern.

Logistically, these recommendations would be built in the long-term (15 or more years) and would be simple to implement because they eliminate access points at mid-blocks, where there is already access from a side street. However, a future Tanners Creek bridge and associated sections will be built in this section. The recommendations of this study should be implemented only after new travel patterns from a new bridge crossing are confirmed. The estimated access management project cost would be approximately $600,000. This cost includes the replacement of the existing curb on each side of the roadway, which may not be necessary or may be part of a larger bridge crossing construction project.

Land Use

This subsection is similar to the previous subsection in terms of developable land, development constraints, strategic significance to the region and recommended development intensity. One difference, however, is that this section has fewer opportunities for redevelopment or sidewalk widening.

Additionally, the future of this segment depends on the design of the Tanners Creek bridge replacement, which has yet to be determined. The bridge reconstruction should be leveraged as an opportunity to improve pedestrian safety and streetscaping in this subsection, and to create pedestrian connections to surrounding communities. Planning should occur immediately to incorporate such improvements into the bridge design.

SECTION 3

SR 48 to Tanners Creek Road

Access Management

This segment of Section 3 has a 2006 AADT of 43,800 vpd and a projected volume of 57,500 vpd in 2036. It currently functions at LOS D and is projected to function at LOS E in 30 years. Twenty-three percent of the vehicles traveling this roadway are trucks and the 2006 85th percentile speed is 55 mph. So this segment has a high percentage of trucks and functions at a poor LOS now and in the future.

There are currently 27 access points in this segment, resulting in an existing access point density of 26 accesses per mile, which is toward the lower end of densities for the project area. The existing average access spacing of 118 feet is below the minimum goal of 350 feet, so this segment does not have an ideal density or spacing of access points. Implementing the recommendations would improve these numbers and the access spacing would be very close to the minimum 350 feet. Access points would be reduced to 16, resulting in a lower density of 16 accesses per mile and a higher access spacing of 330 feet.

There were 46 crashes on this segment over a three-year period, equating to a crash rate of 93 crashes per 100 million vehicle miles. Compared to a statewide average crash rate of 187 (1997-1999 rate), this crash rate is low. The improvements recommended for this segment should further reduce the crashes based on the modification of some of the access points.

Logistically, these recommendations would be built in the long-term (15 or more years) and would require a moderate effort to implement. There is little undeveloped land in this area, a low occurrence of accidents, and with the recommendations, the safest access spacing would be achieved. It is likely given these factors that this portion of the corridor would see recommendations implemented over time, as the segment parameters do not warrant an immediate action. The estimated project cost would be approximately $2 million.

Land Use

Most of the US 50 frontage in this subsection has already been developed or is constrained by steep hillsides or floodplains. The reduced casino traffic and distance from I-275 act to moderate the strategic regional significance of this subsection. Development intensity is planned as moderate in this area, due to its proximity to an existing urban center and infrastructure.

Development pressure is limited by this segment's distance from I-275, as well as the presence of power and sewage plants, reducing the likelihood of short-term land use change. The high number and timeframe of access management improvements in this subsection, however, will create opportunities to implement streetscape and

property enhancements but those improvements would more than likely be in the long-term.

Tanners Creek Road to Wilson Creek Road

Access Management

This segment of Section 3 has a 2006 AADT of 35,700 vpd, and a projected volume of 46,500 vpd in 2036. It currently functions at LOS C and is projected to function at LOS D in 30 years. Twenty-four percent of the vehicles traveling this roadway are trucks and the 2006 85th percentile speed is 51 mph. So this segment has a high percentage of trucks and functions at an average LOS now and poor LOS in the future. With the construction of a raised median and the reduction of access points, the future year LOS should improve.

There are currently 37 access points in this segment, resulting in an existing access point density of 33 accesses per mile, which is in the middle of densities for the project area. The existing average access spacing of 127 feet is below the minimum goal of 350 feet, so this segment does not have an ideal density or spacing of access points. Implementing the recommendations would improve these numbers and the access spacing would be very close to the minimum goal of 350 feet. Access points would be reduced to 19, resulting in a lower density of 17 accesses per mile and a higher access spacing of 311 feet. A raised median in this area would improve the access spacing even more.

There were 74 crashes on this segment over a three-year period, equating to a crash rate of 171 crashes per 100 million vehicle miles. This crash rate is just below the average statewide crash rate of 187 (1997-1999 rate). The improvements associated with this segment should reduce the crashes.

Logistically, these recommendations would be built in the moderate-term (5-15 years) and would be difficult to implement given the number of property owners and the number of access points recommended for elimination. The estimated project cost would be approximately $3 million.

Land Use

This subsection is constrained by steep hillsides and floodplains, although a few developable parcels remain. Development intensity is planned as moderate in this area, due to its proximity to an existing urban center and infrastructure. Strategic significance to the region is similar to the previous subsection.

Development pressure, though moderated by the distance from I-275, seems to be steady with the development of several retail projects serving local populations as well as pass-through traffic. Additionally, the high number and timeframe of access management improvements in this subsection will create opportunities to implement streetscape and property enhancements but those improvements will

more than likely be in the long-term.

Wilson Creek Road to SR 148

Access Management

This segment of Section 3 has a 2006 AADT of 32,200 vpd, and a projected volume of 41,900 vpd in 2036. It currently functions at LOS C and is projected to function at LOS C in 30 years. Nine percent of the vehicles traveling this roadway are trucks and the 2006 85th percentile speed is 53 mph. So this segment has a low percentage of trucks and functions at an average LOS now and in the future.

There are currently 44 access points in this segment, resulting in an existing access point density of 23 accesses per mile, which is toward the lower end of densities for the project area. The existing average access spacing of 50 feet is below the minimum goal of 350 feet, so this segment does not have an ideal density or spacing of access points. Implementing the recommendations will improve these numbers and the access spacing would exceed the minimum goal 350 feet. The access points would be reduced to 22, resulting in a lower density of 11 accesses per mile and a higher access spacing of 480 feet.

There were 78 crashes on this segment over a three-year period, equating to a crash rate of 113 crashes per 100 million vehicle miles. Compared to a statewide average crash rate of 187 (1997-1999 rate), this crash rate is low. The improvements associated with this segment should further reduce the crashes.

Logistically, these recommendations would be built in the moderate-term (5-15 years) and would be difficult to implement given the number of property owners and the number of access points. The estimated access management project cost would be approximately $4 million.

Land Use

This section is similar to the previous subsection in terms of the development constraints, strategic significance to the region, planned development intensity and timeframe. The main difference lies in the relative lack of developable land in this subsection.

SR 148 to George Street

Access Management

This segment of Section 3 had a 2001 ADT of 37,350, has a 2006 AADT of 32,200 vpd, and a projected 2036 AADT of 41,900 vpd. It currently functions at LOS C and is projected to function at LOS D in 30 years. Nine percent of the vehicles traveling this roadway are trucks and the 2006 85th percentile speed is 53 mph. So this segment has a low percentage of trucks and functions at an average LOS now and a poor LOS in the future.

There are currently seven access points in this segment, resulting in an existing access point density of 70 accesses per mile, which is toward the high end of densities for the project area. The existing average access spacing of 105 feet is below the minimum goal of 350 feet, so this segment does not have an ideal density or spacing of access points. Implementing the recommendations would improve these numbers but the access spacing would still be below the minimum goal of 350 feet. The access points would be reduced to two, resulting in a lower density of 20 accesses per mile and a higher access spacing of 264 feet. One access point in the intersection of SR 148/US 50, the other is a shared driveway of three local businesses. It would be ideal if this shared driveway would access US 50 from SR 148 via a service road, but after discussions with the property owner that does not seem a possibility at the time. If the land use for this property changes, alternate access should be investigated.

There were 29 crashes on this segment over a three-year period, equating to a crash rate of 674 crashes per 100 million vehicle miles. Compared to a statewide average crash rate of 187 (1997-1999 rate), this crash rate is very high. Twenty-five of these crashes or 86 percent occurred at the intersections of either SR 148 or George Street. The George Street intersection is at an angle to US 50. While not included in the scope of this study a re-alignment of George Street should be investigated.

Logistically, these recommendations would be built in the long-term (15 or more years) and would require a simple effort to implement. While these improvements would be simple to implement, it is likely that they will take place over time. It is feasible to complete them sooner, given the nature of the access and the relatively low cost. The estimated project cost would be $200,000.

Land Use

This subsection contains relatively dense development on small lots, as this portion of the corridor is adjacent to the historic urban core of Aurora. A steep embankment along the western frontage, a railroad along the eastern frontage and a bridge all act as significant development constraints in this area. Strategic significance is mainly local, as this subsection of US 50 approaches a gateway to historic Aurora.

Development pressure is somewhat limited by physical constraints and the distance from I-275. Additionally, relatively few access management improvements would create opportunities for significant streetscape or property improvements in this area. Therefore, the timeframe for land use change in this segment is moderate.

George Street to SR 350

Access Management

This segment of Section 3 had a 2001 AADT of 27,900, has a 2006 AADT of 29,400 vpd and a projected 2036 AADT of 38,200 vpd in 2036. It currently functions at LOS B and is projected to function at LOS C in 30 years. Nine percent of the vehicles

traveling this roadway are trucks and the 2006 85th percentile speed is 53 mph. So this segment has a low percentage of trucks and functions at a good LOS now and an average LOS in the future.

There are currently 11 access points in this segment, resulting in an existing access point density of 37 accesses per mile, which is toward the middle of densities for the project area. The existing average access spacing of 17 feet is below the minimum goal of 350 feet, so this segment does not have an ideal density or spacing of access points. Implementing the recommendations would improve these numbers and the access spacing would be just below the minimum goal of 350 feet. Access points would be reduced to five, resulting in a lower density of 17 accesses per mile and a higher access spacing of 311 feet.

There were 78 crashes on this segment over a three-year period, equating to a crash rate of 113 crashes per 100 million vehicle miles. Compared to a statewide average crash rate of 187 (1997-1999 rate), this crash rate is low. The improvements associated with this segment should further reduce the crashes based on the modification of some of the access points. Again, over 50 percent of these crashes occurred at the intersections of George and SR 350. In the area of SR 350, the access management improvements would protect the functional area of the intersection and thus increase the safety of the intersection. As mentioned earlier, a re-alignment of George Street should be considered as part of a subsequent project.

Logistically, these recommendations would be built over time in the long-term (15 or more years) and would be simple to implement. Improvements could be completed sooner, due to the nature of the access and their relatively low cost. The estimated project cost would be $500,000.

Land Use

This subsection contains relatively dense development on small lots, as this portion of the corridor is adjacent to the historic urban core of Aurora. A steep embankment along the western frontage, a railroad along the eastern frontage and a bridge all act as significant development constraints in this area. Strategic significance is mainly local, as this subsection of US 50 approaches a gateway to historic Aurora. Development pressure is somewhat limited by physical constraints and the distance from I-275. Additionally, relatively few access management improvements would create few opportunities for significant streetscape or property improvements in this area. Therefore, the timeframe for land use change in this segment is moderate.

SECTION 4

SR 350 to SR 62

Access Management

Section 4 had a 2001 AADT range of between 10,310 and 21,070. Other congestion-related information was not available for Section 4.

There are currently 114 access points in the eastbound direction and 118 in the westbound direction, resulting in an existing access point density of 14 (eastbound (EB)) and 14 (westbound (WB)) accesses per mile, which is toward the lower end of densities for the project area. The existing average access spacing of 389 (EB) and 376 (WB) feet exceeds the minimum goal of 350 feet, so this segment has an ideal spacing of access points. Implementing the recommendations would improve these numbers. Access points would be reduced to 111 (EB) and 108 (WB), resulting in a lower density of 13 (EB) and 13 (WB) accesses per mile and a higher access spacing of 400 (EB) and 411 (WB) feet.

There were 197 crashes on this segment over a three-year period. The remaining safety-related information is not currently available for Section 4.

Logistically, these recommendations would be built in the long-term (15 or more years) and would require a moderate effort to implement. This area is still rural in nature and it is likely that access management practices would be implemented over time with a moderate effort. Future access management guidelines are important in this section of US 50. The estimated project cost would be $14 million dollars. As in all of the access management cost estimates, a complete curb construction is included. This is one of the segments where that type of construction is not needed currently because of the segment's rural nature, but may be required in the future.

Land Use

This rural section of the corridor contains a large amount of developable land and is less constrained by topography and floodplains than other sections of the corridor. However, relatively low traffic volume and the distance from I-275 limit the regional significance of this segment. Planned development intensity is low due to the distance from urban centers and infrastructure, and the desire to preserve rural character. Because of this, recommendations point to a long timeframe for land use change in this segment.

COMPARISON AND SUMMARY

Access Management

Congestion

Section 1, from Stateline Road to I-275/SR 1 has the best traffic flow, or LOS, Section 3, from SR 48 to Tanners Creek Road has the worst. The remaining segments had average to good LOS.

Safety

Section 2, Walnut Street/Stadium Road to Front Street had the highest density of access points, followed closely by Section 3, SR 148 to George Street. Section 1, Stateline Road to I-275/SR 1 had the lowest density of access points, followed closely by Section 2, Argosy Parkway to Walnut Street/Stadium Lane. The remaining segments were toward the lower end of densities. Section 2, Walnut Street/Stadium Road to Front Street had the lowest existing average access spacing, followed closely by Section 3, Wilson Creek Road to SR 148. Section 1, Stateline Road to I-275/SR 1, and Section 2, Argosy Parkway to Walnut Street/Stadium Lane were the only two segments that met the average access spacing goal. With the recommendations, five segments would exceed the minimum spacing goal and three would be just under the minimum. The remaining two segments would remain below the minimum spacing goal (Section 2, Front Street to SR 48, and Section 3, SR 148 to George Street.) Seven of the segments have crash rates that exceed the statewide average, one segment did not have the information available for comparison, one was right at the average (Section 3, Tanners Creek Road to Wilson Creek Road), and only two segments were under the statewide average crash rate – Section 3, SR 48 to Tanners Creek Road, and Section 3, Wilson Creek Road to SR 148.

Logistics

Most of the segments have long-term projects associated with their recommendations except for Section 1, I-275/SR 1 to Argosy Parkway – short-term. Most of the segments would require a moderate effort to implement, except for Section 2, Front Street to SR 48 – simple, Section 3, SR 148 to George Street and George Street to SR 350 – simple, Tanners Creek Road to Wilson Creek Road – difficult, and Section 3, Wilson Creek Road to SR 148 – difficult.

The most expensive project area to address is Section 4, from SR 350 to SR 62 at $14 million and the least expensive cost to address is Section 3 – SR 148 to George Street.

Land Use

Sections 1 and 4 both have a high availability of developable land; Section 2 has low; and Section 3 has low to moderate availability in its developable land evaluation rating. Section 2 has high development constraints; Section 1 ranges from high to low constraints; Section 3 ranges from moderate to high constraints; and Section 4 has moderate constraints. The second segment of Section 1 is the only segment that

has high significance to the region; Section 2 and 3 have moderate regional significance; Section 4 and the first segment of Section 1 have low regional significance. Section 2 would have a high planned development intensity; most of the remaining sections have moderate planned development intensity; and Section 4 has low regional significance. For project timeframe, the segments vary, five would be long-term projects – Section 2, Argosy Parkway to Walnut Street/Stadium Lane, Section 3 SR 48 to SR 148, and Section 4.

Figure 5-1: Evaluation Matrix

			SECTION 1		*SECTION 2*			*SECTION 3*					*SECTION 4*
			Stateline Road to I-275/SR 1	**I-275/SR 1 to Argosy Parkway**	**Argosy Parkway to Walnut Street/ Stadium Lane**	**Walnut Street/ Stadium Lane to Front Street**	**Front Street to SR 48**	**SR 48 to Tanners Creek Road**	**Tanners Creek Road to Wilson Creek Road**	**Wilson Creek Road to SR 148**	**SR 148 to George Street**	**George Street to SR 350**	**SR 350 to SR 62**
ACCESS MANAGEMENT EVALUATION		***Overview of Access Management Recommendations:***	Define, Combine & Relocate Access Points, Re-align Oberting Road	Define, Combine & Relocate access points, Construct Raised Median	Define, Combine Access Points	Define, Combine & relocate access points,Construct Raised Median	Define, Combine & relocate access points, eliminate mid-block access	Define, Combine & Relocate Access Points	Define, Combine & Relocate Access Points, Construct Raised Median	Define, Combine, Relocate access points; Construct Raised Median	Define, Combine and Relocate Access Points	Define, Combine and Relocate Access Points	Define, Combine and Relocate Access Points
	Category	Quantity/Rating											
	Congestion	2001 AADT	vehicles per day			41,900	41,900					37,350	27,990	10,310 to 21,070
		2006 AADT	vehicles per day	12,800	31,800	44,000	44,000	43,800	43,800	35,700	32,200	39,300	29,400	
		2006 Peak LOS	A-F	A	C	B	B	B	D	C	C	C	B	------
		2036 AADT	vehicles per day	16,700	41,400	57,200	57,200	57,000	57,000	46,500	41,900	51,100	38,200	------
		2036 Peak LOS	A-F	A	C	C	C	C	E	D	C	D	C	------
		2006 Truck Percentage	percentage	23%	23%	23%	23%	23%	24%	24%	9%	9%	9%	
		2006 85 percentile speed	miles per hour	55 mph	55 mph	55 mph	55 mph	55 mph	51 mph	51 mph	53 mph	53 mph	53 mph	
	Safety	Segment Length	miles	2	1.4	0.6	0.21	0.32	1.03	1.11	1.95	0.1	0.3	8.4
		Existing Access Points	Number	22	31	8	18	8	27	37	44	7	11	114(EB)/118(WB)
		Proposed Access Points	Number	20	19	7	NA	6	16	19	22	2	5	111(EB)/108(WB)
		Exsting Access Point Density	points per mile	11	22	13	86	25	26	33	23	70	37	14(EB)/14(WB)
		Proposed Access Point Density	points per mile	10	14	12	NA	19	16	17	11	20	17	13(EB)/13(WB)
		Existing Average Access Spacing	feet	509	185	368	30	188	118	127	50	105	134	389(EB)/376(WB)
		Proposed Average Access Spacing	feet	528	377	440	NA	278	330	311	480	264	311	400(EB)/411(WB)
		Crashes	number	92	119	75	33	105	46	74	78	29	62	197
		Comparative Link Crash Rate	Crashes per 100 million vehicle miles	328	244	259	326	684	93	171	113	674	642	----
	Logistics	Project Timeline	Short, Moderate, Long	Long	Short	Long	NA	Long	Long	Moderate	Moderate	Long	Long	Long
		Implementation Difficulty	Simple, Moderate, Difficult	Moderate	Moderate	Moderate	Moderate	Simple	Moderate	Difficult	Difficult	Simple	Simple	Moderate
		Public Support	low, medium, high	High	High	Medium	NA	Low	Medium	Medium	Medium	Medium	Medium	High
		Estimated Access Managment Project Cost	$	$3,500,000	$3,000,000	$1,000,000	NA	$600,000	$2,000,000	$300,000	$4,000,000	$200,000	$500,000	$14,000,000

LAND USE RECOMMENDATIONS	***Overview of Land Use Recommendations:***		None; developer-driven	New sidewalk, street trees, treelawn to replace pavement, gateway landscaping and signage	New sidewalk	Widen sidewalk, street trees, decorative wall/fence, decorative street lamps, raised crosswalks	Raised crosswalks	New sidewalk, street trees, treelawn to replace pavement	New sidewalk, street trees, treelawn to replace pavement, gateway signage and landscaping	New sidewalk, widen/relocate sidewalk, street trees, treelawn to replace pavement	None; developer-driven	None; developer-driven	None; developer-driven
	Criteria	Quantity/Rating											
	Availability of Developable Land (amount of undeveloped land along the US 50 frontage)	Low/Moderate/High	High	High	Low	Low	Low	Low	Moderate	Low	Low	Low	High
	Development Constraints (extent to which future development will be physically constrained by steep slopes, floodplain, or lot sizes)	Low/Moderate/High	High	Low	High	High	High	Moderate	Moderate	Moderate	High	High	Moderate
	Strategic Significance to Region (visibility and effect of future development on the remainder of the study area and Dearborn County)	Low/Moderate/High	Low	High	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	Low
	Planned Development Intensity (planned development intensity level identified in Chapter 2)	Low/Moderate/High	Low	Moderate	High	High	High	Moderate	Moderate	Moderate	Moderate	Moderate	Low
	Project Timeframe	Short/Moderate/Long	Moderate	Short	Long	Short to Moderate	Short	Long	Long	Long	Moderate	Moderate	Long
	Streetscape Cost (total of all streetscape recommendations, excluding site-specific development and enhancement concept plans)	$	N/A	$700,000	$40,000	$500,000	$50,000	$200,000	$700,000	$600,000	N/A	N/A	N/A