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**To:** City of Dalton Gardens  
**From:** HMH Engineering  
Matthew Hall, P.E.  
**Date:** October 29, 2020  
**Re:** Reduction in Thru Traffic

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Thru traffic has become a growing concern with the City of Dalton Gardens. The increased traffic has created issues with the safety and quality of life of residents, as well as increased the need for maintenance on the City's infrastructure. In response to this issue, the City has continued to explore options to reduce thru traffic by traffic calming.

FHWA defines traffic calming as:

"Traffic calming is a term that has emerged in Europe to describe a full range of methods to slow cars, but not necessarily ban them, as they move through commercial and residential neighborhoods. The benefit for pedestrians and bicyclists is that cars now drive at speeds that are safer and more compatible to walking and bicycling. There is, in fact, a kind of equilibrium among all of the uses of a street, so no one mode can dominate at the expense of another."

There are several types of traffic calming measures available and they can be grouped into the following five categories:

1. Horizontal Deflection; traffic circles, small roundabouts
2. Vertical Deflection; humps and bumps
3. Width Reduction; bulb-outs, median islands
4. Route Restriction; diverters and closures
5. Traffic Control; signs, pavement markings and rumble strips

The City has requested HMH to explore category 4, Route Restriction, specifically as it applies to closures. FHWA has determined that the closure of streets may be appropriate when large volumes of thru traffic or "short-cut" traffic results in unsafe conditions in a residential environment. The majority of thru traffic in Dalton Gardens can be associated with two distinct routes.

1. Vehicles traveling between the cities of Coeur d'Alene and Hayden via 4<sup>th</sup> Street.
2. Vehicles traveling to the development off Lookout Drive via 15<sup>th</sup> Street and various east/west streets.

There are two types of closures; partial closures, and full closures. Partial closures create a one-way street and would encourage traffic to shift from 4<sup>th</sup> and 15<sup>th</sup> to surrounding streets that were not constructed to handle increased traffic volumes. Full closures of 4<sup>th</sup>

and 15<sup>th</sup> streets would also encourage traffic to shift to alternate routes; therefore, road closures must be considered in a cluster or group to provide for thru traffic reduction.

Full closure of all north-south roads at Dalton Avenue and Prairie Avenue including 15<sup>th</sup> Street at the northern City limit would provide for the greatest reduction in thru traffic. All east-west roads would be left open, with access to Dalton Gardens limited to Government Way. This leaves all commercial properties in Dalton Gardens easily accessible, and residential streets reduced to local traffic only.

There are several key issues with the implementation of this measure that the City must consider.

- 1) Potential legal/financial concerns:
  - a) The development along Lookout Drive was established many years ago and access was provided through Dalton Gardens. These residents may bring legal cases against the City for closure of their access.
  - b) Federal funds were used to improve City streets such as Hanley Avenue. Restricting access or altering the designed traffic pattern to these roads may require repayment of Federal funds. Potential repayment of Federal funds should be discussed with KMPO and/or LHTAC.
  
- 2) Appropriate signing needed at entrances to full-closure street blocks:
  - a) According to the MUTCD, Dead End signs (W14-1) must be posted as near as practical to the entry point or at a sufficient advance distance to permit the road user to avoid the dead-end condition on the minor roads by turning at the nearest intersecting street.
  
- 3) Traffic diversion patterns and associated impacts:
  - a) Residents on dead end streets will have to plan for delivery of materials and vehicles that must turn-around including those of refuse trucks, delivery trucks, and other large vehicles will be impacted. Large trucks may be forced to backup considerable distances. Residents may experience vehicles turning around on private property.
  - b) Residents living on the far east of the City, such as 18<sup>th</sup> street may have to drastically change their traffic patterns if egress is only provided via Government Way.
  - c) The location of the road closure at the north end of N 15<sup>th</sup> would cut off Dalton Gardens residents living on Rockridge Lane from the City because the City of Dalton Gardens does not control 15<sup>th</sup> Street to the entrance of Rockridge Lane.
  - d) Residents along Prairie Ave and Dalton Ave would likewise be forced to alter their access point into the City. These residents would be forced to rely on outside jurisdictions to provide access to their residence.

- 4) Concerns regarding street network connectivity and capacity:
  - a) Road closures will result in traffic diverting to other local streets. The City of Dalton Gardens owns portions of Dalton and Prairie Avenue. Increased traffic volumes will require increased maintenance or reconstruction of these roads. Dalton Gardens residents living on Dalton and Prairie Ave will experience an increase in traffic due to closure of north and south roads. The City of Dalton Gardens does not own Government Way. Adjacent communities could restrict access from Dalton Gardens onto Government Way. Dalton Gardens would be barricaded within its borders.
  
- 5) Emergency Response Issues:
  - a) Road closures can increase response times and should not be used on roads/streets that provide access to hospitals or emergency medical services. Closures can be designed to allow emergency vehicle access. The City and HMH has met with the Kootenai County Fire District, who is receptive to the closure of streets to thru traffic as long as a 20 ft wide fire apparatus road is maintained for unrestricted emergency vehicle access. These accesses would need to comply with all regulations set by Kootenai County Fire District, as well as Appendix D: Fire Apparatus Access Roads of the International Fire Code as adopted by the State of Idaho. In addition, closure placement would need to be chosen carefully, as vehicles should not be able to drive around the closure, through residents' properties. Closures will require increased enforcement to ensure that traffic doesn't disregard the road restriction and travel through the fire apparatus access road.

Implementation of road closures would be recommended in phases. Phase 1 would include closing off all north-south roads except for 4<sup>th</sup> Street and 15<sup>th</sup> Street. This would allow residents to familiarize themselves with the new traffic pattern. 4<sup>th</sup> and 15<sup>th</sup> streets are more likely capable of handling the increased traffic resulting from closure of alternate north-south routes. Finally, phase 2 would close off 4<sup>th</sup> and 15<sup>th</sup> streets in the north-south direction.

It is recommended prior to the closure of streets that a full traffic study be performed to further determine the effects of such drastic changes to traffic patterns. It is important to consider where the diverted traffic is likely to shift, in particular the availability, capacity, and appropriateness of the alternative routes within City limits. All traffic will be required to travel on Hanley Ave, Canfield Ave, Wilbur Ave, or Deerhaven Ave to enter or exit the City of Dalton Gardens.

This proposal is likely to lead to a reduction in access to all Dalton Gardens residents. It is strongly recommended that consultation with residents, through public meetings and workshops, be conducted covering the planning and design of any proposed road closures to minimize opposition during implementation.

## CITY OF DALTON GARDENS: CLOSURE OF NORTH-SOUTH ROADS IMPACTS



Road Closure on 15<sup>th</sup> south of Rockridge Lane. Residents on North 15<sup>th</sup> Street and Rockridge Lane have no direct access to City of Dalton Gardens.

Road Closures south of Prairie Ave. Residents along Prairie have restricted access to Dalton Gardens.



Road Closures north of Dalton Ave. Residents along Dalton Ave have restricted access to Dalton Gardens.



- ROAD CLOSURE
- SIGN - DEAD END



OPTION 1: CLOSURE OF NORTH-SOUTH ROADS  
CITY OF DALTON GARDENS, IDAHO