

*Prince Avenue  
Possible Three-Lane Conversion*

*N. Milledge Avenue to Pulaski Street*

Athens-Clarke County  
Transportation & Public Works  
October 13, 2005

*Prince Avenue Conversion*



## *Why the Analysis?*

- Prince Avenue will be resurfaced during the Fall of 2005
  - All four lane roadways are evaluated for conversion at the time of resurfacing (M&C Policy adopted Feb. 2005)
  - Prince Avenue is a corridor that has been recommended for bicycle lanes (Bicycle Master Plan adopted Jan. 2003)

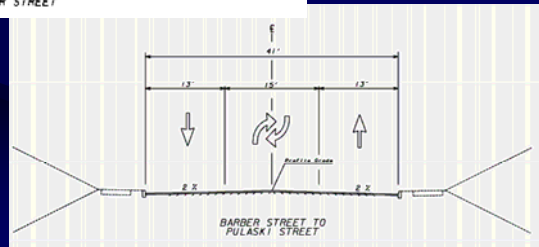
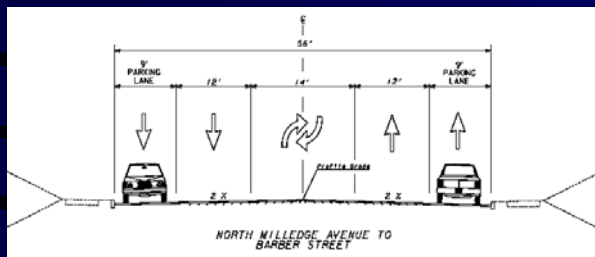
## *Project Limits*

- N. Milledge Avenue to Pulaski Street
  - 3,000 linear feet in length
  - 3 signalized & 7 unsignalized intersections
  - Four-lane facility with limited on-street parking between N. Milledge Avenue and Barber Street
  - Transition points between Chase Street and Milledge Avenue and Pulaski and Hull Streets

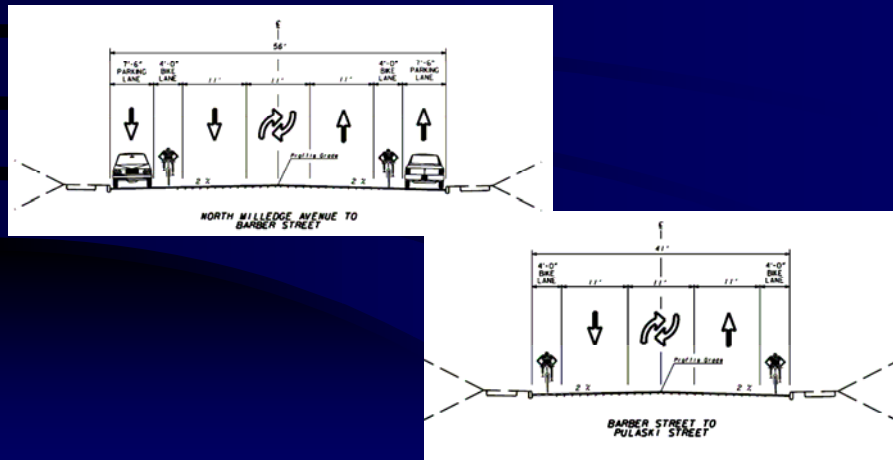
## Roadway Characteristics

- N. Milledge Avenue to Barber Street
  - 56 feet curb to curb width
    - 2 - 8' parking areas
    - 4 - 10' travel lanes
- Barber Street to Pulaski Street
  - 41 feet curb to curb width
    - 4 - 10' travel lanes (±)

## Prince Avenue Conversion without Bicycle Lanes



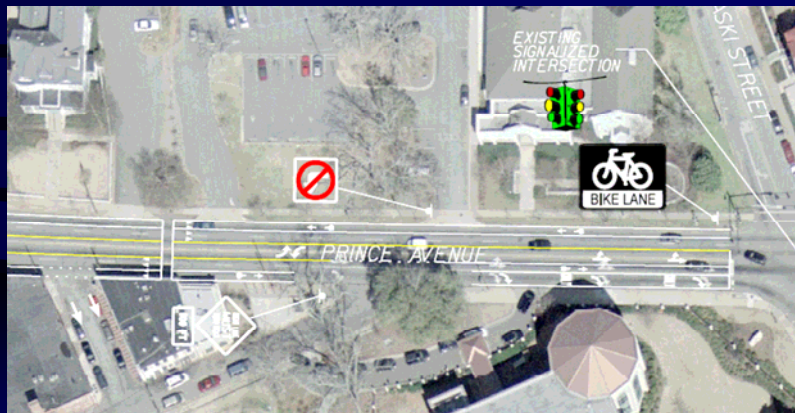
## *Prince Avenue Conversion with Bicycle Lanes*



### *Alternative 1A*

- Allows signalized intersection to operate more efficiently
- Minimizes conflicting queues between Meigs Street and Pulaski Street
- Lane marking to Pulaski Street remains the same
- No Left-turns at Meigs Street from Prince Avenue
- Reverses one-way flow of Newton Street to southbound
- Allows all turns on to Newton Street from Prince Avenue

## *Alternative 1A*



## *Evaluation Criteria*

- Functional Classification
- Ten-Year Corridor Volume
- Signalized Level of Service Analysis
- Crash History

As adopted by the M&C in February 2005

## *Functional Classification*

- Corridor must be either an Arterial or Collector



Prince Avenue is an Arterial

## *Ten-Year Traffic Volumes*

Year	Average Daily Volumes (Vehicles per day)		Peak Hour Volumes (Vehicles per hour)	
	Milledge to Barber	Barber to Pulaski	Milledge to Barber	Barber to Pulaski
2005	16,150	18,100	1,275 625 EB / 650 WB	1,250 650 EB / 700 WB
2015	18,050	19,250	1,425 700 EB / 725 WB	1,450 700 EB / 750 WB



Traffic Volumes must be less than 20,000 vpd and 1,100 vph in the highest peak hour direction

## *Level of Service*

Intersection	Four – Lane Facility		Three – Lane Facility	
	AM Peak 2005/2015	PM Peak 2005/2015	AM Peak 2005/2015	PM Peak 2005/2015
Milledge	A / B	B / B	B / B	B / B
Barber/Finley	B / B	B / B	B / B	B / B
Pulaski/Dougherty Alternative 1A	C / C	B / B	D / E B / C	D / E B / C



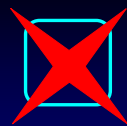
Delays at signalized intersections must be Level of Service “D” or better.  
Alternative 1A satisfies this criteria.

## *Crash History*

Corridor Crash History (2001 - 2004)

Annual Average

Section	Crash Type								Total	Crash Rate (MVM)
	Angle	Head On	Rear End	Sideswipe Same	Sideswipe Opposite	Fixed Object	Pedestrian	Left-Turn		
Milledge to Barber	3	0	3	3	0	1	1	3	14	2.4
Barber to Pulaski	2	1	4	1	0	0	0	3	11	1.7



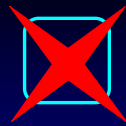
Crash rates for the corridor should be at least 5.0 crashes per million vehicle miles (MVM)

# Crash History

Signalized Intersection Crash History (2001 - 2004)

Annual Average

Intersection	Crash Type								Total
	Angle	Head On	Rear End	Sideswipe Same	Sideswipe Opposite	Fixed Object	Pedestrian	Left - Turn	
@ Milledge	2	0	9	3	0	2	0	2	18
@ Barber	3	0	4	2	0	0	1	3	13
@ Pulaski	1	0	3	2	0	0	0	1	7



Accident frequency should be at least 23 per year based on entering traffic volumes

# Comparison to Baxter Street

Before Conversion

After Conversion

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>• Volumes             <ul style="list-style-type: none"> <li>- Lumpkin to Milledge                 <ul style="list-style-type: none"> <li>• 16,600 vpd</li> </ul> </li> <li>- Milledge to Alps                 <ul style="list-style-type: none"> <li>• 18,800 vpd</li> </ul> </li> </ul> </li> <li>• Crash History             <ul style="list-style-type: none"> <li>- Lumpkin to Milledge                 <ul style="list-style-type: none"> <li>• 19.0 Crashes / MVM</li> </ul> </li> <li>- Milledge to Alps                 <ul style="list-style-type: none"> <li>• 24.8 Crashes / MVM</li> </ul> </li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>• Volumes             <ul style="list-style-type: none"> <li>- Lumpkin to Milledge                 <ul style="list-style-type: none"> <li>• 15,000 vpd</li> </ul> </li> <li>- Milledge to Alps                 <ul style="list-style-type: none"> <li>• 18,100 vpd</li> </ul> </li> <li>- 5 % shift from Baxter</li> </ul> </li> <li>• Crash History             <ul style="list-style-type: none"> <li>- Lumpkin to Milledge                 <ul style="list-style-type: none"> <li>• 22.7 Crashes / MVM</li> </ul> </li> <li>- Milledge to Alps                 <ul style="list-style-type: none"> <li>• 9.2 Crashes / MVM</li> </ul> </li> </ul> </li> </ul> |
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## *Next Steps*

- Comment forms due no later than Oct. 26th
- Agenda Report for the Oct/Nov Meeting Cycle
  - October 20th Agenda Setting Meeting
  - November 1st Regular Voting Meeting
- Resurfacing Schedule
  - Repair Work scheduled for the week of Oct. 24th
  - Resurfacing schedule for week of October 31st
  - Striping scheduled for the week of November 7th

## *Questions & Comments*