

RETHINKING TRANSPORTATION

Metropolitan Transportation Plan Major Update

Clark County Transportation Analysis District Report

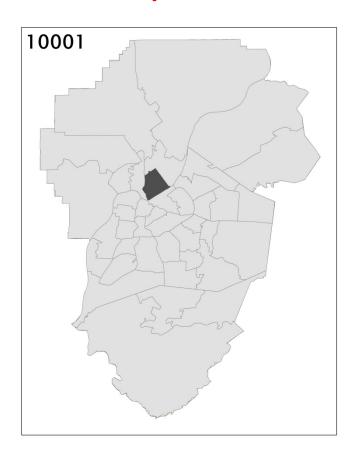




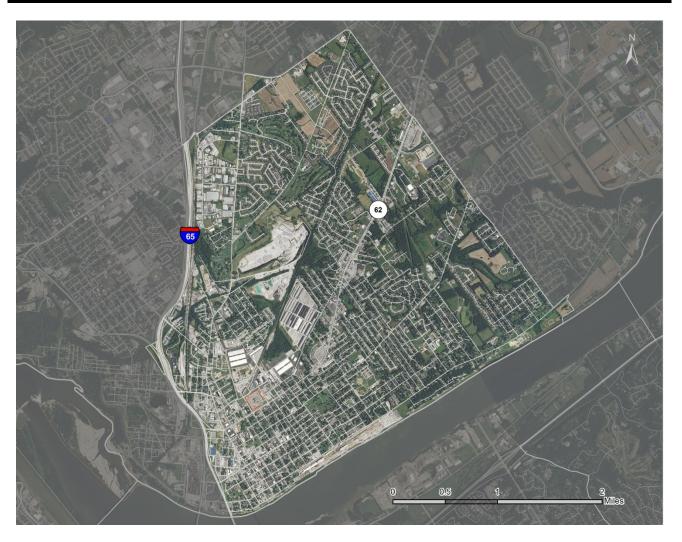
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Metropolitan Transportation Plan Major Update

Transportation Analysis District 10001 Report







Location & General Characteristics

Transportation Analysis District (TAD) 10001 is located in the southern portion of Clark County, north of the Ohio River, east of I-65, south of Charlestown-New Albany Pike, Hamburg Pike, and Veterans Parkway, and west of Allison Lane and Holman Lane. It contains some unincorporated areas, but most of the TAD is in Jeffersonville. TAD 10001 is relatively well established in terms of development patterns with the exception of several small undeveloped areas in the eastern and northeastern portions of the TAD. A significant portion of this TAD is residential. A high percentage of the residential exhibits a typical suburban pattern, although the development in the southwestern corner shows more urban residential property uses, such as apartments. There are also other land uses in various sections of the TAD. There is a retail commercial area in the southwestern portion of the TAD in the region along Spring Street between Market Street and 10th Street, and there are other more dispersed retail commercial areas along Tenth Street from Spring Street to Allison Lane/Holman Lane. There is a non-retail commerce park north of Tenth Street between Dutch Lane and First Avenue. There is an industrial park in the northwest corner of the TAD. There are also several historic sites, government services locations, parks, a library, and a hospital. With the exception of the parks, most of these are located in the general vicinity of the southwestern corner of the TAD. The parks are distributed around the southern 75% of the TAD.

Area and Socioeconomic Information

Area: Approximately 6,596 acres

Non-Group Quarters Population (2010): 24,009

Number of Households (2010): 10,693 **Number of Jobs (2000):** 21,575

Title VI/Environmental Justice

The Community Assessment & Outreach Program for the Louisville (KY-IN) Metropolitan Planning Area for Environmental Justice and Other Communities of Concern (July, 2006) identifies a Title VI/Environmental Justice area in TAD 10001 (see Figure 10001-A). The area is located in the southwestern portion of the TAD. The boundary follows I-65 starting slightly north of the Ohio River and continues generally northward to Eastern Boulevard. It then goes to the east following Eastern Boulevard and Mill Creek to Willinger Lane. From there, it goes southward and follows Willinger Lane, Hamburg Pike, and Dutch Lane to the northern branch of the B&O railroad. The boundary then follows the northern branch of the B&O railroad in a southwesterly direction; then it follows Spring Street in a south-southeasterly direction; and finally Riverside Drive in a west-southwesterly direction back to I-65. It includes Spring Hill, the Ken Ellis Center, and Colston and Lansden parks.



Figure 10001-A: Title VI/Environmental Justice area is shown in red.

The Community Assessment & Outreach Program outlines various measures to be undertaken when considering the

issues and potential solutions for Title VI/Environmental Justice areas. While Title VI/Environmental Justice is best addressed at the project level, considerations appropriate for the metropolitan transportation plan level include:

- Mitigating disproportionate burdens placed upon Title VI/Environmental Justice areas that may result from transportation projects and programs.
- Reducing barriers to non-automotive forms of transportation

Functionally Classified Roadways

Urban Principal Arterial – Interstate	I-65* from the Ohio River to the overpass over Lewis & Clark Parkway
Urban Principal Arterial – Freeway/Expressway	US 31* from the Ohio River to the Browns Stations Way overpass
Urban Principal Arterial – Other	10th Street* from I-65 to Allison Lane/Holman Lane
Urban Minor Arterial	• US 31* from the I-65 overpass to Charlestown-New Albany Pike
	Allison Lane from Utica Pike to 10th Street
	Charlestown-New Albany Pike from US 31 to Veterans Parkway
	Chippewa Drive from Utica Pike to Eighth Street
	Court Avenue from I-65 to Penn Street
	Dutch Lane from 11th Street to Spring Street/Hamburg Pike
	Eastern Boulevard from Spring Street to the I-65 overpass
	Eighth Street from Spring Street to Hopkins Lane
	Hamburg Pike from Dutch Lane to Veterans Parkway
	Holman Lane from 10th Street to Veterans Parkway
	Market Street from the I-65 overpass to Mechanic Street
	Middle Road from Hopkins Lane to Allison Lane
	Penn Street from Utica Pike to 11th Street

	Spring Street from Market Street to Dutch Lane
	Springdale Drive from Eighth Street to 10th Street
	Utica Pike from Mechanic Street to Allison Lane
	Veterans Parkway from Hamburg Pike to Holman Lane
	Wall Street from Market Street to Spring Street
Urban Collector	Augusta Drive from Hamburg Pike to Charlestown Pike
	Charlestown Pike from Hamburg Pike to Holman Lane
	East Stansifer Avenue/West Fourteenth Street from I-65 to Spring Street
	East 12th Street from Spring Street to Dutch Lane
	East 12th Street from Dutch Lane to First Avenue
	First Avenue from Plank Road to East 12th Street
	Main Street from Market Street to Plank Road
	Plank Road from Main Street/First Avenue to 10th Street
	Perrin Lane from Utica Pike to Middle Road
	Walnut Street from Market Street to East 12th Street
	West Ninth Street from I-65 overpass to Spring Street
	Sportsman Drive from 10th Street to Nole Drive
Rural Principal Arterial –	• N/A
Interstate	
Rural Principal Arterial –	• N/A
Other	
Rural Minor Arterial	• N/A
Rural Major Collector	• N/A
Rural Minor Collector	• N/A

^{*}Denotes part of the National Highway System (NHS)

Schools

- Bridgeport Elementary SchoolClark County Middle/High School
- Corden Porter School
- Jeffersonville High School
- Maple Elementary School
- Northaven Elementary School

- Parkview Middle School
- River Valley Middle School
- Sacred Heart of Jesus Catholic Elementary School
- Spring Hill Elementary School
- Thomas Jefferson Elementary School
- Wilson Elementary School

Colleges & Universities

• N/A

Parks

- Aquatic Center
 Bob Hedge Park
 Colston Memorial Park
 Connie Selmer Park
 Duffy's Landing
 Henry Lansden Park
 Highland Park
- Howard Steamboat Museum
- Inman Park
- John Wilcoxson Park
- Lotte Oglesby Park

- Meijers Fields
- Nachand Fieldhouse
- Optimist Park
- Perrin Family Park
- Poppy Park
- Preservation Park
- Riverside Park
- S. Harlan Vogt Park
- Shirley Hall Park
- Warder Park
- Wathen Park

Other Area of Interest/Significance

- Big Four Bicycle & Pedestrian Bridge
- JeffBoat

• Quartermaster Court

Historic

- Grisamore House
- Henry French House
- Howard Home

- Old Jeffersonville Historic District
- Spring Street Freight House

Transit

TAD 10001 is currently served by TARC. The following routes pass through and have stops within the TAD, providing connections within and beyond the TAD:

- Route #71 Jeffersonville/Louisville/New Albany
- Route #72 Clarksville
- Route #82 New Albany/Clarksville/Jeffersonville

Park and Ride

There are no identified Park and Ride lots in TAD 10001.

Public Comments

Eighth Street

Lots of traffic on Eighth - slow moving.

10th Street

• Too many signals - hard to get through quickly.

Allison Lane

• From Middle Road to IN 62 needs bicycle lanes and middle turn lane. Intersection at IN 62 and Allison Lane needs to be addressed. As well, turning from Middle Road onto Allison Lane is difficult during peak times.

Allison Lane/Middle Road

• Intersection needs turn arrows.

Big Four Bridge

• Needs sidewalks in 1/2 mile radius.

Charlestown Pike

• Sidewalk along Charlestown Pike only goes part of the way to Thomas Jefferson Elementary. Kids cannot walk or ride to school because it's too dangerous.

Highway 62/Plank Road

• Need turn arrow at this intersection. Very dangerous.

Kopp Lane/Hamburg Pike

• Connect across I-65

Old SR 62/I-65 interchange

• Connector from I-65 southbound to Brown Station Way northbound (Old 62).

Park (North of Middle Road – West of Allison Lane)

New park needs possible pedestrian/bike facilities.

Utica Pike

• Bicycle lanes on Utica Pike from JeffBoat to Port of Indiana. Currently unsafe due to roads being too narrow and several blind turns

Safety

3,642 crashes were reported in TAD 10001 in the three year period from 2009 to 2011. There were four fatalities reported as a result of crashes from 2009-2011: one in 2009; two in 2010; and one in 2011. In the same time period, there were a total of 650 crashes resulting in injury in this TAD: 215 in 2009; 209 in 2010; and, 226 in 2011.

As might be expected, the larger number of crashes occurred on the roadways with the higher traffic volumes: 10th Street, I-65, Court Avenue, Eighth Street, Spring Street, and US 31. Collectively, 2,230 of the crashes in TAD 10001 occurred on one of these six roadways, and each of them had in excess of 100 crashes. In fact, slightly more than 1000 crashes occurred on 10th Street. Additionally, Allison Lane, Hamburg Pike, Holmans Lane, Eastern Boulevard, and Market Street Lane each had between 50 and 100 crashes while twenty-six other roadways had more than 10 but less than 50 crashes.

Fatalities

There were four fatalities reported as a result of crashes from 2009-2011: one in 2009; two in 2010; and one in 2011.

175 - 254

125 - 174

75 - 124

High Crash Locations

There are four areas within or at the border of this TAD where the number of crashes within 0.10 mile over the three-

year period (2009-2011) has been in excess of 175 (highest density areas), seven areas where the number of crashes within 0.10 mile has been between 125 and 174 (higher density areas), and nine areas where the number of crashes within 0.10 mile has been between 75 and 124 (high density areas). Many of these

areas are joined in groups which include areas with two or all three densities of crashes. Overall, there are ten general high crash locations that can be found in or near TAD 10001 (see Figure 10001-B). These locations are described below.

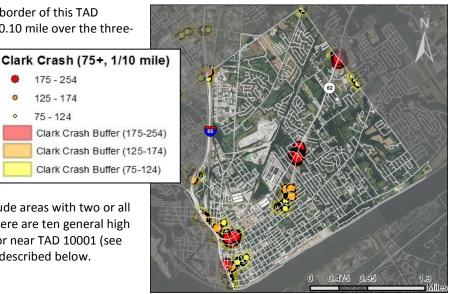


Figure 10001-B: High crash locations in TAD 10001.

<u>I-65 and Court Avenue</u>

This section of TAD 10001 had crash densities at all three levels described above. The crashes tend to be most highly concentrated along the I-65, Broadway Street, and Court Avenue corridors with strings of crashes—at lower densities—along several streets which cross Court Avenue, such as Mulberry, Spring, and Wall Streets. There is an area near Fifth Street and Broadway Street where the highest density of crashes occurred. Crashes occurred at the higher density in the areas along I-65 from approximately 300 feet north of Court Avenue to about 450 feet south of Court Avenue, along Broadway Street from Fifth Street to Court Avenue, and along Court Avenue from about North Shore Street west of the TAD to about Ohio Avenue (approximately 600 feet east of I-65). Crashes occurred at high density in the areas along I-65 from the Indiana-Kentucky border to Exit 0 and along Court Avenue from just west of Mulberry Street (approximately 550 feet east of I-65) to Wall Street (approximately 2,100 feet east of I-65). Many of the crashes were not classified as to type. Of those which were classified; approximately 35% were rear end crashes, 16% were right angle crashes, and 13% were sideswipe accidents. There are at least five factors which could be contributing to the high number of crashes occurring in this section of the TAD. They include:

- high traffic volumes associated with the interchange of traffic between I-65 and the surface streets in this area;
- traffic on southbound I-65 becoming highly congested (i.e. stop-and-go) during the morning and afternoon peak periods;

- a number of curb cuts on Court Avenue—but no center turn lane—requiring vehicles to queue in the left-hand lane while waiting to turn;
- a lane drop of the westbound curb lane on Court Avenue at Broadway Street leading to significant queuing at some times of the day; and
- the intersection of North Shore Drive and Court Avenue being less than 150 feet from the I-65 overpass (sight restriction) and almost directly across Court Avenue from the southbound I-65 on-ramp.

10th Street from I-65/US 31 to Locust Street

This section of the TAD had crash densities at all three levels described in the introduction to this section. The highest density locations were located at or near the intersections of 10th Street with Spring Street and Wall Street, and they extend along Spring Street about 200 feet to 300 feet from either side of 10th Street and along Wall Street about 50 feet to 150 feet either side of 10th Street. Some higher density locations also occurred along 10th Street and Spring Street about 150 feet to 300 feet to the north, east, and west of their intersection. In addition, there are locations to the west along 10th Street and to the north and south along Spring Street for about 350 feet to 650 feet from the intersection and along 10th Street to the east of Wall Street about 400 feet from their intersection where high crash densities have occurred. There are also locations with higher crash densities in the area where I-65 and US 31 meet the ramps from 10th Street, and other locations along I-65 and US 31 to the north for about 900 feet and to the south for about 100 feet where high crash densities have occurred. Many of the crashes were not classified as to type. Of those which were classified; approximately 29% were rear end crashes, 18% were sideswipe accidents, 15% were backing crashes, and 16% were right angle crashes. There are at least three factors which could be contributing to the high number of crashes occurring in this section of the TAD. They include:

- high traffic volumes associated with the interchange of traffic between I-65 and the surface streets in this area;
- traffic on southbound I-65 becoming somewhat congested (i.e. slow-and-go) during the morning and afternoon peak periods; and
- a number of curb cuts on Tenth Street but no center turn lane requiring vehicles to queue in the left-hand lane while waiting to turn.

I-65/US 31 and Stansifer Avenue

This section of the TAD had crash densities at the higher and high levels described in the introduction to this section. The area with the higher crash densities is at or near the intersection where northbound US 31 intersects with Stansifer Avenue just east of I-65. All of the higher crash density locations in this area are located in this quadrant of the intersection. Some of the high density locations are also in the same vicinity. However, there are also high density locations along and near Stansifer Avenue west of its intersection with southbound US 31 in TAD 10002. Only two of the higher and high density locations were located on I-65. Most of the higher and high density locations were located on US 31 with the overwhelming majority of those locations being on northbound US 31 as it approached Stansifer Avenue. US 31 operates as a collector-distributor road (limited access road with grade-separated intersections) from Court Avenue to north of 10th Street. Then it transitions to a frontage road (limited access road with at-grade intersections) as it approaches Stansifer Avenue. Therefore, the Stansifer Avenue intersection is the first at-grade intersection for a significant distance. This situation may be a contributing factor to the high number of crashes occurring in this section of the TAD. Drivers on US 31 may not be anticipating the queuing occurring at this intersection. This seems to be consistent with the frequency of the various types of crashes occurring in this area. Many of the crashes were not classified as to type. Of those which were classified; approximately 49% were rear end crashes, 17% were right angle crashes, and 14% were sideswipe accidents. The high percentage of rear end crashes seems to be consistent with drivers not expecting the vehicles in front of them slowing or stopping.

I-65/US 31 and Eastern Boulevard

This section of the TAD had crash densities at the higher and high levels described in the introduction to this section. The area with the higher crash densities is at or near the intersection where northbound US 31 intersects with Eastern Boulevard just east of I-65. All but one of the higher crash density locations in this area were located in this quadrant of the intersection. The high density locations are located mostly along Eastern Boulevard to either side of I-65. US 31 operates as a frontage road (limited access road with at-grade intersections) in the area near Eastern Boulevard. The presence of the signal-controlled at-grade intersection at US 31 and Eastern Boulevard may be a contributing factor to

the number of higher density crash locations occurring in this section of the TAD. Drivers on US 31 may not be anticipating the queuing occurring at this intersection. This seems to be consistent with the frequency of the various types of crashes occurring in this area. Many of the crashes were not classified as to type. Of those which were classified; approximately 46% were rear end crashes, 19% were sideswipe accidents, and 10% were right angle crashes. The high percentage of rear end crashes seems to be consistent with drivers not expecting the vehicles in front of them slowing or stopping.

Lewis & Clark Parkway/US 31 and I-65

This section of the TAD had crash densities at the higher and high levels described in the introduction to this section. The area with the higher crash densities is mostly along Lewis & Clark Parkway although one is along the southbound I-65/I-65 ramp north of Lewis & Clark Parkway. That location and one of those along Lewis & Clark Parkway are in the I-65/US 31 corridor while the other two locations were along US 31 between I-65 and Charlestown-New Albany Pike. There were also a number of locations where there were high crash densities. These occurred along Lewis & Clark Parkway from east of Cedar Street in TAD 10002 to southwest of Charlestown-New Albany Pike and along the northbound and southbound I-65/US 31 about one to two blocks from the US 31/Lewis & Clark Parkway underpass of I-65. The pattern of higher and high density locations does not immediately suggest a cause for the crashes. However, a review of the crashes in this area indicates that a large number of them have occurred at the intersection of US 31 and Lewis & Clark Parkway. This would indicate that the portion of US 31 involved in the crashes is probably the portion that functions as a frontage road. Therefore, it is possible that the situation at this interchange area is similar to the ones at Stansifer Avenue and Eastern Boulevard in that the drivers on US 31 may not be anticipating the queuing occurring at the intersection. This seems to be consistent with the frequency of the various types of crashes occurring in this area. Many of the crashes were not classified as to type. Of those which were classified; approximately 46% were rear end crashes, 17% were right angle crashes, and 15% were sideswipe accidents. The high percentage of rear end crashes seems to be consistent with drivers not expecting the vehicles in front of them slowing or stopping.

10th Street from Cherry Drive to Clairview Drive

This section of the TAD had crash densities at the higher and high levels described in the introduction to this section. The area with the higher crash densities is located near the intersection of 10th Street and Nachand Lane. The higher density locations extended along both of those streets about 300 feet to 500 feet in either direction from the intersection. The area with the high crash densities is located near the intersection of 10th Street and Main Street. The high density locations mainly extended along 10th Street from about 500 feet west of the intersection to about 750 feet east/northeast of the intersection. However, there were also a number of locations along Main Street near Ninth Street and along Grubbs Avenue east of Main Street where there were high crash densities. The land use along the section of 10th Street where the higher and high crash locations exist is predominantly retail commercial. Although this area does not have continuous access to 10th Street, the number of curb cuts on 10th Street is quite large. This combination of land use and significant level of access provides the opportunity for a large of vehicles to turn left from 10th Street. However, 10th Street does not have a center turn lane. This means that queuing may develop in the lefthand lane while the vehicles are waiting to turn. This may be contributing to the higher and high density crash locations along this section of 10th Street. Frequent access also exists along Nachand Lane for about one to two blocks, which is about the same area where the higher density locations occur along that street. The frequency of access/egress opportunities may be contributing to the higher crash locations along Nachand Lane. This seems to be consistent with the frequency of the various types of crashes occurring in this area. Many of the crashes were not classified as to type. Of those which were classified; approximately 32% were rear end crashes, 15% were backing crashes, 15% were sideswipe accidents, and 13% were right angle crashes. The high percentage of rear end and sideswipe crashes shows some consistency with queuing. In that situation, the drivers may not stop quickly enough or if they do and the vehicle at the front of the queue does not turn as soon as expected, the driver may attempt to pass in the right lane and may be sideswiped. Also, the right angle crashes may be related to drivers turning in front of oncoming vehicles and not being able to complete the turn.

10th Street near the intersection with Plank Road/Springdale Drive

This section of the TAD had crash densities at the highest levels described in the introduction to this section. The area with the highest crash densities is located near the intersection of 10th Street, Plank Road, and Springdale Drive. The

highest density locations extended along 10th Street about 500 feet to 600 feet in either direction, along Plank Road slightly more than 400 feet, and along Springdale Drive about 230 feet from the intersection. Like the sections of 10th Street discussed above, there are frequent curb cuts and a significant amount of commercial land use in this section. Also, like the other sections of 10th Street discussed above, 10th Street is a four-lane roadway without a center turn lane. Therefore, there is a significant probability of a large number of left turns from 10th Street and queuing when these left turns occur. This may be contributing to the highest density crash locations occurring in this section of 10th Street. Frequent access also exists along Plank Road in the section where highest density locations occur along that street. Although one would not expect a center turn lane to exist along Plank Road, the frequency of access/egress opportunities may be contributing to the higher crash locations along that street. This seems to be consistent with the frequency of the various types of crashes occurring in this area. Many of the crashes were not classified as to type. Of those which were classified; approximately 34% were rear end crashes, 21% were backing crashes, and 15% were right angle crashes. The high percentage of rear end crashes seems to be consistent with drivers not expecting the vehicles in front of them slowing or stopping. Further, the right angle crashes may be related to drivers turning in front of oncoming vehicles and not being able to complete the turn.

10th Street and Allison Lane/Holmans Lane

This section of the TAD had crash densities at all three levels described in the introduction to this section. The area with the highest crash densities is located near the intersection of 10th Street, Allison Lane, and Holmans Lane. The highest crash density locations extended along these streets about 300 feet to 400 feet in all directions from the intersection. However, the majority of locations were along Allison Lane and Holmans Lane rather than 10th Street. There were only two highest crash density locations on 10th Street (one in each direction), and they were located about 300 feet to 350 feet in either direction along 10th Street from the intersection. Further, there was one higher density location in this area. It was along Allison Lane approximately 600 feet south of the intersection. In addition, there were two high density locations in this area. They were along Holmans Lane approximately 550 feet north of the intersection. The distribution of types of crashes was similar to that of the other locations in this TAD with highest, higher, or high density of crashes. Many of the crashes were not classified as to type. Of those which were classified; approximately 38% were rear end crashes, 24% were backing crashes, 10% were right angle crashes, and 10% were sideswipe crashes. The number of highest crash density locations in this area should not be surprising. This is a high-volume intersection with 10th Street, Allison Lane, and Holmans Lane all being relatively high-volume streets. In addition, the land use in this area is largely retail commercial, which is similar to other sections of 10th Street discussed above. The difference with this section of 10th Street is the presence of non-mountable medians extending 200 feet to 300 feet in two opposite directions from the intersection. The two highest density locations along 10th Street appear to have occurred slightly farther from the intersection than the ends of the medians. As noted above, the highest density locations and the higher density location were located along Allison Lane further from the intersection than the highest and high density locations were located along Holmans Lane. Two factors may be contributing to the differences at this location compared to the other locations in this TAD. They are:

- the traffic volume on Holmans Lane—although in excess of 10,000 vehicles per day—is about seventy percent of the volume on Allison Lane; and
- the elevations of the businesses immediately north of 10th Street are significantly higher than 10th Street which has necessitated placing their driveways onto Holmans Lane further from the intersection than the driveways onto Allison Lane.

Both of these differences have probably allowed for larger reaction distances for traffic on Holmans Lane as compared to Allison Lane. These larger reaction distances have probably allowed for some near-misses, which would have otherwise resulted in crashes.

Allison Lane – 400 feet to 600 feet either side of Seminole Drive

This section of the TAD had only high crash densities described in the introduction to this section. There were two high crash density locations along Allison Lane extending about 400 feet to the north of Seminole Drive, and four locations along Allison Lane extending about 600 feet south of Seminole Drive. Seminole Drive intersects Allison Lane directly across from the main driveway from the Jeffersonville High School student parking lot. This section of Allison Lane no doubt experiences significant peaking of the traffic volume during the period prior to the start of school and

particularly during the period after the end of school each weekday. Further, this intersection is less than 0.5 miles from the 10th Street/Allison Lane/Holmans Lane intersection discussed above, and there are numerous curb cuts that can be used to access a number of retail commercial businesses. It is likely that these two factors contribute to the high density crash locations along the section of Allison Lane. Many of the crashes in this area were not classified as to type. Of those which were classified; approximately 48% were rear end crashes, 13% were right angle crashes, and 13% were sideswipe crashes. The high percentage of rear end crashes seems to be consistent with drivers not expecting the vehicles in front of them slowing or stopping. Further, the right angle crashes may be related to the high frequency of turning movements at Allison Lane and Seminole Drive/driveway to Jeffersonville High School.

Holmans Lane/Veterans Parkway and Holmans Lane/west leg of Charlestown Pike

This section of the TAD had only high crash densities described in the introduction to this section. There were eleven high crash density locations near the Holmans Lane/Veterans Parkway intersection and eight high crash density locations near the Holmans Lane/west leg of Charlestown Pike intersection. These two intersections are located less than 250 feet apart. There is a traffic signal at the intersection of Holmans Lane and Veterans Parkway, but the only traffic control at the intersection of Holmans Lane and the west leg of Charlestown Pike is a stop sign for traffic coming from the west leg of Charlestown Pike onto Holmans Lane. It should be noted that west leg of Charlestown Pike terminates at Holmans Lane. The east leg of Charlestown Pike is aligned with Veterans Parkway at the intersection of Holmans Lane and Veterans Parkway. To complicate matters further, the northbound Holmans Lane traffic approaching its intersection with the west leg of Charlestown Pike approaches the intersection coming down from a knoll which limits the sight distance for drivers on the west leg of Charlestown Pike, and there are trees, signs, etc. which limit the ability of drivers in either traffic stream to see the vehicles in the other stream. To summarize this situation at the intersection of Holmans Lane and the west leg of Charlestown Pike, the drivers on the west leg of Charlestown Pike have a somewhat limited sight distance to their left because of the closeness of the two intersections and a similarly limited sight distance to their right because of the knoll and the other visual obstructions. The limited sight distance may well be contributing to the higher concentration of crashes at the intersection of Holmans Lane and the west leg of Charlestown Pike. Many of the crashes were not classified as to type. Of those which were classified; approximately 60% were rear end crashes. All other types contributed less than 10% of the crashes. The limited sight distances may be related to the high percentage of rear end crashes. The limited sight distance may be leading to some vehicles having to slow or stop suddenly, and the drivers of the following vehicles not expecting this behavior.

Congestion

Current Level of Service (LOS)

Currently the only roadways on the Congestion Management Process (CMP) network with a LOS below C are:

LOS D:	• I-65 northbound from the Ohio River border to northbound US 31 south of 10th Street
	• I-65 southbound from the ramp from US 31 south of 10th Street to the Indiana/ Kentucky border
	10th Street from US 31 ramps to Allison Lane/Holmans Lane

Projected 2030 Level of Service (LOS)

Due to the changes for I-65 associated with the Ohio River Bridges Project, it will not be operating worse than LOS C by 2030. On the other hand, there will be sections of some roadways which are projected to be congested to a level worse than LOS C by 2030. Based on a travel demand model scenario for the Year 2030 that includes only those projects included in the 2011-2014 KIPDA Transportation Improvement Program (TIP), the corridors on the CMP network with a LOS forecasted to be worse than C in the Year 2030 are:

LOS D:	Charlestown-New Albany Pike from Hamburg Pike to Veterans Parkway	
	10th Street from US 31 ramps to Spring Street	
LOS E:	10th Street from Penn Street to Reeds Lane	
LOS F:	10th Street from Spring Street to Penn Street	

In summary, by 2030, a few sections of the major roadways in this TAD are expected to be congested at LOS D, E, or F. The main impact of these changes will likely be on 10th Street where there are the three congested sections with one of them being at LOS F (see Figure 10001-D). Given the importance of the 10th Street corridor, this will probably impact travel in a significant portion of TAD 10001.

Access to Community Amenities

Most of TAD 10001 is relatively well established in terms of development patterns including a number of developed open areas (parks, golf course, etc.) as well as the built areas. About 50% to 60% of this TAD is residential. Much of it follows a typical suburban pattern, although the residential area in the southwestern corner contains some apartments and is more urban in nature. There are three prominent areas with a moderately high density of commercial activity. They can be found: (1) in the southwestern portion of the TAD near downtown along and within a couple of blocks of Court

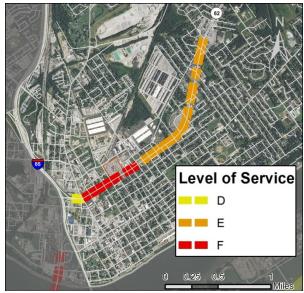


Figure 10001-D: Projected LOS on 10th Street.

Avenue and Spring Street and, to a lesser degree, 10th Street between Spring Street and Walnut Street, (2) along and near 10th Street in the vicinity of Nachand Lane and Clairview Drive, and (3) in and around the area of the 10th Street/Allison Lane/Holmans Lane intersection. The open space in the TAD includes a golf course and several parks. Other community amenities include historic sites, a senior center (on West Market Street), a library (on Court Avenue), a museum (on East Market Street), and several schools. Access to residences, commercial and shopping areas, historic sites, and the museum will be addressed in this section. Access to the other amenities such as the senior center, schools, library, and parks and golf courses will be covered later in the sections concerning access for persons with disabilities and older adults, access to education, and access to government services.

There is access to some residences, some commercial and shopping areas, and some historic sites in TAD 10001 by public transit. As described above, there are three transit routes serving this TAD. They are the Route #71, Route #72, and Route #82, and they all provide day-long service on weekdays. The first two routes also provide service on weekends. The Route #82 bus also operates on Saturdays but on a shortened route which does not access TAD 10001; it does not operate on Sundays. Only about half or fewer of the residences in this TAD are within 0.25 miles (the usually accepted walking distance) of a bus route. Many of the commercial and shopping establishments in the downtown area—and probably all of them in the 10th Street/Allison Lane/Holmans Lane area—are within walking distance of a bus route. The establishments in the commercial and shopping area along and near 10th Street in the vicinity of Nachand Lane and Clairview Drive are a little farther from a transit route than 0.25 miles. The Grisamore House, the Spring Street Freight House, and much of the Old Jeffersonville Historic District are within walking distance of a transit route, but the Henry French House, Howard Home, and Howard Steamboat Museum are not.

There is some pedestrian access to residences, commercial and shopping locations, and historic sites in this TAD, but access by bicycle is limited to riding in the travel lanes with motor vehicles. Sidewalks are available through much of the downtown and adjoining area, as far north as 10th Street and as far east as Main Street. In these areas, the ability to access a residence, commercial and shopping location, or historic sites by walking is generally a matter of distance rather than the presence or absence of sidewalks. Since there are a number of commercial and shopping locations in or near the downtown area, pedestrian access to these locations is practical from a significant number of residences. The same is true for travel from one residence to another for a significant number of locations, primarily those in the downtown area and to the east of downtown. The Howard Steamboat Museum is the only museum located in TAD 10001. It is located along Market Street and has pedestrian access from a significant number of residences. However, aside from these locations, pedestrian access to other residences and commercial and shopping locations is more challenging not just due to distance but also due to the lack of sidewalks. There are number of neighborhood streets that likely have low traffic volumes that may provide pedestrians with a walking route, but the lack of sidewalks along

some major roadways probably presents a barrier for pedestrian access to other portions of the community. As for bicycle access, the main challenge is the lack of a rectangular grid of streets—or in some cases almost any streets—providing connectivity in the direction perpendicular to Market Street and Veterans Parkway and the streets between them which run—more or less—in the southwest to northeast direction. The lack of such streets does not present a serious problem between Market Street and Eighth Street, as the lack of connecting streets mainly exists between Perrin Lane and Allison Lane—about 4,400 feet. Between Eighth Street and 10th Street, the number of such streets is sparse between Springdale Drive and Allison Lane—over 7800 feet. Northwest of 10th Street, there is almost no connection between Hamburg Pike and Holmans Lane—a distance of more than 12,000 feet.

In contrast, the roadway network in TAD 10001 is well developed. There are not any significant challenges with using a motor vehicle. At present, only 10th Street is experiencing any congestion. It is operating at LOS D throughout its length in this TAD; so the level of congestion is minimal. In some areas, such as the downtown area, the density of traffic signals may cause some delays, but the LOS along these streets is C or higher; so the delay should not be too great. In the future, 10th Street is projected to be operating at LOS F from Spring Street to Penn Street and at LOS E from Penn Street to Reeds Lane. The short section from the US 31 ramps to Spring Street is projected to be operating at LOS D. The only other road with projected congestion is Charlestown-New Albany Pike, which is projected to be operating at LOS D in the future. Otherwise, recurring delay due to congestion is essentially nonexistent in the rest of the TAD. However, as noted in the section concerning crashes, there are several locations with a high number of crashes. Given the lack of recurring delay, the non-recurring delay at locations with a high number of crashes is likely to be noticeable. Also, as mentioned in the paragraph above, another challenge is a lack of connecting streets in the northwest to southeast direction. However, this lack of connecting streets is probably not as great a problem for those driving vehicles as it is for bicyclists.

Access to community amenities in TAD 10001 varies by mode. Although some sections of streets in this TAD are presently congested or projected to be congested in the future, this congestion is not wide spread affecting many streets. There are no streets operating at a level worse than LOS D at the present, and only 10th Street is expected to be congested at LOS E or F by 2030. Therefore, congestion is not a significant problem at present and can be addressed on 10th Street as it worsens. The non-recurring delay associated with the high number of crashes in some locations may be as great or a greater problem as the recurring delay associated with congestion. However, access by other modes to community amenities from the various portions of the TAD is not consistent. For those wishing to travel on foot and by bicycle, there are sidewalks and side streets that can provide reasonable access within portions of this TAD but not within other portions. Further, crossing the major roadways will likely be challenging, and using the side streets to find the best path through the residential areas can be challenging at present due to the lack of connecting streets in the northwest-southeast direction. For those wishing to travel by bus, access will be good to those portions of the TAD along bus routes but not so good in those areas away from the bus routes.

Access to Workplace

Access to workplace was examined on different levels: major employers (300+ employees), high density employment (1000+ employees within 0.25 miles of each other), high density retail (50 to 99 and 100+ retail facilities within 0.25 miles of each other), and commerce parks.

Major Employers

- Clark Memorial Hospital
- JeffBoat
- Kitchen Kompact

There are three major employers (300+ employees) in TAD 10001 plus one just outside the eastern border of the TAD. The three major employers located in TAD 10001 are: (1) Clark Memorial Hospital located along Spring Street, (2) Kitchen Kompact located along Dutch Lane, and (3) Jeffboat located along Market Street/Utica Pike. The major employer located just outside the eastern border is Meijer's located along Allison Lane. In addition, there are a number of clusters of high density employment within this TAD. The clusters are located primarily in the downtown area mostly along Court Avenue and Spring Street and the streets adjacent to them. However, there are other clusters located: (1)

along Spring Street and adjacent streets between 10th Street and 15th Street, (2) between Watt Street and Mechanic Street along 10th Street and continuing up to 12th Street, (3) along and near Eighth Street and 10th Street from Penn Street/Dutch Lane to east of Main Street, (4) along and near 10th Street and Plank Road from Clairview Drive to east of Sharon Drive, and (5) near the intersection of 10th Street with Allison Lane/Holmans Lane about 700 feet to 1,300 feet along each leg of the intersection. Aside from these workplaces, there is one location along Production Drive between Hamburg Pike and Industrial Parkway where there are 1,000 or more employees within 0.25 miles. There is also a commerce park located between Dutch Lane and Main Street from 10th Street about 1,400 feet to 2,000 feet to the northwest.

- Shopping High Density (100+, 1/4 mile)
- Shopping High Density (50+, 1/4 mile)
- Major Employers (300+, 1/4 mile)
- Employment High Density (1000+ employees, 1/4 mile)
- Shopping High Density Buffer (100+, 1/4 mile)
 - Shopping High Density Buffer (50+, 1/4 mile)
 - Employment High Density Buffer (1000+ employees, 1/4 mile)
- Commerce Park

There is access to most of the workplaces in TAD 10001 by transit. As described above, there are three transit routes serving this TAD. They are the Route #71, Route #72, and Route #82, and they all provide day-long service on weekdays. The first two routes also provide service on weekends. The Route #82 bus also operates on Saturdays but on a shortened route which does not access TAD 10001;

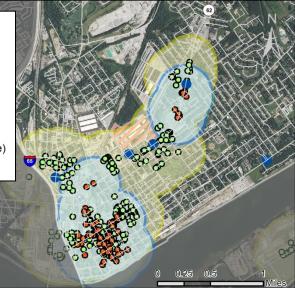


Figure 10001-D: Access to workplace in TAD 10001

it does not operate on Sundays. Most of the workplace locations are within the walking distance of a bus route or are close to it, and many are near sidewalks. The exceptions are about 75% of those along and near 10th Street and Plank Road from Clairview Drive to east of Sharon Drive and the location on Production Drive. These locations are not within easy walking distance, and generally sidewalks are not available in these areas. Otherwise, it is reasonable to consider the workplaces in TAD 10001 as probably being accessible by transit.

There is some pedestrian access to the workplaces in this TAD, but access by bicycle is limited to riding in the travel lanes with motor vehicles. Sidewalks are available through much of the downtown and adjoining area, as far north as 10th Street and as far east as Main Street. In these areas, the ability to access a workplace is generally a matter of distance rather than the presence or absence of sidewalks. There are a number of workplaces near the downtown area, and they generally have good pedestrian access. The same is true for a significant number of other workplaces, primarily those to the east of downtown. However, while the workplace end of the trip may have good access by walking, the other end of the trip may not. As mentioned above in the section concerning community amenities, pedestrian access to residences, for example, may be limited primarily to the downtown area and the area east of it. This may limit the number of persons who would walk to work. In fact, walking from the workplace to a commercial or shopping location (and back) at lunch time may be a more common example of pedestrian access than walking to work. In some cases, there are some neighborhood streets that likely have low traffic volumes that could provide pedestrians with a walking path, but the lack of sidewalks along some major roadways probably present a barrier for pedestrian access to other portions of the community. As for bicycle access, the main challenge is the same as it was for access to community amenities. It is the lack of a rectangular grid of streets—or in some cases almost any streets—providing connectivity in the direction perpendicular to Market Street and Veterans Parkway and the streets between them which run—more or less—in the southwest to northeast direction. Given that many of the workplaces are west of Springdale Drive, the lack of such streets does not present a serious problem between Market Street and Eighth Street

and between Eighth Street and 10th Street. However, northwest of 10th Street, there is almost no connection between Hamburg Pike and Holmans Lane—a distance of more than 12,000 feet.

In contrast, the roadway network in TAD 10001 is well developed. There are not any significant challenges with using a motor vehicle. At present, only 10th Street is experiencing any congestion. It is operating at LOS D throughout its length in this TAD; so the level of congestion is minimal. In some areas, such as the downtown area, the density of traffic signals may cause some delays, but the LOS along these streets is C or higher. So the delay should not be too great. In the future, 10th Street is projected to be operating at LOS F from Spring Street to Penn Street and at LOS E from Penn Street to Reeds Lane. The short section from the US 31 ramps to Spring Street is projected to be operating at LOS D. The only other road with projected congestion is Charlestown-New Albany Pike, which is projected to be operating at LOS D in the future. Only the workplace along Production Drive is anywhere close to that street. Otherwise, recurring delay due to congestion is essentially nonexistent in the rest of the TAD. However, as noted in the section concerning crashes, there are several locations with a high number of crashes. Given the lack of recurring delay, the non-recurring delay at locations with a high number of crashes is likely to be noticeable. Also, as mentioned in the paragraph above, another challenge is a lack of connecting streets in the northwest to southeast direction. However, this lack of connecting streets is probably not as great a problem for those driving vehicles as it is for bicyclists.

Access to workplaces in TAD 10001 varies by mode. Although some sections of streets in this TAD are presently congested or projected to be congested in the future, this congestion is not wide spread affecting many streets. There are no streets operating at a level worse than LOS D at the present, and only 10th Street is expected to be congested at LOS E or F by 2030. Therefore, congestion is not a significant problem at present and can be addressed on 10th Street as it worsens. The non-recurring delay associated with the high number of crashes in some locations may be as great a problem as the recurring delay associated with congestion. However, access by other modes to workplaces from the various portions of the TAD is not consistent. For those wishing to travel on foot and by bicycle, there are sidewalks and side streets that can provide reasonable access within portions of this TAD but not within other portions. Walking at the workplace end of the trip may not be a problem, but walking at the other end of the trip may be a problem. Further, for both walking and bicycling, crossing the major roadways will likely be challenging, and using the side streets to find the best path through the residential areas can be challenging at present due to the lack of connecting streets in the northwest-southeast direction. For those wishing to travel by bus, access will be generally good for most workplaces since most workplaces are within walking distance of bus service, and many of those locations are near sidewalks.

Access for Persons with Disabilities and/or Older Adults

There is a senior center in TAD 10001. It is located near the intersection of Market Street and Spring Street. The other types of facilities that would be utilized by persons with disabilities and/or older adults are those also used by other persons and are discussed in the sections concerning access to community amenities, workplaces, government services, and medical facilities.

There is access to the senior center in TAD 10001 by transit for those willing to walk a slightly longer distance than normal. As described above, there are three transit routes serving this TAD. They are the Route #71, Route #72, and Route #82, and they all provide day-long service on weekdays. The first two routes also provide service on weekends. The Route #82 bus also operates on Saturdays but on a shortened route which does not access TAD 10001; it does not operate on Sundays. The Route #71 and Route #72 buses both operate within about 3 blocks of the senior center. This means that the senior center is about 300 feet further from these transit routes than the usually accepted maximum walking distance (0.25 miles). However, the two routes are sufficiently close to the senior center that the paratransit service could provide access to that location.

There is some pedestrian access to the senior center in this TAD, but access by bicycle is limited to riding in the travel lanes with motor vehicles. Sidewalks are available through much of the downtown and adjoining area, as far north as 10th Street and as far east as Main Street. In these areas, the ability to access another location is generally a matter of distance rather than the presence or absence of sidewalks. Since the senior center is near the downtown area, it has good pedestrian access. Further, as described in the paragraph above, for those willing to walk an extra 300 feet, the

Route #72 bus can be accessed. This route travels up Spring Street into the area where Clark Memorial Hospital and other medical facilities are located. So the combination of walking and transit usage can provide access to some necessary services. Being near the downtown area—where sidewalks are usually available—commercial and shopping locations can be accessed for those willing to walk about 0.5 miles from the senior center. As mentioned previously, access by bicycle is limited to riding in the travel lanes with motor vehicles. In the vicinity of the senior center, the street network approximates a rectangular grid. So it should be possible for a bicycle rider to find some streets with lesser traffic volumes to use. In other areas of this TAD, bicycle access might be limited by a lack of connecting streets in the northwest to southeast direction. In the vicinity of the senior center, that is not a problem.

In TAD 10001, the roadway network is well developed. There are not any significant challenges with using a motor vehicle. At present, only 10th Street is experiencing any congestion. It is operating at LOS D throughout its length in this TAD; so the level of congestion is minimal. In some areas, such as the downtown area, the density of traffic signals may cause some delays, but the LOS along these streets is C or higher. So the delay should not be too great. In the future, 10th Street is projected to be operating at LOS F from Spring Street to Penn Street and at LOS E from Penn Street to Reeds Lane. The short section from the US 31 ramps to Spring Street is projected to be operating at LOS D. The senior center is located approximately 0.7 miles from Spring Street. So the congestion along Spring Street should not provide a great problem for travel in the area around the senior center. The only other road with projected congestion is Charlestown-New Albany Pike, which is projected to be operating at LOS D in the future. It is much further from the senior center and should have much less impact on travel in the vicinity of the senior center. A number of the high crash locations are in the general area of the senior center, but the nearest locations are about 0.3 miles away. Non-recurring delay at these high crash locations could affect travel in the vicinity of the senior center. However, safety may be a more important concern. Ten crashes involving injuries occurred within 0.25 miles of the senior center during 2009-2011. In other areas of the TAD, the lack of connecting streets in the northwest to southeast direction is a problem. In the portion of the TAD near the senior center, it is not a problem.

Access for persons with disabilities and/or older adults in the vicinity of the senior center in TAD 10001 varies by mode. Although some sections of streets in this TAD are presently congested or projected to be congested in the future, this congestion is not widespread. There are no streets operating at a level worse than LOS D at the present, and only 10th Street is expected to be congested at LOS E or F by 2030. Therefore, congestion is not a significant problem at present and can be addressed on 10th Street as it worsens. The non-recurring delay associated with the high number of crashes in some locations may be as great a problem as the recurring delay associated with congestion. For travel in the vicinity of the senior center, however, the safety issue associated with the nearby high crash location is probably of greater concern. Otherwise, access by other modes to the senior center from the various portions of the TAD is not consistent, although this access is probably better than it is in other portions of the TAD. For those wishing to travel on foot and by bicycle, there are sidewalks and side streets that can provide reasonable access within some portions of this TAD, particularly in the vicinity of the senior center. In general, for both walking and bicycling, crossing the major roadways will likely be challenging, and using the side streets to find the best path through the residential areas can be challenging at present due to the lack of connecting streets in the northwest-southeast direction. However, in the vicinity of the senior center, the problems associated with crossing the streets may not be as bad as in other portions of the TAD, and the problems associated with the lack of connecting streets in the northwest-southeast direction do not apply. For those wishing to travel by bus, access is generally good once the riders get on the bus. However, they have to walk about 300 feet more than the generally accepted maximum to access the bus.

Access to Education

There are no post-secondary institutions in TAD 10001. However, there are twelve elementary, middle, and high schools in the TAD. Two of the schools—Clark County Middle/High School and Jeffersonville High School—are sufficient close to qualify as a cluster. All of the schools have parking lots, which appear to serve as locations where parents could drop off and pick up children or where driving-age students could park. Access by other means varies by school as described below.

Public transit can be used to access most of the schools. As described above, there are three transit routes serving this TAD. They are the Route #71, Route #72, and Route #82, and they all provide day-long service on weekdays. Route #82

operates on a shortened route on Saturdays and does not operate on Sundays, but this is generally of no consequence since schools rarely have classes on Saturdays and not on Sundays. Nine of the twelve schools are within the 0.25 miles distance normally accepted as the maximum walking distance for using transit. Two others are within 0.40 miles; the remaining school is well removed from a public transit route. Aside from the distance to be walked, the main challenge in using public transit to access the school is the presence or absence of sidewalks or an appropriate street on which to ride a bicycle. Nine of the eleven schools to which students might walk after using a public transit bus have sidewalks to connect the school and the bus route or the school is located adjacent to the street on which the bus is running. One of the remaining two is located on a street which can be closed at the school making the street a dead-end street. Making this street a dead-end street should reduce the volume of motor vehicles improving the walking conditions for the students. Many students utilize school buses to access the school. This generally lessens the need for sidewalks or streets for riding a bicycle for students. However, some students live sufficiently close to their school that they may not be afforded the opportunity to ride a school bus. Further, faculty, staff, and parents are unlikely to use a school bus to access a school; so they would need the presence of sidewalks and/or low-volume to able to access the school if they had no motor vehicle or chose to not use one.

There is some pedestrian access to the schools in TAD 10001, but access by bicycle is limited to riding in the travel lanes with motor vehicles. As stated above, sidewalks are generally available in the vicinity of the schools and continuing to the nearest public transit route. Students who only walk to school may need to walk a greater distance. For those who do, sidewalks are available through much of the downtown and adjoining area, as far north as Tenth Street and as far east as Main Street. In these areas, the ability to access a school is generally a matter of distance and/or general safety rather than the presence or absence of sidewalks. There are two schools which are in this area and another not too far north of 10th Street. These schools should have moderate to good pedestrian access. The same is true for another three schools to the east of downtown. The other six schools are located in areas where the presence of sidewalks is sporadic. Students attending those schools are less likely to access their school by walking only. As for bicycle access, the main challenge is the lack of bikeways. Aside from that, the next challenge is the lack or rectangular grid of streets—or in some cases almost any streets—providing connectivity in the northwest-southeast direction—cross streets to Market Street and Veterans Parkway and the other streets between them which run—more or less—in the southwest-northeast direction. The seven schools that are east of Springdale Drive may be affected by this problem.

The roadway network in TAD 10001 is well developed. There are not any significant challenges with using a motor vehicle. At present, only 10th Street is experiencing any congestion. It is operating at LOS D throughout its length in this TAD; so the level of congestion is minimal. In some areas, such as the downtown area, the density of traffic signals may cause some delays, but the LOS along these streets is C or higher. So the delay should not be too great. In the future, 10th Street is projected to be operating at LOS F from Spring Street to Penn Street and at LOS E from Penn Street to Reeds Lane. The short section from the US 31 ramps to Spring Street is projected to be operating at LOS D. The only other road with projected congestion is Charlestown-New Albany Pike, which is projected to be operating at LOS D in the future. The schools along Veterans Parkway and possibly Charlestown Pike might be affected by the congestion along Charlestown-New Albany Pike, but it does not seem likely that the effect will be significant. Otherwise, recurring delay due to congestion is essentially nonexistent in the rest of the TAD. However, as noted in the section concerning crashes, there are several locations with a high number of crashes. Given the lack of recurring delay, the non-recurring delay at locations with a high number of crashes is likely to be noticeable. Also, as mentioned in the paragraph above, another challenge—and it is not a major problem—is a lack of connecting streets in the northwest to southeast direction.

Access to education in TAD 10001 varies by mode. Although some sections of streets in this TAD are presently congested or projected to be congested in the future, this congestion is not widespread. There are no streets operating at a level worse than LOS D at the present, and only 10th Street is expected to be congested at LOS E or F by 2030. Therefore, congestion is not a significant problem at present and can be addressed on 10th Street as it worsens. The non-recurring delay associated with the high number of crashes in some locations may be as great a problem as the recurring delay associated with congestion. However, access by other modes to workplaces from the various portions of the TAD is not consistent. For those wishing to travel on foot and by bicycle, there are sidewalks and side streets that can provide reasonable access within portions of this TAD but not within other portions. Walking near the schools may

not be a problem for most schools, but walking further away from the schools at the other end of the trip may be a problem. Further, crossing the major roadways will likely be challenging particularly for younger students who would be walking or bicycling, and using the side streets to find the best path through the residential areas may be challenging at present due to the lack of connecting streets in the northwest-southeast direction. For those wishing to travel by bus, access will be generally good for most of the schools since most schools are within walking distance of bus service.

Access to Government Services

There are 31 government services facilities and parks in TAD 10001. The government services facilities include a city hall, a county government office, a police station, a sheriff's office, a jail/correctional facility, two ambulance/fire stations, a health department, and a library. There are two large parks, and twenty smaller parks. Three of the government services facilities are located in the county building located along Court Avenue; another three are clustered along Wall Street between Court Avenue and Eighth Street; two are located at Quartermaster Court along 10th Street; and one is located along Duncan Avenue near Fourteenth Street. As for the parks, the two larger parks are located in the eastern corner of the TAD, and the smaller parks are mostly scattered throughout the portion of the TAD from slightly northwest of 10th Street to the Ohio River.

There is access to most of the government service facilities in TAD 10001 by transit. As described above, there are three transit routes serving this TAD. They are Route #71, Route #72, and Route #82, and they all provide day-long service on weekdays. The first two routes also provide service on weekends. Route #82 also operates on Saturdays but on a shortened route which does not access TAD 10001; it does not operate on Sundays. Seven of the government service facilities and fourteen of the parks are within the generally accepted walking distance (0.25 miles) of a bus route. The other two government services facilities and six of the remaining parks are within 0.50 miles. The remaining parks are each more than a mile from a transit route. In general, it is reasonable to consider the government services facilities and most of the parks in TAD 10001 as probably being accessible by transit.

There is some pedestrian access to the government services facilities and parks in this TAD, but access by bicycle is limited to riding in the travel lanes with motor vehicles. Sidewalks are available through much of the downtown and adjoining area, as far north as 10th Street and as far east as Main Street. Since sidewalks are available in these areas, the ability to access a government services facility by walking is generally a matter of distance rather than sidewalks. Since all of the government services facilities except one are in this area, they have good pedestrian access. The Clark County Health Department, which is the one not in this area, is located along Duncan Avenue near 14th Street. There does not appear to be a sidewalk on the side of 14th Street where the Clark County Health Department is, but there is a sidewalk along most of the other side of the street in that area. Further, there are sidewalks along Spring Street, which is the next major intersecting street to the east of the block where the Clark County Health Department is located. Further, there are sidewalks and side streets in the vicinity of the Clark Memorial Hospital, which would allow some pedestrian access—albeit less than perfect—from the other side of the Clark County Health Department. As for the parks, most of them have some sidewalks in the vicinity of the park. The extent of the sidewalks is difficult to judge, but they appear to be sufficient to allow walking from nearby neighborhoods to the parks. There are exceptions, such as Duffy's Landing, which is located along Utica Pike between Perrin Lane and Allison Lane. Sidewalks are not common in that portion of the TAD. As mentioned above, access by bicycle is limited to riding in the travel lanes with motor vehicles. For those government services facilities which are located in the downtown and adjacent areas, there are a number of side streets which may have low traffic volumes and, therefore, provide more suitable paths for bicycling than the major streets. Nevertheless, the paths to many government services facilities and parks may require crossing major streets, if not riding on them. This means that more experienced bicycle riders would be the ones likely accessing government services facilities and parks by bicycle. In addition, another challenge is the lack of a rectangular grid of streets—or in some cases almost any streets—providing connectivity in the cross direction to Market Street and Veterans Parkway and the streets between them which run—more or less—in the southwest to northeast direction. Given that the government services facilities and many of the parks are west of Springdale Drive, the lack of such streets does not present a serious problem. However, for the parks east of Springdale Drive, there are not as many connecting streets in the northwest-southeast direction.

In contrast, the roadway network in TAD 10001 is well developed. There are not any significant challenges with using a motor vehicle. At present, only 10th Street is experiencing any congestion. It is operating at LOS D throughout its length in this TAD; so the level of congestion is minimal. In some areas, such as the downtown area, the density of traffic signals may cause some delays, but the LOS along these streets is C or higher. So the delay should not be too great. In the future, 10th Street is projected to be operating at LOS F from Spring Street to Penn Street and at LOS E from Penn Street to Reeds Lane. The short section from the US 31 ramps to Spring Street is projected to be operating at LOS D. The only other road with projected congestion is Charlestown-New Albany Pike, which is projected to be operating at LOS D in the future, but it is not located near the government services facilities or parks. Otherwise, recurring delay due to congestion is essentially nonexistent in the rest of the TAD. However, as noted in the section concerning crashes, there are several locations with a high number of crashes. Given the lack of recurring delay, the non-recurring delay at locations with a high number of crashes is likely to be noticeable. There are several government services facilities and parks which are located along and near 10th Street. Access to these locations may be affected by the recurring and non-recurring delay that is occurring and which is expected to continue in the future. Also, as mentioned above, another challenge—and it is not a major problem—is a lack of connecting streets in the northwest to southeast direction. However, this lack of connecting streets is probably not as great a problem for those driving vehicles as it is for bicyclists.

Access to government services facilities and parks in TAD 10001 varies by mode. Although some sections of streets in this TAD are presently congested or projected to be congested in the future, this congestion is not wide spread affecting many streets. There are no streets operating at a level worse than LOS D at the present, and only 10th Street is expected to be congested at LOS E or F by 2030. Therefore, congestion is not a significant problem at present and can be addressed on 10th Street as it worsens. The non-recurring delay associated with the high number of crashes in some locations may be as great a problem as the recurring delay associated with congestion. However, access by other modes to government services facilities from the various portions of the TAD is not consistent. For those wishing to travel on foot and by bicycle, there are sidewalks and side streets that can provide reasonable access within the portions of this TAD where most of the government services facilities and some of the parks exist but not within other portions. Further, crossing the major roadways will likely be challenging, and using the side streets to find the best path through the residential areas can be challenging at present due to the lack of connecting streets in the northwest-southeast direction. For those wishing to travel by bus, access will be generally good for most government services facilities and many of the parks since these facilities are within walking distance of bus service.

Access to Medical Facilities

The medical facilities in TAD 10001 are located in the general neighborhood of the Clark Memorial Hospital. The hospital is located near the intersection of Missouri Avenue and Sparks Avenue. The other medical facilities are located along the nearby streets in the area bounded by I-65 on the west and Wall Street on the east and extending from just north of 15th Street to just south of 10th Street. Many of the other medical facilities are located along Spring Street, which is approximately one block east of Missouri Avenue in that area.

The mode of access a patient of a hospital would use would depend on the service/treatment to be provided at the hospital. Probably the majority of times a patient goes to a hospital, he/she would travel by vehicle—either private or an emergency vehicle. Since Spring Street is close to the hospital and many of the other medical facilities are located along it, it is likely that Spring Street would provide an important portion of the path to the hospital or other medical facilities. Spring Street is not presently operating at less than LOS C nor is it expected to be in the future. Further, Spring Street is well-connected to most, if not all, of the major streets in the TAD. Of these other major streets, only 10th Street is operating at less than LOS C. It is presently operating at LOS D, and sections of it are expected to be operating at LOS E and LOS F in the future. From the standpoint of congestion, only 10th Street is likely to impede the access to the hospital or the other medical facilities. However, as noted in the section concerning crashes, there are several locations with a high number of crashes. The non-recurring delay at locations with a high number of crashes may also impede the access to the hospital or the other medical facilities. This non-recurring delay is certainly likely to affect the reliability of response times in accessing the hospital.

Aside from the medical situations implicit in the discussion above, other patients, those who are visiting the hospital for another reason, or those visiting the other medical facilities might use alternative modes as well as access by vehicle. Any challenges associated with access by vehicle would be the same as discussed above. A possible alternative would be the use of transit. As described above, there are three transit routes serving this TAD. They are Route #71, Route #72, and Route #82, and they all provide day-long service on weekdays. Route #82 operates on a shortened route on Saturdays and does not operate on Sundays. A portion of the route followed by Route #72 is along Spring Street in the vicinity of the hospital and other medical facilities. All of the medical facilities are within 0.25 miles, the normally accepted maximum walking distance. Unfortunately, the presence of sidewalks along 14th Street west of Spring Street is sporadic. So access to the medical facilities in that area may be more challenging.

There are some sidewalks and side streets which might support pedestrian access to the medical facilities in TAD 10001, but access by bicycle would require riding in the travel lanes with motor vehicles. There are sidewalks along Spring Street in the area of medical facilities. However, as mentioned above, some of the side streets—for example, 14th Street—have sidewalks only in some places, only on one side of the street, or not at all. In these areas, however, the side streets may not have large traffic volumes, and there may be parking lots which can provide an alternative for pedestrians. As mentioned above, access by bicycle is limited to riding in the travel lanes with motor vehicles. In this area, there are a number of side streets, which probably do not have large traffic volumes, which can serve as minimally acceptable alternatives for bicyclists. Nevertheless, the paths to the medical facilities may require crossing major streets, if not riding on them. This means that the more experienced bicycle riders would likely be the ones accessing the medical facilities by bicycle.

Access to the medical facilities in TAD 10001 varies by mode. Although some sections of streets in this TAD are presently congested or projected to be congested in the future, this congestion is not wide spread affecting many streets. There are no streets operating at a level worse than LOS D at the present, and only 10th Street is expected to be congested at LOS E or F by 2030. Therefore, congestion is not a significant problem at present and can be addressed on 10th Street as it worsens. The non-recurring delay associated with the high number of crashes in some locations may be as great a problem as the recurring delay associated with congestion. However, access by other modes to the medical facilities is not consistent. For those wishing to travel on foot, there are sidewalks in some areas near the medical facilities, but in other areas, pedestrians must use side streets without sidewalks or parking lots. For those wishing to travel by bicycle, the only access requires riding in the travel lanes of the streets with the motor vehicles. Further, crossing the major roadways may be challenging for either pedestrians or bicyclists. For those wishing to travel by bus, access is good in the area of the medical facilities since they are within walking distance of bus service. The main challenge to access by transit is the absence of sidewalks in a few places.

Freight Access

I-65, US 31, IN 62/Tenth Street, Spring Street/Hamburg Pike, and Main Street between Market Street and 10th Street in TAD 10001 are part of the KIPDA Freight Network. These roadways/streets connect the freight users and facilities in this TAD with the rest of the region, the interstate system, and the rest of the nation. In addition to the streets in the KIPDA Freight Network, there is a major rail line and several short-line connections which provide freight access to and/or through this TAD. These lines provide connections: (1) between southern Indiana and locations to the south and (2) between southern Indiana and locations to the north.

There are two clusters (five or more users within 0.5 miles of each other) of major freight users in TAD 10001. There are 19 freight users and distributors in this TAD. Six of the users and distributors are in the cluster located in the northwest corner of the TAD. There are ten users and distributors in the west central portion of the TAD—two in area near Eastern Boulevard and Spring Street, two along Dutch Lane north of 10th Street, and six in the cluster in the center of the TAD (around Plank Road). Two of the other users and distributors are located near Wall Street south of 10th Street, and the remaining one is located along Utica Pike. There is also a commerce park in TAD 10001. It is located north of 10th Street and, for the most part, south of 12th Street. Dutch Lane is to its west, and Main Street is to its east. Several of the freight users and distributors are located in or near the commerce park. Most of the freight users and distributors are located within three blocks of the KIPDA Freight Network. The exceptions are located along Wall Street near Riverside Drive and along Utica Pike near Blanchel Terrace.

Freight access by truck faces two potential challenges. First, although most of the freight users and distributors are located within three blocks of the KIPDA Freight Network, the path to the network sometimes requires the use of more narrow streets, which are not always in as good a condition as the network generally are. Further, while the distance traveled on the non-network streets is three blocks or less for most facilities, there are some freight users and distributors where the distance traveled on the non-network streets is significantly longer. Second, for a few freight users and distributors—mostly those near 10th Street, congestion and delay may be a problem. 10th Street is presently operating at LOS D throughout its length in this TAD. In the future, 10th Street is projected to be operating at LOS F from Spring Street to Penn Street and at LOS E from Penn Street to Reeds Lane. The short section from the US 31 ramps to Spring Street is projected to be operating at LOS D. The congestion along 10th Street, at present, is somewhat minimal, but it may have a greater effect on larger trucks as compared to the traffic in general. Also, there are several high crash locations along 10th Street. The non-recurring delay at these locations may create delays for the trucks, as well. In addition, in some areas—such as the downtown area, the density of traffic signals may cause some delays, but the LOS along these streets is C or higher. So the delay should not be too great. The only other road with projected congestion is Charlestown-New Albany Pike, which is projected to be operating at LOS D in the future. While there are a number of freight users and distributors near that street, their route to most locations would logically be in other directions. So the projected congestion along Charlestown-New Albany Pike will probably not be much of a problem for freight access.

The issues facing freight access in TAD 10001 are the conditions of some of the streets that have to be utilized to get from the freight users and distributors to the KIPDA Freight Network and the congestion and delay—mostly along 10th Street—along the routes used by the trucks. Tenth Street is presently operating at LOS D throughout its length in this TAD, and in the future, it is projected to have sections operating at LOS D, LOS E, and LOS F. Although the congestion along 10th Street, at present, is somewhat minimal, it may have a greater effect on larger trucks as compared to the traffic in general. Further, the number of high crash locations along Tenth Street may cause additional delay. Neither of these issues is truly major, but the combination of these two factors may create some problems for freight access for users and distributors located near Tenth Street.

Future Socioeconomic Conditions

Much of TAD 10001 is currently built out and is not anticipated to see many changes by the year 2030. The three socioeconomic indicators are:

Households: Low growthEmployment: Low growthPopulation: Low growth

This scenario is not unexpected given the current density patterns in TAD 10001. Of the three socioeconomic indicators the increase in employment and non-group quarters population raises the most interest. In general terms, growth is recognized as positive indicators for the TAD. Given the forecast congestion throughout the TAD the socioeconomic indicators may negatively impact transportation and connections in the TAD if the issues are left unmitigated.

Issues and Opportunities

- There are two related issues involving 10th Street. First, it is the only street in TAD 10001 with existing and/or projected congestion worse than LOS C. Second, there are several high crash locations along its length in TAD 10001. The combination of recurring and non-recurring delay from the two issues may result in unacceptable delays. Further, the recurring delay can be expected to increase since the LOS is expected to degrade from LOS D to LOS E in some sections and to LOS F in others. Projects to be implemented in this area will need to be able to address the congestion and crash potential challenges occurring there. In addition, as land redevelops, there is an opportunity to improve the access management along this street.
- In general, pedestrian facilities are available in the downtown area north to 10th Street and east to Main Street. Outside of this area, there are gaps in those facilities. Projects to be implemented in this area need to consider including improved pedestrian facilities in areas where they are missing.

- Bicycle facilities are generally not available except through the use of side streets. Access for bicycles coexists in the traffic lanes with the motor vehicles. Further, areas north of 10th Street or east of Springdale Drive and north of Eighth Street or east of Perrin Lane between Utica Pike and Eighth Street often do not follow a rectangular-grid pattern, and the patterns that do exist are consistent from one section of the TAD to the next. In this TAD, there is a short-term opportunity to establish and sign bike paths and encourage a mode shift to travel by bicycle. There is also a longer-term opportunity to establish bikeways and sidewalks or streets in the northwest-southeast direction which provide better connections particularly between 10th Street and Charlestown Pike and, to a lesser degree, between Eighth Street and 10th Street.
- Transit routes generally follow the major streets in TAD 10001 and provide access for many of categories discussed above. However, there are large—particularly residential—areas which are not adjacent to the major streets, and the distance necessary to access transit is often beyond the maximum many would find acceptable. There is an opportunity in this TAD to consider ways to improve access to transit routes and to encourage a mode shift to travel by transit.

Related Plans and Studies

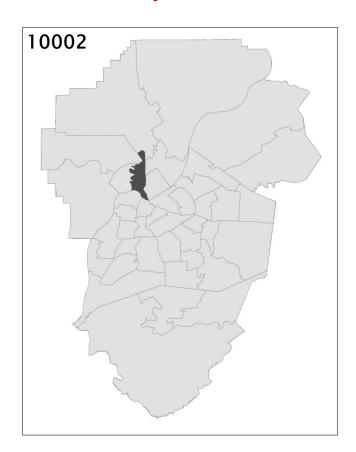
- Clark County Comprehensive Plan (2007)
- Clark County Transportation Plan (2012)
- Jeffersonville Bicycle & Pedestrian Plan (2013)
- Jeffersonville Comprehensive Plan 2030 (2008)
- Walkable Community Workshop Report (2004)



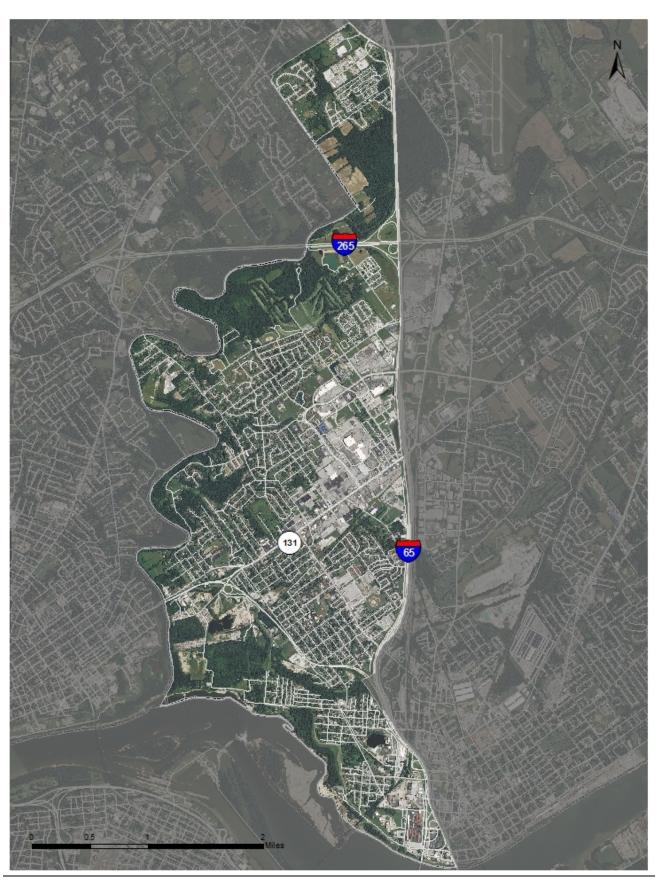
RETHINKING TRANSPORTATION

Metropolitan Transportation Plan Major Update

Transportation Analysis District 10002 Report







Location & General Characteristics

Transportation Analysis District (TAD) 10002 is located in southern Clark County, and incorporates much of the Town of Clarksville. TAD 10002 is relatively well established in terms of development patterns; the TAD is a thorough mix of residential and commercial, with a few schools and government facilities.

Area and Socioeconomic Information

Area: Approximately 6,439 acres

Non-Group Quarters Population (2010): 20,811

Number of Households (2010): 8,966 **Number of Jobs (2000):** 12,755

Title VI/Environmental Justice

The Community Assessment & Outreach Program for the Louisville (KY-IN) Metropolitan Planning Area for Environmental Justice and Other Communities of Concern (July, 2006) identifies a Title VI/Environmental Justice area in TAD 10002. The area extends west from I-65 to approximately Greentree Boulevard and south from Potters Lane to Kopp Lane. In Title VI/Environmental Justice areas, consideration is to be given to removing barriers to alternative modes of transportation, including transit, bicycle, and pedestrian modes. Both public transit facilities and a pedestrian network are available in this area.

The Community Assessment & Outreach Program outlines various measures to be undertaken when considering the issues and potential solutions for Title VI/Environmental Justice areas. While Title VI/Environmental Justice is best addressed at the project level, considerations appropriate for the metropolitan transportation plan level include:

 Mitigating disproportionate burdens placed upon Title VI/Environmental Justice areas that may result from transportation projects and programs. O This is a second of the seco

Figure 10002-A: The red area shows the Title VI/Environmental Justice area in TAD 10002.

• Reducing barriers to non-automotive forms of transportation

Functionally Classified Roadways

Urban Principal Arterial –	• I-65* from Highway 60 to Ohio River		
Interstate	• I-265 from Silver Creek to I-65		
Urban Principal Arterial –	Old State Road 62 from Silver Creek to I-65		
Freeway/Expressway			
Urban Principal Arterial –	Lewis and Clark Parkway from I-65 to Old State Road 62		
Other	Eastern Boulevard from Lewis and Clark Parkway to I-65		
Urban Minor Arterial	Potters Lane from Greentree North to I-65		
	Potters Lane from Blackiston Mill Road to Greentree North		
	Greentree North from Potters Lane to Veterans Parkway		
	Clevidence Boulevard from Veterans Parkway to Turpin Drive		
	Veterans Parkway from Greentree Boulevard to I-65		
	Blackiston Mill Road from Silver Creek to Lewis and Clark Parkway		
	Greentree Boulevard from Veterans Parkway to Lewis and Clark Parkway		

	West Court Avenue from Illinois Avenue to I-65
	Illinois Avenue from West Court Avenue to West Market Street
	East Riverside Drive from West Winbourne Avenue to Woerner Avenue
	West Market Street from Woerner Avenue to I-65
Urban Collector	Payne Koehler Road from I-65 to County Line Road
	Giltner Lane from Potters Lane to Broadway Street
	Broadway Street from Giltner Lane to I-65
	Gutford Road from Blackiston Mill Road to Old Highway 62
	Old Highway 62 from Silver Creek to Lewis and Clark Parkway
	Lincoln Drive from Lewis and Clark Parkway to West Adams Street
	Applegate Lane from Lewis and Clark Parkway to North Hallmark Drive
	Kopp Lane from North Hallmark Drive to Eastern Boulevard
	Triangle Drive from Lewis and Clark Parkway to Eastern Boulevard
	West Adams Avenue from Lincoln Drive to Taggart Avenue
	West Maple Court from Taggart Avenue to Eastern Boulevard
	Evergreen Drive from Eastern Boulevard to Irving Drive
	Randolph Avenue from West Adams Avenue to Harrison Avenue
	Brooks Avenue from Randolph Avenue to Eastern Boulevard
	Knopp Lane from Eastern Boulevard to Applegate Lane
	Emery Crossing from Old State Road 62 to Harrison Avenue
	Harrison Avenue from Emery Crossing to South Oak Street
	South Clark Boulevard from Harrison Avenue to Missouri Avenue
	East Montgomery Avenue from South Clark Boulevard to I-65
	Woerner Avenue from East Montgomery Avenue to East Riverside Drive
Rural Principal Arterial –	• N/A
Interstate	
Rural Principal Arterial –	• N/A
Other	
Rural Minor Arterial	• N/A
Rural Major Collector	• N/A
Rural Minor Collector	• N/A

^{*}Denotes part of the National Highway System (NHS)

Schools

- Clarksville Elementary School
- Clarksville High School
- Clarksville Middle School

- Our Lady of Providence Junior/Senior High School
- Parkwood Elementary School
- Saint Anthony of Padua Catholic School

Colleges & Universities

• N/A

Parks

Ashland Park
Beechwood Park
Cedar Park
Clarksville Little League Park
Colgate Park
Midway Park
Moore Park
Falls of the Ohio State Park
Gaskell Park
Ray Lawrence Park

Other Area of Interest/Significance

• Falls of the Ohio Interpretive Center

Historic

- Old Clarksville Site, located along the Ohio River on Riverside Drive
- Old Falls Car and Locomotive Company Historic District, located on Missouri Avenue

Transit

TAD 10002 is currently served by TARC. The following routes pass through and have stops within the TAD, providing connections within and beyond the TAD:

- Route #71 Jeffersonville/New Albany
- Route #72 Clarksville
- Route #82 New Albany/Charlestown Crosstown

Park and Ride

There are three Park and Ride lots located in TAD 10002:

- Bass Pro Shops
- Green Tree Mall
- Value City

Public Comments

SR 60/I-65 Interchange

• Traffic backs up on SR 60 eastbound near the I-65 interchange.

I-65 South

• Ramp to I-65 south needs to be extended as an exit only lane to join I-265 west. So many vehicles on SR 60 join I-65 south at this point that it is difficult to remain in the outside lane to reach exit for I-265 west.

Veterans Parkway

• Gets too congested. Needs more lights to get out of shopping centers.

Veterans Parkway/I-65

- Very high traffic. Needs to be improved.
- Major congestion. a) possibly extend right turn lane give more storage, or b) have two left turn at I-65 headed north

Blackiston Mill Road

New Bridge over Blackiston Mill and Silver Creek. Possibly add to Potter to take new bridge.

Old State Road 62

- This section of road is a bottleneck (Old State Road 62 and Browns Station Way).
- Connector from I-65 south to Brown Station Way North (Old Indiana 62)

Old Highway 62

• Bridge over Mill Creek needs a Bike/Ped route. People drive too fast and there is virtually no shoulder.

Harrison Avenue

• Possible relocation of roadway (due to erosion into river) to help provide more reliable access.

South Clark Boulevard

Needs better access for future development – needs better connections to I-65 (both sides)

Clark Memorial Bridge

• Bridge needs to be made much safer than it currently is for cyclists.

West Riverside Drive

• Need to extend River Greenway to I-65.

Safety

1,850 crashes were reported in TAD 10002 from 2009 through 2011. There were four fatalities reported as a result of crashes from 2009 through 2011. During this three year period, one reported crash involved a pedestrian. No bicyclist-involved crashes were reported.

Fatalities

Information on two of the crashes was not available. The two with information stated that the fatalities were: a result of driver illness; and the pedestrian death (intersection of Randolph Avenue and Harrison Avenue) resulting from the pedestrian crossing the street at night in poor lighting.

High Crash Locations

Utilizing GIS analysis, there are nine areas identified as high crash locations during the 2009-2011. Some of these areas are wholly within TAD 10002 while a majority of the areas are along the border with TAD 10001 and 10003. There is a fairly even distribution of high crash locations with 75-124 and 125-174 crashes within 0.10 mile of each other (see Figure 10002-B).

Veterans Parkway

Between Broadway and the westerly entrances to Walmart/Lowes parking lots – Several high crash locations (between 75-124 crashes within 0.10 mile of each other).

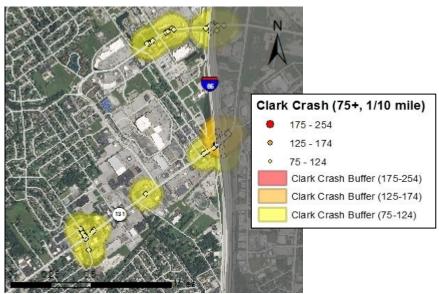


Figure 10002-B: High crash locations on Veterans Parkway and SR 131 in TAD 10002.

Between easterly entrances to Walmart/Lowes parking lots and US 31 E (bisected by the boundary between TAD 10002 and 10003) – One high crash location (between 75-124 crashes within 0.10 mile of each other) in TAD 10002.

Lewis and Clark Parkway

Between Applegate Lane and Greentree Boulevard – There were 75-124 crashes in this area. While there are crashes along the corridor between the termini, a majority of the crashes have occurred on Lewis and Clark Parkway at the Applegate Lane/Lewis and Clark Parkway and Greentree Boulevard/Lewis and Clark Parkway intersections.

In the Blackiston Mill Road & Triangle Drive Area – Several high crash locations (between 75-124 crashes within 0.10 mile of each other). A majority of the crashes have occurred in the intersection itself with the remainder distributed within less of 0.10 mile of the intersection along Blackiston Mill Road, Triangle Drive, and Lewis and Clark Parkway.

In the I-65 interchange area (just east of Vaxter Avenue to just east of US 31E) – This high crash location area encompasses TADs 10001, 10002, and 10003. In TAD 10002 there are high crash locations on Lewis and Clark Parkway with 75-124 crashes within 0.10 mile of each other. In TAD 10001 and 10003 there are high crash locations on I-65 with a range of both 75-124 and 124-174 crashes within 0.10 mile of each other.

Eastern Boulevard

In the I-65 interchange area (just east of Knopp Lane/Brooks Avenue and just west of Sodrel Drive) – This high crash area is bisected by I-65 and encompasses both TAD 10001 and 10002. In TAD 10002 there are high crash locations on

Eastern Boulevard with 75-124 crashes with 0.10 mile of each other. Along I-65 and the Eastern Boulevard overpass there are high crash locations with 124-174 crashes within 0.10 mile of each other.

Stansifer Avenue

In the I-65 interchange area (between Sunset Avenue and Francis Drive) – This high crash area is bisected by I-65 and encompasses both TAD 10001 and 10002. In TAD 10002 there are numerous high crash locations (74-124 crashes within 0.10 mile of each other). Additional crash locations in TAD 10002 are along Marriot Drive close to the intersection with Stansifer Avenue, the intersection of US 31 and Stansifer Avenue, and along I-65 in the Stansifer Avenue area.

Old State Route 62

In the West 10th Street/I-65 interchange area – This high crash area is divided between TAD 10001 and 10002 with a majority located in the TAD 10001. Locations encompass all three ranges of high crashes (74-124, 125-174, and 175-251). High crash locations in TAD 10002 range from 75-124 and 125-174 crashes within 0.10 mile of each other.

1-65

Between Seventh Street and the Ohio River – This high crash location is bisected by I-65 and encompasses parts of TAD 10002 and 10001. The segment in TAD 10001 extends along Court Avenue east to Locust Street. High crash locations throughout this area include ranges from 75-124 and 125-174 crashes within 0.10 mile of each other. There are locations in TAD 10001 with a range of 174-254 crashes within 0.10 mile of each other. A significant number of the crashes occur on I-65. In TAD 10002 there are areas with 75-124 crashes within 0.10 mile of each other located on Broadway, Market Street, and Riverpointe Plaza. There are also high crash locations in the immediate vicinity of Court Avenue and Third Street.

Many of the crashes within this TAD occur within the I-65 corridor or on roadways that provide access to it. Given the importance of I-65 to the TAD and the region, the number of crashes is of significant concern. Not only do these crashes take a toll on life and property, but the economic impact is significant considering the resulting time delay.

Crashes also occur in the Veterans Parkway and Lewis and Clark Parkway corridors. Given the access these corridors provide to retail and other community amenities, there is a significant impact on the community.

Bicycle and Pedestrian Crashes

From 2009 through 2011, one reported crash involved a pedestrian. The pedestrian death at the intersection of Randolph Avenue and Harrison Avenue resulted from the pedestrian crossing the street at night in poor lighting. No bicyclist-involved crashes were reported.

Congestion

Current Level of Service (LOS)

Currently the only roadways on the Congestion Management Process (CMP) network with a LOS below C are:

LOS F:	Veterans Parkway from I-65 west to Clevidence Boulevard
	SR 60 at the Payne Kohler Road intersection

Projected 2030 Level of Service (LOS)

Based on a travel demand model scenario for the Year 2030 that includes only those projects included in the 2011-2014 KIPDA Transportation Improvement Program (TIP), the corridors on the CMP network with a LOS forecasted to be worse than C in the Year 2030 are:

LOS D:	I-265 just east of the I-65 interchange
	Veterans Parkway from I-65 west to Clevidence Boulevard
	Lewis and Clark Parkway from I-65 west to Eastern Boulevard

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L	US.	г.

- Old Indiana 62 (Browns Station Way) from McCullough Pike west to Silver Creek
- Clark Memorial Bridge from just west of the I-65 south to Main Street in Jefferson County

Both current and projected LOS of service introduces issues for the TAD. The identified corridors provide access within the TAD as well as provide regional access. The impact of leaving congestion within these corridors unmitigated may result in delayed connections.

Access to Community Amenities

Most of the residential development in this TAD is dense. There are many community amenities in this TAD, including schools, libraries, parks, and shopping. The majority of these are clustered along Veterans Parkway and Lewis and Clark Parkway. There is public transit available on both of these routes, however, pedestrian and bicycle access may be fragmented in these areas, creating a bicycle/pedestrian barrier between the residential areas and major destinations within this TAD, some of them with a regional draw.

The area along Veterans Parkway from just east of Greentree Boulevard east to I-65 and north to just south of approximately Redwood Drive and south to Bales Boulevard is identified as a high density community access area with 10-49 Community Access destinations within 0.25 miles of each other throughout. Traveling along Veterans Parkway, there are several retail opportunities. North of Veterans Parkway are the Clarksville Town Hall and The Town of Clarksville Police Station as well as Yellow Wood Terrace Senior Center. South of Veterans Parkway at the Turpin Drive/Woodstock Drive intersection is a park (Cedar Park). There is both pedestrian and public transit access (Routes #72 and #82) throughout the area.

A community access high density area along Lewis and Clark Parkway between I-65 and Eastern Boulevard and south along Eastern Boulevard from Lewis and Clark Parkway to the Eastern Boulevard and East Brooks Avenue/Knopp Lane intersection is comprised of many community-based attractions. While a majority of the attractions are retail, there are also schools, parks, and a library. Along Lewis and Clark Parkway there is a pedestrian network spanning the length of the corridor. The pedestrian facilities extend north of Eastern Parkway to the high density shopping areas within the clustered area. Within the Lewis and Clark Parkway Corridor between Blackiston Mill Road and Greentree Boulevard, is a very dense concentration of community access areas with a majority of them being shopping opportunities. There is also public transit service (Route #82) along Lewis and Clark Parkway.

South of Lewis and Clark Parkway, along the Eastern Boulevard corridor are several high density shopping areas as well as a public library, parks, and three schools). The area is served by both pedestrian facilities and public transit (Route #72) services.

Many of the high density community amenity clusters contain both pedestrian facilities and public transit access within their corridors. Pedestrian and transit access connections from the surrounding residential areas is fragmented.

Access to Workplace

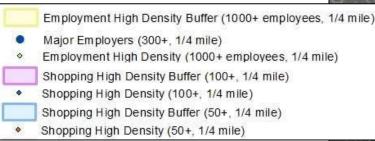
Access to workplace was examined on different levels: major employers (300+ employees), high density employment (1000+ employees within 0.25 miles of each other), high density retail (50 to 99 and 100+ retail facilities within 0.25 miles of each other), and commerce parks.

Major Employers

- Dillards
- National Distributors Leasing
- Walmart Supercenter

There are two areas where clusters of high density retail and high density employment occur (see Figure 10002-C):

 The Veterans Parkway corridor from I-65 west to Greentree Boulevard contains both high density employment and high density retail. This area benefits from both pedestrian and transit access (Routes #72 and #82) within the corridor. Also included in this corridor are high density employment (within 0.10 mile of Veterans Parkway) on Turpin Drive and Giltner Lane. Additional high density employment is identified on Koetter Lane, north of Veterans Parkway.



 Another area considered a high employment and high retail area is the Lewis and Clark Parkway (I-65 west to the Ryan Boulevard/Beechwood Drive intersection) and Eastern Boulevard (Lewis and Clark Parkway south to corridors East Bowne Boulevard). Within the Lewis and Clark Parkway corridor is an area that includes high density retail (100+ retail opportunities within 0.25 miles of each other) cluster stretching from the Greentree Boulevard area west to Eastern Boulevard. The entire Lewis and Clark Parkway/Eastern Boulevard corridor benefits from pedestrian and public transit access (Routes #72 and #82).



Figure 10002-C: Clustering of high density employment and high density retail locations along the Veterans Parkway and SR 131/Eastern Boulevard corridors.

While the Veterans Parkway and Lewis and Clark Parkway/Eastern Boulevard corridors have pedestrian and public transit access within the corridors, there is limited pedestrian and transit access to the surrounding neighborhoods. A major employer (National Distributors Leasing) lacks public transit access. This issue may be more significant relative to the dense housing surrounding it.

In terms of future employment, TAD 10002 is forecasted to see an increase in the number of employees. The forecasted increase between 2000 and 2030 is anticipated to be approximately 25%. This increase is derived using 2000 Census data forecast to 2030. The non-group quarters population and household forecasts do not indicate a significant growth. Therefore it can be assumed that the increase of employees will come from outside TAD 10002. This increase may add to already existing issues within TAD 10002 relative to access to workplace both within TAD 10002 and entering TAD 10002.

Access for Persons with Disabilities and/or Older Adults

There is one area in TAD 10002 that has a single senior center and nutrition site, Yellow Wood Terrace Senior Center, located at the Greentree North/Deatrick Drive intersection. This area has pedestrian and transit access to neighboring shopping and employment high density areas located to the south of the senior center. The existing public transit service (Routes #72 and #82) also provides access to the high density medical area located in the southern portion of the county (in TAD 10001).

While there are no significant issues relative to the Yellow Wood Terrace, the availability of pedestrian and transit access is important to all persons including persons with disabilities and older adults. The fragmented pedestrian and transit issues found in TAD 10002 may result in some barriers for the persons with disabilities and older adults.

Access to Education

Of the six schools located in TAD 10002, three are clustered within 0.25 miles of each other (Clarksville High, Clarksville Middle, and Clarksville Elementary Schools).

Clarksville Middle School enjoys well-defined pedestrian facilities throughout its campus, including sidewalks and cross walks between the school buildings and parking area. In the neighborhood north of the campus (East and West Maple Court) there are sidewalks along both sides of the street. East of the campus, along Ettels Lane, and continuing west of the campus onto West Lincoln Avenue, there is a sidewalk that extends to Eastern Boulevard. In the neighborhood west of campus (West Jefferson Avenue, North Taggart Avenue, West Lincoln Avenue, and West Randolph Avenue), there are few pedestrian options, yet the context of the neighborhood (local neighborhood streets with low traffic volume) may not require pedestrian facilities. Public transit service (Route #72) along Eastern Boulevard as well as sidewalks from Eastern Boulevard to the campus provide for transit service.

The Clarksville High School campus abuts the Clarksville Middle School campus to the east and is separated from Clarksville Elementary School by North Taggart Avenue to the west. Sidewalks surround the campus to the north and to the west. South of the campus there are sidewalks along Carter Avenue. The neighborhood to the south of the campus (along North Taggart Avenue, North Whitcomb Avenue, North Sherwood Avenue, and Bowne Boulevard) has sidewalks at numerous locations. The neighborhood to the north of the campus (along North Taggart Avenue, West Lincoln Avenue, and West Jefferson Avenue) lacks sidewalks, but the context of the neighborhood may not require sidewalks in order for there to be relatively safe pedestrian travel. Public transit service (Route #72) along Eastern Boulevard, accompanied by sidewalks, provides for transit service and access to it.

Clarksville Elementary School has pedestrian facilities surrounding its campus. The school is surrounded by neighborhoods on three of its four sides with the Clarksville High School on its east side. The neighborhoods to the west and south of campus (Randolph Avenue, McKinley Avenue, and Carter Avenue to the west, and Taggart Avenue, North Whitcomb Avenue, and North Sherwood Avenue to the south) have a mix of sidewalks and pedestrian friendly streets. As with the middle school and high school, transit (Route #72) is currently addressed through service along Eastern Boulevard.

There are no significant issues.

Access to Government Services

There are no GIS-identified clusters of government services (three or more government facilities within 0.25 mile of each other) in TAD 10002. The Clarksville Town Hall and the Town of Clarksville Police Station share the same site located at the intersection of Veterans Parkway and Turpin Drive. There is both pedestrian and public transit (Routes #72 and #82) access to the campus.

There are no significant issues.

Access to Medical Facilities

While there are no GIS-identified clusters of medical facilities (25 or more medical facilities within 0.25 miles of each other) in TAD 10002, there is a cluster in TAD 10001 (to the east of 10002) whose 0.25 miles buffer extends into TAD 10002. Clark Memorial Hospital serves as an anchor for the medical facility cluster in TAD 10001. The hospital campus is located at the intersection of Sparks and Missouri Avenues. The high density medical facility cluster is bounded by Stansifer Avenue, just south of East Montgomery Avenue and just west of I-65. There are two access points from TAD 10002 to the high density medical area in TAD 10001. East Stansifer Avenue has pedestrian access from the surrounding neighborhoods into TAD 10001. A review of pedestrian facilities in TAD 10001 shows limited pedestrian access. Another access point from TAD 10002 to 10001 is East Montgomery Avenue. East Montgomery Avenue has limited pedestrian facilities in both TAD 10002 and 10001. Public transit service (Routes #71 and #72) also provides

access from TAD 10002 to the medical facilities in TAD 10001. Pedestrian safety issues in the area can be found due to the railroad tracks that run north/south in the area and I-65.

Pedestrian facilities within the medical facilities cluster are fragmented when going from TAD 10002 to TAD 10001.

Freight Access

In TAD 10002 there are no clusters of high density freight users. In TAD 10001 there is a concentration of high density freight users (five major freight distributors within 0.50 miles of each other) in the I-65/Charlestown New Albany Road area. While this cluster is located in TAD 10001 the 0.50 high density buffer extends west into TAD 10002. In TAD 10002 the buffer extends from TAD 10001 west to the vicinity of the Lewis and Clark Parkway/Greentree Boulevard intersection. The freight network that runs along I-65 also passes through this high density area. Lewis and Clark Parkway from Eastern Boulevard to I-65 shows a projected LOS of D.

The projected LOS D on IN 131 may prove a factor in accessing the high density freight users located in TAD 10001.

Future Socioeconomic Conditions

A significant portion of TAD 10002 possesses dense land use patterns and/or is considered built-out and well-established, making future growth negligible in terms of non-group quarters population and households. Forecasts (2000-2030) indicate the possibility of an approximate 25% increase in the number of employees in TAD 10002. Given the little change to forecasts for non-group quarter population and households it can be assumed that a majority of the increased workforce will come from outside of TAD 10002.

While an increase in the number of employees is generally seen as a good thing, this increase should be considered when evaluating access to workplace issues.

Issues and Opportunities

There are two primary areas of attraction in TAD 10002. The first is the Veterans Parkway corridor from I-65 to Greentree Boulevard. The second is the Lewis and Clark Parkway from I-65 to Eastern Boulevard/Eastern Boulevard from Lewis and Clark Parkway south to East Brooks Avenue.

Veterans Parkway

The Veterans Parkway corridor contains many attractions including high employment areas, high density retail, dense housing, and government services. This corridor is connected to I-65 which provides a regional connection. With the high density retail and employment opportunities, the attractions in this corridor are regional. This corridor (from Greentree Boulevard to I-65) is located in a Title VI/Environmental Justice area.

The high crash locations (75-124 within 0.10 mile of each other) present not only safety issues, but present access delays.

Limited pedestrian access between the corridor and surrounding neighborhoods and the attractions within the corridor may present an access barrier.

Lewis and Clark Parkway/Eastern Boulevard

The Lewis and Clark Parkway/Eastern Boulevard corridor contains many attractions including high density employment, high density retail, dense housing, high density freight buffer, and schools. This corridor is also connected to I-65, which provides a regional connection. With the high density retail and employment opportunities, this area serves as a regional draw. A portion of this corridor (from Applegate Lane to I-65) is located in a Title VI/Environmental Justice area.

High crash locations within this corridor (75-125 and 125-174 crashes within 0.10 mile of each other) pose a significant issue, given the high number of attractions and potential freight access issues. The crashes on Lewis and Clark Parkway are of particular concern given the higher crash rate and the fatalities that have occurred.

There is also limited pedestrian access between the surrounding residential areas and the attractions located within the corridor.

An opportunity exists to enhance public transit connections along Eastern Boulevard from Lewis and Clark Parkway south to East Carter Avenue. Along Eastern Boulevard are several attractions including high density employment and high density retail as well as a public library (Clarksville Public Library) and a cluster of three public schools (Clarksville Elementary, Clarksville Middle, and Clarksville High Schools). Currently, public transit service begins on Eastern Boulevard south of the many of the attractions.

Other Issues and Opportunities

- Many of the crashes within this TAD occur within the I-65 corridor or on roadways that provide access to it. Given the importance of I-65 to the TAD and the region, the number of crashes is of significant concern. Not only do these crashes take a toll on life and property, but the economic impact is significant considering the resulting time delay.
- Crashes also occur in the Veterans Parkway and Lewis and Clark Parkway corridors. Given the access these corridors provide to retail and other amenities, there is a significant impact on the community.
- Both current and projected LOS raises issues for the TAD. The identified corridors provide both access within the TAD
 and regional access. The impact of leaving congestion within these corridors unmitigated may result in delayed
 connections and increased safety concerns.
- Many of the high density community amenity clusters contain both pedestrian facilities and public transit access within their corridors. Pedestrian and transit access connections from the surrounding residential areas are fragmented.
- While the Veterans Parkway and Lewis and Clark Parkway/Eastern Boulevard corridors have pedestrian and public transit access along within the corridors, there is limited pedestrian and transit access to the surrounding neighborhoods. A major employer (National Distributors Leasing) lacks public transit access. This issue may be more significant relative to the housing surrounding its location.
- Pedestrian facilities within the medical facilities cluster are fragmented when going from TAD 10002 to TAD 10001. Improvements to the pedestrian access are warranted.
- The projected LOS D on Lewis and Clark Parkway may prove a factor in accessing the high density freight users located in TAD 10001.

Related Plans & Studies

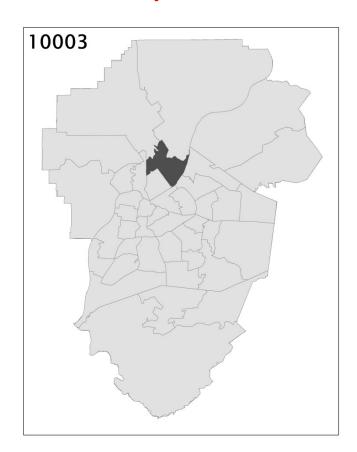
- Clark County Comprehensive Plan (2007)
- Clark County Transportation Plan (2012)
- Clarksville Comprehensive Plan (1992)
- Jeffersonville Comprehensive Plan (2008)
- West Riverfront Master Plan (2011)



RETHINKING TRANSPORTATION

Metropolitan Transportation Plan Major Update

Transportation Analysis District 10003 Report







Location & General Characteristics

Transportation Analysis District (TAD) 10003 is located in southwestern Clark County, and incorporates the northern edge of the City of Jeffersonville and the Town of Utica. TAD 10003 has a thorough mix of residential, commercial, industrial, and rural land use.

Area and Socioeconomic Information

Area: Approximately 12,569 acres

Non-Group Quarters Population (2010): 20,553

Number of Households (2010): 8,147

Number of Jobs (2000): 5,388

Title VI/Environmental Justice

The Community Assessment & Outreach Program for the Louisville (KY-IN) Metropolitan Planning Area for Environmental Justice and Other Communities of Concern (July, 2006) does not identify any Title VI/Environmental Justice areas within TAD 10003.

The Community Assessment & Outreach Program outlines various measures to be undertaken when considering the issues and potential solutions for Title VI/Environmental Justice areas. While Title VI/Environmental Justice is best addressed at the project level, considerations appropriate for the metropolitan transportation plan level include:

- Mitigating disproportionate burdens placed upon Title VI/Environmental Justice areas that may result from transportation projects and programs.
- Reducing barriers to non-automotive forms of transportation

Functionally Classified Roadways

Urban Principal Arterial – Interstate	• I-265/I-65* interchange
Urban Principal Arterial –	IN 62/265 from I-265/I-65* interchange to just east of East 10th Street
Freeway/Expressway	
Urban Principal Arterial – Other	East 10th Street from Holmans Lane/Allison Lane to Utica-Sellersburg Road
Urban Minor Arterial	Utica Pike from Allison Lane to Fourth Street (in Utica)
	Middle Road from Allison Lane to just east of Pebble Creek Drive
	Hamburg Pike from Veterans Parkway to US 31E
	US 31E* from Charlestown-New Albany Road to Silver Creek
	Veterans Parkway from I-65 to Charlestown New Albany Road
	Charlestown-New Albany Road from Veterans Parkway to Charlestown Pike
	Potters Lane from I-65 to US 31E
Urban Collector	Middle Road from just east of Pebble Creek Drive to Utica-Sellersburg Road
	Charlestown Pike from Charlestown New Albany Road to Utica-Sellersburg Road
	Coopers Lane from US 31E to Utica-Sellersburg Road
	Utica-Sellersburg Road from Coopers Lane to Fourth Street (Utica)
Rural Principal Arterial –	• N/A
Interstate	
Rural Principal Arterial –	• N/A
Other	
Rural Minor Arterial	East 10th Street from Utica-Sellersburg Road to Salem-Noble Road
Rural Major Collector	Utica-Sellersburg Road from Silver Creek to Coopers Lane
	Charlestown Pike from Utica-Sellersburg Road to Salem-Noble Road
	Upper River Road from north Front Street (Utica) to Patrol Road

Rural Minor Collector	• N/A		
*Denotes part of the National Hig	ghway System (NHS)		
Schools			
Riverside Elementary Sci	nool	Utica Elementary School	
Colleges & Universities			
Forest Park		Sylvan Park	
 Indiana Tech – Jefferson 	ville	Vissing Park	
Oak Park		Woehrle Fields	
Parks			
• N/A			
Other Area of Interest/Sig	nificance		
• N/A			
Historic			
• N/A			
Transit			

TAD 10003 is currently served by TARC. The following routes pass through and have stops within the TAD, providing connections within and beyond the TAD:

- Route #71 Jeffersonville/New Albany
- Route #82 New Albany/Charlestown Crosstown

Park and Ride

There is one Park and Ride lot located in TAD 10003:

• First Christian Church of Jeffersonville

Public Comments

I-65 North/I-265

• When exiting I-265W to I-65N, the lane needs to continue as an exit only lane to allow for the volume of vehicles using the Hamburg Pike.

Veterans Parkway

• Jeffersonville market place is growing.

Veterans Parkway/US 31E

• This signalization at this intersection is not synched with signal at I-65 interchange. Traffic backs up.

Veterans Parkway/I-65

- Very high traffic. Needs to be improved.
- Major congestion. a) possibly extend right turn lane give more storage, or b) have two left turn at I-65 headed north.

Veterans Parkway/Charlestown Pike

Very busy intersection and growth expected. (Includes TAD 10001)

Herb Lewis Road

• New 250 apartment complex expecting growth and impact.

East 10th Street

• Needs bike lane from River Ridge to Allison Lane.

Middle Road

• From Allison Lane to Port Road needs bike lanes.

Allison Lane

• From Middle Road to SR 62 needs bicycle lanes and middle turn lane. Intersection at IN 62 and Allison lane needs to be addressed. (Includes TAD 10001)

Allison Lane/Middle Road

Intersection needs turn arrows.

Safety

1,808 crashes were reported in TAD 10003 from 2009 through 2011. There were four fatalities reported as a result of crashes from 2009- 2011. During this three year period, no crashes involved pedestrians or bicyclists.

The four crashes that resulted in four fatalities were attributed to drivers running off the road or failure to stop at an intersection.

High Crash Locations

Utilizing GIS analysis, there are six areas identified as high crash locations during the 2009-2011. One of these areas is wholly within TAD 10003, while the others are along the border with TADs 10001 and 10002.

Veterans Parkway/I-65 Interchange

Between I-65 and US 31E - Several high crash locations between 75-124 high crash locations within 0.10 mile of each other. This high crash location includes both TAD 10002 and 10003.

US 31E/I-65 Interchange

Between I-65 and just east of US 31E - There are several 75-124 and 125-175 high crash locations within 0.10 mile of each other in this area. This high crash location includes TADs 10001, 10002, and 10003.

Charlestown-New Albany Pike/Armstrong Road/Holmans Lane/Charlestown Pike Intersection

This high crash location has two intersections just over 200 feet apart. The Charlestown-New Albany Road/Armstrong Road intersection is approximately 200 feet to the northwest of the Charlestown Pike/Holmans Lane

intersection. The two intersections are connected as Armstrong Road turns into Holmans Lane at the Charlestown Pike intersection. While each intersection has its own grouping of crashes, the proximity of these intersections results in this area being defined as a high crash location with 75-

124 crashes within 0.10 mile of each other. East 10th Street/Holmans Lane/Allison Lane Intersection This high crash location is divided between TAD 10001 and

10003 with crashes occurring evenly between the two

TADs. This is a high density commercial area with several

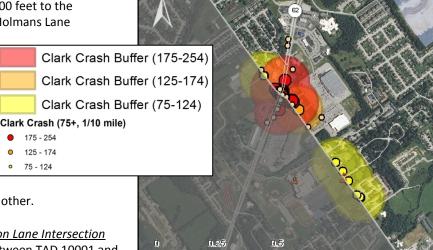


Figure 10003-A: East 10th Street and Holmans Lane/Allison Lane high crash location.



restaurants and big box retail stores that sit within 300-600 feet of each other and each has individual access points to East 10th Street, Allison Lane, and Holmans Lane (see Figure 10003-A).

There is a high crash location at the intersection of Peach Blossom Drive and Holmans Lane with 75-124 crashes occurring within 0.10 mile of each other.

At the intersection of East 10th Street and Holmans Lane/Allison Lane there is a high crash location with 175-254 crashes occurring within 0.10 mile of each other.

Travelling south along Allison Lane there are high crash locations (125-174 and 175-254 crashes within 0.10 mile of each other) at the entrance to the Meijer parking lot.

Another high crash location has been identified on Allison Lane between the north entrance to Jeffersonville High School to Lutz Lane. This corridor is on the boundary between TAD 10005 and 10001. There were 75-124 crashes within 0.10 mile of one another over the 2009-2011 timeframe. This is a straight road with access to both the high school and an apartment complex.

Bicycle and Pedestrian Crashes

There were no bicycle or pedestrian crashes in TAD 10003 during the period from 2009-2011.

Congestion

Current Level of Service (LOS)

Currently the only roadways on the Congestion Management Process (CMP) network with a LOS below C are:

LOS D: • East 10th Street from I-265 Interchange north to Utica-Sellersburg Road
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Projected 2030 Level of Service (LOS)

Based on a travel demand model scenario for the Year 2030 that includes only those projects included in the 2011-2014 KIPDA Transportation Improvement Program (TIP), the corridors on the CMP network with a LOS forecasted to be worse than C in the Year 2030 are:

LOS D:	• I-265 from Hamburg Pike interchange with East 10th Street
	Veterans Parkway from I-65 east to Hamburg Pike
	Charlestown-New Albany Road from Hamburg Pike east to Veterans Parkway
	East 10th Street from Utica-Sellersburg Road north to Salem-Noble Road
	New I-265 Extension from Port Road east to new Ohio River Bridge Project Eastern Bridge
LOS F:	East 10th Street from I-265 interchange north to Utica-Sellersburg Road

Access to Community Amenities

Much of the residential development in this TAD is considered suburban (approximately ½ of the land coverage). There are many community amenities in this TAD, including schools, parks, and shopping. The majority of these amenities are well-dispersed throughout the TAD with a cluster of high density shopping (50 or more shopping facilities within 0.25 miles of each other) at the intersection of East 10th Street and Holmans/Allison Lane. Some of the shopping opportunities in this cluster extend south into TAD 10001. There is public transit available within the high density shopping cluster and along the southern border of this TAD only. A large majority of the TAD is not served by public transit.

The area around the Holmans/Allison Lane and East 10th Street intersection is a mix of both residential and retail/food service. East 10th Street from Holmans/Allison Lane north to Vissing Park Road serves as a divider between residential land use and commercial land use. The residential property to the north of the intersection has pedestrian facilities throughout and has vehicular access to Holmans Lane and East 10th Street. Two neighborhoods further north on East

10th Street and just outside of the cluster buffer have well defined pedestrian facilities. Each has vehicular access points within the buffered area to either East 10th Street or Holmans Lane, or both. Pedestrian facilities along Holmans Lane, Allison Lane, and East 10th street are fragmented. TARC service via Route #71 and Route #82 provide public transit in the clustered area.

Access to Workplace

Access to workplace was examined on different levels: major employers (300+ employees), high density employment (1000+ employees within 0.25 miles of each other), high density retail (50 to 99 and 100+ retail facilities within 0.25 miles of each other), and commerce parks.

Major Employers

- Meijer
- Summit Trucking

There are no clusters of high density retail or high density employment solely within TAD 10003. There are three cluster areas of high density retail and high density employment that are shared with neighboring TADs 10001 and 10002.

The East 10th Street area adjacent to TAD 10003 contains a mix of high density retail (50+ shopping opportunities within 0.25 miles of each other) and high density employment (1000+ employees within 0.25 miles of each other). While a majority of the locations in this clustered area are in TAD 10001, there are several locations in TAD 10003. The clustered area on East 10th Street extends from Thompson Lane (in TAD 10001) to the south, and north to Vissing Park Road (in TAD 10003). The clustered area extends from the west at Brian Drive, and east to Seminole Drive. The clustered area is bisected by Holmans Lane/Allison Lane. The portion of this clustered area in TAD 10003 is a mix of suburban residential and high density shopping. The Meijer store, identified as a major employer (300+ employees) is located at the intersection of Allison Lane and East 10th Street.

The neighborhoods in this TAD typically have a network of pedestrian facilities. Pedestrian facilities also exist along Holmans Lane/Allison Lane. While the 10th Street corridor has pedestrian facilities, there are gaps which may impede access to high density shopping opportunities. Utilizing TARC routes #71 and #82, the area is well served by public transit.

As identified in the Safety section of this report, the East 10th Street/Holmans Lane/Allison Lane is a high crash location with 175-254 crashes occurring within 0.10 mile of each other from 2009-2011. While there were no fatalities reported during the three year period, there were several crashes reported with injury.

In the I-65/SR 131 (Lewis and Clark Parkway) area is a clustered area of high density shopping and high density employment. Nearly all of this clustered area is located in TAD 10002.

Access to the clustering of high density employment and shopping in TAD 10002 from TAD 10003 is by Lewis and Clark Parkway. While there are sidewalks on Lewis and Clark Parkway in TAD 10002 there are none along the corridor in TAD 10003. With the convergence of Lewis and Clark Parkway, Industrial Parkway, Charlestown-New Albany Road, and I-65 access opportunities for safe pedestrian travel may be limited. Public transit access from TAD 10003 to 10002 is available via TARC Route #82 with a transfer to Route #72. This area has also been identified as a high accident location (see Safety section) which may impede access to the high density shopping and high density employment from TAD 10003 to TAD 10002. It is anticipated that the portion of this clustered area in TAD 10003 will see an increase in employment by the year 2030. The increase in employment may make the absence of direct public transit and the impact of safety concerns more significant over time.

In TAD 10002 (neighboring TAD 10003 on its western border) there is a high density clustering of both employment and shopping. Located in the vicinity of the I-65/Veterans Parkway area, the buffer for this cluster extends into TAD 10003 but there are no clustered facilities in TAD 10003. Given the amount of clustering as well as the proximity to TAD 10003, it is safe to assume that access between TAD 10003 and 10002 is important. In TAD 10003 pedestrian facilities

line both sides of Veterans Parkway and continue into the clustered area in TAD 10002. Public transit is also directly available between TAD 10003 and TAD 10002 via TARC Route #82.

As identified in the Congestion section of this report, Veterans Parkway is anticipated to see LOS D in the future. Also there is a high crash location on Veterans Parkway at I-65 and at US 31 (see Safety section). The reduction in LOS coupled with the high crash location, may result in a negative impact on access to and from TADs 10003 and 10002. It is anticipated that the portion of this cluster's buffer in TAD 10003 will see an increase in employment by the year 2030. The increase in employment raises the significance of the lower level of service and the high crash location.

Access for Persons with Disabilities and/or Older Adults

While there are no points, let alone clusters, of facilities that directly serve the needs of older persons or persons with disabilities in TAD 10003, there are clustered locations frequented by older persons or person with disabilities. In TAD 10003 there is a cluster of shopping opportunities in the area around the East 10th Street & Holmans Lane/Allison Lane intersection. When the needs of older persons or persons with disabilities are examined in the review of clusters of shopping opportunities, consideration should be given to making connections without single occupant vehicles, or autos.

As reviewed in the Access to Workplace section of this report, public transit service is available in this area by way of TARC Routes #71 and #82. Pedestrian facilities also exist along Holmans Lane/Allison Lane. While the East 10th Street corridor has pedestrian facilities, there are gaps which may impede access to high density shopping opportunities.

Access to Education

None of the three schools located in TAD 10003 are within 0.25 miles of each other and therefore are not considered clustered. There are four schools located in TAD 10001 at the edge of TAD 10003 (River Valley Middle School, Wilson Elementary School, Clark County Middle School, and Jeffersonville High School).

Clarksville Middle School and Jeffersonville High School form a cluster of education facilities. While the schools are located in TAD 10001, their buffer extends into TAD 10003. For purposes of this report, access from TAD 10003 to the schools has been reviewed. The campuses for these schools are bordered by East 10th Street to the west and Allison Lane to the east. There is thorough pedestrian access within the campuses. Also, pedestrian facilities exist along Allison Lane in front of the schools and tie into the Allison Lane pedestrian crossing. There are residential areas east of Allison Lane that have either pedestrian facilities or are easily considered local streets with low traffic volumes, thereby making them relatively safe for pedestrian usage. While pedestrian facilities exist on East 10th Street, there are many gaps that may impede the use of the existing sidewalks and contribute to an unsafe walking experience for the students. The schools are accessible by public transit via TARC's Route #71.

There are two areas that present safety concerns for this school cluster. North of the campuses, at the intersection of East 10th Street and Holmans Lane/Allison Lane intersection is a high crash location with 175-254 crashes occurring within 0.10 mile of each other from 2009- 2011. Along Allison Lane and directly in front of the school at two of their three entrances, there are several high crash locations with 75-124 crashes occurring within 0.10 mile over the three year period 2009-2011. The cluster of high crashes spreads along Allison Lane between Wooded Way and Lutz Lane. The sidewalk gaps along East 10th Street may present barriers to their utilization and safety for those who use them. Of greater significance to the students coming from TAD 10003 to the schools is the high number of crashes that have occurred at the intersection of East 10th Street and Holmans Lane/Allison Lane, as well as the high number of crashes that occurred in front of the schools along Allison Lane.

Access to Government Services

There are no GIS-identified clusters of government services (three or more government facilities within 0.25 miles of each other) in TAD 10003. Two community centers (YMCA of Southern Indiana and Jeffersonville Boys & Girls Club) and two government buildings (Utica Township City Hall and Utica Township Fire Department) are located in TAD 10003.

There are also two parks (Vissing Park and Woehrle Fields). The community centers have pedestrian access but lack public transit service. The government buildings do not have pedestrian facilities. The lack of pedestrian facilities may not present an issue in the case of the fire departments, as they generally do not attract much foot traffic. There is no public transit access to either of these facilities.

While not clustered, a review of the government facilities results in a need to address gaps in pedestrian access and lack of public transit which may impede connections to these facilities.

Access to Medical Facilities

There are no GIS-identified clusters of medical facilities (25 or more medical facilities within 0.25 miles of each other) in TAD 10003. There is a cluster in TAD 10001 (to the south of 10003). Clark Memorial Hospital serves as an anchor for the medical facility cluster in TAD 10001. The hospital campus is located at the intersection of Sparks and Missouri Avenues. There are three primary access points from TAD 10003 to the high density medical area in TAD 10001: I-65, East 10th Street, and TARC Route #71. East 10th Street has a current LOS of D (in both TAD 10001 and 10003) and a forecasted lower LOS by 2030 (in TAD 10003). Both East 10th Street and I-65 have high crash locations, primarily located in TAD 10001.

The current and anticipated congestion on East 10th Street, coupled with the high crash locations on both East 10th Street and I-65 may present issues relative to persons in TAD 10003 accessing the Clark Memorial Hospital cluster of medical facilities in TAD 10001. While public transit is an option for accessing the medical area, its limited coverage in TAD 10003 diminishes the opportunity for transit access to the medical facilities in TAD 10001 from TAD 10003.

Freight Access

There are a couple of considerations when looking at freight access in TAD 10003. There is one area identified as a cluster of freight distribution centers (five major freight distributors within 0.50 miles of each other), a heavy presence of the freight network in TAD 10003, the completion of the programmed Ohio River Bridges Project (including the extension of I-265), and the anticipated growth in employment and increase in freight distribution in the River Ridge Commerce Park located in TAD 10005 to the north of TAD 10003. In total, these considerations indicate both a current and projected significant presence of freight distribution in and around TAD 10003.

Roadways within TAD 10003 which are identified as being part of the KIPDA Freight Network are:

- I-265 from I-65 east to East 10th Street (forecasted to experience a reduction in LOS by 2030)
- Port Road from I-265 to Utica Pike
- SR 60 from Greenwood Road (TAD 10004) south to US 31F
- Hamburg Pike from US 31E south to Charlestown-New Albany Road
- East 10th Street from Salem-Nobel Road south to Holmans Lane/Allison Lane (Salem-Noble Road south to I-265 is forecasted to see a reduction in LOS by 2030.

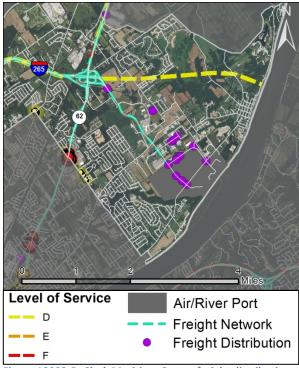


Figure 10003-B: Clark Maritime Center freight distribution, freight network and future LOS.

The intersection of East 10th Street and Holmans Lane/Allison Lane is identified as a high crash location.)

Within the Clark Maritime Center is a cluster of freight distribution centers (five major freight distributors within 0.50 miles of each other). Currently, there are 11 freight facilities in the cluster. The cluster is bordered to the southeast by the Ohio River, west of Port Road to the west, just east of Utica Sellersburg Road to the east, and just north of Middle Road to the north.

The Clark Maritime Center is forecast to show an increase in employment which may, in turn, increase the freight traffic entering and exiting this area. Areas in Clark County and to the north of TAD 10003 are also forecasted to see an increase in employment. This is particularly evident in the River Ridge Commerce Center and surrounding area (TAD 10005). The completion of the Ohio River Bridges Project and I-265 extension is also anticipated to increase freight traffic through the area.

The primary access point to the Clark Maritime Center and the freight facilities is Port Road. Utica Pike, Utica-Sellersburg Road, and Middle Road also provide access to the area. Port Road is on the freight network and has wide lanes, wide turning radius at intersections, and limited access points from surrounding neighborhoods and businesses. Utica Pike, Utica-Sellersburg Road, and Middle Road are all two-lane facilities with multiple access points from residential and business properties. Utica-Sellersburg Road also introduces additional challenges with a couple of curves which may prove difficult for some freight trucks to navigate safely.

Port Road appears to be the only freight friendly access point to this clustered area in the Clark Maritime Center. While other access roads exist, they may be considered less freight friendly. They have narrow two lane roads peppered with multiple access points to residential and commercial land uses, curves, and turning radius at intersections that may make it more difficult for freight trucks to make turns without cutting corners or entering opposing lanes of traffic. With the anticipated economic growth in and surrounding the clustered area this may become more of an issue.

Future Socioeconomic Conditions

The southern portion (inside the I-265 and Port Road) of TAD 10003 possesses dense land use patterns and is considered built-out and well-established. Yet within this area there is anticipated growth in households and employment along with western border of TAD 10003 along I-65. Employment growth is also anticipated in the northern area of TAD 10003 as well as the area around Port Road. It should also be noted that TAD 10005 (north of TAD 10003) is anticipated to see significant increase in employment in and around the River Ridge area. The employment growth in TAD 10005 will have an impact on transportation facilities in TAD 10003 as people travel north through TAD 10003 in order to access employment. TAD, in its entirety, is anticipated to see a low to moderate growth in non-group quarters population.

With the anticipated increase in employment in TAD 10005's River Ridge area, consideration may need to be given to access to work issues between TAD 10003 and TAD 10005 that may not have been a concern in prior years.

As discussed in the Safety section of this report, the area anticipated to see an increase in households (along I-65 and the western border of TAD 10003) has realized two high crash locations in the interchange areas of US 31E and I-65 and Veterans Parkway and I-65. Along with the high crash locations is anticipated reduction in LOS on both the US 31E and Veterans Parkway corridors. These points should be taken into consideration when addressing issues in TAD 10003.

Issues and Opportunities

• Many of the crashes within this TAD occur along the borders with neighboring TADS (10001 & 10002). The I-65 and Veterans Parkway interchange and the I-65/Lewis and Clark Parkway interchange both serve as access points to the retail attractions in TAD 10002. The East 10th Street and Holmans Lane/Allison Lane intersection area is a major access point for those traveling from TAD 10003 to and from downtown Jeffersonville and has been identified as a high crash location. The Holmans Lane/Charlestown-New Albany Road/Charlestown Pike intersection is another access point to TAD 10003 and is a high crash location. Along Allison Lane in front of Jeffersonville High School (located in TAD 10001) is a high crash location as well and one of the major access points to the high school.

- The high crash location at East 10th Street and Holmans Lane/Allison Lane is a location with 175-254 crashes within 0.10 mile of each other over a three year period. The number crashes at this intersection is significant due to its proximity to Jeffersonville High School as well as the access this area provides to and from downtown Jeffersonville, including the shopping opportunities in and around this area.
- This TAD is expected to see moderate to high growth. While currently there is relatively little congestion, the anticipated amount of growth both in terms of households and employment, the congestion is anticipated to worsen over time on the roadways that provide access to the interior of this TAD and the surrounding TADs. The impact of leaving the identified corridors unmitigated may result in delayed connections and a possible increase in crashes.
- Access to the Clark Maritime Center is important today and may be more important in the upcoming years. Port Road serves as the primary access point to and from many of the freight facilities in TAD 10003. Port Road appears to be the only freight friendly access point to the Clark Maritime Center. While other access roads exist they may be considered less freight friendly. They have narrow two lane roads peppered with multiple access points to residential and commercial land uses, curves, and turning radius at intersections that may make it more difficult for freight trucks to make turns without cutting corners or entering opposing lanes of traffic. With the anticipated economic growth in and surrounding the clustered area this may become more of an issue.
- TAD 10003 is anticipated to see moderate to high growth in terms of households, employment, and population. Transit access is currently available in the southern portion of the TAD. There is no public transit access in the northern portions of this TAD and neighboring TADs where growth is anticipated to occur.
- East 10th Street from I-265 north into TAD 10005 is anticipated to see a significant drop in LOS, or increase in congestion. Given this segment of roadway is on the freight network, and that the area is anticipated to see moderate to high growth, the reduction in LOS may prove an issue in the future.

There is a primary area of attraction in TAD 10003 where a mix of issues exists: in and around the intersection of East 10th Street and Holmans Lane/Allison Lane. This area is on the border of TAD 10001. There are many attractions and characteristics identified in this area, including: schools, clusters of shopping and employment, dense residential, community center, and a park. There are also several issues that, when addressed, would improve access to and from this area. They include:

- There are two high crash locations (75-124 and 175-254 crashes within 0.10 mile of each other over a three year period). The high crashes pose a significant issue given the high number of attractions in this area.
- Fragmented pedestrian facilities along East 10th Street that may impede access to and from this high density shopping and employment area.

Related Plans and Studies

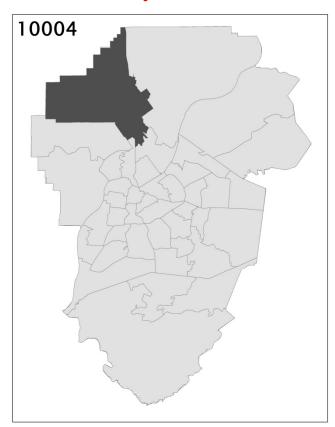
- Clark County Comprehensive Plan (2007)
- Clark County Transportation Plan (2012)



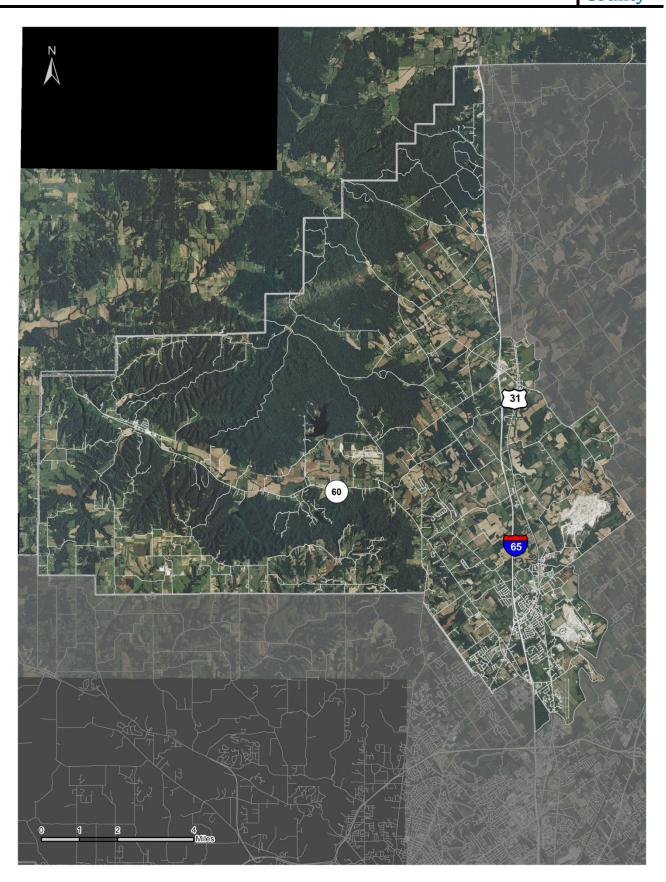
RETHINKING TRANSPORTATION

Metropolitan Transportation Plan Major Update

Transportation Analysis District 10004 Report







Location & General Characteristics

Transportation Analysis District (TAD) 10004 is located in northwestern Clark County and incorporates the City of Sellersburg and City of Borden. TAD 10004 is a mix of suburban neighborhoods, farmlands, schools, government facilities, libraries and parks. The schools, government facilities, and libraries are located near and around the City of Sellersburg and City of Borden. The major interstate corridor is I-65 which runs throughout this TAD. Outside the I-65 corridor, the land use is sparse and is made up of farmlands and the Clark County State Forest.

Area and Socioeconomic Information

Area: Approximately 82,714 acres

Non-Group Quarters Population (2010): 20,760

Number of Households (2010): 7,991

Number of Jobs (2000): 6,336

Title VI/Environmental Justice

The Community Assessment & Outreach Program for the Louisville (KY-IN) Metropolitan Planning Area for Environmental Justice and Other Communities of Concern (July, 2006) does not identify any Title VI/Environmental Justice areas in TAD 10004.

The Community Assessment & Outreach Program outlines various measures to be undertaken when considering the issues and potential solutions for Title VI/Environmental Justice areas. While Title VI/Environmental Justice is best addressed at the project level, considerations appropriate for the metropolitan transportation plan level include:

- Mitigating disproportionate burdens placed upon Title VI/Environmental Justice areas that may result from transportation projects and programs.
- Reducing barriers to non-automotive forms of transportation

Functionally Classified Roadways

Urban Principal Arterial –	• I-65* from SR 60 to Saint Joe Road East
Interstate	
Urban Principal Arterial –	• N/A
Freeway/Expressway	
Urban Principal Arterial –	SR 60 from Poindexter Road to I-65
Other	
Urban Minor Arterial	SR 60 from Saint Joe Road East to Poindexter Road
	SR 311 from County Line Road to South Indiana Avenue
	South Indiana Avenue from SR 311 to Utica Street
	US 31* from Utica Street to Saint Joe Road East
	SR 60 from I-65 to Greenwood Road
	US 31* from SR 311 to south of Diamond Heights
	Utica-Sellersburg Road from US 31 to Diefenbach Lane
	• SR 403 from US 31 to Riley Street.
	Perry Crossing from I-65 to US 31
Urban Collector	East Saint Joe Road from SR 60 to US 31
	US 31* from East Saint Joe Road to Perry Crossing Road
	SR 60 from Green wood Road to Ohio River
	Greenwood Road from SR 60 to US 31E
	Bean Road from US 31E to Utica Sellersburg Road
Rural Principal Arterial –	• I-65* from Clark County line to East Saint Joe Road
Interstate	

Rural Principal Arterial – Other	• N/A
Rural Minor Arterial	West Water Street from Clark County line to West Street
	East Water Street from West Street to north of Gibson Hollow Road
	SR 60 from north of Gibson Hollow Road to East Saint Joe Road
Rural Major Collector	Marthsburg Knob Road from Clark County line to East Water Street
	Greenville-Borden Road from Marthsburg Knob Road to south of Smith Road
	Saint John Road from Greenville-Borden Road to Brook Road
	• Louis Smith Road from Saint John Road to south of Smith Road
	Engle Road from Saint John Road to south of Hill Road
	Weiska Hill Road from Brook Road to Atkins Road
	Atkins Road from Weiska Hill Road to Saint John Road
	Saint John Road from Atkins to south of Deer Run Trace
	• SR 111 from SR 60 to Old Highway 111
	Perry Crossing Road from SR 60 to I-65
	• Ebenezer Church Road from SR 60 to US 31
	Memphis Blue Lick Road from Bartle Knob Road to US 31
	Main Street from US 31 to Grove Street
	Pixley Knob Road from Clark County line to Henryville Blue Lick Road
	Bartle Knob from Daisy Hill Road to Memphis Blue Lick Road
	Daisy Hill Road from Crow Road to Bartle Road
	Daisy Hill Road from West Water Street to Crow Road
Rural Minor Collector	North Skyline Drive from Saint John Road to south of Skyline Drive
	Crone Road from Memphis-Blue Lick Road to Cummins Road
	Cummins Road from Crone Road to Wilson Switch Road
	Wilson Switch Road from King Road to Deam Lake Road
	Deam Lake Road from Wilson Switch Road to SR 60

^{*}Denotes part of the National Highway System (NHS)

Schools

•	Borden	Elementary	/ School
•	DOLUCII	Licincillary	, 3011001

- Borden Junior/Senior High School
- Rock Creek Community Academy
- Saint Paul Elementary School
- Silver Creek Elementary School

• Silver Creek High School

- Silver Creek Middle School
- Silver Creek Primary School
- West Clark Education Center

Colleges & Universities

• Ivy Tech Community College – South Central Campus

Parks

- Clark County State Forest
- Moser Park
- Silver Creek Township Park

- Speed Park
- Wilkerson Park

Other Area of Interest/Significance

- Covered Bridge Golf Course
- Deam Lake State Recreation Area

• Speed Golf Course

Historic

• N/A

Transit

There is no public transit currently within this TAD.

Park and Ride

There are no identified Park and Ride lots located in TAD 10004.

Public Comments

I-65

• Add an exit on I-65 north of Exit 9 in Sellersburg. Traffic due to residents, students at Ivy Tech, trucks from the quarry, etc. keep this interchange congested most of the day.

I-65 North Exit Ramp at Sellersburg

Congestion – This area needs redesign. Northbound exit dumps vehicles onto a crowded single lane of
northbound traffic going into town. Expansion of Ivy Tech has increased the vehicle load of the road. Maybe
build exit north near cement plant and high school.

East Main Street

• From Borden School to the new park sidewalks are needed.

US 31

• US 31 is extremely congested in downtown Sellersburg between I-65 and SR 403.

Charlestown Road at Ivy Tech

• On Charlestown Road southbound, left lane becomes turn only at Ivy Tech intersection. More warning is needed at this intersection, example would be signage or paint.

SR 311/SR 60

• Congestion – Intersection of SR 311 and SR 60 – upgrade intersection. Quick fixes for turning movements and passing left turning cars on south leg of SR 311. The intersection of SR 311/SR 60 is not safe.

Hunter Station Way

 Connect street from Plum Creek to Hunter Station Way. Currently only one exit from neighborhood street is SR 60.

Highway 60 Eastbound Near the I-65 Interchange

• Traffic backs up on SR 60 eastbound near the I-65 interchange.

Safety

1,873 crashes were reported in TAD 10004 from 2009 through 2011. There were 11 fatalities reported as a result of crashes from 2009-2011. During this three year period, no crashes involved pedestrians or bicyclists.

Fatalities

There were 11 fatalities reported as a result of crashes from 2009-2011. No further information is available.

High Crash Locations

GIS analysis identified the SR 311/SR 60 intersection as a high crash location during the 2009-2011 period (see Figure 10004-A). This intersection is located in the Clarksville area southwest of Sellersburg. There are more high crash locations in adjacent TADs 10001 and 10002.

SR 311 and SR 60 (see Figure 10004-A)

- There are several high crash locations at SR 311 between 75-124 crashes within a 0.10 mile of each other. Those crash locations start at the Hometown Plaza entrance and ends at the Old Highway 60 entrance.
- There are four high crash locations on SR 60 with between 75-124 crashes within a 0.10 mile of each other. Those crash locations start north of the intersection and end at Hometown Plaza.

There are many crashes that have occurred along the I-65 corridor. There are also many crashes located on US 31W in Sellersburg near I-65.

Bicycle and Pedestrian Crashes

There were no bicycle or pedestrian crashes in TAD 10004 during the period from 2009-2011.

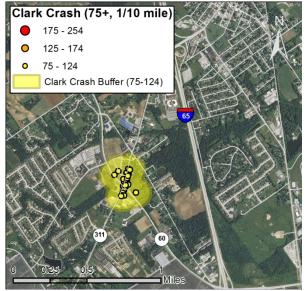


Figure 10004-A: High crash location at SR 311/SR 60 intersection in Sellersburg.

Congestion

Current Level of Service (LOS)

Currently the only roadways on the Congestion Management Process (CMP) network with a LOS below C are:

LOS D:	SR 60 from East Saint Joe Road to south of Future Drive
	• SR 311 from north of Enterprise Drive to SR 60
	US 31 from SR 403 to West Utica Street
LOS F:	SR 60 from Old State Road 60 to Avco Boulevard
	South Indiana Avenue from West Utica Street to south of Bucheit Street

Projected 2030 Level of Service (LOS)

Based on a travel demand model scenario for the Year 2030 that includes only those projects included in the 2011-2014 KIPDA Transportation Improvement Program (TIP), the corridors on the CMP network with a LOS forecasted to be worse than C in the Year 2030 are:

LOS D:	I -65 from the north Clark County line to SR 160
	SR 60 from First Street to SR 111
	• SR 311 from New Albany Pike to SR 60
	SR 403 from Bethany Road to US 31
LOS E:	I-65 from Mount Zion Road to Memphis-Blue Lick Road
LOS F:	US 31 from SR 403 to West Utica Street
	South Indiana Avenue from West Utica Street to Prather Street

Currently the congestion on SR 60, SR 311, US 31, and South Indiana Avenue has expected delays. The projected congestion for year 2030 is expecting delays on sections of I-65, SR 60, SR 311, SR 403, US 31 and South Indiana Avenue.

Access to Community Amenities

Community amenities in TAD 10004 include schools, libraries, parks, and shopping. However, there is no public transportation available to get to these community amenities.

The two high density community access clusters area are in the City of Borden and the City of Sellersburg. In the City of Borden, the high density community access clusters are schools and the library (see Figure 10004-B). These clusters are located in Borden along East Main Street and West Street. There is no pedestrian or bicycle access to connect these community amenities in Borden.

In the City of Sellersburg, the clusters include schools and a library which are located along SR 311, SR 31, East Utica Street and North New Albany Avenue (see Figure 10004-C). There are some pedestrian access and bicycle access to connect these community amenities in Sellersburg.

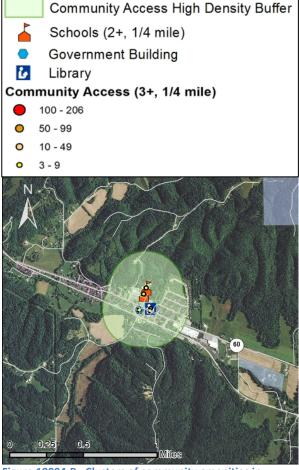


Figure 10004-B: Clusters of community amenities in Borden.



Figure 10004-C: Clusters of community amenities in Sellersburg.

Access to Workplace

Access to workplace was examined on different levels: major employers (300+ employees), high density employment (1000+ employees within 0.25 miles of each other), high density retail (50 to 99 and 100+ retail facilities within 0.25 miles of each other), and commerce parks.

Major Employers

• Ivy Tech Community College

No high density employment is identified in this TAD but there is high density retail, which is the Hometown Plaza located on SR 311.



The Borden Business Park is located in TAD 10004. The business park is located on East Water Street near the Borden Community Park. The Borden Business Park has pedestrian facilities and is surrounded by suburban neighborhoods.

Access for Persons with Disabilities and/or Older Adults

There are no clusters of senior centers and nutrition sites located in TAD 10004. In this TAD, there is no public transportation for persons with disabilities and older adults to provide access to medical appointments, shopping, and jobs. However, there are private transportation providers that provide services for persons with disabilities and older adults.

There are sidewalks in the City of Sellersburg to provide access to medical appointments, shopping and jobs for persons with disabilities and older adults. The City of Borden does not have sidewalks.

Access to Education

There are nine schools located in TAD 10004.

Borden Elementary and Borden Junior/Senior High School are within 0.25 miles of each other. Borden Elementary School and Borden Junior/Senior High School have sidewalks connecting both schools. However, there are no sidewalks on Jackson Road, West Main Street and East Main Street in the area surrounding these schools. There is also no access to high density neighborhoods from these schools.

In Sellersburg, Silver Creek Middle School, Silver Creek High School, Silver Creek Primary School, Silver Creek Elementary School, Saint Paul Elementary School and West Clark Education Center are clustered within 0.25 miles of each other. Silver Creek Middle School, Silver Creek High School, Silver Creek Primary School, and Silver Creek Elementary School have connected pedestrian facilities located on US 31. Saint Paul Elementary School and West Clark Education Center are located on North Indiana Avenue and have sidewalks. According to the safety crash data, there have been accidents along the roadway of US 31 at these Sellersburg schools.

Rock Creek Community Academy is located outside the city limits of Sellersburg on US 31 and, while there are sidewalks surrounding the school, there are no sidewalks located on the front entrance to the campus on US 31.

The Ivy Technical Community College on SR 311 has no pedestrian facilities. According to the safety crash data along SR 311, there have been accidents in front of the Ivy Technical Community College.

Access to Government Services

There are two clusters of government services located in this TAD. The first cluster is in Borden and includes the Borden Public Library and Borden Volunteer Fire Department located on East Main Street (see Figure 10004-A). Other government facilities are the Borden City Hall and Borden Police Station, located on West Street. There are no sidewalks located on East and West Streets to walk to these government services.

The second cluster is located in Sellersburg, and includes the Sellersburg Public Library and Clark County Emergency Management Agency, located on US 31. The Sellersburg Public Library and Clark County Emergency Management Agency on US 31 have pedestrian facilities. The other government facility located in the Sellersburg cluster is the Sellersburg Fire Department on East Utica Street. The roadway of East Utica Street has sidewalks.

Access to Medical Facilities

There are no GIS-identified clusters of medical facilities in TAD 10004. The nearest hospital for residents living in TAD 10004 is located in adjacent TAD 10005. The nearest medical complexes for residents living in TAD 10004 are in the city limits of Jeffersonville and New Albany.

Freight Access

The freight network runs throughout this TAD 10004. There are also two major railroads that run through Clark County. The Louisville and Indiana Railroad runs parallel to I-65, and CSX runs along SR 60.

Three freight access distribution centers are identified in this TAD:

- ESSROC, located on US 31
- HAAS Cabinet Company, located on West Utica Street
- Metals Sales Manufacturing Corporation, located on SR 60

There are also two truck stops located in Memphis, Indiana at the I-65 interchange. These truck stops are the Pilot and Love's Truck Stops.

There is an issue with freight on I-65 from the Memphis exit to the Clark County line. There are several crashes located along this section of roadway of I-65 which is part of the freight network. The LOS for this section of I-65 is D and E, and the projected LOS for 2030 is also D and E.

Another freight issue is on SR 60 from First Street to SR 311 due to crashes. The current LOS for this section of SR 60 is D, and is forecasted as D for 2030 as well.

Future Socioeconomic Conditions

There is a slight increase forecasted in the number of the jobs in this TAD.

There is also a slight increase forecasted in non-quarter populations as well as households.

Issues and Opportunities

- There is a major safety issue at the intersection of SR 311/SR 60 at the Hometown Plaza Shopping Center in Sellershurg
- There are congestion problems along the roadway of SR 60, SR 311, US 31, and South Indiana Avenue.
- There is no public transportation for citizens in this TAD for community amenities (schools, libraries, parks and shopping).
- With only one major employer located in TAD 10004, the majority of the citizens commute to jobs outside of the TAD.
- The suburban neighborhoods located in the City of Borden do not have sidewalks.
- The lack of bicycle and pedestrian facilities for citizens in TAD 10004 should be addressed.

Related Plans and Studies

- Clark County Comprehensive Plan (2007)
- Clark County Thoroughfare Plan (2012)
- Clark County Transportation Study (2012)



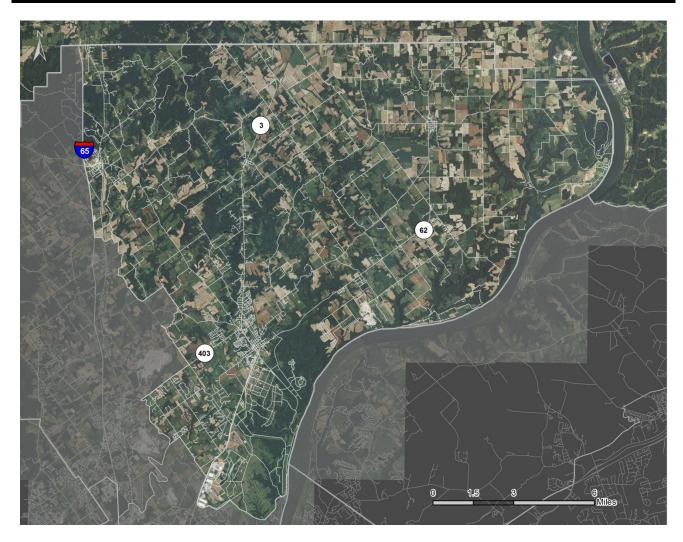
RETHINKING TRANSPORTATION

Metropolitan Transportation Plan Major Update

Transportation Analysis District 10005 Report







Location & General Characteristics

Transportation Analysis District (TAD) 10005 is located in northeastern Clark County. It contains the City of Charlestown as well as New Washington, Utica, and Henryville. TAD #10005 is largely rural and is either used for agricultural purposes or is undeveloped in nature with the exception of Charlestown, New Washington, Utica, and Henryville. The current and future development of the River Ridge Commerce Center is anticipated to bring additional jobs back to this area.

Area and Socioeconomic Information

Area: Approximately 132,590 acres

Non-Group Quarters Population (2010): 22,584

Number of Households (2010): 8,451

Number of Jobs (2000): 4,497

Title VI/Environmental Justice

The Community Assessment & Outreach Program for the Louisville (KY-IN) Metropolitan Planning Area for Environmental Justice and Other Communities of Concern (July, 2006) identifies no Title VI/Environmental Justice areas within this TAD.

The Community Assessment & Outreach Program outlines various measures to be undertaken when considering the issues and potential solutions for Title VI/Environmental Justice areas. While Title VI/Environmental Justice is best addressed at the project level, considerations appropriate for the metropolitan transportation plan level include:

- Mitigating disproportionate burdens placed upon Title VI/Environmental Justice areas that may result from transportation projects and programs.
- Reducing barriers to non-automotive forms of transportation

Functionally Classified Roadways

Urban Principal Arterial –	• N/A	
Interstate		
Urban Principal Arterial –	• N/A	
Freeway/Expressway		
Urban Principal Arterial –	· · ·	
Other	SR 3 (Market Street) from SR 3 to Main Street	
	SR 3 from Main Street to SR 62	
	SR 403 from Bethany Road to SR 3	
	SR 62 from the Charlestown State Park to Stacy Road	
	SR 403 from northeast of Mariners Trail to Bethany Road	
Urban Minor Arterial	 Monroe Street from Market Street (SR 3) to SR 62 	
	Water Street from Market Street (SR3) to Monroe Street	
	• SR 160 from just northwest of the Charlestown boundary (rural section) to SR 403	
	High Jackson Road from Bethany Road to High Street	
	High Street from High Jackson Road to SR 3 (Market Street)	
	SR 3 from Sunset Trail to just north of Mill Street	
Urban Collector	Bethany Road from SR 403 to SR 62	
	Memphis Road from just to the east of Saddleback Drive to SR 160	
Rural Principal Arterial –	• I-65* from the Clark County boundary to the north to the southern limit of the TAD to	
Interstate	the south	
Rural Principal Arterial –	• N/A	
Other		
Rural Minor Arterial	SR 62 from SR 362 to Charlestown State Park	
	SR 62 from Stacy Road to Salem Noble Road	
Rural Major Collector	Marble Hill Road from Gill Road to SR 62	
-	Paynesville Road from the Clark County line to New Washington-Bethlehem Road	
	New Washington-Bethlehem Road from Camp Creek-Bethlehem Road to Ohio Street	
	Camp Creek-Bethlehem Road from New Washington-Bethlehem Road to	
	Charlestown-Bethlehem Road	
	• SR 362 from SR 3 to SR 362	
	Nabb-New Washington Road west from SR 362 to Nabb-New Washington Road East	
	Nabb-New Washington Road east from North New Market Road to SR 62	
	East Main Street from SR 62 to Ohio Street	
	• SR 203 from SR 362 to SR 3	
	SR 3 from SR 362 to West Railroad Street	
	Old SR 3 from New Market Road to Henryville-Otisco Road	
	Mahan Road from Old State Road 3 to SR 3	
	Henryville-Otisco Road from Old State Road 3 to SR 160	
	·	
	US 31 from Clark County line to southern TAD boundary (just south of Biggs Road) SD 160 from LCT to when postion (just porthwest of Charlestown)	
	SR 160 from I-65 to urban section (just northwest of Charlestown)	
	Memphis Road from the western boundary of the TAD to just northwest of the Charlestown when posting of Managhia Road	
	Charlestown urban section of Memphis Road	

	New Market Road from SR 3 to Zimmerman Road		
	Zimmerman Road from New Market Road to Tunnel Mill Road		
	Tunnel Mill Road from Zimmerman Road to Brooks Road		
	Brooks Road from Tunnel Mill Road to SR 62		
	Hibernia Road from SR 62 to Charlestown-Bethlehem Road		
	Charlestown-Bethlehem Road from Hibernia Road to Kamp Road		
	Kamp Road from Charlestown-Bethlehem Road to Charlestown-Bethlehem Road		
	Charlestown-Bethlehem Road from Kamp Road to Camp Creek-Bethlehem Road		
	Charlestown Road from SR 62 to Salem Noble Road		
	Memphis-Charlestown Road along western edge of TAD boundary on Memphis-		
	Charlestown Road to Fox Road		
	• SR 403 from Salem Noble Road to the urban section of SR 403 (just southwest of		
	Stacy Road)		
Rural Minor Collector	• N/A		

^{*}Denotes part of the National Highway System (NHS)

Schools

- Charlestown High School
- Charlestown Middle School
- Henryville Elementary School
- Henryville Junior/Senior High School

- Jonathan Jennings Elementary School
- New Washington Elementary School
- New Washington Middle/High School
- Pleasant Ridge Elementary School

Colleges & Universities

N/A

Parks

- Charlestown State Park
- Clark County State Forest (partially)

Greenway Park

Other Area of Interest/Significance

N/A

Historic

- Benjamin Fergus House (Charlestown)
- Bottorf-McCullough Farm

- Thomas Downs House (Charlestown)
- Watson House (Charlestown)

Transit

TAD 10005 is currently served by TARC. The following route passes through and has stops within the TAD, providing connections within and beyond the TAD:

Route #71 – New Albany/Jeffersonville/Louisville

Park and Ride

There are no park and ride lots identified in TAD 10005, but commuters wishing to travel to River Ridge may use the Park and Ride lot located in the Meijer parking lot in Jeffersonville (TAD 10003) to the south.

Public Comments

Clark Road

• The sidewalks on Clark Road need to be repaired.

High Jackson Road

• Sidewalks are needed by Charlestown Middle School for the students.

SR 3

• Protected left turn is needed on northbound SR 3 at Main Street due to heavy traffic.

SR 3/SR 403

• Too many driveways slow access.

SR 402/SR 60

Lights are needed to exit from Jaycee's Grocery, Taco Bell, etc. There have been several traffic accidents in this
area.

SR 403

• Safety is a concern for pedestrians and cyclists from Cypress to SR 3 on SR 403.

Monroe Street

- Sidewalks are needed by Pleasant Ridge Elementary for the students.
- Sidewalk ends on the left side of Monroe Street, but it needs to continue.

Park Street

• Need sidewalks by the skate park.

Safety

16 crashes were reported in TAD 10005 from 2009 through 2011. There were 18 fatalities reported as a result of crashes from 2009- 2011. During this three year period, no crashes involved pedestrians or bicyclists.

Fatalities

The 18 fatalities seemed fairly well dispersed throughout the TAD except for four that occurred on SR 62, just south of Charlestown; two at the intersection of Monroe Street and SR 62; and two others further southwest on SR 62. One fatality was attributed to driver illness; the other fatalities were due primarily to excessive speed and failure to yield.

High Crash Locations

There is only one area in this TAD where a high number of crashes (75-124) have occurred within 0.10 mile of each other: the intersections of SR 160, SR 403, Horton Street, and Market Street. There are a number of commercial attractions in this area, plus three three-way intersections that are within 400 feet of each other which may be compounding the issue. There were no fatalities at this intersection, but there were a number of crashes involving injuries. The largest reason cited for these crashes is failure to yield.

Bicycle and Pedestrian Crashes

There were no crashes reported in this three-year period involving bicyclists and/or pedestrians.

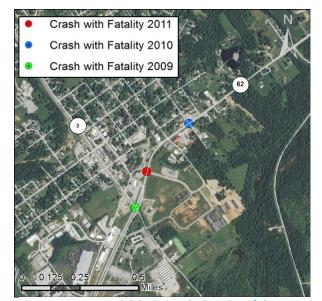


Figure 10005-A: Aerial depicting the location of three crashes involving fatalities within close proximity to each other.

Congestion

Current Level of Service (LOS)

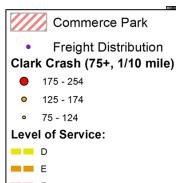
Currently the only roadways on the Congestion Management Process (CMP) network with a LOS below C are:

LOS D:

- SR 62 from Market Street to Salem Church Road
- I-65 from the Clark County line to SR 160

Projected 2030 Level of Service (LOS)

Based on a travel demand model scenario for the Year 2030 that includes only those projects included in the 2011-2014 KIPDA Transportation Improvement Program (TIP), the corridors on the CMP network with a LOS forecasted to be worse than C in the Year 2030 are:



LOS E:	I-65 from SR 160 to Memphis-Blue Lick Road
LOS F:	SR 62 from Salem-Noble Road to SR 3

Both SR 62 and I-65 are identified as part of the KIPDA Freight Network. SR 62 provides access to and from the growing River Ridge development, which will contribute additional commuter and freight traffic to both of the roadways. The 2030 projected LOS is a concern as congestion along both of these roadways may be impacted in terms of delays.



Figure 10005-B: Forecasted LOS D and F on SR 62 with River Ridge Commerce Park, freight distribution, and high crash locations.

Access to Community Amenities

Just east of I-65 in Henryville, there is a cluster of community amenities, including a nutrition site at a church, two schools, a library, and the Monroe Township Fire Department. These are abutted to the north, south and east by typical suburban single-family home neighborhoods. There is limited sidewalk access and gaps in the existing sidewalk system in this clustered area making pedestrian access, especially for the residents living nearby, problematic. Access via automobile to these locations appears to be adequate. There is no access via public transit.

In the City of Charlestown, there are several community amenities, but they fall outside the quarter-mile parameter for being considered clustered. Several of these locations are simply three-tenths of a mile from the next closest amenity, which is still a walkable/bikeable distance. These locations include four schools, Charlestown City Hall, Charlestown Police Department, Charlestown Volunteer Fire Department, Charlestown Public Library, Charlestown Civic Center, and a Senior Center. These areas are surrounded by suburban neighborhoods, but there are gaps in the pedestrian facilities between these destinations as well as some of the residential areas to these destinations. There is a fairly strong pedestrian network in Charlestown except for these gaps. Access by motor vehicle appears adequate. There is no public transit service to these locations.

Access to Workplace

Access to workplace was examined on different levels: major employers (300+ employees), high density employment (1000+ employees within 0.25 miles of each other), high density retail (50 to 99 and 100+ retail facilities within 0.25 miles of each other), and commerce parks.

Major Employers

- Amazon
- D.A. Inc.

Workplace development is evolving within this TAD due to the development of the River Ridge Commerce Center, and the recent addition there of an Amazon distribution center with several hundred employees. The other current major employer (300+ employees at a single location) is D.A. Inc., located southwest of Charlestown on SR 62. This area is also home to several other smaller industries, as well. Outside of these locations (River Ridge and the group of industries southwest of Charlestown), there are no clusters of high density employment in this TAD.

Limited public transit service is available to the River Ridge Commerce Center on TARC Route #71. Route #71 provides three trips in the morning and four trips in the late afternoon/evening on weekdays to and from the River Ridge Commerce Center. River Ridge does not have pedestrian or bicycle facilities. D.A. Inc. is not served by public transit, nor does it have pedestrian or bicycle facilities. At this time, for employees working in these locations, the primary access is by automobile or ridesharing, with some limited public transit access.

The forecast LOS on SR 62 from the western boundary of this TAD to Salem Church Road as noted in the Congestion section is either a LOS F (closer to Jeffersonville) or LOS D (from SR 3 to Salem Church Road). Being that employment is anticipated to increase with the additional development of the River Ridge Commerce Center, the forecast LOS may impact travel time for employees getting to work in those particular locations as well as residents within the TAD accessing SR 62 in order to travel within the TAD or beyond it to Jeffersonville, Clarksville, New Albany, Louisville or beyond for employment.

Access for Persons with Disabilities and/or Older Adults

The one hospital in the area is Saint Catherine Regional Hospital, located at 2200 Market Street in Charlestown. It is located between SR 3 and Old Indiana 3, neither of which have pedestrian access from the roadway to the hospital. The Henryville United Methodist Church serves as the senior center and nutrition site. However, none of these services are clustered together or are otherwise in proximity to each other. Sidewalks do exist in Henryville, Charlestown, and New Washington, but, due to gaps, there is no overall system to connect pedestrians, particularly those who may have disabilities and/or who are older to services, jobs, and other amenities. In addition, many of the roadways in the more rural areas are narrow and do not have adequate shoulders to accommodate pedestrian and/or bicycle modes of travel.

Access to Education

New Washington Elementary and Washington Senior High Schools are located within 0.25 miles of each other in the north central portion of TAD 10005 along North Poplar Street and SR 62 in New Washington. The only pedestrian and bicycle facilities provided with regarding school access are wide shoulders along the roadway. There are also no separated pedestrian and cyclist facilities between the two schools. Given the location of these two schools, the current average daily traffic, and forecast development, shoulders along the roadways may be an adequate treatment at this time given the demand. This area is not currently served by public transit outside of a school bus.

The Henryville Elementary and Henryville High Schools are located on one campus (see Figure 10005-C). There is some residential and commercial development to the south and east of the campus. Few sidewalks exist in the area. There are no sidewalks from US 31 connecting to the school grounds, nor are there sidewalks on the east side of US 31 north of SR 160. The closest sidewalks runs for a half block along US 31 north from SR 160, but the sidewalk is discontinued, not making the connection to the school grounds. The shoulders along these roadways are either not present or fairly narrow. The entrance to the school campus is very large, which does not provide a clearly defined entrance for autos, buses, and people walking and/or biking to the campus, which may contribute to the crashes occurring on US 31 in front of the school property. While the number of crashes does not meet the threshold for a high crash location, seven crashes (only one with injuries) were reported in the 0.15 miles stretch in front of the school on US 31 during the three year period (2009-2011). Other than school buses, there is no public transit service offered currently in the area.

Charlestown High School and Pleasant Ridge Elementary School are also located within 0.25 miles of each other in Charlestown, basically across Monroe Street from one another. Residential development surrounds both schools. There are no sidewalks on Monroe Street connecting residents to the schools or the schools to each other. There

appears to be adequate pedestrian circulation on both campuses. There are some sidewalks on Park Street and Saint Michael's Drive, but there are gaps in the system. Besides school buses, there is no other available public transit in the area. Given the development that is anticipated to occur with the River Ridge Development, lack of sidewalks in Charlestown to the schools may be an issue.

Jonathan Jennings Elementary School on Market Street and Charlestown Middle School on High Jackson Road are not clustered; however, they are located within close proximity to developed portions of Charlestown, and pedestrian access may be a needed consideration when planning improvements in the area due to the gaps in the existing system, especially given the amount of residential land use in close proximity to both schools' properties. Vehicular access appears to be adequate.

Access to Government Services

There are no identified clusters of government services within this TAD. Government services are fairly well dispersed throughout, but largely located in the more populated areas of Charlestown, New Washington, Henryville, and Utica. Vehicular access to these locations appears to be adequate; however, access via public transit, biking and/or walking may pose an issue to due gaps in the existing networks for those modes.

Access to Medical Facilities

There are no clusters of medical facilities in this TAD; however, the Saint Catherine Regional Hospital is located at 2200 Market Street in Charlestown, which lacks pedestrian access and public transit service. Vehicular access to the hospital appears to be adequate.

Freight Access

Currently there are no clusters of major freight users within this TAD. There are six identified major freight distributors located closely together on SR 62, southwest of Charlestown. SR 62 is identified as part of the KIPDA Freight Network. There is additional freight movement anticipated along SR 62 due to the development of the River Ridge Commerce Center. There are also two rail lines: one parallel to SR 62 terminating in Charlestown, as well as the line that runs north to south parallel to US 31. The segment of I-65 in this corridor is also identified as part of the KIPDA Freight Network. There are two industrial parks at the southern portion of this TAD, both with access to SR 62. I-65 and SR 62 now serve as the main freight roadway corridors with anticipated heavier use in the future. The additional freight will place more demand on the system, and with the projected LOS on SR 62 to be D and F around the commerce park area, attention should account for improving the LOS so freight can move in and out of the area with less delay.

Future Socioeconomic Conditions

This TAD is forecasted to grow in terms of population, households, and jobs. Some of this is seen as overflow as people move to the outer-edges of the already more populous areas, such as Charlestown. Job growth within this TAD is anticipated to be fairly high due to the River Ridge Commerce Center, which is expected to be built-out by the horizon year of the Metropolitan Transportation Plan, 2040. Being that the population growth is not expected to keep pace with the number of new jobs, many of the new employees will be traveling from outside this TAD to their job putting additional demand on the system. This area is being marketed to industrial, warehouse, and manufacturing uses. Additional freight traffic is also anticipated due to the River Ridge Commerce Center. Improvements in and around the TAD, and especially the southern portion (Charlestown, Utica, and the River Ridge Commerce Center) should address all modes: automotive, transit, bicycle, and pedestrian.

Issues and Opportunities

• While there are sidewalks in the more densely populated areas of this TAD, there are gaps in the pedestrian network. Public comments and data analysis support the need for a connected and safe bicycle and pedestrian network.



- With the development anticipated in and around Charlestown with the River Ridge Commerce Center, the lack of public transit service as well as lack of access via walking or bicycling is apparent and may limit prospective employees from seeking work in this location due to lack of transportation options.
- Adequate access by a variety of modes is not available to the hospital in this TAD.
- Many of the roadways in this TAD appear narrow with little to no shoulders. Freight access on these roadways may become more difficult as this area continues to develop.
- The intersections of SR 160, SR 403, Horton Street, and Market Street are noted by both data and public comments as a high crash location.

Related Plans and Studies

- Charlestown Comprehensive Plan (2007)
- Clark County Comprehensive Plan (2007)
- Clark County Transportation Plan (2012)
- River Ridge Enterprise Zone (2001)