## Village Crossroads - Chamblee Dunwoody Road

Concept Preliminary Final Right-of-Way Utility
Design Design Acquisition Relocation Construction Complete

### **Current activities**

(January 2024) The city is in the process of contracting with an engineering firm to begin developing the final design later this spring.

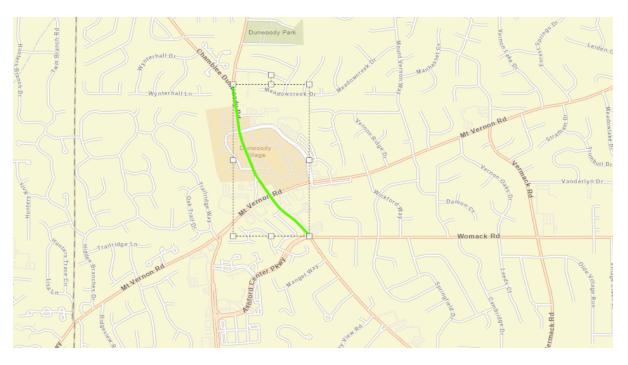
(June 2023) The city was awarded \$6,000,000 in federal funding for construction and is working with the Georgia Department of Transportation to obtain approval of the concept design so that the full design plans can be developed.



The Village Crossroads Project seeks to transform Chamblee Dunwoody Road in Dunwoody Village into a more walkable and bike-friendly corridor, with added traffic-calming measures to reduce speeds. This projects covers Chamblee Dunwoody Road from Womack Road to Roberts Drive.

Signup.

1/31/2024, 10:44 PM



Click <u>here</u> or on the drawing below for an enlarged plan view of the improvements proposed along the entire corridor from Womack Road to Roberts Drive.



## **Project History**

The vision for the project was established in the original Dunwoody Village Master Plan when the community identified pedestrian improvements as a top priority for the Village.

Signup.

# Background: 2011 Village Master Plan

## The 2011 plan called for:

- A true "downtown"
- · A more walkable and bikeable village
- Central public green space
- Vibrant mix of civic, office, convenience retail, and residential uses
- New streets with redevelopment



The <u>City's Transportation Plan</u> incorporates the recommendations from the Village Master Plan and recommends accommodations for bicycles and improvements to address traffic congestion at the Mount Vernon Road intersection.

This is an early concept with no specific project timeline or budget details available.

## **Proposed Improvements**

**Wider Sidewalks**- Existing sidewalks generally vary from four to six feet wide. The new sidewalks will be eight feet wide with street trees, decorative streetlights, benches and bus shelters.

Signup.



**Existing Sidewalk** 

**Proposed Sidewalk** 

**Separated Bike Path (Cycle Track)-** There are on-street bike lanes to the north and south of the Dunwoody Village, but there is a gap on Chamblee Dunwoody Road through the Village. The proposed bike path would be at sidewalk level and separate cyclists from auto traffic and pedestrians on both sides of the road.



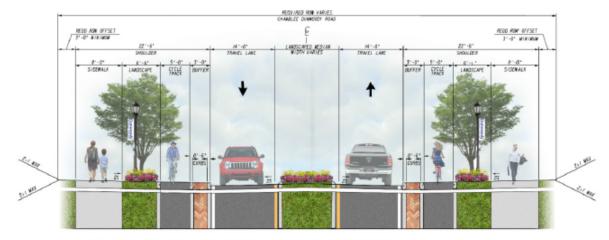
**Existing Bike Travel** 

**Proposed Bicycle Path** 

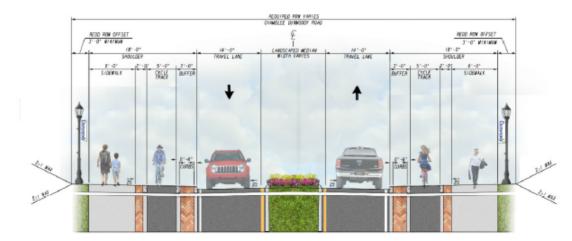
**Roadway-** The proposed design generally maintains the lane configurations as they currently exist with the exception of removing one of the southbound through-lanes south of Mount Vernon Road. In areas north of Mount Vernon Road where a center turn lane is not needed, the turn lane will be converted into a landscaped median which will add greenery, calm traffic and create safer pedestrian crossings.

The drawings below show the proposed improvements for the ideal condition (preferred) where there is ample

right of way - and for the constrained condition, such as in front of the farmhouse, where the right of way is narrower. For the constrained condition, the tree planting strip between the cycle track and sidewalk is removed.



TYPICAL SECTION: CHAMBLEE DUNWOODY ROAD PREFERRED TYPICAL: 1NB LANE + MEDIAN



TYPICAL SECTION: CHAMBLEE DUNWOODY ROAD CONSTRAINED TYPICAL: 1NB LANE + MEDIAN

Click <u>here</u> or on the drawing below for an enlarged plan view of the improvements proposed along the entire corridor from Womack Road to Roberts Drive.





#### What is a Cycle Track? Why not a Shared-Use Path?

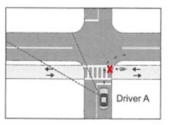
"A cycle track is an exclusive bike facility that combines the user experience of a separated path with the onstreet infrastructure of a conventional bike lane. A cycle track is physically separated from motor traffic and distinct from a sidewalk." (National Association of City Transportation Officials, 2014)

Cycle tracks differ from a shared-use path in that the cyclists and pedestrians are separated. Shared-use paths are most suitable for off-road facilities and along roadways with infrequent driveways and side streets (American Association of State Highway Transportation Officials , 2012). This guidance is based on data that indicates that the majority of bicycle crashes occur at intersections and driveways (Hunter, Stutts, Pein, & Cox, 1996). The frequent driveways on the Chamblee Dunwoody corridor make it less suitable for a path because of potential conflicts with turning vehicles.

#### Shared Use Paths

Why are Frequent Driveways a Problem for Two Way Side Paths?

Cyclists Riding Against Traffic on a Side Path Have a Higher Risk of Crashes with Right-Turning Vehicles



Right turning Driver A is looking for traffic on the left. A contraflow bicyclist is not in the driver's main field of vision

Additionally, as pedestrian traffic increases in Dunwoody Village, conflicts between pedestrians and cyclists will increase if they are sharing the same space. The proposed zoning for future development along Chamblee Dunwoody Road envisions shopfront along the roadway. Pedestrians entering and exiting stores and outdoor dining will encroach on the usable area and force pedestrians and cyclists to share an even smaller area.

These safety considerations make a separated cycle track the preferred option for this project.

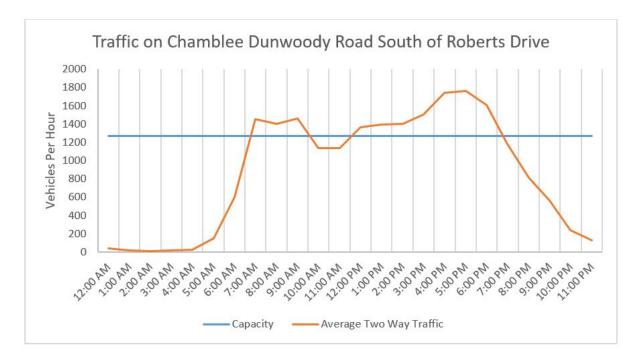


Example of Shops and Dining along Sidewalk

## **Traffic Congestion Considerations**

Signup!

The number of vehicles on Chamblee Dunwoody Road is at or above the maximum capacity of the road for most weekday daytime hours. With an average daily traffic of over 17,000 vehicles per day and frequent driveways, the traffic pushes the limit of what can be accommodated with only one travel lane in each direction.



Despite the high traffic volume, a 4-lane roadway north of Mount Vernon Road has not been considered based on the desired characteristics for the Village expressed by the community during the planning process. Several ideas such as additional turn lanes and roundabouts were explored to improve traffic flow at the Mount Vernon Road Intersection and the Roberts Drive intersection. The roundabout options are not part of this proposal, as explained in another section below.

#### **Mount Vernon Road Intersection**

This intersection has the most impact on traffic flow through Dunwoody Village. When traffic is light, the intersection operates well. During times of heavier traffic, the intersection operates near capacity and backups occur on Chamblee Dunwoody where there is only one through lane in each direction. On weekday afternoons, the queue of cars waiting to turn left from Mount Vernon Road to northbound Chamblee Dunwoody often extends beyond the length of the left turn lane and backs up into the through lane.

#### **Intersection Improvement Ideas**

Add a second northbound left turn lane from Chamblee Dunwoody Road to Mount Vernon Road

Signup.



The design team evaluated several concepts for adding capacity to the intersection and found that adding a second northbound left turn lane on Chamblee Dunwoody Road provides the *most* benefit for the *least* cost and disturbance. This turn lane can be added within the existing right of way and is projected to reduce overall delay at the intersection by 15% during times of peak traffic. While this will be an overall traffic improvement it won't completely resolve the traffic congestion, as the intersection will still operate at a level of service F in the morning and E in the afternoon. The eastbound left turn queue will also continue to exceed the length of the turn lane.

Due to the high benefit/low cost, the additional northbound left turn lane **has been incorporated** into the Chamblee Dunwoody Road concept plan .

Signup.