

## Access and Circulation

This section of the report outlines the traffic access and circulation issues for each of the four areas of the corridor. An overview of these areas is provided below, and is followed by maps of each corridor area that graphically depict traffic access and circulation.

Each map identifies the street classifications in the corridor, signalized intersections, at grade crossings, important cross routes and typical conditions regarding pedestrian facilities, lighting and utilities. Traffic accident information is summarized and potential options are presented for improving traffic flow in the corridor.

## Accident Information

Traffic accident information was obtained from the City of Rockford. 2004 – 2006 data, the most recent available, was analyzed for Kishwaukee Street from Airport Drive to 1st Avenue (Walnut Street) and along 3rd Street from Walnut Street to the Whitman Street interchange.

A total of 305 accidents were reported along the Kishwaukee Street / 3rd Street corridor. Within the three year period, the recorded accidents decreased each year: 124 in 2004, 111 in 2005 and 70 in 2006. Of the reported accidents, 209 occurred over dry surface conditions (68.5%), 250 occurred in clear weather conditions (82%) and 212 occurred during daylight hours (69.5%).

The intersection of Kishwaukee Street with Harrison Avenue and 15th Avenue had the greatest number of accidents reported in this three year period. Approximately 13% of the total number of accidents occurred at Harrison Avenue and approximately 10% of the total occurred at 15th Avenue. The accidents for the arterial and collector street intersections in the corridor are illustrated on each map. Approximately 48% of the reported accidents occurred mid-block and at minor street intersections.

## Improvements to Traffic Flow in the Corridor

The Average Daily Traffic (ADT) along Kishwaukee Street ranges from approximately 15,000 vehicles per day from 1st Avenue to Harrison Avenue to approximately 12,000 vehicles per day from Harrison Avenue south to Airport Drive. The ADT's were for the years 2004 and 2005 and provided by the Illinois Department of Transportation (IDOT).

### Stakeholder Feedback

- Continued and improved heavy truck accessibility should occur both within the study corridor and surrounding areas
- Traffic flow is poor at key intersections
- Roads should be widened to relieve congestion
- Median construction can block truck access to businesses
- Better signage is needed on main arterials to direct drivers to the airport
- There is limited bridge access for heavy trucks to cross the river
- Street conditions are generally poor
- Close spacing of utility poles can make truck turns difficult

Kishwaukee Street from approximately the Whitman Street interchange south to Harrison Avenue is designated as IL Rte. 251, which is designated as an IDOT truck route. IL Rte. 251 continues east along Harrison Avenue to 11th Street.

A number of improvements could be made in order to improve traffic flow in the corridor, including the conversion of one-way street pairs to two-way roadways near the Central Business District, the completion of a current IDOT reconstruction project, the construction of an additional collector roadway on an existing railroad right-of-way, and a new interchange at US 20. The details of these potential improvements are presented below:

### One-Way Street Pairs

A study completed in 2002 (2nd Street Interchange Feasibility Study Final Report – City of Rockford/Clark Dietz) identified issues related to the one-way street pairs in downtown Rockford and IL Rte. 251. The study analyzed alternatives that addressed truck traffic, high traffic volumes and the split of IL Rte. 251 through the downtown business district and the adjacent residential/historic neighborhood. The objectives of the study were “to provide a direct through route for IL Rte. 251, reduce truck traffic on 2nd Street and return 2nd Street back to a residential street”.

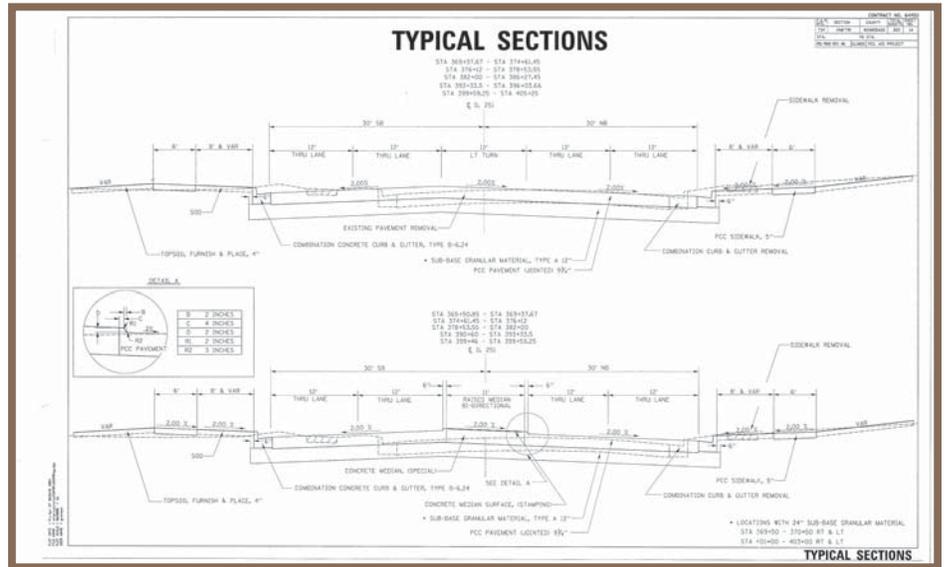
The selected alternative shifted all traffic from 2nd Street and eastbound Whitman Street to 3rd Street. According to the study, this alternative best accomplishes the goal of removing the high truck volumes from 2nd Street and returning the street to a residential, two-way collector. Additionally, this alternative reduces turning conflicts in the study area.

The selected alternate is feasible; however, it is recommended that the selected alternative be pushed forward into a potential Phase I detailed study. Specifically, the northeastern section of the study area (Longwood Street and Rural Street) should also be analyzed in greater detail to examine the impact of a possible interchange and street realignment (NE quadrant) to allow direct access to downtown from this residential neighborhood area. This Phase I study could evaluate land that could be reclaimed by realignment or by eliminating ramp and local street connections, as illustrated below:



IDOT Improvements: Kishwaukee Street -15th Avenue to Harrison Avenue  
 IDOT improvements are currently underway for Kishwaukee Street (IL Rte. 251) from 15th Avenue to Harrison Avenue. The existing typical roadway cross-section consists of a four-lane undivided roadway with exclusive northbound and southbound left-turn lanes at 15th Avenue and Harrison Avenues. The proposed typical roadway cross-section consists of a four-lane divided roadway with exclusive left-turn lanes at all cross-street intersections. Southbound to westbound exclusive right-turn lanes are provided at Harrison Avenue, Blackhawk Park Avenue and 18th Avenue. Proposed through lanes are 12' in width with variable 11' to 12' width left turn lanes, including the raised bi-directional median. A typical roadway cross-section diagram is illustrated below:

The addition of the exclusive left-turn lanes, exclusive right-turn lanes and the bi-directional raised median provides storage for turning vehicles. These improvements improve the intersection and arterial level of service throughout the improvement limits. Sidewalks are proposed to ensure pedestrian access in the area and at the intersections.



### Potential Collector Roadway

A potential collector street could be constructed along unused railroad right-of-way west of Kishwaukee Street to allow improved roadway access for the industrial properties in the area.

The advantages of this roadway include allowing direct north-south access into the properties west of Kishwaukee Street that previously was not available and redirecting some heavy truck volumes from Kishwaukee Street. A proposed intersection would be needed at 15th Avenue, including possible improvements east to Kishwaukee Street. An intersection at Peoples Avenue would be needed, with reconstruction from Kishwaukee Street to the potential roadway in order to accommodate the rerouted truck volumes.

### Potential Interchange at US 20

A potential interchange location at US 20 at Kishwaukee Street is illustrated on the Area D map. This interchange would provide additional access from Kishwaukee Street to the Greater Rockford Airport and the Kishwaukee Street corridor. Currently, access into the airport is provided by the US 20 / IL Rte. 2 interchange. The airport is about a mile south of this interchange along IL Rte. 2 and is served by a four-lane divided highway. The existing roadway infrastructure allows for adequate vehicle and heavy vehicle access to and from the Kishwaukee corridor, given current traffic volumes.

**According to the Illinois Department of Transportation (IDOT) as provided in the Bureau of Design & Environment Manual (BDE):**

- On average, the desirable spacing between interchanges in urban areas should not be less than 2 miles.
- The minimum distance in urban areas for adjacent interchanges should not be less than 1 mile.
- A spacing of less than 1 mile may be developed if collector-distributor roads are used.

**Current System versus Potential System:**

- Spacing between IL Rte. 2 and IL Rte. 251/11th Street is approximately 1.9 miles (meets the desirable requirements).
- Spacing between IL Rte. 2 and Kishwaukee Street is approximately 1.19 miles (meets the minimum requirement).
- Spacing between Kishwaukee Street and IL Rte. 251/11th Street is approximately 0.75 miles (less than the minimum requirement).

The addition of a new interchange imposes possible right-of-way acquisition and possible business relocation in the immediate area. According to the RATS TIP, IDOT has allocated money towards engineering (Phase II) for the US 20/Rockford Bypass at IL Rt. 2 in FY 2009. Additionally, IDOT has allocated money in FY 2010 towards engineering (Phase I and PE Consultant T&I) the US 20/Rockford Bypass from IL Rte. 2 to I-39. It is recommended that the City establish contact with IDOT and its corresponding consultant to propose that the possible interchange at Kishwaukee Street be examined.

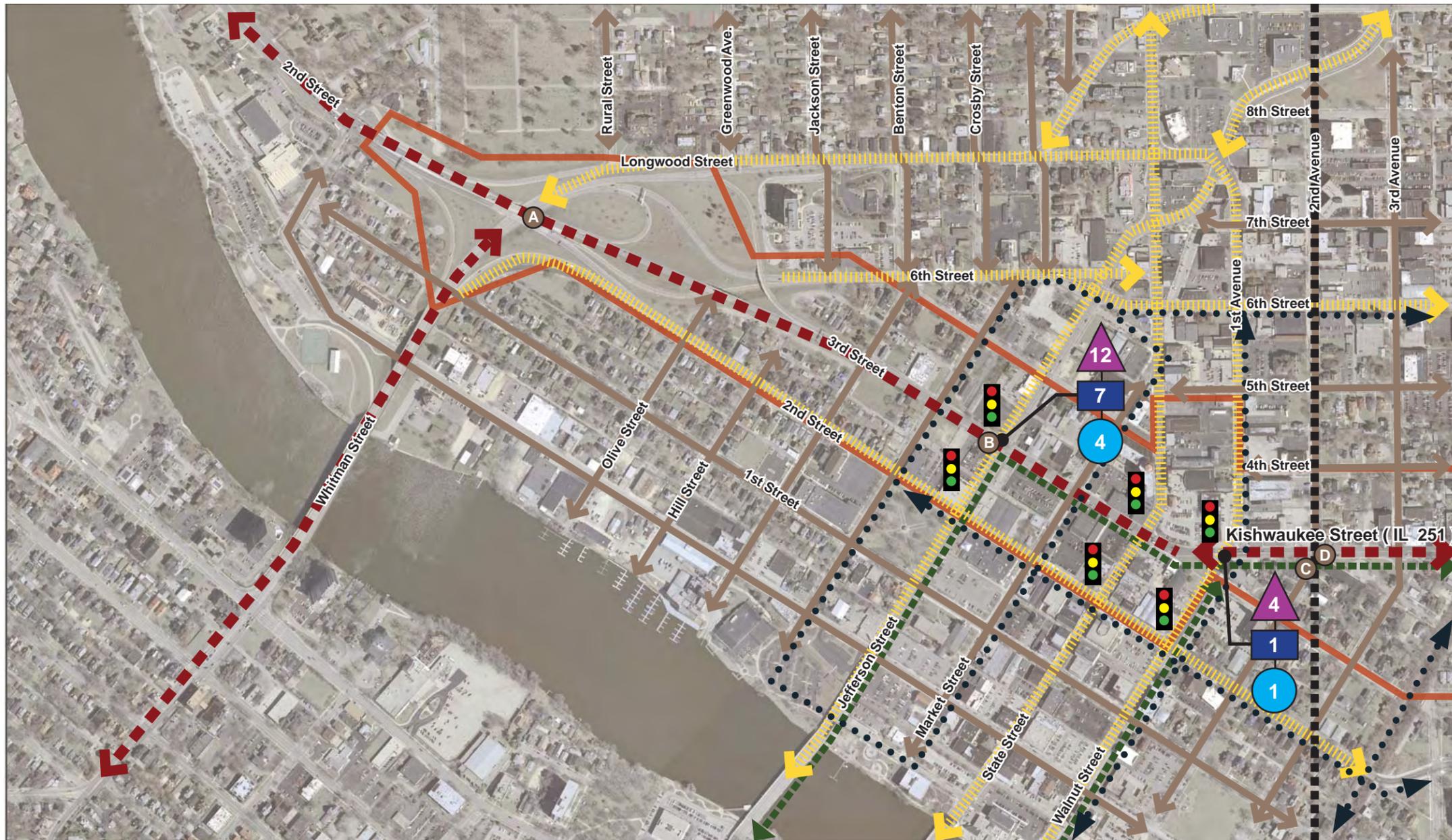
**Short-term design solutions include the addition of adequate wayfinding signage in and out of the corridor area, specifically at the following locations:**

- US 20 / IL 251 interchange to northbound 11th Street (IL 251) to Sandy Hollow Road and westbound to Kishwaukee Street
- US 20 / IL 251 interchange to southbound 11th Street (IL 251) to Samuelson Road and westbound to Kishwaukee Street (using Airport Drive)
- US 20 / IL 251 interchange to northbound 11th Street (IL 251) to Harrison Avenue and westbound to Kishwaukee Street

Additionally, possible roadway safety improvements to minimize heavy vehicle disturbances and even imposing heavy vehicle restrictions along designated roadways could be utilized to provide short-term design solutions for the heavy truck volumes in the area.

**Multi-Modal Access: Pedestrian and Bike Accessibility and Bus Service**

In addition to private vehicles, the study corridor offers mass transit, sidewalks, and proposed bike paths as transportation options. The Rockford Mass Transit District operates the #15 bus along Kishwaukee Street, which provides access to the downtown and the Chicago Rockford International Airport. Sidewalk facilities and conditions vary throughout the corridor. While signalized intersections provide the opportunity for pedestrians to safely cross the street, heavy traffic volume that is carried on multiple lanes in both directions, particularly in the vicinity of Kishwaukee Street and Broadway, can function to discourage pedestrian activity. The 2007 Draft Pedestrian and Bicycle Plan released by the Rockford Area Transportation Study (RATS) outlines a number of proposed bicycle paths and routes throughout the study corridor, although none are proposed along Kishwaukee Street. The City may consider strengthening bicycle and pedestrian networks in order to decrease traffic congestion and increase circulation alternatives for residents and visitors.



Legend

- Arterial Streets
- Collector Streets
- Minor Streets
- Bus Routes
- Proposed Bike Lane or Route
- Number of accidents - Year 2004
- Number of accidents - Year 2005
- Number of accidents - Year 2006
- Study Area Boundary
- Match Line
- Signalized Intersection

Picture Key:

- A** Northbound 3rd Street at Whitman Street Interchange: Overpass and on-ramp.
- B** Northbound Kishwaukee Street at East Jefferson Street: One-way traffic patterns.
- C** Southbound Kishwaukee Street at Oak Street: Two-way traffic with well-maintained sidewalks.
- D** Northbound Kishwaukee Street at 2nd Avenue: Good sidewalk access with attractive landscaping.



Access and Circulation Area A

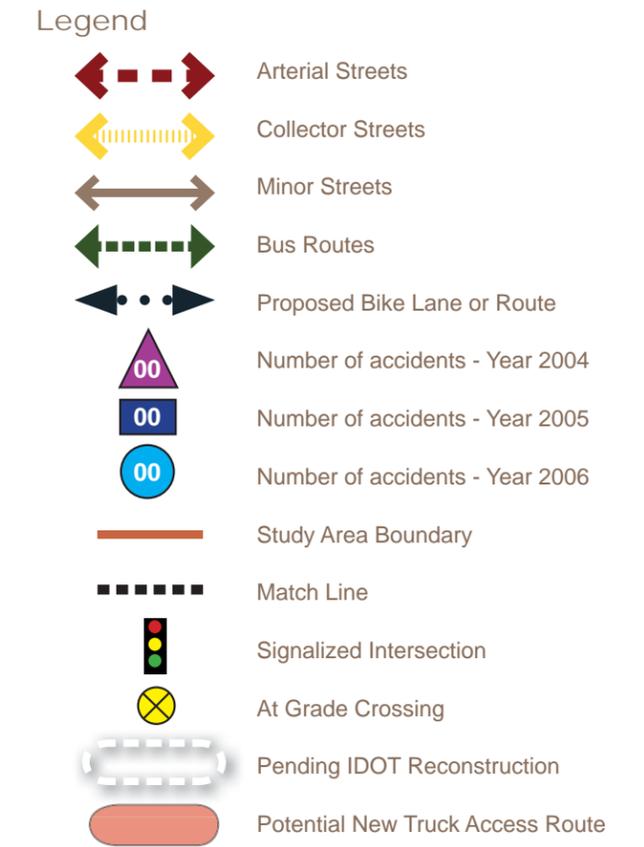
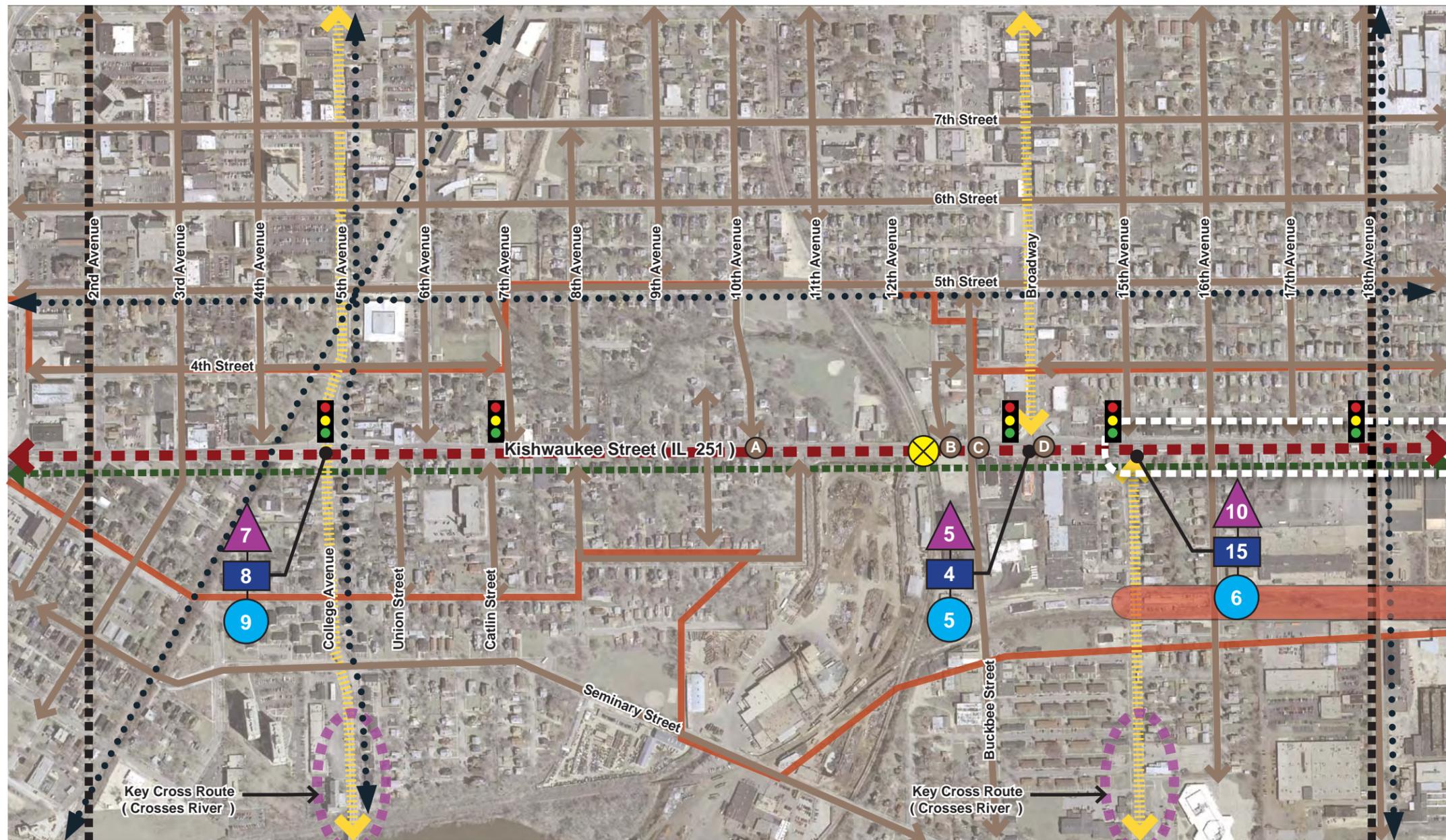
Scale: 1" = 600'

March 2008

**HNTB**

In association with:  
Gary W. Anderson and Associates &  
Valerie S. Kretchmer Associates, Inc.

Kishwaukee Street Corridor Revitalization Plan



- Picture Key:**
- A** Northbound Kishwaukee Street at 10th Avenue: Heavy truck driving past residential structures.
  - B** Kishwaukee Street at Lorden Court: At-grade freight railroad crossing.
  - C** Northbound at Kishwaukee and Buckbee Streets: Poor pedestrian environment.
  - D** Kishwaukee Street at Broadway: Southbound Rockford Mass Transit District bus.



**Access and Circulation Area B**

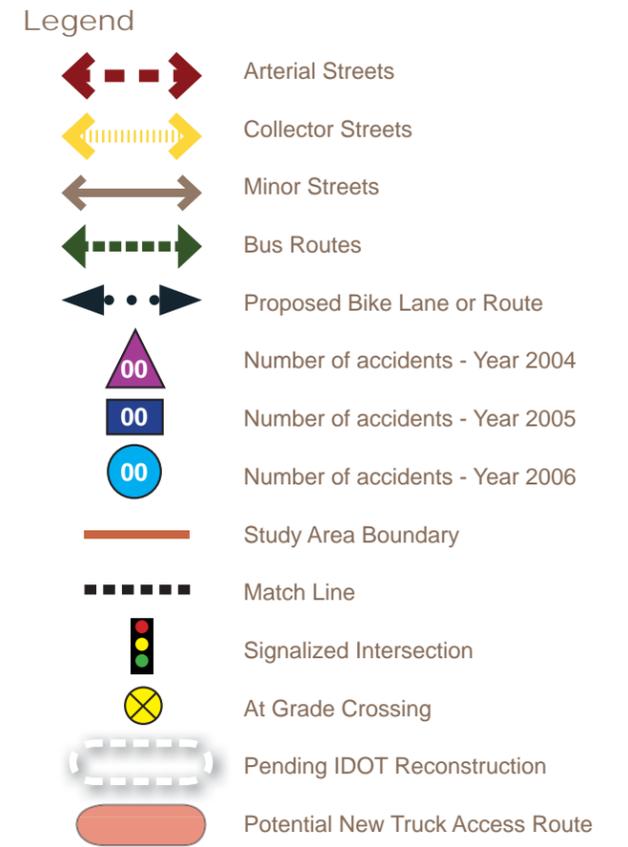
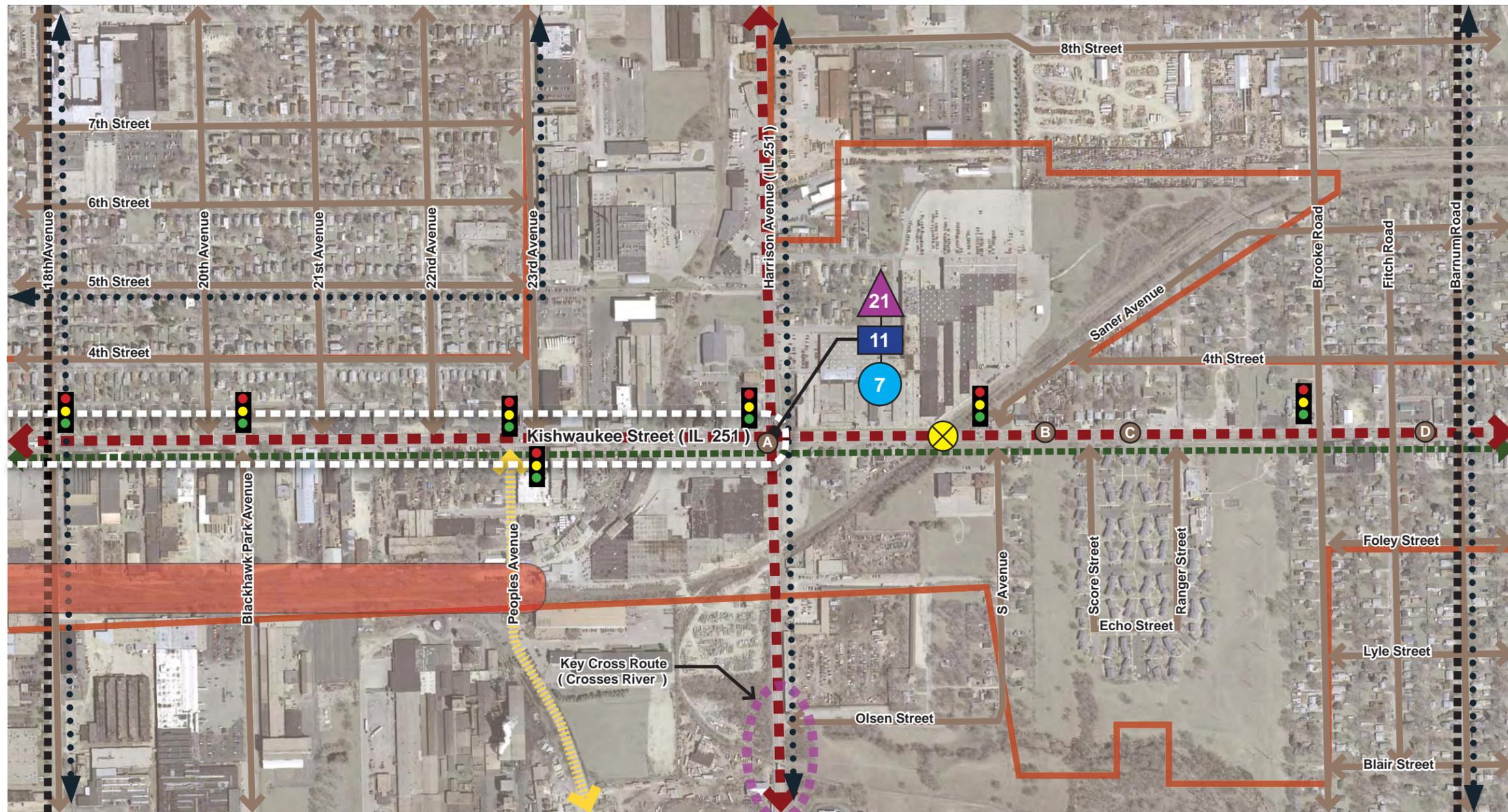
Scale: 1" = 600'

March 2008

**HNTB**

In association with:  
Gary W. Anderson and Associates &  
Valerie S. Kretchmer Associates, Inc.

# Kishwaukee Street Corridor Revitalization Plan



- Picture Key:**
- A** Kishwaukee Street at Harrison Avenue: IDOT construction activity.
  - B** Kishwaukee Street between Score Street and South Avenue: Poor pedestrian connectivity.
  - C** Kishwaukee Street between Score and Ranger Streets: Bus shelters near the Orton Keyes housing complex.
  - D** Kishwaukee Street between Fitch and Barnum Roads: Roadway usage by semi-tractor trailers.



A



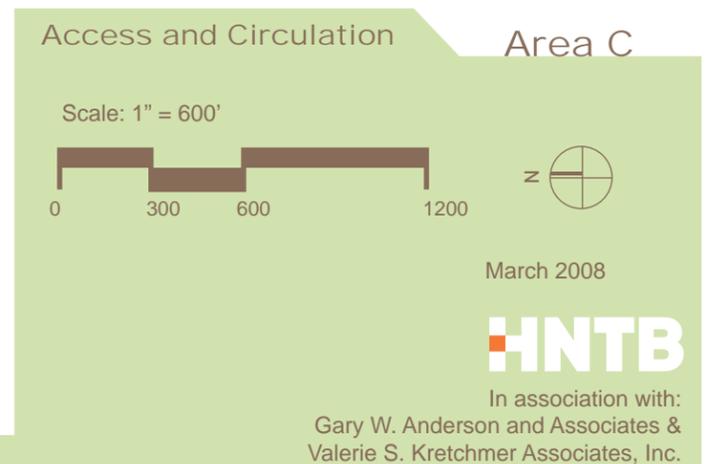
B



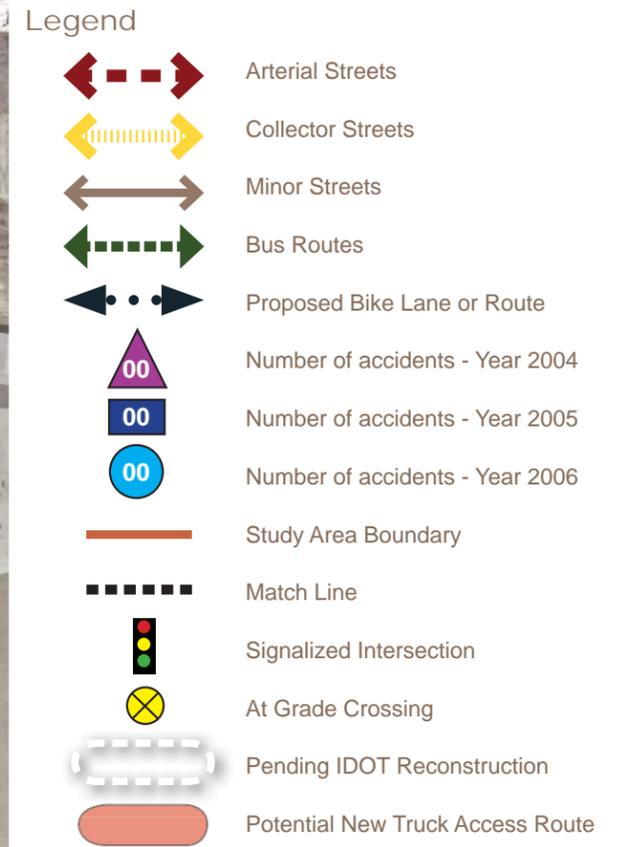
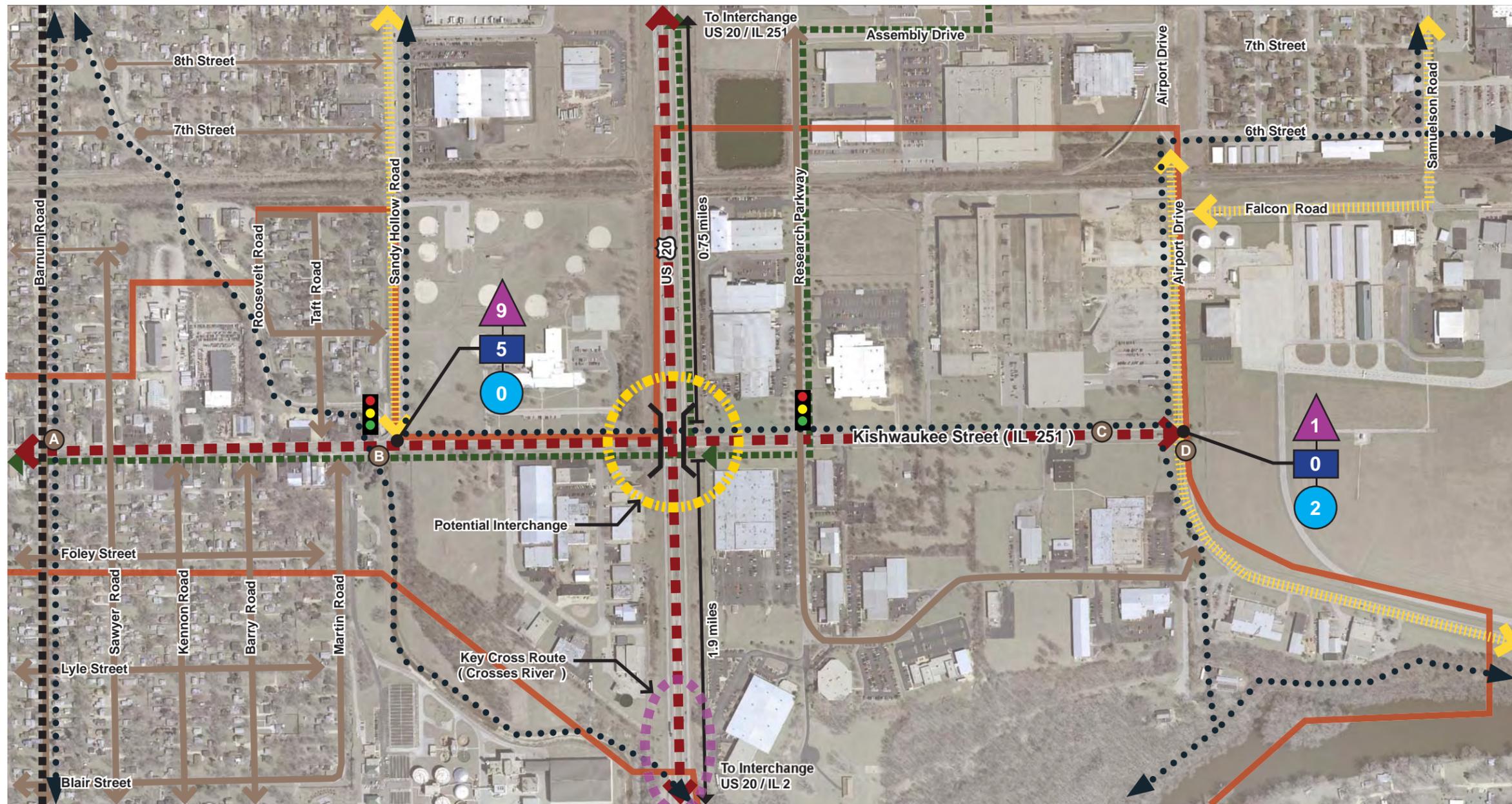
C



D



# Kishwaukee Street Corridor Revitalization Plan



- Picture Key:**
- A** Northbound Kishwaukee Street at Barnum Road: Good pedestrian connectivity.
  - B** Northeast corner of Kishwaukee Street and Sandy Hollow Road: Overpass and culvert.
  - C** Northbound Kishwaukee near Airport Road: Roadway usage by semi-tractor trailers.
  - D** Intersection of Kishwaukee Street and Airport Road: Kishwaukee Street dead-ends at the Chicago Rockford International Airport.



**Access and Circulation Area D**

Scale: 1" = 600'

March 2008

**HNTB**

In association with:  
Gary W. Anderson and Associates &  
Valerie S. Kretchmer Associates, Inc.

# Kishwaukee Street Corridor Revitalization Plan