Echols
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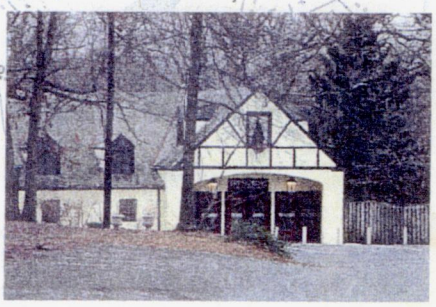
6-10-15 Comp. Plan
adoption

SOUTHERN URBAN AREA B
FINAL REPORT

10 SEP 2004



EXECUTIVE SUMMARY - Interconnection and Interdependency

For nearly twenty years the Southern Urban Area B has been a shared concern of the City of Charlottesville, the County of Albemarle, and the University of Virginia: the "Three Parties". Work in this area dates back at least to an earlier Three Party consideration in 1988 entitled the "Jefferson Park Avenue/Fontaine Avenue Neighborhood Study". The current Area B Study explores opportunities for collaboration within and beyond the study area to work toward a more integrated and interconnected community, qualities that have been elusive given the challenging topography, existing constraints, and history of decision-making by the three entities. The report contains alternatives and suggestions involving transportation and related policy matters including housing, transit, and parking. The three entities have recognized that Area B requires coordination and cooperation to resolve the serious challenges of creating a more integrated setting in this part of the community. Indeed, many of the most serious challenges in the area cannot be solved by any one of the three entities working on their own.

Several key elements are presented in the Area B Framework Plan that suggest compelling alternatives to by-right development under current zoning and the associated absence of coordinated transportation strategies. Alternatives to the "status quo" in the area introduce:

- Compact mixed-use development that supports integrated strategies for bicycle, pedestrian and transit approaches tied to land-use and open space strategies. This approach builds on the recent innovative planning work in the County, City and University Master Plan.
- Retail/commercial services to support residential development in and around the area, helping to reduce trip generation beyond the study area.

To accomplish the goal of an integrated and better functioning community, the Three Parties plan to consider the Framework Plan alternatives and opportunities. Together the Three Parties will be looking toward coordination of individual and shared priorities and staging in this area. Significant portions of the plan could be implemented by the private sector in association with development opportunities. The public value and advantages of these private investments will evolve from a clear understanding of shared assumptions by the three entities. There are several key elements and alternatives that would require regional commitment.

Some of the possible approaches presented in this report include:

- Infill development at Fry's Spring corner and along Jefferson Park Avenue, following the City's Corridor Study (and within the City's new "University Precinct" on JPA).
- A new opportunity for selective "redevelopment" of Fontaine Research Park providing additional commercial space along with a possibility of limited mixed-use functions serving this area as a new "neighborhood center". The mixed use alternatives could include functions such as small to medium-scale service retail, day care, structured parking, along with added commercial office space.
- A neighborhood center opportunity for the Trinity Presbyterian Church precinct within the County's development area, including a possible emphasis on home ownership and faculty/staff housing.
- A new neighborhood center on the Granger property, with small scale mixed-use, transit stops and connection to a new park and the open space system of Moore's Creek and beyond.
- A newly defined open space and park system throughout Area B, building on the existing resources of Azalea Park, the Rivanna Trail system, Moore's Creek and the extraordinary rolling landscape in this area.
- Although outside Area B, a new center south of Route 64 and northwest of Fifth Street Extended could be considered, bringing greater focus to the existing housing in that precinct, with small scale retail and a possible location for a new neighborhood elementary school.

Preliminary feasibility of several new street alternatives are presented in this study - serving to connect the area south of I-64 to the JPA-Fontaine area. Alternatives and implications of the following scenarios are included:

- **Alternative #1: Fontaine/Sunset Connector West.** Create a connection adjacent to the Virginia Department of Forestry and Minerals (VDFM), utilizing a portion of Ray Hunt Drive and Forestry Drive, connecting Sunset Avenue in the County to Fontaine Avenue. The existing entrance to Fontaine Research Park is utilized, allowing a connection to Fontaine Avenue (east/west) and the possibility of an alignment with a new Stadium Road Extended.
- **Alternative #2: Fontaine/Sunset Connector Central Boulevard.** Create a connection through the central axis of Fontaine Research Park with a new Fontaine Avenue/Sunset Avenue connector, and a direct connection to the existing Fontaine Research Park entrance and the possibility of an alignment with a new Stadium Road Extended at this intersection.
- **Alternative #3: Fontaine/Sunset Connector with Shift.** Create a connection through the eastern portion of Fontaine Research Park with a new Fontaine Avenue/Sunset Avenue connector through eastern parking lot, linked back to the existing Research Park entrance.
- **Alternative #4: Fontaine/Sunset Connector East.** Create a connection through the eastern portion of Fontaine Research Park with a new Fontaine Avenue/Sunset Avenue connector, through the eastern parking lot and a direct connection to Fontaine Avenue at a new intersection. If Stadium Road Extended is constructed, it could be aligned at this new intersection. The existing entrance of Fontaine Research Park would remain, primarily handling local Research Park traffic.
- **Alternative #5: Rehabilitate/replace the Sunset Avenue Bridge** and make improvements to Sunset Avenue, Sunset Road, Stribling Avenue and Piedmont Avenue with a new RR bridge and connection to Fontaine Avenue.
- **"By Right" Development**. Accommodate traffic on existing roadways. This is the "status quo" alternative of by-right build-out with no new infrastructure improvements.

Additional transportation connections within and outside Area B have been studied including:

- Consideration of a possible extension of Stadium Road to connect with Fontaine Avenue at the existing entrance to Fontaine Research Park, providing connection with the possible Fontaine/Sunset connector.
- Maywood Lane options from JPA and Shamrock Road to the University Hospital precinct.
- New East/West connection south of Rt. 64 between Sunset Avenue Extended and Old Lynchburg Road.
- New road north of Rt. 64 between Fifth Street Extended and Avon Street.
- Southern Parkway (with a revised location linked to Sunset Avenue Extended).

TABLE OF CONTENTS

I. INTRODUCTION

The City of Charlottesville, Albemarle County, and the University of Virginia (the "Three Parties") continue to evolve in many interdependent ways. The current Southern Urban Area B study was commissioned to consider coordinated planning, infrastructure, and policy, honoring sustainable land use principles, pedestrian-oriented neighborhoods, and supportive transportation strategies. Substantial changes and growth have occurred in the three jurisdictions since the last major consideration in 1988.

This current study considers the growth of the area over the next twenty years, recognizing pressures on existing infrastructure and mobility. Growth is already occurring under existing zoning and master planning assumptions, yet the topography, existing neighborhoods, major impediments to interconnection such as Route 64, Route 29 Bypass, and the railroad represent serious constraints, in some cases channeling and accentuating the impacts of this growth. Additionally, by right development and growth within the three entities has tended to evolve without the benefit of truly coordinated planning among the three jurisdictions in Area B. This has resulted in current and accelerating problems, induced by population growth and limited transportation options.

In contrast to the 1988 study, the current Area B study considers the serious challenge of transportation connections through and beyond these urbanized portions of the City, County and University. In fact this aspect and omission was one of the primary reasons behind the current Area B work.

The Area B study has continued consensus-based planning conducted by the three entities over recent years. At times, the City, County, and University have been able to employ innovative strategies to address the positive potential of pedestrian-oriented neighborhoods with attention to the form and scale of compact development. Building on and connecting the work of the City's Corridor Studies and new Zoning Code, the County's Neighborhood Model, and the University's Master Plan, this study offers alternatives to disconnected development among the three parties. In other words, the challenges of the Area B can be addressed most effectively by the three entities working together. The alternatives that follow are in clear contrast to the current pattern of growth in this study area – disconnected and absent necessary infrastructure investments to accommodate the added demands induced by growth under current zoning and by-right development.

The Framework Plan alternatives emerge from community input and the desire for more livable neighborhoods. The Area B study provides guidelines for developing a stronger sense of place and distinct identity for this region. Within the Framework Plan, urban design, housing, and transportation policy considerations are integrated to address the challenges and opportunities for Area B.

Relationship to Prior Studies

Jefferson Park Avenue/Fontaine Avenue Neighborhood Study (1988)

Our current study builds upon the work begun with the 1988 Jefferson Park Avenue/Fontaine Avenue Neighborhood Study as one of the initial attempts at cooperative planning between the City of Charlottesville, Albemarle County, and the University of Virginia. It recommended joint planning efforts for development projects in the area covered by this report. The development of the University's Fontaine Research Park, street and sidewalk improvement plans, as well as subsequent comprehensive plans emerged from the strategies laid out by the 1988 Neighborhood Study. Many of the broader issues regarding student housing and transportation laid out in the original Neighborhood Study are still relevant today. Increased development pressure in this part of the region adds to the need for the current joint effort among the City, County, and University to integrate plans and policies for the mutual benefit of the Three Parties and area residents. It did not address transportation interconnection in any serious way.

Charlottesville Corridor Study (2000)

The Commercial Corridor Study (by Torti Gallas CHK) was conducted as an effort to enhance the economic benefits and ensure the best mix of property uses for the commercial corridors within the city. It was projected that the University's growth in research with high tech and biotech industries would bring many newcomers to the area. Combined with these economic development trends is a renewed interest in urban living, where a sense of "community" is perceived as a tangible asset. The City's "smart growth" approach as developed in the Corridor Study takes advantage of the numerous underutilized areas and targets them for redevelopment and infill.

Fontaine Avenue was one of the many sites considered in the Corridor Study. The recommendations included the creation of higher density, mixed-use buildings and the addition of multifamily buildings including apartments. It also recommended that future development should create a safe walking environment for pedestrians in the neighborhood. These elements are essential in creating a viable commercial area and community.

Development Areas Initiatives Study Committee–Neighborhood Model (2001)

The Neighborhood Model, developed by Albemarle County in collaboration with Torti Gallis & Partners calls for a change in the development pattern in both greenfield and infill sites. The Model recommends new growth in the Development Areas, locations identified by the County as appropriate for higher density growth to maintain a clear boundary between the Rural Areas and those being developed. Among the twelve Neighborhood Model principles is the maintenance of a clear boundary. In addition, neighborhoods should have designated centers that incorporate varying densities and mixed-use activities. Interconnected streets are emphasized among and between neighborhoods to accommodate pedestrians, bicyclists, and public transportation, and to link open space.

University Master Plan (On going)

The University Master Plan provides a physical framework for reaching the University's evolving goals as an institution. These goals include creating a pedestrian environment, improving access through connecting corridors and multi-modal transportation. Ongoing challenges include providing adequate and appropriate levels of housing and amenities for students, faculty, and staff. Piedmont Faculty Housing on Fontaine Avenue, for example, is the only faculty housing available through UVA at this time. The plan considers the projected growth in the number of new incoming students (approximately 100/year). Their housing needs (especially as they move off Grounds following first or second year), transportation, and parking constraintss call for dense, infill development, with bicycle, pedestrian and transit access to central Grounds. The current plan calls for improving circulation along Jefferson Park Avenue and the Medical Sciences area through the proposal for a "Maywood Connector". In considering the larger area, the Master Plan also recognizes the need for improving the water quality and storm water management within the Rivanna watershed.

II. SUMMARY OF EXISTING CONDITIONS AND PUBLIC INVOLVEMENT

II.A Existing Conditions and Demographics

The full Existing Conditions Report is included in the Appendix. The following is a summary of key elements contained in the body of this report.

Maps

The existing conditions maps illustrate the relationship within the study area between significant natural features, such as critical slopes, streams and rivers, and floodplains, and the built environment. The natural features of the area create significant constraints for the expanding built environment. Roadways, greenway trails, and transit connections are also represented.

Existing Conditions Maps, including the following, are provided for orientation and reference:

1. **Regional Connections** - Overlays roads, greenways, and CTS and UTS transit routes.
2. **Area B Built Environment** - Illustrates existing neighborhood centers, selective building uses, and roads.
3. **Area B Natural Environment** - Illustrates important natural features including rivers and streams, floodplains, and critical slopes.
4. **Area B Existing Comprehensive Plans** - Compiles data from City's and County's respective Comprehensive Plans.
5. **Area B Existing Zoning (shown elsewhere under "By Right Development" section)** – Shows current Zoning information for the entire study area, represented in aggregate with diminished emphasis on boundaries between jurisdictions, affording the opportunity to see potential relationships among the various neighborhoods within and around the study area.

Study Area and Key Findings

The study area includes segments of the southwestern quadrant of the University of Virginia, southwestern areas of the City of Charlottesville and designated portions of the surrounding development areas within Albemarle County. This report provides a baseline reference for alternative approaches involving physical planning and policy considerations (including housing policies, transit, bicycle/pedestrian infrastructure, parking, etc.). Several key issues that will require attention include:

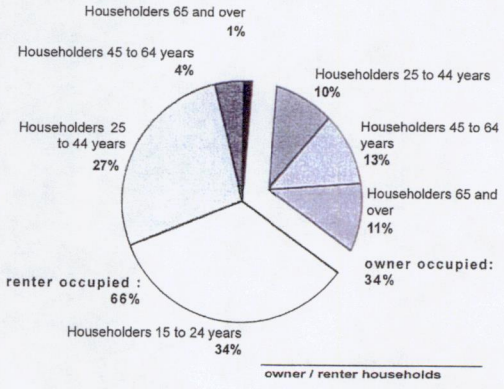
- Topography and natural systems are dramatic and important to this area. Moore's Creek and its tributaries interlace with a rolling topography. They frame several key amenities including park space, trails, and several short range and long vistas.
- Limited interconnection inhibits mobility, channels traffic onto Old Lynchburg Road and encourages cut through traffic onto Harris Road and through other neighborhoods.
- Few alternative routes within and around the study area may indicate a continuing pattern of increased traffic congestion.

- Student housing trends within existing City neighborhoods in the study area are significant (especially in the vicinity of Jefferson Park Avenue - JPA). Recent apartment developments just outside the area are also notable and will add traffic pressures within the area (particularly along Old Lynchburg Road and JPA). Isolation and separation of students from the Grounds may affect the quality of their experience of university life.
- More generally, pressures from current and ongoing growth in the surrounding areas of the County can be seen in the significant numbers of single family and multi-family housing units that have emerged over the past ten to fifteen years.
- Fontaine Research Park is perceived to be remote from the University. Both entities could benefit from improved general access and a greater degree of interconnection.

Demographics – Summary Observations

Based on an examination of data from the 2000 Census for the tracts and block groups in Charlottesville and Albemarle County several trends emerge. Selected observations or "conclusions" can be drawn from the extensive demographic information that was analyzed are included below:

- A large percentage of students are dependent upon walking, biking, or public transit.
- Distinct sections of the study area have relatively high percentages of renters. The study area houses 60% of all students living off-grounds. Thirteen percent of all students live in the JPA/Fontaine community.
- Approximately 12% of University employees live in the study area.
- Relatively few people in the entire community have lived there for more than 10 years. The area grew largely in the 1950's & 1960's, suggesting an aging, overworked housing stock, especially in areas with high renter percentages.
- The community enjoys higher than average educational levels.
- The area reports a relatively high poverty rate, but this may due to the high student numbers.
- A high percentage of JPA/Fontaine commuters use alternatives to cars. Walking and transit use are very high. One-third of the homeowners have one or no cars while two-thirds have two or more. One-half of the renters have one or no cars.
- Due to increased enrollment of roughly 100 additional students/year, the University will need to build additional student housing, especially for first year students.



Population Growth - The number of people in the study area is expected to increase by 40 percent from 11,340 in 1998 to 15,927 by 2025, according to figures developed by Albemarle County and Charlottesville planners for the regional traffic model.

People, Households & Housing

The predominant age groups suggest three distinct cultures within the study area.The community has a higher than average share of well-educated people throughout all the sections. Throughout the study area, the proportion of renters is highest in younger age groups, while homeownership is higher among people over 35.

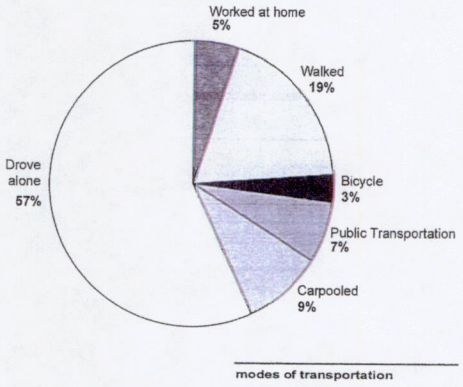
The area grew largely in the 1950's and 1960's and has not added much housing since then. Longevity varies among owners and renters living in various sections, but relatively few people overall have lived in the community longer than ten years. Among those in the labor force, the community enjoys a very low unemployment rate. However 38% of the residents of the study area (mostly students) are not in the labor force. Median household and family income compared to city and county-wide medians indicate a wide diversity in income ranges for all types of residents in the community but a high poverty rate compared to city/county as a whole. The 32% below poverty may also reflect the disproportionate number of students as well.

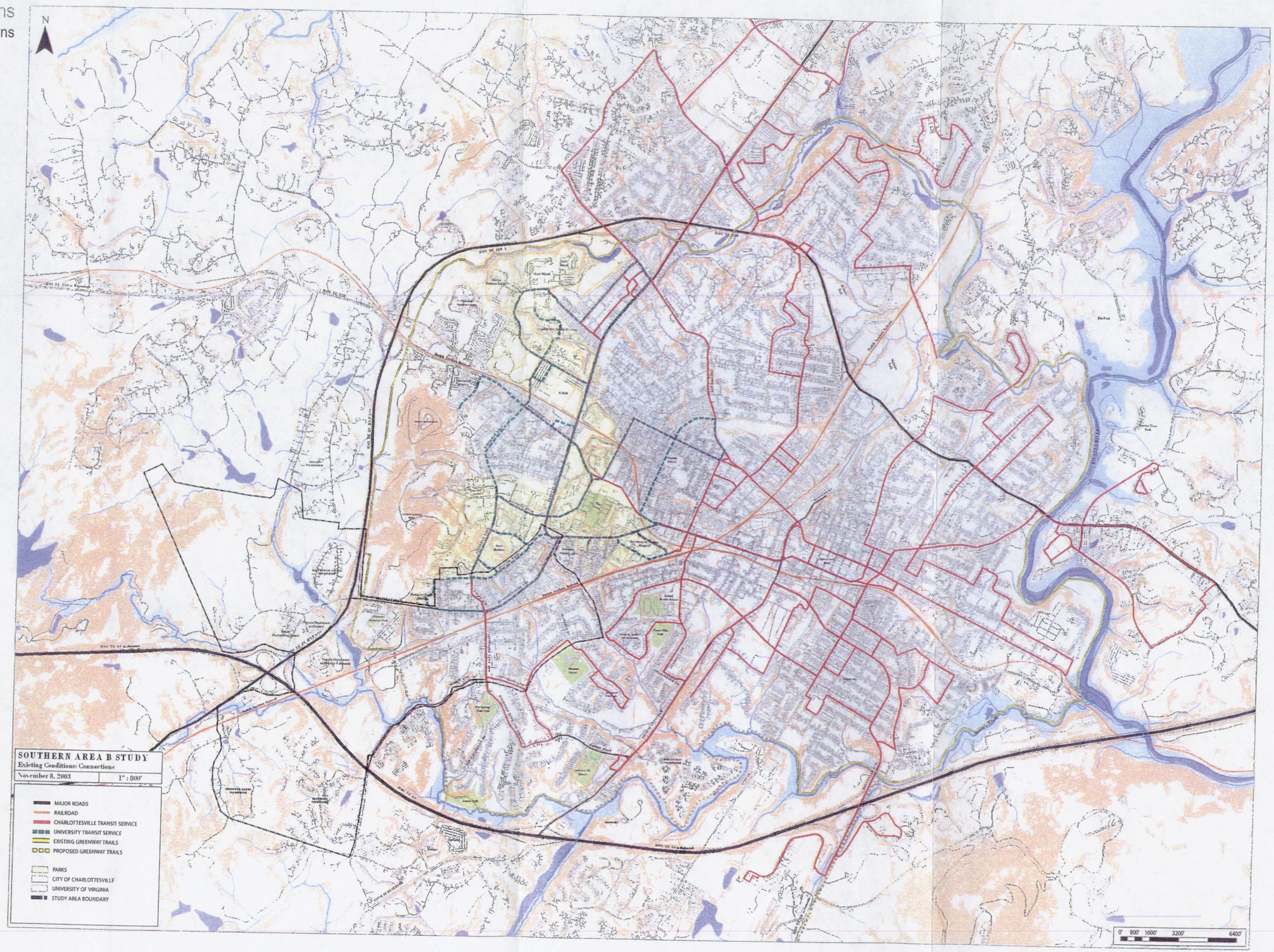
Roughly 2,340 students (13% of all students) live in the study area. Sixty percent of all students living in off Grounds housing reside in this area. By 2007 University enrollment is expected to grow by 2%, reaching 19,655. Twelve percent of the University's 11,608 staff members live within the study area.

Transportation

The study area is a crossroads of transportation routes including roads, highways, railroad tracks, existing and proposed greenway trails, and transit systems (CTS and UTS routes). Primary roads are highlighted and classified as Interstates (US 64), Arterials (US 29), and Major Roads (JPA, Fontaine). CTS and UTS routes serve high density residential development in the eastern part of the study area with stops along JPA and Maury Ave.

It is important to note that one third of homeowners in the study area have one or no cars, while almost twice as many of rental households (59%) have one or no cars. This is explained by the proximity of many residents to the University Grounds and several existing transit routes, providing access to the University and downtown for many homeowners and residents alike.




N
SOUTHERN AREA B STUDY
Existing Conditions: Connections
November 8, 2003
1" : 800'
MAJOR ROADS
RAILROAD
CHARLOTTESVILLE TRANSIT SERVICE
UNIVERSITY TRANSIT SERVICE
EXISTING GREENWAY TRAILS
PROPOSED GREENWAY TRAILS
PARKS
CITY OF CHARLOTTESVILLE
UNIVERSITY OF VIRGINIA
STUDY AREA BOUNDARY
0' 800' 1600' 3200' 6400'


ROUTE 64 to Staunton
ROUTE 29 BYPASS
Trinity Presbyterian Church
Virginia Department of Forestry
Virginia Department of Forestry & Minerals
Norfolk Southern Railroad
Moore's Creek
ROUTE 29 to Lynchburg
SHERWOOD FARMS SUBDIVISION
REDFIELDS SUBDIVISION
BELAIR SUBDIVISION
BUCKINGHAM CIRCLE SUBDIVISION
OBSERVATORY HILL
Piedmont Facility Housing
Fry Springs Road Park
Azalea Park
Burford Middle School
Forest Hills Park
Johnson School
Jackson Via School
Payne
Porties
ROUTE 64 to Richmond
SOUTHERN AREA STUDY
Existing Conditions: Built Environment
BUILDING USES
RETAIL
PARKS
0' 400' 800' 1600' 3200'

Existing Conditions
Natural Environment

Existing Conditions

Existing Comprehensive Plan

SOUTHERN AREA B STUDY
COMPREHENSIVE PLAN

August 29, 2003	1" : 400'

COUNTY	CITY
NEIGHBORHOOD D	RESIDENTIAL
NEIGHBORHOOD S	RESIDENTIAL CONDO
OFFICE SERVICE	RESIDENTIAL APT
OFFICE REGIONAL	RETAIL
INSTITUTIONAL	RETAIL - MIXED USE
INDUSTRIAL	COMMERCIAL
REGIONAL S	OFFICE
COMMUNITY	INSTITUTIONAL
URBAN	INDUSTRIAL
PARKS & GREENWAY	PARKING STRUCTURE
	VACANT LAND

STUDY AREA BOUNDARY

CITY/COUNTY LINE

0 400 800 1,600 2,400 3,200 Feet

were identified

II.B Public Involvement

Introduction

The Project has been guided by regular input from all three entities through their representatives on the "Project Working Group": Susan Thomas, AICP Project Manager from Albemarle County, Ron Higgins, AICP from the City of Charlottesville, and Mary Hughes, ASLA from the University of Virginia. In addition, the work has received input from a larger, citizen Project Advisory Group that has met periodically for feedback at key stages of the project's evolution. The Project Advisory Group members are appointed from each of the three entities and the composition of this group is shown in the Appendix along with a Community Stakeholders Group to involve area agencies and programs in the process.

Community Open House

On November 8, 2003 the project team conducted a day-long Open House to solicit input on existing conditions and several key questions:

- What is needed to ensure this community grows and develops in a healthy and sustainable way that provides a high quality of life for residents?
- What are the implications of new neighborhood centers in regards to transportation infrastructure (streets, sidewalks, trails, bike lanes, transit, etc.)?

Attendees were also asked to highlight specific areas on an aerial photograph, with green dots denoting areas that they want to preserve or enhance, and red dots as areas of concern. Complete notes from the Community Open House are included in the Appendix. Several of the dominant issues include:

- Plan for people, not cars
- Pedestrian, bike and transit are priorities
- Improve the efficiency, scope of public transportation
- Promote more owner occupancy and a wider range of housing options
- Encourage UVA staff & faculty to live in and own homes within walking distance of UVA
- Control the UVA affiliated parking situation
- Create a greenway network preserving contiguous swaths of open space
- All centers should be connected, compact/urban
- Identify and explore opportunities for interconnection: (Sunset, Stribling, Stadium, Harris)
- Invest in existing neighborhood centers first
- Utilize mixed-use functions for enhancing existing centers and new centers
- Retail and services seriously limited in southern part of city and adjoining areas of county

Infrastructure & Transit Improvements

As a general consensus, the public preferred to use "streets" as connectors between neighborhoods and town centers, as opposed to large four lane roads, dead ends, or cul de sacs. Using streets as ways of connecting the different communities also helps to create the desired density of the neighborhood scale. In particular, there were concerns about the widening of Fontaine Avenue and the possibility of reconnecting Sunset Avenue. The public believes that there should be alternatives to the current parking situation. In general, it was suggested that parking could be concentrated into satellite areas outside the center from which people can use public transportation to commute to the city centers. There is an expressed need to expand the bus routes, especially

the Trolley, in order to reach the neighborhoods and proposed areas for development. In creating pedestrian-scale neighborhoods with interconnecting streets, the public felt the need for adequate lighting and continuous sidewalks to ensure the safety of its users.

Land Use & Urban Design

A series of comments relating to land use and urban design emerged from the public. Homeownership was cited as an important goal. Respondents wanted to see pedestrian oriented development on a neighborhood scale, particularly as it relates to retail and mixed-use development. A desire was expressed for a public cultural amenity, such as a library, for this area of town. Several places received mention in particular for reuse/redesign. These included the Willoughby Shopping Center as well the intersection of Maury Ave. and JPA, which could be developed into a neighborhood oriented shopping activity area.

Open Space, Historic Preservation & Planning

Planning for open space and preserving historic settings are high priorities. Protecting historic neighborhoods, such as Oakhurst Circle, as well as historic amenities, like the Fry's Spring Beach Club, surfaced as important goals. The preservation of natural amenities in the face of development is important. In particular, Observatory Hill and the wetlands/open space along Moore's Creek were highlighted as community resources.

University Student Housing Focus Group

Extensive input was received from student housing representatives during a focus session. They spoke about the different cultures that emerge at the undergraduate level depending on where one lives, beginning with the first dormitory assignments. They recommended more dorm-style housing arrangements and on grounds upper class housing options. They also suggested that the limited exposure to diverse population groups established by certain dormitory floor plans (particularly the suites) may be contributing to friction, segregation, and racial tension as first year students move off Grounds. The current need for automobile transportation was highlighted along with parking difficulties. The students proposed more dense spatial patterns relating to the twenty-four hour student life style. A preference was voiced for housing closer to Grounds rather than in suburban areas, promoting a safe pedestrian environment. In addition, they recommended more efficient transit options at different areas and times, and an integration of small-scale retail in close proximity to their housing areas.

III. DEVELOPMENT SCENARIOS

III.A Framework Plan Alternatives Introduced

Several Framework Plan alternatives were examined or developed in the course of this study. Implications of these alternatives follow in abbreviated form. There are significant features in common among all alternatives:

- With the exception of the "By Right" (status quo/buildout) alternative, each scenario envisions a pattern of land use consistent with the City, County, and University's commitment to pedestrian-oriented, transit-served, interconnected neighborhoods.
- Each alternative is presented in map form with accompanying transportation modeling data.
- Cost and feasibility of each alternative are assessed and included in a comparative matrix format.

Immediately following this page, a map is included showing all of the various alignment options serving to connect the area south of I-64 to the JPA-Fontaine area that have been considered and analyzed. Following this overview, individual Alternatives are included with text and a "Framework Plan" map showing the integration of transportation, land-use and open space for each of the three geographic areas where transportation improvements may be introduced.

The Framework Plan Alternatives have several specific features in common:

Land Use and Urban Design Characteristics

1. Mixed-Use development on JPA and Maury Ave. intersection
2. New neighborhood on Granger property
3. Old Lynchburg Rd. and 5th Street neighborhood center
4. Trinity Presbyterian Church neighborhood center
5. Additional infill development possibilities at Fontaine Research Park with limited mixed-uses (service & retail, not residential)
6. Possibility of attached Residential with mixed-use at Department of Forestry
7. Single-family detached Residential south of Railroad tracks across from Granger Property
8. Residential and mixed-use opportunities at 5th Street and I-64 interchange
9. Possible location of new county elementary school in this neighborhood center.

Infrastructure and Transit Possibilities

1. Add a Fontaine/Sunset Connector Street and/or re-open the Sunset Avenue bridge.
2. Extend Stadium Road from the existing road to Fontaine Avenue, connecting at the existing Fontaine Research Park entrance with the new Fontaine/Sunset Connector

3 Add Maywood Lane from JPA and/or Shamrock Road to the University Hospital precinct

4. Add a new connector road north of Rt. 64 between Fifth Street Extended and Avon Street in conjunction with private sector development of the surrouding property.
5. Build the projected Southern Parkway (with a revised location linked to Sunset Avenue Extended)
6. Add a new East/West connection south of Rt. 64 between Sunset Ave Extended and Old Lynchburg Road

Open Space, Historic Preservation, and Planning

1. Complete interconnected greenway network along Moore's Creek, including bike trails
2. Consider park opportunities on Old Lynchburg Road, Sunset Avenue near Granger Property, and 5th Street Neighborhood Park
3. Park at Department of Forestry
5. Park/greenway link at south end of Fontaine Research Park
6. Park along Duck Pond, West of Buckingham Circle
7. County conservation easement

SOUTHERN AREA B STUDY
FRAMEWORK PLAN - ALTERNATIVES 1-5
August 9, 2004

LAND USES
- MIXED-USE
- HIGH DENSITY RESIDENTIAL (16-24 dua)
- MODERATE DENSITY RESIDENTIAL (12-16 dua)
- LOW DENSITY RESIDENTIAL (4 dua)
- UNIVERSITY HIGH DENSITY RESIDENTIAL (up to 64 dua)
- EMPLOYMENT
- INSTITUTIONAL

CONNECTIONS
- EXISTING ROADS
- PROPOSED ROADS
- PROPOSED CONNECTOR ROAD ALTERNATIVES

- PARKS
- RIVER/STREAM
- WETLANDS
- FLOOD PLAIN
- CRITICAL SLOPE
- UNIVERSITY OF VIRGINIA
- STUDY AREA BOUNDARY
- COUNTY DEVELOPMENT AREA BOUNDARY

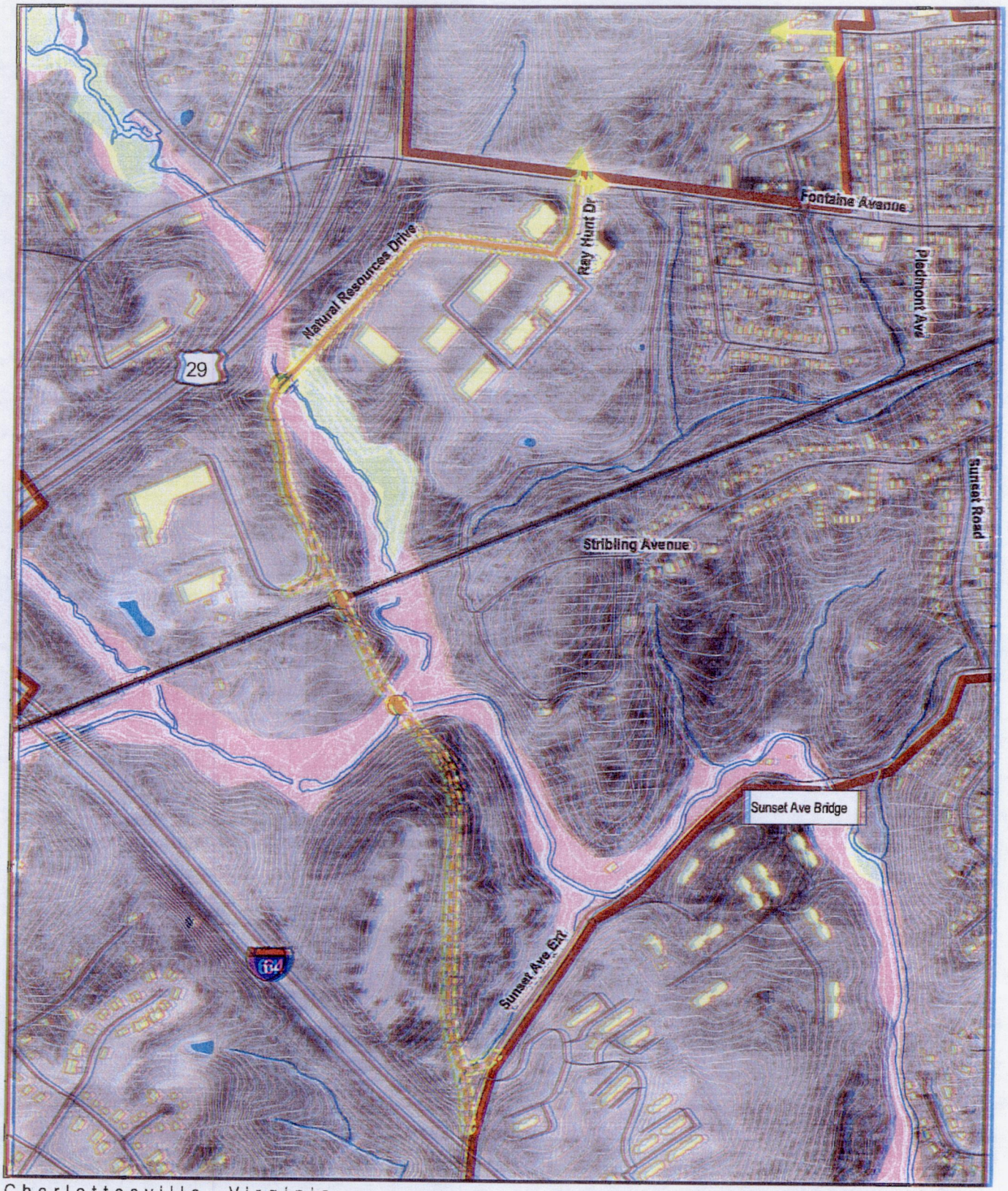
Alternative #1: Fontaine/Sunset Connector West

This Alternative envisions additional development at the Fontaine Research Park (FRP), although the specific nature and intensity of new development would differ from Alternative #2. In this alternative, the location of the Fontaine/Sunset Connector passes to the west of the existing FRP. It is still necessary to bridge Moore's Creek and the railroad, but it does so further to the south, connecting with Forestry Drive and Ray C. Hunt Drive as it traverses the hill leading to the Department of Forestry. Hunt/Forestry Drive would need to be improved (with sidewalks and bike lanes), and it would be extended toward the north connecting to the current intersection of Fontaine Research Park and Fontaine Avenue. The existing Research Park entrance would remain, serving the regional traffic and FRP local traffic as it does today.

The principal advantage of this alternative is the way it accommodates the need for transportation interconnection without interrupting the current configuration of FRP. In other words, the road could be built with no additional development associated at the Research Park. This "advantage" is also a disadvantage because it is less likely that such a new connector road could be developed and designed in conjunction with a newly evolving neighborhood center of mixed-uses, and costs associated with the improvements to Ray Hunt Drive might not be absorbed within the development dynamics as they could with Alternative #3 or #4. This alternative does not accommodate ideally or encourage pedestrian and bicycle use since it is more hilly and less direct than Alternative #2.

Although the costs associated with this alternative are lower than Alternative 4, they are still considerable.

Description	**Alternative 1 - Fontaine/Sunset Connector West** Create a new alignment adjacent to the Virginia Dept. of Forestry & Minerals (VDFM), utilizing a portion of Ray Hunt Drive and Forestry Drive, connecting Susnet Avenue in the County to Fontaine Avenue. The existing entrance to Fontaine Research Park is utilized, allowing a connection to Fontaine Avenue (east/west) and the possibility of an alignment with a new Stadium Road Extended.
Length (feet) - Total	6,400 feet
Existing Alignment	6,400 feet
New Location	3,700 feet
Horizontal & Vertical Geometrics/ Alignment	Horizontal alignment issues are minimal and primarily deal with avoiding developed areas. The vertical alignment presents challenges due to the steep topography in the area.
Intersections and Driveways – Reconfigurations/Conflicts	From the south, Sunset Avenue will be reconfigured to connect into the proposed extension and form a continuous through movement. Sunset Avenue to the north will "T" into this new alignment. A new "T" intersection will be constructed directly north of the railroad tracks to access Natural Resources Drive to the Virginia Dept. of Forestry & Minerals buildings. At northern end the Fontaine Research Park entrance driveway and Ray Hunt Drive intersection will require some reconfiguration to handle the additional traffic load.
Local Street Improvements	n/a
Number of New Bridges/Culverts	2 bridges
Right-of-Way (acres)	4.3 acres
Retaining Walls	At railroad crossing, at floodplain crossing.
Aesthetics Issues	None anticipated.
Acres of Wetlands	Existing bridge across wetland and there may be undelineated wetlands in floodplains.
Number of Wetland Crossings	1 + 1 (existing)
Acres of Floodplains	0.35 acres for new location section, 0.25 acres for existing alignment section
Number of Floodplain Crossings	1
Number of Stream Crossings	1 for new location, 1 for existing alignment
Noise	Impact of roadway noise will be minimal with both options.
Number of Homes Impacted	n/a
Number of Businesses Impacted	Alignment through part of the Fontaine Office Park, but no relocations required
Development/Redevelopment Potential	Presents new development and redevelopment opportunities to the south. Provides redevelopment opportunities on property directly south of the railroad tracks.
Public Acceptability	Minimal issues with single family owners, highest impact with Fontaine Research Park. Potentially perceived as helping improve system and access to the south. May gain support from those to the south of I-64 and those north of Fontaine Avenue (i.e. Stadium Drive).
Parking	None anticipated.
Local Street Connectivity	There is no connectivity.
Intersection Operations	Fontaine Avenue/Ray C. Hunt Drive will be a critical intersection requiring improvements. Intersections internal to the Fontaine Research Park will require improvements.
Intersection Spacing	Spacing between Fontaine Avenue and Natural Resources Drive continues to be short.
Emergency Response	Longer route to Sunset Avenue/I-64 area
Traffic Calming	n/a
Bike/Pedestrian Accommodation	5-foot striped bike lanes on new location sections and shared lanes on existing sections, unless widening is permissible
Transit Accommodation	Opportunities for bus pull outs.
Route Attractiveness	Fairly attractive. Posted speed - 35 MPH.
Constructability	Severe slopes and grades south of Natural Resources Drive. Will impact existing operations in Fontaine Research Park, creating some disruption.
Planning Level Costs, based on 2-lane typical section CONSTRUCTION COSTS ONLY	$6,890,000



Charlottesville, Virginia

Area B - Alternative 1 Connector West

Kimley-Horn and Associates, Inc. September 2004

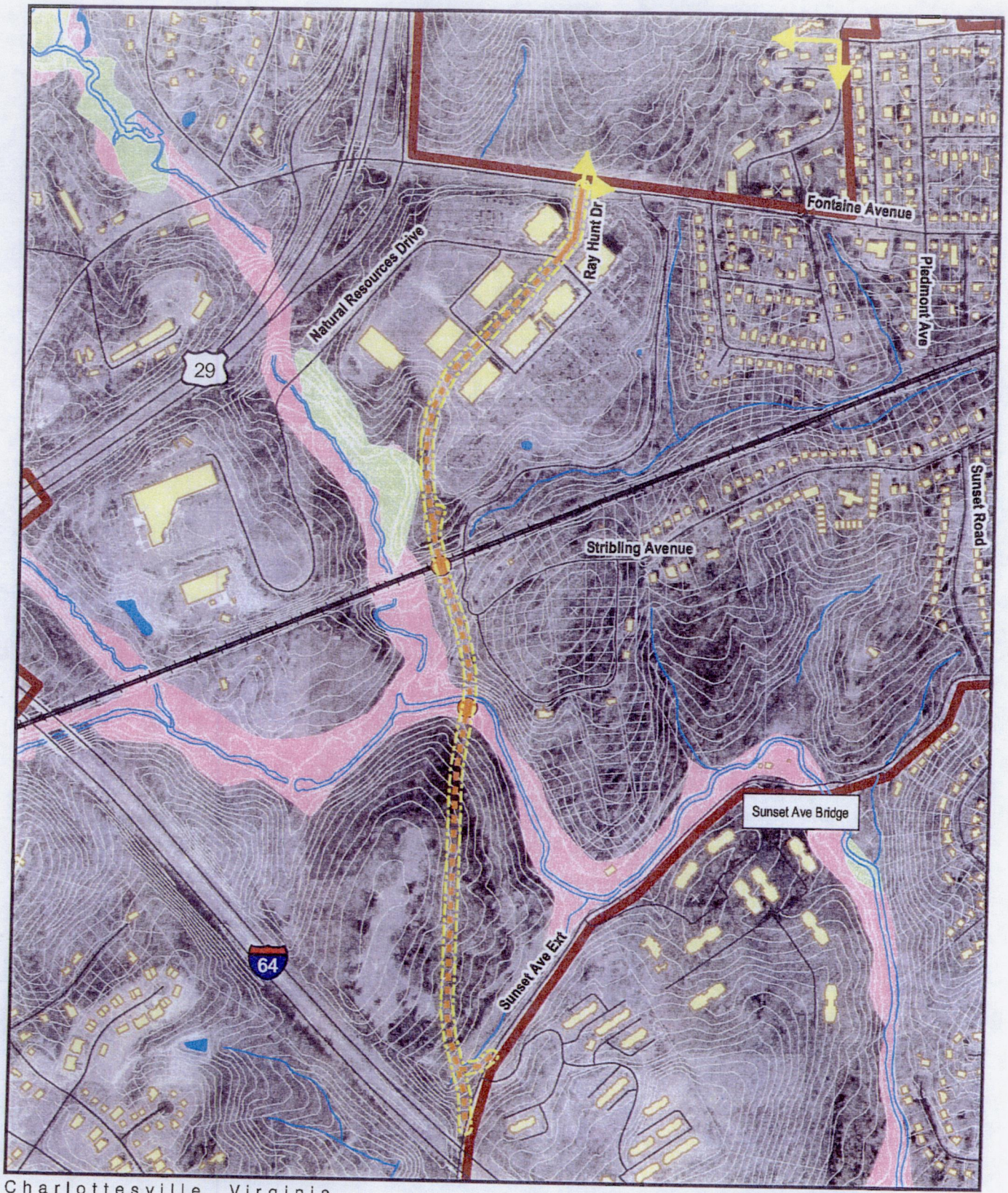
NORTH

0 200 400 Feet

Legend

Potential Corridor	Bridges		Topography
Existing	Existing	Street	River or Stream
New Location	Potential	Railroad	Body of Water
Right-of-Way		Area B Boundary	Wetland
		Property Line	Floodplain
		Buildings	

Description	Alternative 2 - Fontaine/Sunset Connector Central Boulevard Create a connection through the central axis of Fontaine Research Park with a new Fontaine Avenue/ Sunset Avenue connector, and a direct connection to the existing Fontaine Research Park entrance and the possiblity of an alignment with a new Stadium Road Extended at this intersection.
Engineering Issues	
Length (feet) - Total	5,300 feet
Existing Alignment	400 feet
New Location	4,900 feet
Horizontal & Vertical Geometrics/Alignment	Horizontal alignment issues are minimal and primarily deal with avoiding developed areas. The vertical alignment presents challenges due to the steep topography in the area, particularly along the east side of the Fontaine Research Park.
Intersections and Driveways – Reconfigurations/Conflicts	From the south, Sunset Avenue will be reconfigured to connect into the proposed extension and form a continuous through movement. Sunset Avenue to the north will "T" into this new alignment. Reconfigure intersection at southern connection/terminus of Sunset Avenue. The intersection will include a right-angle "T" intersection and widening of Sunset Avenue to accommodate turn lanes. The northern end the Fontaine Research Park entrance driveway and Ray Hunt Drive intersection will require some reconfiguration to handle the additional traffic load. Requires connections to parking lot along east side of Fontaine Office Park and reconfiguration of internal intersections.
Local Street Improvements	Requires construction of a new boulevard style street through the central axis of the Research Park.
Number of New Bridges/Culverts	2 bridges
Right-of-Way (acres)	6.2 acres
Retaining Walls	All options will require approximately 500-1000' of retaining walls at the southern part of the Fontaine Office Park. Retaining walls are also anticipated at the at floodplain crossing and railroad crossing.
Aesthetics Issues	Presents the opportunity and need for extensive streetscaping through the Fontaine Office Park central green.
Environmental Issues	
Acres of Wetlands	None mapped, but may be wetlands in floodplains
Number of Wetland Crossings	1
Acres of Floodplains	0.25 acres
Number of Floodplain Crossings	1
Number of Stream Crossings	1
Noise	Will place roadway noise directly between two established multi-story building developments.
Number of Homes Impacted	n/a
Number of Businesses Impacted	Alignment through part of the Fontaine Office Park, but no relocations required
Development/Redevelopment Potential	Presents new development and redevelopment opportunities to the south.
Public Acceptability	Minimal issues with single family owners, highest impact with Fontaine Research Park. Potentially perceived as helping improve system and access to the south. May gain support from those south of I-64.
Parking	15 to 20 spaces lost in Fontaine Office Park.
Local Street Connectivity	Provides the opportunity to connect the new alignment to existing streets: Stribling Avenue, and new residential development along Sunset Road and Stribling Avenue.
Intersection Operations	Fontaine Avenue/Ray C. Hunt Drive will be a critical intersection requiring improvements. Intersections internal to the Fontaine Research Park will require improvements. The Ray Hunt Drive/Entrance Driveway will perform better than Alternative #1.
Intersection Spacing	Spacing between Fontaine Avenue and Natural Resources Drive continues to be short.
Emergency Response	More direct route to Sunset Avenue/I-64 area.
Traffic Calming	Possibly required in the Fontaine Research Park.
Bike/Pedestrian Accommodation	5-foot striped bike lanes on new location sections and shared lanes on existing sections, unless widening is permissible
Transit Accommodation	Opportunities for bus pull outs.
Route Attractiveness	More attractive (less circuitous) than Alternative #1 and 3. Posted speed - 35 MPH, except through central axis which would be 25 MPH.
Constructability	Severe slopes and grades south of Fontaine Office Park. Will impact existing operations in Fontaine Research Park, creating some disruption.
Planning Level Costs, based on 2-lane typical section CONSTRUCTION COSTS ONLY	$6,340,000



Charlottesville, Virginia

Area B - Alternative 2 Boulevard Connector

Kimley-Horn and Associates, Inc. September 2004

NORTH

0 200 400 Feet

Legend

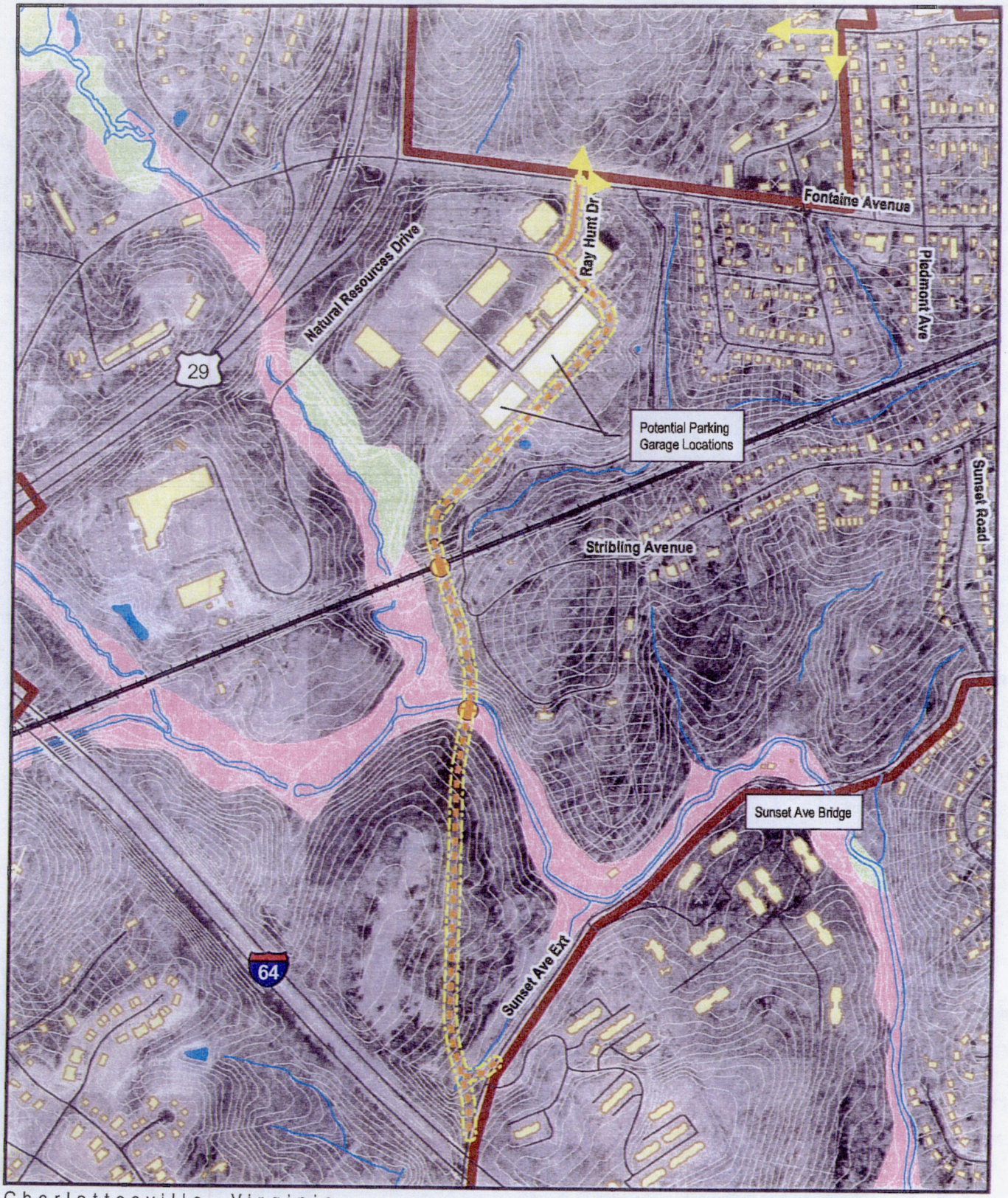
Potential Corridor
- Existing
- New Location
- Right-of-Way

Bridges
- Existing
- Potential

- Street
- Railroad
- Area B Boundary
- Property Line
- Buildings

Topography
- River or Stream
- Body of Water
- Wetland
- Floodplain

Description	**Alternative 3 - Fontaine/Sunset Connector with shift** Create a connection through the eastern portion of Fontaine Research Park with a new Fontaine Avenue/ Sunet Avenue connector through the eastern parking lot, linked back to the Fontaine Reserach Park.
Engineering Issues	
Length (feet) - Total	5,400 feet
Existing Alignment	400 feet
New Location	5,000 feet
Horizontal & Vertical Geometrics/ Alignment	Horizontal alignment issues are minimal and primarily deal with avoiding developed areas. The vertical alignment presents challenges due to the steep topography in the area, particularly along the east side of the Fontaine Research Park.
Intersections and Driveways – Reconfigurations/Conflicts	From the south, Sunset Avenue will be reconfigured to connect into the proposed extension and form a continuous through movement. Sunset Avenue to the north will "T" into this new alignment. Reconfigure intersection at southern connection/terminus of Sunset Avenue. The intersection will include a right-angle "T" intersection and widening of Sunset Avenue to accommodate turn lanes. At the northern end, the Fontaine Research Park entrance driveway and Ray Hunt Drive intersection will require some reconfiguration to handle the additional traffic load. Requires connections to parking lot along east side of Fontaine Office Park and reconfiguration of internal intersections.
Local Street Improvements	None anticipcated.
Number of New Bridges/Culverts	2 bridges
Right-of-Way (acres)	6.5 acres
Retaining Walls	All options will require approximately 500-1000' of retaining walls at the southern part of the Fontaine Office Park. Retaining walls are also anticipated at the at floodplain crossing and railroad crossing.
Aesthetics Issues	Using landscaping treatments to buffer the roadway will require additional right-of-way and a more costly roadway section.
Environmental Issues	
Acres of Wetlands	None mapped, but may be wetlands in floodplains
Number of Wetland Crossings	1
Acres of Floodplains	0.25 acres
Number of Floodplain Crossings	1
Number of Stream Crossings	1
Noise	Impact of roadway noise will be minimal.
Number of Homes Impacted	n/a
Number of Businesses Impacted	Alignment through part of the Fontaine Office Park, but no relocations required
Development/Redevelopment Potential	Presents new development and redevelopment opportunities to the south.
Public Acceptability	Minimal issues with single family owners, highest impact with Fontaine Research Park. Potentially perceived as helping improve system and access to the south. May gain support from those south of I-64.
Parking	106 spaces lost in Fontaine Office Park
Local Street Connectivity	Provides the opportunity to connect the new alignment to existing streets: Stribling Avenue, and new residential development along Sunset Road and Stribling Avenue.
Intersection Operations	Fontaine Avenue/Ray C. Hunt Drive will be a critical intersection requiring improvements. Intersections internal to the Fontaine Research Park will require improvements.
Intersection Spacing	Spacing between Fontaine Avenue and Natural Resources Drive continues to be short.
Emergency Response	More direct route to Sunset Avenue/I-64 area.
Traffic Calming	Possibly required in the Fontaine Research Park.
Bike/Pedestrian Accommodation	5-foot striped bike lanes on new location sections and shared lanes on existing sections, unless widening is permissible
Transit Accommodation	Opportunities for bus pull outs.
Route Attractiveness	Fairly attractive. Posted speed - 35 MPH.
Constructability	Severe slopes and grades south of Fontaine Office Park. Will impact existing operations in Fontaine Research Park, creating some disruption.
Planning Level Costs, based on 2-lane typical section CONSTRUCTION COSTS ONLY	$6,450,000



Charlottesville, Virginia

Area B - Alternative 3 Connector with Shift

NORTH

0 200 400 Feet

Kimley-Horn and Associates, Inc. September 2004

Legend

Potential Corridor
- Existing
- New Location
- Right-of-Way

Bridges
- Existing
- Potential

- Street
- Railroad
- Area B Boundary
- Property Line
- Buildings

Topography
- River or Stream
- Body of Water
- Wetland
- Floodplain

Alternative #4: Fontaine/Sunset Connector East

This alternative considers an integrated land-use strategy based on neighborhood centers as the unit of growth, with several key connector roads introduced. One of these is called the "Fontaine/Sunset Connector". In this alternative it spans Moore's Creek and the railroad tracks to the south of Fontaine Research Park, passing along the eastern edge of the Research Park with a direct connection to Fontaine Avenue and Stadium Road Extended.

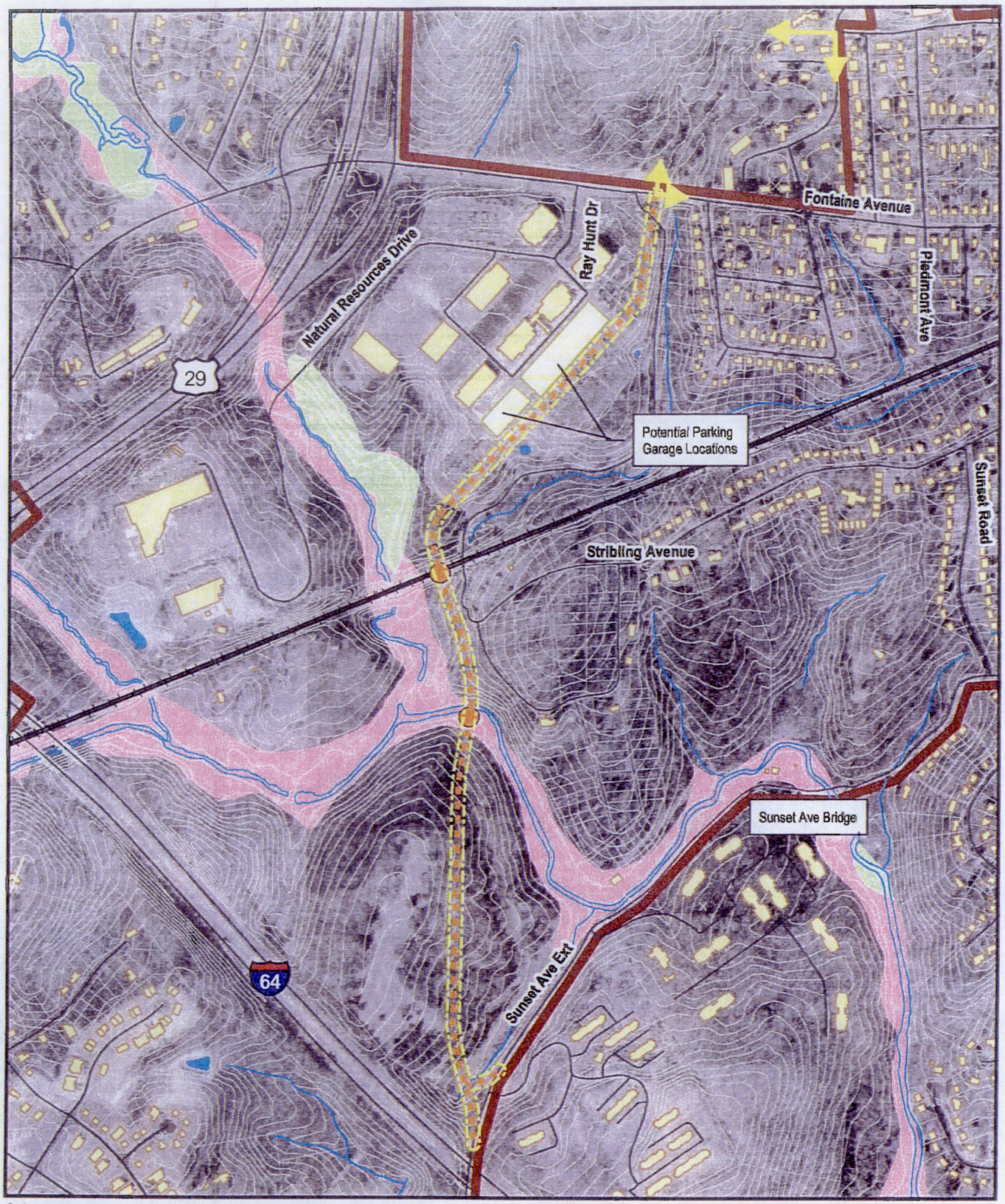
This Alternative envisions additional development at the Fontaine Research Park (FRP) with the possibility of structured parking. In addition to the potential for extensive new office development, limited mixed-uses (small scale service retail, or day-care, for example) could be introduced to provide more amenities and supportive activities for this area. Such a transition over time would begin to view the area in a way that is consistent with the County's Neighborhood Model of pedestrian-friendly, compact development. UTS and/or CTS bus service could extend to this new Fontaine Neighborhood Center. The new Fontaine/Sunset Connector East would be located toward the east of the property, providing safe and continuous access for traffic that could move toward the current intersection of Fontaine Research Park and Fontaine Avenue. The structured parking has the potential to serve special events crowds during evening and weekend functions.

The principal advantage of this alternative is the way it integrates the need for transportation interconnection with the added development opportunity of FRP. While the FRP has been very successful in achieving its buildout (all but one of the approved buildings have been constructed), this mode of development might be enriched for employees and businesses alike through the introduction of a limited mixed-use and a neighborhood orientation. Through the added development potential, a share of the costs associated with the infrastructure investment might be absorbed where those costs directly benefit the development.

The alignment allows for a direct connection to the possibility of a new Staidum Road Extended, improving flow. The existing entrance to the Fontaine Research Park would remain, and could be converted into a right turn in, right turn out configuration, with the new intersection accommodating the full functions of turns, possibly through a roundabout.

The principal concerns involve implications of placing a significant transportation element within an existing business development and the investment associated with the bridges over Moore's Creek and the existing railroad tracks. The specific design and engineering strategy for the road within the FRP property would require additional study, particularly in the way that it could engage the Research Park (parking and drives), and at its intersection with the existing entrance to the Research Park at Fontaine Avenue.

Description	**Alternative 4 - Fontaine/Sunset Connector East** Create a connection through the eastern portion of Fontaine Research Park with a new Fontaine Avenue/Sunet Avenue connector, through the eastern parking lot and a direct connection to Fontaine Avenue at a new intersection. If Stadium Road Extended is constructed, it could be aligned at this new intersection. The existing entrance of Fontaine Research Park would remain, primarily handling local Research Park traffic.
Engineering Issues	
Length (feet) - Total	5,300 feet
Existing Alignment	n/a
New Location	5,300 feet
Horizontal & Vertical Geometrics/ Alignment	Horizontal alignment issues are minimal and primarily deal with avoiding developed areas. The vertical alignment presents challenges due to the steep topography in the area, particularly along the east side of the Fontaine Research Park.
Intersections and Driveways – Reconfigurations/Conflicts	From the south, Sunset Avenue will be reconfigured to connect into the proposed extension and form a continuous through movement. Sunset Avenue to the north will "T" into this new alignment. Reconfigure intersection at southern connection/terminus of Sunset Avenue. The intersection will include a right-angle "T" intersection and widening of Sunset Avenue to accommodate turn lanes. A new full movement intersection will be constructed at Fontaine Avenue. The existing intersection at Fontaine Avenue and the Research Park would become a secondary access driveway accomodating primarily traffic entering from the east and exiting to the west.
Local Street Improvements	There will likely be improvements required to Fontaine Avenue between the Research Park driveway and Westerly Aveune, including improvements to Stribling Aveune and Westerly Avenue.
Number of New Bridges/Culverts	2 bridges
Right-of-Way (acres)	7.5 acres
Retaining Walls	All options will require approximately 500-1000' of retaining walls at the southern part of the Fontaine Office Park. Retaining walls are also anticipated at the at floodplain crossing and railroad crossing.
Aesthetics Issues	Presents the opportunity to create a new gateway into the City and University.
Environmental Issues	
Acres of Wetlands	None mapped, but may be wetlands in floodplains
Number of Wetland Crossings	1
Acres of Floodplains	0.25 acres
Number of Floodplain Crossings	1
Number of Stream Crossings	1
Noise	Impact of roadway noise will be minimal.
Number of Homes Impacted	n/a
Number of Businesses Impacted	Alignment through part of the Fontaine Office Park, but no relocations required
Development/Redevelopment Potential	Presents new development and redevelopment opportunities to the south.
Public Acceptability	Minimal issues with single family owners, highest impact with Fontaine Research Park. Potentially perceived as helping improve system and access to the south. May gain support from those south of I-64.
Parking	160 spaces lost in Fontaine Office Park
Local Street Connectivity	These options provide the opportunity to connect the new alignment to existing streets: Stribling Avenue, and new residential development along Sunset Road and Stribling Avenue.
Intersection Operations	Traffic is dispersed along Fontiane Avenue and internally, thus improving operations. Coordination of traffic signals between Fontaine Aveneu/Reserach Park and Fontaine Avenue/New Alignment will be necessary, if two signals are required.
Intersection Spacing	Spacing between between Fontaine Aveneu/Reserach Park and Fontaine Avenue/New Alignment will be approximately 500' requiring coordination.
Emergency Response	More direct route to Sunset Avenue/I-64 area.
Traffic Calming	Possibly required in the Fontaine Research Park.
Bike/Pedestrian Accommodation	5-foot striped bike lanes on new location sections and shared lanes on existing sections, unless widening is permissible
Transit Accommodation	Opportunities for bus pull outs.
Route Attractiveness	Very attractive because motorists have the option to bypass the internal operations of the Fontaine Research Park if desired. Posted speed - 35 MPH.
Constructability	Severe slopes and grades south of Fontaine Office Park. Will impact existing operations in Fontaine Research Park, creating some disruption.
Planning Level Costs, based on 2-lane typical section CONSTRUCTION COSTS ONLY	$7,050,000



Charlottesville, Virginia

Area B - Alternative 4 Connector East

Kimley-Horn and Associates, Inc. September 2004

NORTH

0 200 Feet

Legend

Potential Corridor	Bridges		Topography
Existing	Existing	Street	River or Stream
New Location	Potential	Railroad	Body of Water
Right-of-Way		Area B Boundary	Wetland
		Property Line	Floodplain
		Buildings	

Alternative #5: Rehabilitate/replace the Sunset Avenue Bridge

This alternative examines the implications of opening the Sunset Avenue Bridge, connecting to Fontaine Avenue via Sunset Road and a constructing a new bridge crossing the railroad tracks while joining Piedmont Street. This alternative would require improvements to Sunset Avenue, Sunset Road, Piedmont Street, Stribling Avenue, and an improved intersection at Piedmont and Fontaine Avenue.

The re-opening would require significant upgrades to all three existing streets to accommodate increased traffic loads and to address impacts on the surrounding neighborhood. The intersections of Sunset Avenue/JPA and Stribling/JPA would also need to be redesigned and reconstructed to effectively serve the additional traffic demands. The rise in daily traffic loads might also require roadway improvements along JPA, especially at intersections with Fontaine Avenue and Stadium Road/Maurry Avenue.

The principal advantage of this alternative is the re-use of a previous roadway connection. In comparison to the Fontaine/Sunset Connector, the Sunset Avenue link is somewhat less constrained by existing wetlands and topographic conditions. To meet the expected increase in demand however, the roadway must be upgraded at a considerable expense. The specific design and engineering strategy for the road would require additional study to determine the magnitude of necessary improvements and to measure the impacts on the surrounding residential neighborhood and environment.

One other advantage involves easier and much more direct access to the UVA Grounds for the significant number of new residents to the south (Jefferson Ridge, Eagle's Landing, Pavilion, Redfields, etc.).

Rather than relying exclusively on the improvements to the full length of Sunset Avenue from the re-opened bridge to JPA, this alternative envisions a direct connection to a newly improved intersection at Piedmont Road and Fontaine Avenue with a newly constructed bridge over the railroad tracks. Along with improvements to Stribling Avenue, this would create more of an interconnected grid, expanding out from the Fry's Spring corner. For example, Piedmont extends up to Stadium Road, allowing multiple and new options for moving north/south and east/west through this mixed-use activity area. This also presents a challenge in terms of additional traffic impacts on existing residential areas.

Almost all of these improvements would be public efforts and publicly funded as there are limited opportunities for new or infill development associated in the immediate vicinity of these various streets and bridges. The one place where development could occur is at the intersection of Piedmont and Fontaine, particularly along the south side between Fontaine and the tracks.

Description	Alternative 5 - Rehabilitate/replace the Sunset Avenue Bridge Open Sunset Avenue bridge to traffic w/ either rehabilitation or reconstruction. Make improvements to Sunset Avenue, Sunset Road, Stribling Avenue and Piedmont Avenue with a new RR bridge and connection to Fontaine Avenue.
Engineering Issues	
Length (feet) - Total	7,500 feet
Existing Alignment	4,900 feet
New Location	2,600 feet
Horizontal & Vertical Geometrics/Alignment	Sunset Avenue is narrow, winding and has vertical challenges. Sunset Road is a wide street.
Intersections and Driveways – Reconfigurations/Conflicts	There will be multiple driveway conflicts, and 5-6 intersections. Reconfiguration of the Sunset Road/Sunset Ave intersection will be necessary. Intersection improvements at each termini (either at JPA or Fontaine) will necessary such as turn lanes, signalization, etc. Intersections improvements to Sunset Road/Stribling Avenue will be required.
Local Street Improvements	A significant length of Sunset Avenue, between the pedestrian bridge and Sunset Road, will require reconstruction and realignment. The length of Sunset Avenue, between the pedestrian bridge and JPA, will require reconstruction and realignment. Improvements to Stribling Avenue and Piedmont Road are necessary.
Number of New Bridges/ Culverts	2 bridges
Right-of-Way (acres)	3.5 acres
Retaining Walls	Along floodplain, at railroad crossing
Aesthetics Issues	Under all options there will be a need for streetscaping.
Environmental Issues	
Acres of Wetlands	May be wetlands in floodplains. Need to avoid stream along northside of Sunset Avenue.
Number of Wetland Crossings	1 or more
Acres of Floodplains	1.35 acres
Number of Floodplain Crossings	2 (one part of the road may run linearly in the floodplain)
Number of Stream Crossings	4 (2 may not exist, will need field verification)
Noise	
Number of Homes Impacted	15 homes
Number of Businesses Impacted	None noted.
Development/Redevelopment Potential	Redevelopment opportunity along south side of Sunset Avenue if homes are taken. Improves access to land south of the railroad corridor in the east part of the study area.
Public Acceptability	Severe issues - may require residential property purchases/relocations, uses residential streets, connects to existing cul-de-sac roadway, traffic may be viewed as cut-through.
Parking	No impact.
Local Street Connectivity	Creates a connection between residential areas north and south of the railroad corridor.
Intersection Operations	Increased traffic volumes on Sunset Avenue, Sunset Road, Stribling Avenue and Piedmont Avenue. and Fontaine Avenue/Piedmont Avenue and Sunset Avenue/Jefferson Park Avenue intersections.
Intersection Spacing	No issues noted.
Emergency Response	Provides improved access to Sunset Avenue area south of the pedestrian bridge and south of I-64.
Traffic Calming	All options may suggest considerations of traffic calming measures.
Bike/Pedestrian Accommodation	5-foot striped bike lanes on new location sections and shared lanes on existing sections, unless widening is permissible
Transit Accommodation	Potential to serve several residential areas. Opportunities for bus pull outs.
Route Attractiveness	Moderately attractive, due to neighborhoods streets and multiple conflict points. Low speed - 25 MPH.
Constructability	Linear roadway alignment along the floodplain on Sunset Avenue and potentially severe neighborhood opposition to the connection of a through street and extension of it across the railroad corridor (to Piedmont Avenue). Significant disruption to neighborhoods.
Planning Level Costs, based on 2-lane typical section CONSTRUCTION COSTS ONLY	$7,040,000

Charlottesville, Virginia

Area B - Alternative 5
Sunset Connector

Kimley-Horn and Associates, Inc. September 2004

NORTH

0 200 400 Feet

Legend

Potential Corridor
- Existing
- New Location
- Right-of-Way

Bridges
- Existing
- Potential

- Street
- Railroad
- Area B Boundary
- Property Line
- Buildings

Topography
- River or Stream
- Body of Water
- Wetland
- Floodplain

III.B "By Right" Development

This alternative examines implications associated with existing zoning. This map is a compilation of current zoning in the City and County. Traffic would occur on existing roadways with no new infrastructure improvements This is the "status quo" alternative of by-right build-out. There are serious problems associated with this "alternative" including an absence of services (retail and public) in this part of the community and overloading of the limited roads available to accommodate the vehicular traffic.

This scenario was modeled to gain an understanding of transportation impacts over the next twenty years absent any changes in current zoning and without the benefit of any additional connector roads. In other words, it is presumed to operate with the existing infrastructure alone. The modeling was conducted according to VDOT and nationally accepted standards of practice, utilizing relevant data at the regional and sub-regional scale.

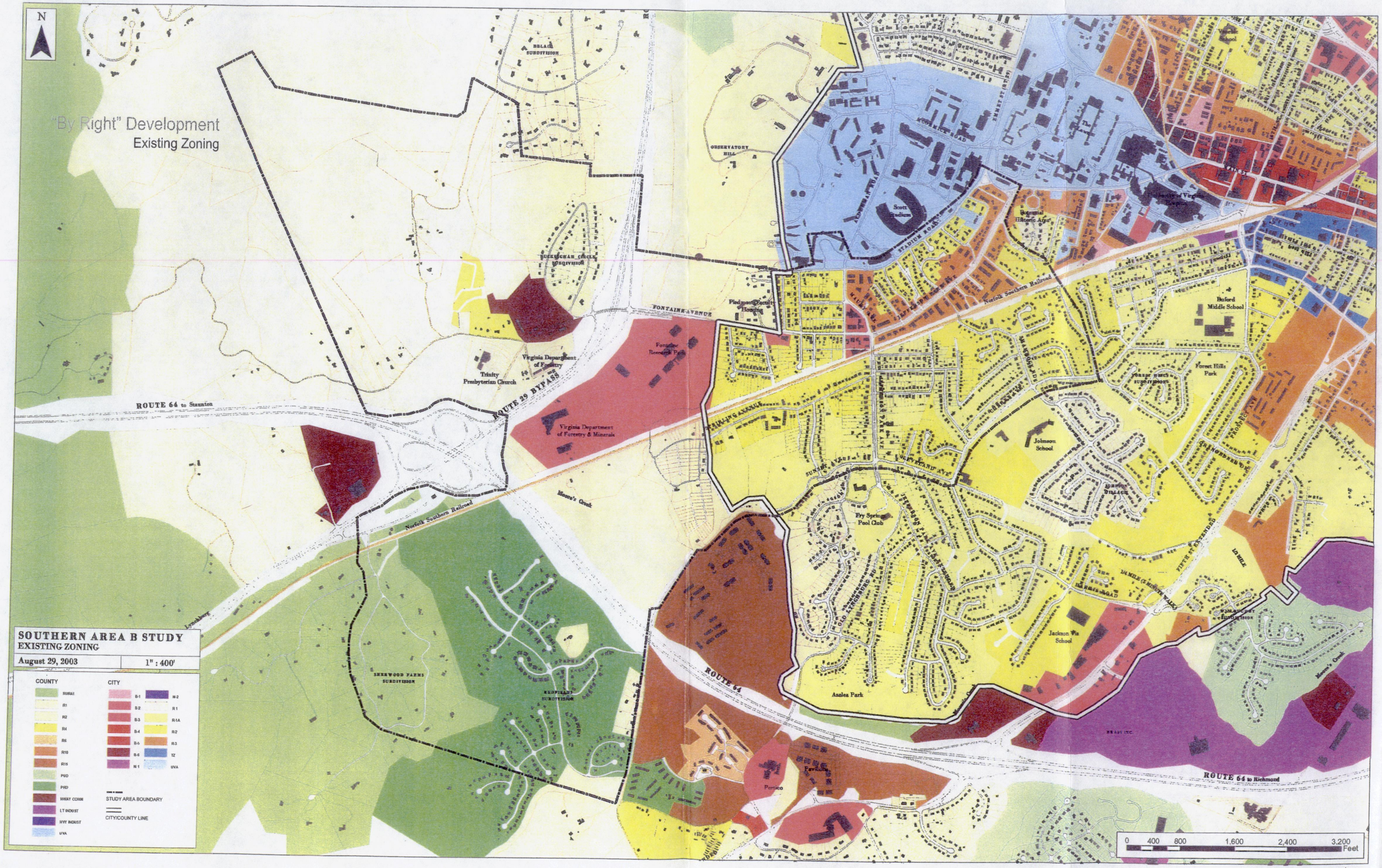
The impacts of "by right" or "trend" build-out are serious. Several roads clearly fail including Fontaine Avenue, JPA, and West Main Street in the City. Many other streets in the area become loaded with significant increases in Average Daily Trips (ADT's) including Harris Road, Shamrock Road, McCormick Road, Alderman Road, Cherry Avenue, Fifth Street Extended, Ridge Street, and Fontaine Avenue and Sunset Avenue Extended in the County. These findings confirm intuitive impressions. Several of these roads are already perceived to be over-taxed in their ability to accommodate the traffic as it has grown over the past ten years.

Under "by right" development, significant additional residents will appear within the County's Development Area (within and in some instances beyond Area B), and additional population will derive from infill development in the intensified areas of the City, particularly along JPA in the "University Precinct". Very little service retail exists for these current and new residents, and by-right development will be highly unlikely to accommodate local functions – thereby exacerbating traffic problems. Transit does not currently serve much of the area, so it is not available as a traffic reduction opportunity under "by right" development.

Under this scenario, virtually all of the burden of accommodating the pressures of growth would fall to the localities and VDOT, as there is little likelihood that private sector development would cover substantial percentages of public improvements.

These issues challenges associated with "by right" development in this area confirm the importance that the Three Parties attach to the coordinated resolution of issues within Area B.

Description	"By Right" Development Accommodate traffic on existing roadways. This is the "status quo" alternative of by-right build-out with no new infrastructure improvements.
Length (feet) - Total	
Existing Alignment	
New Location	
Horizontal & Vertical Geometrics/ Alignment	Sections of Old Lynchburg Harris Road, Fontaine Avenue, Jefferson Park Avenue, does present some horizontal and vertical geometry issues.
Intersections and Driveways – Reconfigurations/Conflicts	Multiple driveway and intersection conflicts coupled with an anticipated increase in traffic volumes.
Local Street Improvements	Due to poor geometrics along Old Lynchburg Road, some improvements may be required.
Number of New Bridges/Culverts	n/a
Right-of-Way (acres)	Depending on the level of improvements required, some right-of-way may be necessary.
Retaining Walls	n/a
Aesthetics Issues	n/a
Acres of Wetlands	n/a
Number of Wetland Crossings	n/a
Acres of Floodplains	n/a
Number of Floodplain Crossings	n/a
Number of Stream Crossings	n/a
Noise	Minimal change - attributable to increase in traffic volumes
Number of Homes Impacted	Improvements to Harris Road, Fontaine Avenue, Jefferson Park Avenue may require some right-of-way
Number of Businesses Impacted	n/a
Development/Redevelopment Potential	No change.
Public Acceptability	Does not require acceptance, but does require tolerance of existing conditions to remain relatively the same.
Parking	n/a
Local Street Connectivity	No change anticipated
Intersection Operations	Key intersections along Old Lynchburg Road will experience an increase in traffic volumes due to additional development
Intersection Spacing	n/a
Emergency Response	No change.
Traffic Calming	None applicable.
Bike/Pedestrian Accommodation	No change.
Transit Accommodation	No change.
Route Attractiveness	Marginally attractive.
Constructability	Should not be an issue.
Planning Level Costs, based on 2-lane typical section CONSTRUCTION COSTS ONLY	Lowest.



SOUTHERN AREA B STUDY
EXISTING ZONING

August 29, 2003	1" : 400'

COUNTY	CITY		
RURAL	B-1	M-2	
R1	B-2	R-1	
R2	B-3	R-1A	
R4	B-4	R-2	
R6	B-5	R-3	
R10	B-6	TZ	
R15	M-1	UVA	
PSD			
PRD			
HWAY COMM	STUDY AREA BOUNDARY		
LT INDUST	CITY/COUNTY LINE		
HVY INDUST			
UVA			

III.C Transportation and Land Use Analysis

Traffic modeling has been conducted for the Area B Study Area and its immediate environs.The results and analysis are included below. The demand and feasibility of roads, sidewalks, bicycle facilities, and public transit varies with the density, design, mix, and location of land use.

Methodology and Modeling

The MINUTP travel demand model was used for the Area B Study to forecast traffic demand for the study area and related regional roads. Year 2025 forecasts were generated for the "By Right" Development scenario and three Framework Plan alternative scenarios. The "By Right" scenario reflects the build out of Area B as allowed by existing zoning. The alternative scenarios reflect the development of the area with the inclusion of the proposed roadways and land uses associated with each Framework Plan alternative.

The MINUTP model was provided by VDOT for use in the travel demand modeling. The Charlottesville Area Regional Transportation (CHART) Study network, reflecting the Metropolitan Planning Organization's Long Range Transportation Plan (LRTP), was the base network for all scenarios. The Area B study area was detailed in the network by adding new roadway connections and socioeconomic data forecasts.

MINUTP Model Calibration

The Charlottesville MPO MINUTP model was used as the basis for forecasting travel demand in the study area. Prior to performing the analysis, however, the existing 1998 base year highway network was revised to ensure that the model is accurate and sensitive to changes in the study area. The resulting network can be considered a sub-area model for Area B. Several methods were used to refine and calibrate the sub-area model, including TAZ splits and centroid adjustments and changes to speed/capacity classifications. In addition, several locally-relevant roads were added that otherwise are not included in the regional model:

- Stribling Avenue west of Jefferson Park Avenue;
- Sunset Road from Stribling Avenue to Sunset Avenue;
- Stadium Road from Alderman Road to Mimosa Drive;
- Mimosa Drive from Stadium Road to Summit Drive, and
- Summit Drive from Mimosa Drive to Fontaine Avenue.

The end result of this effort was a refined and locally relevant sub-area model that more accurately replicates existing study area traffic flows compared to the regional model.

Socioeconomic Data

As part of the travel demand forecasts, new socioeconomic data was developed for the Framework Plan alternatives. Proposed land uses were aggregated to the Traffic Analysis Zone (TAZ) level and converted to variables used in the model, including total dwelling units and employment by type (Industrial, Commercial Service). To make the translation, assumptions were made about gross densities and intensities associated with each land use type in the Framework Plan (see table below).

Land Use Type	Assumptions	
	Dwelling Units per Acre	Employees per Acre
Mixed Use	20	10
High Density Residential	12	NA
Medium Density Residential	2	NA
Low Density Residential	1	NA
Institutional	NA	80
Commercial/retail	NA	17

Bicycle and Pedestrian Facilities

New streets should typically include two lanes for vehicular travel, bike lanes, sidewalks, and street trees where appropriate (both sides). Street sections should be developed to support traffic calming and pedestrian/bike safety. Work in Area B should coordinate with the City's recent Bike/Ped Master Plan and the University's priorities in this area.

The existing topography in much of the Area B setting presents a challenge for bicycle and pedestrian use. However, several of the alternatives would change this setting. For example, a new connector between Sunset Avenue Extended and Fontaine Avenue would involve gradual grade change moving in the north-south direction. With this change, it is entirely plausible for travel to occur through non-vehicular alternatives.

Additional resources can evolve in concert with the City, County, and University's open space system along Moore's Creek, its tributaries and Observatory Hill (with its many trails). The Rivanna Trail System is a community-wide resource that could expand through careful attention to opportunities within and beyond Area B. One such opportunity is along the current floodplain where Stribling Road travels up to Fontaine Avenue. As this area evolves, that could become a dedicated bike path tied into paths on University property at Observatory Hill and into the central Grounds.

Transit Issues

The central areas of the University are very well served by the University Transit System (UTS), while many areas of the City are well served by the Charlottesville Transit System (CTS). Most of Area B however is currently outside the area of service for both of these systems. As the Area evolves with a coordinated effort of transportation planning and land-use decisions, opportunities for transit expansion to service this area will emerge, especially to the north of Route 64 and east of Route 29 bypass. The possible new centers at Trinity Presbyterian Church and along Fifth Street Extended could also generate enough activity to merit CTS extension to service these.

Coordination between CTS and UTS will continue to be important in providing as much seamless connection between the two systems as possible. There may be areas that are best served by one system or the other, and in the end the key issue will be the extent to which non-automobile options emerge to provide choice for students, employees and residents of the community. Creating convenient access to transit provides a viable alternative transportation option within the study area. With the expansion of CTS and UTS routes and the expected increase of transit as a preferred mode of transportation, car trip generation can be reduced.

The framework plan is designed to promote walking and transit trips through an integrated network of pedestrian and bicycle connections, greenways, and transit routes. The plan's compact, neighborhood-oriented land use strategy maximizes the potential number of residences, businesses, and employers served by transit. Through the coordinated efforts of CTS and UTS, the expansion of transit service within the study area should focus on connecting locations of high demand. The Area B design and land use concept locates neighborhood centers and intense development along the major north/south road in the area. These areas will be well served by fixed route transit. A possible route is illustrated in this report (pages 38 & 39).

Another transit issue involves "shuttles". Currently, for example, private shuttles operate between two of the recent apartment developments on Sunset Avenue Extended and the central Grounds at UVA. Also, the University runs shuttle service to the Medical Center from several locations. It may be more efficient to examine "demand" in these various areas to see if full CTS or UTS service could be justified in these or other areas.

Parking

In some development areas, on street parking could supplement the local parking resources while helping to "calm" traffic. Posted speeds on these roads should not exceed 35 miles per hour, making on-street parking feasible. The major parking opportunity in the area is at the existing Fontaine Research Park. Currently, extensive on grade parking exists in conjunction with the office, medical and research functions. Structured parking could be introduced to increase the parking capacity on the site. Additionally, this parking could serve multiple duties, changing during different times of the day, week, and throughout the year. For example, additional event parking for UVA facilities (including Scott Stadium) could occur on this site with shuttle bus connections. Depending on the University's strategies with regard to satellite parking, this area could accommodate some parking for the Medical Center with transit connections back to the central medical "campus". Any new structured parking could include "mixed-use" where appropriate, with some ground level retail or service functions.

Housing Issues

County

The County has committed to neighborhood-oriented, pedestrian-friendly development within its designated growth areas. Within the County's portion of Area B, there are at least two settings where compact, interconnected "neighborhoods" could emerge. One is at the "Granger property", currently undeveloped land to the south of Fontaine Research Park and north of Route 64 and Sunset Avenue Extended. Housing numbers in this area could be significant (500-750 units for the Granger property alone and perhaps another 1,000 units in the development area). If one of the Fontaine/Sunset Connectors is built, the Granger property development along with existing housing at Redfields, Jefferson Ridge, and Eagle's Landing would have more direct access to the University area as well as the Route 29 bypass on-ramp. Small scale service and mixed-use would be possible on the Granger property, and the density could justify transit connections either through CTS or UTS. With the County's provision of 15% units in an affordable range, a mixture of sale price levels could be provided in this development along with the potential of this development helping to fund infrastructure investments for portions or road and bridges that benefit this property. Many residents in this area would bike or walk to Fontaine Research Park or bike to the Grounds or Medical Center from this location.

The other area is within a 1/4 mile radius of Trinity Presbyterian Church. Over time, this setting could evolve into a more traditional neighborhood quality with housing surrounding the major presence of the church. With added critical mass in this area, there may be sufficient justification for transit connection, which could benefit members of the congregation, including UVA students, as well as new residents. Several people in the nearby neighborhoods have suggested that the most appropriate use would be for UVA faculty housing (as opposed to student housing). Bicycle commuting from this area would certainly be an option since it is less than two miles to the Rotunda or Medical Center.

A third area exists outside the designated Area B – in the vicinity of Fifth Street Extended and Old Lynchburg Road. This is more of an infill development opportunity, where housing and limited mixed-uses could be introduced. The county's anticipated new elementary school could be the focal point of this neighborhood center, with additional housing developing around it.

City

The City's portion of Area B includes a "University Precinct" as defined in its new zoning code. This represents a significant infill redevelopment opportunity that could result in substantial additions of rental housing units over time. In fact, current market forces have resulted in attached housing units on tight infill sites within close proximity to the Grounds. Student preferences for off Grounds housing start with the 14th Street area and other neighborhoods north of University Avenue. Additional housing will emerge between Jefferson Park Avenue and the railroad tracks, a process that could be accelerated if limited mixed-use emerges in concert with the housing (small scale service retail functions). The JPA area has the advantage of proximity to the Grounds and excellent access through pedestrian and bicycle provisions and transit service. Most students prefer to live in close proximity to the Grounds, and there appears to be substantial opportunity for the private sector to develop in these areas to meet the demand. Overall, the City has seen nearly 600 units of new residential construction between 2000-2003, more than 50% of which are attached or multi-family complexes. There are many more units under construction within the City at this time.

University

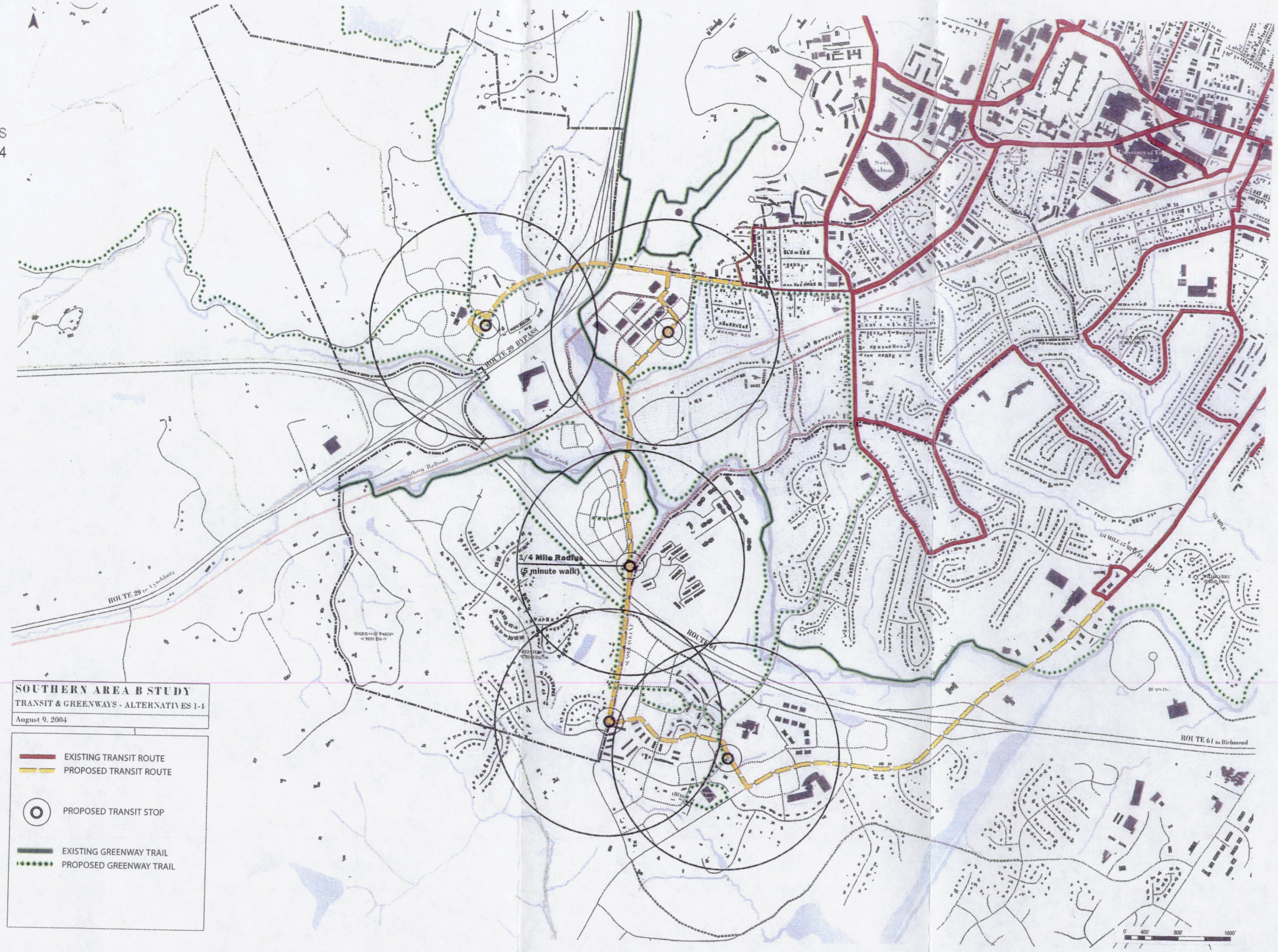
There are several opportunities that the University could consider to strengthen housing opportunities for students, faculty and staff. With regard to first year students, additional housing will be produced to accommodate the modest anticipated growth of approximately 100 students/year. Over a ten-year period, if the University continues to provide student housing for approximately 37% of its students, this would result in demand for 370 additional on Grounds beds and 630 beds off Grounds. As noted earlier, infill development in designated areas of the City can accommodate this growth in ways that do not require each resident to own a car. In fact, as in other urbanized areas surrounding campuses in the U.S., the convenience of pedestrian and bicycle access to classes and supporting retail services can result in a drop in the percentage of upper year students who bring cars to Charlottesville (examples of this include Princeton, Stanford, and other campuses with close town/gown relations).

Faculty housing has several dimensions. The cost of home purchases and rentals in the Charlottesville area can be prohibitively expensive for new faculty. At the same time, there would be advantages in stabilizing neighborhoods if more faculty were choosing to live in existing neighborhoods. The University could consider some form of location-based mortgage support that would provide incentives for faculty to purchase "starter" homes in existing neighborhoods surrounding Grounds – within a defined radius from the Lawn. In past years, the University had a mortgage support program that was helpful to new faculty, and many faculty used the program to purchase their first home within existing residential neighborhoods. A new location-based program could be used to support house staff, interns, and nurses at the Medical Center who might purchase condominiums or apartments in walking distance to the hospital.

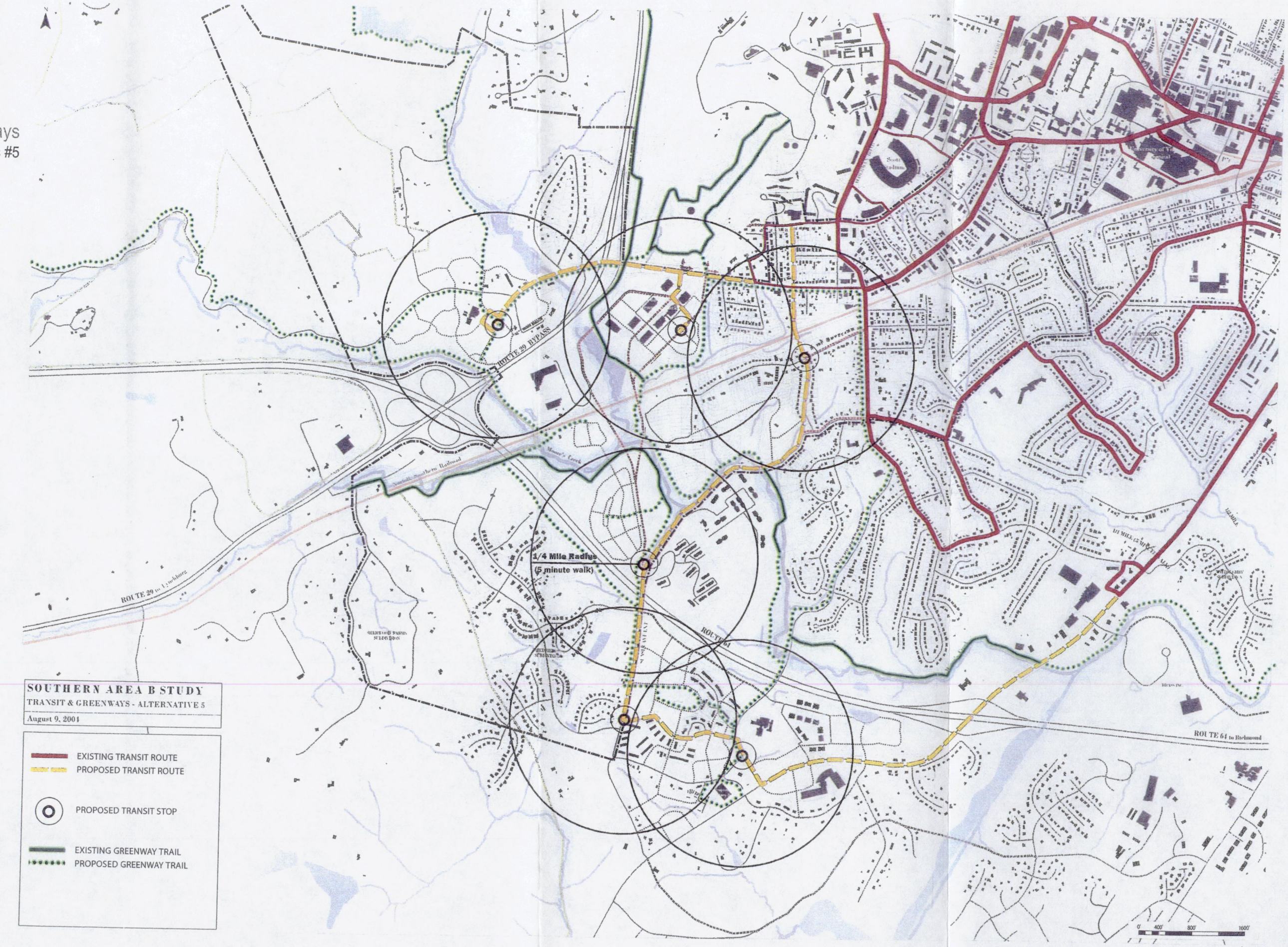
Another housing issue is the direct provision of faculty housing by the University. Piedmont Housing is the only such facility at this time, although another faculty/staff apartment building used to be available on Rugby Road at Beta Bridge. Redevelopment of the Piedmont Housing site could include replacement housing for faculty or the University could study other options such as faculty housing in conjunction with new residential colleges elsewhere (such as Ivy Road south of the new parking structure). The Faculty Senate survey of concerns indicated strong interest among faculty in the University addressing faculty housing.

Clearly all of these housing issues speak to larger policy questions that the University would need to consider in a coordinated manner. Stanford University undertook one such study through the "Provost's Committee on Faculty Housing Policy" (March, 2000). A similar consideration of issues and options could yield significant strategies and collaborative opportunities for the benefit of faculty, staff and the surrounding City and County neighborhoods.

Transit and Greenways
Alternatives #1-#4



Transit and Greenways
Alternatives #5



SOUTHERN AREA B STUDY
TRANSIT & GREENWAYS - ALTERNATIVE 5
August 9, 2004

- EXISTING TRANSIT ROUTE
- PROPOSED TRANSIT ROUTE
- PROPOSED TRANSIT STOP
- EXISTING GREENWAY TRAIL
- PROPOSED GREENWAY TRAIL

III.D Traffic Modeling Results

Forecast Results

A comparative traffic counts table with CHART 2025 data is included following this section. All traffic model runs are organized by roadway segment. The following information is included in the matrix: Road Segment; Existing Traffic Counts (data provided by others); CHART 2025 data and Level of Service are included for reference. Level of Service was calculated using the Department of Transportation's chart for urbanized areas (typical of national standards and methodology). LOS ratings of A and B are not achievable within the Area B roadway network. The short road segments used for analysis preclude the "free flow" necessary for ratings A and B.


12000
13000
7200
5900
19000
19200
17000
11723
13500
14000
3500
3600
12000
14200
25000
5300
14000
4800
4300
1100
2300
4500
7000
8600
9300
16000
SOUTHERN AREA B STUDY
Existing Traffic Counts (2001)
August 9, 2004
VOLUME to CAPICITY RATIO
< 0.8
0.8 to 1.0
1.0 to 1.2
> 1.2
All volumes reported as Average Daily Trips
'Average Daily Trips' is the total volume of vehicles passing a point or segment of a roadway facility, in both directions, during a 24-hour period. It is commonly obtained during a given time period, in whole days greater than one day and less than on year, divided by the number of days in that time period.


22700
4700
15700
4800
4400
1300
6000
12800
15900
8600
9700
16200
17200
6100
9900
16200
27100
36100
8900
7600
9600
600
1100
4600
18700
6300
2500
7700
4200
2700
3600
13600
14500
26300
12300
3600
6000
1
2
3
4
SOUTHERN AREA B STUDY
Alternatives 1-4 Traffic Counts (2025)
August 9, 2004
VOLUME to CAPICITY RATIO
< 0.8
0.8 to 1.0
1.0 to 1.2
> 1.2
All volumes reported as Average Daily Trips
'Average Daily Trips' is the total volume of vehicles passing a point or segment of a roadway facility, in both directions, during a 24-hour period. It is commonly obtained during a given time period, in whole days greater than one day and less than on year, divided by the number of days in that time period.

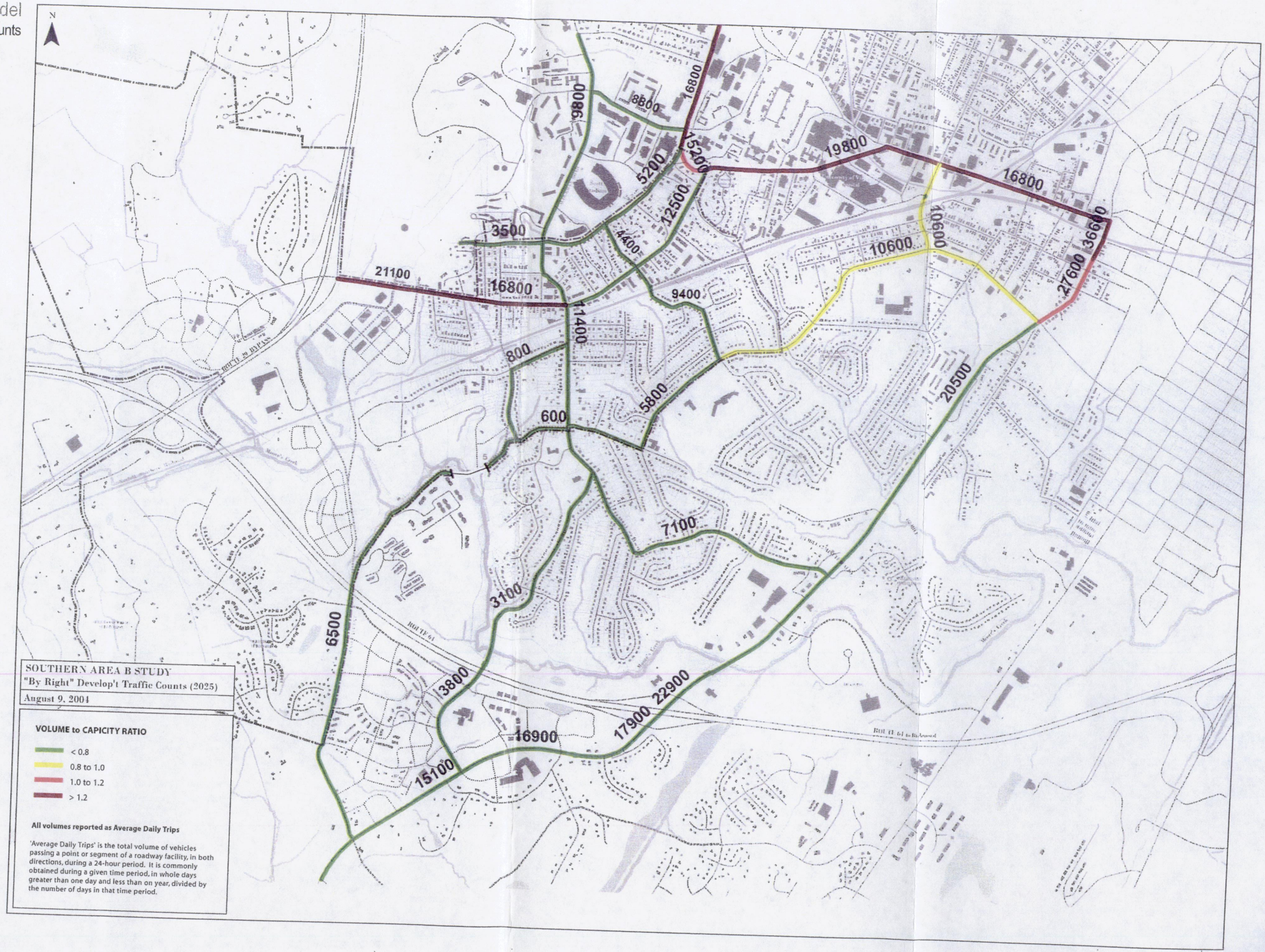
SOUTHERN AREA B STUDY
Alternative 5 Traffic Counts (2025)
August 9, 2004

VOLUME to CAPICITY RATIO

- < 0.8
- 0.8 to 1.0
- 1.0 to 1.2
- > 1.2

All volumes reported as Average Daily Trips

'Average Daily Trips' is the total volume of vehicles passing a point or segment of a roadway facility, in both directions, during a 24-hour period. It is commonly obtained during a given time period, in whole days greater than one day and less than on year, divided by the number of days in that time period.


N
16800
9800
3800
5200
12500
19800
16800
3500
4400
10600
10600
21100
16800
9400
27600
36600
11400
800
600
5800
20500
7100
3100
6500
3800
16900
17900
22900
15100
SOUTHERN AREA B STUDY
"By Right" Develop't Traffic Counts (2025)
August 9, 2004
VOLUME to CAPICITY RATIO
< 0.8
0.8 to 1.0
1.0 to 1.2
> 1.2
All volumes reported as Average Daily Trips
'Average Daily Trips' is the total volume of vehicles passing a point or segment of a roadway facility, in both directions, during a 24-hour period. It is commonly obtained during a given time period, in whole days greater than one day and less than on year, divided by the number of days in that time period.

Traffic Model

Comparative Traffic Count Table with LOS

Area B - Traffic Modeling August 9, 2004

ROAD NAME	FROM	TO	GEOMETRY	CAPACITY	EXISTING (2001)*		"BY RIGHT" (2025)		CHART (2025)		FRAMEWORK PLAN * (2025)			
											ALTERNATIVES 1 - 4		ALTERNATIVE 5	
					VOLUME	LOS	VOLUME	LOS	VOLUME	LOS	VOLUME	LOS	VOLUME	LOS
ALDERMAN RD	STADIUM RD	THOMPSON RD	2LU	12800	7200	D	9800	D			9700	D	10500	D
CHERRY AVE	SHAMROCK RD	RIDGE ST	2LU	12800	12000	E	10600	D	9900	D	8900	D	9000	D
CHERRY AVE	CLEVELAND AVE	SHAMROCK RD	2LU	12800	5300	C	5800	C	5000	C	4600	C	4600	C
CLEVELAND AVE	JPA EXT	CHERRY AVE	2LU	12800	2700	C	2400	C	5000	C	2000	C	4400	C
EMMET ST	STADIUM RD	JPA	2LU	12800	19700	F	15200	F			14400	F	16700	F
EMMET ST	STADIUM RD	UNIVERSITY AVE	2LU	12800	19000	F	16800	F			15900	F	17600	F
FIFTH ST	SCL	CHERRY AVE	5LU	32200	14000	C	20500	C	29000	D	18700	C	20600	C
FIFTH ST EXT	STAGECOACH RD	WINFIELD CIR	5LU	32200	8600	C	17900	C	23000	C	14500	C	15800	C
FIFTH ST EXT	WINFIELD CIR	I-64	5LU	32200	9300	C	17900	C	23000	C	14500	C	15800	C
FIFTH ST EXT	I-64	SCL	5LU	32200	16000	C	22900	D	30000	D	26300	D	29000	D
FIFTH ST EXT	HICKORY	OLD LYNCHBURG RD	5LU	32200	4500	C	15100	C	5000	C	12300	C	13000	C
FIFTH ST EXT	OLD LYNCHBURG	STAGECOACH RD	5LU	32200	7000	C	16900	C	19000	C	13600	C	14000	C
FONTAINE AVE	WCL	JPA	2LU	12800	13000	F	16800	F	19000	F	15700	F	18700	F
FONTAINE AVE	US 29	WCL	2LD	16800	12000	E	21100	F	21000	F	22700	F	22000	F
HARRIS ROAD	JPA EXT	FIFTH ST	2LU	12800	4800	C	7100	D	8500	D	6300	C	7200	D
JPA	EMMET ST	MAIN ST	3LU	16000	17000	F	19800	F	21000	F	17200	F	18400	F
JPA	MAURY AVE	EMMET ST	2LD	16800	14000	D	12500	D	12000	D	12800	D	13200	D
JPA	MAURY AVE	CLEVELAND AVE	2LD	16800	10000	D	11400	D	14000	D	9600	D	12800	D
JPA EXTENDED	CLEVELAND AVE	HARRIS RD	2LU	12800	3900	C	8600	D	6500	C	7500	D	7400	D
MAIN ST	TENTH ST	FIFTH ST	2LU	12800	13500	F	16800	F	19000	F	16200	F	18800	F
MAIN ST	JPA	TENTH ST	2LU	12800	18000	F	19500	F	22000	F	16000	F	18100	F
MAURY AVE	JPA	STADIUM RD	2LU	12800	6700	C	6500	C			6100	C	7800	D
MAYWOOD CONNECTOR	JPA	NINTH-TENTH CNCTR	2LU	12800							6100	C	7600	D
MAYWOOD CONNECTOR	SHAMROCK RD	MAYWOOD	2LU	12800							1300	C	2000	C
MCORMICK RD	ALDERMAN RD	EMMET ST	2LU	12800	5900	C	8800	D			8600	D	9900	D
NEW	OLD LYNCHBURG	SUNSET	2LU	12800							2700	C	2400	C
FONTAINE/SUNSET CONNECTOR	FONTAINE	SUNSET	2LU	12800							7700	D		
NEW	FONTAINE	STADIUM RD	2LU	12800							4700	C	6000	C
BRASS INC CONNECTION	FIFTH ST	AVON	2LU	12800							6000	C	7400	D
NEW	STRIBLING AVE	FONTAINE RD	2LU										8200	D
NEW	FONTAINE RD	STADIUM RD	2LU										2200	C
NINTH-TENTH ST CONNECTOR	MAIN ST	CHERRY AVE	2LU	12800	11723	D	10600	D	12000	E	9900	D	11600	D
OLD LYNCHBURG RD	JPA EXT	SCL	2LU	12800	4300	C	3100	C	8000	C	2500	C	5000	C
OLD LYNCHBURG RD	FIFTH ST EXT	SCL	2LU	12800	2300	C	3800	C	12000	D	3600	C	6800	D
RIDGE STREET	CHERRY AVE	MONTICELLO AVE	4LU	25400	14200	D	27600	F	32000	F	27100	F	28200	F
RIDGE STREET	MONTICELLO AVE	MAIN ST	4LU	25400	25000	E	36600	F	45000	F	36100	F	37000	F
SHAMROCK RD	STADIUM RD	JPA	2LU	12800			4400	C	7000	D	4400	C	6100	C
SHAMROCK RD	JPA	CHERRY AVE	2LU	12800	3600	C	9400	D	13000	F	7600	D	8300	D
SOUTHERN CONNECTOR	SUNSET RD	AVON	2LU	12800					15,000	F	3600	C	5900	C
STADIUM RD	ALDERMAN RD	EMMET ST	2LU	12800	3500	C	5200	C	9500	D	6000	C	7400	D
STADIUM RD	SUMMIT ST	ALDERMAN RD	2LU	12800			3500	C			4800	C	6000	C
STRIBLING AVE	FONTAINE AVE	JPA	2LU	12800			800	C			600	C	1100	C
SUNSET AVE	WCL	SUNSET RD	2LU	12800									8600	D
SUNSET AVE	SUNSET RD	JPA EXT	2LU	12800			600	C			1900	C	3600	C
SUNSET AVE EXT	FIFTH ST EXT	WCL	2LU	12800			6500	C	4500	C	4200	C	4200	C
SUNSET RD	STRIBLING AVE	SUNSET AVE	2LU	12800			1800	C			1100	C	8800	D

* Counts represent the most current VDOT data. Where roads did not have 2001 VDOT counts, the most recent VDOT data was used.

APPENDIX 1 **MEMORANDUM**

TO: Wayne Cilimberg, Director of Planning and Community Development, Albemarle County
Jim Tolbert, AICP, Director of Neighborhood Development Services, City of Charlottesville
Mary V. Hughes, University Landscape Architect

FROM: Ron Higgins, AICP, Planning Manager, City of Charlottesville
Susan E. Thomas, AICP, Senior Planner, Albemarle County

DATE: May 16, 2003

RE: Southern Urban Area B Study Advisory Committee

The City, County and University staff members who are serving as contacts for the Southern Urban Area B Study have been asked for information and recommendations on the process and composition of the Task Force and Advisory Committee that typically are formed as a part of an Area B study process. In the previous JPA/Fontaine Area B Study, a four-member Task Force was appointed to manage the process, consisting of the City and County planning directors, a representative from Facilities Management (the position of Architect for the University did not yet exist), and the chair of the managing jurisdiction's planning commission (the City). Because both of the planning directors, the University Architect and Planning Commissioners from the City and County sit on the PACC Tech committee, in our opinion a Task Force of those individuals is appropriate and can be designated.

During the last study, a six-member Advisory Committee was established to work with the Task Force that included two neighborhood and agency/department representatives from each jurisdiction. Members were confirmed respectively by City Council or the Board of Supervisors. To address issues and include key stakeholders within these neighborhoods, we recommend that the Southern Urban Area B Study Advisory Committee be increased by one member for each jurisdiction, as follows:

<u>City (three members)</u>
One representative each from the Jefferson Park Avenue and Fry Spring neighborhoods
One representative from the Blue Ridge Apartment Council (BRAC)

<u>County (three members)</u>
One representative each from Redfields and Buckingham Circle neighborhoods
One representative from a student rental housing property located within the study area

<u>University (three members)</u>
One representative from the UVa. Real Estate Foundation
One representative from the University Parking and Transportation Department (Rebecca White)
One University of Virginia student (e.g., Chair of Student Council Housing Committee)

PACC Tech has decided that these representatives should be appointed by the respective Planning Commissions and the Master Planning Council. We request that you initiate this process in your respective jurisdictions.

IV. APPENDIX

1 Project Advisory Group
- Advisory Committee Memorandum (May 16, 2003)
- Project Advisory and Stakeholders Group Composition
- Advisory Group Welcome

2 Existing Conditions Report

3 Housing
- Notes from Student Focus Group
- City of Charlottesville Housing Policy Task Force: Chapter Four - Data Collection
- City of Charlottesville Five Year Housing Plan

4 Faculty Housing
- Faculty Comments on Faculty Housing
- Report of The Provost's Committee on Faculty Housing Policy (Stanford)

5 Area B Open House Comments

6 Project Advisory Group Comments (January 22, 2004)

7 Kimley-Horn Proposed Typical Cross-Sections

8 Transportation Modeling Memorandum

9 Southern Urban Area B Alternatives Ratings

Southern Urban Area B
Project Advisory Group and Stakeholders - Combined List

NAME	AFFILIATION
Juandiego Wade <JWADE@albemarle.org>	County – Transportation
Lee Catlin <LCATLIN@albemarle.org>	County – Community Relations
Mark Graham <mgraham@albemarle.org>	County – Community Development
Mary Joy Scala <scala@charlottesville.org>	City – N'hd Dev Services
Bill Goldeen <goldeen@ntelos.net>	County - Buckingham Circle resident
Bruce Stouffer <bbs2c@virginia.edu>	University Real Estate Foundation
David Benish <DBENISH@albemarle.org>	County – Community Development
Fred Missel <fam5c@virginia.edu>	University Real Estate Foundation
George Telford <George.Telford@adelphia.net>	County - Redfields resident
John Bailey <jmb5vr@virginia.edu>	Student council/housing
Kevin Kotlarski <kotlarski@virginia.edu>	JPA N'hd Assn
Mary Hughes <mvh2t@virginia.edu>	University – Office of the Arch
Nancy Damon <ncd8nr@virginia.edu>	City – Fry's Spring N'hd Assn
Will Rieley <wdr@rieleyandassociates.com>	County – Planning Commissioner
Dan Mahon <DMAHON@albemarle.org>	County – Greenways Planner
David Beardsley <beardsley@charlottesville.org>	(now departed)
David Hirschman <DHIRSCH@albemarle.org>	County – Water Resources
Rebecca White <rwc6j@virginia.edu>	University – Parking and Transit
Richard Spurzem <richard@neighborhoodprops.com>	County – student housing developer
Wayne Cilimberg <WCILIMB@albemarle.org>	County – Community Development
Shannon Yadsko <yadsko@virginia.edu>	(departed)
Ron Jenkins <jenkinsr@dof.state.va.us>	Va. Department of Forestry
Phil Garber <garber@charlottesville.org>	C'ville Gas Division
Rick Jones <rjones@msc-rents.com>	City – student housing developer
Diana Foster <dfoster@newventure.com>	Rivanna Trails Foundation
Gaylon Beights <gaylon@beightsdevelopment.com>	County – Redfields developer
Mike Farruggio <Farruggio@charlottesville.org>	City – Fry's Spring N'hd Assn
Jim Palmborg <palmborg@charlottesville.org>	City – Public Works
Matt Grimes <matthew.grimes@virginiadot.org>	Virginia Department of Transportation
Jim Tolbert <tolbertj@charlottesville.org>	City – N'hd Dev Services
David Neuman <neuman@virginia.edu>	University of Virginia

COUNTY OF ALBEMARLE
Department of Planning & Community Development
401 McIntire Road, Room 218
Charlottesville, Virginia 22902-4596
(804) 296 - 5823
Fax (804) 972 - 4035

August 8, 2003

Address
.....

Dear.....:

On behalf of Albemarle County, the City of Charlottesville, and the University of Virginia, I am writing to welcome you as a member of the Advisory Group for the Southern Urban Area B Study, for the JPA/Fontaine area. As you may know, in 1986 the three jurisdictions agreed to coordinate planning efforts in Area "B," which includes land lying "at the boundaries of or between the University and either the City or County and on which the activities of any or all three of the parties might have an effect (p. 1of the Agreement)." A number of studies have been completed over the years, and in fact the current project updates an earlier study of the same area, completed in 1988.

The scope of the study is attached, along with a map of its geographic area. The product will be a framework plan focusing on significant demographic, socio-economic, land use, transportation, and student housing patterns and trends. The timeframe for the study is one year. Because the budget is limited, the study will not incorporate the level of detail associated with the City's Corridor Study or the County's Crozet Master Plan. Nonetheless, we believe that when completed it will offer valuable guidance for future land use, transportation and housing decisions in this geographic area.

The Renaissance Planning Group (RPG) has been retained as planning and urban design consultants for the study, and joins me in welcoming you to this project. We have scheduled the first meeting of the Project Advisory Group for Thursday, September 4, from 4 –5:30 p.m. in Room 235 of the County Office Building. Your role, as a representative of your jurisdiction, is a varied one: we hope that you will bring issues and ideas to the attention of staff and the consultants; review and comment on information, presentations and reports prepared by the consultants; and, assist us by informing neighbors, colleagues and other interested parties about the progress and conclusions of the study.

We look forward to seeing you on September 4, when we will have the opportunity to discuss the study in more detail. Please RSVP regarding your attendance at this meeting to me at 296-5823 extension 3438, or via e-mail to sthomas2@albemarle.org.

Sincerely,

Susan E. Thomas, AICP
Senior Planner

APPENDIX 2

SOUTHERN URBAN AREA B

EXISTING CONDITIONS REPORT

SEPTEMBER 4, 2003

I. INTRODUCTION

The following material comprises the Existing Conditions Report for the "Southern Urban Area B Study". This study area includes segments of the southwestern quadrant of the University of Virginia, southwestern areas of the City of Charlottesville and designated portions of the surrounding development areas within Albemarle County. This report builds upon and updates several previous studies.

The purpose of this first stage of work with the Area B Study is to document factors that could be significant in the consideration of future possibilities for this area. It will serve as the foundation for consideration of opportunities and constraints in viewing the area as an integrated and interconnected condition. In particular, physical constraints and various demographic dynamics are documented in the collected material of this report. These provide preliminary insights into the challenges of the existing conditions and the pressures of "status quo growth" under current zoning designations as well as the limited transportation infrastructure. Additionally, this report will provide a baseline reference for alternative approaches involving physical planning and policy considerations (including housing policies, transit, bicycle/pedestrian infrastructure, parking, etc.)

The report includes several key Existing Condition Maps and a Demographic Overview. Demographic issues and data are included in the next section of this report. The maps help to elucidate several key issues that will require attention:

- Topography and natural systems are dramatic and important to this area. Moore's Creek and its tributaries interlace with a rolling topography. They frame several key amenities including park space, trails and several short range and long vistas.
- Limited inter-connection inhibits mobility, channels traffic onto Old Lynchburg Road and encourages cut through traffic onto Harris Road and through other neighborhoods.
- Few alternative routes within and around the study area may indicate a continuing pattern of increased traffic congestion.
- Student housing trends within existing City neighborhoods in the study area are significant (especially in the vicinity of Jefferson Park Avenue - JPA). Recent apartment developments just outside the area are also notable and will add traffic pressures within the area (particularly along Old Lynchburg Road and JPA).
- More generally, pressures from current and ongoing growth in the surrounding areas of the County can be seen in the significant numbers of single family and multi-family housing units that have emerged over the past ten to fifteen years.
- Fontaine Research Park is remote from the University. Both entities could benefit from improved general access and a greater degree of interconnection.

II. MAPS

MAP 1 - EXISTING CONDITIONS: BUILT ENVIRONMENT

The Built Environment Map focuses on the built form of the study area and its immediate context. This shows the relationship between the University of Virginia as the focal point of the area. Several outlying parts of the institution interact with surrounding City and County neighborhoods. It also shows the range of scale and use within and around the study area.

Existing mixed-use centers are highlighted and color-coded by building use. The existing centers are located at the JPA/Fontaine intersection, the Corner, and near the intersection of 5th Street and Cherry Avenue. Development is concentrated toward the eastern portion of the study area along Fontaine Avenue, JPA, and Cherry Avenue. In addition, several high-density apartment complexes have been recently completed south of the study area to the north of Route 64. Significant natural features, such as critical slopes, streams and rivers, and floodplains, are represented as they contribute to the shape of the existing built environment as significant constraints. The City of Charlottesville boundary and the University of Virginia grounds are also denoted.

This drawing also highlights several key "subareas" within Area B. Each of these has its own characteristics and localized existing conditions to consider. In general, the subareas display characteristics of three types of communities:

- a high-density, University-student oriented communities along the major JPA corridor within the City;
- a mix of older students and family households in the areas around Fontaine Avenue in the City; and
- a much less dense area within Albemarle County with a much older population, many of whom have lived in the area much longer than those in the City, albeit in houses that were generally built later than the 1950's/60's stock that predominates along the urban corridors.

A summary of characteristics for each subarea is as follows:

I. THE AREA BETWEEN JPA AND STADIUM ROAD

This compact area has the highest population concentration especially in proximity to the University. While there are some individual, owner-occupied residences, the area is dominated by its student population and a large portion of multi-unit rental properties. Existing transit, pedestrian, and bicycle use are very high and parking conditions are tight. JPA and Stadium Road bracket this area, with several "cross streets" connecting the two. Fry Springs crossroads is an active neighborhood center with retail, commercial, and residential uses in close proximity and fairly compact configuration.

II. THE AREA BETWEEN JPA AND THE RAILROAD TRACKS

Student population is concentrated between JPA and the tracks, with many of the same characteristics identified in Subarea I. Beyond the tracks, the residential neighborhood diversifies somewhat, yet its proximity to the University explains the dominant characteristics including students, employees and a high proportion of renters. A high proportion of residents walk to school or work. JPA forms the northwestern edge of this area with Shamrock Road connecting over to Cherry Avenue. The railroad inhibits interconnection between the north and south of this area.

III. THE AREA NORTH OF I-64 AND SOUTH OF FONTAINE AVENUE

This section includes residential and commercial areas along Fontaine Avenue, over to the Fry Springs Beach Club community as well as the Fontaine Research Park. In comparison with Subareas I and II, the population density is lower, the average age is higher, and there is a balanced mix of single family and smaller multi-family residences. A high percentage of residents and workers in this area are commuting alone. Current development is concentrated toward the north and eastern edges of this area – along Fontaine Avenue and JPA. Old Lynchburg Road provides north-south access in this area

IV. THE AREA SOUTH OF I-64 AND WEST OF SUNSET AVENUE EXTENDED

In comparison with Subareas I, II and III, this residential area includes the highest proportion of single to multifamily homes, the highest average household size, the highest percentage of white persons, the highest proportion of home ownership and a very high percentage of single occupancy commuters. Very few residents are UVA students, but many are UVA employees. Sunset Avenue Extended is the key access road for this area, passing under I-64 and dead-ending at the blocked-off bridge crossing Moore's Creek. Therefore the only access to UVA or downtown Charlottesville is through Old Lynchburg Road or 5th Street Extended.

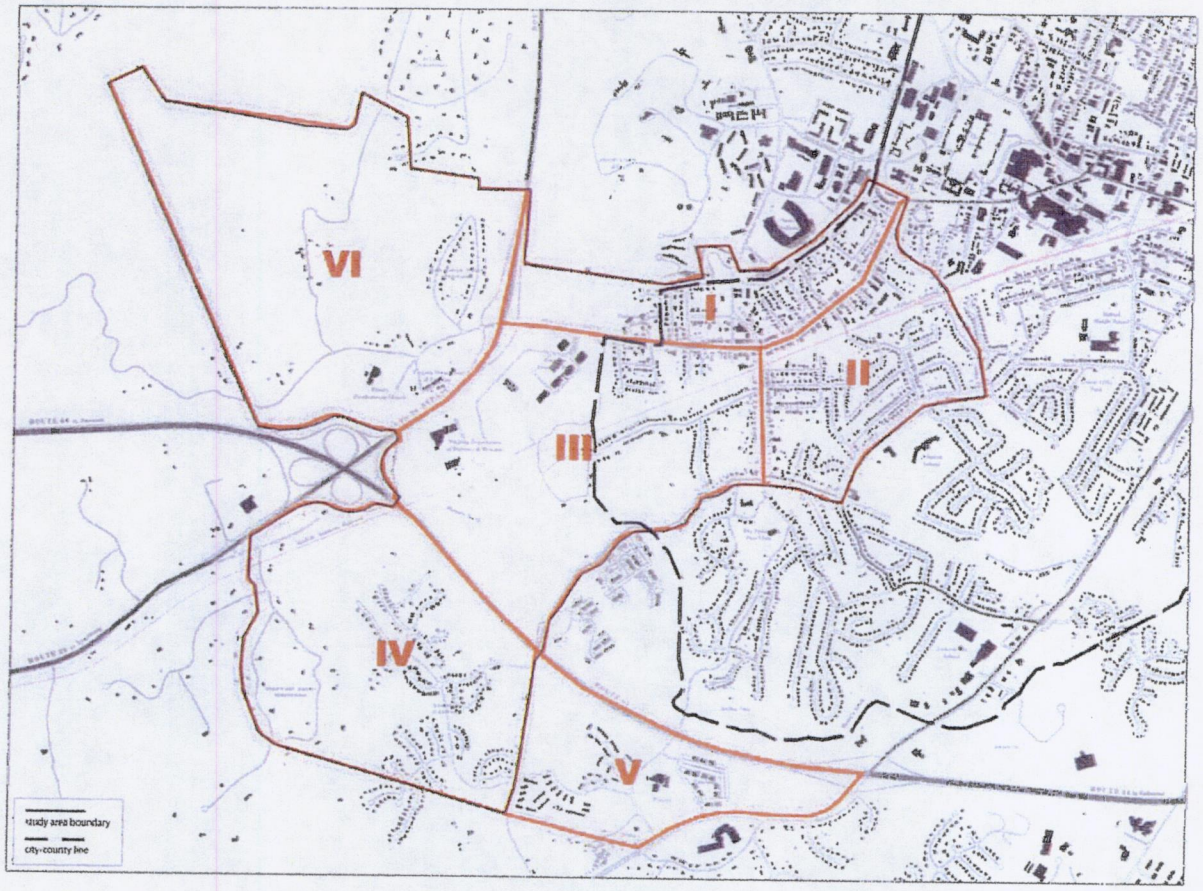
V. THE AREA SOUTH OF I-64 AND EAST OF SUNSET AVENUE EXTENDED – TO OLD LYNCHBURG ROAD:

This area adjoins the study area's east boundary. While detailed data have not been compiled for this subarea, it has much undeveloped land and is predominated by older and recently completed apartment complexes occupied by graduate and undergraduate students and others in townhouses. The residential areas are located in a fairly wide expanse of open space bisected by I-64. This area includes Sunset Avenue Extended, Old Lynchburg Road and 5th Street Extended as its eastern boundary.

VI. THE AREA WEST OF ROUTE 29 BYPASS

This is a predominately residential area with older and more affluent residents, and the highest proportion of homeowners among all Subareas. There is a fairly large number of school age children, and a high percentage of single-occupancy vehicle commuting. Sole access to this area is provided by Fontaine Avenue beyond Route 29. There is a large area of potential development beyond the existing residential and church uses.

SUB-AREAS



MAP 2 - EXISTING CONDITIONS: NATURAL ENVIRONMENT

The Natural Environment Map illustrates natural features including topography, critical slopes, streams and rivers, wetlands, and floodplains. Steep slopes, including Observatory Hill and other smaller hills and the Moore's Creek stream and its tributaries create a varied and challenging landscape within the study area. Additionally, the area's network of existing and proposed greenway trails is indicated as significant amenities for the entire community. Most notably, the Rivanna Trail passes through the study area.

MAP 3 - EXISTING CONDITIONS: CONNECTIONS

The Connections Map is produced at twice the scale of the other representations to situate the study area within the larger transportation network. The map overlays roadways with CTS and UTS routes and existing and proposed greenway trails. Primary roads are highlighted and classified as Interstates (US 64), Arterials (US 29), and Major Roads (JPA). CTS and UTS routes serve high density residential development in the eastern part of the study area with stops along JPA and Maury Ave.

MAP 4 - EXISTING ZONING MAP

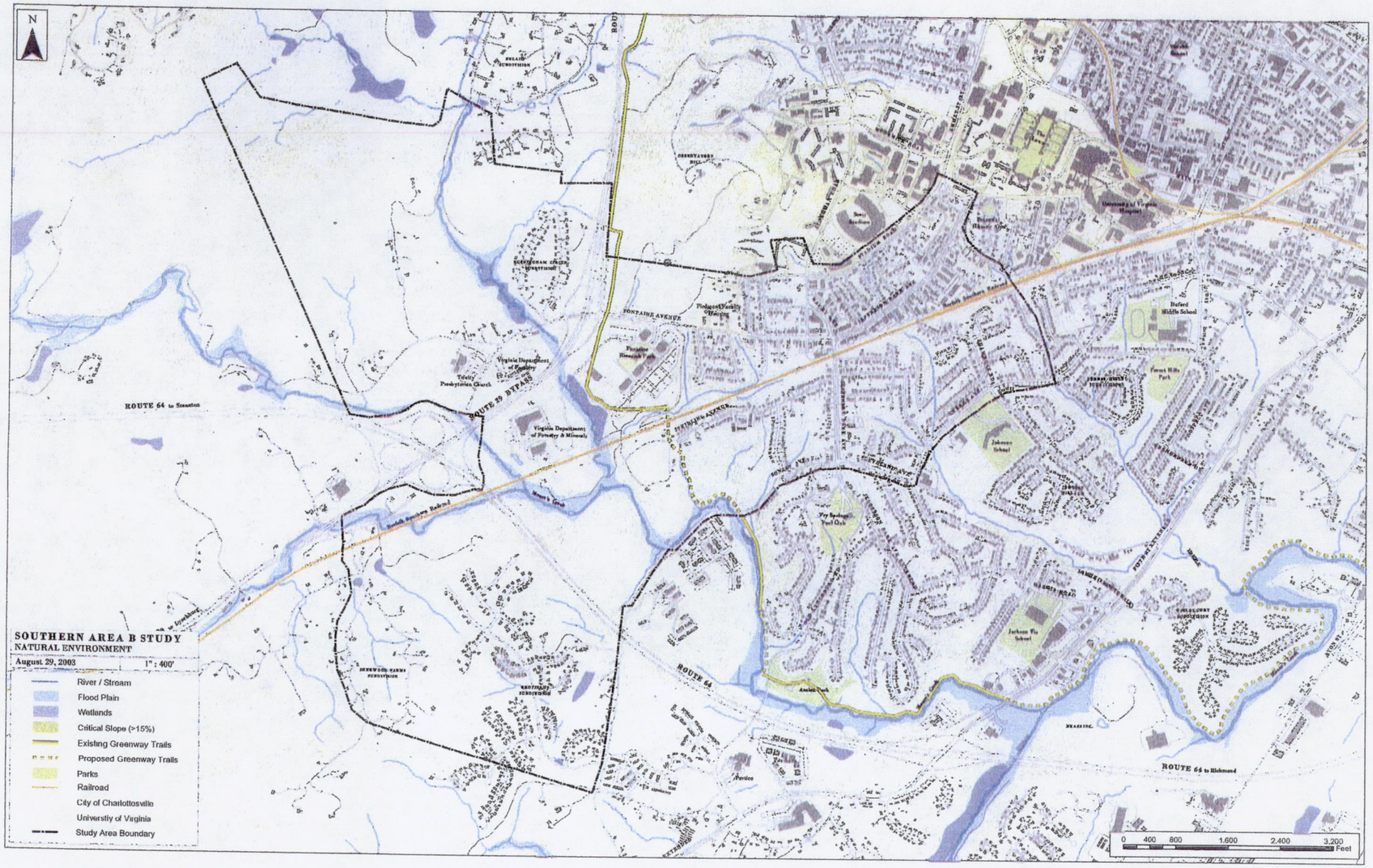
This map includes current zoning information for the entire study area. Viewing this information in aggregate, with diminished emphasis on boundaries between jurisdictions, affords the opportunity to see potential relationships among the various neighborhoods within and around the study area. This includes the recently adopted zoning changes in the City of Charlottesville.

MAP 5 - COMPREHENSIVE PLAN LAND USE MAP

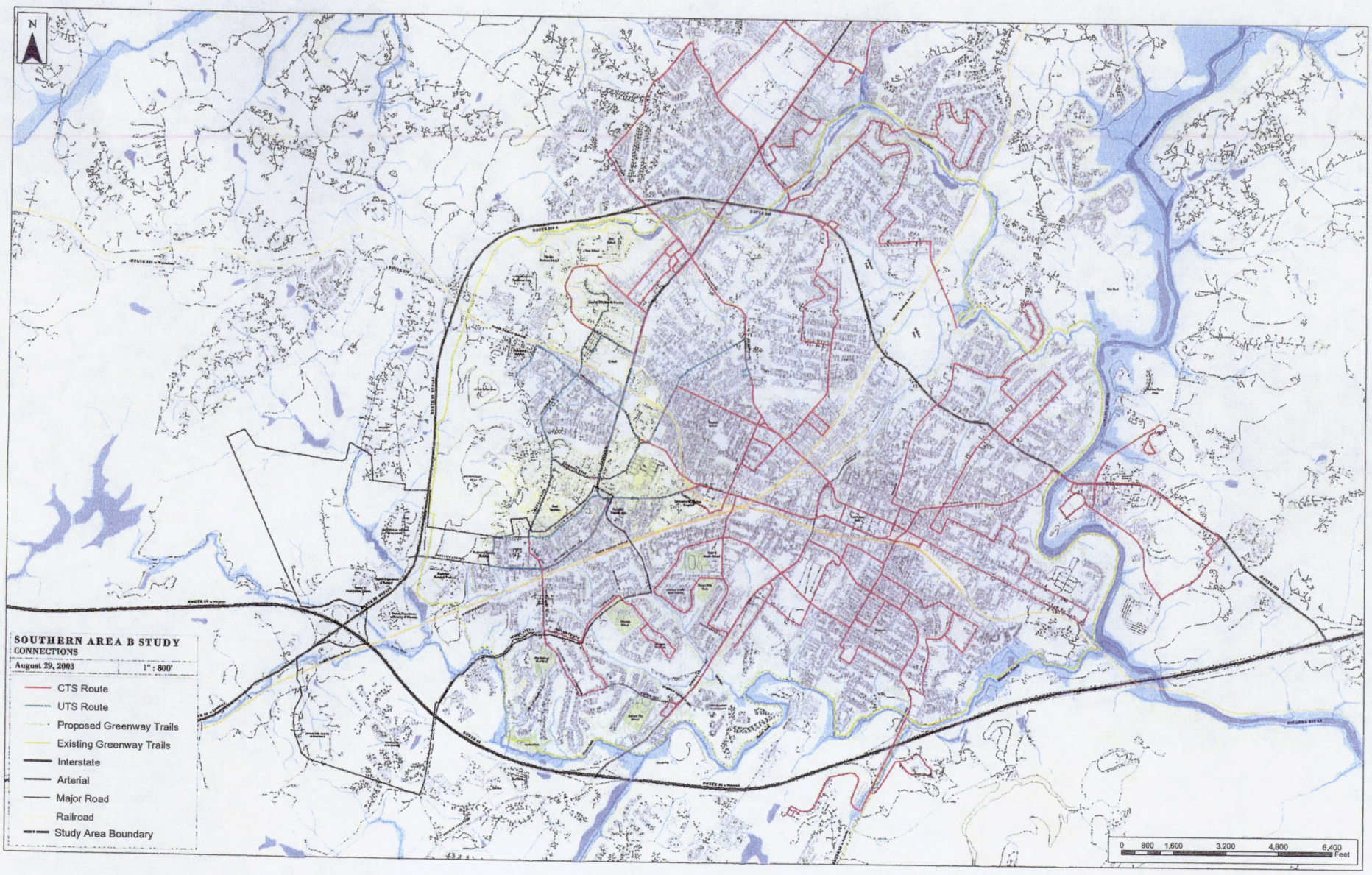
This map is a compilation of existing data from the City and County from their respective Comprehensive Plans.

EXISTING CONDITIONS: BUILT ENVIRONMENT

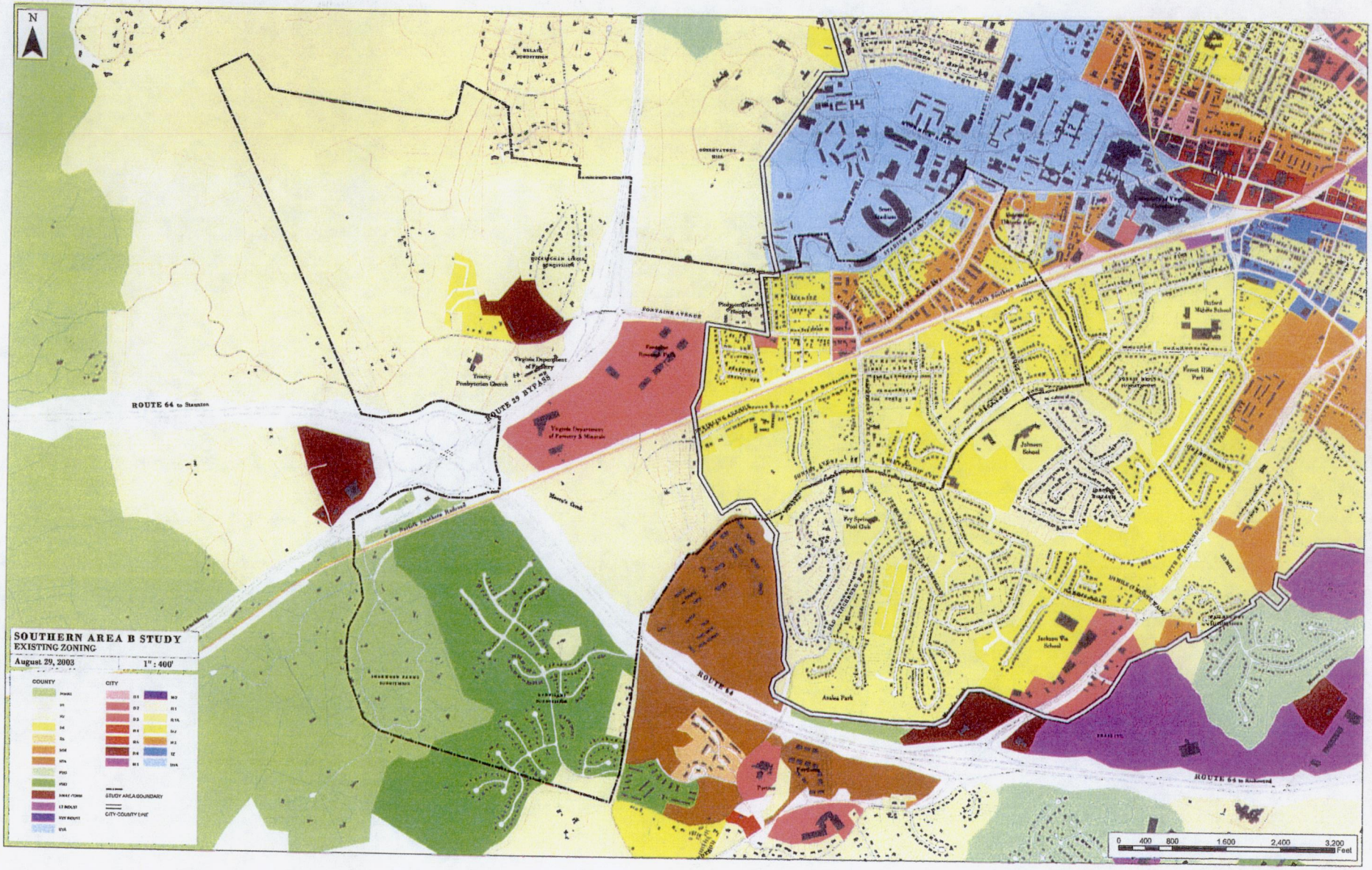
EXISTING CONDITIONS: NATURAL ENVIRONMENT

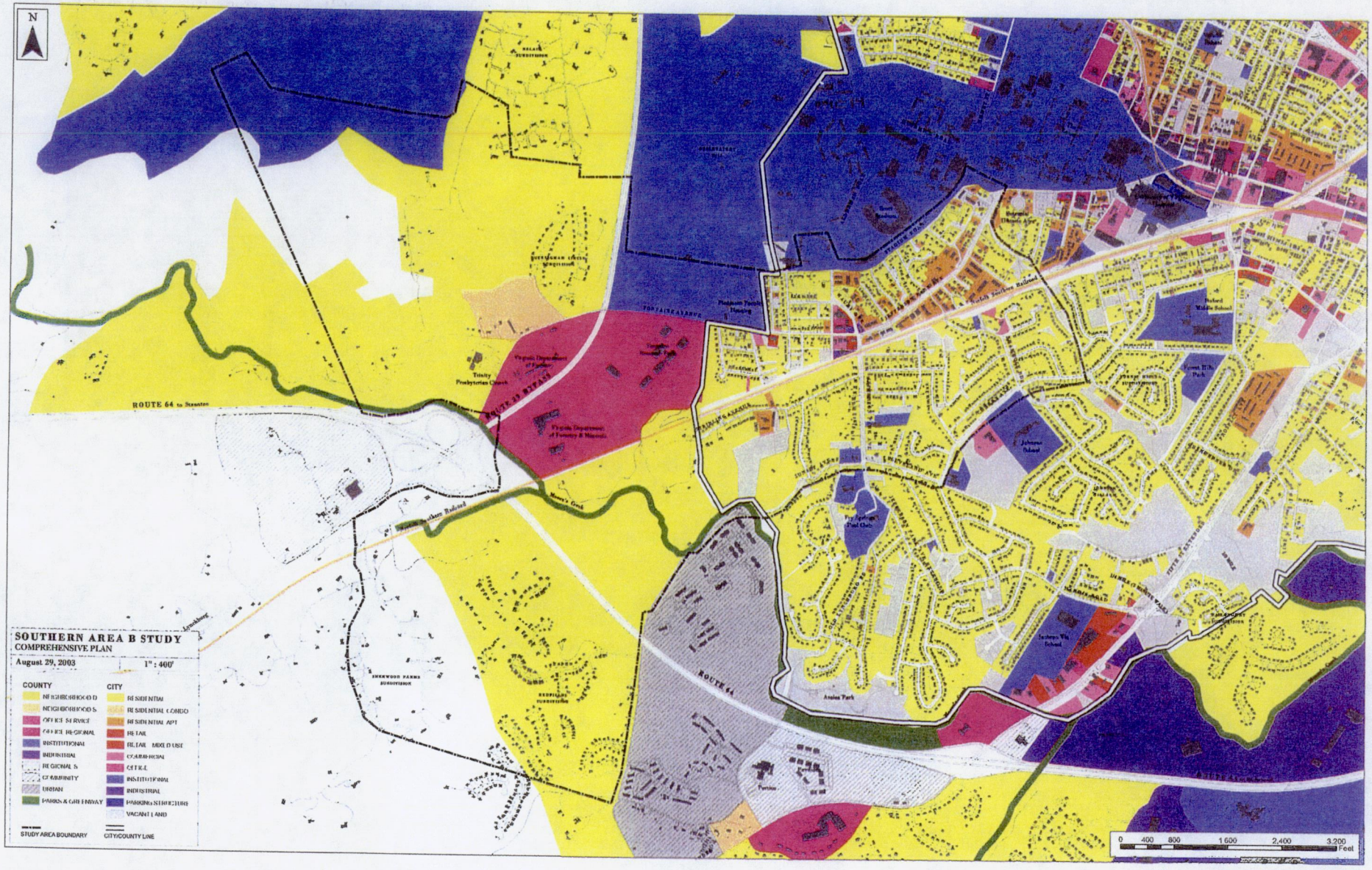


EXISTING CONDITIONS: CONNECTIONS



EXISTING ZONING

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SOUTHERN AREA B STUDY
COMPREHENSIVE PLAN
August 29, 2003
1" : 400'
COUNTY
NEIGHBORHOOD
NEIGHBORHOOD S
OFFICE SERVICE
OFFICE REGIONAL
INSTITUTIONAL
INDUSTRIAL
REGIONAL S
COMMUNITY
URBAN
PARKS & GREENWAY
CITY
RESIDENTIAL
RESIDENTIAL COMBO
RESIDENTIAL APT
RETAIL
RETAIL MIXED USE
COMMERCIAL
OFFICE
INSTITUTIONAL
INDUSTRIAL
PARKING STRUCTURE
VACANT LAND
STUDY AREA BOUNDARY
CITY/COUNTY LINE
ROUTE 64 to Staunton
ROUTE 64
0 400 800 1,600 2,400 3,200 Feet

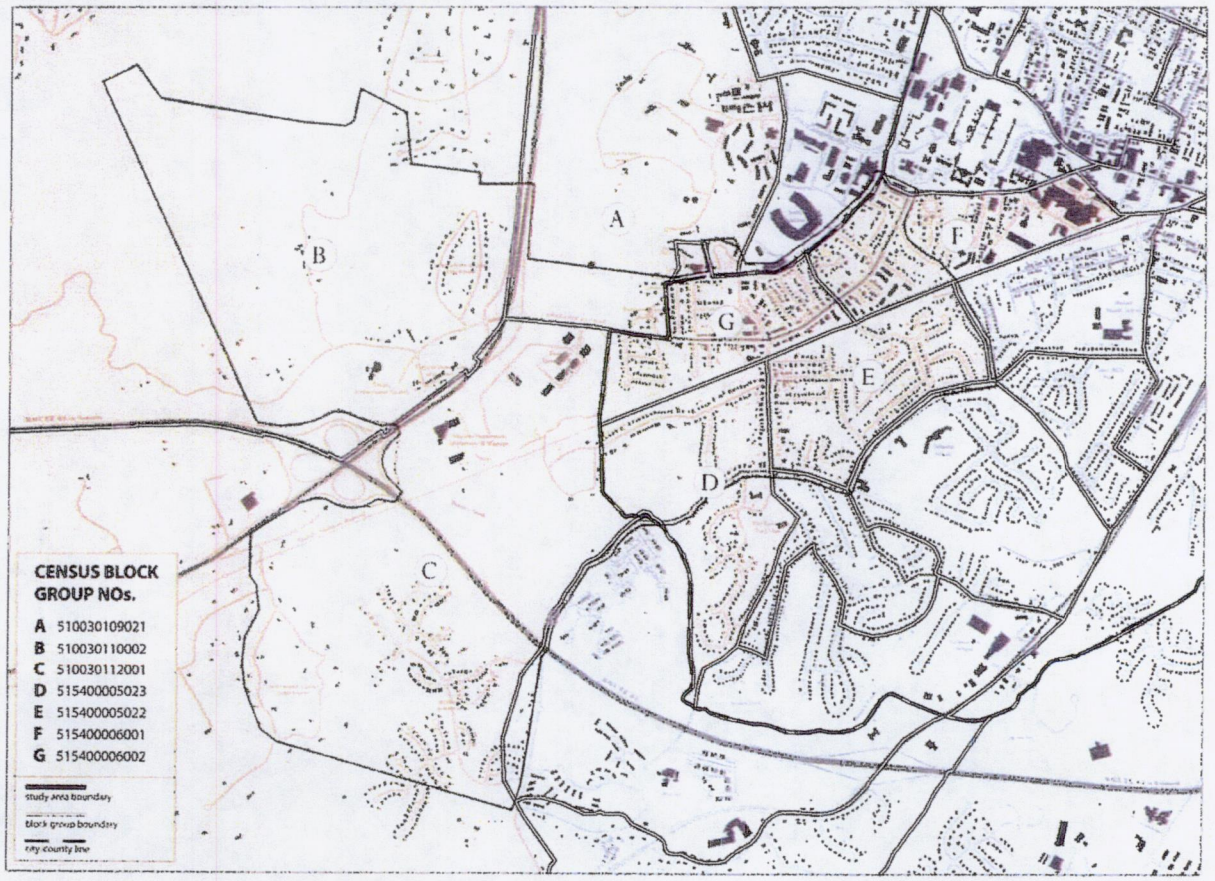
SOUTHERN URBAN AREA B

DEMOGRAPHIC OVERVIEW

I. DEMOGRAPHIC INTRODUCTION

The following report presents a summary of the existing demographic and economic conditions of the JPA/Fontaine community. The analysis is largely based on an examination of data from the 2000 Census for the tracts and block groups in Charlottesville and Albemarle County which encompass the community. In some sections the census boundaries overlap the study area boundary, as shown on the base map below, but the general conclusions provide a good sense of the characteristics of this community. Other information for this report was drawn from the socio-economic data and projections developed by local planning departments for the Metropolitan Planning Organization (MPO) traffic model; ridership data and routes from Charlottesville Transit Service (CTS), JAUNT, and University Transit Service (UTS); student housing and enrollment statistics from the University of Virginia; and demographic projections from local planning departments based on statewide projections from the Virginia Employment Commission.

AREA B STUDY AREA AND BLOCK GROUPS



II. KEY FINDINGS AND OBSERVATIONS

THREE COMMUNITIES: INDEPENDENCE AND INTERDEPENDENCE

The following data and graphic depictions show several key characteristics of the study area and its immediate environs. Clearly, the role of the University of Virginia and the Health Sciences Center exert a strong influence over the area's identity.

Some of the preliminary findings include the following:

- Three distinct "cultures" distinguished by age. In turn, these tend to create distinct sub areas.
- A large percentage of students are dependent upon walking, biking, or public transit.
- Distinct sections of the study area have relatively high percentages of renters.
- Relatively few people in the entire community have lived there for more than 10 years.
- The community enjoys higher than average educational levels.
- The area has a relatively high poverty rate, but this may due to the high student numbers within the area.
- A high percentage of JPA/Fontaine commuters use alternatives to cars. Walking and transit use is very high.
- One-third of the homeowners have one or no cars while two-thirds have two or more. One-half of the renters have one or no cars.
- The area grew largely in the 1950's & 1960's, suggesting an aging, overworked housed stock, especially in areas with high renter percentages.
- The study area houses 60% of all students living off-grounds. Thirteen percent of all students live in the JPA/Fontaine community.
- Due to increased enrollment, the University will likely need to build additional student housing, especially for first year students.
- Approximately 12% of University employees live in the study area.

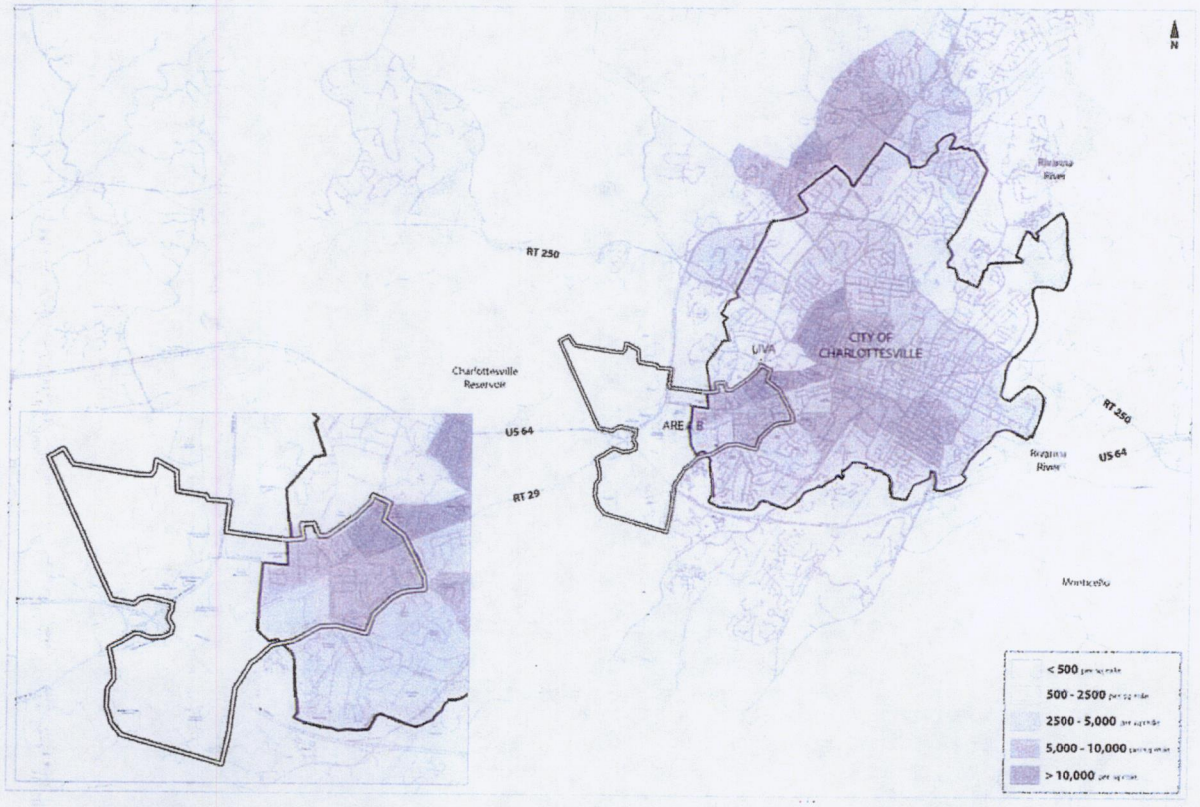
III. PEOPLE AND HOUSEHOLDS

POPULATION DENSITY

The JPA/Fontaine community is home to 9,230 people as of the 2000 Census. This includes a mix of University undergraduate and graduate students, University-related staff, and an array of local residents similar to the City and County as a whole. As shown on the map below, population densities vary within the study area. The sections along the two major streets contained within the city boundary have a density of 7,438 persons per square mile, slightly more dense than the City as a whole. The sections in Albemarle County are 122 persons per square mile, which is typical of the countywide density, but much lower than the City.

TOTAL POPULATION	A	B	C	D	E	F	G	Total
Total Persons	738	966	1,397	763	1,137	2,747	1,482	9,230

DENSITY



In general, the study area sections have about the same or fewer persons per household than the City and County as a whole.

AVG HOUSEHOLD SIZE	A	B	C	D	E	F	G	TOTAL	Albemarle	Ch'ville
Total	1.74	2.19	3	2.22	2.19	2	2	2.21	2.53	2.27

HOUSEHOLD SIZE	A	B	C	D	E	F	G	TOTAL
Total:	420	452	542	346	527	1,045	588	3,920
1-person household	248	118	107	110	180	482	181	1,426
2-person household	106	257	277	123	180	257	179	1,379
3-4 person household	55	56	119	100	127	239	181	877
5 or more person household	11	21	39	13	40	67	47	238
Percent of Total								
1-person household	59%	26%	20%	32%	34%	46%	31%	36%
2-person household	25%	57%	51%	36%	34%	25%	30%	35%
3-4 person household	13%	12%	22%	29%	24%	23%	31%	22%
5 or more person household	3%	5%	7%	4%	8%	6%	8%	6%

RACE

Racially the area is not particularly diverse in any section. There is a relatively large Asian population in the student area. Otherwise the entire study area is predominantly Caucasian at a rate higher than that of the City as a whole, but similar to Albemarle County.

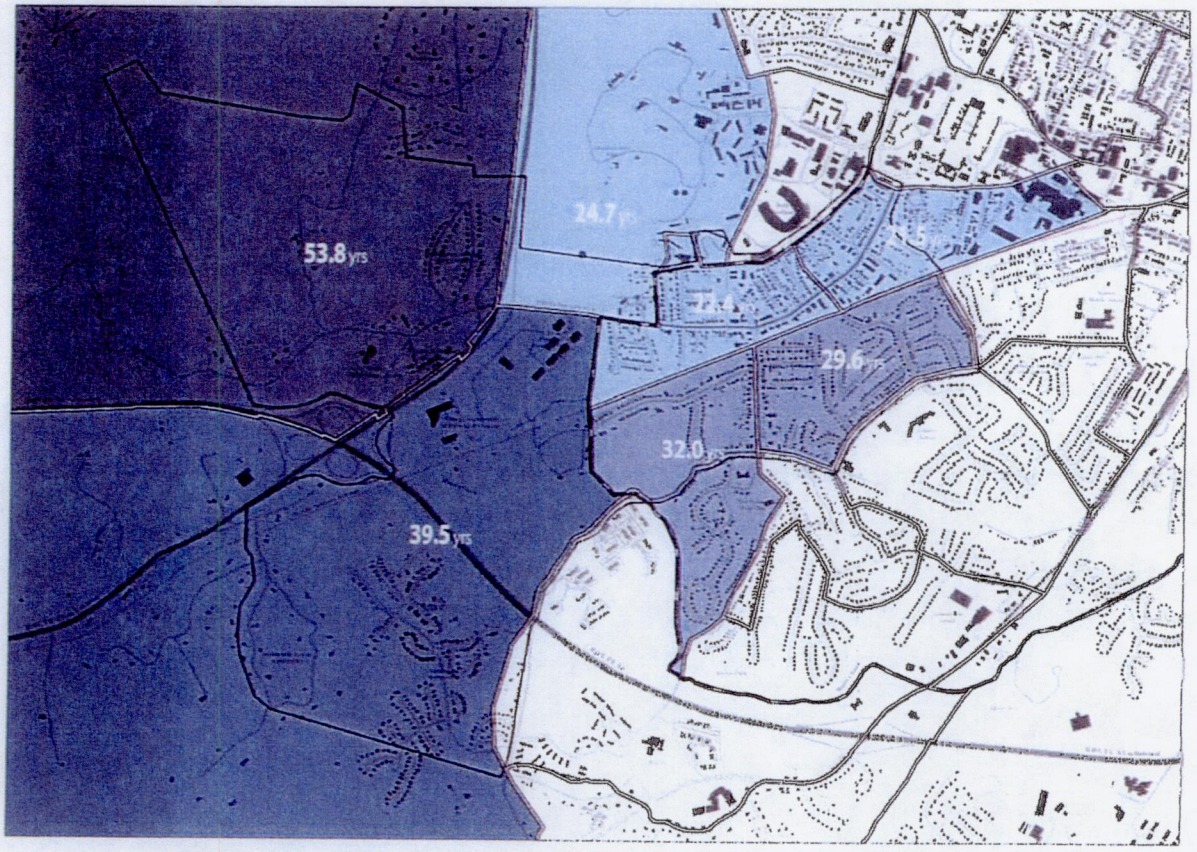
TOTAL POPULATION BY RACE	A	B	C	D	E	F	G	Total	Alb	Chv
White alone	430	953	1,272	639	874	1,952	1,110	7,230		
Black or African American	146	6	62	87	183	194	134	812		
Asian	139	4	48	16	42	448	182	879		
Other Race(s)	23	3	15	21	38	153	56	309		
Percent of Total										
White alone	58%	99%	91%	84%	77%	71%	75%	78%	87%	70%
Black or African American	20%	1%	4%	11%	16%	7%	9%	9%	10%	22%
Asian	19%	0%	3%	2%	4%	16%	12%	10%	2%	5%
Other Race(s)	3%	0%	1%	3%	3%	6%	4%	3%	1%	3%

AGE

The range of age groups is much more diverse within this community. The median age is 22 in the JPA corridor, 24 to 27 in the adjacent City block groups, and jumps up to the 40's and 50's in the County areas. These different predominant age groups suggests three distinct cultures within the study area, which may suggest different responses to the issues and needs of the community as a whole.

POPULATION BY AGE	A	B	C	D	E	F	G	Total
Total:	738	966	1,397	763	1,137	2,747	1,482	9,230
Under 5 years	31	27	90	42	54	15	11	270
5 to 17 years	42	133	240	88	99	24	21	647
18 to 21 years	129	23	48	39	93	1566	626	2524
22 to 24 years	183	8	31	72	138	565	330	1327
25 to 44 years	291	156	453	288	473	467	390	2518
45 to 64 years	53	307	393	164	177	80	61	1235
65 and older	9	312	142	70	103	30	43	709
Percent of Total								
Under 5 years	4%	3%	6%	6%	5%	1%	1%	3%
5 to 17 years	6%	14%	17%	12%	9%	1%	1%	7%
18 to 21 years	17%	2%	3%	5%	8%	57%	42%	27%
22 to 24 years	25%	1%	2%	9%	12%	21%	22%	14%
25 to 44 years	39%	16%	32%	38%	42%	17%	26%	27%
45 to 64 years	7%	32%	28%	21%	16%	3%	4%	13%
65 and older	1%	32%	10%	9%	9%	1%	3%	8%

MEDIAN AGE



NON-FAMILY HOUSEHOLDS

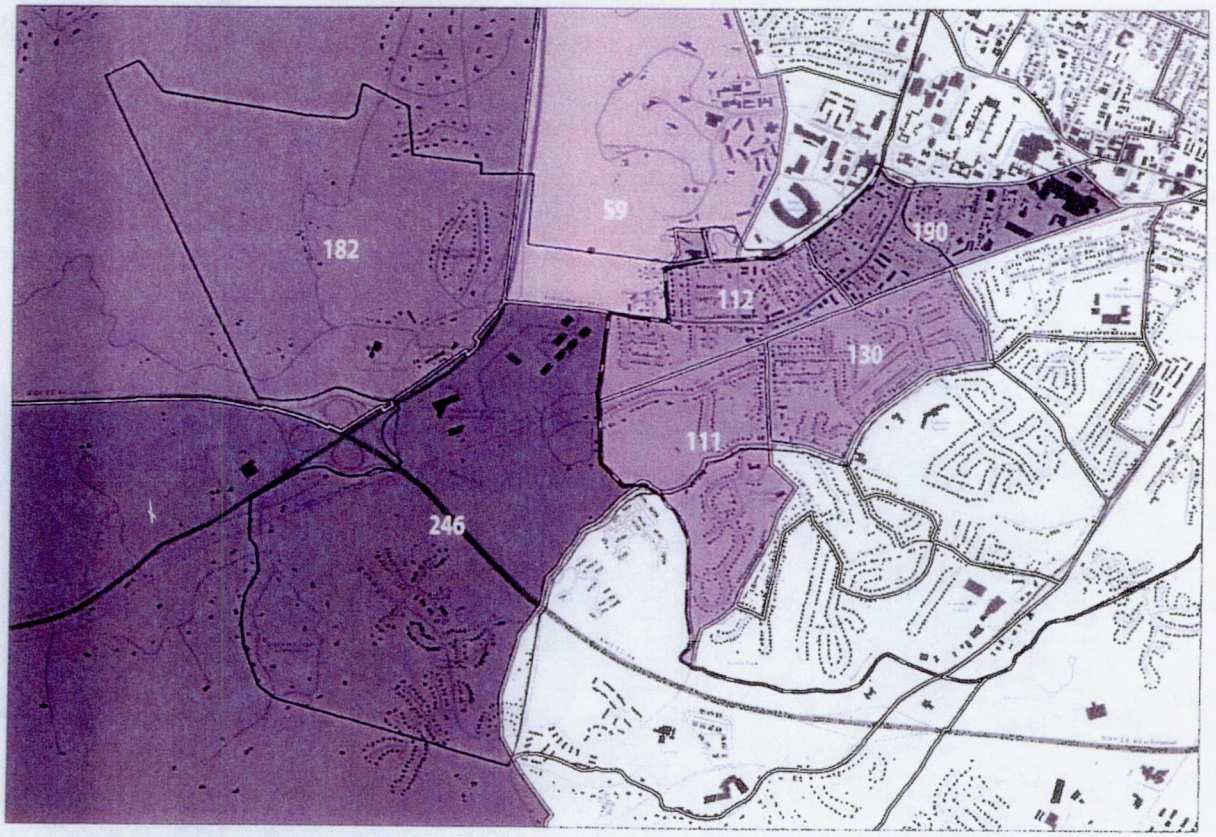
Although the Census does not directly identify student households, the distribution of non-family households, cross-referenced by the age of the householder, helps illuminates the presence of University students within the community. The distribution is similar to that of various age groups in the community. Non-family households that are not occupied by students are likely be single people, including elderly people living alone. More information on student households is described in section V of this report.

NONFAMILY HOUSEHOLDS	A	B	C	D	E	F	G	TOTAL
Total	324	126	148	175	310	938	515	2,536
Householder 15 to 24 years	176	2	8	37	77	587	311	1198
Householder 25 to 44 years	129	21	53	84	138	304	160	889
Householder 45 to 64 years	15	42	60	33	63	32	30	275
Householder 65 years and over	4	61	27	21	32	15	14	174
Percent of Total								
Householder 15 to 24 years	54%	2%	5%	21%	25%	63%	60%	47%
Householder 25 to 44 years	40%	17%	36%	48%	45%	32%	31%	35%
Householder 45 to 64 years	5%	33%	41%	19%	20%	3%	6%	11%
Householder 65 years and over	1%	48%	18%	12%	10%	2%	3%	7%

DISABLED

The majority of disabled people are concentrated in the County section, but in fact the numbers of people with disabilities are spread fairly evenly throughout the study area. This indicates a market for paratransit and a need for accessible housing and sidewalks throughout the community.

DISABLED PERSONS



SCHOOL ENROLLMENT

Students within the study area are not limited to those at the University. The following table of school enrollment shows an array of students of all ages living in the community. This is largely a population that depends on walking, transit, and ridesharing for travel to school as well as other activities. Transit-related services and a well-designed pedestrian system will help improve the overall mobility and access of this group.

SCHOOL ENROLLMENT PERSONS AGE 3+	A	B	C	D	E	F	G	TOTAL
Total:	660	983	1,347	793	1,061	2,806	1,400	9,050
Nursery school, preschool:	8	0	9	7	0	0	0	24
Kindergarten - 8th grade	13	59	53	28	23	6	0	182
Grade 9 to grade 12:	0	25	22	6	17	11	13	94
College, undergraduate years:	77	0	15	33	36	844	417	1,422
Graduate or professional school:	99	0	15	47	109	216	159	645
Not in school	162	382	535	257	347	303	141	2,127
Percent of Total								
Nursery school, preschool:	1%	0%	1%	1%	0%	0%	0%	0%
Kindergarten - 8th grade	2%	6%	4%	4%	2%	0%	0%	2%
Grade 9 to grade 12:	0%	3%	2%	1%	2%	0%	1%	1%
College, undergraduate years:	12%	0%	1%	4%	3%	30%	30%	16%
Graduate or professional school:	15%	0%	1%	6%	10%	8%	11%	7%
Not in school	25%	39%	40%	32%	33%	11%	10%	24%

EDUCATION LEVELS

The community has a higher than average share of well-educated people throughout all the sections. With skilled facilitation and good public information, this community can generate a high level of public awareness and civic involvement. However, the transient nature of student populations and their intense focus on academic demands may render the student members of the community less likely to participate in civic activities.

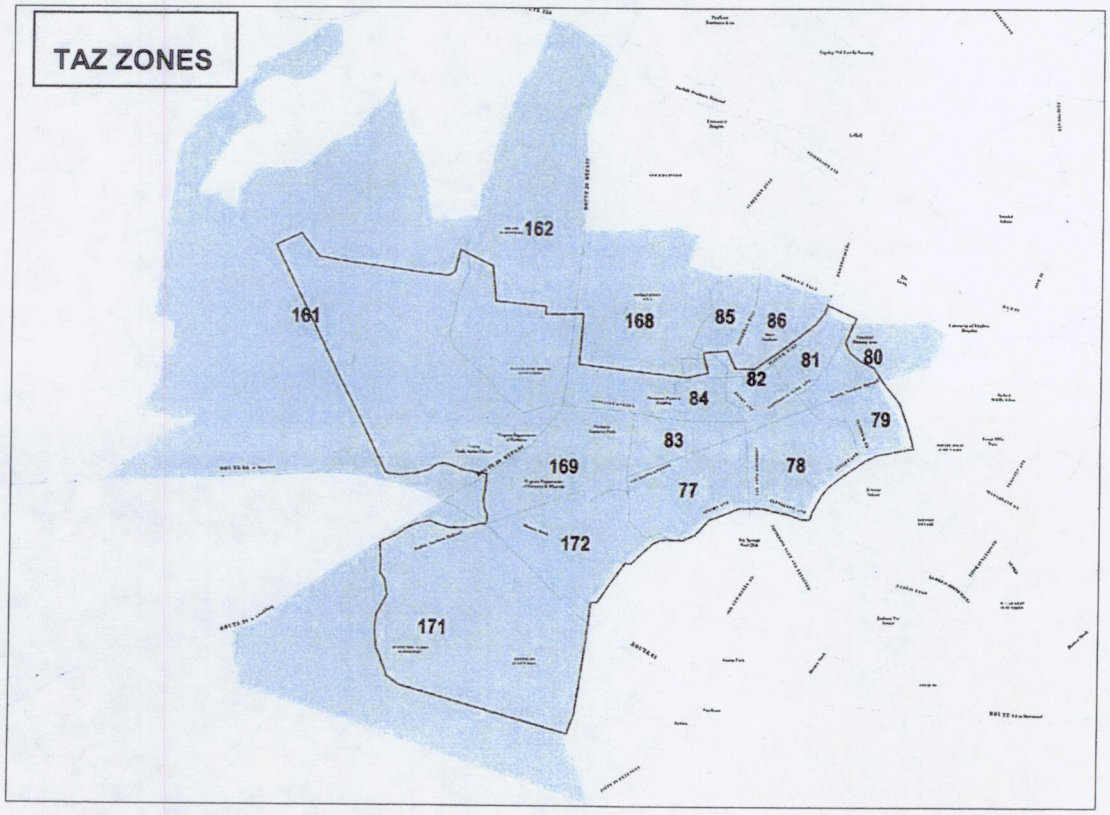
EDUCATIONAL ATTAINMENT PERSONS AGE 25+	A	B	C	D	E	F	G	TOTAL
Total:	315	840	1,068	557	775	578	449	4,582
No schooling completed	0	0	0	8	9	0	0	17
Up to 12th grade, no diploma	20	17	158	75	69	4	6	330
High school graduate (includes equivalency)	21	127	149	99	198	28	30	652
Some college or associate's degree	32	163	206	132	132	76	75	816
Bachelor's degree	104	279	237	114	204	195	152	1285
Master's degree	72	111	181	78	130	140	72	784
Professional degree or doctorate	66	143	137	51	33	135	114	679

POPULATION FORECASTS

The number of people in the study area is expected to increase by 40 percent from 11,340* in 1998 to 15,927 by 2025, according to figures developed by Albemarle County and Charlottesville planners for the regional traffic model. The number of households is expected to grow from 4,958 to 6,913, an increase of 39 percent. These data are developed through a method that starts with statewide population projections and refines them based on local land use plans.

* Note: This population figure is drawn from Traffic Area Zone data and therefore differs from the 9,230 population total derived from Census Block Group data.

ZONE	1997 HH	1998 HH	1999 HH	2015 HH	2025 HH	1997 POP.	1998 POP.	1999 POP.	2015 POP	2025 POP.
77	192	190	190	198	204	454	404	450	469	433
78	362	371	371	374	398	838	810	879	866	869
79	134	139	139	38	149	327	309	329	338	332
80	675	795	795	815	853	1061	2176	1884	1282	2336
81	220	241	241	229	259	585	604	571	608	648
82	348	367	367	359	394	756	899	870	780	965
83	111	124	124	115	133	264	291	294	273	313
84	93	97	97	97	104	235	240	230	244	258
85	1145	1475		1792	1700	3715	2980		5815	3450
86	494	717		656	717	757	1550		1005	1550
161	96	82		128	675	198	172		264	1418
162	135	113		191	231	518	292		734	596
168	64	51		85	78	172	119		228	182
169	0	1		0	3	0	3		0	9
171	105	185		207	789	324	465		640	1980
172	30	10		80	226	104	26		280	588
TOTAL	4204	4958	2324	5364	6913	10308	11340	5508	13826	15927



IV. HOUSING

HOUSING DENSITY

The number, density and type of housing units in the study area are shown in the table below. Consistent with other demographic characteristics, the sections in the City are denser and more diverse than those in the County. Both areas are fairly typical of overall City and County densities and housing types.

UNITS IN STRUCTURE	A	B	C	D	E	F	G	TOTAL
Total:	476	481	567	365	555	1,091	605	4,140
Single Family	20	382	499	188	297	141	183	1,710
Attached or duplex	5	82	42	111	235	128	103	706
3-4 units	12	9	8	66	6	58	66	225
5-9 units	55	8	0	0	17	261	59	400
10 or more units	384	0	0	0	0	503	194	1081
Mobile home	0	0	18	0	0	0	0	18
Percent of Total								
Single Family	4%	79%	88%	52%	54%	13%	30%	41%
Attached or duplex	1%	17%	7%	30%	42%	12%	17%	17%
3-4 units	3%	2%	1%	18%	1%	5%	11%	5%
5-9 units	12%	2%	0%	0%	3%	24%	10%	10%
10 or more units	81%	0%	0%	0%	0%	46%	32%	26%
Mobile home	0%	0%	3%	0%	0%	0%	0%	0%

OWNER/RENTER HOUSEHOLDS

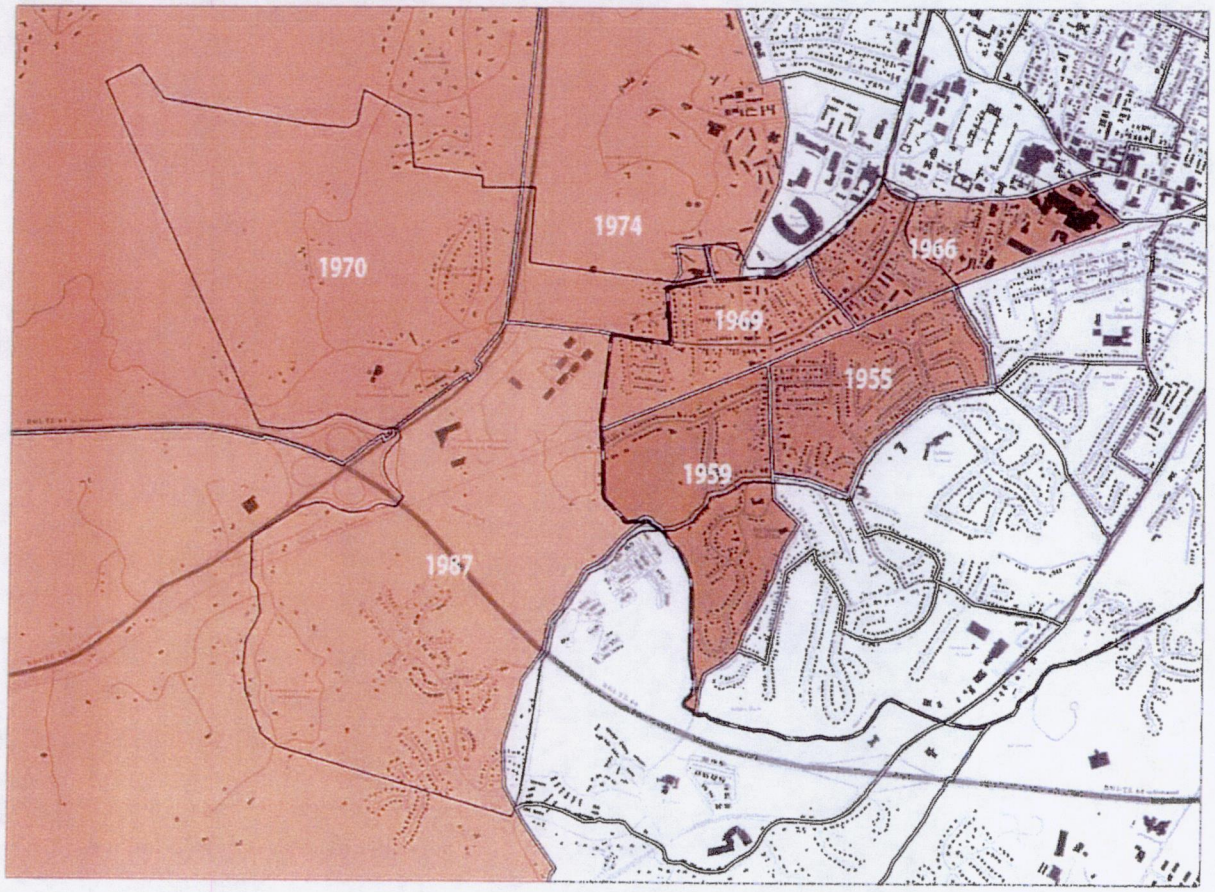
An ongoing issue for the City, particularly in areas such as the JPA/Fontaine community, is the ratio of owners to renters. There is a general concern, common to University towns, that neighborhoods with too few homeowners lack stability and civic cohesiveness. The map of renters as a percentage of all residents indicates that some sections of the study area do indeed have relatively large renter proportions compared to the citywide average of 59 percent. The accompanying table of owner and renter households cross-referenced by age of householder offers more illumination about the types of people living in the study area. Throughout the study area, the proportion of renters is highest in younger age groups, while homeownership is higher among people over 35.

TENURE BY AGE OF HOUSEHOLDER	A	B	C	D	E	F	G	TOTAL
Total:	420	452	542	346	527	1,045	588	3,920
Owner occupied:	0	407	453	146	230	55	40	1331
Householder 15 to 24 years	0	0	0	0	6	0	0	6
Householder 25 to 44 years	0	40	164	45	97	22	32	400
Householder 45 to 64 years	0	122	228	58	63	14	8	493
Householder 65 years and over	0	245	61	43	64	19	0	432
Renter occupied:	420	45	89	200	297	990	548	2589
Householder 15 to 24 years	189	0	15	42	91	616	349	1302
Householder 25 to 44 years	200	35	31	122	188	317	171	1064
Householder 45 to 64 years	31	0	26	30	13	42	24	166
Householder 65 years and over	0	10	17	6	5	15	4	57
Percent of Total								
Owner occupied:	0%	90%	84%	42%	44%	5%	7%	34%
Householder 15 to 24 years	0%	0%	0%	0%	1%	0%	0%	0%
Householder 25 to 44 years	0%	9%	30%	13%	18%	2%	5%	10%
Householder 45 to 64 years	0%	27%	42%	17%	12%	1%	1%	13%
Householder 65 years and over	0%	54%	11%	12%	12%	2%	0%	11%
Renter occupied:	100%	10%	16%	58%	56%	95%	93%	66%
Householder 15 to 24 years	45%	0%	3%	12%	17%	59%	59%	33%
Householder 25 to 44 years	48%	8%	6%	35%	36%	30%	29%	27%
Householder 45 to 64 years	7%	0%	5%	9%	2%	4%	4%	4%
Householder 65 years and over	0%	2%	3%	2%	1%	1%	1%	1%

AGE OF HOUSING STOCK

The map below indicating the median year housing structures were built, accompanied by a table of the total of residential units built by over the past several decades indicates that this area grew largely in the 1950's and 1960's, and has not added much housing since then. This fact has implications for at least two issues in the plan: 1) ensuring the housing stock ages well, which can be particularly challenging with a large number of rental houses; and 2) ensuring new buildings are compatible in size and scale with the predominant style.

MEDIAN YEAR BUILT - HOUSING STRUCTURES



LOCAL LONGEVITY

The table below summarizes the length of time residents have been living in the study area. Local longevity varies among owners & renters living in various sections, but relatively few people overall have lived in the community longer than ten years.

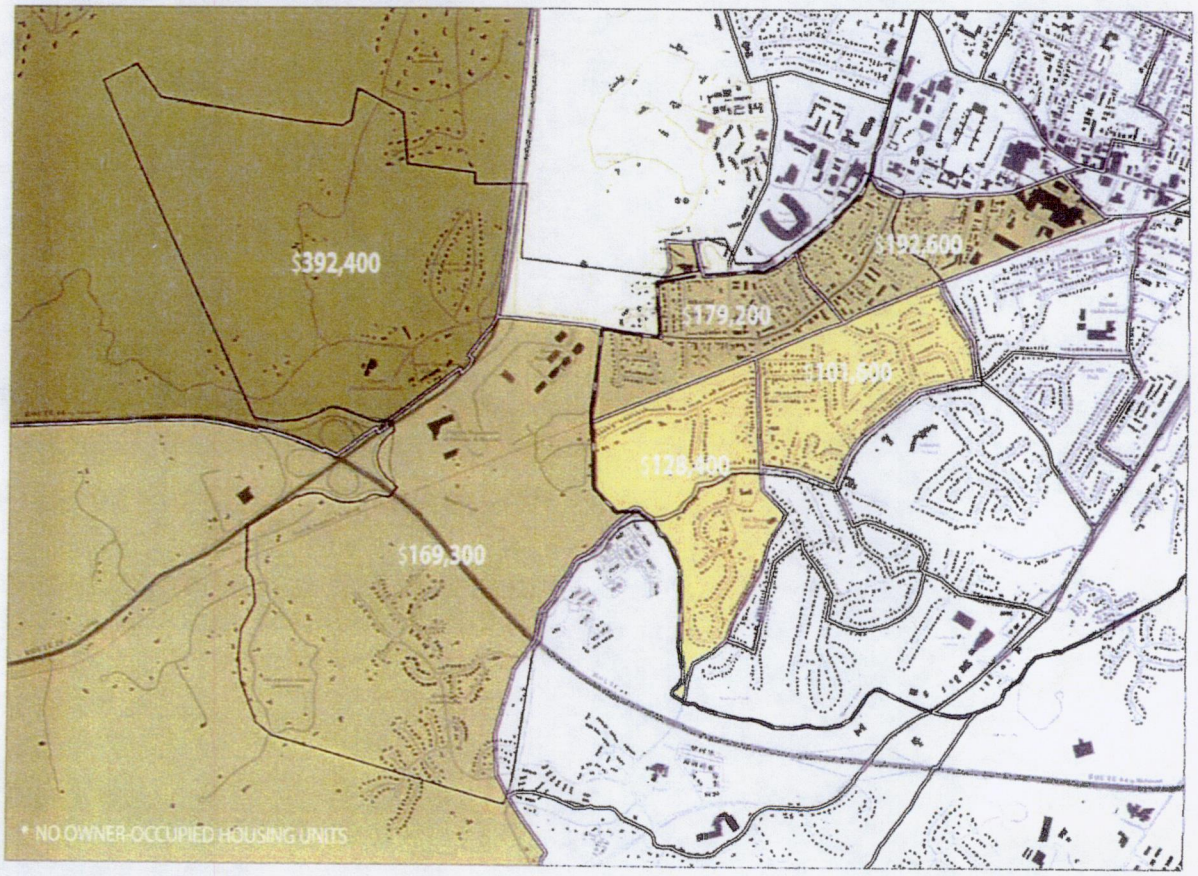
YEAR HH'DER MOVED IN BY TENURE	A	B	C	D	E	F	G	TOTAL
Total:	420	452	542	346	527	1,045	588	3,920
Owner occupied:	0	407	453	146	230	55	40	1331
Moved in 1999 to March 2000	0	39	143	19	29	12	0	242
Moved in 1995 to 1998	0	94	96	43	74	0	24	331
Moved in 1990 to 1994	0	90	72	17	19	0	0	198
Moved in 1980 to 1989	0	71	65	20	33	10	16	215
Moved in 1970 to 1979	0	27	36	17	17	7	0	104
Moved in 1969 or earlier	0	86	41	30	58	26	0	241
Renter occupied:	420	45	89	200	297	990	548	2589
Moved in 1999 to March 2000	231	0	37	109	180	645	322	1,524
Moved in 1995 to 1998	170	36	19	57	97	304	192	875
Moved in 1990 to 1994	13	9	25	11	13	29	23	123
Moved in 1980 to 1989	6	0	0	18	0	12	11	47
Moved in 1970 to 1979	0	0	0	0	0	0	0	0
Moved in 1969 or earlier	0	0	8	5	7	0	0	20
PERCENT OF TOTAL								
Owner occupied:	0%	90%	84%	42%	44%	5%	7%	34%
Moved in 1999 to March 2000	0%	9%	26%	5%	6%	1%	0%	6%
Moved in 1995 to 1998	0%	21%	18%	12%	14%	0%	4%	8%
Moved in 1990 to 1994	0%	20%	13%	5%	4%	0%	0%	5%
Moved in 1980 to 1989	0%	16%	12%	6%	6%	1%	3%	5%
Moved in 1970 to 1979	0%	6%	7%	5%	3%	1%	0%	3%
Moved in 1969 or earlier	0%	19%	8%	9%	11%	2%	0%	6%
Renter occupied:	100%	10%	16%	58%	56%	95%	93%	66%
Moved in 1999 to March 2000	55%	0%	7%	32%	34%	62%	55%	39%
Moved in 1995 to 1998	40%	8%	4%	16%	18%	29%	33%	22%
Moved in 1990 to 1994	3%	2%	5%	3%	2%	3%	4%	3%
Moved in 1980 to 1989	1%	0%	0%	5%	0%	1%	2%	1%
Moved in 1970 to 1979	0%	0%	0%	0%	0%	0%	0%	0%
Moved in 1969 or earlier	0%	0%	1%	1%	1%	0%	0%	1%

HOUSING AFFORDABILITY

As illustrated in the map below, there is remarkable diversity in homeowner house values, ranging from barely $100,000 to almost $400,000. The accompanying table of housing costs indicates the area is largely affordable for local homeowners (e.g. most people are not paying more than thirty percent of their income on housing).

MONTHLY HOUSING COSTS AS PCT OF INCOME	A	B	C	D	E	F	G	TOTAL
Owner-Occupied Housing Units	0	341	364	134	187	33	32	1,091
Less than 10 percent	0	155	114	49	55	21	0	394
10 to 29 percent	0	100	231	58	104	12	32	537
30 percent or more	0	86	19	27	28	0	0	160
Percent of Total	0	18	44	15	28	0	0	105
Less than 10 percent	0	45%	31%	37%	29%	64%	0%	36%
10 to 29 percent	0	29%	63%	43%	56%	36%	100%	49%
30 percent or more	0	25%	5%	20%	15%	0%	0%	15%

MEDIAN OWNER-OCCUPIED HOUSE VALUE



RENTAL RATES

The following table on renter costs shows much diversity in rents among the study area sections. Rents are fairly high in the County sections but seem to be fairly affordable. Rents in the student corridors are lower, but take a higher percentage of income. However, it should be noted that student incomes are difficult to assess accurately, as they appear falsely low for students who report little income of their own but receive support from their families.

MEDIAN CONTRACT RENT	A	B	C	D	E	F	G	TOTAL
Median contract rent	$569	$708	$815	$512	$631	$559	$591	$626
MEDIAN GROSS RENT AS A PERCENTAGE OF INCOME								
Median as a percentage	42.9%	20.3%	22.5%	30.3%	27.1%	44.7%	43.7%	33.1%

V. EMPLOYMENT AND INCOME

UNEMPLOYMENT

As illustrated in the table below, the JPA/Fontaine community has a relatively large number of residents not in the labor force, due largely to the high student population. However, among those in the labor force, the community enjoys a very low unemployment rate, especially compared the City and County average unemployment rates in the year 2000 of between 2.4 and 3 percent.

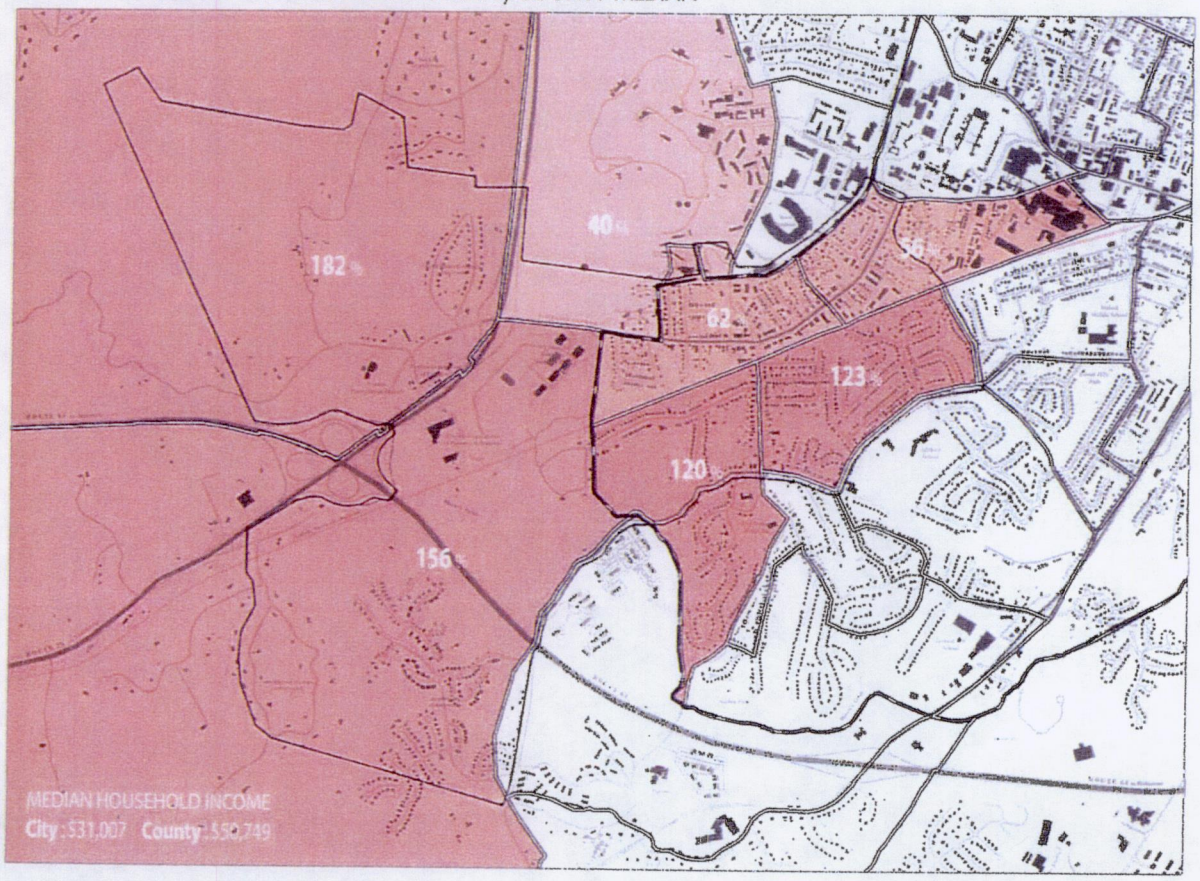
EMPLOYMENT STATUS, PERSONS AGE 16+	A	B	C	D	E	F	G	TOTAL
Total:	615	884	1174	676	995	2794	1392	8530
In labor force:	418	478	899	507	738	1435	790	5265
Employed	418	478	899	487	726	1343	777	5128
Unemployed	0	0	0	16	12	79	13	120
Not in labor force	197	406	275	169	257	1359	602	3265
Percent of Total								
In labor force:	68%	54%	77%	75%	74%	51%	57%	62%
Employed	68%	54%	77%	72%	73%	48%	56%	60%
Unemployed	0%	0%	0%	2%	1%	3%	1%	1%
Not in labor force	32%	46%	23%	25%	26%	49%	43%	38%

INCOME

An examination of median household and family income compared to city- and county-wide medians indicates a wide diversity in income ranges for all types of residents in the community but a high poverty rate compared to city/county as a whole. However, as noted in the previous section on rental costs, student incomes are difficult to assess accurately because they can appear falsely low for students who report little income of their own but receive support from their families.

POVERTY LEVEL, 1999	A	B	C	D	E	F	G	TOTAL
Total Persons for whom poverty status obtained	663	983	1,357	813	1,113	2,288	1,417	8,634
Total Below Poverty	237	8	63	89	168	1399	780	2744
Percent Below Poverty	36%	1%	5%	11%	15%	61%	55%	32%

MEDIAN HOUSEHOLD INCOME AS PCT. OF CITY/COUNTY MEDIAN



VI. TRANSPORTATION

MODE OF TRANSPORT

A high percent of JPA/Fontaine commuters use alternatives to driving alone compared to city-wide averages of workers over the age of 16. A little more than half of local residents drive alone to work, compared to sixty percent citywide. Meanwhile nineteen percent walk to work, and seven percent use public transit, compared to citywide percentages of seventeen percent and five percent respectively. Five percent of local residents work at home, similar to the citywide average.

MEANS OF TRANSPORT WORKERS 16+	A	B	C	D	E	F	G	TOTAL
Total:	406	478	899	474	719	1,286	709	4,971
Drove alone	168	336	711	290	467	468	365	2,805
Carpooled	82	10	97	86	50	94	9	428
Public transportation:	131	0	9	28	43	44	89	344
Bicycle	3	8	11	28	41	15	45	151
Walked	22	18	11	12	88	629	163	943
Worked at home	0	82	60	6	30	36	38	252
Percent of Total								
Drove alone	41%	70%	79%	61%	65%	36%	51%	56%
Carpooled	20%	2%	11%	18%	7%	7%	1%	9%
Public transportation:	32%	0%	1%	6%	6%	3%	13%	7%
Bicycle	1%	2%	1%	6%	6%	1%	6%	3%
Walked	5%	4%	1%	3%	12%	49%	23%	19%
Worked at home	0%	17%	7%	1%	4%	3%	5%	5%

INSERT MAP OF CTS AND UTS ROUTES WITH NUMBER OF RIDERS IN STUDY AREA AND PERCENT OF TOTAL HIGHLIGHTED. ***WE HAVE CTS AND UTS ROUTE MAPS AND CTS RIDERSHIP DATA, BUT ARE STILL WAITING FOR UTS RIDERSHIP DATA.***

VEHICLES

The Census figures focus on workers and do not incorporate students, many of whom are likely to walk or use UTS for at least some of their daily trips, the total proportion of people who daily walk or take transit in the community is likely very high compared to other parts of the City and County. The following table indicates the number and percent of University Transit Service riders who use the routes in the study area.

The number of cars among local residents and related parking and traffic issues are of concern to the community. The table below of vehicle ownership cross-referenced by owner/renter status reveals that one third of homeowners in the study area have one or no cars, while almost twice that ratio (59%) of rental households have one or no cars. Similarly, sixty-seven percent of howeowners have two or more cars, compared to forty-one percent of renters.

TENURE BY VEHICLES AVAILABLE								
Total:	420	452	542	346	527	1,045	588	3,920
Owner occupied:	0	407	453	146	230	55	40	1,331
No vehicle available	0	0	16	11	16	0	0	43
1 vehicle available	0	132	77	64	86	24	12	395
2 vehicles available	0	162	201	63	81	14	16	537
3 vehicles available	0	85	112	8	26	17	0	248
4 vehicles available	0	12	31	0	18	0	12	73
5 or more vehicles available	0	16	16	0	3	0	0	35
Renter occupied:	420	45	89	200	297	990	548	2,589
No vehicle available	44	0	17	13	20	153	38	285
1 vehicle available	271	19	35	114	119	467	212	1,237
2 vehicles available	91	9	24	45	64	180	132	545
3 vehicles available	7	10	13	18	66	97	60	271
4 vehicles available	0	7	0	10	28	35	78	158
5 or more vehicles available	7	0	0	0	0	58	28	93

TRAFFIC COUNTS

Traffic counts have been reported in several ways by the City, County, and VDOT. Included in this report is the following table from VDOT showing 2001 traffic counts for several key locations. In addition, a 1997 City traffic count map is included on the following page.

VDOT - AVERAGE DAILY TRIPS - 2001	
Route 64 - before and after interchange with 29; east of interchange with 5th St.	36,000
Route 29 Bypass - before and after interchange with 64; before and after interchange with Fontaine Avenue	25,000
Fontaine Avenue - before and after Fontaine Research Park entrance; before and after intersection at corner of Maury Avenue	13000 (fm SCL to JPA)
Jefferson Park Avenue	10000 (fm Fontaine to Cleveland)
	3900 (fm Cleveland to HarrisRrd)
Jefferson Park Avenue Extended	3900 (fm Harris to Cleveland)
	10000 (fm Cleveland to Fontaine)
Harris Road	4800 (fm 5th St to JPA)
Old Lynchburg Road	4300 (fm Rt 780 to 1.87 fm Rt 706)
	2200 (fm Rt 631 to SCL)
Sunset Avenue Extended	1100 (fm Rt 875 to SCL)
Maury Avenue	6700 (fm JPA to Stadium Rd)
Alderman Road	7200 (fm Stadium to Thompson)
Stadium Road	3500 (fm Maury to Emmett)
Cleveland Avenue	2700 (fm Cherry to JPA)
Cherry Avenue	11000 (fm 1st St to Ridge St)
	12000 (fm Ridge St to Spring St) 5300 (fm Spring St to Cleveland Ave)

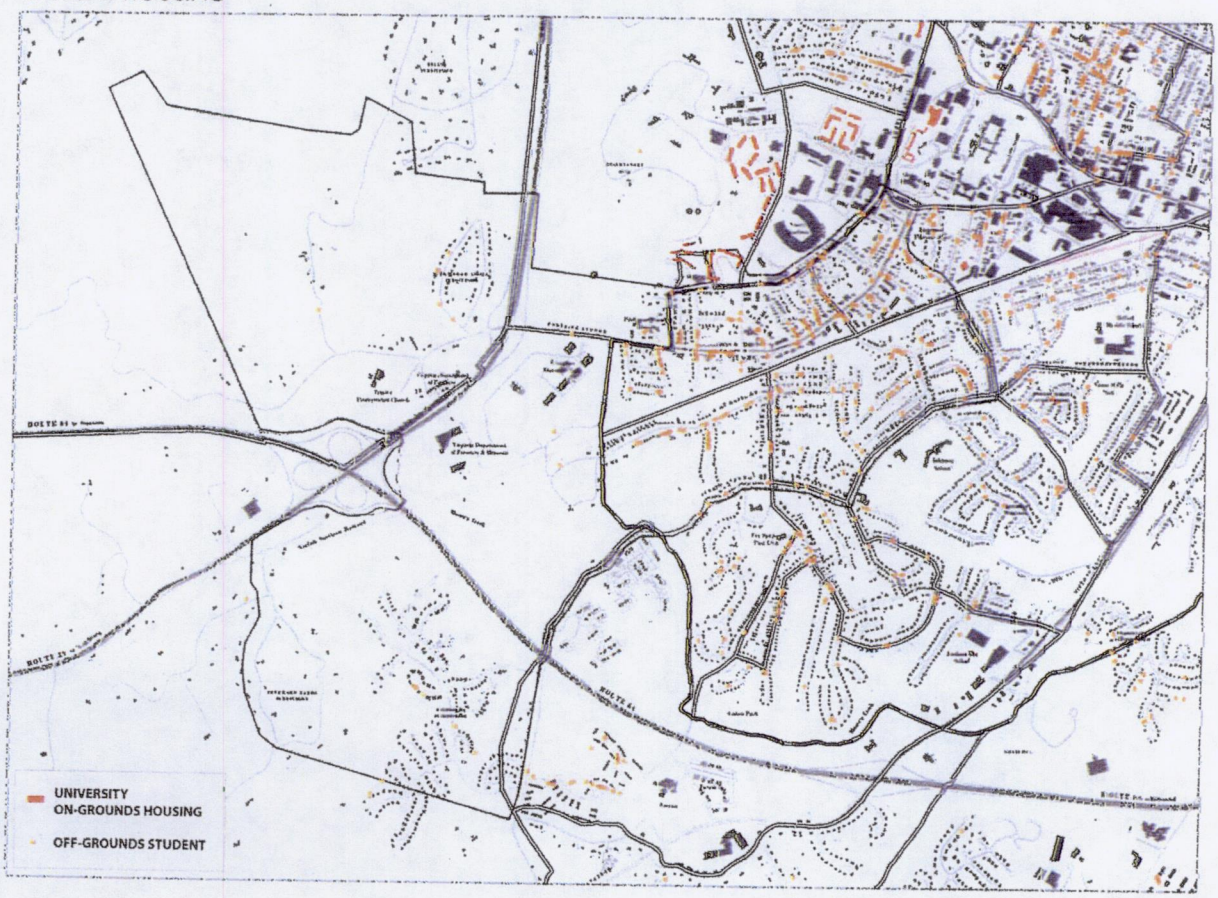
TRAFFIC OUNTS - 1997

VII. UNIVERSITY STUDENTS AND EMPLOYEES

The following map illustrates the distribution of University students throughout the Charlottesville-Albemarle area as of 2001. Roughly 2,340 students (13% of all students) live in the study area. Additionally, the study area as a whole contains 60% of all students (in a combination of dormitories and off Grounds housing).

STUDENTS BY ON GROUND/OFF GROUNDS									
YEAR	1990	1995	2000	2002	2003	2004	2005	2006	2007
	Actual	Actual	Actual	Actual	Projctd	Projctd	Projctd	Projctd	Projctd
Undergraduate	11,304	11,949	12,489	12,748	12,775	12,875	12,950	13,000	13,070
First Year	2,568	2,876	2,927	2,999	3,040	3,040	3,040	3,040	3,100
New Transfers	539	577	494	508	530	535	540	540	545
Graduate	4,665	4,403	4,160	4,459	4,530	4,550	4,570	4,590	4,610
1st Prof	1,693	1,703	1,607	1,608	1,620	1,625	1,625	1,625	1,625
Cont. and Prof Studies	475	343	294	382	350	350	350	350	350
On Grounds Total	18,137	18,398	18,550	19,197	19,275	19,400	19,495	19,565	19,655
Off Grounds	2,973	3,330	3,861	3,947	3,850	3,850	3,850	3,850	3,850

STUDENT HOUSING



Current University practice calls for housing one hundred percent of first year students, approximately half of all undergraduate students and about a third of all students. The most recent numbers approved by the Board of Visitors was in April 2003 project that by 2007 University enrollment is expected to reach 19,655 including 350 non-resident students in

Continuing and Professional Studies. This is an increase of 458 students, or 2% over the total of 19,197 in 2000. Currently the University has 7065 beds in the housing system. About 230 of these beds are for residence life staff.

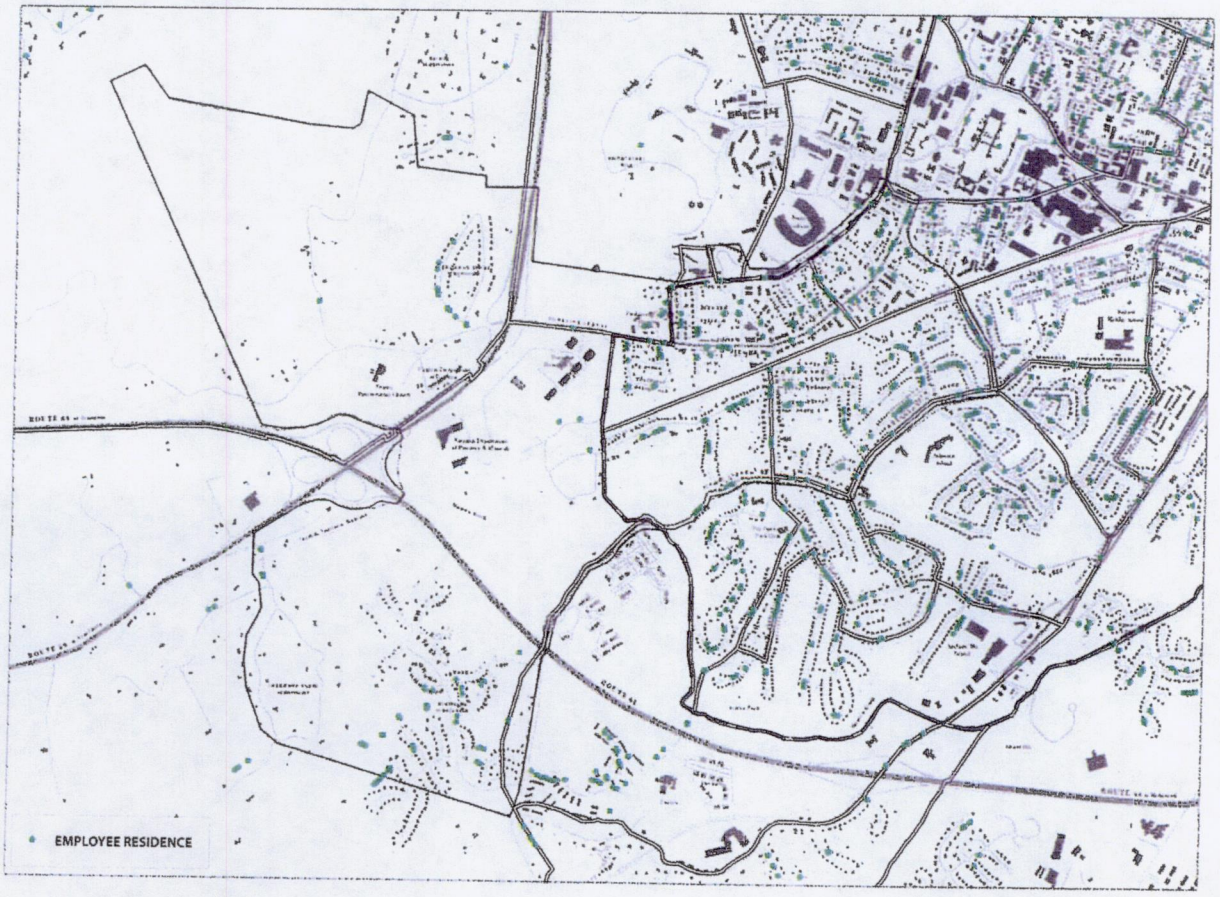
The first year class is scheduled to increase by 60 students by the year 2007, which means the University would likely need to build additional first year housing to accommodate the increase. By the year 2010, as the class of 2007 first year students progress, the University would expect to add upper-class housing. In response to these combined needs, the University is looking at adding 100 to 120 additional beds as part of the Alderman Swing Space project.

ENROLLMENT TRENDS									
YEAR	1990	1995	2000	2002	2003	2004	2005	2006	2007
	Actual	Actual	Actual	Actual	Projctd	Projctd	Projctd	Projctd	Projctd
Enrollment	21,110	21,728	22,411	23,144	23,125	23,250	23,345	23,415	23,505
Percent Increase	n/a	1.02	1.03	1.03	0.9	1	1	1.13	1

During the development of an alternative scenario for the JPA/Fontaine neighborhood plan, the team will assess the demand for additional student housing in the study area and compare it to the amount and location of land available for such development.

The following map shows the number of University employees living in the study area. Twelve percent of the University's 11,608 staff members live within the study area.

UNIVERSITY EMPLOYEES



VIII. SUMMARY OF DEMOGRAPHIC INFORMATION BY SUB AREA

I. THE AREA BETWEEN JPA AND STADIUM ROAD

This area encompasses most of the census block groups labeled as "G" and "A" in the demographic analysis. This area's primary characteristics include:

- In the area nearest to JPA, a high population density, significantly higher than that of the City as a whole, and more than that in the rest of the study area. The density drops considerably in the section along Fontaine Avenue, across from the Fontaine Research park.
- Most of the study area's Asian population.
- A high proportion of people in their 20's and 30's, with a median age of about 23. In the area nearest to JPA, more than 40% area are in the 18-21 year old age group, while about 40% of the less densely populated section along Fontaine is aged 25 to 44. More than half of the non-family households in this area have householders aged 15 to 24 years.
- Very few young or high school age children. About 42% of the area is in undergraduate school, while another 26% are in graduate school.
- A relatively large proportion of large (10+) multi-unit rental properties. The area along JPA is a little less than one-third single family homes, while the section along Fontaine has very few single family homes.
- A very high proportion of renters, more than 90 percent.
- Housing stock primarily built in the late 60's and early 70's.
- A moderate homeowner house value of about $180,000, about in the middle of the range of values for the study area.
- A fairly high percentage (32%-34%) of residents not in the work force.
- A high percentage (23% in the section nearest JPA) of people who walk to work.
- A high proportion of the study area's University students and employees, especially in the section along JPA.

II. THE AREA BETWEEN JPA AND THE RAILROAD TRACKS

This area encompasses most of the census block groups labeled as "E" and "F" in the demographic analysis. Its primary characteristics include:

- The largest number of people within any of the subareas, (3,884) and the subsection of the study area with the highest density. This high-density section is in the eastern corner of the subarea, which is home to a large proportion of University students.
- About an even split of one-person, two-person, and three-person households, roughly one-quarter to one-third each.

- Predominantly younger aged households, with a more than half of the densely populated student area aged 18-21, and about 42% of the remaining area aged 25-44. Less than 10 percent of this section's population is more than 65 years old.
- Most of the study area's undergraduate and graduate students.
- A high number and percentage, relative to other parts of the study area, of multi-unit housing.
- A high proportion of renters; the section in the eastern portion is more than 90% renters, while the remainder is about 56% renters.
- A high proportion of housing stock built in the 1950's and 1960s.
- A concentration of some of the study area's relatively few residents who moved into the area before 1990 – about 27 percent of the block group "E" area residents are in this category, most of whom are homeowners.
- Median homeowner house values ranging from about $102,000 to $193,000.
- A high proportion, e.g. a quarter to half, of the population not in the work force.
- A high percentage (nearly half, in the eastern section) of people who walk to work.
- A high proportion of the study area's University students and employees.

III. THE AREA NORTH OF I-64 AND SOUTH OF FONTAINE AVENUE

This area encompasses most of the census block group labeled "D" and the northern half of the block group labeled "C" in the demographic analysis. The "D" section includes residential and commercial areas along Fontaine Avenue and back to the Fry Springs Beach Club community. The portion of block group "C" in this area is primarily occupied by the Fontaine Research Park. Population and housing characteristics for the "C" block group are included in the description for subarea IV. Area III's primary characteristics, based on the population and housing data for block group "D" include:

- A much less dense and smaller population than areas I and II.
- A predominantly white racial distribution typical of Albemarle County as a whole (more than 80 percent white, with most of the remaining population black and few Asian or other races).
- A more middle-aged population, with a median age of 32. More than a third of this area is in the 25-44 year age group, and 21 percent are in the 45-64 year category.
- Small percentages of school students of any type, including college and graduate students.
- A fairly balanced mix of single-family and smaller multi-family residences; slightly more than half of this area's homes are single family units, with the remaining residences totaling no more than 4 units per structure.
- An owner/renter ratio of 42%/ 58%, which is fairly typical of the City as a whole.
- Housing stock built in the late 1950's.

- A moderately high proportion of longer-lived residents, with about 25 percent of homeowners and nine percent of renters having moved in before 1990.
- Homeowner house values of about $128,000.
- Compared to the rest of the study area, a relatively high percentage (75 percent) of residents in the labor force.
- A moderately high percentage (61 percent) of commuters who drive alone to work, and a high percentage (18 percent) of people who carpool, but few who walk or use public transit.
- A moderate proportion of the study area's University students and employees.

IV. THE AREA SOUTH OF I-64 AND WEST OF SUNSET AVENUE EXTENDED

This area encompasses the southern portion of the census block group labeled "C," on the opposite side of I-64 from the Fontaine Research Park. Area IV's primary characteristics, based on the population and housing data for block group "C" include:

- A fairly high, but lower density population than areas north of I-64, and the highest average household size in the study area (3).
- A high percentage (91) of white persons.
- An older middle-aged population, with a median age of 39.5. Its makeup is fairly similar to neighborhood subarea III, but it has a higher percentage, and much higher numbers, of people older than 45.
- Very small percentages of school students of any type, including college and graduate students.
- The highest percentage (88%) of single-family homes in the study area, and very few units larger than a duplex. It is also the location of the study area's only mobile homes, some 18 in all, about three percent of this subarea's housing stock.
- A high percentage of homeowners (84%).
- Housing stock built in the late 1980's, the newest in the study area.
- A relatively high proportion of longer-lived residents, with about 40 percent of homeowners and six percent of renters having moved in before 1990.
- Homeowner house values of about $170,000.
- Compared to the rest of the study area, the highest percentage (77 percent) of residents in the labor force., and an unemployment rate of zero.
- A very high percentage (79 percent) of commuters who drive alone to work, and a modest percentage (11 percent) of people who carpool, but very few who walk or use public transit. About seven percent work from home, higher than the areas north of I-64.
- Very few of the study area's University students, but a number of University employees.

V. THE AREA SOUTH OF I-64 AND EAST OF SUNSET AVENUE EXTENDED – TO OLD LYNCHBURG ROAD

This subarea immediately adjoins the study area to the east of the study boundary. While detailed data have not been compiled for this subarea, its general makeup is predominated by apartment complexes occupied by students or graduate students. The residential areas are located in a fairly wide expanse of open space bisected by I-64.

VI. THE AREA WEST OF ROUTE 29 BYPASS

This area encompasses the portion of the census block group labeled "B" in the demographic analysis. Its primary characteristics include:

- A moderately high, very low density population.
- A very high percentage (99%) of white persons.
- A much older population than the rest of the study area, with a median age of 54. A third of its residents are aged 45-64, and another third are more than 65. Most of the rest of school-aged children, with only one to two percent in the college-age group.
- A relatively high percentage (10%) of school students compared to the rest of the study area, but virtually no college or graduate students.
- A high percentage (79%) of single-family homes in the study area, and very few units larger than a duplex.
- The study area's highest percentage of homeowners (94%).
- Housing stock built in the 1970's.
- The study area's highest proportion of longer-lived residents, with about 71 percent of homeowners and two percent of renters having moved in before 1990, and a very large 19 percent of homeowners having moved in prior to 1970.
- Very high homeowner house values of about $392,000.
- A moderate percentage (54 percent) of residents in the labor force, similar to the more student-oriented subareas, and an unemployment rate of zero.
- A high percentage (70 percent) of commuters who drive alone to work, and few who use any alternative modes, but an unusually large percentage (17%) who work at home.
- Very few of the study area's University students, but a few University employees.

APPENDIX 3

Student Focus Group Notes
Southern Urban Area B Study

December 10, 2003

Participants: Study Project Team (Susan Thomas, Albemarle County; Mary Hughes, University of Virginia; Ken Schwartz, Renaissance Planning Group); University students John Bailey, past Student Council Housing Chair, Ryan Grammer, incoming Housing Chair; Cerissa Cafasso

Question: Tell us about your current living situation. Describe a typical day.

Cerissa:
There is a very different culture south of the Grounds versus north and northeast of the Grounds. Cerissa's housing by year: 1st – McCormick dorms; 2nd – Brandon; 3rd – Greek housing in Rugby Road area; 4th – Wertland Street @ the curve. She rarely goes home during the day because of the time involved in getting there. Cerissa gives student tours, and housing is always an issue. Another issue is the lack of "dorm-like community" off grounds.

There is a distinct character associated with each of the three different off-Grounds student housing areas:
Rugby: Greek, comprised of series of smaller communities (University Circle, Preston, Wertland)
JPA: more laid back, students live there because they may not have gotten their 1st housing choice

Ryan:
1st year – McCormick dorms; 2nd – University Circle; 3rd – Grady/Rugby; 4th – 14th Street. The bus provides adequate transportation but he has to plan. Ryan noted that the JPA neighborhood is convenient for Engineering students.

John:
1st year – Alderman Road dorms; 2nd – fraternity house near the Architecture School; 3rd – fraternity house again; 4th – Belmont.
The Rugby area has sub-identities, while JPA is lumped together. Rugby has a more defined identity, a positive feature. This pattern may start during a student's 1st year. For example, many McCormick students go Greek. One's housing situation shapes one's view of the neighborhood. Many students request dorms, and usually get them. The hallway design (McCormick) introduces a 1st year student to many more people, which the suite layout (Alderman) may promote a situation where one gets to know fewer people, better. The organization of the dorm buildings on the site is also important to the student's housing experience.

Sometimes a place identity affects how people find the students living there. Residents of Brandon Avenue have had to describe the street as the one where student health is located.

Ryan:
People living in Sterling and the other new apartment complexes are having a hard time – there is little sense of a community. It's also hard to get back home after socializing in places like the Corner. Rather than driving after drinking, people tend to sleep on friends' couches on Grounds or close by since the shuttles stop running in the evening.

Cerissa:
The JPA area doesn't have places for people to socialize – you have to go north. There isn't even a coffeehouse at Fry's Spring corner. As an example of the identities places assume, even the libraries have their own distinct personalities.

Question: How does the students' early housing experience (ultimately) affect the University?

Ryan:
Students get intense pressure to sign leases for the second year in October of their first year. They don't even know their roommates yet – it's too soon. So, they often resort to rooming with high school friends.

John:
In McCormick, you have to grab your friends for early leasing. This benefits the wealthier students whose parents can afford the downpayment. North Grounds (private) housing is more expensive than other areas. A lot of early admission students live in McCormick. Often these students choose early admission because they can request – and virtually always get – the housing of their choice. McCormick housing patterns exhibit racial and pre-Greek/non-Greek dimensions/divisions that may contribute to the racial and other tensions on-Grounds in later years.

Mary:
Residential colleges are said to have a high retention rate.

Cerissa:
Definitely true for Brown.

Cerissa:
There is a high concentration of second year students in Preston and Cambridge complexes. Many of these did not get a room in Lambeth. There is a mad scramble for second year housing before first year spring break.

Ryan:
With the new housing supply, we're seeing more flexibility.

John:
Are the new complexes changing established patterns or are they just a last resort?

Ryan:
The pressure is reduced. With the city's zoning ordinance changes, more people will be able to live in the North Grounds area.

Ken:
If there were cultural, social amenities mixed in with the south side neighborhoods, they could become desirable places to live.

Cerissa:
This would be a townie, grad student area, not for students (undergraduates).John: How the JPA/Fontaine area develops depends on your goals. Do we want to mix people through what is created there? Attracting people to the south side could be positive.

Ryan:
The University should strive for equitable housing within a specified radius of the Grounds.

Cerissa:
Faulkner and Copeley have an "otherness" quality. Trolley access is not available to south side students – extending it would be very positive – the trolley is a different kind of transportation and it is really great for first year students.

John:
All three of us have cars. I drive all the time to the Engineering school. Sometimes I park in lots, sometimes on the street. Pretty much everyone with cars uses them.

Question: If you were writing the Area B Plan, how would you support the things that are working well – the positives? [answers – all]

- The integration of students and local residents is already happening.
- UTS serves the area pretty well.
- There is some low-cost housing available in this area close to Cabell and the Engineering school (and the McIntire School is moving to the East Lawn).
- Getting home safely at night is key - it's convenient from the Lawn to this area.

Question: What is not working well, and how could it be improved?

- Parking is a huge problem, particularly safety.
- The high level of student involvement in activities means that people are moving around at all hours. The stadium area is not well populated.

- Efficiency and convenience are key. Many grocery stores are open 24 hours, inducing students to shop at non-peak hours. At these times, transit may not be available so private cars become more necessary.
- Students want to identify with distinctive places.
- Students follow a 24-hour schedule much of the time.
- Location of the dorms is critical for attracting upper-class students [this seemed to mean anything other than First Year.]
- There will be some new opportunities for dorms with the South Lawn project.
- The re-establishment of the off-grounds housing office will improve the current housing situation.
- Student complexes like the ones along Sunset Avenue Extended work at big state universities, which also follow a more sprawling pattern.
- They are not consistent with UVa's cultural, spatial patterns.
- These complexes will be replaced as student housing y high-density complexes developed under the City's new ordinance, in the new districts north of the Grounds.

Chapter Four: Data Collection – Analysis

The Housing Policy Task Force had various items of data made available to them, which they used as a foundation for assessing the current state of housing, including: 2000 Census demographic data; background data, and; historic information from past studies and efforts. Other information was provided to the Housing Policy Task Force and its sub-groups to permit deeper discussion of particular issues and ideas that were identified during the process. This information was kept in the Neighborhood Development Services Department as a resource for all. Appendices to this housing strategy include a "Housing Atlas" of customized data as well as a bibliography of information supplied.

As the sub-groups pursued their individual tasks, other information was developed and provided to them, and later made available to the entire Housing Policy Task Force as discussed above. Some sub-groups obtained additional information through the use of separate "focus group" sessions where outside resources were brought in on such topics as: Condominium development; Trust Funds; small house development/expansion; Housing Authority activities and programs. This section will discuss some of the data and what it revealed to the task force.

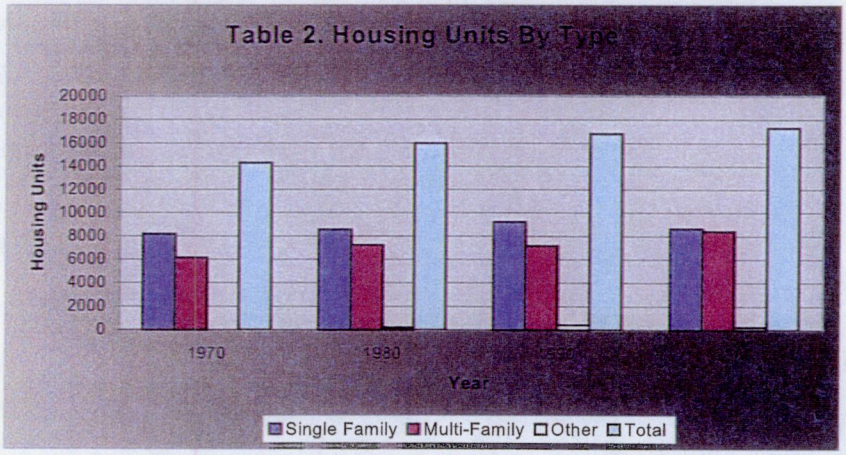
A. Selected Data and Trends

According to the U.S. Census 2000, the City of Charlottesville had 17,591 total dwelling units of which 16,851 were occupied at the time the census was taken, a vacancy rate of just over 4% (most of the vacancies were rental units). Of these, 6,882 (40.84%) were owner-occupied (Table 1). Housing in the city consists primarily of single-family dwelling units. In 2000, 54.6% of all housing units were single-family detached or attached dwelling units. Between 1990 and 2000, the number of single-family units increased by 4.4% while the number of multi-family units increased by 5.3% (Table 2). This has continued as can be seen in

Table 1. Occupancy for Charlottesville

2000	Counts	Percents
Total Housing Units	17,591	100.00%
Occupied Housing	16,851	95.79%
Vacant Housing	740	4.21%
Occupied Housing Units	16,851	100.00%
Owner Occupied	6,882	40.84%
Renter Occupied	9,969	59.16%
Vacant Housing Units	740	100.00%
For Rent	242	32.70%
For Sale Only	74	10.00%
Rented or Sold	90	12.16%
For Seasonal, Recreational Or Occasional Use	71	9.59%
Other Vacant	261	35.27%

Table 9, in that 46% of the 436 units built from 2000 to 2002 were single family units.



In a June 17, 2003 article, the Boston Globe reported that nearly one in seven American households spend more than half their income on housing. In Charlottesville, the ratio is closer to one in five households paying over 50% of income for housing. In the rental market more than one in four pay over half (Table 3). This ratio has gotten worse over the past two decades.

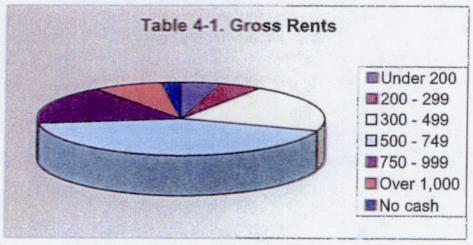
Table 3. Gross Rent as a Percentage of Household Income 1999

	Count	Percentage
Total	9,952	100%
Under 30%	4,637	46.59%
30% - 49%	2,045	20.55%
Over 50%	2,707	27.20%
Unknown	563	5.66%

Table 4. Gross Rent as a Percentage of Household Income 1999

	Count	Percentage
Total	9,952	100%
Under 30%	4,637	46.59%
30% - 34%	718	7.21%
Over 35%	4,034	40.53%
Unknown	563	5.66%
Gross Rents		
Under 200	455	4.57%
200 - 299	457	4.59%
300 - 499	2,103	21.13%
500 - 749	4,240	42.60%
750 - 999	1,715	17.23%
Over 1,000	749	7.53%
No cash	233	2.34%
Median	$596.00	

When looking at the traditional "affordability" threshold of 30% of household income for housing, Charlottesville has experienced an increase between 1990 and 2000, also, with 55% of all City households paying more than 30%. This includes 48% of all renters paying more than 30% (Table 4).



There was a 28% increase in median household income from 1990 to 2000, while the value of housing increased 39% during that same period (Tables 5 & 6). Also, during that period, rents in

excess of $500/month increased from 41% of all rental units to 67% of all rental units (Table 7). Median rent increased 52% between 1990 and 2000 (Table 8).

Table 5. Median Household Income: 1989 and 1999 Comparison

	Albemarle	C-ville	Fluvanna	Greene	Louisa	Nelson
1989 Median Household Income	$36,886	$24,190	$31,378	$29,799	$26,169	$23,705
1999 Median Household Income	$50,679	$31,007	$46,372	$45,931	$39,402	$36,769
Percent Change	38%	28%	48%	54%	51%	55%

Table 6. Median Home Values: Comparison of 1990 and 2000

	Albemarle	C-ville	Fluvanna	Greene	Louisa	Nelson
1990 Self - Reported Value	$111,200	$85,600	$75,100	$73,700	$64,400	$53,100
2000 Self - Reported Home Value	$161,100	$119,000	$111,300	$111,400	$96,400	$95,100
Percent Increase in Home Value	45%	39%	48%	51%	50%	79%

Table 7. Rent Price Ranges: 1990 to 2000

	Charlottesville		Albemarle		Fluvanna		Greene	
Year 1990	**Count**	**Percent**	**Count**	**Percent**	**Count**	**Percent**	**Count**	**Percent**
<200	571	6%	261	3%	20	3%	30	4%
200-299	679	7%	293	4%	88	12%	115	15%
300-499	3,919	43%	2,395	31%	240	33%	335	42%
500<	3,805	41%	4,519	58%	217	30%	184	23%
No cash	202	2%	354	5%	160	22%	125	16%
Median	$469.00		$530.00		$429		$419	
Year 2000	**Charlottesville**		**Albemarle**		**Fluvanna**		**Greene**	
<200	455	5%	150	1%	8	1%	27	3%
200-299	457	5%	264	3%	19	2%	33	4%
300-499	2,103	21%	842	8%	172	18%	112	13%
500<	6,704	67%	8,317	82%	578	60%	582	67%
No cash	233	2%	516	5%	181	19%	118	14%
Median	$596.00		$712.00		$669.00		$622.00	

Table 8. Median Rents: 1990 and 2000 Comparison

	Albemarle	C-ville	Fluvanna	Greene	Louisa	Nelson
1990 Median Monthly Rent	$454	$391	$329	$314	$283	$206
2000 Median Monthly Rent	$712	$596	$669	$622	$504	$440
Percent Increase	57%	52%	103%	98%	78%	114%

Of 9,964 total renter households in Charlottesville, 2,338 (23%) had incomes under $10,000, or roughly 30% of the City Area Median Household Income (AMI), which is $31,007. Another 1,132 (11%) had annual incomes between $10,000 and $15,000, over 30% but below 50% of the AMI. Together these two groups make up almost 35% of the renter households in the city. When using the Metropolitan Statistical Area (MSA) median household income of $44,356, those making roughly 30% or less of the MSA median household income, among renters in the city, is more than 30%.

Of the 365 families living in public housing in Charlottesville, 224 (61%) have incomes at or below 30% of the AMI. The waiting list for public housing has 594 families on it, 98% of which are extremely low income families (below 30% of AMI). 324 of those families on the waiting list have dependent children. Fewer than 70 public housing units turnover per year, with an average of fewer than 6 vacancies monthly.

In addition to the public housing discussed above, the Housing Authority also administers various housing voucher programs totaling approximately 450 vouchers. One of these is the tenant-based Housing Choice Vouchers program with 340 active vouchers, with a waiting list of 1265 (at the end of 2003). Another is the Mainstream Vouchers for families with at least one disabled family member which has 75 active vouchers, with a waiting list of 243. Fewer than 20 of these turnover per year. The remaining 35 vouchers are in the Moderate Rehab program. The wait for the vouchers can be as much as several years. The TJPDC annual "point in time" study of homeless, taken January 21st, revealed that there were 33 unsheltered homeless individuals (31% of the total homeless, up from 20% in 2003). The number of unsheltered was more than two and one-half times what it was in 2003. Of the total homeless, 58% said they were unable to find affordable housing.

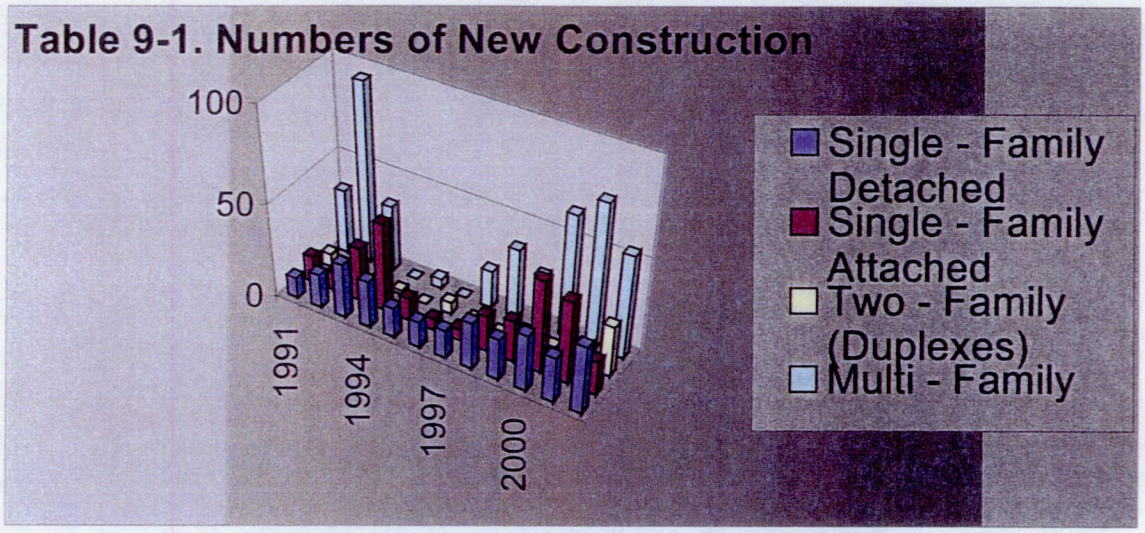
Housing Policy Task Force member, Professor William Lucy, authored a report in June of 2002 which analyzed 1990 and 2000 census data for Charlottesville and Albemarle, pointing out the growing disparity between housing cost and income in the City. This report indicated the need for balance in housing size, age, ownership and value relative to the surrounding communities.

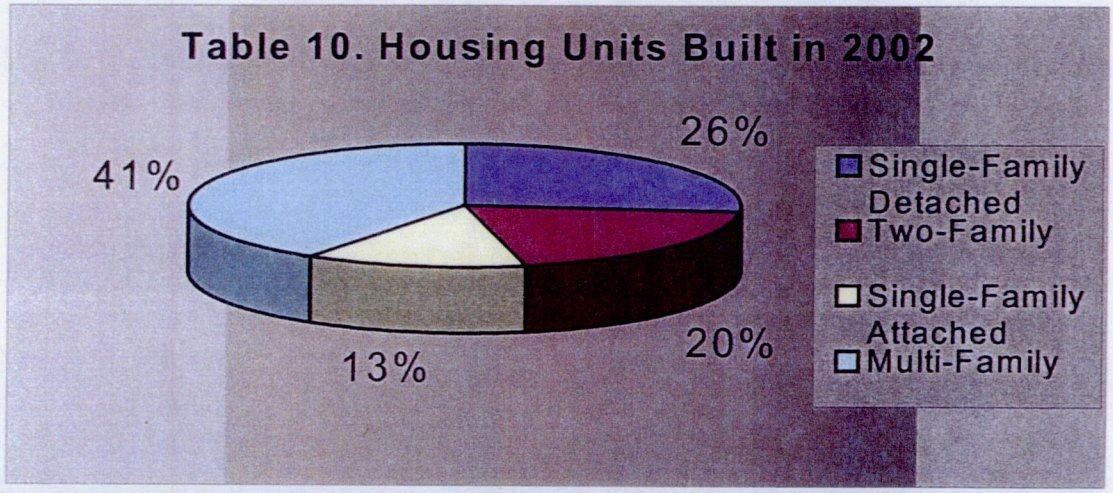
In the thirteen years, between 1991 and 2003, approximately 594 units of single-family detached and attached houses were constructed, approximately 46 units per year. The total building permits issued for housing per year has ranged from a low of 26 in 1996 to a high of 294 in year 2003 with 152 in year 2001. In 2002, 81 (60%) of the 136 units were for homeowners. The four years from 2000-2003 yielded the highest building permits for housing in over a decade (Table 9).

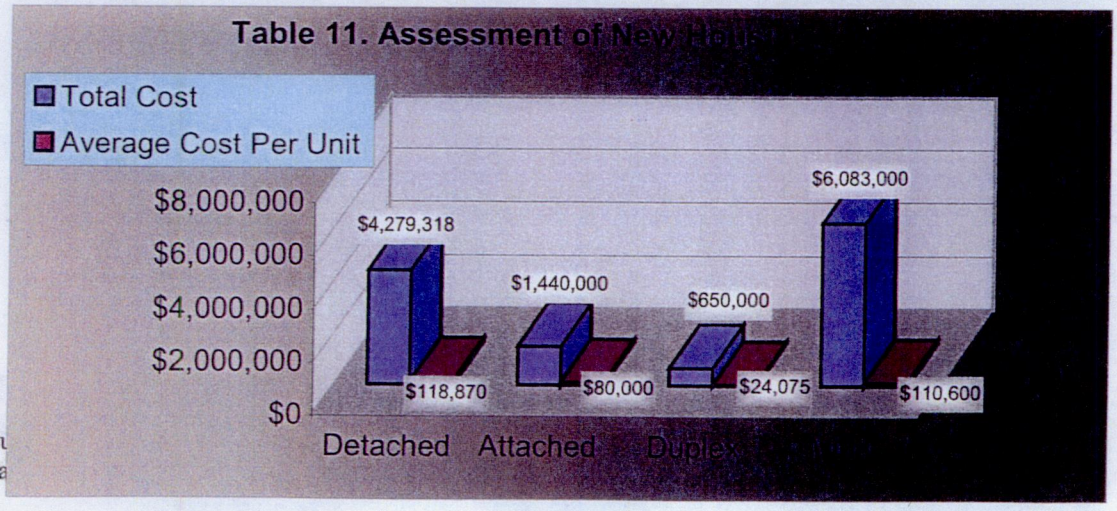
Table 9. New Construction Residential

Year	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Total
Single - Family Detached														
Number of Units	11	18	29	25	16	14	15	25	22	30	24	36	39	304
Single - Family Attached														
Number of Units	14	10	29	47	12	6	6	19	22	49	44	18	14	290
Two - Family (Duplexes)														
Number of Units	7	2	2	2	0	6	2	0	6	4	8	27	6	72
Multi - Family														
Number of Units	34	95	35	0	5	0	20	37	28	65	76	55	235	685
Total Units	66	125	95	74	33	26	43	81	78	148	152	136	294	1351

In the year 2002, there were four types of units built in the City. Of these units, 26% (36 units) were single family detached, 20% (27 units) were duplex units, 13% (18 units) were single-family attached, and 41% (55 units) were multi-family. (Table 10)







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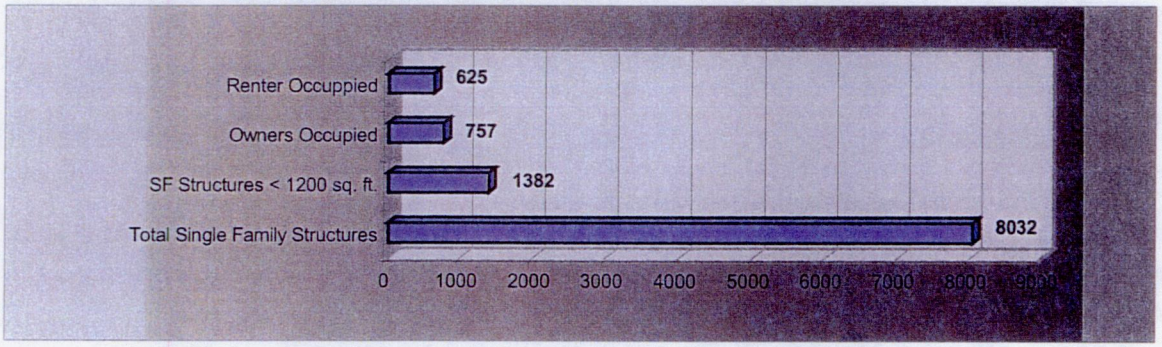
The 136 units built in the year 2002 were spread over a large price range. Sixty-seven percent (67%) of those units were valued at $90,000 or less per unit. This is due, in large part, to most of these being multi-family or attached units which keeps the per unit value low. Twenty-nine percent (29%) of the units were valued at $90,000 to $150,000 (more than half of which were multi-family) and the remaining 4% of the units were above $150,000 (Table 11). The larger number of units permitted in 2003 is mainly due to one 225 unit apartment development.

There are over 8000 single family detached structures within the City of Charlottesville, of which, 1382 (17%) have gross floor areas of less than 1200 square feet (Table 12). Renters occupy 625 or 45% of these small houses. This stock represents another opportunity for potential new homeowners to purchase and expand. The potential for affordable accessory units is there also for both the existing and new homeowners.

Table 12: Single Family Structures with Less than 1200 Square Feet



According to the Charlottesville/Albemarle Area Realtors Report, there were 422 houses sold in Charlottesville in the year 2003, up almost 15% from 2002. The report also indicates that regionally, houses were on the market for 78 days, before they were sold, but the city average was only 38 days. This was again the lowest average in the whole region, indicating strong housing demand in the City of Charlottesville.

The latest city assessment shows an average residential assessment increase for 2004 of 12%, ranging from 5% to 40%. The highest increases being in North Belmont, Rose Hill/Greenleaf, Fifeville, Downtown and around the University, and the lowest increases being in Johnson Village, Orangedale and Willoughby. The average residential assessment increase for 2003 was 14%.

In year 1995 to year 2000, residential sales prices per square foot in downtown Charlottesville have increased from $92 per square foot to $156 per square foot. This indicates that residential property values have increased rapidly and in downtown they are higher than commercial property values (Tables 13 & 14).

It is worth noting that sales data in the downtown for single-family residences has continued to rise to an average of approximately $180/sq.ft in 2001/2002 and an average of $254/sq.ft. in the first half of 2003. Also the city-wide average for residential sales was $137/sq.ft. for the first quarter of 2004, an increase of just over 20% from 2003.

Table 13. Residential Sales Prices Per Square Foot in Downtown Charlottesville

Year	Number of Sales	Average Sales Price Per Square Foot
1995	1	$92
1996	1	$109
1997	2	$115
1998	2	$113
1999	5	$140
2000	4	$156

Table 14. Business and Residential Condominium Structures Assessed Values Per Square Foot in Downtown Charlottesville, 2001-2002

	Average Assessed Value Per Square Foot		
Project Name	Business	Residential	Percent Residential Higher
Queen Charlotte	$109 (20)	$134 (25)	23%
Lewis and Clark	$83 (3)	$114 (24)	27%
Maclin	$68 (16)	$106 (8)	56%
500 Court Square (Monticello Hotel)	$92 (6)	$91 (41)	-1%

B. Challenges, Key Learning Points & Trends

As the Task Force worked through the data and information gathering the following key learning points emerged:

- Uniqueness of the Charlottesville area real estate market given the limited size of the city and areas for new development, the age of housing and the accelerated cost of housing in recent years.
- Housing affordability is a regional issue.
- There is a shortage of affordable rental housing as well as homeownership properties.
- Unlike other communities facing this issue, there are no "undesirable neighborhoods" that could be targets for rehabilitation and affordability projects.
- People who work in Charlottesville do not necessarily live in Charlottesville.
- Affordable today will not be affordable tomorrow due to escalating values.
- Demand versus product availability is driving the market/cost.
- The number of low and moderate income households is steadily growing while the number of affordable starter homes is decreasing.
- The median sales price of homes in Charlottesville for 2003 increased 22% over 2002, making it the highest in the region and higher than the regional average.

All Projected Housing Starts Within the Next 5 Years

Charlottesville Va.

APPENDIX 4

FACULTY COMMENTS ON FACULTY HOUSING

On the faculty housing question, I feel the it is important for the University to maintain some apartments, houses for faculty. Several factors: some faculty here for a short period of time (visiting, on sabbatical from elsewhere or here in town before family arrive and purchase house), many new faculty have limited resources and need affordable housing when new here. All I can think of at the moment. (Nancy McDaniel)

****

When I joined the faculty, I was not informed that faculty housing existed. Consquently my wife and I invested almost immediately in an expensive mortgage. It was the wisest financial decision we've made since joining the University. (A. James Arnold)

****

This is about future plans for faculty housing at U.Va. I strongly support maintaining and in fact expanding options for faculty housing supported by the University in the future. This seems to me particularly important both for junior faculty and for visiting faculty. Charlottesville's real estate is quite expensive (as it is in nearby counties) and can create a hardship for those at the lower rungs of the salary structure, particularly junior faculty and many visitors. To enhance recruitment of both new faculty and visitors, I encourage expanding the housing options that we have for faculty in any ways that are feasible. (Mitchell Green)

****

As far as I know, there is very little demand for faculty-supported faculty housing from medical school faculty. (L.H. Phillips, M.D.)

****

I believe it is critical that we have some sort of furnished residence-type housing for visiting faculty to use for stays of 2 weeks to a few months. It is next to impossible to have short-term accommodations which have cooking for these longer stays. For a sabbatical, year rentals are able to be done. Essentially all other academic institutions have these- I have stayed at Texas, Oklahoma, Maine in such housing. (Stephen Macko)

****

I believe there should be reasonably-priced faculty housing for incoming faculty, and that if anything it should be expanded. As the student body has expanded, with more students living off-grounds there is increasing pressure to find housing. Having an initial period in

University housing can make a tremendous difference to incoming faculty.
But I also think that my impression is anecdotal, and wonder whether you are doing a survey of faculty who have used faculty housing to see how important it is to them? (Judity Shatin)
****

This is just to indicate my strong support for UVa's providing significant amounts of housing units for faculty. I certainly beneffitted from such opportuinity when I first arrived in Charlottesville, and know many other who also did. This service was specilaly useful and almost essential; for thopse who come from outside the US and cannot easily visit Charlottesville ahead of time to looki at options and prepare ahead of time for the arrival of family and household goods. Knowing that there was a university-provided housing option made a huge difference. It facilitates attracting good foreing faculty. University-provioded housing has also been extremely useful for visitors to our department. Again, foreign visitors have been the meain beneficiaries, but this is a useful service for all temporary visitors. (Jorge Secada)
****

I am now in my eighth year of living in faculty housing, without which I could not have saved enough money for a down payment on a starter home in Charlottesville. Given the fact that UVA does not offer home-buying programs, mortgage assistance, or anything of the sort, faculty housing is the only remedy available to faculty who cannot afford a home here. It is also a wonderful place for faculty from different disciplines and different countries to interact, which the University should encourage. (Ruth Hill)
****

I feel strongly that the University should maintain and, when possible, increase options for faculty housing. Families feel welcomed and get oriented more quickly. Connections with other faculty are made that last for years. It promotes interdisciplinary exchange. New faculty get off to a more secure start - housing is one less thing to worry about, as all the other aspects of being a new faculty member need major attention.

Families who have been there for a year or more are great resources for information on elementary schools, medical care, 3employment for the "trailing" spouse, and many other matters. I think that having that as a base to start from probably increases retention of faculty. (Judith Reagan)
****

This email is in reference to the request for faculty comments on housing in the immediate area of the grounds. I believe the university needs to invest in housing for faculty. Here are some thoughts:

1) as a relatively young faculty member (two year visiting appointment, hoping to join tenure track soon) I do not earn enough money to purchase a home in the city of Charlottesville large enough for myself, wife and two young children. This is an economic fact. I am forced to live in a distant part of the county, where I can get a home with some space, and a yard. We would live in town if there was an affordable way to do it. Renting a non-university property in town doesn't make sense for us, because we would simply be throwing money away. But renting a low-cost university property or buying into a housing complex/development makes sense.

2) Faculty will walk to work if you give them the chance. Why invest in more parking garages?

3) Mixing unit sizes is probably a good idea -- I don't think it makes sense to simply build single bedroom apartments for single faculty. Families will live in housing if its comfortable and affordable. Families prefer yards and not too many stairs.

4) Please don't build red brick blobs that look vaguely Georgian, and then have contemporary interiors. Don't be afraid of contemporary design -- it doesn't have to be crazy looking, but modern buildings can be attractive, functional, affordable and scaled appropriately to their sites. This university wide obsession with red brick is getting absurd, and has nothing to do with the real ideas behind the buildings designed by Jefferson. He used red brick because it was available, local and affordable.

5) Any new buildings ought to be built with energy efficiency in mind. Don't force the occupants (or the university) to pay high utility bills. (John Quale)
****

Thank you for the enquiry. None of the faculty in our section make use of university-supported faculty housing. We do have a number of visiting researchers, but none have used the available housing. If we choose to continue to offer this (and I think we should), it would be good to promote faculty awareness, particularly among scientists likely to have researchers visiting for finite periods. (Stephen Bickston)
****

Housing is important for entry level faculty, bachelor and married. If not housing then a stipend to assist beginning level teachers. (Shepard Hurwitz)
****

The German Department welcomes faculty housing, particularly since we often provide space from faculty housing for our guest professors, who visit us on a regular basis. Whatever happens to faculty housing, the issue of guest professors and their accommodation by faculty housing should not be forgotten when its fate is discussed.

(Volker Kaiser)

This is in response to your email requesting faculty input on the importance of UVA faculty housing.

First of all, thank you very much for soliciting faculty input. I am sure that you will receive a great number of very positive comments from the many faculty who have benefitted from UVA's wonderful faculty housing program! I am delighted to be able to express my support.

I cannot emphasize enough how wonderful my stay in faculty housing was, and how crucial that was to the very positive first impression I got of working at UVA and living in Charlottesville. I would wholeheartedly support not only a continuation of the present program but also an extension of the program to accommodate more faculty AND to provide the opportunity for some junior faculty (those who would benefit in special ways) to remain in faculty housing throughout their probationary pre-tenure time.

I lived in a 1-bedroom apartment in the Farm House in Piedmont for 4 years--and I would have stayed there for 2 more years (until receiving tenure) if I'd been allowed to. It was a wonderful experience. The apartment was beautiful. The maintenance was outstanding. The price was right. The location was incredibly convenient. The neighbors became fast friends.

I was especially pleased that Housing allowed me the flexibility of subletting my apartment to a colleague during a year when I was on leave (and out of town), since this greatly simplified both my departure from Charlottesville for the year and my return after the leave.

Having faculty housing available to me was especially important because of my rather complicated personal situation. I have been commuting to and from Kansas, where my wife and family reside. Having this split household, it was especially convenient for me to be able to move to Charlottesville without having to search for an apartment, and to live in a place that was so effortlessly maintained and so tied into campus transportation.

Indeed, I would have loved to have been able to stay in the UVA apartment throughout my pre-tenure time. I imagine that there are a number of faculty in similar positions, for whom finding permanent housing in Charlottesville is impractical during the early years of employment at UVA. For these people longer term residency in the faculty housing would be a great benefit. I would urge the university to institute flexibility allowing some faculty with special needs to remain in the faculty housing for a full 6 years (or even longer).

The current 4-year limit is particularly awkward for many junior faculty (as it was for me). The university offers most junior faculty a sabbatical in their 4th or 5th year (the

Sesquicentennial Fellowships). Since many faculty choose to use that year to conduct research away from Charlottesville, the 4-year limitation on faculty housing kicks in at a particularly inopportune time. The year of research leave is a time when storing belongings and searching for an apartment are most inconvenient, and this comes just a year or so before the tenure decision, which is the most difficult and stressful time in a junior faculty member's early career. It is just at this time that the convenience of faculty housing would be most beneficial.

Thank you again for soliciting my views. I would be happy to provide further input if it would be of use. (Daniel Lefkowitz)

****

I strongly support continuation of University-supported faculty housing. This is very important for junior faculty, especially now that the price of real estate in Charlottesville and especially within easy access of Grounds continues to increase. Also, some junior faculty come here without a car and they need to be able to get to work. One policy that should be re-examined, though, is the requirement that everyone must leave Univ. housing after 4 years. Since junior faculty in Arts & Sciences are often given research leave during their 4th-5th year so that they can focus on getting their research published in time for their tenure review, this policy puts a burden on junior faculty to find alternative accommodations just at the time when they are entering this stressful period. (Ellen Contini-Morava)

SenD#5080

Report of

The Provost's Committee on Faculty Housing Policy

March 6, 2000

Table of Contents

Charge to the Provost's Committee on Faculty Housing

Housing of faculty has become one of Stanford's major challenges. This committee should explore ways to improve our existing housing programs as well as develop new approaches to achieve and maintain housing for our faculty. In particular, working with the staff from the Provost's Office, the task force should focus on two issues:

1. How well do Stanford's existing housing programs serve the needs of our faculty? What improvements could be made to the existing programs?

2. As Stanford considers building additional campus housing, the question of how the University can develop housing that maintains affordability through multiple owners becomes crucial. What approaches can Stanford use to ensure that any new housing will continue to be accessible to future faculty?

Due to the critical nature of this issue, the committee should aim to report any recommendations to the Provost and President by January, 2000.

Faculty Members

Franklin Orr, Chair, Earth Sciences
Deborah Gordon, Biological Sciences
Stephen Hinton, Music
Jeffrey Koseff, Engineering
Edward Lazear, GSB and Hoover Institution
Herbert Lindenberger, English
David Leith, SLAC
William Mobley, Medical School
Jeff Strnad, Law School
Barry Weingast, Political Science

Provost's Staff

Kathy Gillam
Carolyn Sargent
Jeff Wachtel
Betty Oen
Tim Warner

Process

The committee met for the first time on October 15, 1999, and continued to meet weekly until March 2, 2000. On October 28, 1999, Carolyn Sargent made a brief presentation to the Faculty Senate outlining the housing problem. The Senate discussion raised issues that were addressed during the committee's deliberations. Throughout the process, committee members consulted with faculty colleagues on ideas formulated in the committee. In addition, the committee divided into smaller subgroups that met to discuss, in depth, a variety of approaches to the problem.

Introduction

From its beginnings, Stanford University has been a residential community of scholars. The earliest design of the Stanford campus, prepared in the 1880s by Frederick Law Olmsted, included housing for faculty and staff. In 1899, Jane Stanford in addressing the Trustees said, "It is desirable that the members of the faculty and the students should generally reside upon the grounds of the University." Her vision of the University as a place where students and faculty live on or near the campus has endured as the surrounding communities have grown. In the last four decades, however, housing for faculty and students has taken on another dimension as the cost of housing in the region has increased. The leadership of Stanford University, with the backing of the Trustees, has had the foresight and wisdom to create programs to help faculty find and afford housing. These programs have become an important component of the University's effort to attract and retain the talented faculty that make up a university of the first rank. The option of on-campus housing, plus access to financial assistance for home purchases on or off campus, has served the University well, and it must continue to do so in the future if Stanford is to compete academically at the highest level.

Stanford's housing programs began in 1891 with the construction of ten cottages on Alvarado Row that were sold to charter members of the faculty and staff. In the 1920's and 1930's, as the faculty of the new university grew, more than 180 faculty members built single family homes in the San Juan Hill area. There are now 609 existing single family homes on-campus, the majority of which were built between 1955 and 1970 to accommodate post war faculty growth. President J.E. Wallace Sterling and Provost Frederick Terman recognized the value of campus housing as a recruiting tool. Under their direction, in the late 1950's, the Committee on Faculty-Staff Housing planned the development of the Pine Hill and Frenchman's Hill subdivisions. Financial assistance for housing also began at that time as the University provided leases of campus lots at low cost and offered construction loans and mortgages at attractive rates.

The development of the more affordable Pearce Mitchell (1975) and Peter Coutts (1982) condominiums broadened the array of housing choices. Recently, a small number of homes were built at Ryan Court and the Hill Site. Today, there are 842 homes owned by faculty and senior staff on-campus. At present, only a limited number of rental units exist, but that situation will improve with the completion of 628 apartments under construction in the Stanford West project. Stanford faculty and staff will have preference for those units. In addition, Stanford has applied to the County of Santa Clara to build between 313 and 689 additional faculty housing units over the next ten years under a new General Use Permit.

While affordable housing has long been a concern, the rate of price inflation became alarming in the late 1970's. In 1970, a 3-bedroom 2-bathroom house in Palo Alto cost $44,500. By 1979, the price for the same house, net of inflation, had increased 135%. The need for additional financial assistance became evident, and a variety of programs were developed to help faculty cope with limited availability of housing at prices they could afford to pay. These included shared appreciation mortgages, the Housing Allowance Program, and the Down Payment Assistance Program.

Stanford's housing assistance programs have evolved over the years in response to the changing local housing market. University committees were convened repeatedly to review the programs and recommend changes. These include the Subcommittee on Faculty and Staff Housing (report, 1979), the Decanal Subcommittee on Housing (1981 to 1989), the Provost's Committee on Housing chaired by Robert Cutler (1991), and the Provost's Committee on Housing Programs and Policies chaired by Gavin Wright (1993).

The issues considered here are persistent. One committee noted that:

> "While Stanford has had a strong and highly effective housing program that has substantially furthered its academic program, certain events in recent years have raised questions about the capability of the current housing program to maintain its high

degree of effectiveness. The unprecedented and spectacular increase in the cost of housing, fueled by a high and seemingly intractable rate of inflation, has made housing less and less affordable. The lack of new construction, coupled with the soaring cost of housing in Northern California, has created a housing problem that we believe have a potentially serious impact on the academic program of the University."

While this report was issued in June, 1979, by the Subcommittee on Faculty and Staff Housing, its concerns echo those faced by the present Provost's Committee on Faculty Housing Policy. No doubt there will be future committees who will be asked to examine how successful this committee was in recommending appropriate responses to the housing challenges the University now faces.

In 1993, the Committee on Housing Programs and Policies stated the following as a goal of Stanford's housing policies:

"The goal of Stanford's housing programs is to provide sufficient assistance that decisions made by faculty about whether to come to Stanford or to stay at Stanford are primarily based on academic reasons, not on the cost of housing. Similarly, retirement decisions should not be primarily, or in a major way influenced by housing considerations."

The recent fast-paced escalation of housing prices on the Stanford campus and in the surrounding communities has greatly jeopardized Stanford's ability to meet this goal. Even with Stanford's housing programs, many recently appointed faculty have been unable to purchase suitable housing. This problem is especially acute for the junior faculty.

Prior to the 1990s, Stanford's programs allowed many junior faculty to afford housing in the local community. Housing was therefore a smaller factor in a junior scholar's decision to move to or to remain at Stanford. Because price escalation and limited availability has priced many junior faculty out of the market, these scholars must now place greater weight on housing in their decisions. Stanford clearly has been able to compete with its peer on academic dimensions alone. Yet it is unlikely that we can continue to do so if housing weighs heavily as an element in faculty decisions.

Put simply, Stanford's future is in jeopardy. For many departments, even a gap in hiring of a few years will affect their standing. We cannot remain competitive unless we continue to attract and retain top assistant and associate professors. If we fail, Stanford will inevitably decline in quality. In the sections that follow, we review the current housing market, Stanford's competitive position, and current housing programs. The remainder of the report presents the committee's evaluation of current programs and its recommendations.

The Housing Problem: High Cost and Low Vacancy

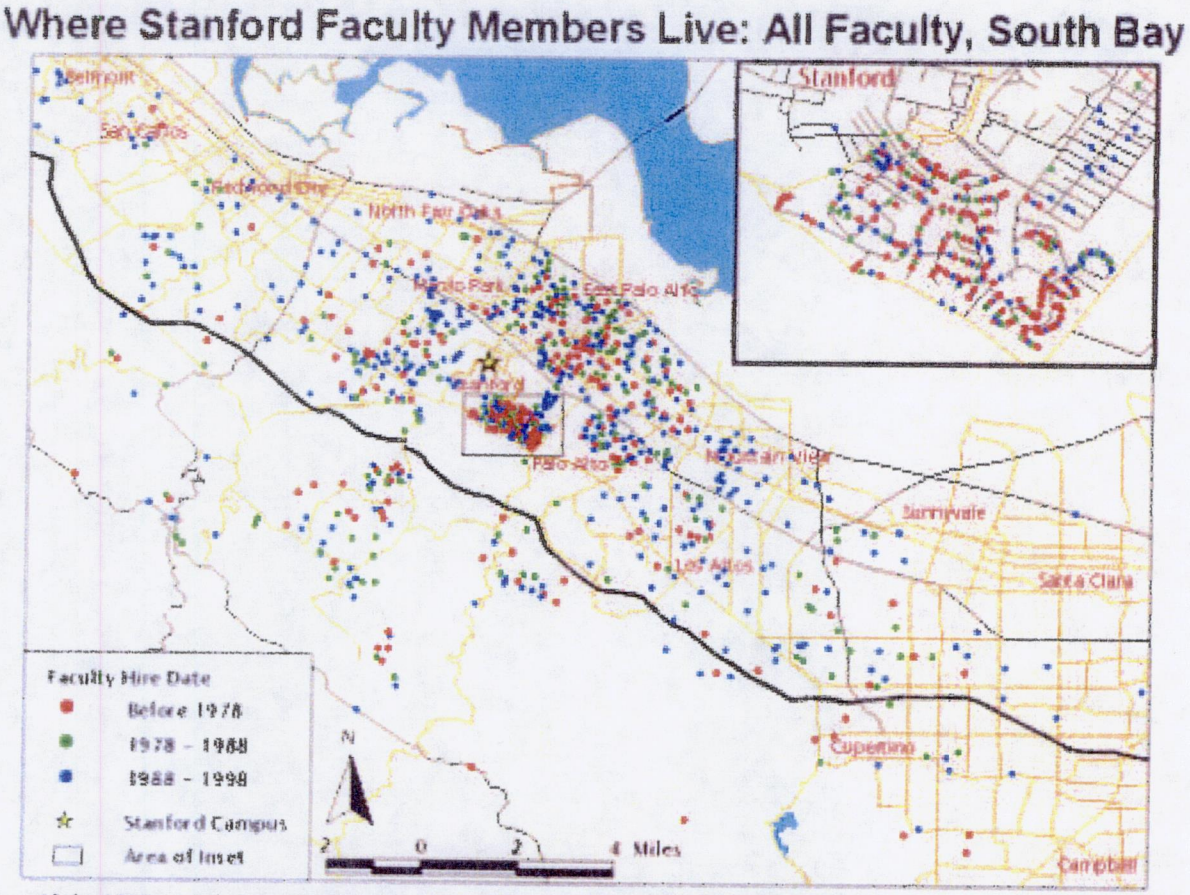
Housing Availability in the Region

The problems Stanford faculty face in finding affordable housing reflect a chronic shortage of housing in the Bay Area, exacerbated in recent years by the booming regional economy. From 1990 to 1998 nearly 79,000 new jobs have been created among eight Peninsula communities.[1] In those same communities, fewer than 9,000 new homes have been built. Palo Alto and Menlo Park added about 8,300 jobs in the past eight years, but together created only 846 new housing units. Thus, Stanford faculty compete for housing in a market where the demand is high and the supply is limited.

Figures 1 and 2 show the current regional distribution of housing occupied by Stanford faculty. It indicates that many Stanford faculty presently live on or near the campus.

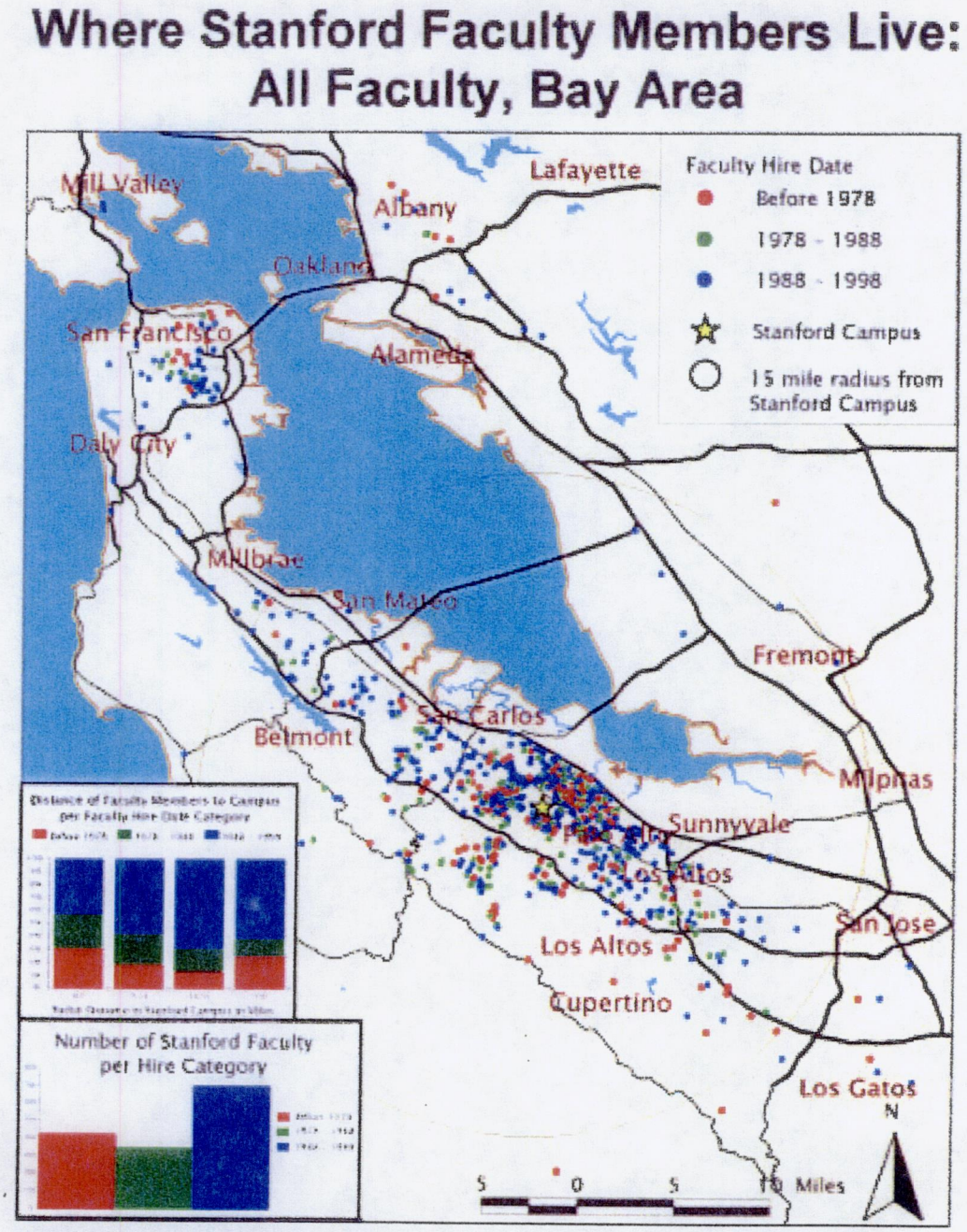
[1] Keyser Marston Associates study commissioned by Stanford.

Figure 1.



* Of the 1595 total data points available, 117 points were not included in this study due to incomplete address data and/or address location outside of Bay Area. This map was prepared using ArcView GIS at the Branner Earth Sciences Library.

Figure 2.



* Of the 1595 total data points available, 117 points were not included in this study due to incomplete address data and/or address location outside of Bay Area. This map was prepared using ArcView GIS at the Branner Earth Sciences Library.

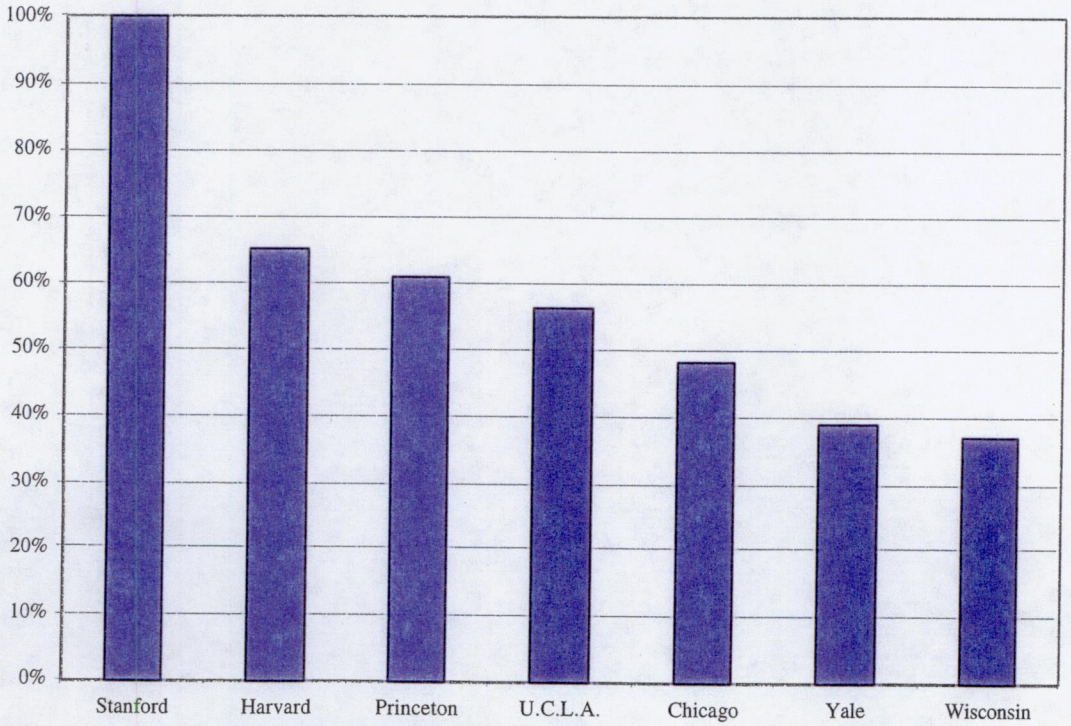
However, most of these faculty purchased their homes before the price rises of the last several years. Stanford currently appoints about one hundred new faculty each year. Over the last five years, an average of forty homes on-campus sold each year. The combination of limited supply and high prices means that most new hires must seek housing off-campus. Faced with the price increases of the last few years, Stanford faculty purchasing houses have increasingly sought housing more distant from the campus.

Although Stanford can do little to influence the availability of housing in the communities surrounding the campus, it does have the option of building more homes on-campus. Stanford will be better able to address the housing problem if we are allowed to build additional housing units under the new General Use Permit. However, the pool of faculty and staff eligible to buy campus housing will still be about twice as large as the supply, so these houses alone will not solve Stanford's housing problem. Nevertheless, the committee believes strongly that building significant numbers of new homes for faculty on-campus is an essential component of Stanford's housing programs. There is a need for a wider range of housing units that would serve faculty members at all stages of their careers.

Stanford's Competitive Position in Recruiting and Retention

Stanford must compete for faculty with other top research institutions, many of which are located in areas with substantially lower housing prices.[2] Figure 4 compares average housing prices in the locations near some of these institutions.

Figure 4. Relative House Prices: Stanford University and Its Competitors 3rd Quarter 1999



Comparative Index Median Prices of Single Family Homes, Stanford = 100%
National Association of Realtors

[2] See Appendix 1 for a summary of housing programs at other universities.

Although there are significant uncertainties in comparing housing price data aggregated over relatively large metropolitan areas, there is little question that comparable housing is available at lower prices in areas near our major competitors.

The cost of housing influences faculty recruitment at all levels. The competitive environment for top young faculty means that candidates being recruited by Stanford typically have offers from one or more of Stanford's peer institutions. Faculty being recruited at higher ranks often already own homes, and for them, the higher price of comparable housing on or near the Stanford campus is a key issue in whether or not they accept Stanford's offer. Deans and department chairs involved in recruiting report that the cost of housing comes up early and often in discussions with faculty at any level across the entire University.

Furthermore, recent experience indicates that special housing assistance (often in the form of zero interest loans) has been required to persuade new faculty, particularly new senior recruits, to come to Stanford. That experience demonstrates, empirically at least, that the current standard housing programs are not sufficient from a competitive standpoint. The committee concludes that the availability and affordability of desirable housing have become a critical factor in recruiting new faculty and that Stanford is seriously disadvantaged with respect to its competitors.

Housing prices also play a role in the retention of Stanford faculty. Recently tenured Stanford faculty, for example, are attractive candidates for universities that can offer better housing at lower prices. Faculty at this stage of their careers are often ready to move beyond entry-level housing. The difficulty experienced by recently tenured faculty of moving into adequate housing at Stanford is often a factor in their deciding whether to accept an offer from a competing institution or to stay at Stanford. Although the economics of housing is clearly not the only factor that influences such decisions, it is equally clear that it can tip the balance in the competition for faculty. Up through the early 1990's, young faculty with outside offers could be assured of adequate housing. They therefore could make their location decision solely on the basis of academic issues. Now they must also consider housing, and this works decidedly against Stanford.

Even worse, many faculty perceive that they need to seek an outside offer in order to obtain additional housing or salary assistance. Unfortunately, this perception creates an environment in which outside offers to Stanford faculty are more likely, and hence a certain portion of scholars who would otherwise stay are, in the end, tempted to leave. It is difficult to quantify the exact role of housing in the complex decisions that faculty make during recruitment and retention discussions. Even so, there is little doubt among deans and department chairs that housing is an area in which Stanford must work hard to avoid further erosion of its competitive position.

Current Programs

Stanford's standard programs currently include salary supplements paid over a fixed term, assistance with the down payment, and access to shared appreciation loans that have a low current interest feature.

Housing Allowance Program (HAP)

HAP is a taxable fringe benefit that provides additional compensation to for a fixed term starting with their initial home purchase.[3] HAP is a program that is intended to address the difference in the cost of home ownership between the Stanford area and areas in proximity to other major research Universities. HAP declines on a linear basis by 1/9 each year. If a different home is purchased during the HAP term, the remaining HAP balance is transferable

[3] The HAP parameters for the Academic Year 1999/20000 are: 8.5% x 9 month starting base salary + $8,500.

to the new home. In the past year, if needed for the down payment, faculty could take the equivalent of the first two years of payments as a one-time payment. HAP is available to faculty who do not own a home in the local area at the time they receive an offer of an appointment at Stanford. Emeriti are not eligible for HAP.

Down Payment Assistance Program (DPAP)

The DPAP loan assists faculty by providing a low interest rate loan for ten percent of the minimum required down payment on a home plus the loan origination fees for the first and MAP mortgages.. The DPAP rate is fixed, and the loan fully amortizes over a 15-year term. The program was created in the mid-1980's when lenders required a twenty percent cash down payment. DPAP was designed to mitigate the difficulties associated with raising a down payment encountered by many faculty because of the high cost of local housing. The purpose of DPAP has evolved since its introduction. Typically, lenders now require a ten percent cash down payment. Most borrowers use DPAP because it offers a very attractive, low market interest rate on a fully amortizing loan.

Mortgage Assistance Program (MAP)

MAP is a tool that enables some borrowers to purchase a home that would otherwise be unaffordable. It is an interest only, non-amortizing loan that has a low, fixed current interest rate and deferred interest that is payable at the time of sale or refinancing. The deferred interest rate is equal to Stanford's share of the appreciation, but cannot exceed approximately 8.75% compounded annually based on the rate for March, 2000. This maximum rate is fixed at the time each loan is funded. However, over time this maximum rate will increase or decrease each month depending on the Applicable Federal Rate set by the Internal Revenue Service.[4] The loan is tax efficient because current and deferred interest are deductible.[5] Like DPAP, this program generally provides a return to Stanford that covers program costs, unless the market is flat or depreciates. In that scenario, Stanford's return is limited to the current interest.

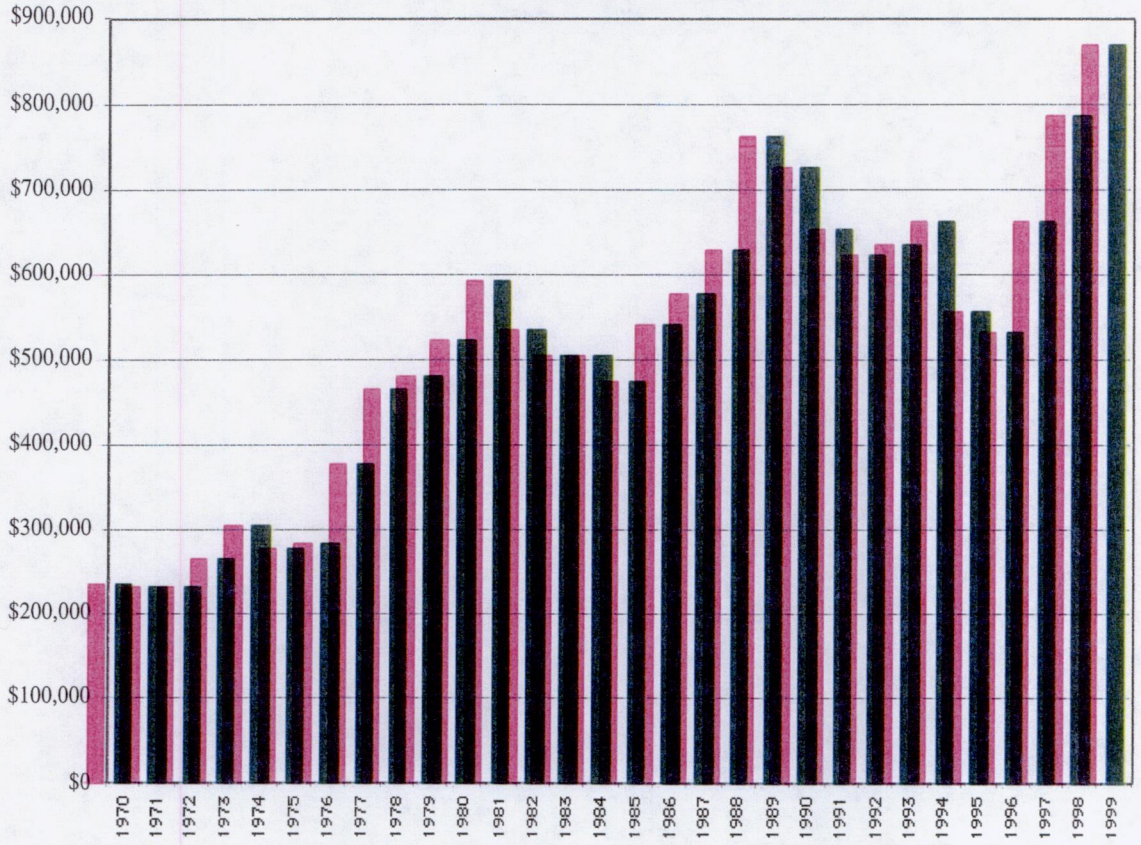
Affordability with Current Programs

Stanford faculty compete for housing both on and off-campus. Although the pool of buyers eligible to buy on-campus is restricted to faculty and certain staff, prices of campus homes are correlated with prices in surrounding communities. Higher prices for off-campus homes translate into higher demand for on-campus homes, which causes on-campus prices to rise. Because home prices on-campus roughly follow the local market, houses that were intended to be affordable for typical faculty members are now beyond reach for many. Median sale prices on-campus rose dramatically last year and have been on a fairly steady upward trend since 1970, as shown in Figure 3.

[4] The maximum rate is limited to an amount of interest, when added to current interest previously paid, would result in a return to Stanford equal to the Applicable Federal Rate (AFR) + 2%, compounded annually. The long-term AFR set by the Internal Revenue Service for March, 2000, is 6.75%, and the AFR + 2% is 8.75%.

[5] The deferred interest is deductible only to the extent that the borrower has sufficient income at the time the loan is paid off to offset the deduction.

Figure 3. Median Sale Prices Campus Single Family Houses: 1970-1999
Prices in 1999 Dollars



Not adjusted for house configuration (Includes Ryan Court)

In the local housing market, Stanford faculty members compete with other professionals. The market is driven both by the shortage of housing and the relatively high salaries associated with new jobs created in Silicon Valley. Typically, Stanford faculty members (and other buyers, of course) must bid above the asking price and accept houses in "as is" condition if they are to compete for the limited number of available houses.

The ability of Stanford faculty to compete in this housing market is limited by their borrowing power. To keep pace with the market, HAP parameters are recalculated each year so that the resulting income supplement is sufficient to assure that on average, faculty using the combined Stanford programs can afford a "target house".

Target houses are currently defined as follows: assistant, 3-bedroom, 2-bath condominium; associate, 3-bedroom 2 or 2.5-bath-single-family house; and professor, 4-bedroom, 3-bath single family house. Median target house prices are based on surveys of homes sold on-campus and in nearby cities.[6] Median salary data are provided by the Provost's office. For faculty who purchased homes in the past ten years using University loan programs, more than 80% of this group have another income source in addition to base salary. For these borrowers, the amount other income was about 50% of the base salary. Data from historic

[6] The cities surveyed for existing homes sales include Palo Alto, Los Altos, Menlo Park, Cupertino, Sunnyvale, and campus.

purchases by faculty are used for the household income assumption in the HAP parameters model.

The median 9-month base salary of a Stanford assistant professor is currently $60,800.[7] Stanford's loan evaluation criteria allow the faculty member to allocate up to 38% of pretax income to housing costs.[8] Consider an assistant professor with a household income at the median assistant professor salary, who takes full advantage of Stanford's regular financial assistance programs, who makes a down payment of 10%, and who has no other significant debt. Then he/she can afford a house costing $341,000. A 40% increase in household income from a working spouse, summer salary, or other income source means that the same assistant professor would be able to afford a house costing $475,000.

For associate professors, the median base salary is currently $82,200. With assumptions similar to those made for assistant professors, a buyer with this income can afford a house costing $474,000. A 35% increase in household income means that an associate professor at the median income level would be able to afford a house costing $622,000. For full professors, the median salary is currently $117,000. A professor with this salary can afford a house costing $668,000. A 30% increase in household income means that a professor at the median income level would be able to afford a house costing $848,000. At all faculty levels, a supplemental source of income, whether summer salary or a working partner, is an important component in the ability of a faculty member to afford housing in the local market. See Appendix 2 for details of loan amounts, interest rates, and monthly housing expenses.

Home prices vary significantly based on the quality of the housing, access to good schools, and the location in surrounding communities. In the six months between April and October 1999, for the associate professor target house, the median resale price for a 3-bedroom, 2-bath single-family home in Palo Alto was $711,000 compared to $573,000 in Cupertino. In the same period, the assistant professor target condominium median prices were $500,000 in Palo Alto and $453,000 in Cupertino.

The current HAP supplement and MAP loan programs are geared toward these target prices. However, there is limited availability of housing in these price ranges on-campus or in adjacent cities such as Palo Alto and Menlo Park. Even with the use of HAP and other programs, many new faculty need additional assistance unless they buy in Sunnyvale, Cupertino, or more distant locations. Young faculty are also often limited by the requirement that they provide 10% of the purchase price for a down payment. It is apparent that even with the substantial assistance of Stanford's current housing programs, without which many faculty would have no opportunity to own a home, faculty seeking housing in the current market face significant difficulties.

Advantages and Disadvantages of Current Programs

This committee was impressed by the prior steps taken by the University and its Trustees to combat this serious problem. Despite these creative tools put at the disposal of the institution, chairs and dean's have a very difficult time recruiting the best faculty, given the local pricing of housing. The Committee on Faculty Housing Policy believes that to solve this problem, we

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7 Median academic base salary data for 1999/2000 include full time, tenure line faculty. Medical School appointments are excluded.

8 Underwriting criteria use two ratios. The first limits the ratio of housing expenses divided by pretax household income to 33%. The second limits the ratio of housing expenses + debt divided by pretax household income to 38%. Conventional lenders and Stanford add Down Payment Assistance Program loan payment to housing expenses in the second, 38% ratio. Affordability calculations in this report therefore use the 38% ratio since it is the most accurately reflects housing expenses.

must introduce a range of programs that continue to make it affordable for most faculty to live in the community.

In reviewing the problem , the committee strongly recommends that attention be given to all stages of a professor's career at Stanford – the new assistant professor, the newly tenured professor, the recruitment or retention of 'superstars' and the transition to emeritus status at the end of a life committed to Stanford. We recommend a implementing housing programs that allow the University to deal with the housing issue in a flexible and sustainable manner, as described in our recommendations.

HAP is very popular with faculty as an unconditional fringe benefit. The benefit is taxable, but since HAP is used to pay a mortgage interest expense, HAP income is partially offset by a corresponding interest deduction. HAP decreases annually and faculty sometimes perceive that their benefit is decreasing more quickly than their salaries are increasing. While front loading HAP is not tax efficient, it has enabled a number of faculty to assemble the minimum down payment required to purchase a home. As a one-time benefit, the HAP program is generally not available for the purchase of a larger, more expensive home as a faculty member's career progresses and family needs change. For example, if a junior faculty member uses HAP on a first home, and then wants to buy a different house after receiving tenure, there is little or no HAP left. Since HAP is an income supplement, unlike MAP, there is no possibility of the University receiving any return on HAP dollars paid to faculty. Occasionally, when a faculty member receives tenure or a promotion, an exception request is made to start a new HAP. The selective distribution of such a benefit raises equity issues.

DPAP is a successful program. It is viewed as a benefit in the form of a relatively inexpensive loan. At the same time, the interest rate is sufficient to make the program cost effective for Stanford. In effect, Stanford is passing on to borrowers the benefit of Stanford's ability to borrow at a lower interest rate than that available to individuals. DPAP is available for subsequent purchases, so it is helpful when someone wants to buy a more expensive home. Because DPAP has a shorter amortization period, the borrower accumulates equity faster than with a conventional 30 year mortgage. The only "disadvantage" of the program is that the 15-year amortization period, even at a lower interest rate, results in monthly payments that may be higher than with a higher interest rate, conventional 30-year mortgage. DPAP is rarely used by faculty and emeriti who have owned homes for many years. Most people in this category have built up sufficient equity to exceed the required minimum down payment and do not want to incur additional debt.

The MAP loan appears to be attractive to faculty. By reducing monthly housing expenses, it enables some faculty to purchase more expensive homes than those they could qualify for using conventional financing. MAP allows faculty to choose between buying a more expensive house with a shared appreciation feature, or avoiding shared appreciation by buying a less expensive house financed with a conventional loan.

The current MAP program is easier to understand than its predecessors, Lathrop and COIN, and the terms are more favorable to borrowers. Unlike COIN and Lathrop, the University does not view MAP as an investment. Instead, MAP is designed as a cost-effective, tax-efficient program to make housing more affordable. By limiting the deferred interest obligation, MAP helps to reduce the problem experienced by some faculty when they wanted to pay off Lathrop and move to a bigger, more expensive home. Under the old programs, when home appreciation greatly outpaced salary increases, paying the shared appreciation obligation to Stanford left insufficient equity for the next purchase.

Since MAP is a shared appreciation loan, there is a perception that the borrower has taken on a risk, not shared by Stanford, in a depreciating market. That is, if the value of the home declines (but the value still exceeds the loan principal), and the faculty member has to sell, the entire principal would have to be paid back to Stanford. While this represents some risk, it is not significantly greater than the risk a borrower would bear with a conventional amortizing loan in the same type of market. In the early years, little equity is accumulated and upon sale,

nearly the entire loan amount would have to be repaid. Over time, any risk is reduced, if not eliminated, if appreciation in the housing market follows past trends.

Recommendations

Although Stanford's current housing programs, HAP, DPAP, and MAP continue to help faculty to purchase housing on-campus and in surrounding communities, the committee believes that they are no longer sufficient and that therefore Stanford urgently needs to invest *substantial* additional University resources in housing programs.

In formulating its recommendations, the committee was guided by the following principles, adapted with some modification from those stated in the 1993 Wright report:

- The goal of Stanford's housing programs is to provide sufficient assistance that decisions made by faculty about whether to come to Stanford or to stay at Stanford are primarily based on academic reasons, not on the cost of housing. Similarly, retirement decisions should not be primarily influenced by housing considerations.

- Housing programs should encourage faculty to live in reasonable proximity to the campus.

- Housing programs should allow faculty to make housing decisions based on market forces. Non-market mechanisms such as rationing should be avoided.

- Housing and mortgage assistance programs should be administered by rules that are clear and concise. Exceptions should be permitted but used sparingly to accommodate special circumstances.

- A menu of housing assistance programs should be offered allowing flexibility in how an individual faculty member makes use of the programs.

Stanford currently contributes substantial resources to housing programs. Moreover, modifications of existing programs and the expanded use of zero interest loans have increased Stanford's contribution beyond the programs noted above. These costs will increase next year. In FY 98/99, for example, the balance sheet for Stanford's housing programs showed a net cost to Stanford of about $5.2 million. The net cost covers only the borrowing costs on zero interest loans, operating expenses, and interest income on the loan portfolio but does not fully recognize implicit subsidies in both the loan programs and land use.

The committee believes that for Stanford to be competitive for top faculty in the future, the University will be required to supplement funding for existing programs. The future level of housing benefits is a matter to be determined by the Provost, President and Trustees. The committee recommends, therefore, that a mix of the programs elements discussed below be offered consistent with the overall level of benefits that are financially feasible. The committee believes that this mix will enable Stanford to be competitive in a large fraction of recruiting and retention cases. The mix is particularly responsive to the needs of new assistant professors and faculty in the middle of the range of Stanford pay for each particular level of rank and seniority.

In its deliberations, the committee considered a wide range of forms of housing assistance, from co-ownership of housing, to significant revisions in the lease arrangements for future homes on-campus, for example. The recommendations that follow reflect the committee's judgments about how to respond to the need for Stanford to compete effectively for faculty without creating tax problems or significant market dislocations that would cause problems in future years.

The committee does not view these recommendations as the last word on the subject. University administrators with the assistance of experts and under the direction of the President, Provost and Trustees should continue the process of considering qualitatively different approaches as well as variations in the details of the recommendations made here. Not every member of the committee agrees with every such detail, and the recommendations deliberately leave some details to be supplied by administrators.

The committee considered several qualitatively different approaches, some of which may offer more individual flexibility for faculty and staff as well as more transparency for Stanford with respect to setting assistance levels and evaluating risk to the University, and the committee believes that additional future consideration of these approaches would be useful. However, the recommendations below have the advantage of relatively easy implementation because they are a combination of approaches already employed by the University. These approaches have known tax and administrative characteristics. The competitive recruiting needs of the University are such that prompt revision of the current system is important.

The recommended approach also has the virtue that assistance levels are set each year such that new faculty of any particular rank will be able to purchase or rent a "target dwelling" (of a size and type typical of the needs of those with that rank) in the area around the University using reasonable fraction of their income to make the relevant payments. Use of target housing prices (revised annually) and fraction of income standard is the reason for the committee's belief that the recommended approach will make Stanford competitive in a large fraction of recruiting and retention cases. In addition, it is doubtful that alternative approaches to achieve the same goal would be significantly cheaper for the University. As a result, cost estimates based on the recommended approach should indicate the order of magnitude of the resources required for the University to be competitive in the face of current housing conditions.

Program Elements

The committee recommends that the future housing programs for Stanford include the following components: a reasonable down payment by the purchaser, a loan that amortizes over 30 years with a favorable interest rate, and an interest-only shared appreciation loan that has both a MAP-like and a zero interest component, and an income supplement to assist with monthly mortgage payments.

We now describe how each of these elements contributes to solving problems created for Stanford faculty by the high cost of local housing. Each element of the proposed program is set to address a different problem and faculty are encouraged to address the various affordability problems through the use of a combination of these elements.

- Down Payment

The committee recommends replacing the DPAP loan with the amortizing loan described in the following paragraph, "30-Year Amortizing Loan". Even at a low market rate, DPAP's 15-year amortization term translates into significant monthly payments. The minimum required equity or cash portion would remain at 10% of the purchase price. For those who cannot meet the required 10% minimum, the committee recommends that a down payment as low as 5% of the purchase price be permitted under certain conditions (such as demonstrated need, meeting underwriting criteria and satisfactory credit).

- 30-Year Amortizing Loan

We recommend a new loan option that allows a portion of a home purchase to be financed with a fixed-rate fully amortizing loan.[9] Amortization implies that the buyer's expenses for a

[9] Monthly payments on an amortizing loan consist of principal and interest. At the end of the loan term, the principal borrowed has been fully repaid.

loan of this type are higher than those for a comparably sized shared appreciation loan. In the past, borrowers used two amortizing loans, a first mortgage with an outside lender and a DPAP loan. The committee recommends offering a new option that combines these two loans into one. The loan should be for a 30-year term with a low market rate similar to DPAP. A single loan would eliminate the need to deal with a second lender and thereby reduce transaction costs and provide a low market rate to be obtained by using Stanford's borrowing power. Faculty should be allowed to use as much of this type of loan as they can afford, subject to the down payment requirements.

- Shared Appreciation Loans

Many faculty cannot qualify for suitable housing using conventional financing. In these situations, housing can be made more affordable by financing the purchase using loans with low or zero current interest. In exchange for low current interest, the borrower agrees to share appreciation that is ultimately characterized as deferred interest (and generally deductible). The committee recommends that the MAP program, as described in the section on Current Programs, be continued in its present form.

The final loan component to help with this problem is the Deferred Interest loan[10]. The committee recommends that these loans be based on terms similar to the MAP, taking into account the zero current interest feature: a non-amortizing loan with a shared appreciation feature that caps at the AFR plus an additional percentage selected to make the program break even over time if the real estate market continues to appreciate rapidly.

The committee recommends that a complete analysis be performed to determine the appropriate limits for the amount of the non-amortizing loans and for their share of appreciation that takes the following factors into account: (1) affordability based on target house price, assumed salaries, and target housing ratios, (2) reluctance of borrowers to share appreciation with Stanford, (3) the requirement that the Deferred Interest loan is accessible only for those who fully utilize a MAP loan, (4) long term return to Stanford, (5) ability of borrowers to payoff the loans in the future, (6) tax deductibility of the deferred interest, (7) equity accumulation, (8) funding constraints, and (9) effects on house prices.

In combination, the MAP and Deferred Interest loans imply a tradeoff. As a buyer increases the proportion of Deferred Interest and MAP loan, the fraction of appreciation he/she will have to share with Stanford in the future also increases. When faculty purchase a home, they will have to decide whether they want low current payments in exchange for the possibility of sharing future gains. Finally, the shared equity feature of these loans makes it of paramount importance that buyers understand the consequences of this tradeoff when they make their decisions.

Monthly Cash Flow

While the MAP and Deferred Interest loans improve affordability significantly, they may not be sufficient to enable a faculty member to purchase the "target house." The committee recommends that the monthly Housing Allowance Program supplement, (HAP) be retained. The level of HAP assistance should be chosen to make the target house affordable with a commitment of 35% of pretax income to housing costs.

The committee notes that the amount of additional income assumed (from summer salary, a working spouse or partner, or other source) is an important parameter in determining the amount of HAP assistance needed. This assumption has a substantial impact on the cost of the program as well. The assumption about additional income can have a significant impact on competitiveness for hiring, especially in fields where it is difficult to arrange summer salary. The committee recommends that the assumed outside income level be adjusted

[10] Deferred Interest loans have zero current interest but a pro rata share of appreciation is due when the loan is repaid.

carefully to balance program costs with the goal of setting a base level of support that is sufficient to make Stanford competitive for faculty in fields at the lower end of the salary distribution. The committee suggests also that it may be useful to consider individual assistance for faculty at the lower end of the salary spectrum who do not have opportunities for summer salary or other outside income.

The committee also recommends increasing the term of the Housing Allowance Program (HAP) to 12 years to insure that the linear decline in HAP is smaller than average increases in salary. Eligible staff and faculty who have not owned a house within the qualifying limit since they received a written offer of employment by Stanford are eligible for this program. In addition, newly tenured professors should be eligible for a new HAP if they elect to purchase another home, or remodel their existing home.

Eligibility for Financial Assistance

The committee recommends that the proposed Deferred Interest loans should be restricted to faculty whose find themselves at the greatest disadvantage because of the recent increases in housing prices. The new programs should be aimed primarily at new recruits and young faculty, and not to faculty who entered the housing market when prices were lower.

Reuse of Standard Loan Programs for Subsequent Purchase

Subject to the limits described in the Principles section, faculty should be permitted to use standard loan programs such as DPAP, MAP, and Deferred Interest loans for both their first home purchase and for additional home purchases over the course of a career at Stanford. As the real estate prices fluctuate, these programs should be modified to reflect current market conditions. The programs should recognize that young faculty who may purchase a small home at the beginning of their career may need additional space as their families grow. The reuse of the various loan options would allow faculty to avoid being locked into a particular house by the provisions of the loans.

Remodeling Loans

The University should develop a program of loans for remodeling of a house currently owned by the faculty member. The ability to offer remodeling assistance will have significant value in retention cases. Further, remodeling loans would allow current faculty to improve their houses without incurring the expense and effort of moving.

Reduce Staff Eligibility for Campus Purchases to the Pre-1995 Standard

Staff eligibility for housing on-campus should be limited to those staff who were eligible prior to the changes made in 1995. The recommendation to return to the pre-1995 eligibility standard for staff is based on the idea that it is in the interests of the academic programs to have as many faculty on-campus as possible. Staff are highly valued, and financial assistance to staff for housing continues to be needed for competitive reasons. The rationale that the assistance should take the form of eligibility to live on-campus is less compelling.

Rental Allowance Program

The committee recommends that Stanford establish a rental allowance program to assist untenured housing-eligible faculty. Access to affordable rental housing is a significant issue for young faculty. Some competing institutions in areas with high housing costs, now offer rental assistance.

The rental allowance should enable an assistant professor to afford a one bedroom apartment at Stanford West at a cost of approximately 30% of pretax income on rent. Rent for a one bedroom Stanford West apartment will start at $1,770. An estimate of the level of assistance

that would be required can be made easily for a faculty member who receives a salary of $55,000 (the first quartile of the current salary distribution). Thirty percent of $55,000 is $16,500 annually, or $1,375 monthly. These parameters imply that the monthly rental supplement for academic 2000/2001 would be $395 ($1,770 - $1,375) monthly or $4,740. If used at Stanford West, the rental assistance should be in the form of a reduced rent, which may not be taxable. The faculty rental supplement could, however, be applied to any rental unit. This level of support would make Stanford competitive with rental assistance programs offered to assistant professors for example at Harvard and Princeton.

The rental allowance should be available for up to seven years. Some faculty may elect to purchase a home during that period. At that time, the rental assistance would cease, and the housing allowance (HAP) associated with a home purchase would become operative. Faculty who currently do not own a home in the local area whose appointment dates are September 1, 1995 or later should be eligible.

Priority for Rental at Stanford West

The committee recommends that to the maximum extent possible, the Stanford West apartments should become an integral part of University housing programs. The first phase of these units should be ready for occupancy by July 2000. Many faculty need to rent when they first come to Stanford, and others cannot afford to buy a home. Having access to rental units on Stanford lands will enhance recruiting efforts significantly.

The committee recommends the following priorities be established for eligibility for the Stanford West Apartments.

1. Housing eligible faculty. This includes faculty with acting appointments, as defined in the Stanford Housing Programs Eligibility Policy Criteria for "Eligible Persons," who do not currently own a home within the qualifying limit.

2. Visiting faculty and scholars.

3. Faculty and staff who do not fall within categories 1 and 2 above. Rental leases for this group, or anyone not in groups 1 or 2 above should be limited to six months to one year.

Emeritus Assistance

Emeriti who live in the residential subdivisions are an important and valued part of the campus community. Recommendations in this section respond to suggestions made by some of our campus home owners about ways the University could assist emeriti living on-campus who are thinking of selling their campus homes.

The committee recognizes and strongly supports the idea that having a broad faculty presence, at all stages in the life of our professoriate, living on-campus positively adds to the education experience at Stanford. We wish to emphasize that this is true at all levels--the new assistant professor, the newly promoted associate professor, the star researcher or teacher and those approaching emeritus status. Each significantly contributes to the campus life-experience of our students and enlivens the cultural climate. The committee suggests that, with the severe constraints on the availability of houses on-campus, offering assistance to those of our older faculty who would desire to move to smaller, more convenient living space, represents an attractive win-win opportunity both for the University and for emeriti.

The committee recommends that the University provide assistance to faculty who wish to consider moving on matters such as: (1) financial planning assistance that would allow emeritus faculty to explore options for deploying the appreciation of their homes to meet their current housing needs and to make use of available tax advantages, (2) help in researching and arranging the transition to smaller homes or retirement communities,

including the possibility of bridge loans when needed, and (3) help with the physical aspects of moving.

The committee wishes to emphasize that the recommendations in this section are not meant to encourage emeritus faculty to leave the campus. Instead, they are intended to help only those faculty who wish to consider a change in their living arrangements.

Insurance Against Market Risk

The problem of affordability in appreciating markets has dominated much of this report. This focus is motivated by market conditions in the recent past, which consists of three decades of steep appreciation punctuated by short periods of declining or stagnant prices. There is no assurance that this pattern will continue in the near or distant future. As a result, it is important to consider how owners and the University would fare during a sustained period of significant price declines. A declining market would threaten owners' equity and might create significant incentives for owners to default on the loans provided by the University. Although the University could respond to defaults by denying future access to housing programs or in other ways, any such steps might be very costly in terms of employee relations. It is important to remember that the default environment would take place when employees have already lost all of their home equity. Many employees would view coercive or punitive action by the University in that setting as a serious breach of faith, especially if the University had used its housing loan programs as an inducement to come to Stanford in the first place. There is also a question of whether punitive action based on default would violate the non-recourse feature of the loans, a feature that is partially or wholly required by state law.

The committee urges that Stanford consider instituting a Mortgage Insurance Plan that would protect the University in the event of a serious downturn in housing prices. In addition, the committee recommends that the University investigate the desirability and feasibility of creating a Down Payment Insurance Program that would allow owners to reduce the risk of losing home equity as a result of a substantial market decline. Any viable insurance scheme requires sound estimates about premium collections and payment liabilities. Stanford's actuaries note, for example, that for the Mortgage Insurance Program scheme to work, all new Stanford loans would have to participate. The committee believes that these insurance programs are important but also recognizes that there would be some administrative cost, and the rate charge to borrowers would nominally increase their monthly housing costs.

Sustainability of Stanford Housing Assistance Programs

The program elements described in this report play varying roles in the sustainability of the housing program. Indeed, there are two important components of sustainability: long term financial and program viability for the University and access to appropriate housing for faculty as they progress through their careers.

Long term financial and program viability is closely connected to the form of housing assistance. For example, the committee considered a variety of methods for limiting the price of new housing on the campus. It concluded, however, that any mechanism that did not recognize market forces in the surrounding communities would create unacceptable tax and rationing problems. The recommended program is neutral with regard to whether the house purchased by a faculty member is on or off-campus. Fund that flow to the University as new housing on-campus is purchased at market prices (with assistance as described above) can be used to offset partially the funds required to provide the assistance. The use of deferred interest in the form of shared appreciation also helps to provide funding for the program in the long term if housing continues to appreciate.

The recommended program addresses the question of sustained access to appropriate housing for faculty in two ways. Allowing reuse of the DPAP, MAP, and Deferred Interest loans for

subsequent house purchase or remodeling would allow faculty to adjust appropriately as their housing needs change. The recommended additional HAP assistance to be available at the time of award of tenure would also contribute to the ability of faculty to meet the needs of growing families, and it would make Stanford more competitive in retention cases.

Conclusion

The committee recognizes that a deeper exploration of the full cost implications of these proposals will be required. It is likely that additional refinements of the programs will be needed based on those cost studies as well as the decisions made by the President, Provost, and Trustees about the levels of resources that can be directed toward housing assistance. The committee believes, however, that significant additional resources must be allocated to housing assistance if Stanford is to maintain its position as a first-class institution.

Appendix 1

Housing Programs at Other Universities

Housing Assistance at other competing universities can be divided into six major categories (1) income supplements (2) subsidized rental assistance (3) co-ownership with shared equity (4) shared appreciation mortgage (5) low-interest mortgage, and (6) indexed pricing.

Harvard and the University of California ("UC") have taxable housing supplements similar to HAP for a select group of employees. Harvard also has a program whereby the first mortgage payments are subsidized by the university. These programs have the "feel good" advantages of HAP and suffer from HAP's tax inefficiency. Neither Harvard nor Princeton offer purchase subsidies to non-tenured faculty.

Harvard, Columbia, Princeton, and New York University ("NYU") all have a rental program whereby employees can rent apartments at rates from 30-50% below those of comparable units. The Harvard program is targeted for new assistant professors. The ones at Columbia and NYU are for all ranks. At least one school, Columbia, reports that allocations are done by a provostial committee, which can give rise to many ill feelings. There may be some tax implications from these programs but representatives from all schools were reluctant to discuss taxes.

Princeton has a Tenancy in Common Program for tenured faculty whereby the university co-buys one-third of the house, up to $375,000. Rent is imputed for tax purposes on this portion. There is a pro-rata share of appreciation paid to the university at payoff which is not deductible as interest.

MIT, Harvard and UC have shared appreciation mortgages with no or low current interest and a pro rata share of appreciation due at payoff which is deductible as interest. In the case of MIT, if the return at payoff is less than the Applicable Federal Rate, income is imputed. The maximum amount of the MIT loan is $75,000 and the size of the entire program in 1997 was only $3 million. It is restricted to new faculty with salaries below a certain level. These programs share the advantages and disadvantages of Stanford's Lathrop and MAP programs.

UC, Princeton, and many other universities have low-interest loans with rates about 0.5% to 1.5% below market that are fixed or adjustable and amortized over 30 or 40 years. These are similar to Stanford's DPAP program.

UC Irvine, Pepperdine, and UCLA have indexed pricing programs whereby houses are sold to faculty at 40-50% below market. When the faculty member is ready to sell the house, the sales price cannot exceed an indexed amount above the purchase price. While this scheme has the advantage of sustaining affordability over time, selecting the appropriate index is complex and there are problems with rationing if there is a limited supply.

Appendix 2

The following table shows the typical financing and the resulting monthly housing expenses for a target house. Comparing housing expenses to monthly income is the measure of affordability used by lenders.

Maximum Affordable House Using Current Programs:
10% Down Payment (March 6, 2000)

	Assistant		Associate		Professor	
Household income, annual						
Median 9 month base salary	60,800	60,800	82,200	82,200	117,000	117,000
Other income as % of base	0%	40%	0%	35%	0%	30%
Other income amount	0	24,320	0	28,770	0	35,100
HAP	13,668	13,668	15,487	15,487	18,445	18,445
Total:	74,468	98,788	97,687	126,457	135,445	170,545
Down payment, 10% of price	34,200	47,600	48,600	63,700	68,400	86,900
Financing						
First mortgage amount	102,600	142,800	145,800	191,100	205,200	260,700
MAP loan amount (50% price)	171,000	238,000	243,000	318,500	342,000	434,500
DPAP principal w/points	36,936	51,408	52,488	68,796	73,872	93,852
Total:	310,536	432,208	441,288	578,396	621,072	789,052
Monthly Housing Expenses						
First mortgage payments	771	1,073	1,095	1,436	1,542	1,959
MAP Current interest	499	694	709	929	998	1,267
Ground rent or association fee	400	400	170	170	170	170
Taxes	356	496	506	664	713	905
Insurance	0	0	142	186	200	253
DPAP Payment	332	462	472	618	664	844
Total:	2,358	3,125	3,094	4,003	4,285	5,398
Ratio housing expenses /income	38.0%	38.0%	38.0%	38.0%	38.0%	38.0%
Maximum affordable house	342,000	476,000	486,000	637,000	684,000	869,000

Assumptions

1. First mortgage for 30% of price, 30 years, 8.25%
2. DPAP for 10% of price + points, 15 years, 7.0%
3. MAP for 50% of price, Current Interest rate = 3.5%
3. Insurance (associate & full), .35% of price
4. Taxes, 1.25% of price
5. Points (loan origination fee), 1% of MAP and first
6. HAP parameters for 1999/2000 (8.5% x 9-month base salary + $8,500)

APPENDIX 5

Area B Open House
Station 1: Existing Conditions

WRITTEN COMMENTS ON MATERIALS

- All the maps show Sunset Road as a through street when it is blocked off at Moore's Creek. This is misleading.
- Show roads in medium gray to help orient oneself on the map.
- Show house values accurately; Buckingham Circle homes are not valued at $365,000 (seem inflated) and Fontaine homes can now be sold in the $200,000 range. House values are rising.
- The number of students with cars in the JPA area is far higher than what's shown in the existing conditions report. Student renters definitely have more than 1 car per dwelling.
- The charts for area F are completely skewed by apartment buildings containing students. This under-represents the incidence of single family, permanent homes in that area.
- Study boundaries don't make sense.
- Questions accuracy of traffic counts.
- Questions accuracy of student renter counts.
- Contour key 10' with 100' called out.
- On existing conditions Maps (Natural Environment & Built Environment) show contour lines heavier every 100'.
- Connect both sections of Sunset Rd. or connect outer part to Stribling and then Fontaine.
- Indicate what land is owned by the University (i.e. Birdwood) with same color as central grounds or a light cross-hatching.
- Include service levels on transportation map.
- ADT doesn't tell the whole story.
- *Must take into account traffic impacts from all the development on Sunset Extended, Fifth St. Extended and the area between Fifth St. Extended and Avon St. This would be a remarkable and costly oversight (provided on behalf of FSNA.)

*Indicates post Open House comments.

Area B Open House
Station 2:
Community Values & Issues

POST IT COMMENTS

INFRASTRUCTURE, ROAD & TRANSIT IMPROVEMENTS	
Rebuild Sunset Ave. Extended.	1
Build new sidewalks & crosswalks.	5
Build new bike paths.	4
Need better street lighting.	1
Complete Southern Parkway to 5th St. Extended	1
Need to connect more neighborhoods.	1
Build a new, big road between Sunset Ave. Ext. and Stribling Ave. Ext. to Fontaine.	1
Rebuild existing "rural" roads to accommodate needs of an urban environment.	1
Extend Stadium Rd. to Fontaine so as to disperse Fontaine traffic.	1
Build no new roads.	2
Build no major parking facilities.	1
Invest in regional ride-sharing programs.	1
Implement permit parking in whole U.VA area.	1
Improve efficiency of public transportation (both within study area & to points beyond.)	7
Provide satellite parking outside city limits with public transportation into town (for students and commuters who live in the county.)	3
Place student parking garages in strategic locations in lieu of lots around buildings.	1
End "Park n' Ride" in neighborhoods.	1
Invest money and space to transit.	3
Trolley needs to run more regularly during the week and some Sunday service.	2
Do not widen Fontaine Ave.	2
Do not extend Stadium Rd.	1
Do not want 3 to 4 land roads going through Fontaine.	2
Keep traffic down in neighborhoods.	1
Do not build 3 to 4 lane roads through neighborhoods.	1
The Fontaine/JPA/Maury intersection needs to be much more pedestrian-friendly.	2
Frye Spring's intersection should be more pedestrian-friendly.	1
Make area in general more pedestrian-friendly.	2
Maintain 35 mph speed limit on JPA Extended from Fontaine to Fry's Spring either through enforcement or traffic calming (i.e. stop signs and/or speed bumps.)	1
Develop alternatives to the "Maywood Connector" such as under the tracks at Valley Cir. and out to Cherry Ave. or a road along the tracks connected to Shamrock.	2
SUBTOTAL	53

LAND USE & ZONING /ARCHITECTURE & URBAN DESIGN	
Locate a good, small grocery store @ the "Little Corner."	1
Decide how to build.	1
Limit multi-story dwelling apartments to 4 stories.	1
Change zoning to allow for vertically-oriented "micro-infill" (i.e. additions/outbuildings.)	1
Intensely develop Fontaine Ave between the two centers.	1
Build neighborhood shopping centers for Southern Albemarle & Southside City.	1
Promote more owner occupancy for rentals & homes (one wants 15-25% of stock.)	7
Encourage more homeowners to protect their neighborhoods.	1
Encourage mixed generation use.	1
Make neighborhood centers more urban.	1
Do not develop potential neighborhood centers #2 and #3.	1
Severely limit parking in the neighborhood centers.	1
Focus development within existing neighborhood centers, especially Fontaine Bus.Pk.	2
The City, County & UVA should take responsibility for managing growth.	1
Support City's Corridor Study's call for greater mixed use along corridors.	1
Provide higher density (more vertical and urban) housing especially along corridors.	1
Encourage smaller setbacks.	1
Provide a public library in the south side of town perhaps on an existing school site.	1
Fontaine Office Park violates all Corridor Study principles; can't walk to it and it is an auto-dependent environment. Should not be repeated.	1
SUBTOTAL	26
OPEN SPACE PLANNING/BUILDING PRESERVATION	
Preserve the "wetlands" adjacent to Buckingham Circle as a public park/natural area.	1
Protect Observatory Hill and preserve dark skies around the Observatory.	2
Protect Foxhaven Farm.	1
Protect existing, relatively undisturbed places historic structures.	2
Preserve single family homes along Fontaine Ave.	1
Protect Oakhurst Circle.	1
Turning Maywood into a connector would destroy the residential homes which date from the 1930's of which none have been torn down.	1
SUBTOTAL	9

"SUMMARY" POST IT COMMENTS

INFRASTRUCTURE, ROAD & TRANSIT IMPROVEMENTS	53
LAND USE & ZONING /ARCHITECTURE & URBAN DESIGN	26
OPEN SPACE PLANNING/BUILDING PRESERVATION	9
GRAND TOTAL	88

Area B Open House
Station 2: Community Values & Issues
WRITTEN RESPONSES TO QUESTIONS

1. **What is needed to ensure that this community grows and develops in a healthy and sustainable way that provides a high quality of life for residents?**

Plan for people, not cars ; bike lanes, sidewalks, lighting, pedestrian-oriented streets.	5
Owner occupied residences.	5
UVA families should be helped to own homes in the area.	1
The more UVA employees who live nearby and walk to work, the less traffic problems.	1
Houses of a range of values to encourage future development and investment.	1
Convenient & healthy neighborhood centers which cater to neighborhood residences.	1
More urbanization (to counteract environmental impacts of the car.)	2
Build neighborhood shopping centers for southern Albemarle & City residents.	1
A public library on the south side of town.	1
Fix up Willoughby/Food Lion shopping center.	1
Develop a Fontaine/JPA/Maury identity, like the "Corner" (i.e. coffee places, etc.)	2
Add employment, retail, commercial to apartment and residential areas to the south.	1
A University supportive of local residents and their neighborhoods.	1
Keep big box retail development out of this area.	1
Keep green space as a priority.	1
Controlled University expansion that keeps student housing and new construction close to UVA but away from "the Lawn."	1
Controlled growth that is monitored over time.	1
Development in sync with the community's expressed needs via forums such as this.	1
Shared responsibility between City, County and University.	1
Limit use of the area as a "park n' ride" for UVA.	1
Less parking for students. Let developers build garages where student cars can be stashed so that they can talk the improved transport system.	1
Neighborhood friendly road network (not highways or 3 to 4 lane roads through the City.)	3
Connectivity of roads.	1
Adequate public transportation which truly runs on Sunday.	2
High capacity transit between nodes. Nodes include Fontaine Research Park, UVA Hospital, U-Hall, Barracks Road, Seminole Sq., Fashion Sq., Rio Hill, Forest Lakes, No. Fork Research Park, NGIC, GE, Greenlea, Country Store and Ruckersville.	1
Possibly higher density on Fontaine.	1
Add housing component to Fontaine Research Park.	1
Do not increase or speed up traffic on Fontaine Ave. The Fontaine Ave. plan that is now on hold is too invasive to the neighborhood.	1
Complete the Southern Pkwy to 5th St. Extended.	1
Rebuild Sunset Ave. Extended.	1
Construct a new road between Sunset Ave. Ext. and Stribling Ave. Ext. to Fontaine.	2
Any alternative route to JPA should go west along the RRD. ROW to the bypass.	1
Avoid deep tunneling of JPA and isolation of Oakhurst Cir. By raising the proposed south Lawn terrace as much as necessary.	1
Preserve Oakhurst Cir., Fry Springs, JPA Ext. as historic, single family neighborhoods.	2
TOTAL	49

2. **What are the implications of new neighborhood centers with regards to transportation infrastructure (streets, sidewalks, trails, bike lanes, transit, etc?)**

Reduces minimum setbacks.	1
Encourages smaller lots in the county.	1
Minimizes sprawl.	1
More pedestrian as opposed to vehicular traffic.	1
Provision of a grocery store would limit need to travel across town.	1
Neighborhood Centers will allow residents to walk to amenities but will also attract vehicular traffic of non-residents en route to their destinations so parking should be severely limited.	1
Existing "rural" roads will have to be rebuilt to accommodate an urban environment.	1
Will need more sidewalks, crosswalks, lighting, bike paths, especially on Fontaine.	3
Need bus routes extended and more frequent.	2
Neighborhoods will need to be connected.	1
Make neighborhood centers urban.	1
Additional neighborhood centers are not necessary and signify loss of green space.	1
Existing centers (i.e. @ Fontaine/JPA/Maury) must be "re"-developed very carefully.	1
Increased traffic & parking needs on JPA, Fontaine and at Fry's Spring due to more commercial uses within the centers.	1
Implications depend upon whether they employment, residential or commercial centers.	1
Potential Center #2 needs connection to Sunset or Fontaine via Stribling, especially if commercial uses are included (e.g. mom & pop store.)	1
TOTAL	19

QUESTIONS & GENERAL COMMENTS:

- Why a new center @ the Fontaine Research Park?
- Parking garages are so expensive and expansive.
- The hospital and planned McIntire Commerce School expansions (near Old Cabell) are ghastly.
- Taking over Maywood to accommodate the hospital is completely insensitive to the local community. The multi-million dollar cut at 10th St. needs to be utilized to provide alternative access to UVA from the south.
- Cars have made us less mobile as our environment has spread out. Urbanization should be conceived to counteract this.

Area B Open House
Station 3: Amenities and Areas of Concern

WRITTEN COMMENTS ON FLIP CHARTS

Special Places & Amenities

- Observatory Hill
- Moore's Creek Trails
- Ragged Mountain Reservoir
- Single Family Homes (along Fontaine, Westerly)
- Fontaine Research Park (where development should be , mixed use like downtown with transit built-in, business ground floor & residential above.)
- Existing roads and existing developed areas
- Frye Spring Beach Club
- Wetlands adjacent to Buckingham Circle
- North Grounds Connector

Areas of Concern

- Fontaine-local residents want to keep it 2 lanes but the general public wants 4 lanes.
- We have never seen backed up traffic on Fontaine as it is with 2 lanes.
- Congestion @ new and existing neighborhood centers.
- Grade separation/traffic.
- Rebuild Sunset Extended.
- Complete Southern Parkway.
- New development, road from Sunset to Fontaine.
- Connect separated parts of Sunset Rd. or connect outer part to Fontaine via rebuilding Stribling through ravine.
- Connecting separate parts of Sunset Rd. would DESTROY a peaceful, city neighborhood.
- Scale/parking at Fontaine & JPA.
- Speed/parking on JPA.
- Adequate bus service (JPA neighborhood/Frye Springs.)
- Bus to new areas more frequent.
- Roads that by-pass neighborhoods.
- Brass Inc. and other developments: neighborhood shopping.
- Bike paths/walking/lighting in general.
- Lighting @ Observatory Hill.
- Venues and crowds; Scott Stadium, Basketball Arena
- Structured parking; build down.

- Don't get rid of homeowners who live in their homes and take a permanent interest in the health of their neighborhood. Some university towns have a dangerous slum around them. Rather encourage more home-owners to buy from landlords.
- Buckingham Circle & 29.
- Developments north of Dept. of Forestry near Buckingham Circle-run off into Duck Pond.
- Don't turn Oakhurst Circle into a "cul de sac." Need to maintain to entry/exit points. With one entry/exit, Emergency Vehicles would be hampered by the circular green thereby necessitating its removal. Don't get rid of the green circle.
- Walking paths either lacking or inadequate. Need to improve pedestrian and bicycle access. Maintain continuous sidewalks.
- University Regional Transit & Ridesharing instead of roads and parking.
- Maywood Connector.
- Food Lion and rest of Willoughby shopping center poorly maintained, ugly, unpleasant, costing this area business.
- No library in the south side. It's a shame that we couldn't hold this event in a south-side library.
- Connection from Shamrock along track under to Valley Extended instead of down Maywood Lane.
- New center @ Fontaine Research Park would impact the existing center @ Maury.
- Fontaine Research-put money into regional transportation vs. parking garages.
- Keep out big boxes.
- Park n' Ride-reduce parking spread through neighborhoods.
- Closing Valley Road & Oakhurst Circle will help preserve the mixed-use residential area where students and faculty live.

Area B Open House

Station 2 & 3: Values & Issues, Amenities and Areas of Concern
WRITTEN COMMENTS & DOTS ON AERIAL & CENTERS MAPS

GREEN DOTS & MARKINGS: Special Places & Amenities

- Observatory Hill
- Area south of Observatory, north of Fontaine should remain natural & undisturbed.
- Piedmont Faculty Housing
- Moore's Creek Trails
- Ragged Mountain Reservoir
- Single Family Homes (along Fontaine, Westerly)
- Edge of Fontaine Research Park
- Frye Spring Beach Club
- Wetlands adjacent to Buckingham Circle
- Area south of Birdwood, north of 64 should remain natural & undisturbed.
- Note dashed greenway line central/west in the study area.

RED DOTS & MARKINGS: Areas of Concern

- Interchange @ 29 and Fontaine.
- Entrance to Buckingham Circle.
- Area around Church and Dept. of Forestry.
- End of Stribling Ave. (not sure if they want to open up or maintain blocked.)
- Must continue a new north/south road past Stribling and Sunset onto Sunset Ave. Extended or else Stribling will get through traffic.
- End of Sunset Ave. (@ location of potential center.)
- Intersection of Maury and Fontaine and JPA. (Currently high potential, low investment.)
- Invest in existing centers first (esp. Maury/JPA/Fontaine) before developing new centers (esp. Fontaine office Park.)
- Railroad crossing/bridge at JPA south of Maury/Fontaine intersection.
- Scott Stadium.
- Maywood Connector.
- Valley Road entrance from JPA.
- Oakhurst Circle entrance form JPA and future of small circular green.
- Food Lion shopping area is unpleasant and underutilized.
- No south side library, perhaps put behind Jackson Via as part of the "revitalized" mixed use center around Food Lion.
- Brass Inc. site.
- Southern Connector.
- Entrance to Sherwood Farms & beer distributor.

MISCELLANEOUS COMMENTS.

- Fry Spring Pool Club once had a hotel.
- Oak Hill Market and barber shop services the mobile home park & development around the "Portico."

APPENDIX 6

Southern Urban Area B Study (JPA/Fontaine)
Project Advisory Group/Community Stakeholders
January 22, 2004
Room 246, County Office Building, 4 – 5:30 p.m.

Group Comments and Questions
[responses in brackets
]

Additional interchange at I-64? [this location would not meet Federal Highway standards for interchange intervals and the study won't recommend it]

Was the new City zoning incorporated in the traffic modeling? [yes]

What would the geometry be for Fontaine Main Street? [2 lanes, bike paths, sidewalks on each side, on-street parking in places – the exact design of the road will come later]

Reaction from UREF?

Some Mill Creek residents feel that both connections (between 5th and Avon) are not needed – this needs to be addressed in the study
The study also needs to clarify for residents beneficial impacts to transit from having both connections

With the final presentation, make sure that stream protection/preservation is emphasized

Any thought of incorporating (light) rail? [the railroad is very hard to work with, and we can't count on the feasibility of light rail with our population]

The City's greenway system shows trails along the railroad; it would be helpful to show these trails within the railroad corridor in the plan as support for dealing with the railroad later

The City has wrangled w/VDOT on the JPA Extd bridge design, in anticipation of rail potential

No new parks are shown yet on the plan; also, a school site is needed and the plan will address it

Completion/adoption of the study? [yes, in the form of a CPA for the County Comp Plan, after review and approval by PACC]

There is a great amount of development in the County that has to get into the City – how will the City react to these traffic impacts?

Negative reaction to the City's Corridor Study from affected neighborhoods – concerns about intensification along Fontaine from JPA Extd to Lewis

With UVa's $25 million hospital expansion coming up, is this going to include housing and parking? (this is an important linkage, one the study would support)

Did the study factor in the growth of UVa jobs (increase of 600 new jobs reported recently in the newspaper)? Will these new employees be able to afford to live here? [UVa isn't the only university located in an expensive place; location-based mortgages are provided in other university communities and are being considered as a recommendation of this study] [approx. 1/3 of the reported new jobs are already here; the study did not precisely factor in these new jobs since the information wasn't available until recently and it is not clear when they will actually be created]

When and where will the new elementary school be built? [no location or date has been identified yet]

Mixed use shown on Observatory Road – not always popular with neighbors [study is following the City's policies on this issue]

City neighborhoods also question the mixed-use redevelopment of the Piedmont housing area [university has been considering options for addressing the deteriorating condition of these structures]

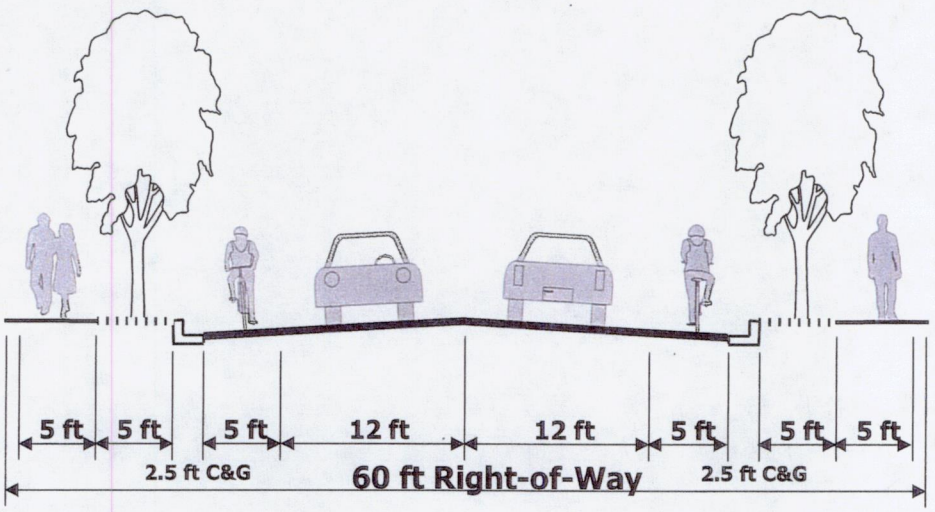
Realigned Stadium Road stays as far east as possible – positive

Emphasize the importance of parks and the health of Moore's Creek in the study; west side of O Hill/east side of 29/250 By-pass is critically important open space to the entire community; important to prioritize transportation improvements (Fontaine Main Street); there are no numbers for Sunset Avenue within the City – did the study model Sunset without Fontaine Main Street (no – will look at this again – the vertical and horizontal curvature and right-of-way on Sunset make it very problematic for increased traffic, if the bridge were re-opened)

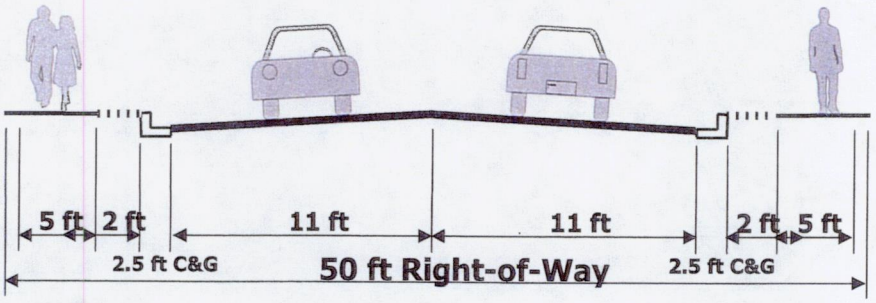
The Route 29 northbound west (left) turn onto I-64 west is a difficult turn, traffic stacks; trucks and other vehicles use Fontaine Avenue for a U-turn

Could we traffic-calm the 29/250 By-pass (noise impacts to adjacent neighborhoods)

APPENDIX 7



2-Lane Road Typical Section w/ Bike Lane (60' section)



2-Lane Road Typical Section w/o Bike Lane (50' section)

APPENDIX 8

Transportation Modeling and Fontaine Avenue

Overview of Methodology & Calibration

Travel demand forecast modeling was conducted for the Area B study area and related regional roadways using MINUTP travel demand modeling software. The Charlottesville Area Regional Transportation (CHART) Study network, reflecting the MPO's Long Range Transportation Plan, was the base network for all scenarios modeled.

MINUTP and the CHART network are designed to render regional-scale travel demand forecasts. As a result, the existing CHART network was calibrated prior to analysis to ensure that the model was accurate and sensitive to local changes within the study area.

A comprehensive description of *Transportation Modeling Methodology* and *MINUTP Model Calibration* may be found in Section III.C of the Southern Urban Area B Study Final Report issued August xx, 2004.

Level of Service Ratings

Level of Service (LOS) ratings have been determined for all roadways using criteria defined in the *Highway Capacity Manual*. Roadway capacity volumes used in calculating the LOS ratings are predetermined values based on roadway geometry (i.e. number of lanes, divided or undivided).

LOS standards are intended to measure single corridors with multiple intersections. Because the Area B analysis focuses on local traffic flows (in contrast to regional traffic flows), the network is composed of many small segments divided by each street intersection. Consequently, the network does not include any single segments that continue, uninterrupted through multiple intersections. For this reason, LOS "A" (free-flow) and "B" (near free-flow) cannot be achieved within the study area.

Fontaine Avenue

The travel demand analysis assumes Fontaine Avenue, from Fontaine Research Park east to JPA, to be a two-lane undivided roadway. In all scenarios (Existing, "By Right," and Alternatives 1-5) this portion of Fontaine Avenue has achieved a LOS "F" rating, clearly identifying it as a roadway that must be improved to accommodate increasing traffic volumes. Because travel demand modeling is designed to forecast network-level traffic flows and has a limited ability to test roadway specific improvements, a more detailed roadway-level analysis of Fontaine Avenue is required. To this end, the City of Charlottesville has commissioned a study – building from the Area B findings – to examine potential improvements to Fontaine Avenue.

APPENDIX 9

Southern Urban Area B Alternatives

Ratings by Renaissance Planning Group and Kimley Horn and Associates
August 23, 2004

The following tables are organized with ratings ranging from 1 to 5. These ratings are provided in response to a request from the PACC Advisory Council on August 19, 2004. They have been developed with consideration for the engineering and feasibility assessment issues in mind and with consideration for land-use implications.

Issue	Alt 1 Fontaine West	Alt 2 Fontaine Central	Alt 3 Fontaine Shift	Alt 4 Fontaine East	Alt 5 Sunset Avenue	By Right "No Build"
"Impact" ratings 1 (highest) – 5 (lowest)						
Environmental Impacts	4	3	3	3	2	3
Transportation Impacts on Existing Residences	5	4	4	4	1	4
Transportation Impacts on Existing Businesses	4	2	3	4	4	4
Other Issues 1 (worst) - 5 (best)						
Transportation Network Connectivity	3	4	3	5	4	1
Positive Development Potential	4	4	4	5	2	1
Public/Private Collaborative Funding Potential	4	2	4	5	1	1
Constructability	3	2	2	4	1	2
TOTALS	27	21	23	30	15	16