

# City of Chamblee North Peachtree and North Shallowford Intersection Improvement Project

## **What?**

- Proposed intersection improvement project to upgrade the existing y-intersection with free flow movement on North Peachtree Road and stop conditions on North Shallowford Road to a compact urban roundabout.
- Ellwyn Drive will also be incorporated into the intersection improvements. The existing asphalt surface will be milled and inlayed from the compact urban roundabout location to approximately 115-ft east of the subject intersection.

## **Why?**

- Goal of this intersection improvement is to improve overall vehicular safety and reduce the quantity and severity of traffic accidents. This improvement will also reduce peak period congestion that occurs on N. Shallowford and N. Peachtree Road.

## **Why a Roundabout and not a Signal?**

- The compact urban roundabout has a smaller footprint and less impact on surrounding property owners which also results in lower construction cost.
- Roundabouts are statistically safer than traffic signals. A trade off occurs between high speed, t-bone collisions that occur when a driver 'beats' a red light for low speed, and side swipe collisions.
- The roundabout has better long-term operations.
- With a traffic signal, delay is always present 24 hours a day when a driver encounters a red light. At a roundabout, less delay occurs, especially at off peak hours, due to the yield condition. This aspect is also a benefit to the environment since fewer vehicle emissions are placed into the air.

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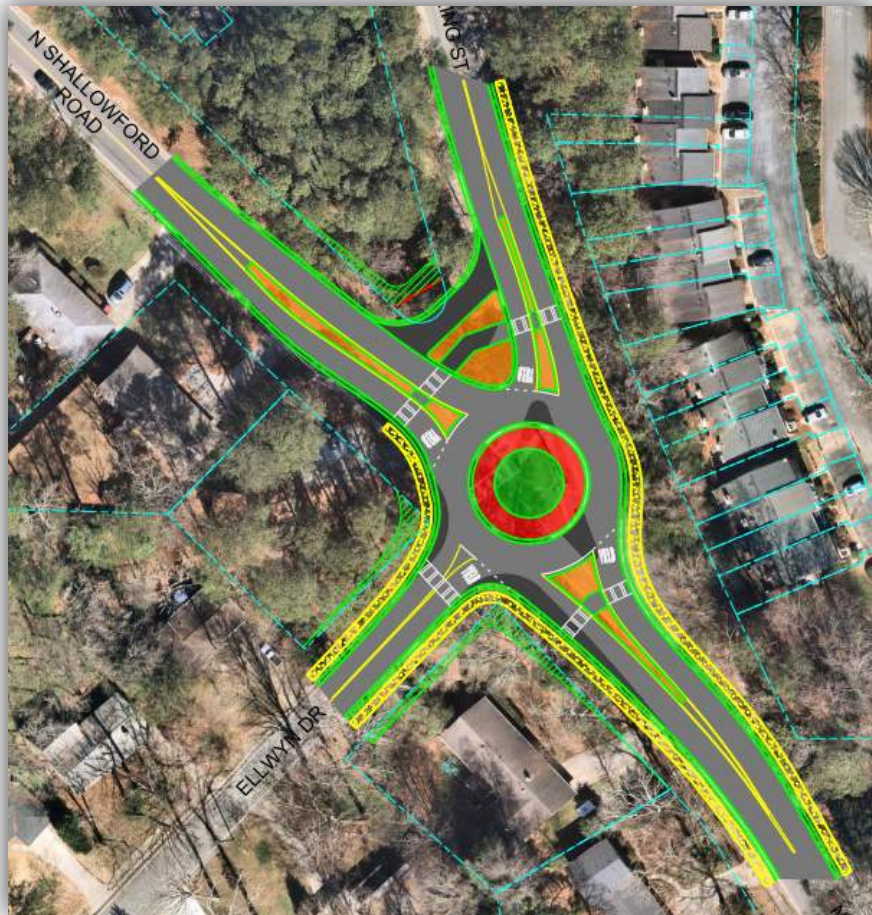
## **Cost & Funding**

- Funding is through SPLOST (Special Purpose Local Option Sales Tax).
- The roundabout intersection improvement project is estimated to cost approximately \$1,100,000.

## **Schedule**

- Construction is planned to start upon completion of right-of-way acquisition. A more detailed construction schedule will be determined prior to bidding. Construction is anticipated to last 6-8 months.

## **Preliminary Layout**



# A Little Knowledge About Roundabouts

## **What is a roundabout?**

A roundabout is a one-way circular intersection engineered to reduce congestion and maximize safety. The “yield at entry” rule reduces delay by eliminating unnecessary stopping. Vehicles yield to traffic in the roundabout and enter only when there is a safe gap in traffic.

Modern roundabouts have design features that improve traffic flow and reduce delay, fuel consumption, and air pollution. That’s why roundabouts are often a better solution at sites where we typically see traffic signal lights or stop signs.

## **Are roundabouts safe?**

Yes. Roundabouts can carry more traffic than a traffic signal, but with one fourth as many injuries, and one tenth as many fatalities. This is because vehicles in a roundabout are moving slowly, in the same direction. So, instead of high speed head-on and broadside crashes, crashes that do occur are mostly low speed sideswipes. Injuries are rare.

That is why roundabouts are important.

Each year, about 7,500 Americans are killed at intersections and many more are injured or disabled. Roundabouts can save lives.

## **Aren’t traffic signals safer for pedestrians?**

No. Pedestrians are safer at roundabouts, because a roundabout crosswalk is split into two shorter crossings of low speed, one-way traffic. At traffic lights, pedestrians can spend more than twice as much time in the road, and they need to look in four different directions: for high-speed traffic turning right or left on green, or right on red - or running the red light. With roundabouts, traffic is slower, crosswalks are shorter, and there’s a safety refuge half way across the street. Roundabouts have about one fourth as many pedestrian injuries as a typical ‘crossroad’ type intersection.

# A Little Knowledge About Roundabouts

## **Why are so many communities building roundabouts?**

Roundabouts are an economical way to solve serious safety and congestion problems. They can reduce congestion without the high cost of adding a signal and widening the entire roadway. Roundabouts reduce fuel consumption, and air and noise pollution, and many people think landscaped roundabouts are more attractive than signals.

## **Are roundabouts safe near schools?**

More than fifty roundabouts have been built near U.S. schools. Speeding is reduced in the school zone, and safety reports are favorable.

## **Some roundabouts look awfully tight for trucks. Will trucks fit?**

Yes. Roundabouts are designed for trucks. Trucks proceed slowly and sometimes use the paved "truck apron" around the central island. As at other intersections, trucks make wide turns; therefore, other drivers should give them plenty of space.

## **How about bicycles at a roundabout?**

Depending on their experience riding in traffic, cyclists can circulate as a vehicle or use the sidewalk as a pedestrian. As always, make sure drivers see you.

## **Are roundabouts suitable everywhere?**

No. The selection of a roundabout, traffic light, or stop sign is complicated, and depends entirely on the situation. Expert traffic analysis can determine whether a roundabout, traffic signal light, or two- or all-way stop is the most effective solution.