CITY OF

Peachtree CORNERS

Innovative & Remarkable

BRIDGE BACKGROUND AND HISTORY

- Studies (Town Center LCI and Multi-Use Trail) identify the need for a bridge
- Safety analysis indicates need for a bridge
- Vehicular Traffic volumes warrant a grade separation crossing
- Anticipated activities and shared parking is expected to result in high volumes of pedestrian traffic between Town Center and the Forum

TRAFFIC VOLUMES

Peachtree Parkway (north of Jay Bird Alley)

- Average Daily Trips – 44,240 vehicles
- ADT has been increasing 1% / year since 2009
- In ten years, Peachtree Parkway will carry nearly 50,000 vehicles per day

CONCLUSIONS FROM POND + CO.'S DEMAND AND SAFETY STUDY NOVEMBER, 2016

- *With a bridge, there is the potential to convert a portion of as many as 2600 trips per day from driving to walking trips.*
- *When large volumes of pedestrians are expected to cross a road as wide as SR 141, the amount of time that must be given to the pedestrians could disrupt the traffic flow on the major streets.*
- *There is an increased risk of pedestrian – vehicle collisions during the evening between 6:00 and 9:00PM.*

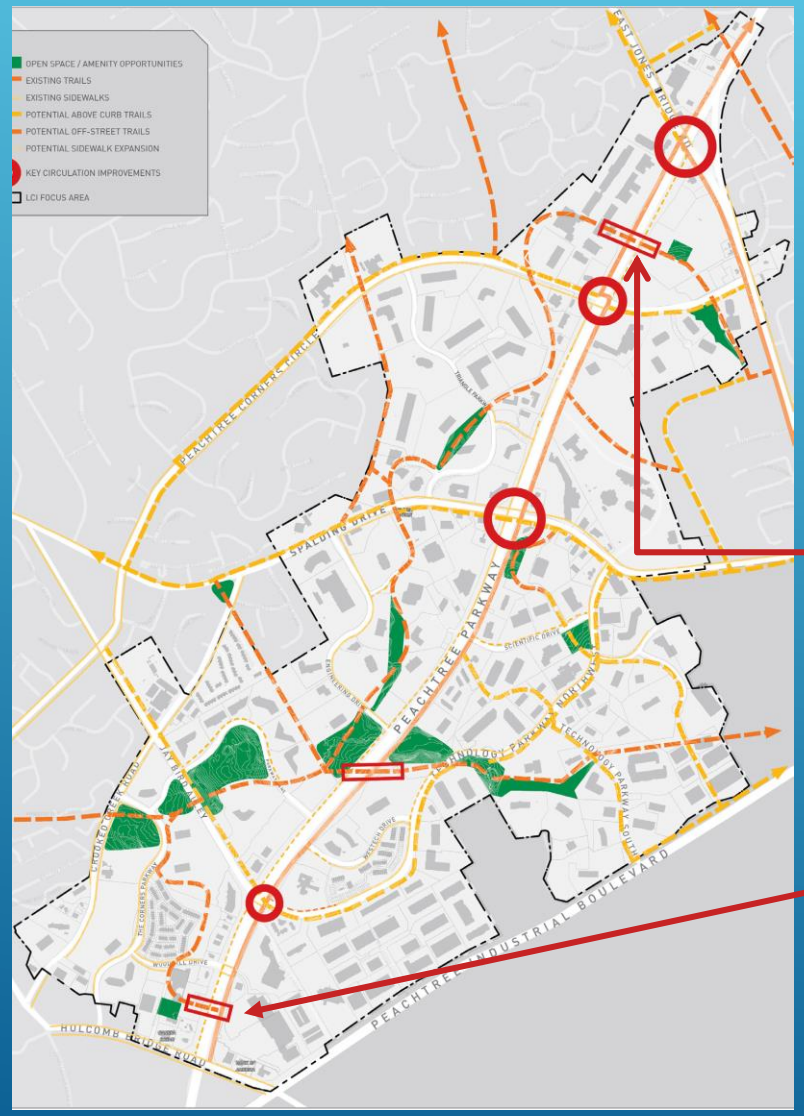
- Pedestrian Crossing signal can take up to 50 seconds at 141/Forum Drive. 20 seconds is added to the adjacent signals at PC Cir/E Jones. It takes those lights 8 cycles to reset to the 'non-pedestrian' flow.
- GDOT requires a pedestrian bridge span accommodating one additional travel lane north & south, for a total of 8 lanes

Conclusion

Two Primary Objectives for Peachtree Parkway:

- Improved Traffic Flow
- Pedestrian Safety

MULTI-USE TRAIL PLAN



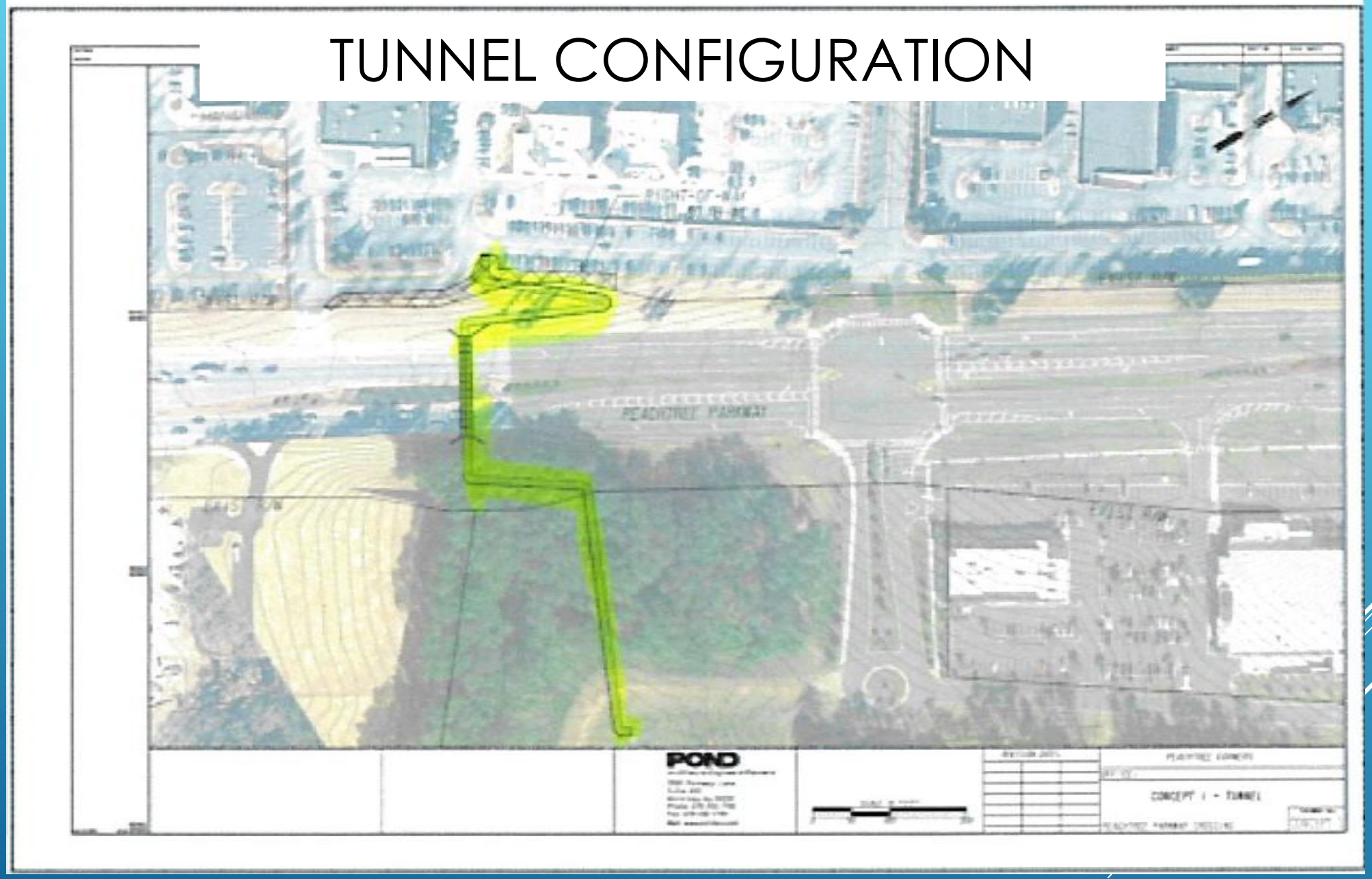
- Connects jobs to housing
- Utilizes existing open space, right-of-ways, and easements
- 1st phase from Peachtree Parkway to Medlock Bridge Road along Colonial Pipeline easement
- Crosses Peachtree Parkway at Town Center and near Holcomb Br. Rd.

BRIDGE VS. TUNNEL

	Bridge	Tunnel
▸ Safety (and perception of safety)	☑	☐
▸ Functionality (spaces needed for pedestrians/ bikes/handicap accessibility)	☑	☐
▸ Sociability of Space (views/seating/interaction)	☑	☐
▸ Image (place making/ branding/feature)	☑	☐
▸ Maintenance (water intrusion-next to creek)	☑	☐

According to Pond study: standard bridge could cost $4.5M
standard tunnel could cost $6.3M

TUNNEL CONFIGURATION



*From Pedestrian Bridge and Tunnel Comparison prepared by Pond +Co. 11/2016

PROCESS FOR SELECTING BRIDGE DESIGN

- ☑ Technical Subcommittee
- ☑ Citizen Committee
- ☑ Design Consultants
- ☑ Conducted Research
- ☑ Analyzed Numerous Options
- ☑ Reviewed Alternatives
- ☑ Developed Multiple Options
- ☑ **Public Input**

2014 (MULTIPLE OPTIONS)

2015 (2 OPTIONS)

2016 (FIRST ½)

1/28/16 UPCCA Town Center update and Bridge presentation

3/31/16 Community Bridge presentation

5/10/16 Surveys at High Schools

6/9/16 PCBA meeting

6/23/16 Community Bridge Presentation

2016 (SECOND ½)

Listened and Learned and came to the following Bridge Conclusions:

1. Design should more clearly be focused on 'Pedestrian Safety'
2. The structure should be simplified
3. The scale should be reduced

4. Emphasis should be on functionality (i.e. add elevator to reduce crossing time, provide horizontal safety screening)

5. Cost should be an initial consideration

6. The appearance should be characterized as ‘Distinctive’, not ‘Iconic’ and should rely on historic precedence (i.e. original Jones Bridge)

JONES BRIDGE

- ARCH GEOMETRY
- STEEL STRUCTURE
- END SUPPORTED SINGLE SPAN
- DIAGONAL CABLES
- HORIZONTAL RAILING
- MASONRY END SUPPORTS
- MAHOGANY COLOR

HALF THE BRIDGE WAS REMOVED AND SOLD. METAL WAS NEEDED FOR THE WAR EFFORT. (FROM PP 127-128, GWINNETT, BY ELLIOTT E. BRACK)

REMAINING HALF CAN BE SEEN FROM JONES BRIDGE PARK.

2017 REVISED BRIDGE DESIGN OBJECTIVES

1. Use a simple structure
2. Lower scale
3. Be cost effective
4. Provide enclosure to enhance safety
5. Replace long ramps with elevators
6. Limit add-ons and extras to bridge design
7. Incorporate traditional as well as contemporary materials and features
8. Rely on historical precedents for design inspiration
9. Ensure visibility at night

☑ ARCH GEOMETRY ☑ STEEL STRUCTURE ☑ SINGLE SPAN ☑ DIAGONAL CABLES
☑ HORIZONTAL RAILING ☑ MASONRY ENDS ☑ MAHOGANY COLOR

PEACHTREE CORNERS

Peachtree Parkway Pedestrian Bridge
Engineer Estimate of Probable Construction Cost
Tied Arch Bridge (170’ x 14’)

No.	Item Description	Amount
1	Mobilization (5%)	$ 166,950
2	Maintenance of Traffic (3%)	$ 100,170
3	Main Span Bridge SF $800 3,400	$ 850,000
4	Elevators EA $350,000 2	$ 700,000
5	Stairs	$ 250,000
6	Sidewalks and Site Work	$ 300,000
7	Landscaping LS	$ 200,000
8	Signage	$ 100,000
9	Lighting/Electrical	$ 500,000
Subtotal		$ 3,167,120
Contingency 15.0%		$ 380,054
Total Construction		**$ 3,547,174**
Engineering 12.0%		$ 425,661
Grand Total		**$ 3,972,835**