



## **STAFF REPORT**

**To:** Honorable Mayor and Members of Town Council

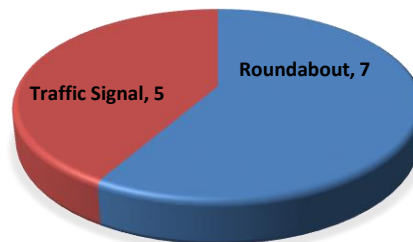
**From:** Dan Sailer, P.E., Assistant Public Works Director

**Title:** Discussion / Direction: Perry Street at Third Street Intersection Traffic Control Upgrade

---

### **Public Outreach**

Staff met with businesses along Perry and Third streets during the month of June to review the pros and cons of each option and allow them to provide feedback on their preferred option for Council consideration. The following is a distribution of those business owners that provided a specific preference.



The general preference for a roundabout is based on the ability of a roundabout to efficiently handle vehicular traffic during all hours of the day, improved pedestrian safety, as well as improved aesthetic enhancement options. For the businesses that prefer a traffic signal the general preference is to preserve the available number of parking spaces near the intersection.

If opposition to the roundabout option occurs at the Town Council meeting it is anticipated to be due to concern of any parking space loss within the downtown area. This came up as a general concern of the businesses that provided feedback on this issue regardless of the option they preferred. The Town is currently kicking off an assessment of the overall downtown parking situation to review opportunities for improvements. This kickoff occurred in July of this year.

Staff also received a formal recommendation from the Downtown Merchants Association, and the Downtown Development Authority. An overview of the pros and

cons of both options was provided to each at their joint Downtown Alliance meeting held on July 7<sup>th</sup>. Each unanimously recommended to Town Council to select the roundabout option.

This item was also discussed with the Public Works Commission at their July 11 meeting. The pros and cons of both options were reviewed, and the Commission unanimously recommended to Town Council to select the roundabout option.

## **Discussion**

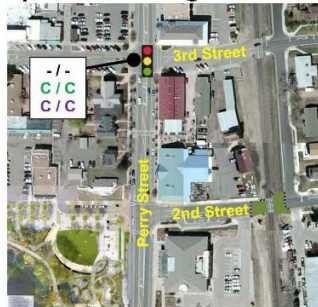
Staff has completed a traffic operational assessment of the intersection as part of a recent evaluation of the potential closure of the Second Street at-grade railroad crossing to establish a railroad train horn Quiet Zone. This assessment looked at three scenarios: 1) existing conditions during morning and evening weekday peak hours, 2) Festival Park expansion with shifted volumes to Third Street, and 3) combination of Festival Park expansion with the Second Street railroad crossing closure. While Town Council decided not to pursue the railroad crossing closure option, the summary traffic assessment that follows related to the first two scenarios are applicable to this discussion.

The graphic below summarizes the traffic operational assessment of each scenario. Letter grades A through F are utilized to provide a summary understanding of the traffic control level of service. Town engineering standards strive to have a level of service that doesn't exceed a D. The current two-way stop control is projected to have a level of service of E during the typical evening weekday peak hour once Second Street is closed between Wilcox and Perry Streets. The roundabout is projected to have a level of service A during the typical morning and evening weekday peak hours and the signal a level of service C during both typical weekday peak hours.

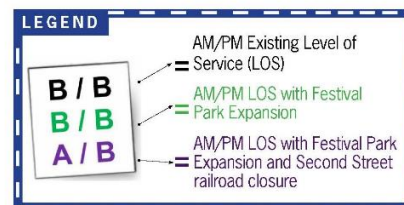
**Option 1: Two-way stop (current)**



**Option 2: Traffic signal**



**Option 3: Roundabout**



The following table provides additional summary information associated with operations during and after a train passing through the downtown area.

	Frequency during typical 24-hour day	Roundabout has better operation	Traffic Signal has better operation
Normal operations (no train)	89% of the time	X	
Operations with train at crossing	Approximately 6% of the time		X
Recovery time after train crosses	Approximately 5% of the time	X	

A rendering of a roundabout at this location is attached (**Attachment A**). If a roundabout is selected as the preferred option, Staff will work with the selected design consultant to minimize the number of existing parking spaces that will be lost with this concept. In addition, the size of the roundabout will be able to accommodate fire apparatus effectively that respond out of the downtown station in addition to the largest vehicle that typically utilizes the downtown streets, which is a school bus. A Federal Highway Administration (FHWA) brochure summarizing the general benefits of a roundabout is also attached (**Attachment B**).

### **Budget**

While traffic signals are generally less expensive to construct initially, when power and maintenance costs are considered over the lifespan of a traffic signal the overall life cycle costs are fairly close between these two options. Including design and construction costs, a roundabout is estimated to be between \$750,000 and \$1,150,000 to initially construct at this location. A traffic signal is estimated to cost between \$230,000 and \$250,000 initially.

Either option will require a budget amendment to be completed in 2016 to allow for design work to be completed this year. There are available funds in the fund balances of the two transportation funds to accommodate design costs in 2016 for both options. Construction costs for the selected option will need to be programmed into the 2017 budget which is planned for approval by Town Council in the fall of this year.