

Chevy Chase Intersection Traffic Safety & Streetscape Redesign

for the
Lexington-Fayette Urban County Government



December 2010





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Introduction

Palmer Engineering was selected by Lexington Fayette Urban County Government (LFUCG) to provide a feasibility study for the Euclid Ave/High Street/Tates Creek Rd/Fontaine Ave intersection located in the Chevy Chase area of Fayette County. The area is surrounded by traffic generators, (University of Kentucky, downtown Lexington, and residential neighborhoods) resulting in many commuters traveling through the intersection to reach their destination.

As a conceptual design neighborhood association leaders, merchants and city staff met in September 2009 with the goal of developing a concept that created a pedestrian friendly village and improved the aesthetics of the area. The concept developed by Steve Austin with the aid of the community was to create landscaped medians with “safe spaces” for pedestrians along with bike lanes.



Figure 1: Euclid Avenue intersection

Purpose and Need

The purpose of this study is to develop an alternative that improves vehicular, pedestrian, and bicycle mobility while enhancing safety and providing an aesthetically pleasing environment.

The existing intersection currently experiences long delays and queues during peak hours due to inadequate turn bay storage and backups from intersections

outside the study area. Drivers traveling westbound Fontaine Road currently experience long delays due to vehicles making a left turn restricting vehicles traveling thru or right. The Euclid Avenue left turn experiences the same problems with the left turn blocking the thru movement resulting in delays and queues.

The desire to accommodate bicycle and pedestrian activity within the Chevy Chase area has increased in recent years with the opening of restaurants and shopping. The study intersection currently accommodates pedestrian activity with marked crosswalks that require long crossing times, creating a safety concern for pedestrians. Bicycle facilities are not currently designated within the study area but are along Euclid Ave adjacent to the study area.

Study Area

The Chevy Chase study area is located in central Fayette County, approximately one mile to the east of the University of Kentucky and downtown Lexington. The study area is bounded by Cochran Ave on Tates Creek Rd and Ashland Ave on High Street and Euclid Ave.

Existing Roadways



Figure 2: Tates Creek Road

Tates Creek Road (KY 1974) is classified as an urban principal arterial and consists of two basic lanes within the study area. Tates Creek Road consists of one thru lane in each direction, one left turn lane to Euclid

Avenue, and one acceleration lane that is created by Euclid Avenue right turns.

Euclid Avenue is also classified as an urban principal arterial and is a 2 lane segment with turn lanes and a flush median that transitions to a three lane segment west of Ashland Avenue. On-street parking is permitted in designated areas along Euclid Ave and Tates Creek Road along with loading zones that serve as un-striped parking spaces.



Figure 3: Euclid Avenue

High Street (CS 3286) is classified as an urban minor arterial consisting of two thru lanes and a short turn lane provided to Fontaine Road. On-street parking is available in designated areas along High Street as well as unstriped spaces on Hanover Avenue.



Figure 4: High Street

Fontaine Road (CS 3353) is classified as an urban minor arterial with two thru lanes that have no on-street parking or turn lanes within the study area.



Figure 5: Fontaine Road

ROW and Utilities

Existing right of way along Tates Creek Road varies between approximately 70-80 feet, Euclid Avenue right of way varies between approximately 75-90 feet. High Street existing right of way varies between approximately 40-60 feet and Fontaine Road right of way is approximately 60 feet wide. The only permanent right of way that is proposed to be acquired in this study is for consolidating the entrances to Chevy Chase Place. Temporary construction easements would be required throughout the project for sidewalk and green space construction.

Within the study area, overhead and underground utilities are located adjacent to the roadway and also below the driving lanes. The overhead utilities consist of cable, telephone, fiber optic, and electric lines while the underground utilities in the area are water, sewer, telephone, electric, and gas. Underground telephone and electric are along the south side of Euclid Avenue. A map of the existing utilities is shown in the Appendix.

Crash Data

Vehicle crash history was analyzed using data provided by the LFUCG for a four-year period from 2005 thru 2009. The data was analyzed (2007-2009) based on the methodology created by the Kentucky Transportation Center which separates the corridor into segments and uses traffic volumes and geometric characteristics to identify crash concentrations. During this timeframe a total of 68 vehicle crashes were reported within the study area, of these 15 resulted in injuries and 0 were fatal.

The Critical Rate Factor (CRF) is a ratio of the crash rate to the average crash rate for sections of roadway of similar volumes and classification. A CRF of greater than 1.0 indicates that the crashes are not statistically random occurrences and should be further studied. Euclid Avenue and High Street were considered to be problematic or hazardous based on their Critical Rate Factors.

Chevy Chase Intersection Feasibility Study

Spot Crash Data Analysis Spreadsheet

Kentucky Method Spot Analysis

Road Name	Begin MP	End MP	Length (Miles)	2007 ADT	# Lanes	Divided/ Undivided	Rural/ Urban	Avg. Crash Rate	# Years	Critical Crash Rate	Crashes				Critical Rate Factor
											Fatal	Injury	PDO	Total	
Tates Creek	12.05	12.15	0.1	22,366	2	Undivided	Urban	0.287	3	0.586	0	3	10	13	0.91
Euclid Ave	12.15	12.25	0.1	16,085	2	Undivided	Urban	0.287	3	0.645	0	6	14	20	1.76
High Street	0.00	0.10	0.1	17,000	2	Undivided	Urban	0.287	3	0.634	0	6	20	26	2.20
High Street	0.10	0.20	0.1	17,000	2	Undivided	Urban	0.287	3	0.634	0	0	2	2	0.59
Fontaine Rd	0.00	0.10	0.1	8,000	2	Undivided	Urban	0.287	3	0.810	0	0	7	7	0.28

Table 1: Study Area Crash Analysis

Traffic Forecast

A traffic forecast that accounts for historical and future planned growth is a key part of the development of an alternative that balances the traffic and community needs. The land use within the study area is fully developed with a mixture of residential and commercial and is not anticipated to change significantly within the study timeframe. To develop the traffic forecast the project team collected turning movement volumes during the peak hours at four intersections within the study area.

Existing Volumes

Intersection turning movement data was gathered by LFUCG and Palmer Engineering at the following intersections:

- Tates Creek Road / Euclid Avenue / High Street / Fontaine Avenue
- Tates Creek Road @ Cochran Road
- Euclid Avenue @ Ashland Avenue
- High Street @ Hanover Avenue

The counts were conducted in 15-minute intervals to obtain peak hour factors and to distribute future year traffic forecasts. The data gathered includes vehicle volumes and truck volumes along with existing queue lengths at the Tates Creek Road / Euclid Avenue / High Street / Fontaine Avenue intersection.

Future Volumes

The existing year (2010) traffic count data was forecasted to the design year (2035) using a 0.3% growth rate per year. The growth rate was based on historical growth trends in the area which are anticipated to stay the same within the study area. The development around the Chevy Chase Study Area is complete and is not expected to generate significantly higher growth rates.

Traffic volumes for the design year are included in the report Appendix.

Traffic Evaluation

A 3D-microscopic traffic simulation model for the study area was created using VISSIM. The simulation visually displays the traffic operations along Euclid Avenue, Tates Creek Road, High Street, and Fontaine Road. The software provides performance measures as well as an animation displaying traffic flow throughout the study area.

The development of a simulation that replicates the existing conditions was created and calibrated using queue length and travel time within the study area. A screen capture of the 3D traffic simulation is shown in Figure 6.



Figure 6: VISSIM Simulation

Three primary performance measures used to evaluate the existing and proposed configurations for the weekday AM and PM peak hours were:

- Level of Service (LOS)
- Delay
- Queue Length

For the purposes of this analysis, one proposed configuration was analyzed that is the same for all alternatives. The Measures of Effectiveness (MOE) selected are objective measures of how well the intersection performed based on modeling tools within the simulation. According to the Highway Capacity Manual, LOS is defined

as a qualitative measure describing the operational conditions. The LOS measures are designated by letters A through F, with LOS A representing the optimal driving conditions and LOS F the worst. A typical intersection design for LOS C and LOS D is acceptable in an urban setting assuming other intersections are not affected. Below is a figure showing the ranges of delay associated with each Level of Service:

LOS	Intersection Delay (Seconds per Vehicle)
	Signalized
A	≤10
B	>10 and ≤20
C	>20 and ≤35
D	>35 and ≤55
E	>55 and ≤80
F	>80

Table 2: LOS/Delay Chart

To determine the length of storage bays at each signalized intersection queue length was computed. Queue length describes the formation of vehicles in a line which can result in considerable delay by blocking other vehicles during congested periods. The HCM provided the 98% queue length for each movement, which was used to determine the storage that was required to remove the turning vehicles from the thru lane.

Simulations do not include the intersections outside of the study area which were observed queuing vehicles into the subject intersection during peak hours.

Intersection Measures of Effectiveness (2010 Existing/2035 Proposed)					
	High St Approach	Fontaine Ave Approach	Tates Creek Approach	Euclid Ave Approach	Overall
Delay (sec)	28 / 31	37 / 26	42 / 60	34 / 37	36 / 42
Level of Service	C / C	D / C	D / E	C / D	D / D
Queue Length (ft)	400 / 450	210 / 125	650 / 800	320 / 375	

Table 3: Study Area Measures of Effectiveness

Intersection Alternatives

The proposed enhancements for the Chevy Chase Study Area were split up by approach so that as funding became available various items could be completed. Each approach to the intersection provides a unique benefit by improving traffic flow, creating a pedestrian friendly atmosphere, and area aesthetics. Three preliminary alternatives were developed and based on public comment and engineering analysis were melded together into a preferred alternative which meets the purpose and need, and expectations of the community.



Figure 7: Typical Section

Euclid Avenue

The Euclid Avenue approach currently does not provide designated bike lanes within the study area. The proposed alternatives include extending the bike lanes along Euclid Avenue and connecting to the existing bike lanes adjacent to the study area. A “road diet” approach would be continued thru this portion of Euclid Avenue which would reduce the travel lanes to a single lane with turn bays at the signalized intersections and create a median. To improve the pedestrian connectivity a mid-block pedestrian crossing is proposed, resulting in an improvement to pedestrian safety. By providing a designated crossing with adequate sight distance and proper markings pedestrians can cross the driving lanes with more confidence.

Tates Creek Road

The addition of bicycle lanes along Tates Creek Road from the study intersection to

Cochran Road will extend the designated bike lane corridor and provide the opportunity to continue with a future project. The reduction in available driving lanes creates an opportunity to improve the ingress/egress to Chevy Chase Place by implementing Access Management. The consolidation of two access points for Chevy Chase Place into one designated opening will minimize driver confusion and reduce the total number of vehicle conflict points resulting in increase safety. The consolidation of access points will increase the number of designated street parking spots and provide streetscaping opportunities. The circulation patterns within the development will need to be studied but a concept of providing a one way circulation within the development should be explored.

Fontaine Road

Improvements to the Fontaine approach were limited to providing a turn lane that is designated for left turns. By providing a designated left turn lane, vehicles traveling thru and right will not be impeded by the left turn vehicles resulting in less delay and shorter queue lengths.

High Street

The reduction of the intersection footprint by eliminating the channelized turn lane provided the opportunity to extend the left turn lane. Providing a longer left turn lane will improve the traffic flow along High Street by reducing the occurrences a left turning vehicle blocks the thru lane. This improvement also reduces the crosswalk length for pedestrians resulting in improved pedestrian safety and signal timing efficiency.

With these improvements made to all alternatives, the following specific median and sidewalk improvements were developed as three alternatives.

Alternative A

Alternative A improvements to the Chevy Chase Study area are an intersection footprint that is reduced to improve pedestrian crossings and signal timing. Parallel street parking would remain along each of the approaches with streetscaping being proposed between the sidewalks and the parking spaces. On-street parking would increase from an existing 51 to a proposed 63. See Appendix A for more detailed maps.

Euclid Avenue

The improvements along Euclid Avenue are to replace the flush painted median with a raised median that provides an area for streetscaping. A mid-block pedestrian crossing is proposed along with dedicated bike lanes in both directions of travel.

There is a shared thru-left lane at eastbound Euclid Avenue to northbound High Street or eastbound Fontaine Road.

Tates Creek Road

There is a mid-block crossing between Cochran Road and the study intersection. Two raised medians with opportunities for streetscaping have been included along Tates Creek Road, near the Chevy Chase Place entrance.

High Street

The modification to the intersection would provide the opportunity to increase the left turn storage lane along High Street. The realignment of Hanover Avenue and inclusion of streetscaping such as a pocket park would improve the safety and appearance of the area.

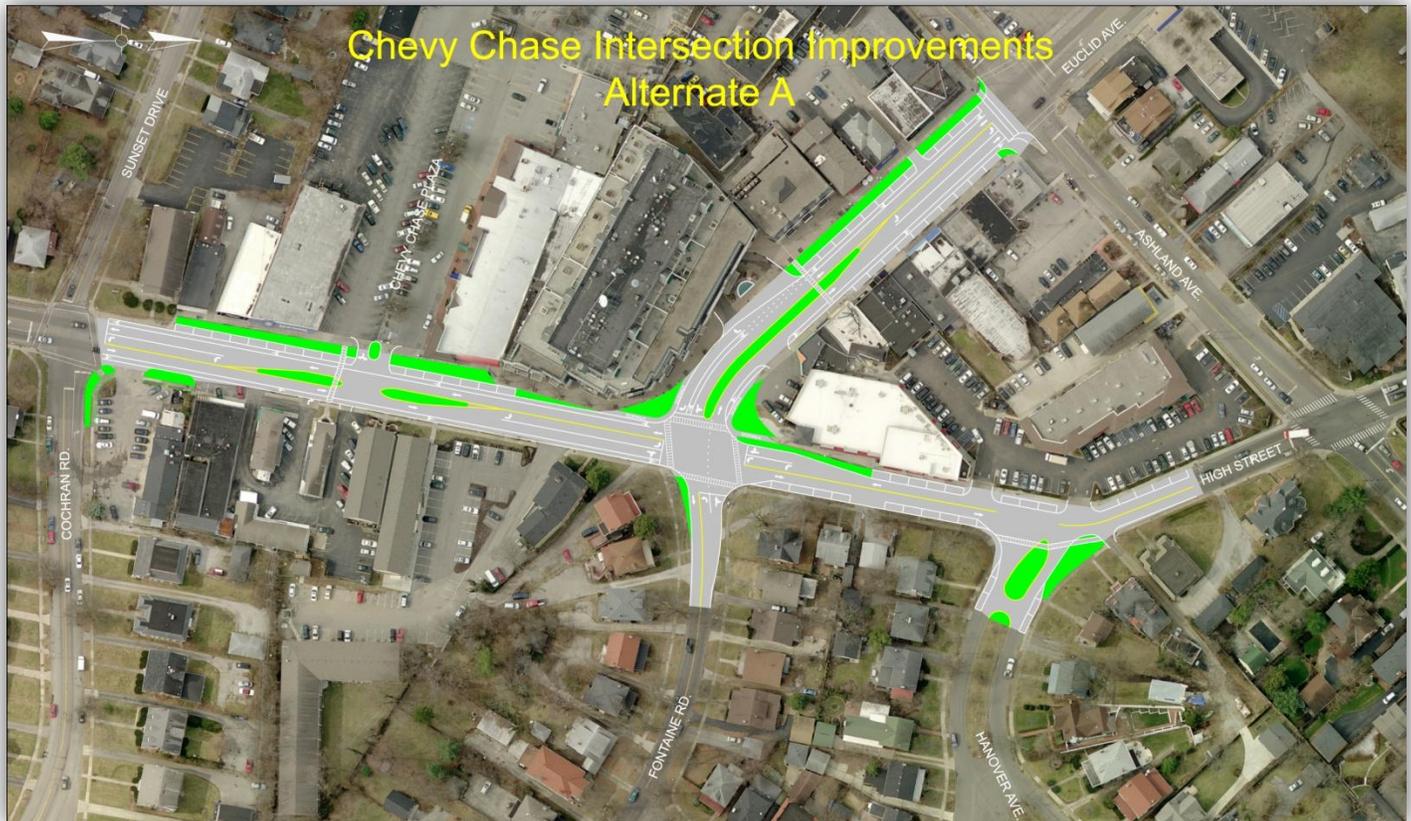


Figure 8: Alternate A Plan View

Alternative B

Alternative B improvements to the Chevy Chase Study area are similar to Alternative A except for the Back-In Street parking concept along one side of Tates Creek and Euclid Avenue. The alternative also includes streetscaping throughout the study area along with improved pedestrian and bicycle facilities.

Euclid Avenue

The improvements along Euclid Avenue are to replace the flush painted median with a raised median that provides an area for streetscaping. A mid-block pedestrian crossing is proposed along with dedicated bike lanes in both directions of travel.

There is a shared thru-left lane at eastbound Euclid Avenue to northbound High Street or eastbound Fontaine Road.

Tates Creek Road

There is a mid-block crossing between Cochran Road and the study intersection along with two raised medians for streetscaping along Tates Creek Road, near the Chevy Chase Place entrance.

High Street

The modification to the intersection will also provide the opportunity to increase the left turn storage lane along High Street. The realignment of Hanover Avenue and inclusion of streetscaping such as a pocket park will improve the safety and appearance of the area.



Figure 9: Alternate B Plan View

Alternative C

Alternative C improvements to the Chevy Chase Study area are an intersection footprint that is reduced to improve pedestrian crossings and signal timing. Parallel Street parking will remain along each of the approaches with streetscaping being proposed between the sidewalks and the parking spaces along Tates Creek Rd along with a raised median the entire study area along Euclid Ave.

Euclid Avenue

The improvements along Euclid Avenue are to replace the flush painted median with a raised median that provides an area for streetscaping. A mid-block pedestrian crossing is proposed along with dedicated bike lanes in both directions of travel.

There is a shared thru-left lane at eastbound Euclid Avenue to northbound High Street or eastbound Fontaine Road.

Tates Creek Road

There is a mid-block crossing between Cochran Road and the study intersection. Two raised medians with opportunities for streetscaping have been included along Tates Creek Road, near the Chevy Chase Plaza entrance.

High Street

The modification to the intersection will provide the opportunity to increase the left turn storage lane along High Street. The realignment of Hanover Avenue and inclusion of streetscaping such as a pocket park will improve the safety and appearance of the area.



Figure 10: Alternate C Plan View

Alternative D

Alternative D was developed based on public input from the August 3, 2010 Public Meeting along with preferences indicated on the questionnaires. The improvements to the Chevy Chase Study area are an intersection footprint that is reduced to improve pedestrian crossings and signal timing along with streetscaping opportunities. Alternative D has a combination of 70 available parallel and back-in parking spaces compared to the dedicated 51 existing spaces. To improve the traffic flow thru the intersection, dedicated left turn lanes are provided on all approaches of Alternative D.

Euclid Avenue

A wider raised median replaces the existing flush median along Euclid Avenue allowing for streetscaping. However, the median is narrowed and the intersection is widened to provide a left turn bay to High Street.

Tates Creek Road

Alternative D shifts the mid-block crossing location in comparison to the original alternatives due to the left turn bay from Southbound Tates Creek Road.

A raised median near the Chevy Chase Plaza is proposed along with a left turn lane into the Chevy Chase Plaza.

High Street

The Hanover Avenue approach is realigned to provide for a 90 degree intersection with High Street. The realignment of Hanover Avenue and inclusion of streetscaping such as a pocket park will improve the safety and appearance of the area.

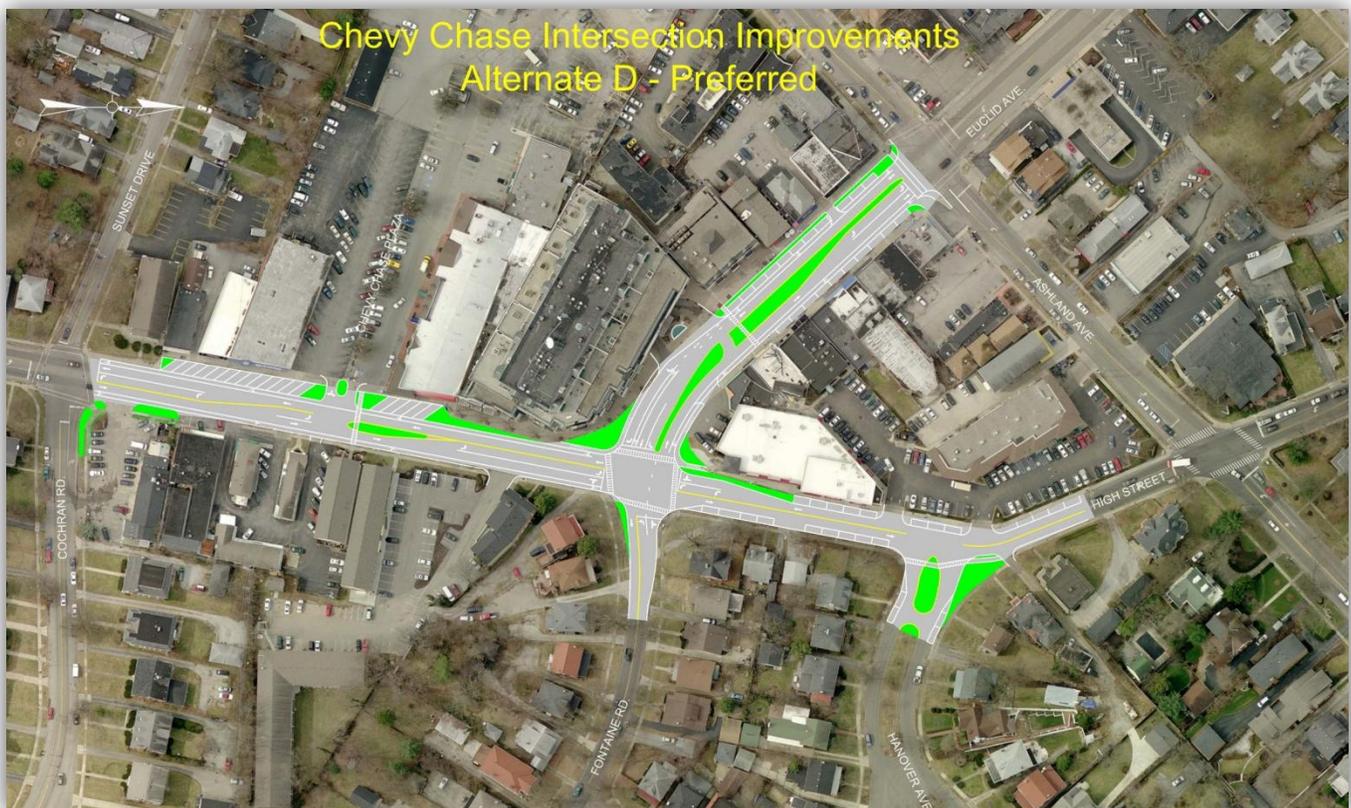


Figure 11: Alternate D Plan View

Alternative D Additional Options

During public meetings and meetings with merchants additional items were requested to be studied by the attendees. The items requested will require survey and more detailed design than was scoped for this phase of the project. Below is a discussion of the items requested for additional study in future phases:



Figure 12: Public Meeting

Delivery Truck Loading Zones

The merchants of Chevy Chase expressed a desire to provide designated delivery truck loading zones along Euclid Ave and Tates Creek Road. The delivery trucks currently use the additional turn bay lanes to park and make deliveries. A desire to make the median mountable and with a textured pavement was discussed and will be studied during the next phase. Most deliveries to the stores occur during off peak hours so heavy traffic volumes are reduced.



Figure 13: Euclid Avenue Loading Area

Chevy Chase Plaza Access

The Chevy Chase Plaza Parking Garage is located on Euclid Avenue and with the proposed raised median would not accommodate ingress/egress left turns. A solution developed during a merchants meeting was to provide a median opening for vehicle to make a left turn into the parking garage but to restrict the exiting vehicles to right turn only. This option will need to be refined during future phases to assure proper circulation patterns can occur.



Figure 14: Chevy Chase Parking Garage

Parking

The merchants of Chevy Chase expressed a desire to maintain the same amount parking in front of Buddy's Restaurant. The group also suggested the evaluation of the parking layout in front of Chevy Chase Hardware to improve the safety of customers that currently are required to back into traffic.

Streetscaping Concepts

Once Alternative D was established as the preferred road layout, three streetscape options were developed. The streetscape consists of the visual elements of the street. These elements can help develop and reinforce the unique atmosphere of the Chevy Chase area and provide additional amenities to visitors and residents alike.

The three options presented at the September 2, 2010 public meeting ranged from a more traditional streetscape scene to a very modern appearance. Each option included an overall plan, a section drawing of Euclid Avenue to demonstrate scale and relationships between different elements, and typical examples of materials and furnishings. Public input was received in the form of written comment sheets and conversations.

Option A

Option A is the most traditional streetscape approach. Typical brick bands line the sidewalks and mark the landing area for crosswalks. Storm water planters create a buffer between the sidewalk and street where space allows. Low flowering shrubs and perennials bring a swath of color to the median which is lined with double armed streetlights down the middle. Brick pavers extend the mid-block pedestrian crossings through the medians. All crosswalks are painted with white striping parallel to the flow of traffic.

A large plaza space is proposed on the southwestern corner of the Tates Creek Road and Euclid Avenue intersection. This plaza provides space for a proposed new statue of Henry Clay, which will visually anchor the intersection and offer a historical context for the area. Directly across Euclid Avenue on the northwestern corner of the



Figure 15: Streetscape Option A

intersection, a smaller plaza space with trees and seating areas is proposed. This plaza offers an opportunity for the adjacent businesses to extend outdoors. The realignment of Hanover creates space for a small pocket park with shade trees and seating at the entrance to the Hanover Street residential area.

Black or darkly colored site furnishings will have a very traditional form. The benches can be a classic park bench type with four legs and arm rests. A hitching post style bike rack can be easily placed individually for a small area or in a group where more space is available. Trash receptacles will be a typical metal canister that can be customized for the district. A logo or street name can be cut into the top rim or border along with designations for trash and recycling. Brick pavers can be a mix of either tan and grey or red and grey. Stone or brick columns with street names are proposed as pedestrian way-markers. The columns are suggested at all intersections, functioning as entry features for the neighborhoods.



Figure 16: Option A: Traditional Bench Example



Figure 17: Option A: Trash Receptacle



Figure 18: Option A Section: Proposed Euclid Avenue

Option B

Option B offers a moderate approach between the more traditional Option A and the modern Option C. Flowing bands of pavers wind down the sidewalk, creating a fluid rhythm to the materials. The Tates Creek Road and Euclid Avenue intersection, marked with decorative paving, enhances visibility both for safety of pedestrians and to visually signify the importance of the area. Storm water planters or rain gardens can enhance the buffer between pedestrians and traffic. Trees are proposed in the Euclid Avenue median, with low plantings beneath. Permeable pavers are recommended for most of the on street parking areas.

Plaza spaces are proposed on both the southwestern and northwestern corners of the intersection. The large plaza on the southwestern corner provides space for public artwork. The smaller plaza on the northwestern corner is an open space with a couple of shade trees. The two plazas



Figure 19: Option B: Custom Bench Example

together provide additional event space for the local businesses and seating areas for passersby. Both plazas are intended to be open and unstructured, creating adaptable spaces for a wide variety of uses. The realignment of Hanover Street creates space for a pocket park on the corner of Hanover and High Street. Proposed decorative paving, shade trees, and seat walls define a formal yet intimate setting.



Figure 20: Streetscape Option B

Site furnishings can be customized to celebrate the character of the Chevy Chase district. Custom cut benches and trash receptacles can display either a Chevy Chase District logo or some other image that reflects the context and history of the surroundings. Repetition of the image throughout the area enhances the sense of identity and place. Furnishings are available in a variety of colors, but a consistent color should be used throughout. Pedestrian scale street lights will be a straight arm style down light. The recommended permeable pavers are a small wavy square style. Varieties of colors are possible and should relate to the decorative paving used throughout the sidewalks and plazas. Colorful way-finding signage, mounted to poles at a pedestrian appropriate height, can direct people toward destinations both inside and outside of the Chevy Chase area. The suggested public art pieces, created by local artists, incorporate street names with sculpture that relates to the district. These pedestrian scale way-markers are indicated at all intersections.



Figure 21: Option B: Custom Trash Receptacle



Figure 22: Option B Section: Proposed Euclid Avenue

Option C

Option C displays the most modern style of the three proposed streetscape scenes. Similar to Option B, curvilinear paver bands flow down the sidewalk creating a flowing and rhythmical pattern in the pavement. Circular paving patterns mark the large and small plaza areas at the main intersection of Tates Creek Road and Euclid Avenue. In-ground LED lights set in narrow paver bands can visually guide pedestrians through the district at night. The street trees are set in bands of permeable pavers, increasing the amount of usable paved area. On street parking is also paved in permeable pavers. The medians are designed as a combination of low plantings and pavers with all crosswalks and mid-block crossings paved with decorative pavers to match.

The proposed two main plaza areas provide additional event and gathering spaces. The

large plaza provides an opportunity to display public artwork that relates to the district. The suggested artwork could be a modern and interpretative sculpture that reflects the character and history of the Chevy Chase district. The proposed small plaza contains several shade trees and seat walls for informal gathering opportunities. Both plazas can serve as focal points and signify the center of the district. The two relatively open and unstructured plazas provide adaptable space for a variety of public events. The realignment of Hanover Street creates space for a proposed pocket park. In Option C, the park is a passive space filled with shade trees and grass.

All site furnishings are stainless steel and modern in styling. The sleek minimalist benches feature either no or very low arm rests. A series of very simple circular tubes create an effective bike rack system. Rectangular pavers with clean cut edges enhance the modern styling. The



Figure 23: Streetscape Option C

permeable pavers in the parking areas should be gray in color to match the stainless steel furnishings. A district map listing all businesses and locations can be incorporated into an interchangeable map kiosk for easy updating in the future. Circular markers located in the pavement at intersections are proposed as pedestrian way-markers. These markers will list the neighborhood the pedestrian is entering or leaving, and incorporate a related image.



Figure 24: Option C: Modern Bench Example



Figure 25: Option C: Business map & directory



Figure 26: Option C Section: Proposed Euclid Avenue

Preferred Options

+ Additional Feedback

Comment sheets returned during and after the second public meeting established that Option B was preferred. In particular, design elements that were most favored included the site furnishings that can be custom cut with a Chevy Chase logo or other image, in-ground pedestrian way-markers, and curvilinear paving patterns. The cost estimate found at the end of this report is based on Option B and includes the way-markers from Option C.

Specific preferences from each option were discovered through both the written comment sheets and conversations and are listed below. For example, more street trees are generally preferred over fewer and any additional green space, in the form of plantings or pocket parks, is generally favored. Elements from each of the streetscape options can be combined to create an atmosphere that reflects the preferences of most of the residents and business owners of Chevy Chase.

Specific Preferences from all options:

- Street Trees
- Permeable Pavers in parking areas
- In-ground Pedestrian Way-markers
- Customized Site Furnishings
- Connect with the history of Henry Clay through art and/or way-markers
- Decorative pavers in crosswalks and mid-block crossings
- Audible traffic signals for visually impaired pedestrians

Additional considerations during the next design phase should include:



Figure 27: Preferred pedestrian way-marker from Option C

- Loading zones in the median of Euclid – create with decorative pavers to match sidewalks
- Reduce the driving lane width to provide additional sidewalk space
- Provide ash urns

Public Involvement

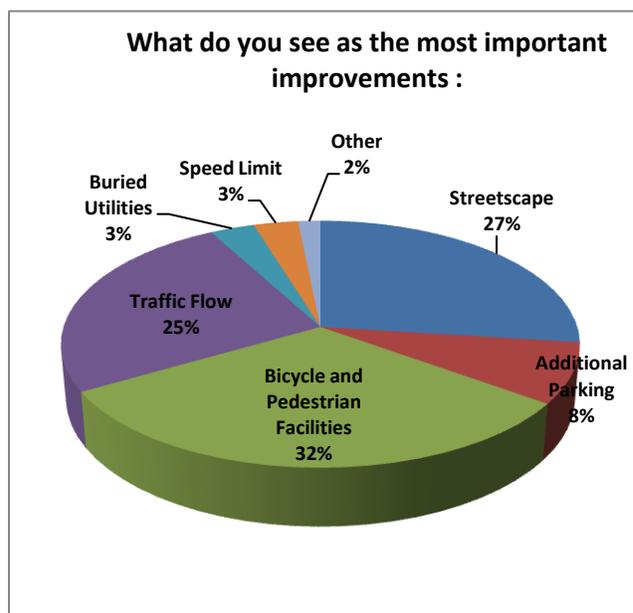
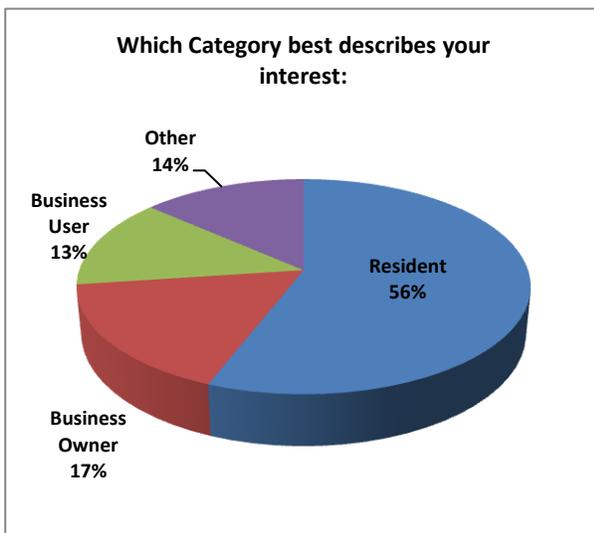
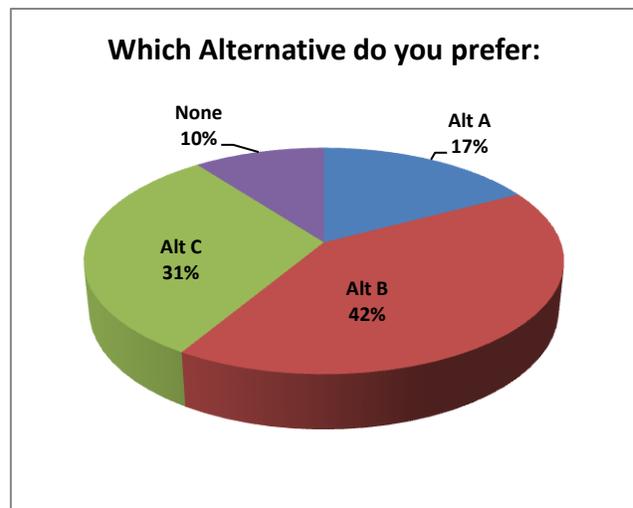
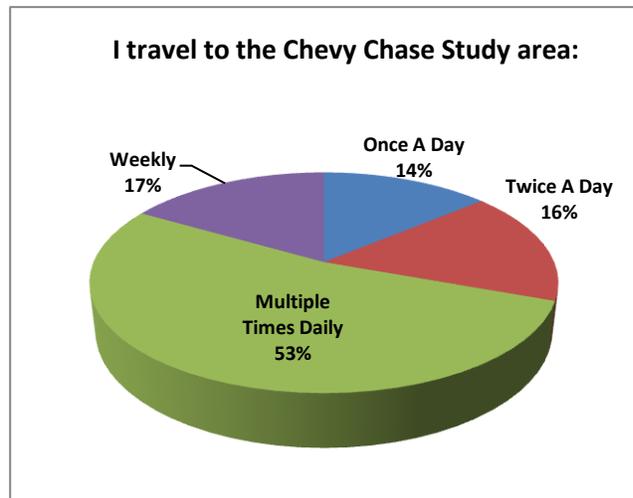
Two public meetings were held to provide the public the opportunity to view and comment on the conceptual and streetscaping alternatives. During each meeting a presentation was made and questionnaire's/comment sheet's were handed out to receive feedback.

Meeting 1

The first public meeting was held at Faith Lutheran Church on August 3, 2010. The meeting included a PowerPoint presentation of the project history, project goals, Alternatives A, B, and C, and the methodology of the study.

To assist in the collection and tabulation of public input, a questionnaire was provided to attendees. The total meeting attendance was 55 residents/business owners with 38 questionnaires returned either at the meeting or within the comment period.

Questionnaire responses revealed that 40% of those attending the public meeting preferred Alternative B. The most important improvements for the area were split between streetscaping, bicycle and pedestrian facilities, and traffic flow improvements.

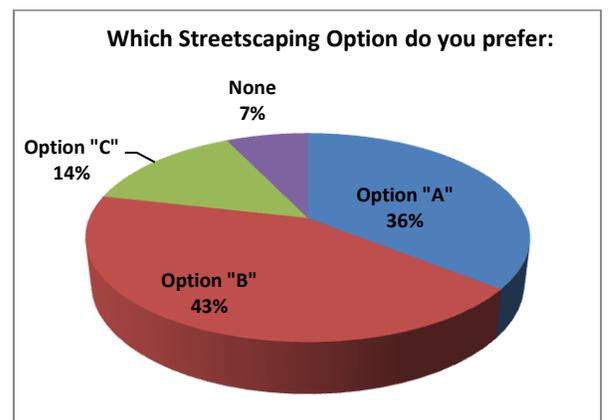
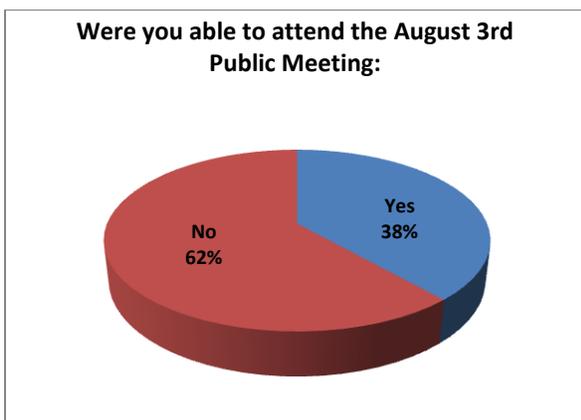
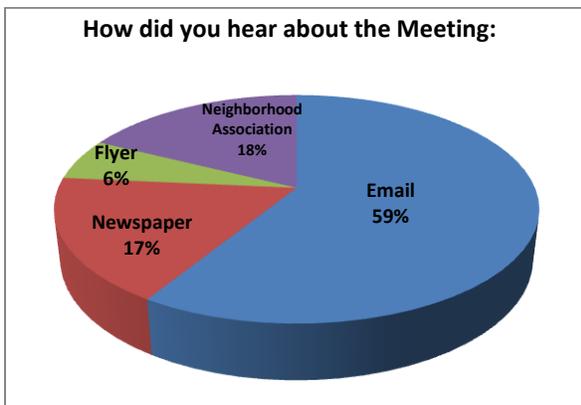
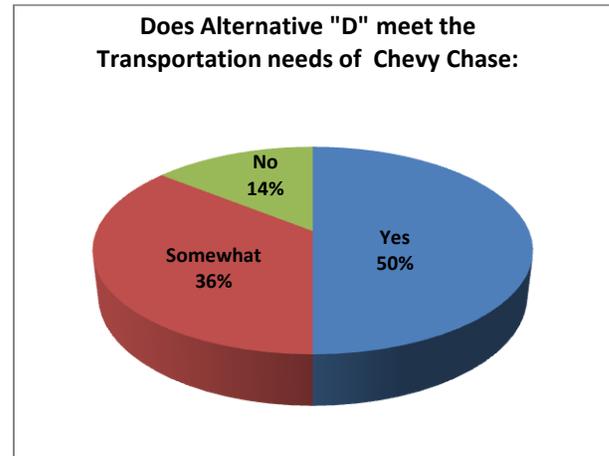


Meeting 2

The second public meeting was held at Park United Methodist Church on September 2, 2010. The meeting presented a summary of the first public meeting followed a preferred alternative and landscaping options.

To assist in the collection and tabulation of public input, a questionnaire was provided to attendees. The total meeting attendance was 27 residents/business owners with 17 questionnaires returned either at the meeting or within the comment period.

Questionnaire responses revealed that 62% of those attending the public meeting were not able to attend the previous meeting. The group also felt that Landscaping and Decorative Paving were the most important aspects of Streetscaping.



Funding

Funding for this project will most likely require various sources and be completed in phases as funding becomes available. With the current budget shortfall, funding for this project should explore multiple sources which includes grants when feasible. The use of grants as a funding source may require matching funds from another source such as local funds. Below is a brief list of some funding sources that may be applicable to this project:

[KYTC Road Plan](#)

Kentucky's Six-year Highway Plan is a major funding source from which highway projects are scheduled and built. New projects entering the Highway Plan must do so through the Statewide Transportation Plan process. In Lexington this would be led by the Lexington Metropolitan Planning Organization (MPO). With the Unscheduled Project List being currently over programmed the timeframe for this project would likely not be in the near future.

[KYTC Transportation Enhancement Grant](#)

Transportation Enhancement (TE) Grants are awarded to transportation related activities that are designed to strengthen the cultural, aesthetic, historic, and environmental aspects of our transportation infrastructure. The Chevy Chase project is eligible based on the following categories:

- Pedestrian & Bicycle facilities
- Pedestrian & Bicyclist Safety & Education
- Landscaping & Scenic Beautification

[KYTC Highway Safety Improvement Program \(HSIP\)](#)

The Highway Safety Improvement Program (HSIP) is part of the states Strategic Highway Safety Plan that corrects or improves a hazardous road location or addresses a highway safety problem. The Chevy Chase project has two approaches with a Critical Rate Factor over 1.0. The Euclid and High Street approaches qualify as a location that accidents are occurring that are not considered random occurrences.

[Land & Water Conservation Grant](#)

A Land and Water Conservation Grant is a federal grant used for outdoor recreational areas. The grant amount ranges from \$5,000 to \$75,000 and requires an equal local match. In our discussions with the Kentucky Department of Local Government, the pocket park (community park) would be well suited for this type of grant. The grant can be used for labor, material, landscaping, burying utilities, and lighting. The matching funds can come in the form of other grants, local funds, work completed by city employees, and volunteer labor. Volunteer labor could be completed by organizations such as boy scouts, girl scouts, church groups, neighborhood associations and gardening clubs. The next window for grant submittals is December 2010 to March 2011.

Cost

The development of the Design, Right of Way, Utility relocations, Construction, and Streetscaping estimates is separated by approach to provide the opportunity to phase the project as funding becomes available. The project team prioritized the project approached in the following order:

- Euclid Ave
- Tates Creek Road
- High Street (excluding Park)
- Fontaine Rd
- Hanover Park

The pocket park proposed on Hanover Ave was excluded from the High Street improvements and added as a separate phase because the group felt other funding sources could be used.

Below is a chart showing the cost breakdown for approach and task based on 2009 average unit bids. The total cost for the project is \$6,940,000. The utility estimate includes relocating overhead utilities underground which could also be completed as a separate project.

Conclusion

The Chevy Chase Feasibility Study has provided an all-inclusive look into the traffic, safety, and beautification of one of Lexington's premier districts. The improvements outlined in the preferred alternative (Alt D) create a blend of improving traffic flow and safety while also encouraging pedestrian and bike users to the area. The extension of the designated bike lanes and mid block pedestrian crossings will encourage users to begin using these alternate forms of transportation. The addition of turn lanes on all approaches of the study intersection will result in improved traffic flow and reduce the number of left turning cars that currently block all other vehicles. The traffic calming measures proposed with the preferred alternative will result in a more uniform traveling speed increasing safety of the area for all users.

	Euclid Avenue	Tates Creek Road	Fontaine Road	High Street	Total Cost
Engineering/Landscape Design	\$100,000	\$100,000	\$20,000	\$90,000	\$310,000
Right of Way	\$50,000	\$100,000	\$20,000	\$30,000	\$200,000
Streetscaping	\$570,000	\$360,000	\$0	\$360,000	\$1,290,000
Construction	\$400,000	\$600,000	\$200,000	\$500,000	\$1,700,000
Total	\$1,120,000	\$1,160,000	\$240,000	\$980,000	\$3,500,000
Utilities	\$660,000	\$1,400,000	\$190,000	\$1,190,000	\$3,440,000
Project Total	\$1,780,000	\$2,560,000	\$430,000	\$2,170,000	\$6,940,000

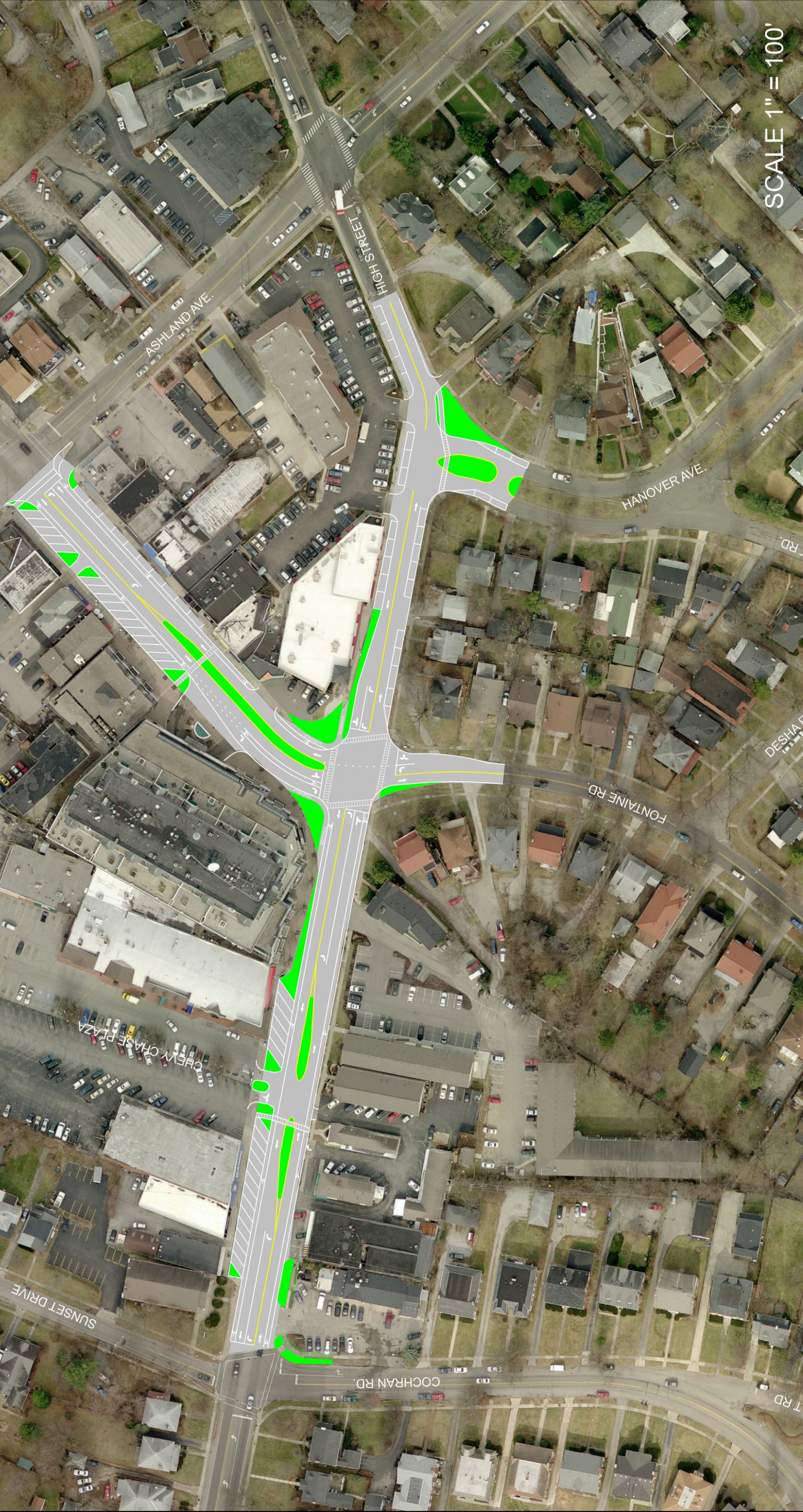
Table 4: Estimated Project Cost

Chevy Chase Intersection Improvements Alternate A



SCALE 1" = 100'

Chevy Chase Intersection Improvements Alternate B



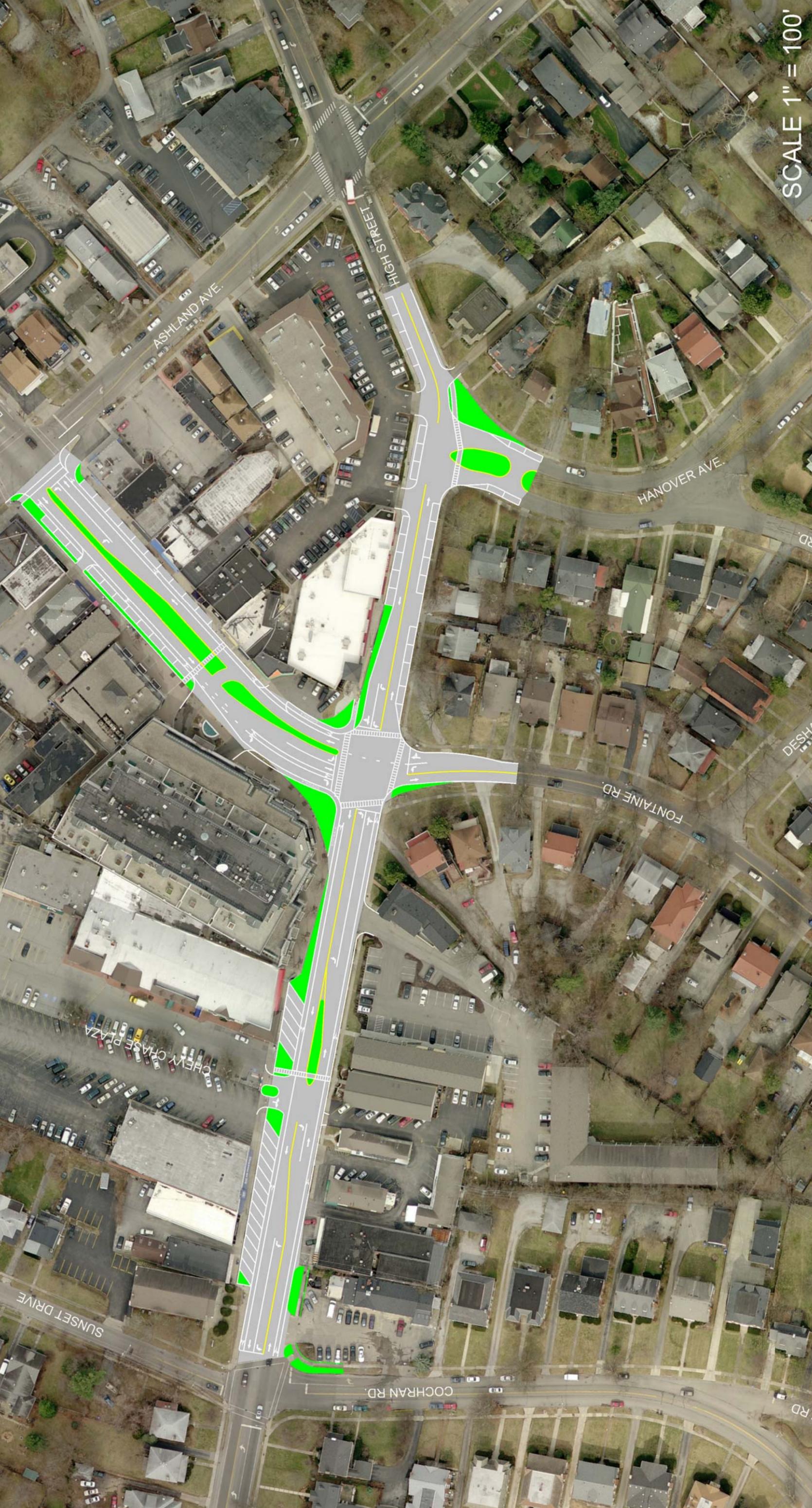
SCALE 1" = 100'

Chevy Chase Intersection Improvements Alternate C



SCALE 1" = 100'

Chevy Chase Intersection Improvements Alternate D - Preferred



SCALE 1" = 100'

CHEVY CHASE STREETSCAPE OPTION A

KEY FEATURES:

- Paver Band along all sidewalks
- Rain Gardens/Storm Water Planters
- Large plaza with area for proposed Henry Clay Statue
- Small plaza with trees and seating areas
- Median with low flowering shrubs and perennials

EUCLID SECTION



MATERIALS + FURNISHINGS

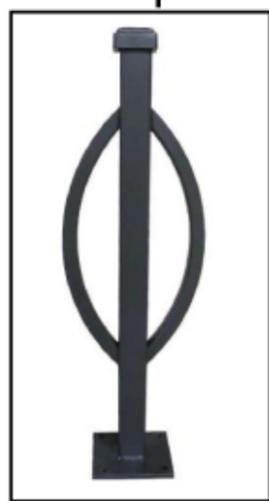
BENCH OPTION 1



BENCH OPTION 2



BIKE PARKING



METAL TRASH +
RECYCLING CANISTERS
CUSTOM CUT FOR CHEVY
CHASE DISTRICT



PLAZA WITH
HENRY CLAY
STATUE



LIGHTS IN
MEDIAN

STORMWATER PLANTERS



TYPICAL PAVER EXAMPLES



HANOVER
URN

PEDESTRIAN WAY-MARKING:
STONE COLUMNS MARK
STREET NAMES



POCKET PARK

CHEVYCHASESTREETScape OPTION B

KEY FEATURES:

- Variety of Pavers in curvilinear bands
- Rain Gardens/Storm Water Planters
- Large plaza with area for public art
- Intersection with decorative pavers
- Median with trees
- Parking areas with permeable pavers

EUCLID SECTION



MATERIALS + FURNISHINGS

BENCH OPTION 1



BENCH OPTION 2



BIKE PARKING

METAL TRASH +
RECYCLING CANISTERS
CUSTOM CUT FOR CHEVY
CHASE DISTRICT



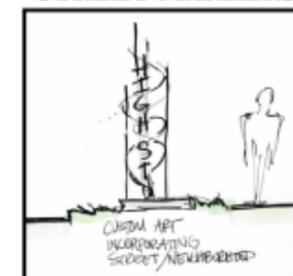
PEDESTRIAN
STREET LIGHT



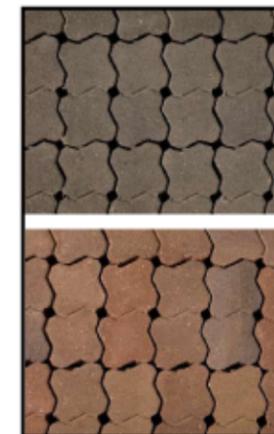
PEDESTRIAN SCALE
DIRECTIONAL SIGNS
MOUNTED ON POSTS



PEDESTRIAN WAY-
MARKING: ART AS
STREET MARKERS



PERMEABLE
PAVERS IN
PARKING AREAS



PLAZA WITH
PUBLIC ART

POCKET PARK

HANOVER
URN

PEDESTRIAN WAY-
MARKING: ART AS
STREET MARKERS

CHEVYCHASE STREETSCAPE OPTION C

KEY FEATURES:

- Variety of Pavers in curvilinear bands and nodes
- Street trees set in permeable pavers
- Large plaza with area for public art
- Small plaza with trees and seat walls
- Median with decorative pavers
- Parking areas with permeable pavers
- Neighborhood markers at intersections

EUCLID SECTION



MATERIALS + FURNISHINGS

BENCH OPTION 1



BENCH OPTION 2



PERMEABLE PAVERS



BIKE PARKING



PLAZA WITH
DISTRICT
MARKER OR
ART

SMALL PLAZA
WITH SEAT
WALLS

HANOVER
URN

IN GROUND
NEIGHBORHOOD
MARKERS



TYPICAL
STREET
LIGHT



BANDS OF
IN-GROUND
LIGHTS



TYPICAL DIRECTIONAL + MAP SIGN
OPTIONS



SUMMARY

PUBLIC INFORMATION MEETING

Chevy Chase Intersection Traffic Safety and Streetscapes Redesign

TUESDAY, AUGUST 3

**5:30 P.M. TO 7:00 PM
Faith Lutheran Church
1000 Tates Creek Road
Lexington, KY**

The meeting was held on August 3, 2010 at 5:30. The meeting was located at the Faith Lutheran Church on Tates Creek Road near the project area. Fifty five attendees at the meeting signed in and approximately 38 comment sheets were completed. Time was permitted for the attendees to review the alternatives presented and representatives were available to address any questions from the public. At 6:00 the Councilmember Fiegle welcomed everyone and introduced David Lindemen of Palmer Engineering. Mr. Lindemen discussed the background of the project and the scope for the current work being completed, then Mr. Lindeman presented the alternative and address questions and comments by the public. Below is a summary of the information gathered from the questionnaires:

How did you hear about the meeting: (check all that apply)

- 17 Email
- 8 Newspaper
- 3 Website
- 4 Flyer
- 3 Neighborhood Association
- 2 TV
- 2 Radio

Which Category best describes your interest: (check all that apply)

- 33 Resident
- 10 Business Owner
- 8 Business User
- 8 Other

I travel to the Chevy Chase Study area:

- 5 Once A Day
- 6 Twice A Day
- 19 Multiple Times Daily
- 6 Weekly

Which Alternative do you prefer

- 5 Alt A
- 12 Alt B
- 9 Alt C
- 3 None

What do you see as the most important improvements needed for the area:

- 17 Streetscaping
- 5 Additional Parking
- 20 Bicycle and Pedestrian Facilities
- 16 Traffic Flow
- 2 Buried Utilities
- 2 Speed Limit
- 1 Other

A summary of written comments follows:

3 people responded that they liked the idea of back-in parking

2 people responded that they did not like the idea of back-in parking

3 people responded that they wanted less on-street parking

1 person responded that they liked improving the appearance of the area

1 person responded that they liked the pocket park

1 person responded that they did not like some or all of the medians

6 people responded that they would like to see more trees

5 people responded that they wanted more green space

3 people responded that they wanted more dedicated turn lanes at the intersection

4 people responded that they wanted less dedicated turn lanes at the intersection

2 people responded that they wanted more traffic or turning lanes

1 person recommended using stop signs instead of stop lights

2 people responded that they preferred the bike lane to be separated from the traffic

1 person responded that they were concerned about ADA compliance

2 people responded that they would like the utilities buried

7 people responded that they would like to slow down traffic

Chevy Chase Intersection
Traffic Safety & Streetscapes Redesign
Questionnaire (*Please Print*)

Name: _____ Date: _____

Address _____

City, State, Zip _____

Phone number _____

Please take a few minutes to fill out the questionnaire and turn it in at the meeting or mail it back with your comments. Thank you in advance for your assistance.

How did you hear about the public meeting (email, newspaper, website, & etc):

Which category best describes your interest: (Check as many as apply)

- Resident
- Business Owner
- Business User
- Other

I travel to the Chevy Chase Study area:

- Once A Day
- Twice A Day
- Multiple Times Daily
- Weekly

Which Alternative do you prefer:

- Alt A
- Alt B
- Alt C

What do you see as the most important improvements needed for the area?

- Streetscaping
- Additional Parking
- Bicycle and Pedestrian Facilities
- Traffic Flow
- Other – Please Describe Below

(Continue on back)

ANNOUNCEMENT

PUBLIC INFORMATION MEETING

Chevy Chase Intersection Traffic Safety and Streetscapes Redesign

**TUESDAY, AUGUST 3
5:30 P.M. TO 7:00 PM
Faith Lutheran Church
1000 Tates Creek Road
Lexington, KY**

Lexington Fayette Urban County Government has scheduled two public informational meetings regarding the Chevy Chase Intersection Traffic Safety and Streetscapes Redesign in Lexington at the Faith Lutheran Church. The purposes of these meetings are to share with the public "Conceptual Alternatives" which represent the first stage in development of conceptual plan for this project and to obtain public comment. Anyone having an interest is urged to attend.

The first meeting will begin at 5:30 p.m. local time and end at approximately 7:00 p.m. local time respectively. A questionnaire/comment sheet will be handed out at the meeting. The second meeting date and time will be announced at a later date.

A formal presentation with PowerPoint slides will be presented at 6:00 P.M. The presentation will include discussions of the project background, the purpose of the public meeting, a brief description of alternatives, the project schedule, future steps and phases in development of the project, and an orientation for displays and exhibits at the public meeting. During the meeting, individuals will be able to view displays and ask questions one on one Department representatives. A questionnaire and comment sheet will be distributed with handouts facilitating public comment. Oral and written comments can be made during the meeting.

All oral and written comments will become part of the official meeting record. Once compiled, the meeting record and other supporting documentation will be made available for review and copying only after an Open Records Request has been received and approved. All Open Records Requests must be submitted to LFUCG.

In accordance with the "Americans with Disabilities Act," if you have a disability for which the LFUCG needs to provide accommodations, please notify us of your requirements by noon August 2, 2010. This request does not have to be in writing. Please contact Paul Schoninger, at the LFUCG or call (859) 258-3208.

Chevy Chase Intersection Traffic Safety & Streetscapes Public Meeting



August 3, 2010



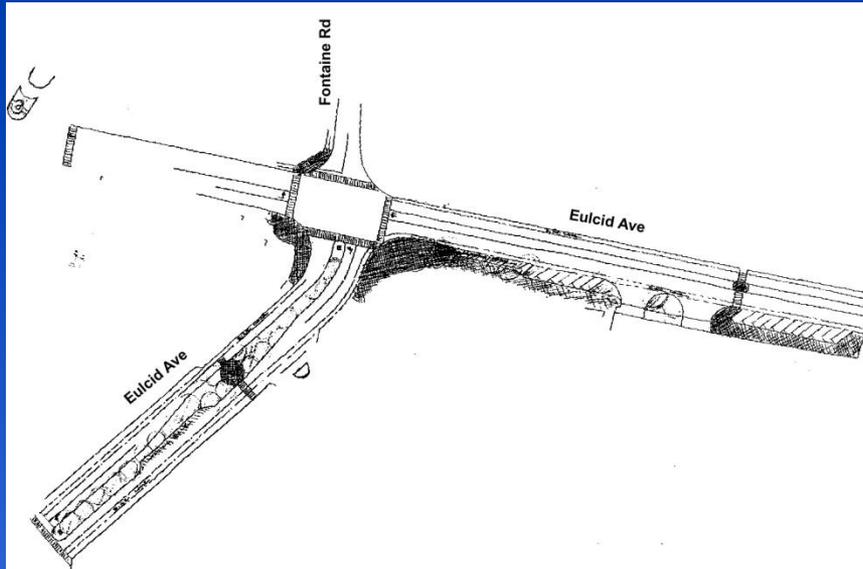
Project History

Neighborhood Meetings

(October 2009)

Conceptual Vision

(January 2010)



Funding for Feasibility Study

(April 2010)

Public Meeting

(August 2010)

Project Goals

Improve Traffic Flow



Increase Greenspace

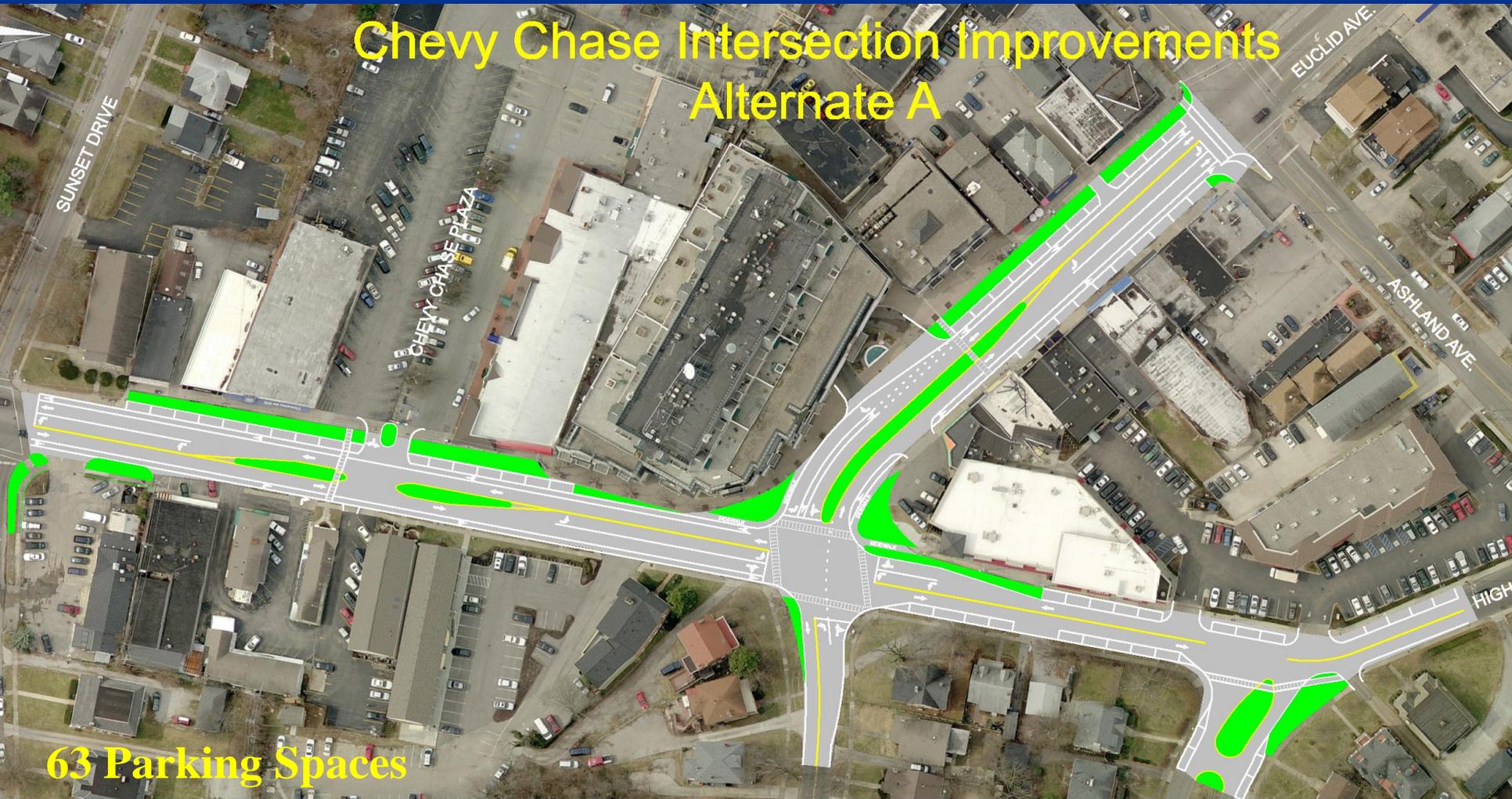
Bicycle and Pedestrian Friendly



Capture Beauty And Charm

Intersection Alternatives

Chevy Chase Intersection Improvements Alternate A

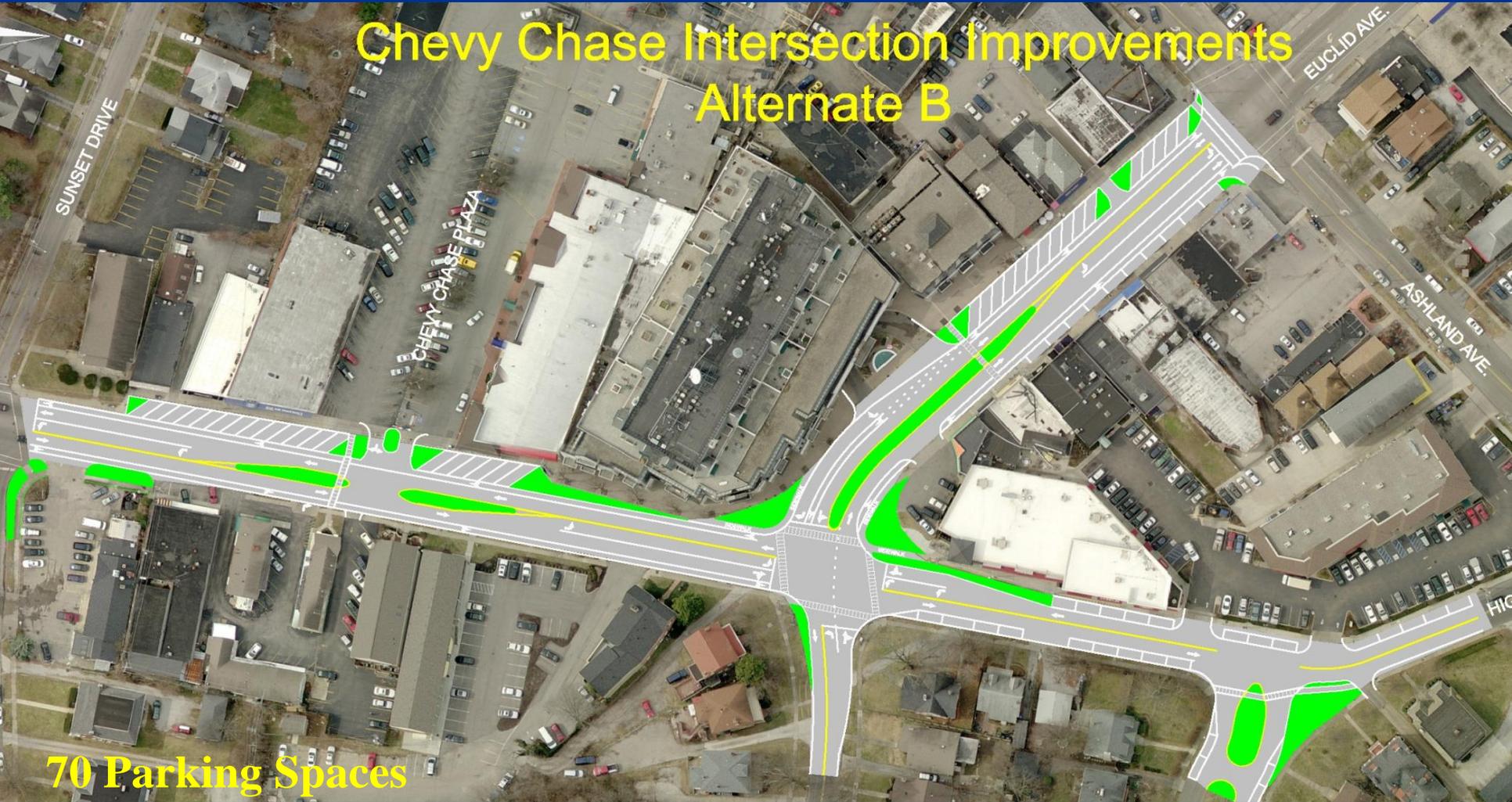


63 Parking Spaces

Reduced Euclid Median, Skewed Hanover Approach, Parallel Parking

Intersection Alternatives

Chevy Chase Intersection Improvements Alternate B



70 Parking Spaces

Reduced Euclid Median, 90 degree Hanover Approach, Back-in Parking

Intersection Alternatives

Chevy Chase Intersection Improvements Alternate C

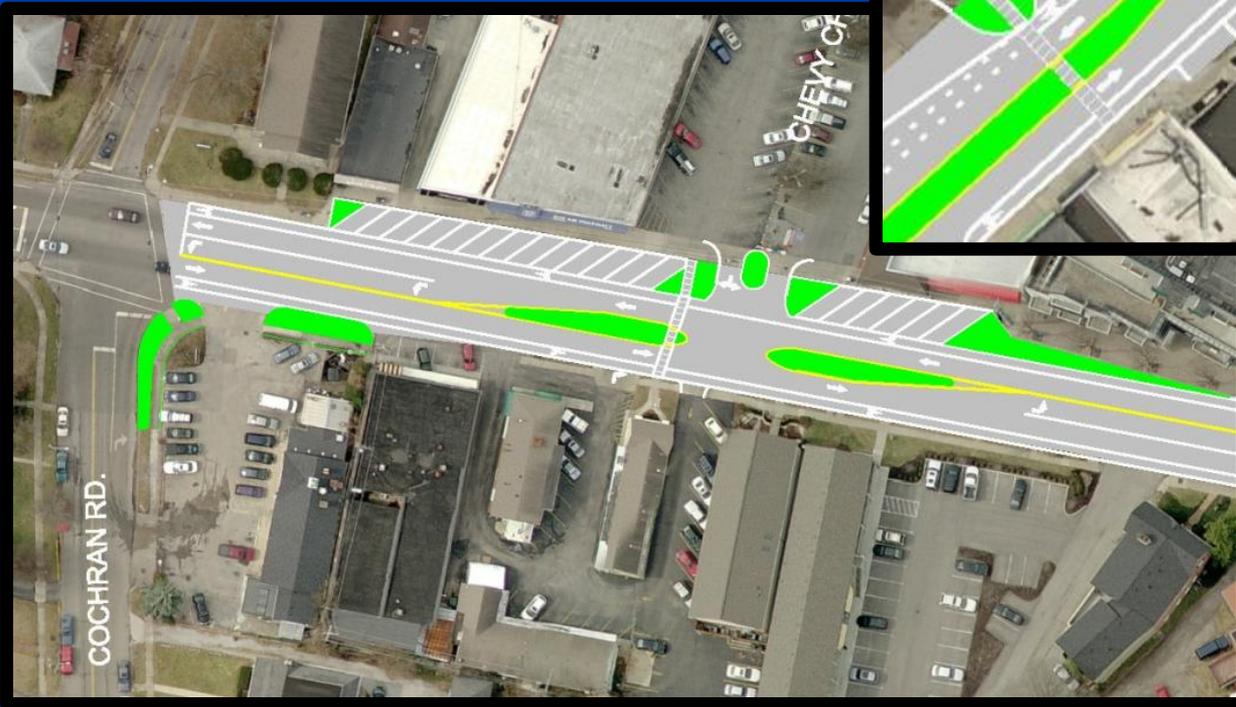
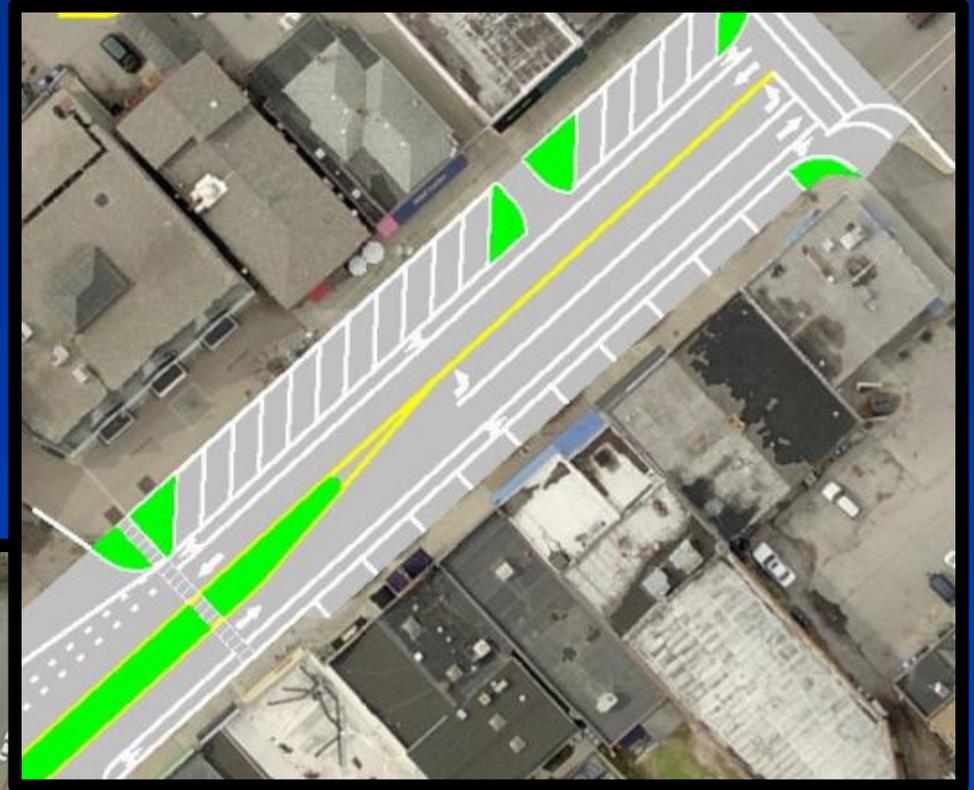


63 Parking Spaces

Larger Euclid Median, 90 degree Hanover Approach, Parallel Parking

Back-in Parking

Euclid Ave Option

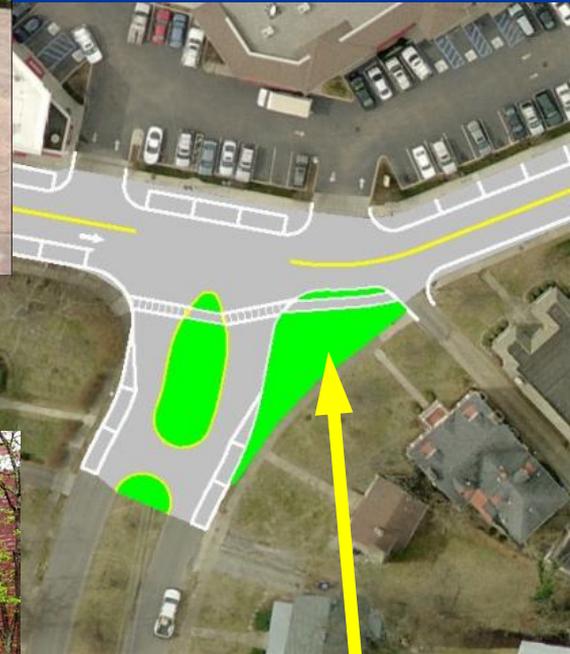


Tates Creek Rd Option

Back-in Parking



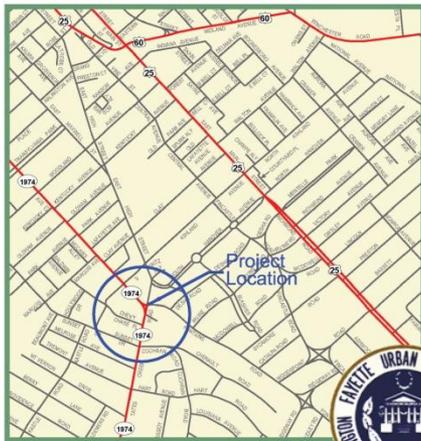
Pocket Parks



Potential Pocket Park

Meeting Layout

Handout & Questionnaire



August 3, 2010
5:30 pm - 7:00 pm

Faith Lutheran Church
Lexington, KY



Chevy Chase Intersection Traffic Safety & Streetscapes Redesign Questionnaire *(Please Print)*

Name: _____ Date: _____

Address _____

City, State, Zip _____

Phone number _____

Please take a few minutes to fill out the questionnaire and turn it in at the meeting or mail it back with your comments. Thank you in advance for your assistance.

Which category best describes your interest: (Check as many as apply)

- Resident
- Business Owner
- Business User
- Other

I travel to the Chevy Chase Study area:

- Once A Day
- Twice A Day
- Multiple Times Daily
- Weekly

Which Alternative do you prefer:

- Alt A
- Alt B
- Alt C

What do you see as the most important improvements needed for the area?

- Streetscaping
- Additional Parking
- Bicycle and Pedestrian Facilities
- Traffic Flow
- Other – Please Describe Below

(Continue on back)

Your answers will be given to Chevy Chase Project Team for their use in evaluating the proposed improvements.

Traffic Simulation

Existing Condition (2010)



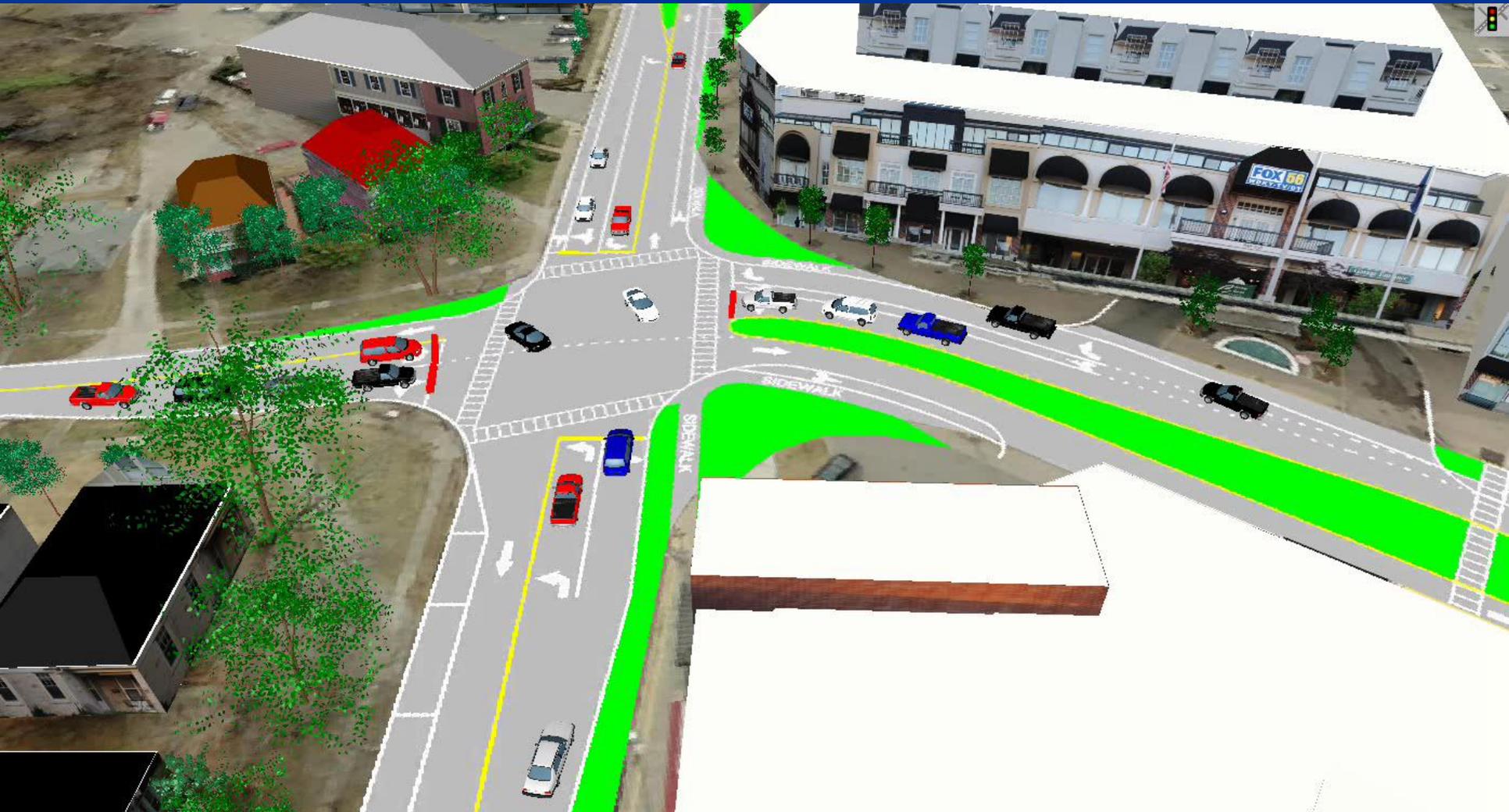
Traffic Simulation

Future Condition (2035)



Traffic Simulation

Proposed Improvements (2035)



Next Steps

- **Draft Report** **August 2010**
- **Final Public Meeting** **September 2010**
Final Report

Unfunded Steps

- **Preliminary Engineering & Environmental**
- **Final Design**
- **Right of Way**
- **Utilities**
- **Construction**



Thank You



SUMMARY

PUBLIC INFORMATION MEETING

Chevy Chase Intersection Traffic Safety and Streetscapes Redesign

Thursday, September 2, 2010

**5:30 P.M. TO 7:00 PM
Park Methodist Church
Lexington, KY**

The meeting was held on September 2, 2010 at 5:30. The meeting was located at the Park Methodist Church on High Street near the project area. Twenty seven attendees at the meeting signed in and approximately 14 comment sheets were completed. Time was permitted for the attendees to review the alternatives presented and representatives were available to address any questions from the public. At 6:00 the Councilmember Fiegle welcomed everyone and introduced David Lindemen of Palmer Engineering. Mr. Lindemen discussed the background of the project and the scope for the current work being completed, then Mr. Lindeman presented the preferred alternative and some decisions behind the changes. Then Morgan McIlwain of M2D presented options A, B, and C and discussed some of the design options each alternative had. Then Mr Lindemen and Mr McIlwain address questions from the attendees. Below is a summary of the information gathered from the questionnaires:

Chevy Chase Intersection Traffic Safety and Streetscapes Redesign Public Meeting Summary

2-Sep-10

27 attendees to the meeting

How did you hear about the meeting: (check all that apply)

10 Email
3 Newspaper
Website
1 Flyer
3 Neighborhood Association
TV
Radio

Were you able to attend the August 3rd public meeting:

5 Yes
8 No

Does Alternative "D" meet the transportation needs of the Chevy Chase area:

7 Yes
5 Somewhat
2 No

Which aspects of the Streetscaping are the most important improvements needed for the area?

7 Decorative Paving/Sidewalks
5 Decorative Lighting
7 Landscaping
2 Other

Which Option do you prefer

5 Option "A"

4 Option "B"

1 Option "C"

1 None

A summary of written comments follows:

2 people felt traffic flow should be given priority.

2 people liked back-in parking.

2 people felt wayfinding signage was not needed.

1 person liked incorporating Henry Clay or Ashland into the project.

1 person expressed concern over increased traffic on Fontaine.

2 people wanted lots of shade trees

2 people liked the idea of having an indentifying landmark.

2 people wanted to move parking spaces on High Street closer to businesses.

1 person wanted to add a turn lane into parking garage.

1 person wanted a combined right and thru lane on Euclid.

1 person liked the Ashland Park marker from Option C.

Chevy Chase Intersection
Traffic Safety & Streetscapes Redesign
Public Meeting #2
Questionnaire (*Please Print*)

Name: _____ Date: _____

Address _____

City, State, Zip _____

Phone number _____

Please take a few minutes to fill out the questionnaire and turn it in at the meeting or mail it back with your comments. Thank you in advance for your assistance.

How did you hear about the public meeting (email, newspaper, website, & etc):

Were you able to attend the prior public meeting:

- Yes No

Does Alternative "D" meet the transportation needs of Chevy Chase area:

- Yes Somewhat No

Comments:

Which aspect of the Streetscaping is the most important improvement needed for the area?

- Decorative Paving/Sidewalks Landscaping (Trees and Shrubs)
 Decorative Lighting Other – Please Describe Below

Which Streetscape Alternative do you prefer?

- Option A Option B Option C

Please describe what your favorite or least favorite aspects of the above Streetscape options are:

(Continue on Back)

ANNOUNCEMENT

PUBLIC INFORMATION MEETING

Chevy Chase Intersection Traffic Safety and Streetscapes Redesign

**THURSDAY, SEPTEMBER 2
5:30 P.M. TO 7:00 PM
Park United Methodist Church
645 East High Street
Lexington, KY**

Lexington Fayette Urban County Government has scheduled the second public informational meeting regarding the Chevy Chase Intersection Traffic Safety and Streetscapes Redesign in Lexington at the Park United Methodist Church. The purposes of these meetings are to share with the public "Conceptual Alternatives" which represent the first stage in development of the conceptual plan for this project and to obtain public comments. Anyone having an interest is urged to attend.

The meeting will begin at 5:30 p.m. local time and end at approximately 7:00 p.m. local time respectively on September 2, 2010. A questionnaire/comment sheet will be handed out at the meeting.

A formal presentation with PowerPoint slides will be presented at 6:00 P.M. The presentation will include discussions of the project background, the purpose of the public meeting, a brief description of alternatives, the project schedule, future steps and phases in development of the project, and an orientation for displays and exhibits at the public meeting. During the meeting, individuals will be able to view displays and ask questions one on one to Department representatives. A questionnaire and comment sheet will be distributed with handouts facilitating public comment.

All written comments will become part of the official meeting record. Once compiled, the meeting record and other supporting documentation will be made available for review and copying only after an Open Records Request has been received and approved. All Open Records Requests must be submitted to LFUCG.

In accordance with the "Americans with Disabilities Act," if you have a disability for which the LFUCG needs to provide accommodations, please notify us of your requirements by noon September 1, 2010. This request does not have to be in writing. Please contact Paul Schoninger, at the LFUCG or call (859) 258-3208.

CHEVY CHASE INTERSECTION TRAFFIC SAFETY & STREETSCAPES PUBLIC MEETING

SEPTEMBER 2, 2010



Meeting Goals

Alternative Comments

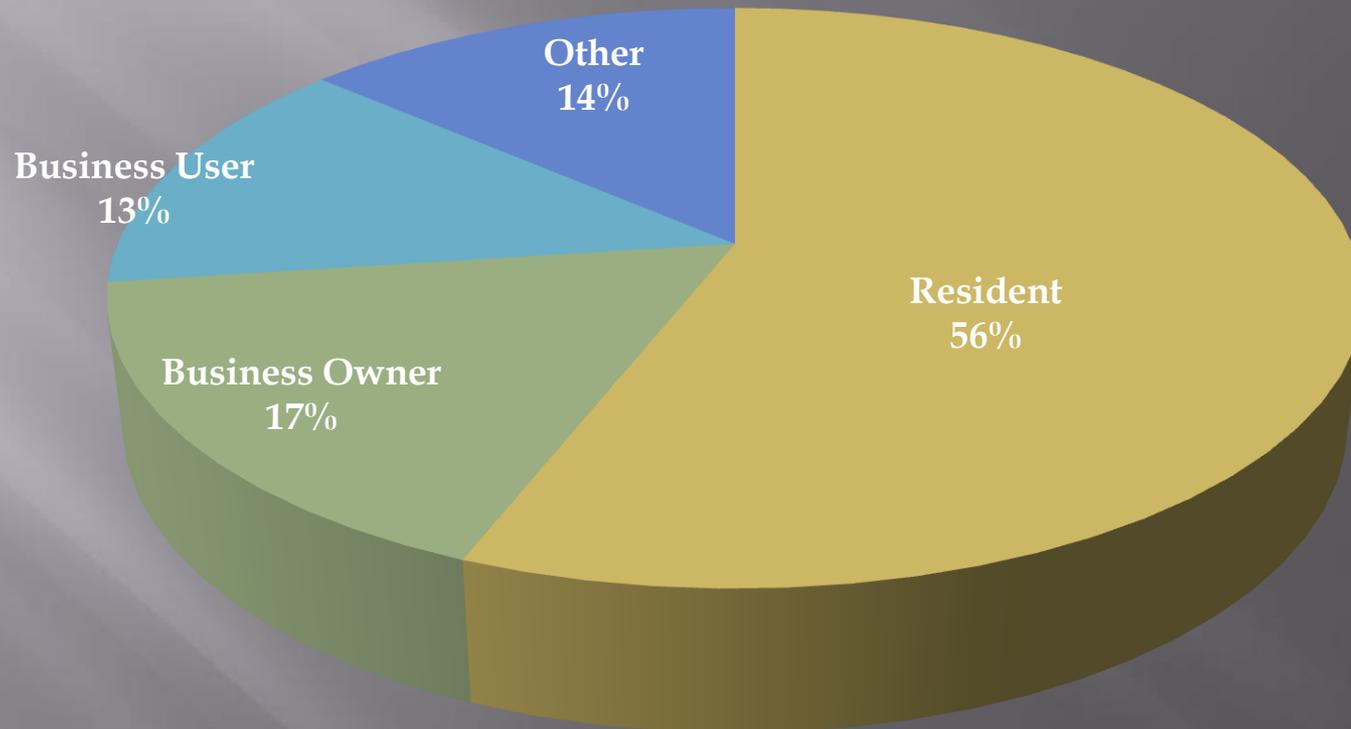


Streetscaping Comments



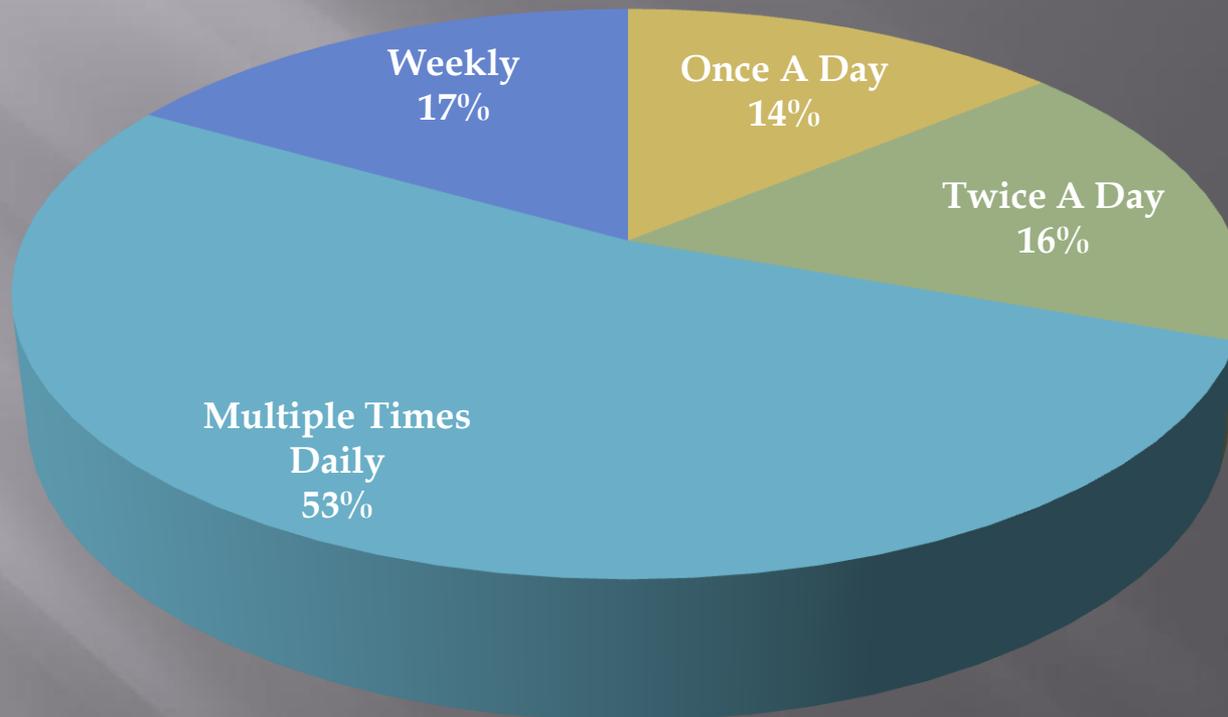
Public Meeting Summary

Which Category best describes your interest:



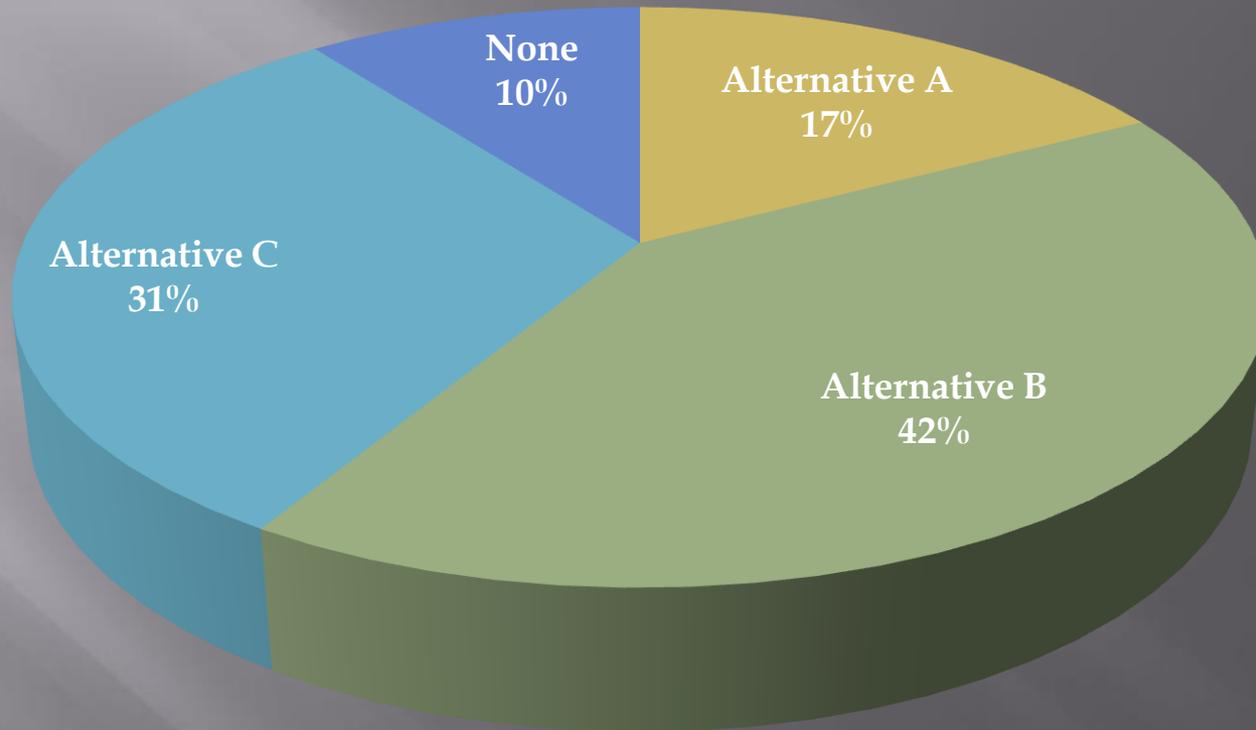
Public Meeting Summary

I travel to the Chevy Chase Study area:



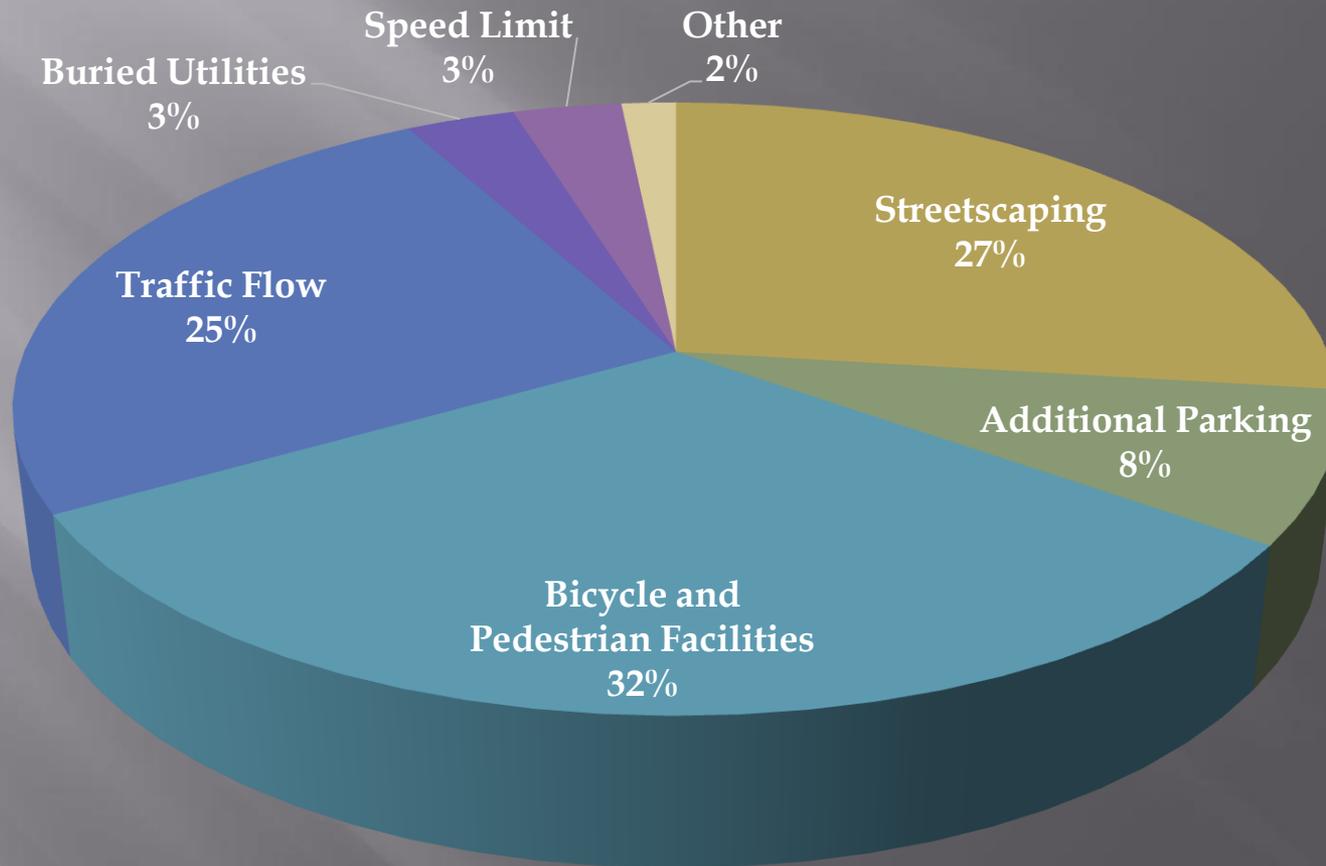
Public Meeting Summary

Which Alternative do you prefer:



Public Meeting Summary

What do you see as the most important improvements :



Intersection Alternative



Euclid Median, 90 degree Hanover Approach,
Parallel Parking (Euclid Ave), Back-in Parking (Tate's Creek Rd),
Mid-block Pedestrian Crossings



Back-in Parking



Back-in Parking



Streetscape

Option A



Streetscape

Option A



Streetscape

Option B



Streetscape

Option B



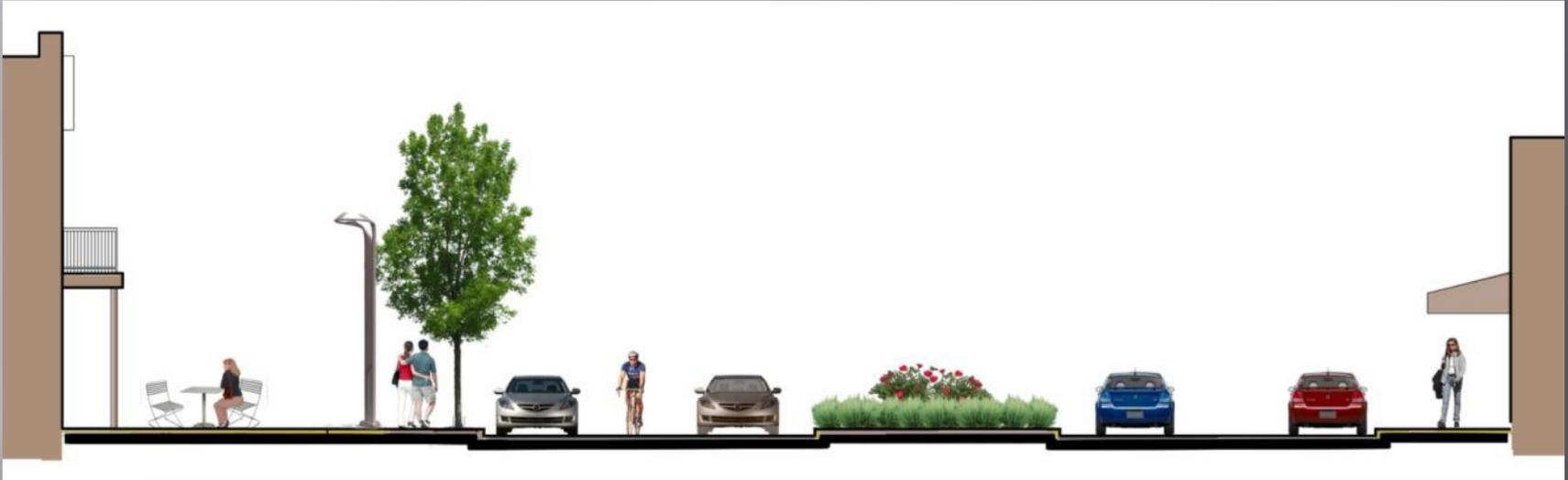
Streetscape

Option C



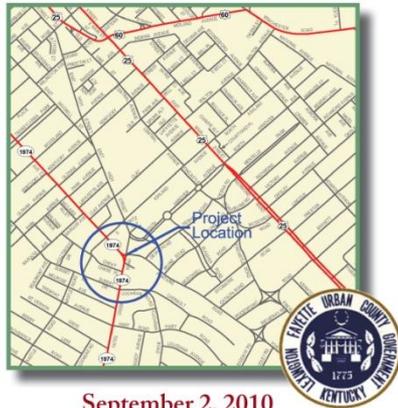
Streetscape

Option C



Meeting Layout

Handout & Questionnaire



September 2, 2010
5:30 pm - 7:00 pm

Park United Methodist Church
Lexington, KY



Chevy Chase Intersection Traffic Safety & Streetscapes Redesign Public Meeting #2 Questionnaire (Please Print)

Name: _____ Date: _____

Address _____

City, State, Zip _____

Phone number _____

Please take a few minutes to fill out the questionnaire and turn it in at the meeting or mail it back with your comments. Thank you in advance for your assistance.

How did you hear about the public meeting (email, newspaper, website, & etc):

Were you able to attend the prior public meeting:

Yes No

Does Alternative "D" meet the transportation needs of Chevy Chase area:

Yes Somewhat No

Comments:

Which aspect of the Streetscaping is the most important improvement needed for the area?

Decorative Paving/Sidewalks Landscaping (Trees and Shrubs)
 Decorative Lighting Other - Please Describe Below

Which Streetscape Alternative do you prefer?

Option A Option B Option C

Please describe what your favorite or least favorite aspects of the above Streetscape options are:

(Continue on Back)



Traffic Simulation

Proposed Improvements (2035)



Next Steps

- Finalize Feasibility Study September 2010

Future Funding Needs

- Preliminary Engineering & Environmental
- Final Design
- Right of Way
- Utilities
- Construction



THANK YOU



SUMMARY

MERCHANT INFORMATION MEETING

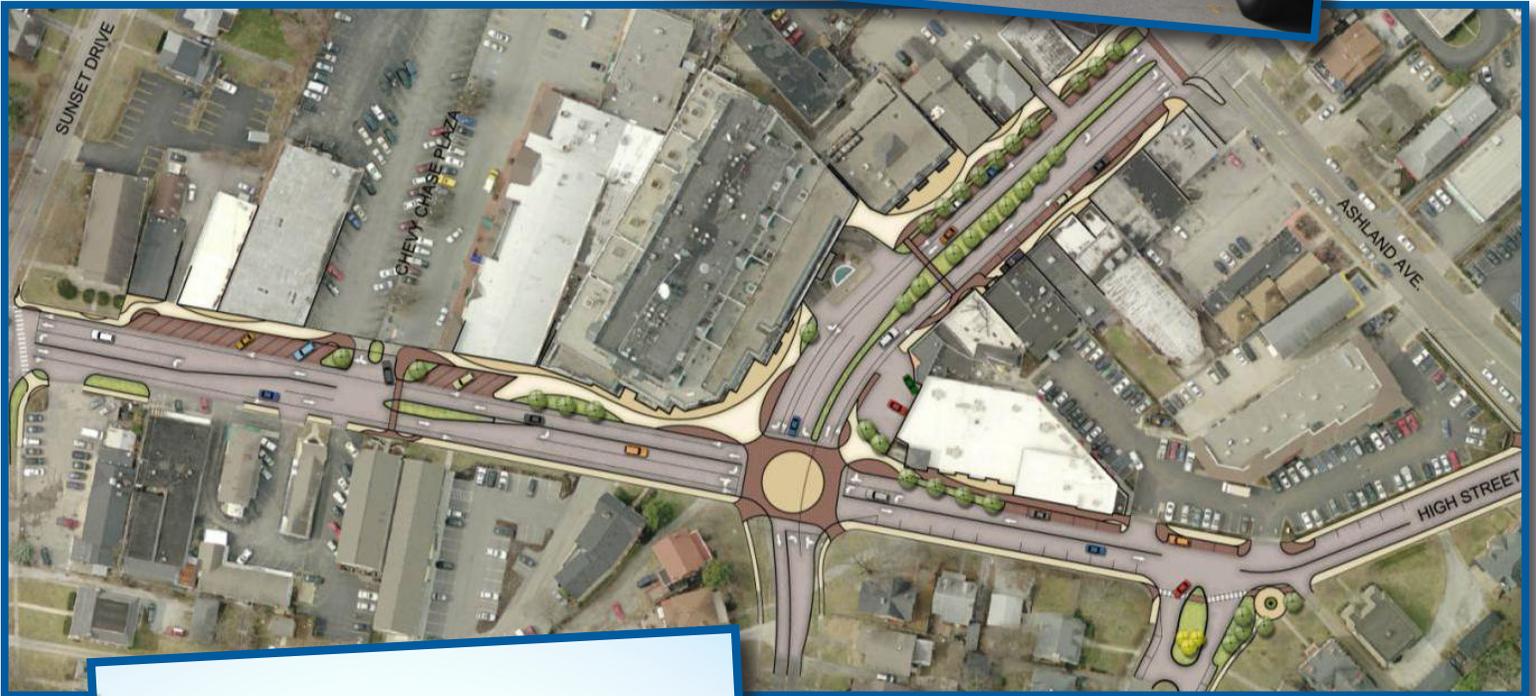
Chevy Chase Intersection Traffic Safety and Streetscapes Redesign

Thursday October 14, 2010

The meeting was held on October 14, 2010 at 5:30 at Puccini's in the Chevy Chase Plaza near the project area. The meeting was an open discussion with 18 attendees signing in. At 5:30 Councilmember Feigel welcomed everyone and introduced David Lindemen of Palmer Engineering. Mr. Lindemen discussed the background of the project and the scope for the current phase along with the preferred alternative (Alt D), and addressed questions and comments by the attendees. Below is a summary of the comments gathered during the open discussion:

- A concern was raised about the turn radius being too sharp from Euclid to Tates Creek for trucks and buses.
 - The turn radius will be refined during final design and can be increased to accommodate delivery trucks
- A concern was raised concerning how delivery trucks would deliver to the businesses along Euclid Ave. Currently they park in the turn lanes and in the middle of the road. Would need to be designed to accommodate 3 trucks delivering at one time.
 - Options were given to the attendees of providing a designated loading/unloading zones by creating an inset in the median or making the medians mountable and eliminating the landscaping.
- A concern over customers backing out of the Hardware Store and also not being able to get out into traffic. Owner suggested no right turn on red at Cochran Ave.
 - It was suggested that the owner talk to LFUCG Traffic Engineering on a solution that could be implemented immediately instead of waiting for this project to be built.
- A business owner suggested that the options be more functional and provide less landscaping. Parking is a high priority to the businesses and landscaping is top priority of the residents.
- If we create an opening for Chevy Chase Place why can't the entrance beside Charlie Brown's get one?
 - If a mountable median is implemented then the access point would remain in its current operations. If a raised median is preferred then access would be provided off of Ashland Ave.
- Would Euclid Ave be closed to traffic during construction?
 - It is not anticipated to require closing Euclid Ave during construction due to the type of construction being completed and the available existing pavement to maintain traffic
- A suggestion was made to keep the parking spots in front of Buddy's Restaurant.
- Could we eliminate the raised median and landscape the outside portion of Euclid?
 - That is an option but was not the vision that was provided to the team to begin the project. A preliminary vision was developed by the business owners and residents prior to this study beginning.

- A comment was made that the mid-block pedestrian crossings were a great idea because people do it anyway so why not provide a designated spot.
- A concern was raised regarding the modification to the Chevy Chase Plaza access points being consolidated into a single access point and that a left and right exit were not provided.
 - The consolidation was provided to improve safety of the access point and also to be able to provide a dedicated left turn lane into the shopping center. Modifications can be made to provide a wider entrance. The option of providing a one way circulation pattern could also be studied as requested by the merchants.



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