FONTAINE AVENUE STUDY
City of Charlottesville
March 28, 2005

Renaissance Planning Group
Kenneth Schwartz, FAIA, AICP
Director of Design

Leigh Wilkerson, Principal Assistant
Kevin Tilbury, Transportation Planner
Noel Murphy, Assistant
Chris Sinclair, President, RPG
CONTENTS

Executive Summary 1

Recommendation: Context Sensitive Design for Fontaine Avenue 2
  Street Sections and Corridor Plan 3
  Extended Sections through Residential 4
  Extended Sections through Commercial 5

Alternatives Considered 7
  Alternative Matrix 8
  3 Lane with Median 9
  3 Lane with Turning Lane (VDOT) 10
  Existing Condition or “Do Nothing” 11
  4 Lane 12
  5 Lane 12

Appendix 13
  Intersection Options
  Community Meeting 1 Comments
  Community Meeting 2 Comments
  Southern Urban Area B Study Summary
  Fontaine History
  Previous Studies and Plans
Executive Summary

On September 27, 2004, the City of Charlottesville elected to postpone improvements to Fontaine Avenue pending the results of the Three-Party “Area B” Study for the Southern Urban Areas. Renaissance Planning Group (RPG) was asked to examine alternatives for Fontaine Avenue using the full regional transportation analysis developed for the Area B Study. For Fontaine Avenue, RPG conducted two public workshops to solicit input in the development of alternatives and to measure the relative value of several alternatives that emerged from this public process.

A “Context Sensitive” approach emerged as clearly the best of all options available for the future of Fontaine Avenue. While an earlier citizens committee, chaired by Meredith Richards, developed an approach in 1997, this so-called “VDOT plan” proposed a continuous three-lane “improvement” that has been deemed to be unsafe and less than optimal in its lack of accommodation of sidewalks, bike lanes and street trees. This former scheme has been supplanted by a safer and more effective alternative that combines aspects of a “boulevard” approach with turn lanes, bike lanes, green space between the street and sidewalks, and a bus turn out at the Fry’s Spring Corner.
Recommendation: Context Sensitive Design for Fontaine Avenue

The recommended alternative recognizes the importance of improving traffic flow on Fontaine Avenue to accommodate the growth in traffic now and into the future. This is accomplished while improving the “quality of life” and multi-modal opportunities, specifically for pedestrian, bicycle, and transit use. A tree-lined, landscape median is introduced wherever possible, inspired by the current street section of Jefferson Park Avenue. Left turn lanes are positioned at key intersections with primary side streets. This option reduces the need for unnecessary widening and helps to preserve Fontaine as a neighborhood street. Narrower lanes and traffic calming measures ensure slower, safer traffic along Fontaine with a recommended design and posted speed limit of 35 miles per hour. A key aspect of this proposal involves the elimination of numerous driveways and parking lot entrances onto Fontaine through the introduction of two alleys between Piedmont Road and Lewis Street (one to the north and one to the south side of Fontaine). These alleys provide access to residences and businesses, with parking and garages to the rear of buildings. This transition allows a continuous sidewalk and tree line to be created on both sides of the street. Having an uninterrupted sidewalk and selective access points is important for many reasons. First it increases traffic flow by supporting selective turning off Fontaine. It also is safer, because residents are no longer backing out of their driveways, and they no longer block traffic while trying to make a left turn into individual driveways and parking lots.

This alternative balances the potentially conflicting demands of traffic flow through the area with the role of Fontaine Avenue as a mixed-use City street, supporting a vibrant center of activity for this part of Charlottesville and its surrounding residential neighborhood. It proposes a careful mix of turn lanes where they are necessary, with a two-lane street configuration where turns are not needed. Although detailed traffic modeling was not part of this brief study, our transportation planners indicate that the recommended alternative will substantially improve flow and should be able to accommodate the traffic increases that are associated with the projected growth in this area of the community. Additional study will be required as part of “design and engineering” with VDOT to examine traffic light locations and timing and the specific traffic accommodation that would be associated with these improvements.

Transit, Pedestrian-Friendly, Neighborhood Orientation

A continuous tree-lined stretch of sidewalk creates a safe, pleasant, and accessible route to the Fry’s Spring Corner with access to a new transit route that could extend out to the Fontaine Research Park and potentially beyond (as proposed in the Area B Study). Currently there are two transit stops to the east of the Corner, but transit does not extend to the west along Fontaine. Although the bus pull-outs will require some additional ROW to be acquired in that particular location, they will enliven this corner, allow businesses to grow, and support a transformation into a neighborhood center thriving with activity and consistent with the City’s Corridor Study for this area. By moving parking to the rear, businesses can focus on engaging the street and pedestrians. For example, restaurants can incorporate outdoor dining patios on the street side. The typical width of this option is 54’ along the two-lane portion with 66’ at the left turning lanes. The right of way (ROW) required for this section ranges from approximately 10’ - 26’. The street width at the bus pullouts is 84’, requiring approximately 41’ of additional ROW. Street trees add to the visual presence of Fontaine Avenue as an important neighborhood street and entrance corridor into the city. Details of the alley can be seen in the larger cross sections accompanying the plan.
Commercial Street Section looking East (near the corner of Fontaine Avenue and Lewis Road)

1. alley section

2. extended street section
Residential Section looking East (near the corner of Fontaine Avenue and Montpelier Street)

1. alley section

garage behind residence

17’
yield alley (driveway access)

2. extended street section

private residence

yard

widening required

existing right of way

widening required

Fontaine Avenue Study Final Report
Most of the qualities evident in the recommended approach evolved out of the community's input during **Community Meeting 1**, for which abbreviated notes are included below. Comments received included:

- Grow the city in a way that respects residents quality of life
- Ensure existing roads are reinforced and improved as build-out continues
- Provide sidewalks, bicycle lanes, and trees between sidewalks and roadways on both sides of Fontaine Avenue
- Do not widen road; limit impacts to front lawns
- Look ahead to accommodate new commercial development along Fontaine
- Traffic calming: engineer roads to ensure reasonable traffic speeds (Park Street is a recent example)
- Underground utilities to accommodate sidewalks
- Pedestrian scale lighting on sidewalks
Alternatives Considered

Each of the various alternatives are included for reference. A matrix was prepared to show the comparative features of each alternative, including an assessment of the Existing Conditions of Fontaine Avenue.

EVALUATION CRITERIA

Criteria were developed from community comments received during Community Meeting 1.

In redesigning Fontaine Avenue our primary goal is to:

• Create a multi-modal entrance corridor into the city that preserves the character of the neighborhood, improves the quality of life for the residents, and allows businesses to grow and develop over time into an active community center.

In looking at each alternative, certain elements were considered.

Impact to Residents and Property owners:
1. How much ROW is acquired?
2. How does this compare to what is gained through the new street design?
3. Does this redevelopment improve the quality of life, preserve this neighborhood’s identity, and enliven businesses?

Traffic Impacts:
1. Is there improved, safer traffic flow?
2. Are there other modes of transportation that relieve the roadway?
3. Turning movements and access questions

Pedestrians:
1. Is this a safe, comfortable, and well-connected pedestrian system?
2. Street trees not only aesthetically add to the appearance of the street, they provide shade and act as a buffer to pedestrians. Are street trees included?

Transit:
Does this roadway section establish transit service and allow Fontaine Avenue to connect with the larger transit network?
### Alternative Matrix

<table>
<thead>
<tr>
<th>Description</th>
<th>Roadway Characteristics</th>
<th>Benefits &amp; Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Existing</strong>&lt;br&gt;28'-55' ROW</td>
<td>Typical Section Width 40'</td>
<td><strong>Traffic</strong>&lt;br&gt;Wider travel lanes allow for high speed traffic. The absence of bike lanes, transit and adequate sidewalks puts an increased strain on the roadway and impacts safety. Unrestrained turning along with the absence of turn lanes increases the potential for crashes and congestion.</td>
</tr>
<tr>
<td><strong>2-3 Lane Context Sensitive</strong>&lt;br&gt;54-66' ROW</td>
<td>ROW Dimensions varies 28'-55'; 45' at typical section</td>
<td><strong>Traffic</strong>&lt;br&gt;Narrower lanes and traffic calming measures ensure slower, safer traffic. Elimination of driveways along Fontaine from Piedmont to Lewis improves traffic flow. Transit, bike lanes, and sidewalks provide for additional modes of transportation and ease congestion.</td>
</tr>
<tr>
<td><strong>3 Lane w/ Planted Median</strong>&lt;br&gt;70' ROW</td>
<td>ROW Acquired N/A</td>
<td><strong>Traffic</strong>&lt;br&gt;Controlled turning lanes. Median improves safety of street by eliminating left turns in and out of driveways. U-turns may be difficult within the constraint of road width. Bike lanes and sidewalks provide additional modes of transportation.</td>
</tr>
<tr>
<td><strong>3 Lane w/ Turning Lane (VDOT)</strong>&lt;br&gt;58' ROW</td>
<td>Sidewalks broken segments/ very incomplete</td>
<td><strong>Traffic</strong>&lt;br&gt;Continuous turning lane produces a confusing middle zone. Designated turning lane is unnecessary in some locations and results in wide expanse of pavement and higher speeds. Bike lanes and sidewalks create additional modes of transportation.</td>
</tr>
<tr>
<td><strong>4 Lane</strong>&lt;br&gt;68' ROW (for comparison only)</td>
<td>Bicycle Lanes no</td>
<td><strong>Traffic</strong>&lt;br&gt;Higher capacity and higher speed road. No turning lanes create difficult situation for turning vehicles.</td>
</tr>
</tbody>
</table>

### Roadway Characteristics

- **Typical Section Width**: 40'
- **ROW Dimensions**: varies 28'-55'; 45' at typical section
- **ROW Acquired**: N/A
- **Sidewalks**: broken segments/ very incomplete
- **Bicycle Lanes**: no
- **Street Trees**: no

### Benefits & Impacts

- **Traffic**: No city or university transit service to alleviate congestion on Fontaine.
- **Pedestrians**: No transit stops planned. Stopping on street would create congestion. However, bus pullouts could be added as in the Context Sensitive option.
- **Transit**: Transit stops can occur anywhere along the street without a designated pull-off, with traffic passing in the inside lane.
3 Lane with Planted Median

This option consists of 2 travel lanes and a planted median with selective left turn lanes. The planted median relates to the context of Jefferson Park Avenue and creates an attractive entrance corridor into the city. The median would begin at the current median in front of the Fontaine Research Park and continue to the corner of Lewis St. The median also improves the safety of the street by eliminating left turns out of driveways. Bike lanes and sidewalks create additional modes of travel and relieve strains on the roadway while creating a more interconnected community. Street trees help to buffer the pedestrians. However due to the numerous curb cuts, it would be nearly impossible to introduce a continuous line of trees. No transit is currently integrated into this option, but can be introduced at the corner of Lewis and Fontaine as in the Context Sensitive option. Without bus pullouts, buses stopping along the street would create congestion. The ROW used for this option is 70 feet. Therefore the city would need to acquire 25’ along the typical section and 42’ along the narrowest portion.
3 Lane with Turning Lane (VDOT)

This option looks at the latest plan VDOT proposed that was postponed by the city. It is 3 lanes with a continuous turn lane running the entire length. The continuous turning lane is problematic in that it creates a confusing middle zone and a free-for-all for motorists. Some state DOT’s in other parts of the country refer to this approach as a “suicide lane” reflecting the potential confusion and danger associated with a continuous three-lane strategy. Turning lanes are unnecessary in some locations and only create additional pavement and higher speeds. Bike lane and continuous sidewalks are included in this option and will help ease congestion by providing alternative modes of transportation, but the sidewalks are directly against the curb in a less than optimal configuration. The absence of street trees places the sidewalk directly adjacent to the roadway creates an uncomfortable environment for pedestrians and an unattractive streetscape. No transit stops are planned for this option and buses stopping along the street would add to congestion. In terms of land acquired, this option requires approximately 13’ of ROW along the typical section and 30’ along the narrowest portion between Summit and Westerly.
Existing Condition or “Do Nothing” Alternative

The typical condition is a wide 2-lane street with on-street parking in some areas and very small incomplete and broken sidewalks segments. The most typical section width is 40’ (with 19’ being the smallest width between westerly and summit street). Currently there are no bike lanes or street trees on Fontaine Avenue. The absence of bike lanes, adequate well-connected sidewalks, and transit service discourages walking and biking and puts an added strain on the roadway. Unrestrained turning along the length of Fontaine adds to congestion problems and increases the potential for crashes.
4 Lane (for comparison only)

This four lane option was considered strictly for comparison purposes only. Four travel lanes create a higher speed, higher capacity roadway. Bike lanes and sidewalk create alternative modes of transportation, yet the absence of street trees contributes to the overall unwelcoming environment for pedestrians. Transit stops on street can occur anywhere along the corridor with transit passing in the inside travel lane. This option obviously requires the greatest amount of widening and ROW acquired. The ROW needed ranges from 23’-40’. This is not an option for consideration.

5 Lane (no illustrations included)

It is important to note that the original strategy proposed by VDOT several years ago involved four travel lanes and a continuous turn lane. This would require an inordinate amount of ROW purchases, with damaging impacts on businesses and residences along Fontaine Avenue. Concerns about this approach led to the City/VDOT 3-lane plan of 1997.
Appendix

- Intersection Options
- Community Meeting 1 Comments
- Community Meeting 2 Comments
- Southern Urban Area B Study Summary and Traffic Modeling
- Fontaine History
- Previous Studies and Plans