



City of Danville, KY
Walnut Street and Stanford Avenue Roundabout
Estimated Cost \$1,500,000

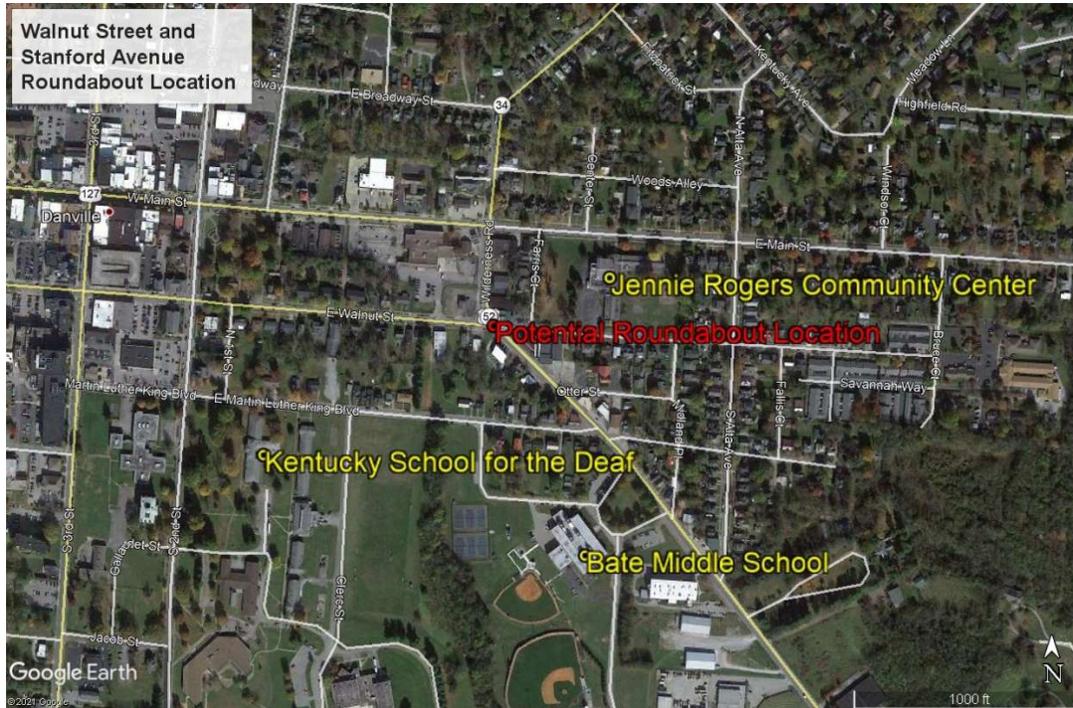
Project Description:

1. Design and Construction of a roundabout at the existing signalized intersection of Walnut Street and Stanford Avenue (U.S. 150) in Danville, Kentucky. This project includes the reconstruction of a severely skewed major intersection in downtown Danville that will provide a safety enhancement for vehicles and pedestrians along with an economic development on this area of downtown.

Project Benefits:

1. **Safety:** This project was initially identified in the Small Urban Area Study completed by the Kentucky Transportation Cabinet in 2014 and that project sheet is attached as an exhibit. Safety was the primary justification for the project in the SUA study due to the geometry of the intersection and the crash history. Pedestrian Safety is a major concern as well due to this intersection's proximity to a potential new Community Center, a public Middle School, the Kentucky School for the Deaf, and low-income neighborhoods.
2. **Economic:** The City of Danville has developed a Downtown Master Plan including the attached diagram that prioritized the improvement of the east end of downtown including vehicular and pedestrian improvements to enhance the vitality of this commercial area. This project will jumpstart future development of this area that has been hindered by an uninviting driving and walking experience.
3. **Equity:** The City is in the process of investing over \$600,000 in the area by acquiring the abandoned Jennie Rogers Elementary School located approximately 400 feet east of the project intersection. This facility has the potential to become a critical component of the future of the City's Parks and Recreation Department as a Community Center with athletic facilities, classrooms, a cafeteria and outdoor play spaces. The Community Center will provide an underserved, low-income area with facilities that are not currently accessible as identified in the City's recently adopted Parks and Recreation Master Plan.
4. **Mobility:** As identified in the City of Danville Downtown Master Plan, a key component to the improvement to the east end of downtown is to connect it to the residential area east of Stanford Avenue (U.S. 150). The improvements to this intersection will provide pedestrian friendly infrastructure so residents east of Stanford Avenue can access the core of downtown Danville which includes schools, a hospital, civic buildings and many commercial businesses.

Roundabout Location



Aerial of Intersection



Downtown Master Plan Consideration



East Entry District

Add Pedestrian Friendly Features and Vehicular Control to Lexington

Consider PUD for Multi-Family Residential Townhouse Development

Prevent Deep Building Setbacks on Main Street; Buildings should Front the Street with Parking in the Rear

Encourage Adaptive Re-use of Jenny Rogers School

Improve Walnut/Wilderness Rd Intersection; Consider a Roundabout. Add Pedestrian Friendly Features to Wilderness Road

KYTC Small Urban Area Study Recommendation

Danville SUA

**US 150 (Stanford Ave) (MP 13.911) /
E. Walnut Street Intersection**

Project #LT-E

PROBLEM

Project Background:

This intersection is severely skewed and signal heads are placed in front of adjacent business. Sight distance beyond the intersection is limited.

US 150 ADT = 6,760 (2011) / 5,000 (2040)

Project Issues:

- **SAFETY**
- CCRF = 2.09
- Majority of crashes are rear-end
- Traffic signals guide vehicles into businesses
- Located within an area that may have minority, low-income, and disabled populations



View of northwest bound approach



View from northwest corner

SOLUTION

Project Type:

Intersection reconfiguration

Project Solution:

Re-align intersection with roundabout.

Final design should consider the treatments of additional driveway access points along the southern edge. May be included (per NE Roundabouts Workshop guidance: <http://www.roundabouts.cc/>) but should provide space for vehicles to turnaround and avoid backing into roundabout. Property acquisition and / or driveway realignment should be considered.

Project Cost Estimate (2014 Dollars):

Design:	\$ 100,000
ROW:	\$ 90,000
Utilities:	\$ 300,000
Construction:	\$ 600,000
Total:	\$ 1,090,000



Project Priority: High