

MEMORANDUM

To: Mayor and City Council

From: Mindy Sanders, Capital Projects Manager

Date: July 08, 2013

Subject: **Discussion of Mount Vernon Road and Vermack Road Intersection Improvement**

ITEM DESCRIPTION

Discussion of Mount Vernon Road and Vermack Road Intersection Improvement

BACKGROUND

The intersection at Mt. Vernon Rd. and Vermack Rd/Manhasset Drive has been identified in the City's Comprehensive Transportation Plan (CTP), adopted in 2011, as a high priority project. The lack of turn lanes at the intersection compromises safety and causes longer traffic queues and delays on Mount Vernon Road and Vermack Road. The intersection is also lacking in accommodations for pedestrians and cyclists. It is the goal of this project to correct these deficiencies.

In February 2013, the City partnered with design consultant, Mulkey Engineers to complete a detailed set of construction plans for this project. Design work began on this project in April 2013 with traffic counts at all of the approaches to the intersection and a review of the accident history. Other site aspects including existing infrastructure, surrounding properties, utilities, and drainage were also factored into creating three viable alternatives.

ALTERNATIVES

As recommended by the CTP, a roundabout was considered initially for the intersection but ruled out as a viable option because it was determined to be ineffective in improving traffic flow for this intersection.

A description of the viable alternatives is included below:

- 1a. Add left turn lanes on Mount Vernon and Vermack- Widening on Mount Vernon is mostly on the north side of the road and requires relocation of a power transmission pole at the intersection. The Georgia Power estimate to relocate this pole is \$90,000.
Estimated Cost: Right of Way/Easements-\$125,000, Utility Relocation-\$150,000, Construction-\$725,000. Total-\$1,000,000
- 1b. Add left turn lanes on Mount Vernon and Vermack- Widening on Mount Vernon is mostly on the south side of the road and the layout is designed around the power pole at the intersection.

Estimated Cost: Right of Way/Easements-\$150,000, Utility Relocation-\$25,000, Construction-\$725,000. Total-\$900,000

2. Alternative 1b with turn lane, sidewalk, and bike lane extended to Vernon Oaks Drive

Estimated Cost: Right of Way/Easements-\$150,000, Utility Relocation-\$25,000, Construction-\$925,000. Total-\$1,100,000

All alternatives were presented to the public on June 17th in an Open House format. Representatives of the City and the design consultant were present to provide information and receive feedback. It is estimated that nearly 100 residents were in attendance. The written comments submitted by the public provided a wide variety of feedback and suggestions. Positive comments generally referenced the addition of left turn lanes, the pedestrian safety improvements, addition of bike lanes, and adding sidewalks on the south side of Mount Vernon Road. Common concerns raised included the amount of commuter traffic in the area, impacts to adjacent property owners, and costs.

RECOMMENDED ACTION

Each of the viable alternates will improve traffic flow and safety at the intersection and are consistent with the recommendations of the City's transportation plan. Alternate 2 provides the following additional benefits:

1. Added safety and better traffic flow by providing turn lane for the church entrance and Vernon Oaks Drive.
2. Extends the sidewalk on the south side of Mount Vernon and the bicycle lanes to the next side street instead of stopping in the middle of a block.

The additional cost for Alternate 2 is mostly due to the additional paving and sidewalks required to extend the project on Mount Vernon. As these are improvements recommend by the transportation plan, these costs will eventually be incurred by the City whether in this project or a future project. Therefore, staff recommends proceeding to final design with Alternate 2



city of dunwoody

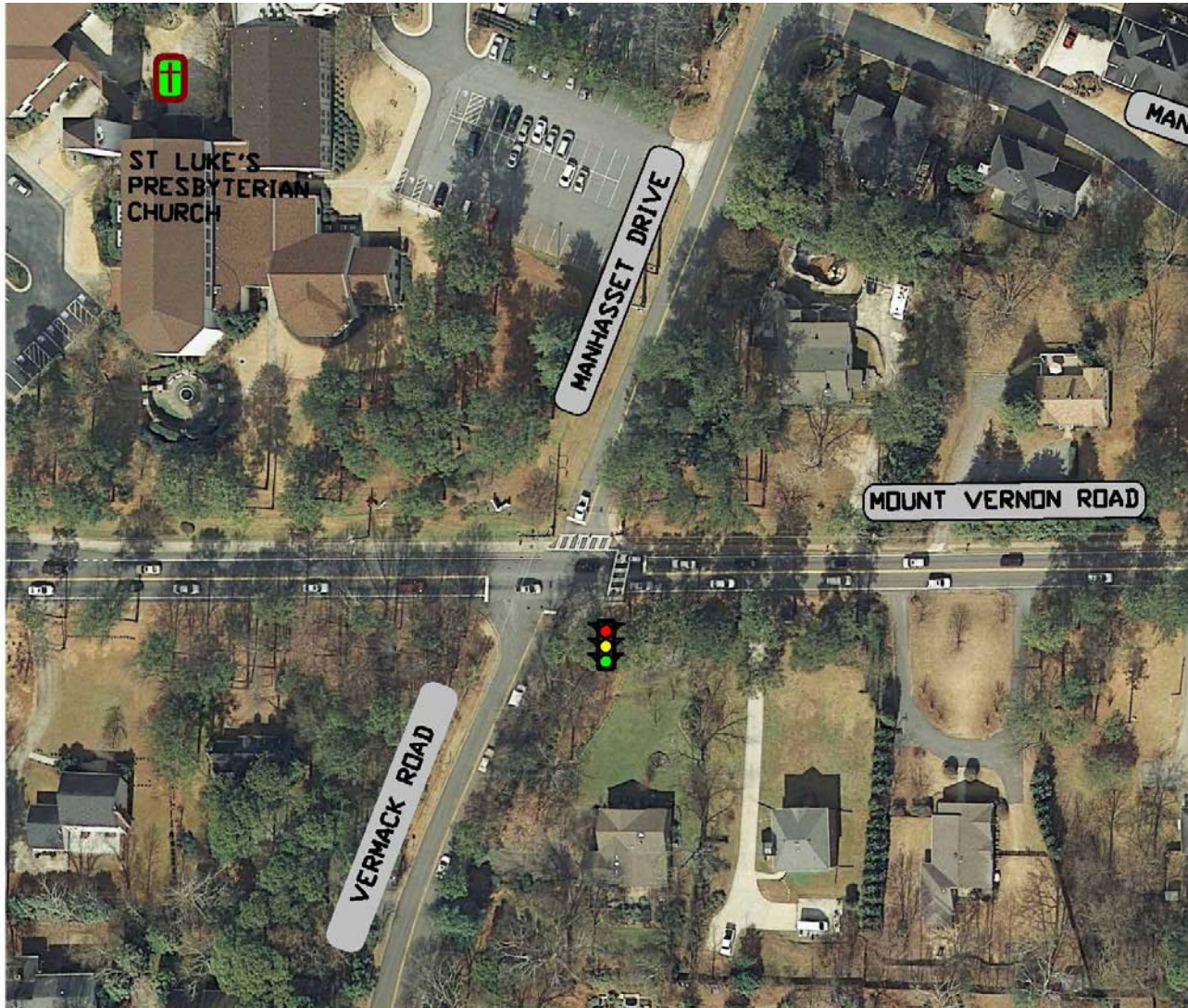
Mt. Vernon at Vermack *intersection improvement project*





agenda

- Existing conditions
- Alternates under consideration
- Traffic simulations
- Recommended improvements
- Public comments



existing conditions

- Signalized intersection with no turn lanes, causing deficiencies in safety and efficiency
- Existing sidewalk is located on the north side of Mt. Vernon and the east side of Vermack Road
- Crosswalks with pedestrian signals are located on 2 of the 4 approaches
- No bicycle facilities

alternates under consideration:

Alternate 1a

**Addition of turn lanes on Mt. Vernon and Vermack approaches
with 1000' enhancement along Mt. Vernon**

Alternate 1b

**Addition of turn lanes on Mt. Vernon and Vermack approaches
with 1000' enhancement along Mt. Vernon (retains transmission line pole)**

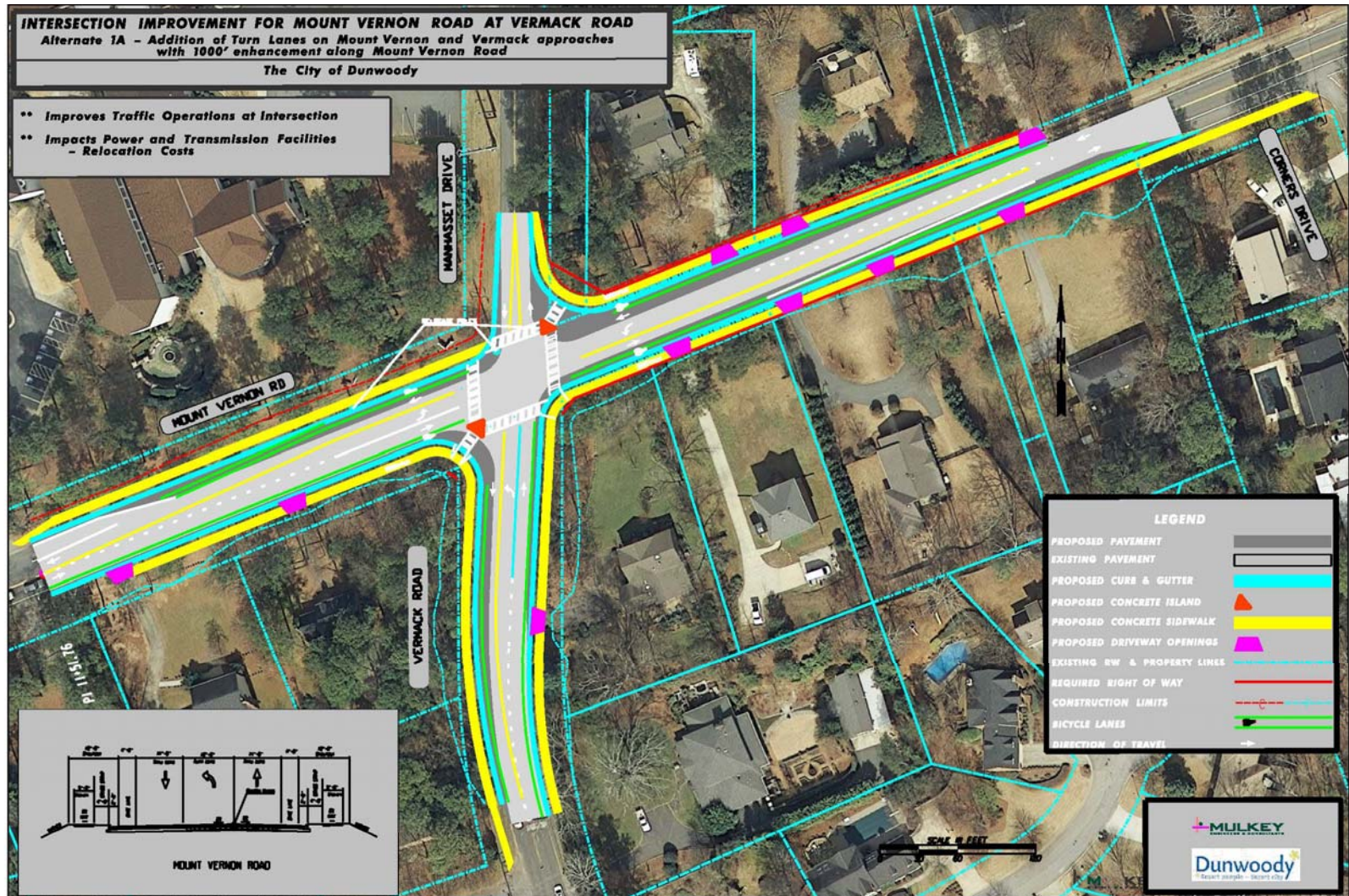
Alternate 2

Addition of turn lanes with 1500' enhancement along Mt. Vernon

alternate rejected:

Alternate 3

Roundabout



Alternate 1a

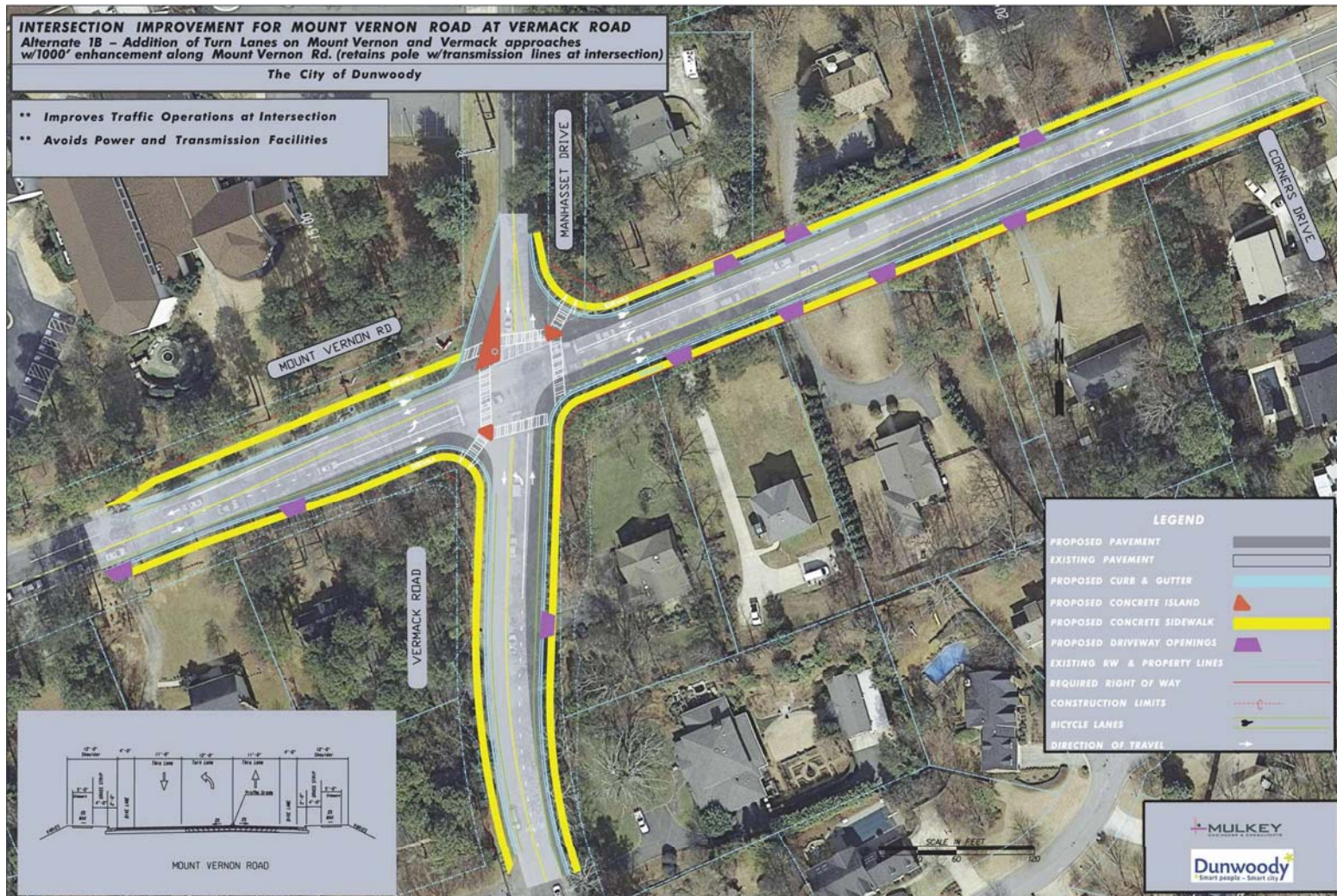
Addition of turn lanes on Mt. Vernon and Vermack approaches with 1000' enhancement along Mt. Vernon

Improves traffic operations at intersection

Impacts power and transmission facilities requiring relocation costs

Estimated cost:

ROW/Easements	\$125,000
Utility relocation	\$150,000
Construction	\$725,000
Total	\$1,000,000



Alternate 1b

Addition of turn lanes on Mt. Vernon and Vermack approaches with 1000' enhancement along Mt. Vernon (retains transmission line pole)

Improves traffic operations at intersection

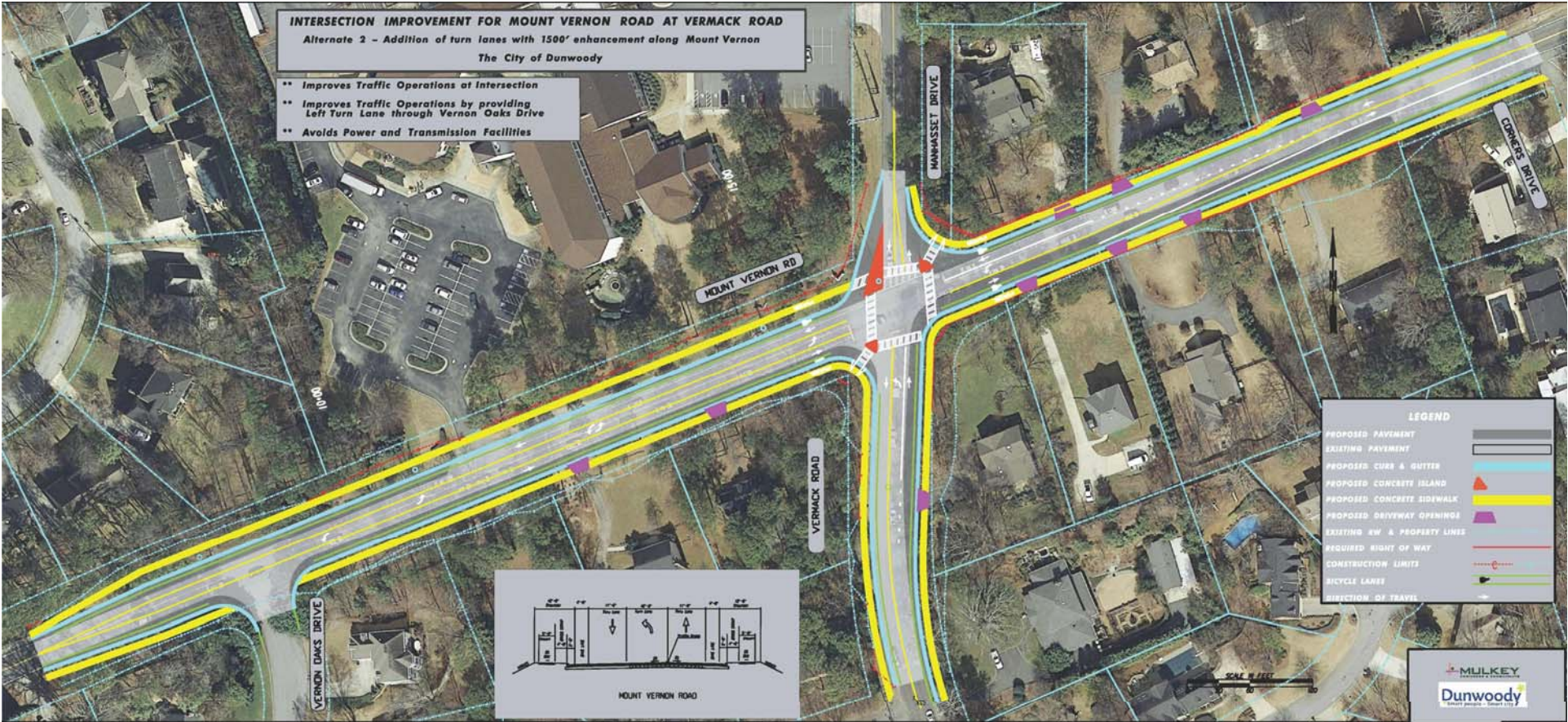
Avoids power and transmission facilities

Estimated cost:

ROW/Easements	\$150,000
Utility relocation	\$25,000
Construction	\$725,000
Total	\$900,000

INTERSECTION IMPROVEMENT FOR MOUNT VERNON ROAD AT VERMACK ROAD
 Alternate 2 - Addition of turn lanes with 1500' enhancement along Mount Vernon
 The City of Dunwoody

- ** Improves Traffic Operations at Intersection
- ** Improves Traffic Operations by providing Left Turn Lane through Vernon Oaks Drive
- ** Avoids Power and Transmission Facilities



Alternate 2

Addition of turn lanes with 1500' enhancement along Mt. Vernon

Improves traffic operations at intersection

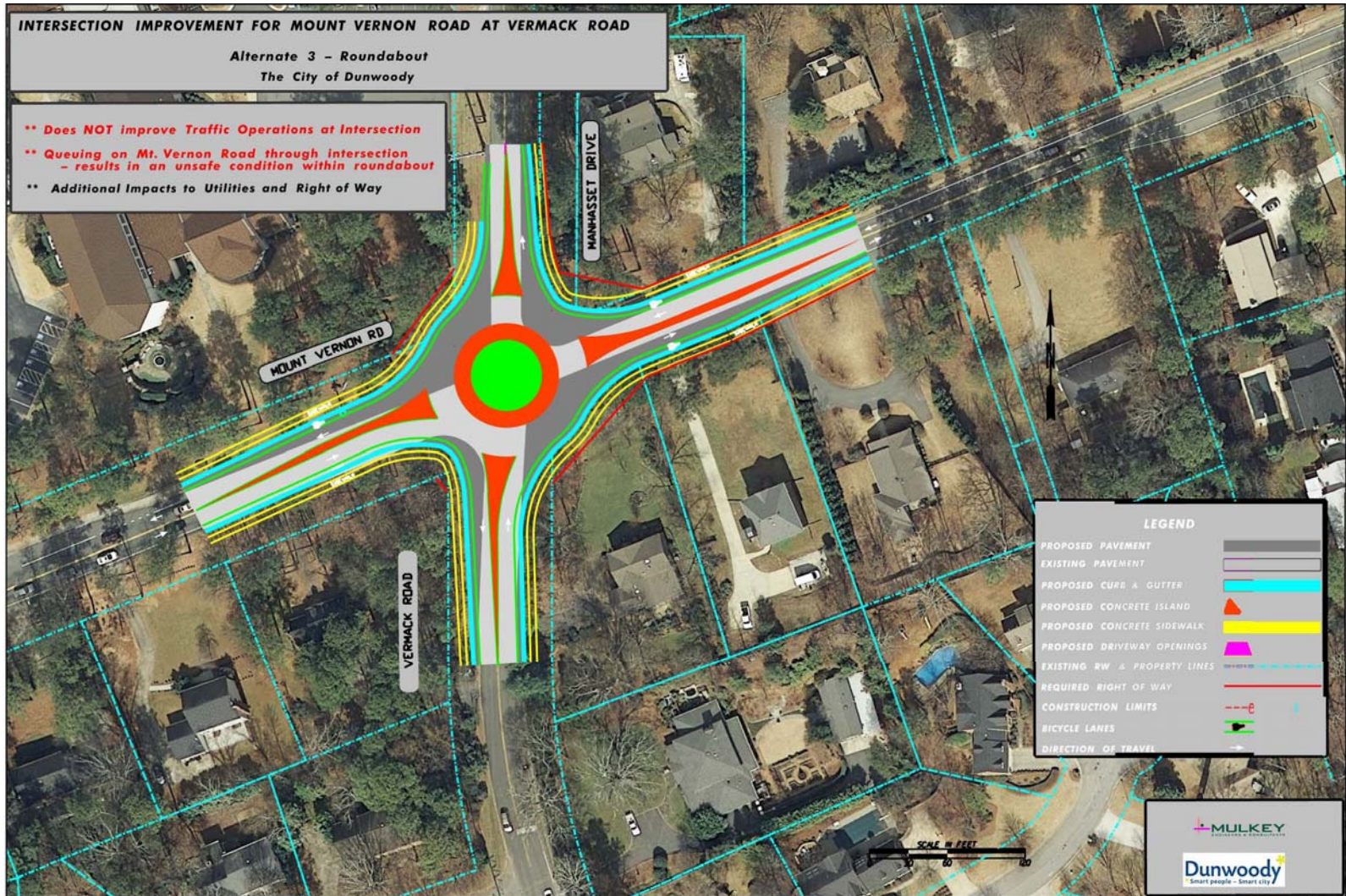
Additional traffic operations benefit by providing left-turn lane through Vernon Oaks Drive

Avoids power and transmission facilities

Extends sidewalks and bike connectivity to Vernon Oaks neighborhood

Estimated cost:

ROW/Easements	\$150,000
Utility relocation	\$25,000
Construction	\$925,000
Total	\$1,100,000



Alternate 3

Roundabout

No longer under consideration

Does not improve traffic operations at intersection

Queuing on Mt. Vernon through intersection results in unsafe condition within roundabout

Additional impacts to utilities and right-of-way

Cost not estimated

traffic simulation 1

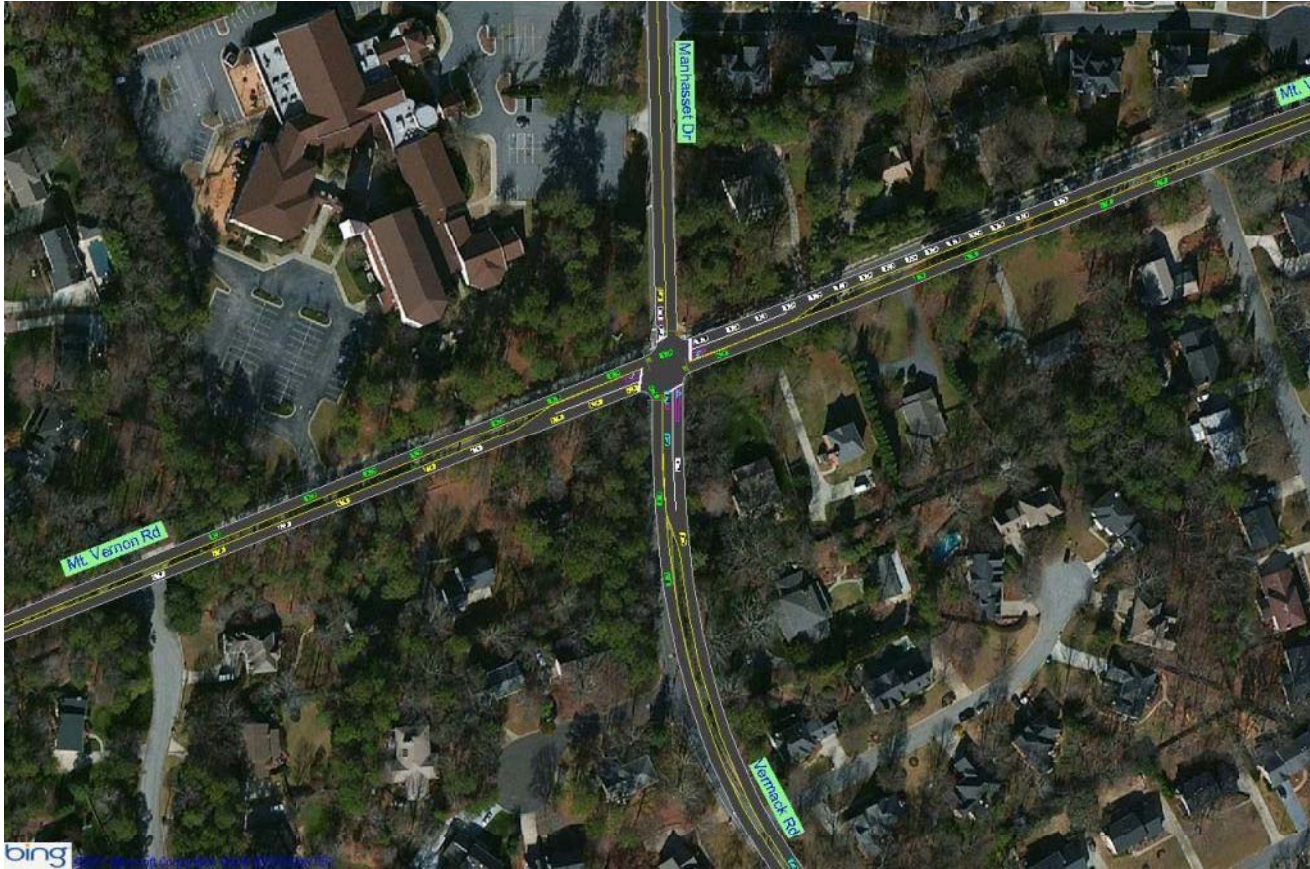
2023 AM traffic
under existing conditions



traffic simulation 2

2023 AM traffic

under Alternates 1a, 1b, and 2



recommended improvements

Left-turn lane on each Mt. Vernon approach and on Vermack

Improved pedestrian crossing facilities, including signals and crosswalks

Addition of bike lanes and extension/addition of sidewalks

Modest aesthetic improvements, including mast-arm poles and replacement of vegetative buffers

public comments

Public Information Open House held June 17, 2013

St. Lukes Presbyterian Church, Mt. Vernon Road

- Majority agree that the City should improve this intersection, primarily by adding turn lanes
- They experience significant traffic delays in the project area and have difficulty completing turning movements from all directions
- They generally agree that the proposed improvements should include accommodations for pedestrians, cyclists, and aesthetic treatments

public comments

Public Information Open House held June 17, 2013

St. Lukes Presbyterian Church, Mt. Vernon Road

Responses to PIOH comment sheet Yes-No questions

Do you experience vehicular traffic delays in the project area?

YES 33 NO 3

Do you have difficulty completing turning movements at this intersection?

YES 26 NO 8

Should the City improve this intersection to reduce congestion?

YES 31 NO 5

Should pedestrians and/or bicyclists be accommodated at this intersection?

YES 28 NO 6

Should aesthetic improvements be made at this intersection?

YES 23 NO 7

public comments

Public Information Open House held June 17, 2013

St. Lukes Presbyterian Church, Mt. Vernon Road

Common concerns

- Significant concern for pedestrian safety, particularly school children who use this intersection
- Concern regarding right-of-way acquisition and impacts to tree buffers
- Concern re accommodating commuter traffic from outside of Dunwoody