

Keep Your Local Businesses Thriving during Construction

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Economic development is directly related to a municipality's infrastructure. The quality and condition of the roads, bridges, water, sewer and other infrastructure are critical to attracting businesses and workers to a municipality. The federal infrastructure bill provides unprecedented funding to rebuild roads, bridges, and expand broadband. While business owners, residents and municipal leaders all appreciate improved infrastructure, no one likes the impact that construction operations may have, particularly in a downtown business district. Before construction begins on a project, engineers work through ways to mitigate the impacts construction has on the local residents and economic development as a part of the design process. Engineers develop a plan for construction, finding a balance between the needs of the public, businesses, and contractors. This balance includes ensuring public and worker safety, minimizing traffic disturbances, limiting impacts to businesses, and ensuring the contractor is able to maintain efficient work operations.



Safety

With changes in traffic patterns, large machinery operating next to the roadway, and the continuous dust storms that accompany construction, maintaining a safe environment for residents passing through construction areas and for the workers is a top priority. To aid drivers through work zones, limiting driver confusion is essential, and can be done by installing temporary construction signs and placing temporary pavement markings to guide drivers when traffic patterns change. These can include wayfinding signs, lane assignment signs and markings, regulatory speed signs, and guide signs for when lanes shift abruptly. For walkers passing through a work zone that may occur in an urban area, safe access through the work zone should be maintained. This can be done by providing a temporary pedestrian access route through the work zone that will not conflict with construction activities. Bicyclists traveling through the work zone

can be provided fall protection for when they are near steep drop-offs adjacent to the travel lane. Providing a safe environment for non-motorized travelers in a construction area is critical, especially in an urban setting, so residents can still travel to local stores and businesses. With all of the efforts contractors make to ensure the safety of residents passing through the work zone, they also take measures to protect their workers to the best of their abilities. Contractors will set up barrels, cones, and fencing around construction areas in order to provide a safe work environment for their employees.

Minimizing Impacts to Commuters and the Community

Although it may not seem like it when you are sitting at a dead stop in a work zone during your commute to work, designers attempt to minimize congestion for local townspeople traveling through a work zone, and seek to provide a reasonable traffic control design. For any

work zone that will alter traffic patterns, designers perform a traffic analysis to determine if the new traffic patterns will still allow the roadway to function during peak commuting hours. Roadways are not expected to function at the same efficiency during construction as compared to when there is none, but designers look to provide the most efficient traffic control plan given the circumstances. For businesses that find themselves in the middle of a construction area, designers ensure access to the businesses are maintained during construction, either by modifying their existing driveways, or providing them new temporary driveways to be used for the duration of construction. Designers also take into account the fluctuation of traffic depending on the hour of day. For most roadways, commuting hours of 7 a.m. to 9 a.m. and 4 p.m. to 6 p.m. are when the most vehicular traffic occurs. With this in mind, designers will sometimes (or often) include working-hour restrictions to contracts stating that there cannot be any work done during peak hours. Designers also coordinate with the local town to determine additional times during the week where traffic volumes may be high, and working hour restrictions may be necessary.

Contractor Efficiency

As important as safety and minimizing the impact on commuters and local businesses are, it is also important that the contractor is able to efficiently complete their work, and provide the local residents and businesses an optimal final product. There is no one singular way in which all construction projects are completed. Contractors are innovative thinkers. Depending on work restrictions and what type of work needs to be done, their preferred method of construction

changes on a project-to-project basis. In an ideal scenario, contractors would shut everything down for construction, closing the road, and directing vehicles to various detours. If the road were closed, the contractor would have all the space and time they would need during the day to get the work done, and get out of there. A construction project might go

from being six months long if the road was open and the contractor had to work around live traffic, to three months long, if they were able start early every morning and work through the day. Obviously, this scenario would not be ideal for residents using the road as part of their daily commute or local businesses within the construction area. It may not even



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be feasible for high-volume roadways. Closing down the roadway is not the only way to get work done in a timely manner. There are several methods by which contractors may approach completing their work, including: daytime staging, weekdays/weekend closures, and night work. Each of these construction methods have various impacts to traffic, local businesses, cost for the contractor, and schedule. It is important for designers to keep these factors in mind when proposing their traffic control plan.

Communication is Key

The best way to limit the impact on local residents and businesses during construction is by having efficient and effective communication, early and often! Communication with local residents and local businesses in regards to planned construction does not, and should not wait until construction already starts. Designers and town officials can communicate to discuss the various needs businesses might have, and figure out a way to meet these needs during the construction season. If special events occur during the year that draw a large population of people from out of town, those event dates can be provided to the designers, so that work restrictions can be put into the contract accordingly. Frequently, designers and town officials will plan and attend public information meetings for upcoming construction projects. At these meetings, anticipated work schedules, and the proposed infrastructure improvements are presented to the public so they are aware of upcoming construction projects. Meeting face-to-face with local residents is not the only way to provide information about upcoming construction and schedule updates for construction. Providing updates on upcoming or ongoing construction projects

Options	Phasing Goals				Comments
	Limit Impacts to Traffic	Limit Impacts to Businesses	Reduce Costs	Shorten Schedule	
Daytime Work/Staging	○	○	◉	○	• No <u>Additional</u> Labor or Material Costs
Closures (Weekdays/Weekends)	○	○	●	●	• Poor Detours/Catch Points • Added Labor Cost (Weekends)
Night Work/Staging	●	●	◉	●	• Additional Labor and Material Costs

via social media and/or project websites is a clear and effective way to keep local residents and businesses informed on construction progress, schedules, and traffic pattern changes.

Conclusion

Infrastructure projects and the construction seasons that accompany them are not going to stop any time soon. Everyone loves the finished product, but nobody loves the headaches that come with driving through work zones. To minimize these headaches, it's important to have a communication network set up between the engineers designing the project, contractors building the project, and the municipality involved in the project. From this communication, these parties can work together to provide a work zone traffic control plan with the following goals in mind: Limiting disruptions to local businesses during construction, providing a

- = Least Beneficial
- ◉ = Slightly Beneficial
- = Moderately Beneficial
- = Most Beneficial

US Route 4 Traffic and Pedestrian Improvement Project



Home

US Route 4 Corridor Construction Traffic Safety Advisory beginning August 4, 2021

The Town of North Greenbush is advising motorists that beginning Wednesday, August 4, 2021, Bloomingrove Drive will be closed to traffic in the following 2 areas of Town 24 hours each day to accommodate construction along the Route 4 Corridor:

- Southbound Bloomingrove Drive at Route 4 (Cumberland Farms) will remain closed for the next 2 weeks and re-open once the new traffic signal is installed, and

- Bloomingrove Drive at Williams Road will be closed for the next 6 weeks. Local traffic only will be allowed on Bloomingrove Drive and motorists are urged to use Winter Street Extension for access to Bloomingrove Drive during this time and to pay close attention to all traffic signage.

Traffic will be controlled by flaggers at the above intersections Monday thru Friday between the hours of 6:00 am and 6:00 pm. Motorists are urged to slow down and drive responsibly in the work zones. Fines are doubled for speeding in a work zone and convictions of two or more speeding violations in a work zone could result in the suspension of an individual's driver license.

Motorists are reminded to obey the directions of flaggers and slow down significantly whenever encountering roadside vehicles displaying red, white, blue, amber or green lights, including maintenance and construction vehicles in work zones.

SEARCH

US ROUTE 4 CORRIDOR PROJECT LOCATIONS



safe and functional traffic control plan during construction, allowing the contractor to build the best finished product they can that will benefit the entire community, and minimizing the negative impacts to economic development that are associated with construction. □