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MEMORANDUM

To: Mayor and City Council

From: Michael Smith, Public Works Director

Date: 3/12/2012

Subject: Discussion of Tilly Mill Road at North Peachtree Road Intersection Improvement Project

ITEM DESCRIPTION

Transportation Short Term Work Program Briefing and Discussion of Tilly Mill Road at North Peachtree Road Intersection Improvement Project

BACKGROUND

In March 2011, Dunwoody adopted its first Comprehensive Transportation Plan (CTP) to guide policy decisions and prioritize future investments in the City's transportation system. The following list highlights a few of the projects from the CTP that have begun or been completed since its adoption:

- 1. Initiated the Concept Design for the Tilly Mill and North Peachtree Intersection Improvement project
- 2. Installed over 3.5 miles of bike lanes
- 3. Completed Dunwoody Village signal timing improvements
- 4. Constructed new sidewalks and installed new curb ramp retrofits to comply with the Americans with Disability Act (ADA)
- 5. Secured \$2,700,000 in state funding for signal timing and coordination improvements in and around the Perimeter Community Improvement District
- 6. Secured additional \$340,000 grant for Dunwoody Village Parkway, for a total of \$1.1 million in grant funding for the project, and submitted the project design to GDOT
- 7. Added \$12,000,000 for multi-modal improvements on Mount Vernon Road and \$1,000,000 for Intelligent Traffic System improvements to the regional project list for the Transportation Investment Act referendum which voters consider in July
- 8. Adopted a Complete Streets Policy
- 9. Secured critical 5-acre parcel for the Peachford Road extension project
- 10. Developed an implementation plan and 5-year work program for the entire CTP

In addition to these activities, in 2012, additional sidewalks and bike lanes will be constructed and design work will be completed for the Womack at Vermack and the Tilly Mill at North Peachtree intersection projects.

SHORT TERM WORK PROGRAM

Staff has developed a short term work program to guide project coordination and annual budget decisions. The initial work program was presented to the Council Budget committee as part of the Public Works' 2012 budget request. Two updated versions of the work



program are attached to this memo. The first version assumes that the Transportation Investment Act referendum is approved by the region's voters this summer. Passage of the referendum would result in approximately \$900,000 of sales tax revenue, set aside to fund transportation improvements in Dunwoody. The second version assumes that the referendum does not pass and sets the annual transportation funding level close to the amount budgeted for 2012.

TILLY MILL ROAD AT NORTH PEACHTREE INTERSECTION IMPROVEMENT PROJECT

In 2011, the City partnered with design consultant, Gresham, Smith and Partners to complete concept design for this project. Design work began on this project in late 2011 with traffic counts at all of the approaches to the intersection and a review of the accident history. Based on this information, four alternatives were studied in addition to the No Build alternative. A description of each alternative is included in the attached presentation. The following table presents the ranking of each alternative for the listed criteria:

Criteria	Separate Roundabouts	Combined Roundabout	Roundabout at Tilly Mill	Traditional Turn Lanes
Design Year LOS	4 th	2 nd	rd 3	1 st
Cost	1 st	4 th	3 rd	nd 2
Displacements	1 st	4 th	3 rd	st 1
Required ROW/Easements	1 st	4 th	3 rd	nd 2
Operational Issues	4 th	2 nd	rd 3	1 st

Based on the high ranking across all of the criteria, the traditional turn lane alternative was presented at a public open house held on January 19, 2012. The written comments submitted by the public provided a wide variety of feedback and suggestions. Positive comments generally referenced the addition of a signal at Peeler and the sidewalks and bicycle lanes. Common concerns raised included the traffic generated by the college, impacts to adjacent property owners, bicycle lanes and the coordination of the new signals.

NEXT STEPS

For major transportation projects, the next step after completing the concept design is to complete final design followed by right of way acquisition and construction. The final design phase will include field surveys and detailed construction drawings for the improvement. The FY 2012 Budget includes funding for this work. Later this spring, staff plans to advertise a Request for Proposals for final design to be completed in 2012.

The preliminary construction cost estimate is \$1.6 million. Funding for right of way and construction is anticipated to be considered as part of the 2013 budget process.

Public Works Capital Project Plan FY 2012-2017 *With Transportation Investment Act Funding*

Project	0	2012	Funding 2013	2014	2015	2016		2017	Notes
<u>Roads</u>		-		-				-	
Annual Road Resurfacing	\$	2,300,000	\$ 2,300,000	\$ 2,380,000	\$ 2,350,000	\$ 2,300,000	\$	2,300,000	Assumes additional \$200,000 from GDOT LMIG program
New Sidewalk	\$	1,050,000	\$ 300,000	\$ 200,000	\$ 200,000	\$ 300,000	\$	200,000	
Dunwoody Village TE Project									
Tilly Mill at North Peachtree	\$	75,000	\$ 800,000	\$ 800,000					
Bike Route Designation				\$ 120,000					
Mt. Vernon at Vermack									
Γ_1 woody Village Traffic Study					\$ 150,000				
Womack at Vermack	\$	100,000	\$900,000						
Mt. Vernon at Tilly Mill				\$ 50,000	\$ 100,000				
Chamblee Dunwoody @ Peeler			\$ 200,000	\$ 400,000	\$ 1,000,000				
Chamblee Dunwoody @ Spalding			\$ 100,000	\$ 650,000					
Peachford Road Extension	\$	100,000							
Mount Vernon @ Chamblee Dunwoody					\$ 200,000	\$ 1,000,000			
Chamblee Dunwoody Multi-modal Imp.						\$ 200,000	\$	2,100,000	
Chamblee Dunwoody Multi-modal Imp. DVP						\$ 200,000			
Georgetown Multi-Use Path					\$ 600,000		•	1.0.00.0000	NT. T. 1. 1. 1. T. 1. T. 1. T. 1.
Mount Vernon Multimodal Imp.							\$	12,000,000	Not Included in Local Funding Total

Not Included in Local Funding

Total

Local Transportation Funding \$ 3,625,000 \$ 4,600,000 \$ 4,600,000 \$ 4,600,000 \$ 4,000,000 \$ 4,600,000

Public Works Capital Project Plan FY 2012-2017 *Without Transportation Act Funding*

Project		20)12	Funding 2013	2014	2015	2016	2017	Notes
<u>Roads</u>									
Annual Road Resurfacing	:	\$	2,350,000	\$ 2,300,000	\$ 2,250,000	\$ 2,300,000	\$ 2,300,000	\$ 2,300,000	Assumes additional \$200,000
New Sidewalk	:	\$	1,050,000	\$ 200,000	\$ 100,000	\$ 200,000	\$ 125,000	\$ 200,000	from GDO1 LMIG program
Dunwoody Village TE Project									
Tilly Mill at North Peachtree	S	5	75,000	\$ 800,000	\$ 800,000				
Bike Routes						\$ 25,000	\$ 25,000		
Mt. Vernon at Vermack					\$ 50,000	\$ 450,000			
Γ_1 woody Village Traffic Study						\$ 150,000			
Womack at Vermack	S	5	100,000	\$400,000	\$ 500,000				
Mt. Vernon at Tilly Mill						\$ 75,000	\$ 275,000		
ATMS						\$ 300,000	\$ 300,000		
Chamblee Dunwoody @ Peeler						\$ 200,000	\$ 375,000	\$ 1,000,000	
Chamblee Dunwoody @ Spalding							\$ 100,000	\$ 200,000	
Peachford Road Extension	S	5	100,000						
Mount Vernon @ Chamblee Dunwoody Chamblee Dunwoody Road Multi-Modal I	Imp.						\$ 200,000		
Chamblee Dunwoody Road Multi-Modal I	Imp.								
Georgetown Multi-Use Path									
Transportation T	otal S	5	3,675,000	\$ 3,700,000	\$ 3,700,000	\$ 3,700,000	\$ 3,700,000	\$ 3,700,000	

Tilly Mill Road at North Peachtree Road

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March 12, 2012



Gresham, Smith and Partners

Jay Bockisch, P.E., PTOEJody Braswell, P.E.









Presentation Agenda

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Alternatives Considered Recommended Improvements Public Comments Other Considerations Traffic Simulation **Next Steps**



Alternatives Considered

Three Roundabout Alternatives Multiple roundabouts Combined roundabout – 5 legs Roundabout at Tilly Mill only One Traditional Intersection Alternative Turn lane improvements Peeler considerations



Multiple Roundabouts

- Closely spaced intersections
- Single lane due to spacing

Criteria							
မ္မ <mark>Design Year LOS</mark>	Design Year LOS F/C						
Cost	\$1,200,000						
Displacements	0						
Required ROW/Easements	0.5 acres						
	Queue spillback						
Operational	between						
Issues	intersections						





Combined Roundabout

- 1 combined intersection
- 5 legs
- Multi-lane roundabout

Criteria						
n Design Year LOS	D					
Cost	\$3,700,000					
Displacements	4					
Required ROW/Easements	1.5 acres					
Operational	Driver expectancy -					
lssues	requires multi lanes					





Roundabout at Tilly Mill Only

- Roundabout at Tilly Mill
- Multi-lane roundabout
- Peeler stop sign controlled

Cr	Criteria					
ပ္ခံ Design Year LOS	D/F					
Cost	\$2,300,000					
Displacements	1					
Required ROW/Easements	1.0 acres					
Operational	Driver expectancy -					
Issues	requires multi lanes					





Traditional Turn Lanes

- Left and right turn lanes at each approach
- Turn lanes sized to accommodate queues

	Criteria						
ర్జు <mark>Design Year LO</mark>	S D/B						
Cost	\$1,600,000						
Displacements	0						
Required ROW/Easemen	ts 0.8 acres						
Operational	Need to consider						
Issues	options at Peeler						





Alternatives Considered

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Criteria	Separate Roundabouts	Combined Roundabout	Roundabout at Tilly Mill	Traditional Turn Lanes
Design Year LOS	4 th	2 nd	3rd	1 st
Cost	1 st	4 th	3rd	2 nd
Displacements	1 st	4 th	3rd	1 st
Required ROW/Easements	1 st	4 th	3rd	2 nd
Operational Issues	4 th	2 nd	3rd	1 st

Recommended Alternative



Recommended Improvements

- Left and Right turn lanes at each approach
- Sidewalks
- Pedestrian crossings
- Continuous bike lanes
- Peach Roads Silver rated sustainable project
 - Multiple traffic control options at Peeler Rd





Public Comments from PIOH

35 Provided Comments 19 Support / Conditionally Support 9 Uncommitted 7 Oppose **Comments/Concerns:** "Outside" traffic (college, other Cities) **Coordinated signals** Adequate turn lane lengths

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CITY OF DUNWOODY DEPARTMENT OF PUBLIC WORKS

Intersection of North Peachtree Road and Tilly Mill Road Safety and Operational Improvements

	Public Information Open House
	January 19, 2012
ACKGROUND:	The purpose of this project is to provide safety and operational improvements to the intersection of Tilly Mill Road with North Peachtree Road and the intersection of Peeter Road with North Peachtree Road through the addition of turning lanes, bicycle lanes, sidewalk, and traffic signals.
ROJECT LIMITS:	The project limits extend along Tilly Mill Road 550 ft seet from the North Deachner Road interaction at Kingswood United Methodsit Church to 600 ft, east of the intersection. The limits of the project span along North Peachree Road 360 ft, south of the Peeler Road intersection at Saint Barnabas Anglican Church to 400 ft, north of the Tilly Mill Road intersection. The project limits along Peeler Road begin 400 ft, west of the intersection with North Reachner Road and end the intersection.
ROJECT LENGTH:	The length of this project is 0.22 miles along Titly Mill Road, 0.20 miles along North Peachtree Road, and 0.08 miles along Peeter Road.
ROJECT SCOPE:	The project consists of improving both intersections with adding and lengthening left and right turning lances on all approaches. Bicycle lance (except on the North leg of North Peachtree Road) and sidewalks will also be added on both sides of each roadway. A traffice signal will be placed at the intersection of North Peachtree Road and Peeler Road in addition to the existing traffic signal at the intersection of Tilly Mill Road and North Peachtree Road.
ROJECT SCHEDULE:	Right-of-Way: Fall 2012

Construction: Summer 2013 Open to Traffic: Fall 2014





Other Considerations

Comparison to Dunwoody Club Drive Traffic Control at Peeler Road



Issue #1: Comparison to Dunwoody Club

Distance

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- Traffic Volumes
- Turn Lanes & Capacity
- Traffic Signal Operations





Comparison to Dunwoody Club

Criteria	Dunwoody Club Area	North Peachtree / Tilly Mill
Distance	Lower – 165'	Greater – 320'
Traffic Volumes	Greater – 54,700 ADT	Lower – 47,300 ADT
Turn Lanes & Capacity	Lower	Greater
Traffic Signal Operations	Complex – 5 Legs	Simpler – 2 Coordinated Intersections



Issue #2: Comparison of Traffic Control Options at Peeler Rd

Criteria	Stop Sign (Existing Condition)	Prohibited Lefts	Signalized Lefts	
Traffic Diversions	Small decrease of traffic from Peeler due to delay	Significant diversions of lefts – no good alternative route	Minimal increase of traffic to Peeler	
Enforcement	Self-Enforcing	Significant Enforcement Required	Self-Enforcing	
esign Year Peak Hour Level of Service on Peeler	F	А	С	
Safety	Less safe due to minimal gaps in mainline traffic	Very safe except for violators	Safer for Peeler – Potential for small increase in crashes along N Peachtree	



Traffic Simulation

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P. Star



Presentation Agenda

Next StepsComplete ConceptBegin Final Design



