### Frequently Asked Questions (based on feedback received from the December 2016 PIOHs):

For additional information regarding the history of the project and a list of frequently asked questions (FAQs), please view previous public meeting materials and documents at <a href="http://www.dot.ga.gov/BS/Projects/SpecialProjects/SR20Improvements.aspx">http://www.dot.ga.gov/BS/Projects/SpecialProjects/SR20Improvements.aspx</a>.

# What is the purpose of this project?

The purpose of the SR 20 project between I-575 and Scott Road is to improve congestion, safety, and mobility in the vicinity of the growing Canton Marketplace area.

The purpose of the SR 20 corridor improvements project is to improve SR 20 between Scott Road in Canton and North Corners Parkway in Cumming to reduce traffic congestion to an acceptable level, address high crash rates, and improve east/west mobility and connectivity between Canton and Cumming. SR 20 is classified as a mix of an Urban and Rural Principal Arterial in Cherokee County and an Urban Principal Arterial in Forsyth County. A road classified as an *arterial* is intended to deliver traffic between collector roads and freeways and also serves to carry longer-distance flows between important centers of activity at the highest level of service possible.

The mission of the Georgia DOT is to provide a safe, connected, and environmentally sensitive transportation system that enhances Georgia's economic competitiveness by working efficiently and communicating effectively to create strong partnerships.

## What is the benefit for local travelers (as opposed to through commuters)?

Local travelers access residences and businesses, as well as side roads throughout the proposed SR 20 improvements corridor. Local travelers tend to make more frequent shorter trips and may experience more turning movements compared to through commuters who may be traveling from Canton to Cumming. The local driver, inclined to make more frequent turning movements, has the potential to experience more conflict points in those turning movements, as well as experience congestion issues in more localized areas. These drivers would benefit from an improved SR 20 in the development of a more efficient roadway that increases capacity to reduce congestion, bring the roadway design up to current engineering standards, and incorporate medians which contribute to providing an infrastructure that improves traffic flow and encourages safer driver behaviors for all vehicles.

The volume of traffic compared to the capacity of the existing roadway severely restricts the mobility of this corridor adding significantly to the time it takes to complete a trip for both local and through traffic as well as contributing to circumstances that may lead drivers to take more risks. In addition, due to the high traffic volumes, drivers attempting to make left turns from SR 20 or enter SR 20 from driveways and side roads may encounter long delays due congestion on the roadway. As a result, safety is compromised as drivers attempt to make these turning movements. Adding capacity and controlling the access points along SR 20 will aid local trips in providing an infrastructure that facilitates the driver to make safer driver decisions for local trips as well as longer distance travel.

Local drivers who experience more frequent turning movements would benefit from the installation of medians along this corridor by separating the *turning* movement from the *through* 

movement and limiting turning locations along the corridor. This aids in providing a turning refuge, reducing the number of conflict points for those turning movements, as well as improving driver expectations. The type of median proposed along SR 20 is the Restricted Crossing U-Turn (RCUT) intersections. The RCUT intersections have been installed in many states in the U.S., and federal studies have shown a reduction in total crashes at those locations by 28% to 44%. These studies have also shown a reduction in the number of fatal crashes by more than half.

The RCUTs can also improve the overall roadway operations even when considering the additional distance traveled by traffic entering from the minor road or driveway. While RCUTs can cause a slight increase in travel time during periods of low traffic volumes, they have been shown to decrease delay during periods of higher volumes, reducing the time it takes to clear an intersection and resume normal travel speeds, thereby resulting in an overall benefit for local roadway users as well as those traveling along SR 20.

# Why does Cumming Hwy/Canton Hwy/SR 20 have to be widened and not some other road?

Since Cumming Hwy/Canton Hwy is a state route and is also classified as an arterial, it is the primary road for carrying the majority of east west traffic between Canton and Cumming and between the local roads and collector roads to connections with I-575 and SR 400. The topography and terrain are also very influential on the locations of this road as well as restrictive to alternative east west routes.

Early in the project development process a number of different conceptual alternatives were considered, including rerouting SR 20 to SR 369 or Bethelview Road, as well as creating new parallel freeways to the north and south of existing SR 20. The SR 369 alternative provided improvements to safety, but provided unacceptable improvements to congestion (e.g., Level of Service which is a qualitative measure used to assign letter grades to represent levels of traffic based on performance measures like speed, density, etc.) and mobility (e.g., Travel Time Savings) when compared against the other conceptual alternatives. The Bethelview Road alternative failed the qualitative analysis because it did not satisfy the mobility or congestion components, as well. The Freeways provided a benefit for mobility and congestion but were cost prohibitive due to the extreme terrain and amount of right-of-way that would need to be acquired to build such a facility.

### What is the Project Schedule moving forward?

The SR 20 Improvements project is on a fast track schedule for construction. Right-of-way acquisition is scheduled to begin in 2017 and will be acquired in stages. The first project letting to construction is scheduled for 2019.

#### Why does the project include 6 lanes?

In general, GDOT plans and designs for projects to sufficiently handle traffic demands up to 20 years after project completion. Traffic data in the SR 20 corridor was analyzed and projected out to the design year of 2045 based on anticipated growth rates and patterns based on historical growth, as well as anticipated growth in conjunction with county and city planning efforts. Analysis of the current and anticipated traffic volumes in this area show that anything less than

6-lanes would be insufficient in the design year. GDOT compared the cost and impacts of a 4 vs 6 lane roadway, and found that the cost to purchase right of way and construct 4 lanes would cost only 4.2 % less that the overall cost for 6-lanes. GDOT determined that constructing six lanes was the best option for long term mobility, as well as in terms of cost/benefit. The three (3) lanes in each direction would consist of two (2), 11-foot lanes and one (1), 12-foot lane.

## How will the mobility issues in Cumming be addressed?

The proposed project would tie to the existing 5-lane section on the west side of Cumming at North Corners Parkway, which would create a continuous multi-lane roadway from the west, past the Sawnee Mountain range and into Cumming. By continuing the multi-lane roadway to the existing 5-lane section, the proposed project would not preclude any future bypass option that could be developed to go around Cumming. The geographical barrier of Sawnee Mountain and its mountain range to the south significantly limits the opportunities for an alternate route around Cumming. Widening improvements are currently being designed and constructed along Bethelview Road and Post Road, which, when completed, are anticipated to draw some vehicles away from SR 20 between these roadways and Cumming providing greater mobility in the area. Once these additional roadway improvements are made and traffic patterns settle out, the need for further improvements through Cumming can be evaluated and solutions developed.

## Why are RCUT intersections needed?

One of the important goals of this project is to reduce crash rates and improve safety along SR 20. Restricted Crossing U-Turn (RCUT) intersections have been installed in many states in the U.S., and federal studies have shown a reduction in total crashes, at those locations by 28% to 44%. These studies have also shown a reduction in the number of fatal crashes by more than half.

The RCUTs can also improve the overall roadway operations even when considering the additional distance traveled by traffic entering from the minor road or driveway. While RCUTs can cause a slight increase in travel time during periods of low traffic volumes, they have been shown to decrease delay during periods of higher volumes, reducing the time it takes to clear an intersection and resume normal travel speeds, thereby resulting in an overall benefit for local roadway users as well as those traveling along SR 20.

### What is a Median U-turn intersection?

A Median U-turn intersection is proposed for safety and capacity improvements. Statistics demonstrate the following:

- 16% reduction of total crashes
- 30% reduction of Injury crashes
- 50% reduction in vehicle conflict points
- 33% reduction in pedestrian/vehicle phase conflicts
- 15% 40% increase in total throughput
- 20% 40% reduction of stopped vehicles in the network
- 17% travel time reduction

The Median U-Turn also requires less Right-of-Way as the left turn lanes are removed from the intersection and replaced by left turns in the median after passing through the intersection.

For more information please review the following video: <a href="https://www.youtube.com/watch?v=fshW\_O\_XggI">https://www.youtube.com/watch?v=fshW\_O\_XggI</a>

## What happens if my property is needed for this project?

If your property is needed for a project, you are entitled to receive fair market value for your property. This value is determined from appraisals prepared by highly qualified independent appraisers. You or your designated representative will be given an opportunity to accompany the appraiser during the inspection of your property.

All appraisals are reviewed by experienced, qualified review appraisers for accuracy of research and appropriateness of method, and to make sure that all significant factors have been considered. You will be offered the full amount of the final approved estimate of fair market value. There will be no attempt to buy your property at a lesser figure. This offer will be made to you in writing and will establish the Department's legal date of initiation of negotiations to purchase your property.

More detailed information can be found at:

 $\frac{http://www.dot.ga.gov/PartnerSmart/Public/Documents/Right-of-Way/ROWBrochure-English.pdf}{}$ 

### How will construction be staged? What are anticipated construction impacts?

The construction of the roadway will be completed in multiple stages. We do not anticipate any detours of SR 20 during construction. Some of the side roads that have nearby adjacent roadways may find some minor roadway closings with diversions or detours to these adjacent roadways for continuous access to SR 20. The contractor will be required to ensure access to all properties is provided throughout the duration of the construction. Some of this access may be through use of temporary driveways and minor roads.

The likely course of construction will include the construction of the new lanes on one side or the other of existing SR 20 while traffic is maintained on the existing roadway. Traffic will then shift to the newly constructed lanes while construction is completed on the remaining portion. Once all lanes are constructed, the full use of the roadway will be opened.

# Is there an opportunity to provide input on project treatments (landscaping, lighting, sidewalks), etc.?

Yes! The proposed plans presented at the December 2016 public meetings were conceptual; the aesthetics and landscaping details are typically worked out later in the process. It is the intent to grass the medians where adequate width is provided for grassing, e.g., generally where it is 8 feet or wider between the curb and gutter encompassing the raised median for ease of mowing and maintenance. When the raised median is reduced in width to accommodate turn lanes, the raised median will be concrete. It is our goal to construct a facility to serve the purpose and need of this major state route while trying to make it fit into the local community. Please feel free to comment on suggested aesthetic treatments in your comment response form.

# What are the major changes since the Dec. 2016 PIOHs?

# **Buffington**

• Forest Creek Subdivision- Alignment shifted away from subdivision to protect entrance monument. Reviewed traffic and due to traffic levels intersection does not warrant a signal. A full median break is also being considered at this location.

#### Macedonia

- **Hampton Station** Reviewed traffic and due to traffic levels, intersection does not warrant a signal. A full median break is also being considered at this location.
- **Multi-use trail** Reviewed request to extend multi-use trail along SR 20 in all of Cherokee County; however, this project is not in master plan and will not be included in this project.
- Cherokee Veterans Park There is no signal planned, but the need for a traffic signal will be reviewed once the park opens and traffic volumes normalize.

#### Lathemtown

- **Old Mill Road** Removed realignment as traffic was reviewed and this intersection would not warrant a signal. A full median break will not be provided.
- Lathemtown—Reviewed area and retained alignment as proposed in 2016
- Holbrook Campground Rd Flattened curve to meet design speed.
- Holbrook Campground Rd and Cherokee Ranch Alignment shift

#### Ducktown

• Franklin Goldmine Rd - Removed realignment as traffic was reviewed and this intersection would not warrant a signal.

#### Cumming

- **Bethelview Road Intersection** Reviewed requests for a traditional intersection and this is still under review. The disadvantages of a traditional intersection are that it fails in the design year with triple left turn lanes, results in a larger footprint due to the increased number of lanes that would be required, and would result in greater right of way impacts.
- Mountain View Church— Added left turn in for direct access.
- River of Life Church- Added left turn in for direct access and shifted alignment to save parking.
- **Highlands at Sawnee** Reviewed traffic and due to traffic levels, intersection does not warrant a signal.
- Sawnee Mountain Flattened curve to meet design speed

#### General

- Typical section reduced from three, 12-foot lanes to two, 11-foot lanes and one, 12-foot lane in each direction
- Refinement of project limits
- Added more RCUTS to allow more options for U-turn movements
- Revised detention pond locations and sizes
- Canton Exchange (PI 0009164) traffic signal approved. Continued evaluation of traffic signals.