



2

THE CITY CONTEXT

This chapter focuses on regional context and shared opportunities and challenges for both the Old Town and Northfax study areas.

The first part of the chapter explores broad observations shared by the community and stakeholders. All efforts begin with key observations and recommendations of past studies and any relevant community outreach. The report highlights common themes, challenges, and opportunities expressed by community members, elected officials, and property owners. comments that inform project approach, further research and implementation goals.

The report also outlines current market feasibility - asking what economic factors can facilitate future development and project implementation as well as lessons learned from local and regional models. This economic research serves as a road-map towards identifying realistic types of development, and how to channel market demand towards expressed community goals.

The second part of the chapter explores general planning opportunities that are critical in shaping the underlying zoning, transportation, and design of the two study areas.

These four opportunities include:

1) **Revising Zoning to Meet Activity Center Goals:** To accomplish the Activity Centers goals, as outlined in the Comprehensive Plan, changes will need occur in the zoning and regulation of these study areas. Changes should also align with market analysis and realistic implementation goals.

2) **Fostering a Better Pedestrian Realm within and between Activity Centers:** The existing streets and urban landscape are largely designed around the car. The urban design of the study areas should be more focused on a safer and better pedestrian and bicycle experience.

3) **Encouraging a Multi-modal Link between the Activity Centers, Massey Complex and George Mason University:** The best interconnected street that cuts through the city north to south and is potentially safe for pedestrians is University Drive and George Mason Boulevard. Strengthening this as a pedestrian and cyclist oriented street will strengthen both study areas, particularly their economic and cultural vibrancy.

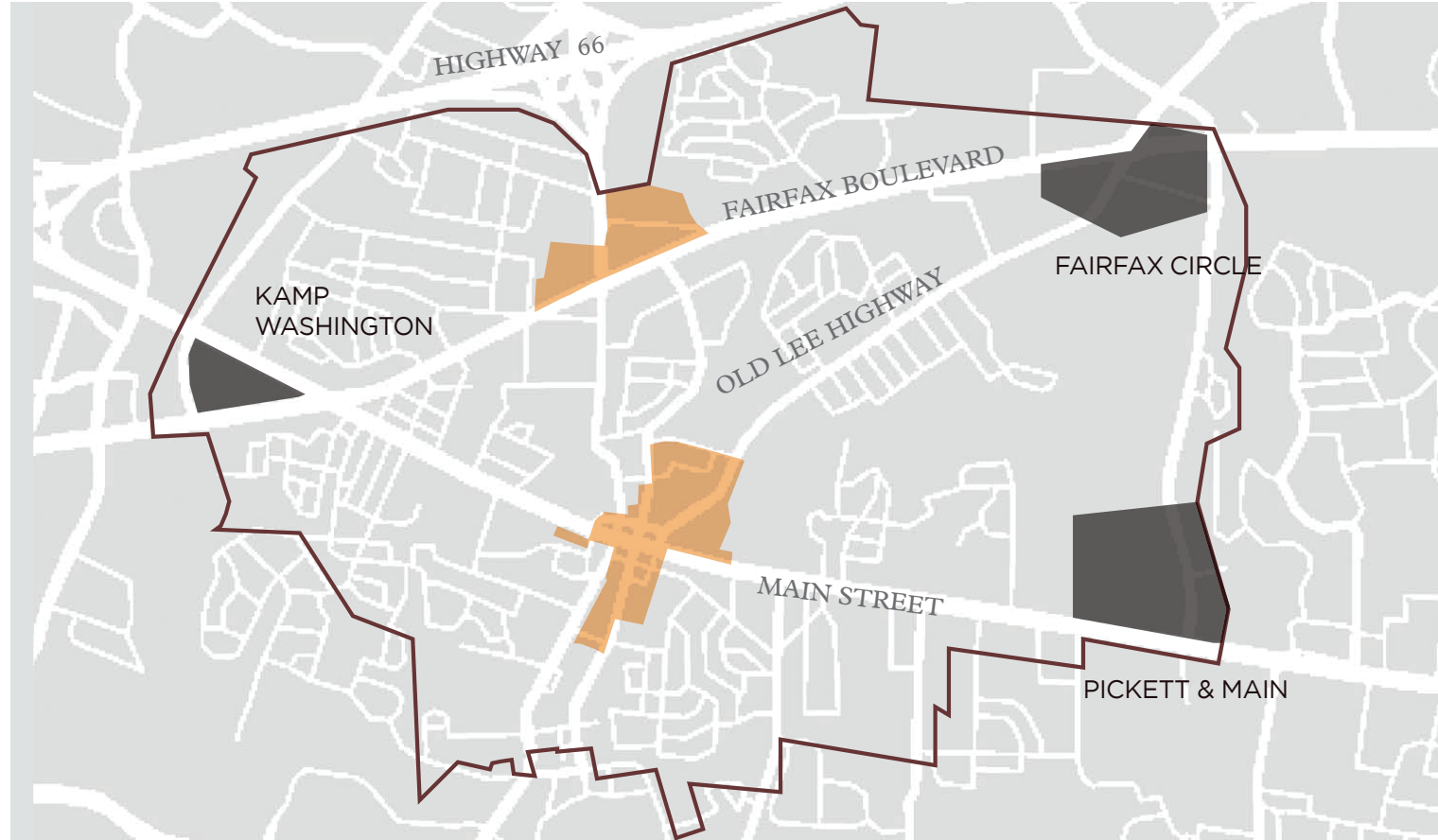
4) **Sustainability & Watershed Infrastructure:** Because of the strategic locations of the two study areas, the approach to sustainability - particularly stormwater capture and management - is important to the local and regional environmental quality.

Left, View of Main Street in Old Town

BUILDING ON PAST STUDIES

The Small Area Plan effort builds upon the 2035 Comprehensive Plan approved by the City of Fairfax in 2019. The Comprehensive plan highlighted five strategic areas (Old Town, Northfax, Fairfax Circle, Pickett and Main, and Kamp Washington) as Activity Centers. Activity Centers were recommended for mixed-use, higher density development, and public spaces. The Activity Centers share common characteristics of being located at key intersections, isolated from existing single family residential developments, and having enough land areas in transition to foster mixed-use pedestrian oriented developments. This study builds on existing studies to help identify feasible approaches capable of supporting new investments over the next 10 to 15 years. Reoccurring themes include:

- **Leadership:** The City of Fairfax is known for supporting economic activity, including strong and broad-based employment drivers, transportation access, high household incomes, and a positive community reputation.
- **Commercial Competition:** Competition for attracting commercial uses from outside the City is challenged given the City's predominantly older and less popular types of commercial locations and spaces. Though there is a strong community desire, actual market support for additional commercial



- spaces is limited because commercial rents and revenues are too low to support new construction.
- **Regulations & Preservation:** Regulations can impose limitations on some potential new development concepts. In some cases, zoning regulations can be revised to accommodate the type of development desired in activity centers without negatively impacting neighborhoods
- **Parcels:** The availability of larger undeveloped land holdings represents an important starting point for coordinated redevelopment
- **Economic Anchors:** A recognition of George Mason University and the Massey Complex as potential economic and cultural drivers.
- **Transportation:** Transportation and planning goals that increasingly look to prioritize the pedestrian, bike, and transit infrastructure
- **Fairfax Boulevard Master Plan,**

SELECT RECENT PLANNING EFFORTS

- **2007 Draft** – Although never adopted by City Council, the plan envisioned the transformation of Fairfax Boulevard into a multi-way boulevard with more pedestrian-oriented mixed-use development.
- **City of Fairfax Comprehensive Plan, 2012** – The City's long-range policy guide & vision for future land use planning and development. Principles included protecting residential neighborhoods and promoting centers of commerce within a small-town atmosphere. Strategies included transforming the Fairfax Boulevard corridor into a business boulevard, reinforcing Old Town Fairfax as an economic and cultural focal point and focusing pedestrian mixed-use developments in key areas (Northfax for example).
- **City of Fairfax Commission on the Arts Strategic Master Plan, 2013** – Established public art policy and guidelines to promote / increase awareness of the City's Commission on the Arts programs.
- **Fairfax Boulevard Commercial Development Market Analysis, 2013** – Retail needed for neighborhood goods and services and food & beverage; older offices are becoming obsolete and lodging market is appealing as confirmed by addition of Residence Inn.
- **Smart Growth America Fairfax Boulevard Recommendations, 2013** – A technical assistance panel was assembled to address failures of the Fairfax Boulevard Master Plan. Recommendations included targeting public investment and incentives and reviewing pending development projects for connective street networks, walkability, town blocks, etc.



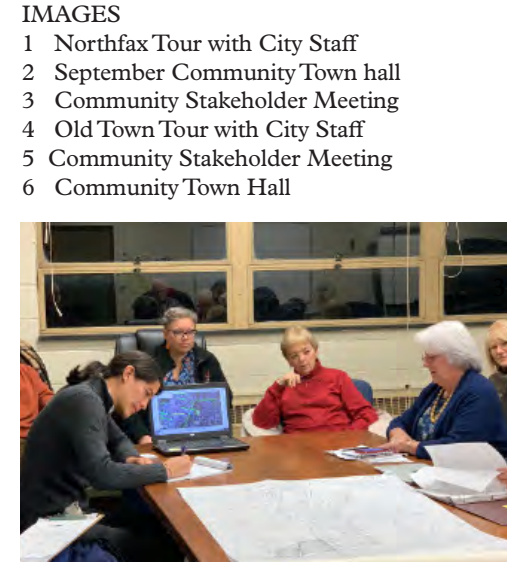
IMAGES
 1. Diagram showing the five Small Area Plans outlined in the 2035 Comprehensive Plan with Northfax and Old town being the first studies undertaken.
 2. Rendering from Fairfax Boulevard Master Plan¹
 3. Photo of Old Town during a community event².

- **Vision Fairfax Mason, 2015** – A workshop held in partnership with the City, George Mason University, and Northern Virginia Regional Commission to explore the connectivity and sustainability between the university and the City's historic downtown.
- **Multi-modal Transportation Plan, 2017** - Envisions the City with options for residents to easily, safely, and efficiently move within and between neighborhoods either by walking, biking, taking public transportation, or driving.
- **City of Fairfax Design Guidelines, 2018** - Adopted design guidelines for historic overlay, transition overlay dt, and architectural control overlay districts.
- **City of Fairfax 2035 Comprehensive Plan, 2019** – Builds on prior plans and provides direction concerning redevelopment opportunities, economic competitiveness, transportation, placemaking, and future land use.
- **Old Town Fairfax Historic Overlay District Streetscape Standards, 2019** - comprehensive and coordinated set of streetscape standards for the district
- **City of Fairfax Fact Books, 2019** – Demographic, land use, and transportation data that has been compiled for the City, Old Town and Northfax that is referenced throughout this analysis.
- **Fairfax County's Massey Complex Master Planning Efforts (Ongoing)**– Market analysis and public charette describes residential market demand for dense multifamily residential uses targeting a mix of users; a variety of retail, particularly food; and possibly some office or hotel uses. Preliminary planning documents propose better street and pedestrian connectivity to Old Town.

LISTENING & INFORMING

COMMUNITY OUTREACH

Extensive community outreach is one of the most important aspects of the Small Area Plans effort. Listening to key stakeholders, such as the broader Fairfax residential community, individual property and business owners, developer partners, and civic groups helps inform the planning process and guide implementation of key ideas. Several different types of meetings were used to gather a range of viewpoints and perspectives on the study areas.



IMAGES

- 1 Northfax Tour with City Staff
- 2 September Community Town hall
- 3 Community Stakeholder Meeting
- 4 Old Town Tour with City Staff
- 5 Community Stakeholder Meeting
- 6 Community Town Hall

1 COMMUNITY TOWN HALL

On September 11, 2019 the project team hosted a kick-off community meeting that introduced the project goals and team to the broader community. While the presentation focused on key observations, the following conversation with the community had a diversity of opinions, including:

- HOPES FOR STUDY AREA:**
- More Public Spaces and Parks
 - Regional Draw and Better Retail Experience
 - Expression of Local Arts & History
 - Potential of a Vibrant College Town

- CHALLENGES & CONCERNS:**
- Implementation
 - Awkward Connection between George Mason and Old Town
 - Pedestrian and Biking Safety
 - Concerns about Zoning & Rules
 - Need for Affordable Housing
 - Wayfinding and Signage Regulations
 - Increased Traffic and Density
 - Poor Parking Experience

2 JOINT WORK SESSION

On November 5, 2019 the team presented a project update to a Joint Session of City Council and the Planning Commission. The Interim Update presentation focused on: building on the 2019 Comprehensive Plan, summary of common themes from the September 11 community meeting, summary of comments from stakeholder meetings, market analysis (including Northfax and Old Town specific observations), history and existing conditions of Northfax, History and existing conditions of Old Town, observations about current zoning and regulations, transportation observations, and sustainability, storm water and watershed observations.

City Council and Planning Commission members thoughtfully responded to the presentation with several comments, including:

- Noted the trend of private investment towards residential components to foster mixed-use. Would like to see City as a regional player, not just a sub-regional node.
- Appreciated the conversation about the identity of each study area, and how they relate to the region.
- Acknowledged the complex regulatory environment.
- Stressed the importance of documenting and sharing a diversity of opinions, particularly with respect to the relationship with the university and affordable housing components.
- Noted the amount of impervious surface parking and its relationship to the watersheds throughout the City.
- Recommended that the project team consider a wide variety of housing options, including senior, affordable and others.

See full notes from from town hall and joint work session in the Appendix.

3 RESIDENTIAL MEETINGS

On December 4, 5, and 12 the project team held Community Outreach meetings tailored to the residential neighborhoods adjacent to the two study areas.

- Old Town community comments include:**
- Pedestrian accessibility, comfort and safety - creating a cohesive, pedestrian environment.
 - The volume and speed of through traffic in Old Town.
 - Housing in Old Town, with benefits and drawbacks.
 - Connecting the study areas to the adjacent neighborhoods.
 - Retail vacancies and turnover are a consistent problem.
 - Attracting an anchor, such as an arts facility, entertainment venue, etc.
 - Open space was repeatedly noted as a draw to bring people to Old Town
 - Retaining old and historic buildings, maintaining design standards and avoiding over building.

- Northfax community comments include:**
- Creating a strong pedestrian environment and providing pedestrian connections to surrounding neighborhoods.
 - Unwanted land uses, including parking lots.
 - General concern about attracting and maintaining quality retail.
 - Open space as a draw to bring people to Northfax. Keeping it “as green as possible” will also help give it a unique character.

See full notes from residential meetings in the appendix.

“We are lacking residential... Empty-nesters love D.C... We have beautiful single-family homes but there is no where we can go. We need some combination of condos and apartments for when I can't drive anymore.”

- Senior Resident, December 4, 2019 Old Town South Residential Meeting

LISTENING & INFORMING COMMUNITY OUTREACH



IMAGES

- 1 Residential Stakeholder Meeting
- 2 September Community Town hall
- 3 Drawing Presented to Team from Citizens for Smarter Growth
- 4 Joint Work Session
- 5-6 Residential Stakeholder Meetings
- 7-8 Community Charrettes

4 CIVIC GROUPS

THE OLD TOWN VISIONING COMMITTEE

The project team held multiple positive meetings with the City-appointed Old Town Visioning Committee. The Committee included a broad range of perspectives - political leaders, business leaders, civic leaders, property owners, George Mason and County institutional representatives, and key board and committee members. In November, the Committee presented a thoughtful final Vision Statement and five guiding principles to help guide and influence the Small Area Plans effort:

Vision Statement:
 "...a vibrant destination for all people to connect, innovate, and share unique experiences."

Guiding Principles:

- 1) **Build Strong Relationships:**
 "Strong partnerships are created by

meaningful relationships, in particular with George Mason University, Northern Virginia Community College, and Fairfax County."

2) **Grow Business:** "Think creatively in order to attract diverse businesses and help business grow and thrive."

3) **Enhance Culture:** "Embrace existing and build new cultural assets and opportunities including George Mason University, historical buildings, and a vibrant arts scene."

4) **Provide Convenient and Safe Accessibility and Connectivity:**
 "Make Old Town Fairfax a safe and easily navigable place for all modes of transportation."

5) **Create Unique Experiences:** "Make Old Town Fairfax a destination for experiences you cannot get anywhere else in Northern Virginia."

BOARDS + COMMISSIONS

Various community-led government boards echoed Visioning Committee goals but also gave other unique input. Key ideas included:

- Market Old Town as a live music and arts destination for the region
- Affordable, Senior, and student multifamily housing key residential uses for Activity Centers
- Use Trail systems as a development tool- particularly in Northfax
- Circulator bus service should be studied to link Activity Centers
- Improved regulatory process coordinated with adopted plan
- Find a space to accommodate large events if displacing parking lots
- Foster an implementation committee and create a plan to recruit unique businesses to support Activity Centers
- Multimodal links to existing residential areas central to all work
- Preserving historic character and charm

FAIRFAX CITY CITIZENS FOR SMARTER GROWTH

On November 12, 2019 the project team met with the Fairfax Citizens for Smarter Growth, who provided a rich and thoughtful discussion on key issues. The group covered many topics, including recommendations and feedback on urban street networks, connectivity, walkability, sustainability and open space systems.

5 PROPERTY OWNERS & OTHER STAKEHOLDERS

Stakeholder outreach, in particular with property owners within the study areas, is an essential component of the project. Implementation most often depends on consensus-building and buy-in from key stakeholders whose properties are most directly impacted by the vision. The team met with dozens of individual property owners within each study areas, along with development partners, in order to listen to current updates, potential plans, ideas for development, ideas for connecting with the greater community, and any obstacles or challenges. Responses from stakeholders were diverse and wide-ranging in nature. Some of the key takeaways were:

HOPES / DESIRES:

- Mixed-Use Developments that Serve the Community
- Positive Outlook on Demographics and Signs of Strong Local Businesses

- Positive Reactions to the Comprehensive Plan

CHALLENGES / CONCERNS:

- Realistic Path to Implementation
- Perceived Lack of Clarity on Process and Approvals
- Perceived Lack of Clarity on Site Development Potential
- Sense that City and George Mason Can Have More Synergy
- Commercial and Residential Rents are Not Often High Enough to Comfortably Redevelop Sites
- Difficulty with Parking Costs, Public Space Costs
- Allowable Density May Be Too Low in Some Areas
- Townhouse Parcels are Key to Financing Mixed-Use Developments and Public Amenities
- City is Lacking an "Instagram Moment" / Needs more Art, Creativity and Uniqueness to Create a Memorable Destination.

MARKET FACTORS

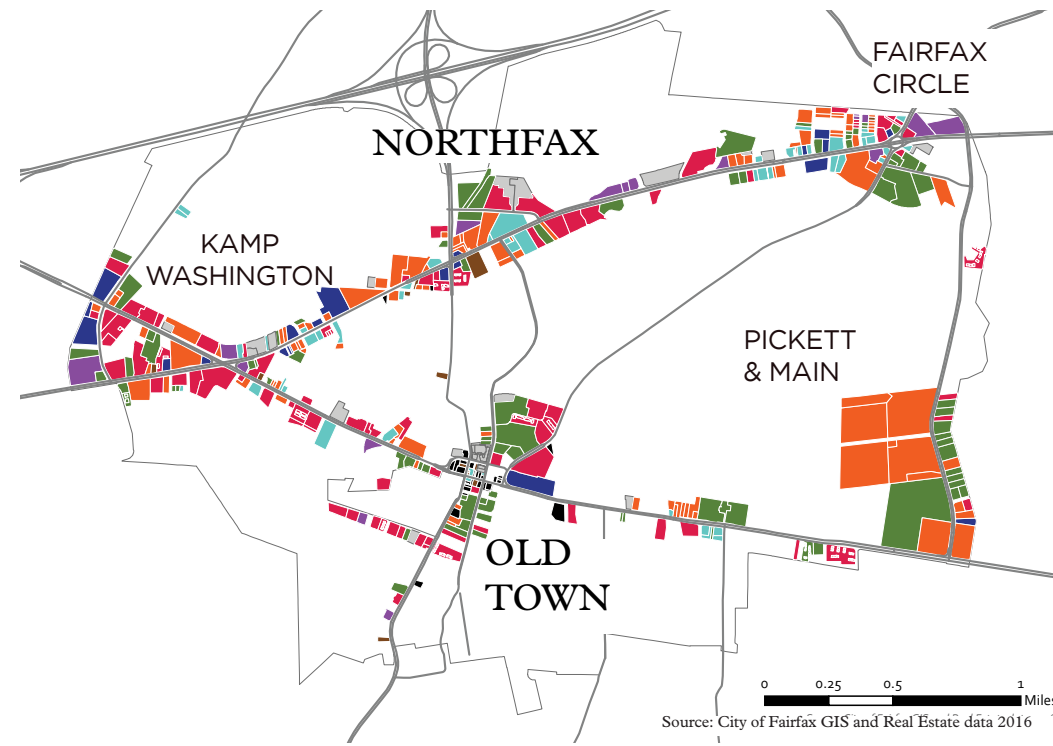
An understanding of market feasibility is key to facilitating future development and project implementation. The market component of this study combines the substantial base of existing City market data with an assessment of development implementation issues to help identify land use combinations likely capable of supporting new investments over the next 10 to 15 years.

BACKGROUND CONDITIONS

DEMOGRAPHICS³

Important demographic takeaways based on all the detailed information provided in prior studies includes:

- Resident/ Household Snapshot – Fairfax City has a relatively stable and affluent population comprising approximately 24,100 residents with a median household income of over \$106,800. With slightly more than 9,100 housing units, the average household size equates to family oriented 2.6+ persons. This residential demand cohort represents strong consumer buying power attractive to diverse retailers.
- Population Growth – Due to its largely built out landscape, population growth has been averaging less than 1.0% per annum since 2000. Population growth has picked up over the last several years driven by market



COMMERCIAL AND INDUSTRIAL BUILDING AGE BY DECADE BUILT



demand for and the ability to deliver higher density housing. This pattern underscores the projected continued market demand for new residential development in the city.

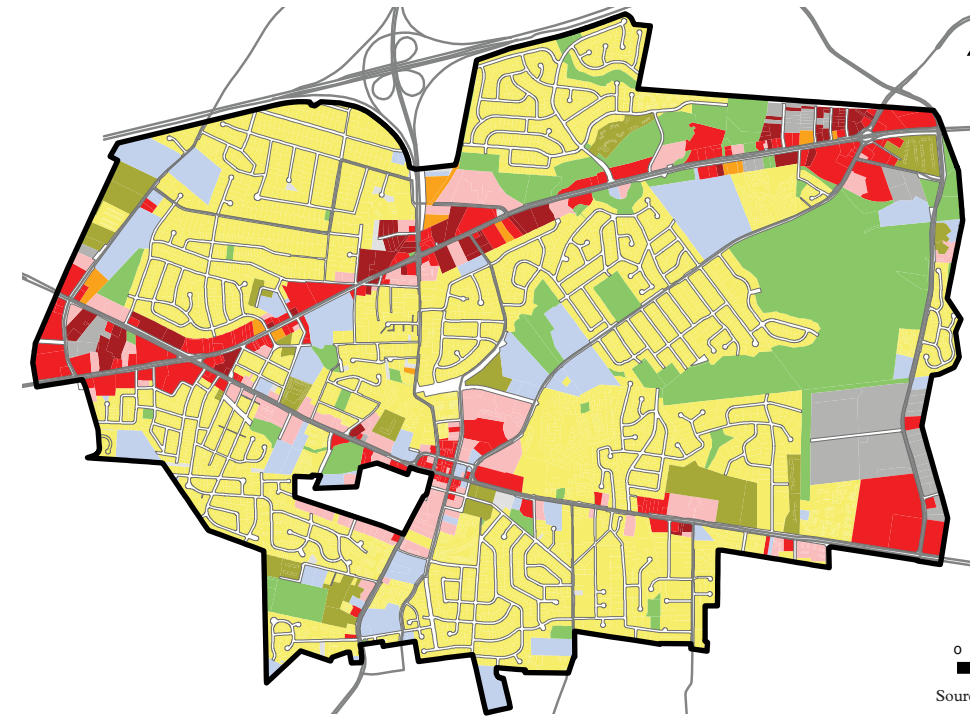
- Age Distribution – Two cohorts with a higher proportion of residents in the City compared to Fairfax County and region include students generated from George Mason University (25 to 34 years old) and seniors / baby boomers (ages 55+ years old). Moreover, recent residential changes indicate an expected pattern of aging homeowners are being replaced by younger residents. These demographic conditions are highly supportive of an ongoing dynamic of a cross-section of residential demand.
- Employment – City based employment has been a very defining economic dimension for the City of Fairfax. Far from being simply a commuter residential and retail related community, at-place employment in the City approximates 20,000 workers, representing almost

one job per resident. This represents a substantial employment base in proportion to the population that is well above the normal ratio for suburban bedroom communities. While relatively stable in volume, some more recent job loss in the corporate sector suggests some vulnerability for the future demand for conventional office space.

EXISTING LAND USE⁴

Land use patterns in the City include:

- Primarily Lower Density Residential- The predominant traditional land uses are single family residential at 44.0% of the City land area, which is followed by 27% streets and open green space, both at low, car oriented densities. Not that there is a target coefficient for lower density land uses, but this proportion of lower density suggests there maybe opportunity for added density diversification resulting in higher intensity land uses.
- Corridor Related and Nodes of



2035 COMPREHENSIVE PLAN EXISTING USES



Commercial Land Uses- Comprising office, retail, auto and lodging total 14.5% and are concentrated along the corridors (mostly east-west orientation) and in the designated Activity Centers. Almost exclusively auto dependent and not pedestrian-oriented.

- Aging Inventory- Redevelopment of older and perhaps obsolete space is already underway given that the majority of both the residential and commercial space is over 30 years old:
 - 73.0% of the citywide multifamily housing stock was built in the 1960s. Redeveloping of some of these facilities is now becoming more cost effective than ongoing maintenance.
 - 83.5% of the shopping centers were built prior to the 1980s. Shopping center landlords are evaluating new investment opportunities to remain competitive (i.e. Point 50).
 - Most of the residential and commercial space is Class B and C due to its age. The older

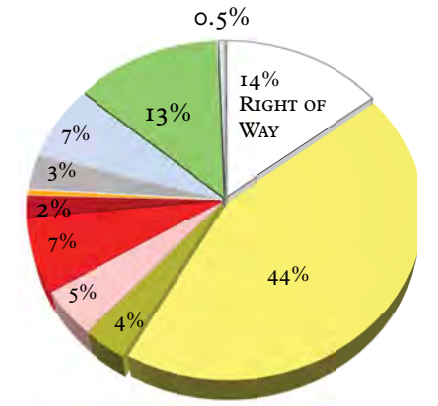
commercial inventory does provide cost-effective space but redevelopment may be necessary if space functionality becomes obsolete.

- Redevelopment Emerging Market- Evidence citywide of older commercial inventory and shopping center redevelopment to more contemporary formats is already underway. This trends will help diversify product offerings allowing the City to sustain its regional competitiveness.

INVESTMENT HURDLES

Development activity in the City has been impacted by investment concerns summarized as follows:

- Comparatively static or stagnant commercial market conditions in the City, evidenced in part by vacancies, user turnover and transitioning land uses, complicates the investment perspectives and economic support for new development.
- Historic built environments impose limitations on new development.



0 0.25 0.5 1 Miles
Source: City of Fairfax GIS and Real Estate data 2016

- Though a market norm, large disparities between landowners' property valuation expectations and what new development can finance may prevent otherwise market driven development from proceeding.
- Development costs may exceed user supported economics because commercial rents (user revenues) could be insufficient to support new development costs, which include land costs, project entitlement expenses and public policy overlays (i.e. use mandates, structured parking, etc.), and construction costs.
- Land use value differs by type and quantity, with both negative and positive impacts related to addressing financial feasibility. The investment challenge is to chart how to leverage higher valued land components to help facilitate the inclusion of lesser value elements.
- Property Owners suggest City is known for a complex regulatory environment.

MARKET FACTORS PART OF A DYNAMIC REGIONAL MARKETPLACE

The City of Fairfax is part of a dynamic sub-regional marketplace, defined by a range of commercial and residential land uses comprising a geography that is largely indifferent to City boundaries. This means proposed new uses within the City will compete with competitive supply elsewhere in the region. Recognizing this market fundamental is critical to comprehending what is economically viable (& financeable) at any location in the City. Economic fundamentals of the City in relation to the retail and hotel, office, and residential markets include the following:

- Positive retail and hotel markets in the region, with plentiful newer supply in the vicinity of the City border and generally older inventory in the City proper.
- Niche local serving office uses with some transitioning corporate office locations to amenity rich concentrations.
- A strong residential market across a range of product types.

Prominent examples of some of the newer or recently refurbished concentrations of commercial uses are identified in the map, listed east to west:

1 MOSAIC DISTRICT

The Mosaic District, with the first phase completed in 2013, is a \$500 million urban-style mixed-use development situated in the midst of a priorly underserved sub regional market of Northern Virginia. With approximately 520,000 square feet of retail, the Mosaic District has established a critical mass shopping platform. The overall 1.9 million square foot project includes 2,600 residential units (60% of total sf) spanning a range of product types – single family, townhomes, apartments and condominiums). Additional uses include 170,000 square feet of office space, a 148-room hotel, 4,000 parking spaces and a one-acre park. Situated on 32 acres, the Mosaic District has an overall 1.4 FAR.

A Fairfax County targeted economic development effort helped underwrite implementation, facilitated in 2009 by a Fairfax County's Community Development Authority (CDA) a public/private partnership with The Mosaic master developer in 2009. The Mosaic CDA issued and sold almost \$66 million worth of bonds to finance the district's roads, water and sewer system, and park, using both tax increment financing (TIF) and backup special assessments. Over time development specific future property taxes are intended to repay the debt. The significance of The Mosaic to the City of Fairfax and the subject Activity Centers is multi-fold:

- Its development evidences the scale of unmet demand potential for retail and mixed-use in the prior existing marketplace.
- The mix of uses featured illustrate the importance of residential land uses as the underpinning of economic value complemented by the market draw of experiential retailing offerings.
- The achieved critical mass, especially as it comprises a spectrum of retail and entertainment uses, represents a fundamental and magnetic impact on



A view of Fair Oaks Mall Above

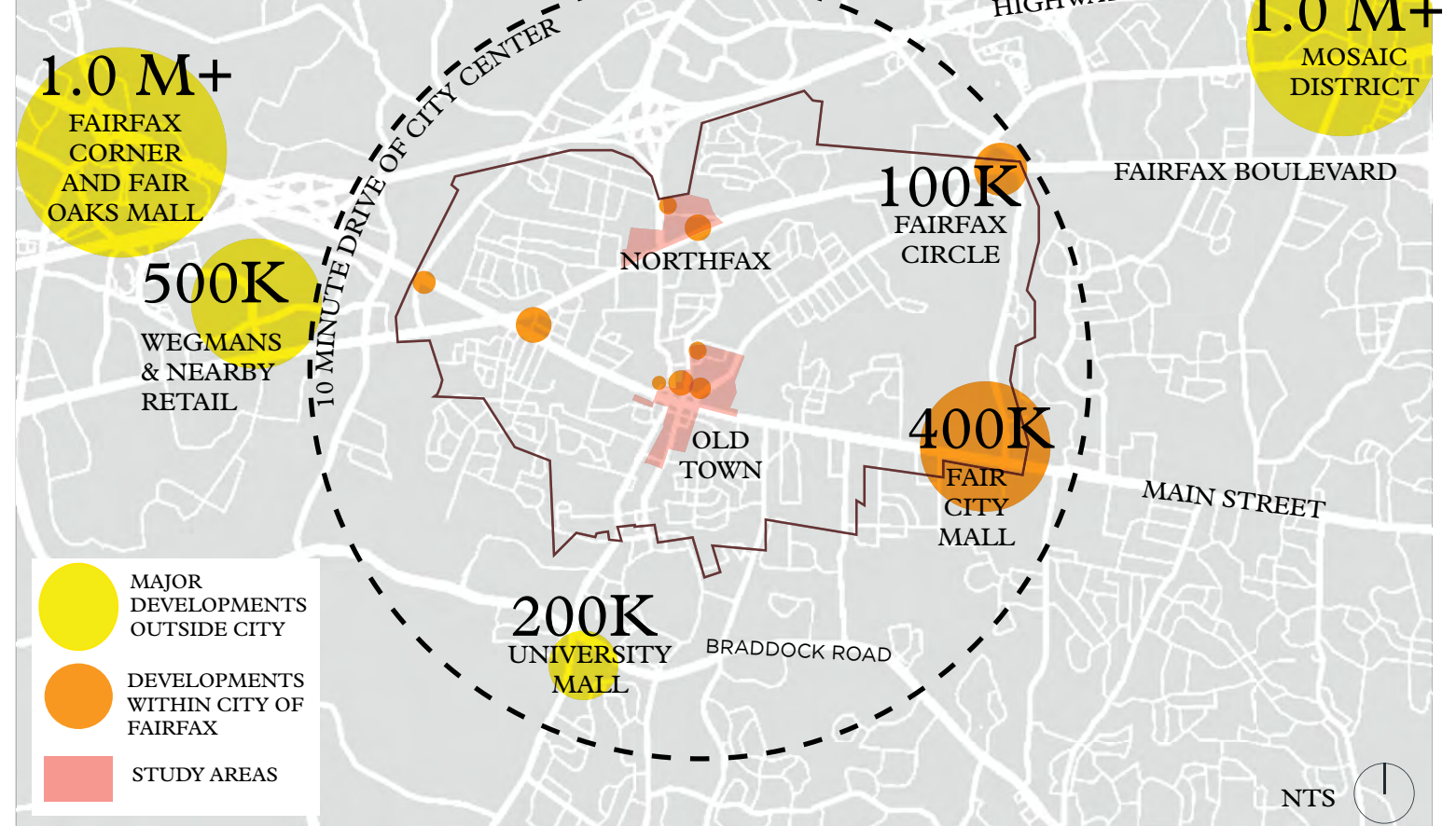
retailer and consumer spending patterns in the greater City of Fairfax market area. While this impact is positive for area residents, it also undercuts and dilutes financial support for other competing uses.

- The combination of the above – new format retail, project scale (and identity) and geographic proximity – have significantly altered the development landscape for the subject Activity Centers compared to ten years ago. Among a host of development planning related learnings to be garnered from The Mosaic, perhaps the most pertinent is that while its success can be enjoyed from a community serving perspective, unless virtually all of its subset economic characteristics can be duplicated, such results cannot be replicated in nearby Fairfax.

2 UNIVERSITY MALL

The aging, early generation 200,000+ square foot community scale University Mall underwent a major renovation in 2016. The project provides retailing options for the City of Fairfax, including a modern large grocery store, movie theaters and contemporary restaurant formats. More importantly University Mall, being located immediately adjacent to George Mason University is university centric, catering to both students and other university such as sports events visitors. On a much reduced and more localized scale than the Mosaic District, the newly invigorated University Mall underscores the market opportunities focused on Fairfax and the level of already provided retailing venues.

MAJOR NEW OR REFURBISHED RETAIL & COMMERCIAL DEVELOPMENTS (SQUARE FEET)



3 WEGMANS & NEARBY RETAIL

Perhaps the most profound daily/weekly use retail impacting land use proximate to the City of Fairfax is the 140,000 square foot standalone Wegmans store located just outside the City's western border. Since completion in 2005, this mega grocery facility has not only transformed the nearby food related marketplace but directly and indirectly has been part of a wider addition of neighboring newer commercial and residential developments.

4 FAIRFAX CORNER & FAIR OAKS MALL

Approximately equal distant to the west from downtown Fairfax as The Mosaic is to the east, Corner is a newer format, market segment dominating 300,000 square foot town center "life style" development. It is proximate to The Fair Oaks Mall, a 1.5 million square foot traditional enclosed regional mall. Together, these two developments provide a regional destination to the greater Fairfax Center sub-market that serves the retailing needs of the City of Fairfax.

IMPLICATIONS FOR THE CITY

- On a project-by-project basis, there is potential for a mix of smaller to medium scale and niche-serving retail, infilling existing underused properties or as part of residential dominant mixed-use additions.
- Though there is no likely financial support for a major new "Mosaic" like concentration of additional commercial uses, the designated Activity Centers can become identified with an enhanced combination of market niche-serving land uses.
- The relatively unlimited residential demand and associated generally high value of residential land means that residential dominant development concepts have the strongest overall market potential.

MARKET FACTORS PRINCIPAL LAND USES CITYWIDE: RETAIL, HOSPITALITY, & OFFICE

1 RETAIL TRENDS⁹

- Citywide, the predominant inventory is food and beverage related (46% between grocery stores and restaurants) which is comparable to other regional locations. The City's proportion of general merchandise is under-represented compared to all of northern Virginia, which is to be expected given that general merchandise vendor locations need to capture larger more regional consumer demand base.
- The grocery store sector is very competitive, with two approved stores comprising half of the 165,000 square feet of planned new retail⁷. There are already five large existing grocery options within the City, not including smaller options and others on the periphery of the City and beyond.

- Overall, the retail vacancy rate is consistently low (5-6%) but with some challenged locations and spaces.
- With the exception of the core area downtown, retail spaces are predominantly found in roadway-oriented shopping properties.
- Average rents are typically in the medium range for Northern Virginia locations outside of I-495.
- Although restaurant sales in the City have been stable, recorded in the range of \$150 million annually⁸ for the past few years, the City has been losing some ground relative to the growing restaurant sales across the rest of northern Virginia.

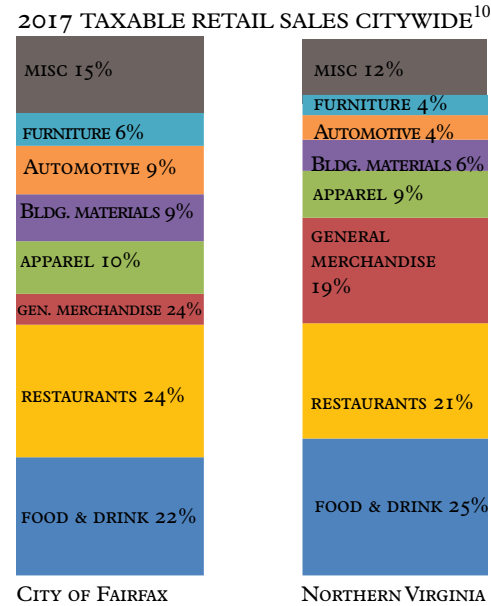
2 POTENTIAL RETAIL FOCUS

Without major population, employment growth, transportation changes, or robust development in the small area plans the demand for additional retail space is limited to better / updated facilities serving existing markets.

The noted exception relates to possible untapped George Mason University anchored demand. Though limited in magnitude, incremental retail demand will also be generated from new developments (i.e. the need for five to ten square feet of more retail space per new household or possible hotel room). Locations will dictate differentiation between neighborhood / node serving needed retail (Northfax) and experiential / destination type retail (Old Town). Notwithstanding limited unmet retail market demand, retail uses undoubtedly help support more lively, mixed-use environments, reinforcing prospects for investment on other properties.

3 HOSPITALITY FOCUS

- There are 4 hotels- all near Northfax - with a total of 373 rooms that compete with numerous hotels just outside the City limits.
- Predominance of national chains.
- Average daily rates are in the \$150 per night ballpark.
- Stable occupancy rates above 70%.
- Location serves multiple market demand sources including weekday business travel, tourists, George Mason University visitors, etc.
- Two older motels / motor inns (Breezeway Motel and Rodeway Inn) are being redeveloped into a range of residential and commercial uses.
- There is currently no hotel in downtown / Old Town though proposals have emerged before and are currently under consideration.

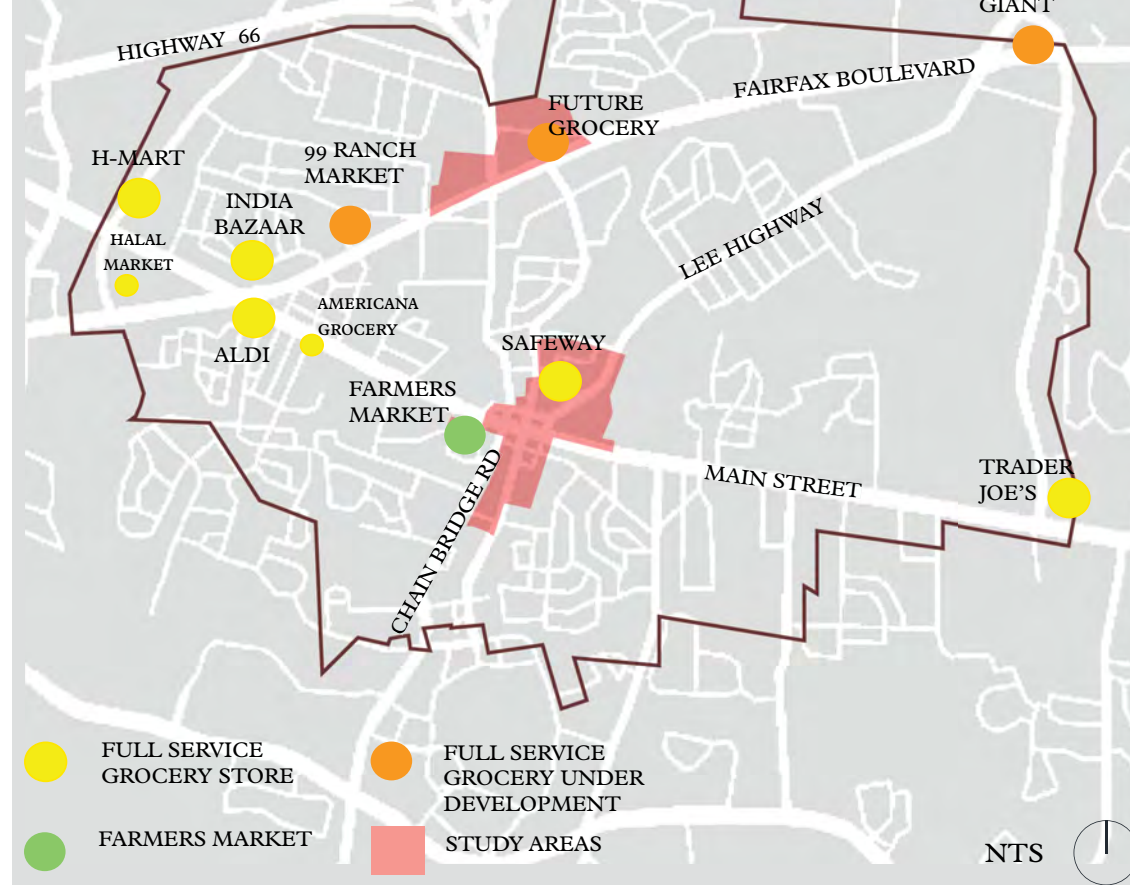


4 POTENTIAL HOSPITALITY FOCUS

Reinforcing existing hotel appeal primarily proximate to Northfax by encouraging node-serving improvements and continuing efforts to leverage George Mason proximity and amenity attractions in Old Town in landing a hotel use.

GROCERY STORES IN CITY

Source: 2020 FactBook



5 OFFICE TRENDS⁶

- Limited Class A space, predominantly Class B space indicative of older inventory.
- Rents generally on the lower end for the Northern Virginia region (value-priced / local-oriented market).
- Although vacancy rates have been increasing more recently, the City's vacancy rate in the 12%+ range is still comparably lower than in Fairfax County. That said, at the current pace of office space absorption, it will likely take several years to fully occupy the existing 200,000+ square feet of vacant space in Northfax.
- The relocation of aspects of Fairfax County Government to Fairfax Corner altered some spin off office functions in the City, but core judiciary and other County functions continue to anchor Old Town. The County's current master planning effort for the future of the Massey Complex indicates

an ongoing commitment to the location. This suggests a number of positive scenarios both for office occupancy and other private real estate related synergies, though this potential may also be restrained to the extent private sector land uses are incorporated into the new design.

- Lack of metro access and other amenities makes for a competitive disadvantage for regional corporate users.
- Rents are currently insufficient to support much new office construction.

6 POTENTIAL OFFICE FOCUS

Primarily preserving and enhancing the market competitiveness and ongoing viability of existing office uses by reinforcing and strengthening the City amenity base (user convenient retail, open spaces, parking, etc.). Select new demand could hopefully be consequent from any additional purpose-built space at the Massey Complex or nurtured in conjunction with George Mason.

COMMERCIAL PROPERTY & LAND VALUES

The consultant has assembled a representative summary of recent commercial sales (see Appendix BSA) in the City. The main findings impacting redevelopment potential include:

- Raw land values in the range of \$25 to \$50 per potential built FAR for larger scale projects are consistent with comparable other locations in the Fairfax County vicinity.
- Commercial property values in the City as improved (in many cases including existing structured parking) often exceed the value that new development can support if redeveloped. In these circumstances, some level of reinvestment or repositioning could be more viable than new construction.

It should be noted that when property transaction values comprise a relatively small percentage of larger scale newly improved property (i.e. > 20% of the overall development value), the potential to increase land productivity by minor upzoning or the addition of structured parking is limited.

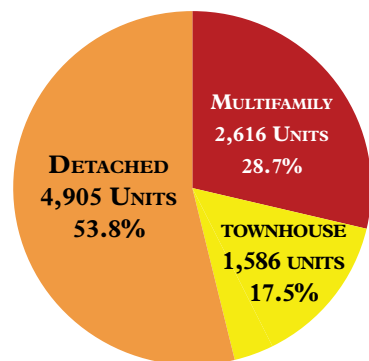
MARKET FACTORS PRINCIPAL LAND USES CITYWIDE: RESIDENTIAL

1 HOUSING STOCK¹¹

The existing residential housing stock is majority single family detached (53.8%) and multifamily units (28.7%).

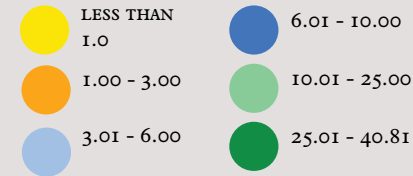
Since the number of approved and recently completed residential developments are predominantly multifamily (over 90% of 1,900 units), multifamily will soon account for close to 40% of the housing stock while the number of detached units will decrease to slightly less than 45%.

HOUSING UNIT TYPES PER 2035 COMPREHENSIVE PLAN



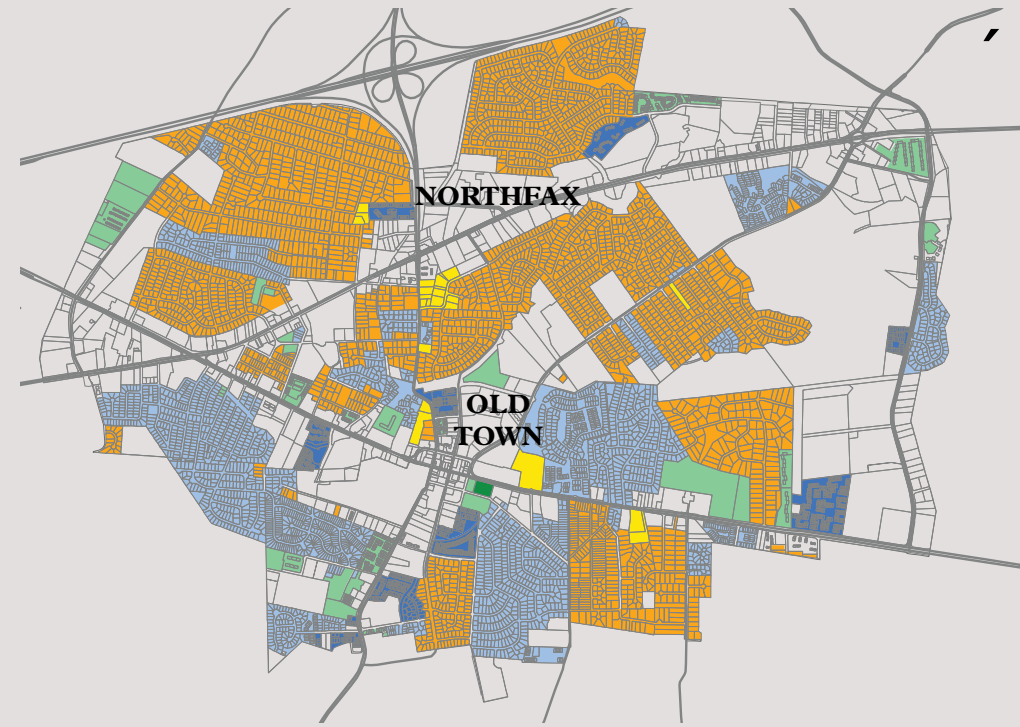
DWELLING UNITS PER ACRE

The City of Fairfax is generally built out with low density residential. Only one property of a more recent vintage (built in 2003) has 25 units or more per acre, Providence Square Condominiums, with close to 40 units per acre in Old Town.



Source: 2019 Fact Book

Note: Density has been calculated based on approved subdivisions, apartment and condominium complexes and groupings of homes not part of an approved subdivision. Common areas and right of way are included in the calculation of area.



2 FOR SALE RESIDENTIAL VALUE TRENDS¹²

Recent residential sales transactions by product type suggest:

- The number of sales per annum is relatively stable across all property types.
- There is a major premium for new construction.
- Pricing of new construction is aligned with other similar location in the region.

RECENT RESIDENTIAL SALES TRANSACTIONS BY PRODUCT TYPE

TYPES OF UNIT	2017		2018		2017-2018
	# of Sales	Average \$	# of Sales	Average \$	% Change \$
Existing Single Family	234	\$573,030	198	\$613,800	7.1%
New Single Family	10	\$1,118,696	3	\$1,157,406	3.5%
Total / Average:	244	\$595,393	201	\$621,914	4.5%
Existing Townhouse	80	\$576,975	82	\$583,439	1.1%
New Townhouse	25	\$800,880	18	\$810,400	1.2%
Total / Average:	105	\$630,286	100	\$624,292	-1.0%
Existing Condominiums	70	\$227,012	80	\$289,742	27.6%
New Condominiums	68	\$517,538	93	\$527,593	1.9%
Total / Average:	138	\$370,170	173	\$417,604	12.8%

- The pricing of new product reflects a regional market norm / balance with townhouse selling at 70% of the amount for single family detached and condominiums at 65% that of townhouses.
- The implications from the market strength in residential use is that residential development has the potential to represent the highest land values in mixed-use scenarios compared with commercial uses. As a product type, townhomes can generate the highest land values per acre when the supportable per unit land value is multiplied by unit density.

3 MULTIFAMILY FOR RENT TRENDS¹³

- There are eleven existing multifamily rental properties with just under 2,000 units in the City of which the majority of the units (73%) date back to the 1960s and earlier (per the 2019 Fact Book).
- All multifamily product is garden style / low rise developments.
- Multifamily rents are averaging less than \$2 per square foot but have been experiencing steady growth (3% per annum).
- Although the rental market is dominated by older products (Class B and C units) with relatively more affordable rents than newer offerings, the increase in rents is outpacing increases in income.
- Vacancy rates are limited / minimal.
- There are four planned / approved new multifamily rental developments expected to deliver 1,430 units; which represents a 55% increase to the number of units in the existing inventory.



- The average project size of new multifamily developments (350+ units) is almost triple that of the existing stock with an average of 110 units per property.
- Not surprising due to the age of the inventory, the existing unit mix comprises an older suburban model of unit sizes with almost 80% being one and two-bedroom units.

IMAGES ABOVE

- Newly built single family homes in Fairfax
- Mews style townhouse in Fairfax
- Older Single Family Home in Fairfax



POTENTIAL RESIDENTIAL FEASIBILITY FOCUS

The comparatively high value of residential land use and relatively unlimited residential market demand means that residential dominant market driven development concepts can provide the potential to help underwrite the financial costs of overall other land use improvements (i.e. infrastructure, open space, desired retail space or other community oriented benefits

- Student Housing- As exemplified by the recently approved Capstone Collegiate development, there remains untapped potential for student housing with strong activity synergies.

- Active Adult & Senior Housing- Potential demand exists as exemplified by the proposed senior housing development plan in Old Town. Contributes to the City revenue tax base since it's a multifamily / commercial use and has minimal public impact (ability to leverage reduced parking requirements, less traffic impact, etc.). In addition, seniors housing provides synergies for other land uses such as an increase in daytime population and family visitors.

MARKET FACTORS THE ECONOMICS OF ACTIVITY CENTER SUCCESS

Understanding the nature of Activity Centers entails distinguishing between the characteristics and needs of individual properties and how they interrelate as a larger combined economic zone.

Recognizing these differences can help inform possible varied planning treatments that may apply district-wide and at the property specific level.

The following provides distinguishing principles for development feasibility for Activity Centers to function as integrated economic zones and their subset specific properties.

IMAGES

1. Bank of America Building, Main Street
2. Recently demolished Massey Building in Fairfax County
3. A view along North Street in Old Town Fairfax



FRAMEWORK FOR DEVELOPMENT IMPLEMENTATION

ACTIVITY CENTER WIDE¹⁴

Needs coordinated infrastructure and planning framework.

- Different Activity Centers should reflect and reinforce their respective and usually distinct market serving characters – Activity Centers should “be what it wants to be”.
- Should feature user friendly district-wide way finding, parking and public spaces.
- Though trying to coordinate larger scale change when constrained by numerous small and disconnected land parcels, having consolidated land areas under related ownership is not critical. Common interest and public support can provide valuable substitute support.

Moreover, incremental approaches to development can offer their own merits from the standpoints of phasing, project scale, product variety, and ability to adapt over time to unknown future conditions. The Small Area Plan geographies already represent a sufficient number of larger property combinations as to provide adequate opportunity for larger scale redevelopment impacts to be realized.

- A case-by-case mix of integrated market-based land use functions is appropriate. Though on a project basis there are no hard and fast formulas for the right “mix” of uses, multi property benefits can be accrued by encouraging otherwise non market-based land use components on a selective basis that create district wide synergistic benefits.

- Critical mass as it relates to commercial functions represents an important concept, though again carries no hard and fast rules for planning or implementation. The term applies differently to the type of retail and the interconnection of development types.
- As addressed elsewhere, residential uses can be key to helping new projects to get off the ground in a financial sense, with a range of benefits thereof. Residential use can also have other, though more limited benefits: it can provide an active 18-hour land use that is superior, for example, to surface parking, and can contribute to user activity that appears positive for retail environments.

PROPERTY SPECIFIC LEVEL

- At the property specific level, highest and best use needs to reflect owner and market specific driven concepts.
- By the same token, so called “quality” development often depends on their being predictable, comparable area-wide development standards (best is economic, but alternatively anchored in public oversight).
- Entitlement factors and regulatory requirements should be economic sensitive, predictable and consistent, and in degree of complexity, commensurate with the value of the overall investment. Extensive “public” input into

detailed project planning not only risks undercutting financial commitments but could end up with compromised / non-functional end results.

- Individual projects generally cannot be disproportionately burdened with accommodating district-wide serving benefits. This can apply to many aspirational desires such as mandating non-market driven land uses and requiring structured parking.

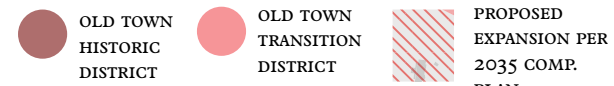
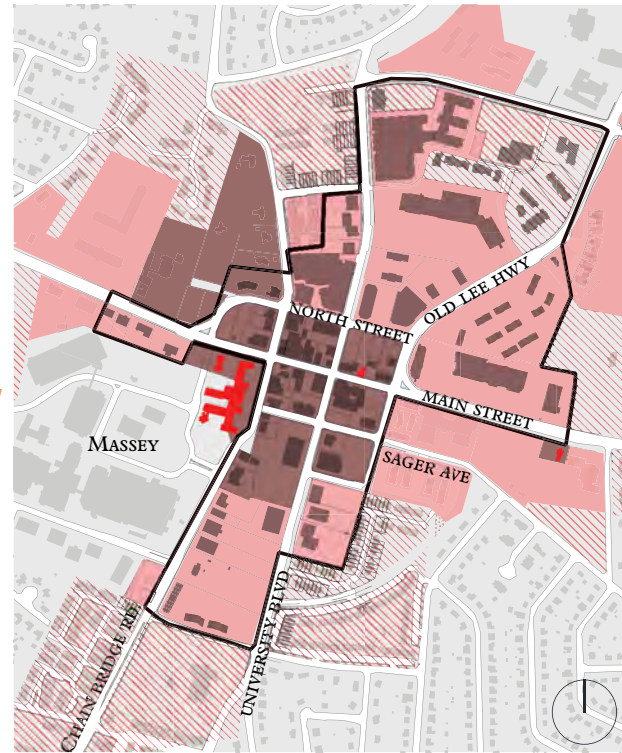
OPPORTUNITY ONE UPDATING ZONING TO REFLECT PLAN AND MARKET

Zoning is a critical framework for implementing the vision outlined in the 2035 Comprehensive Plan. To the right is a comparison of the proposed and existing zoning for the activity areas compared to regional peers.

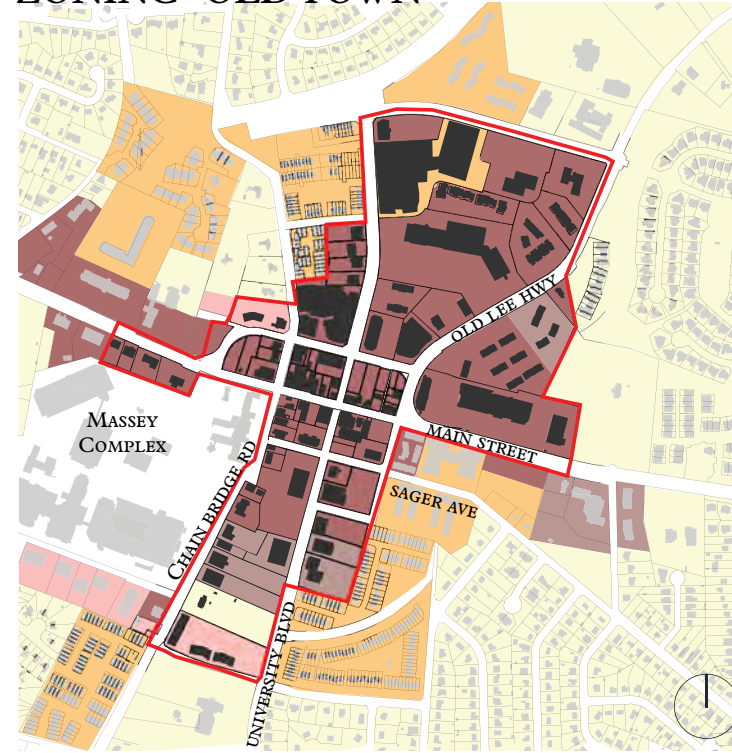
In general, other regional Activity Centers have zoning regulations that are denser, allow more residential typologies such as apartment podium buildings, and allow taller heights than is proposed in the 2035 Comprehensive Plan or indicated by current zoning. Other regional jurisdictions do not tend to have a maximum dwelling unit per acre. Instead the buildings are restricted in density through regulations such as design controls and lot coverage. Lastly, in most of these jurisdictions a FAR ranges from 3.0 to 1.0 The Comprehensive Plan for the City suggests a much lower .4 minimum FAR.

It is also important to note that the majority of recent residential developments in the City are not by-right and have required zoning amendments during the entitlement process. This suggests a possible disconnect between market conditions and regulations as evidenced by the entitlement process. Capstone Collegient- as a recent dense residential development in Old Town- is an indicative case study.

HISTORIC OVERLAYS

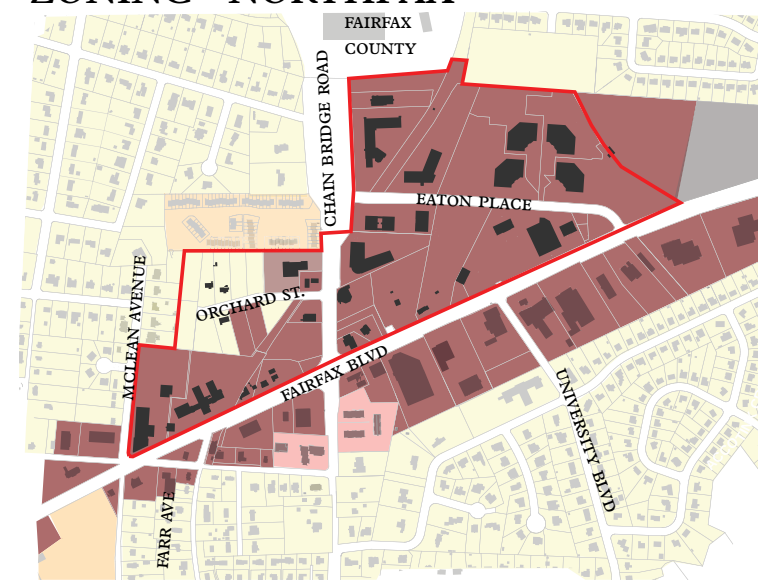


ZONING- OLD TOWN



* PLANNED DEVELOPMENTS NOTED BY THEIR PRIMARY BUILT USE

ZONING - NORTHFAX



FAIRFAX CITY & REGIONAL ACTIVITY CENTERS¹⁵

	Comprehensive Plan Recommendations;	0.4 Min in Activity Center	5 Story / 60'-0 Max	Multifamily mixed use or stand-alone multifamily buildings. Townhouses only as transitional uses to existing residential.	Max 48 (if integrated with mixed use)	80%	Comprehensive Plan encourages structured parking. In CU zones, 10% reduction where structured parking is provided	Currently no rezoning per Comprehensive Plan ; References Commercial Urban district (CU) as guide.
City of Fairfax	Commercial Urban (CU)	N/A	5 Story / 60'-0 Max	Townhouses, Multifamily, Mixed use allowed by special exception.	N/A	80%	Parking described by use. Commercial parking garage uses by special exception. Generally 1 space per 200-300sf.	Most Retail uses allowed by right but grocery, parking, and theater uses are special exceptions
	Commercial Retail (CR)	N/A	5 Story/ 60' Max 4 stories at Transitional Districts	No residential by right allowed. Live/work and limited residential allowed per special exception. Assisted living permitted	N/A	60%	Cannot exceed 110% of required parking; allowances for off-site parking within walking distance. Varies per use and location	Typical current zoning for NorthFax and Old Town
	Old Town Fairfax Overlay District	N/A	3 Stories / 36' Max	No new residential allowed	N/A	60% ¹	100% reduction of required per use in Old Town; 50% reduction in transitional historical areas. Varies per use and location.	Underlying zoning typically Commercial Retail (CR) with the Old Town Overlay
	Old Town Alexandria, VA	1.5 to 2.5	Height building by building per Small area plans; Up to 65' in nonsensitive areas	30 Townhouses per Acre Max for new developments (Existing likely higher)	No DU per acre provision	75%	Varies; shared parking strategies. Mixed metro accessibility	Height limits vary/context specific; FAR bonus for mixed uses. Historic review
Regional Comparisons	Barracks Row [MU-24/25] Capitol Hill Historic District Washington, DC	2.5 to 3.0	5 story + 2 Penthouse/ 65' Max w/ affordability bonus	Townhouse; Multifamily allowed	No DU per acre provision.	75%	Uses shared parking strategies ; Parking reductions at proximity to metro stations and buses;	Density bonuses for affordability. Required Green components. Historic review
	Falls Church Mixed Use Overlay Districts (MUR)	.75 Min to 2.72 FAR with increased density bonus if more than 2.5 acres and below grade parking facilities.	63' to 87' ³	No townhouses; Multifamily allowed only when mixed use with retail/commercial/office	N/A	70%-85% ²	Surface Parking max 25% of site area. Parking requirements based on time period and use. Mixed use on site reduced requirements as does access to public transportation; density bonus for underground parking; Mixed metro accessibility but generally not.	No hard/fast rule; zoning relational to size of lot. Encourages mixed use for large parcels and preserves relatively lower density development for smaller parcels. Residential only allowed if mixed use. Minimum mixed use redevelopment site is 2.5 acres
	Herdon, VA Planned development downtown district (PD-D)	.7 to 2.5 - see notes	50'-0" with 30'-0 along right of way. 20'-0 Minimum Façade	Very restricted residential use to max 2 units on upper stories of mixed use buildings. Increased residential uses encouraged by plan but only through facilitated zoning adjustment / review	N/A but, Max 15 DU per acre for multifamily in city as a whole.	Varies. 60% to 85% with setback/open space requirements	Increase in requirements. 1.5 per dwelling for multifamily minimum (rather than 1 -1.5 for studio/1br and 2 for 2 br). Otherwise +/- 3.3 per 1,000 gross floor area for most retail. Not at transit areas.	Density bonuses up to 2.5 FAR for open space and façade enhancements, parking management, pedestrian friendly walkways, and other aesthetic enhancements. Requires town council final approval.
	Mixed Use Towncenter Typical Northern Virginia	1.5 to 3.0 is typically the minimum range for	8 Story/72'-0" (Podium 5+1)	Townhouses; Multifamily Rentals and Condos	Gross of 12-15 townhouse per acre;	Varies	Limited Parking Requirements; Often city financed structured parking garages for retail. Mixed metro accessibility though, even non metroable locations are	Often with design controls, architectural or special exceptions, or form based code

1. Most of Old Town is CR Zone with various overlays. | 2. 15% open space requirement; various bulk and setback requirements reduce lot occupancy more | 3. Allowable building height is proportional to size of parcel | 4. Mixed-use Towncenter looked at various non-historic suburban town centers in Fairfax County, Arlington County, and Merrifield, VA as models.



ENTITLEMENT PROCESS: CAPSTONE COLLEGIENT CASE STUDY¹⁶

Existing Use: Multiple low-rise office buildings with a total of 82,818 square feet surrounded by surface parking situated on 6.15 acres (0.31 FAR).

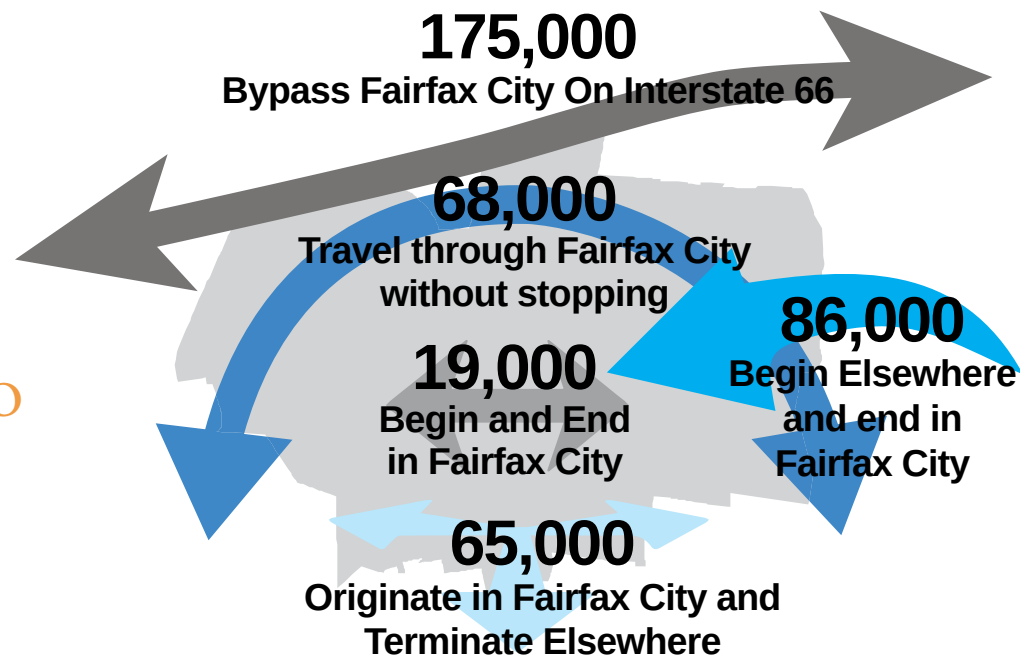
Approved Use: Two connected four and five-story multifamily buildings with 275 units (45 units / acre) and a five-story 700+ space parking structure.

Rezoning: From the subject site's existing CR – Commercial Retail and Architectural Control Overlay District to PDR – Planned Development Residential and Old Town Fairfax Transition Overlay District, to allow development of multi-family housing on 6.15 acres.

2035 Comprehensive Plan Amendment: Modify Future Land Use Map for the subject site from Business- Commercial District to Residential-High District.

Special Exception: To allow a modification of the forty-eight (48) foot maximum building height within the Old Town Fairfax Transition Overlay District.

OPPORTUNITY TWO TOWARDS A BETTER PEDESTRIAN REALM



Every day, 68,000 regional travelers, most of them motorists, travel through the City of Fairfax without making a stop in the city.
(Source: 2017 City of Fairfax Multi-modal Transportation Plan)

Today, streets in the City of Fairfax are designed to prioritize the efficient flow of vehicular automobile trips in the morning and afternoon peak hours to avoid congestion. As identified in the City's Multi-modal Transportation Plan, a large number of the trips on the City's roadway network are people driving in cars that start and end beyond the City's limits. Despite prioritizing regional traffic to avoid congestion, "traffic" is an oft-repeated complaint from residents, employers, and visitors when discussing the quality of life in the City.

The City's historic street network has limited space or public Right-of-Way (ROW). The majority of this public space has been dedicated to moving cars. As a result, less space is left for people who walk, bike, take transit, or for people to mingle in public space.

These Small Area Plans provide a unique opportunity to fundamentally rethink

the role and design of the City's streets to prioritize people over cars. With this approach, City streets can be designed to focus on local activities and local trips made by all modes rather than regional car trips that do not serve the City's goals.

The City has already taken steps in this direction with the adoption of the Multi-modal Transportation Plan in 2017 that envisions the City with options for residents to easily, safely, and efficiently move within and between neighborhoods either by walking, biking, taking public transportation, or driving. The City also identified five Activity

Centers, including Old Town and Northfax, in the 2035 Comprehensive Plan. These centers are local mixed-use districts with many destinations. The goals and objectives of these two plans clearly define the City's focus to design the streets within these Activity Centers with inviting and comfortable public

realm and amenities for people walking and biking.

Existing streets, as well as new streets, can be redesigned to create a close-knit block and street network that enhances walkability. Rethinking the public ROW that includes comfortable, low-traffic stress bicycle facilities, as well as wider sidewalks with street trees, landscaping, and other amenities such as sidewalk cafes, benches, street lighting; along with space for pick-ups/drop-offs and on-street parking. All of which can enhance local quality of life.

While plans are underway in

Vibrant communities are created when all transportation modes and users can interact comfortably, safely, and efficiently.

"It isn't easy for Mason students to get to Old Town.

How can we potentially bridge that gap? **One of the common refrains was with bicycles.**
-Community Feedback from Vision Fairfax Mason

CHALLENGES & OPPORTUNITIES

MULTIMODAL LINKS



- Limited space for walking and bicycling
- Discontinuous and uncomfortable facilities



- Wide paths encourage biking, walking, jogging, scooting, and strolling
- Branded facility with wayfinding & signage to create identity

GATEWAYS & PLACEMAKING



- University Drive lacks clear signage when entering the City of Fairfax
- Need to create a destinations



- Placemaking
- Gateway treatments
- Wayfinding signage

CROSSINGS



- Limited opportunities to cross, perceived risky crossings
- Not all existing crossings are ADA compliant



- Wider ADA compliant crossings
- Opportunity to include artwork and branding to create identity

STREETSCAPE



- Narrow sidewalks and no bicycle facilities along Main Street in Old Town



- Inviting and comfortable pedestrian realm - Main Street in Davidson, North Carolina¹⁷

OPPORTUNITY THREE CONNECTING THE CITY- “THE SPINE”

University Drive / George Mason Drive is a prominent north-south connector within the City of Fairfax. The street provides a direct connection between George Mason University, Old Town, and Northfax. University Drive has the potential to serve as one of the City’s best north-south multi-modal link that provides a continuous, comfortable, and vibrant route that accommodates all users.

George Mason University is a major regional destination, with a high percentage of students and some workers traveling by foot and bicycle. This corridor from George Mason University to Northfax lacks comfortable facilities for people who walk and bike. Despite the lack of continuous comfortable facilities for people who walk and bike, many students and residents mentioned that they use University Drive/ George Mason Boulevard to walk and bicycle between the university campus, Old Town, and Northfax. A multi-modal redesign of this corridor has the potential to revitalize and activate University Drive by reducing conflicts and comfortably serve all users while connecting the University to two major Activity Centers within the City.

The City, beginning to realize the multi-modal potential of the corridor, has implemented a road diet project on

University Drive from Armstrong Street to Sager Avenue, just south of Old Town. This project added a center-running two-way left turn lane and dedicated bicycle lanes by re-purposing one vehicular lane in each direction. The City is also currently planning a neighborhood traffic calming project along University Drive, north of Old Town, from Kenmore Drive to Fairfax Boulevard. There is the potential to unify these initial investments into a design that could enhance the quality of life and economics of the study areas.

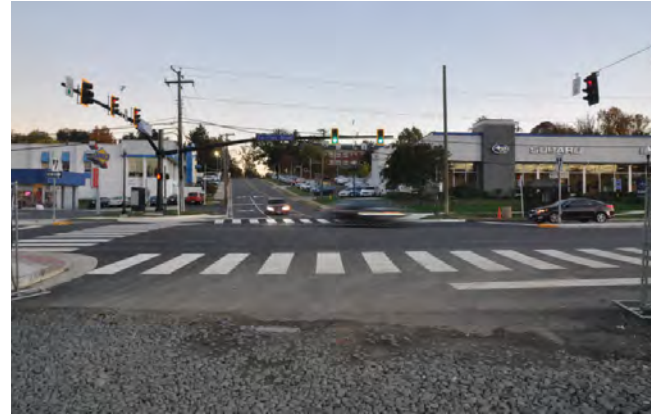
The key is redesigning University Drive as a multi-modal link with unified branded connection that serves people who walk and bike between the university campus, Old Town, and Northfax. This branded connection will not only provide important placemaking as a North/ South

“great street”, but also potentially fuel economic growth with enhanced foot traffic to the study areas from residents, workers, and students alike.

Gateway treatments can be used to designate key Activity Centers and attract residents, businesses, and visitors to the area. Wide sidewalks or multi-use paths along with improved pedestrian crossings provide comfortable facilities for people walking and biking, and encourages people of all ages and abilities to use the corridor for commuting, recreation, and exercise.

Improvements to the George Mason Boulevard segment to Old Town has the most potential of bringing new regular visitors who could generate real economic benefits to the businesses in Old Town.

“No way to safely cross Fairfax Boulevard as a pedestrian or cyclist” - Lifelong Resident



Office Uses included Massey Complex spend 95.1 million in Fairfax(Fairfax City Economic Development Authority)

“Feel like I am intruding walking through the residential neighborhood to go to Old Town.” - George Mason Student



“We do not feel safe even going out of our driveway. It is unsafe.” - Mom & Resident



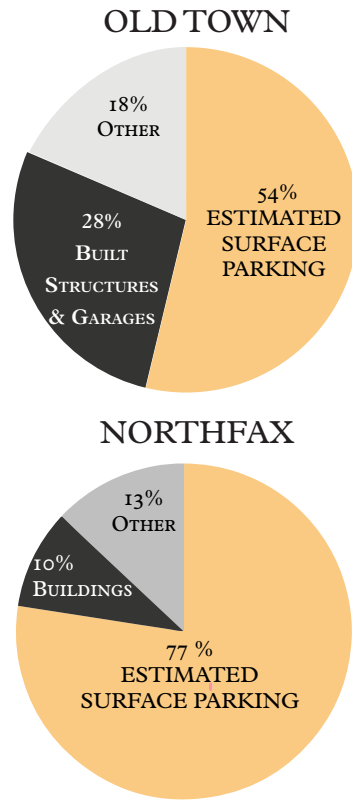
Narrow Sidewalks in historic Old Town make it unfriendly for pedestrians and scary for drivers and cyclists.



No obvious gateway signaling you enter the city of Fairfax along University drive from George Mason University.

George Mason has a \$492 Million economic impact in direct spending in Fairfax City (Fairfax City Economic Development Authority). Creating a strengthened multimodal path can foster increased economic links between Fairfax and Old Town.

OPPORTUNITY FOUR SUSTAINABILITY & WATERSHED INFRASTRUCTURE



The two study areas contain a number of infill and greenfield sites which have the unique opportunity to provide strategic resiliency for the city of Fairfax against climate change including water resource management and energy production.

The city, located at the headwater of Accotink Creek, is linked to the environmental health of the region and Chesapeake Bay. Water and natural areas capture much of the pollution and storm water from nearby uses. These streams are often poor quality- leading to flooding and other issues.

The study areas of Northfax and Old Town are at the source of this strategic water system. Yet, Northfax is dominated by impervious surfaces with surface parking accounting for 77% of land area. Likewise the Old Town study area is covered by impervious surfaces with as much as 82% of the land area devoted to surface parking, buildings, and other impervious surfaces. The impervious surfaces put homes and businesses downstream at an increase risk of flooding if rainfall and erosion increases.

General recommendations that reflect study areas include:

- Cultivating an identity rooted in the ecology of the palce.
- Enhancing storm water retention in all study areas to provide a resilient Accotink Creek system
- Implementing green building and construction standards in study areas to ensure new development provides ecologically sensitive and resilient construction.
- Integrating energy production to provide energy resiliency
- Propose greenways, walking trails and enlarged tree canopies to provide cooling and natural habitats
- Encourage pedestrian oriented development and connectivity to reduce vehicular emissions
- Avoiding impervious parking and roads where possible



WillowWood Plaza Parking Lot Looking South

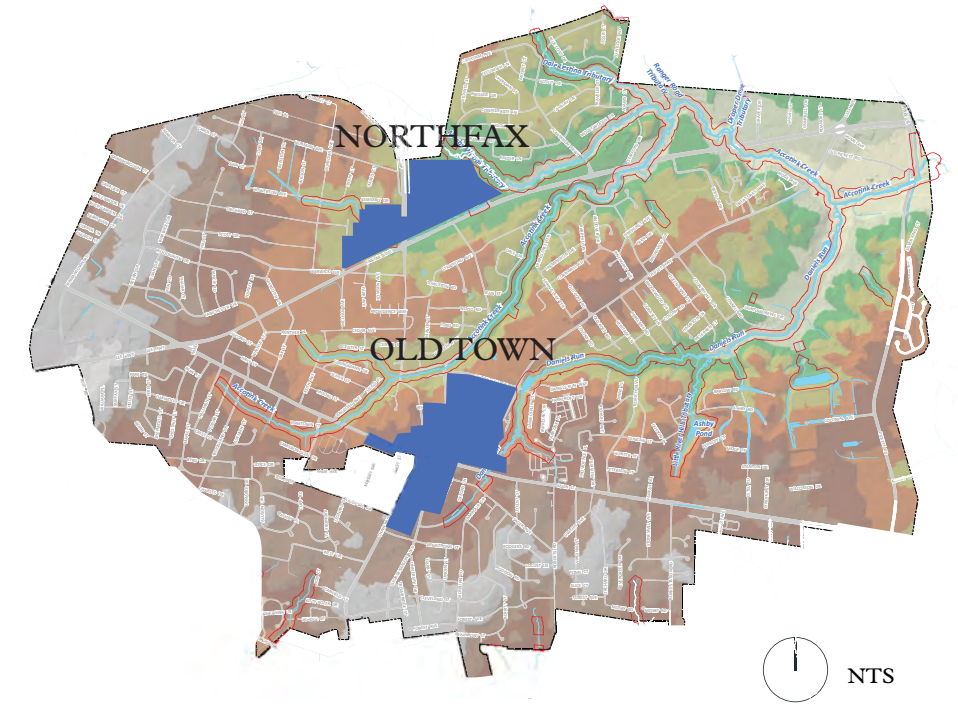


Land Use Dominated by Parking & Impervious Surfaces in Northfax²⁰

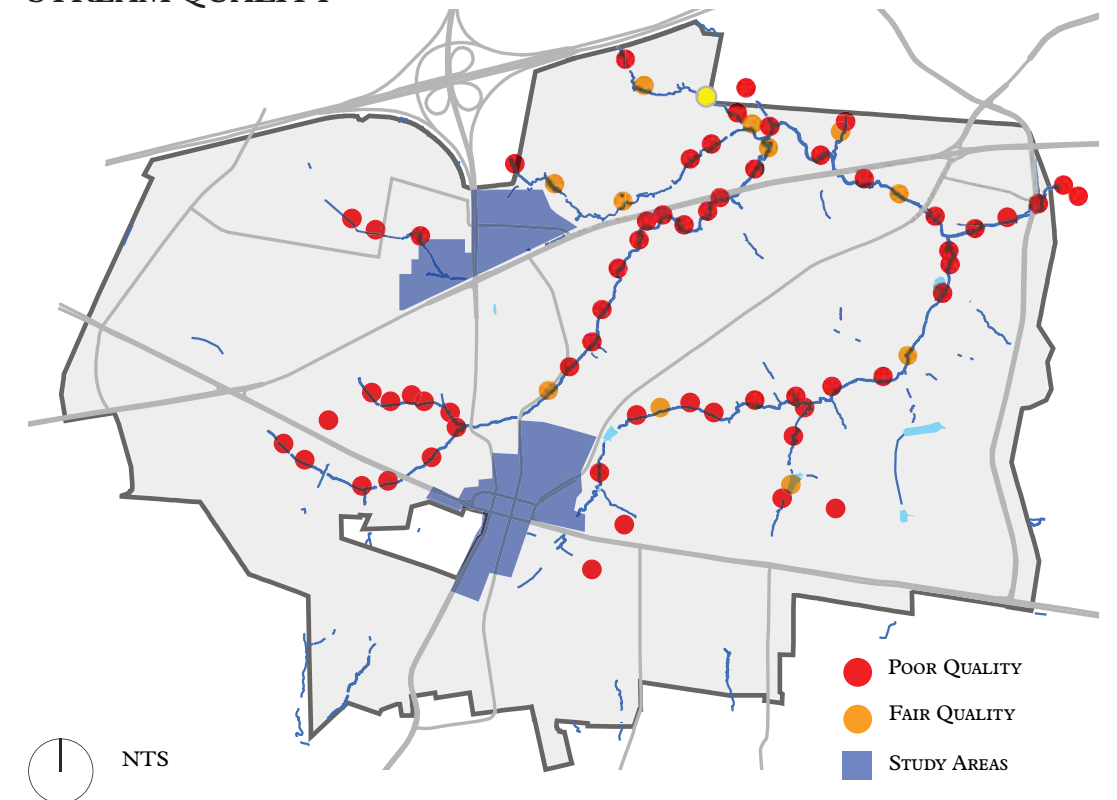


Land Use Dominated by Parking & Impervious Surfaces in Old Town²¹

STUDY AREAS LOCATION AT WATERSHED HEADWATERS¹⁹



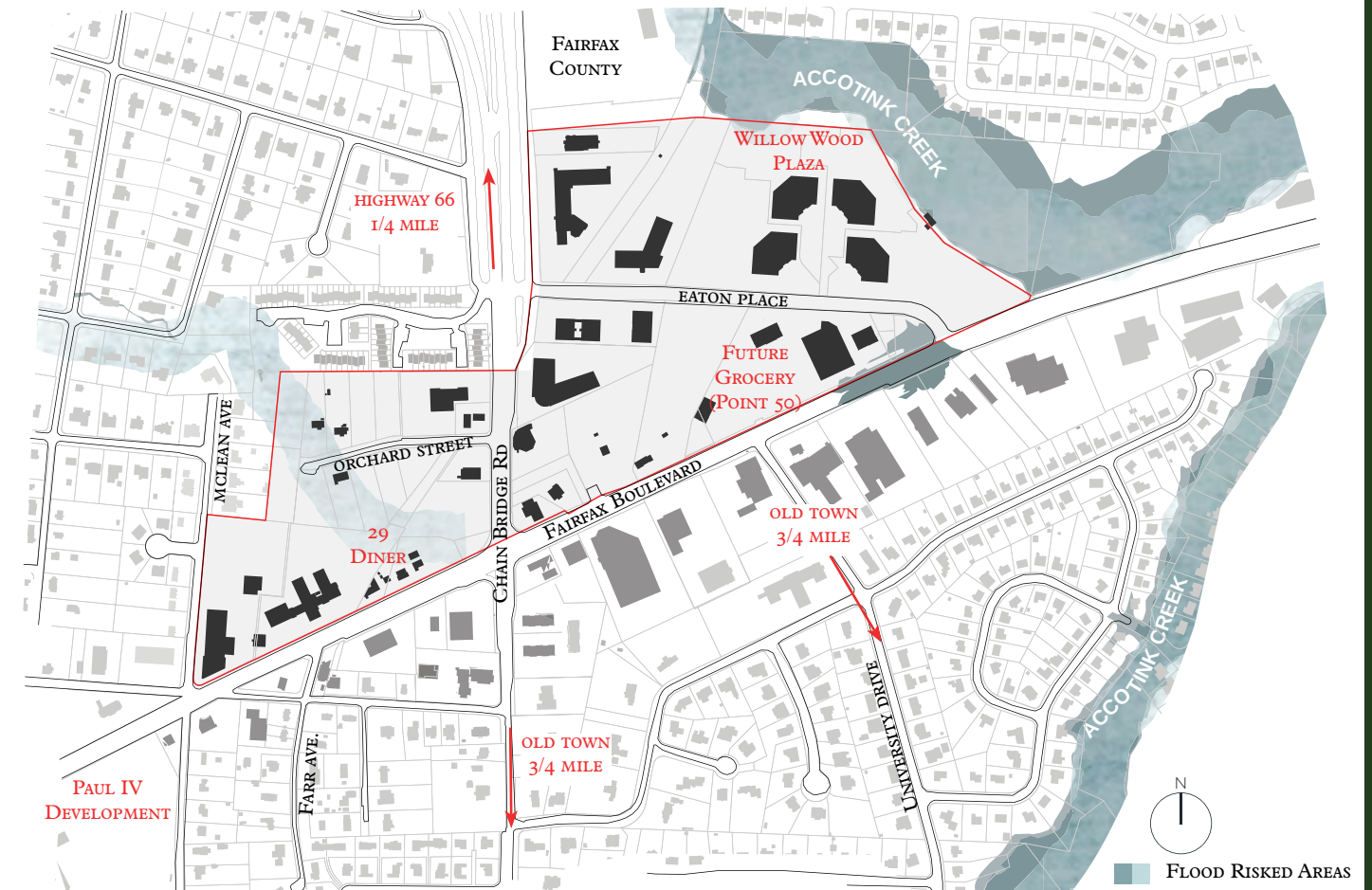
STREAM QUALITY¹⁸



ENDNOTES

- 1 Fairfax Boulevard Master Plan (2018)
- 2 Old Town Visioning Committee Document (2019)
- 3 Demographic information was used from The Fairfax County Courthouse Market Analysis Draft and the 2019 City Fact Book
- 4 Existing Land Use Data Sourced from GIS and 2019 City Fact Book
- 5 Fair Oaks Mall Entry. Photo Credit: Famartin 29 Nov. 2016 Accessed via Wikipedia Commons
- 6 Office Trend Data Sourced from the 2019 City Fact Book and CoStar
- 7 City of Fairfax Department of Community Development and Planning
- 8 Virginia Department of Taxation Taxable Sales by NAICS Codes
- 9 All statistics and data from retail trend sourced from the 2019 City Fact Book and CoStar
- 10 Graphic information from 2019 City Fact Book and the Virginia Department of Taxation
- 11 Housing Stock Data sourced from 2019 City Fact Book and City of Fairfax
- 12 City of Fairfax Department of Taxation and Assessments
- 13 Fairfax County Courthouse Market Analysis Draft
- 14 Refer to the 2035 Comprehensive Plan
- 15 Data sourced from the City of Fairfax Chapter 110 Zoning Ordinance; the 2035 Comprehensive Plan, District of Columbia Zoning Handbook, the City of Falls Church Zoning Ordinances, Fairfax County “Planned Development District” Zoning Ordinance, City of Alexandria “Design Guidelines & Policies” and “Zoning Ordinance.”
- 16 City of Fairfax Department of Community Development and Planning.
- 17 Main Street Shops & Downtown Davidson, Davidson NC 28036 <https://www.visitlakenorman.org>
- 18 Ibid
- 19 Map Sourced from the City of Fairfax 2035 Comprehensive Plan
- 20 Google Earth 2008
- 21 Ibid





2

NORTHFAX CONTEXT

Northfax is a commercial corridor centered at the intersection of Chain Bridge Road and Fairfax Boulevard, and is largely characterized by car-oriented development patterns. Set against a background of strong economic forces for the past decade, this designated Activity Center has been the focus of substantial redevelopment planning, anticipated infrastructure changes, and potential new construction.

This chapter begins with an overview of the characteristics that define Northfax

- first history & identity, then recent developments, next current land uses and finally the impact of the flood plain.

The analysis then focuses on economic opportunities indicated by recent development interests and land values. The question is not if market driven new development can occur, but how, and when is the right time from the property ownership perspective. Pent-up demand supported largely by existing local market needs underpin the unmet land use synergies that this location affords. Economic conditions are followed by analysis of transportation conditions. There, existing conditions and thematic future opportunities are analyzed and presented.

Finally, the chapter concludes with a development framework for Northfax as a gateway, ecologically sensitive district that recognizes the often under appreciated existing natural character of the site and uses it to galvanize new placemaking, land use, and economic vibrancy.

Photo opposite: Route 29 Diner¹



Fairfax Shopping Center, 1961



10570 Lee Hwy- Ted Britt Ford, 1967



Historic postcard of 29 Diner⁵

HISTORY & IDENTITY

AN AUTOMOTIVE CROSSROADS

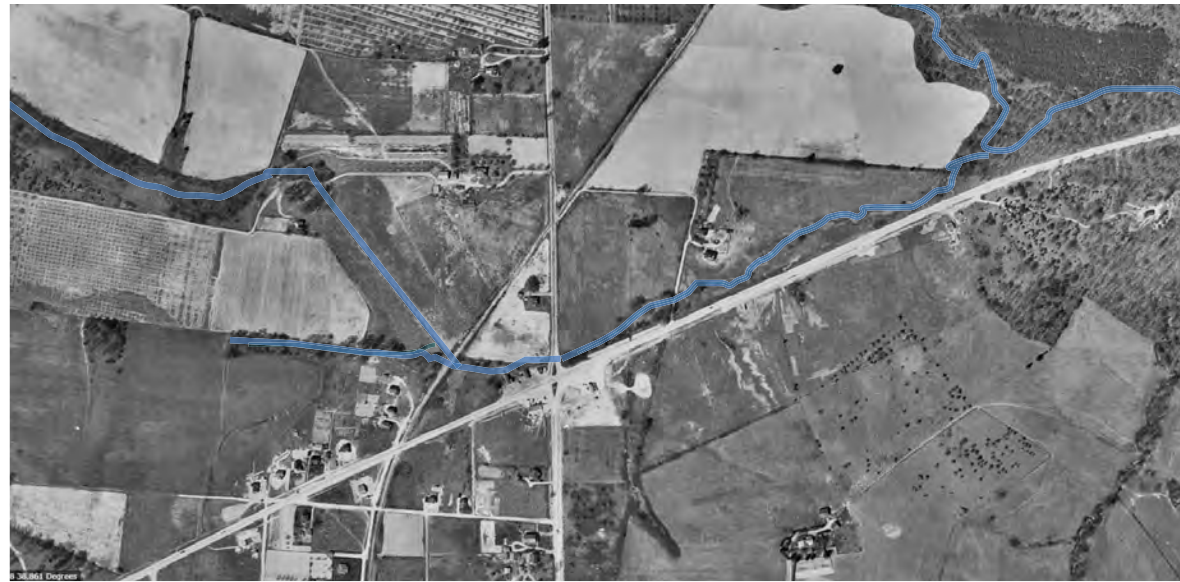
With the extension of Lee Highway from Fairfax Circle to Little River Turnpike at the end of 1931, the northern edge of Fairfax City, locally known by the portmanteau Northfax, became an important automobile route and gateway into the city

Much of the area was left undeveloped due to challenges with flooding. Where development did occur, numerous businesses sprang up to serve the associated automotive uses - from diners to car lots- creating

a pattern of development that has continued to the present day. Today the geographic and built environment of Northfax has come to be defined by three ideas: 1) a Gateway 2) an Automotive Commercial Center 3) The Accotink watershed.

These identities are span decades and sometimes even centuries and many will remain even as new development comes in. The key design opportunity and challenge is to translate and celebrate these existing

identities as positive placemaking characteristics that will define the new future of Northfax. Currently, only the former Tastee 29 Diner in Northfax is listed as a National Register historic property. Recent surveys do not indicate eligibility of any other building within the study area as a future historic property. See appendix for recent historical analysis of study area.



NORTHFAX -1937²

AGRARIAN CROSSROAD

In the early 20th century, the Northfax area was dominated by agricultural uses, including multiple small farms and properties. Notable land features included a railway line and the Accotink Creek watershed, which meandered through the agricultural landscape parallel to Lee Highway.



NORTHFAX - 1997⁴

AUTOMOBILES & OFFICE PARKS

In the post-war decades, Northfax changed dramatically as farms were developed into single-use developments, including commercial retail shopping centers, car dealerships, office parks, and single-family home neighborhoods. Portions of Accotink Creek was channelized and placed underground, and the majority of the Northfax study area was covered with surface parking lots. By 1990s the name NorthFax was designated by property developers.



NORTHFAX -2020³

A NEW BEGINNING

In 2019, several factors have helped shape the next development phase of Northfax, including: city investments in watershed infrastructure and underground channels for Accotink Creek, new retail development with a grocery store anchor, better coordination between property owners, and new street and block plans that provide develop-able parcels within the study area.

A CHANGING NORTHFAX UPCOMING TRANSFORMATIONS

The study area is divided by three wide roads with significant traffic volume (Fairfax Boulevard, Chain Bridge Road., Eaton Place). Within blocks created by the roads, there are significant land parcels that are ripe for consolidation and redevelopment.

While some of the property owners in Northfax have worked towards consolidation, neighbor coordination, and a mixed market outlook remain significant hurdles towards large-scale and

high-quality redevelopment in the area.

The disconnected land use and road network largely prevents the surrounding communities from entering and experiencing both the study area and each other. The parcels and Accotink creek itself currently act as barriers between communities in the area.

Previous private development since the late 90s included only the WillowWood

3 and 4 office buildings (10302 & 10304 Eaton Place) built in 1998/2000, and the Marriott Residence Inn with 155 rooms delivered in 2011.

The current infrastructure and development inquiries point to a transformative period in the coming years.



Above- Rendering of Proposed Point 50 Development⁶



Above - Existing Photo of Browns Mazda



Above - First Phase of George T. Snyder Trail at Fairfax Blvd and Plantation Pkwy

ONGOING DEVELOPMENTS

1. POINT 50 (WHOLE FOODS)

Point 50 shopping center comprises a 30,000 square foot grocery anchor plus 18,000 square feet of retail space that is currently under construction

2. NORTHFAX EAST STREET EXTENSION

A planned traffic circle and road connecting Fairfax Boulevard to Eaton Place.

3. FLOOD MITIGATION AT ORCHARD STREET

Various infrastructure improvement projects to remove several parcels out of the flood plain

4. PROPOSED BROWNS MAZDA REDEVELOPMENT

Proposed Redevelopment of Browns Mazda into a more urban building

5. PROPOSED FARR AVENUE EXTENSION

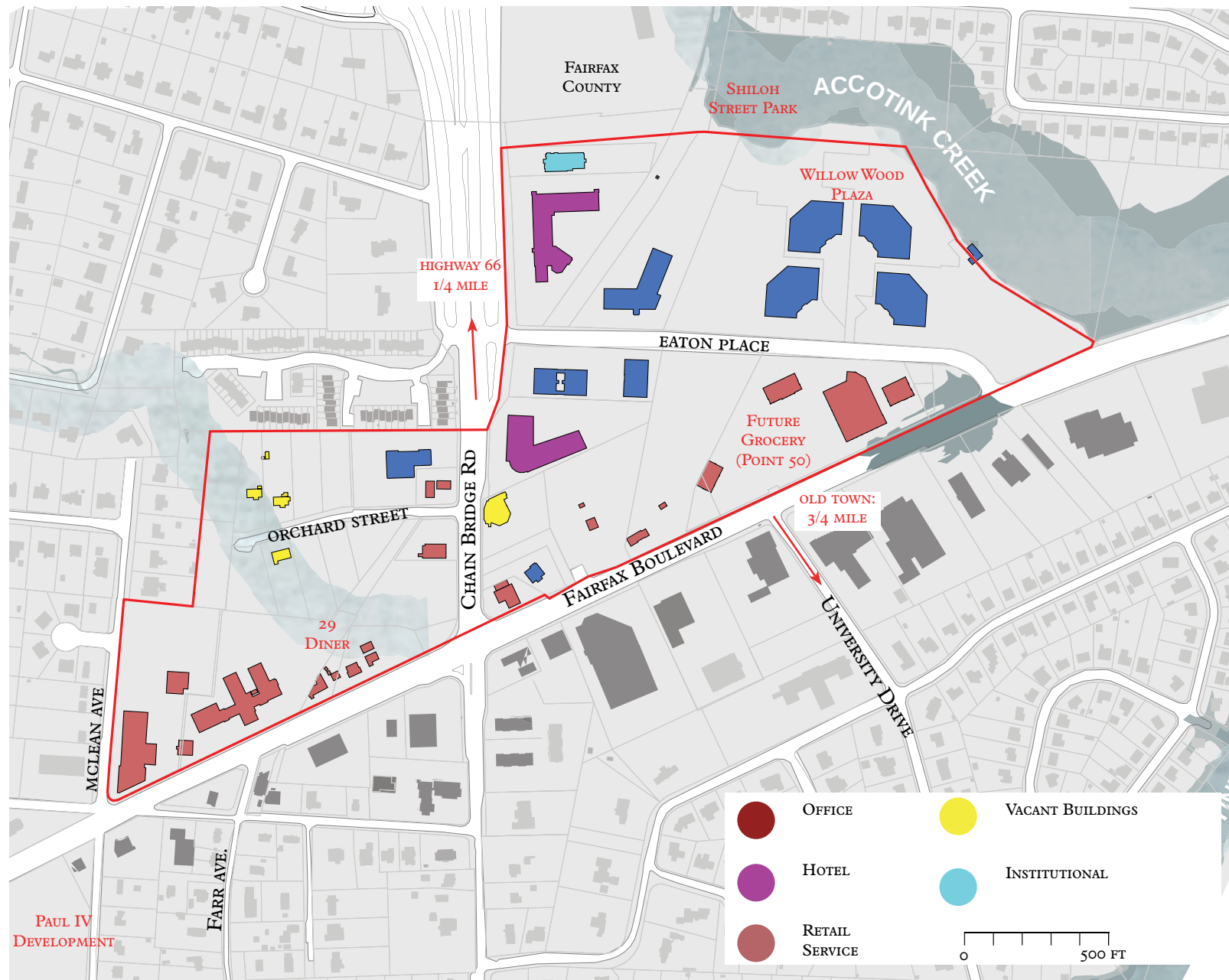
Proposed extension of Farr Road to Orchard street providing necessary egress for any development nearby and accommodate a more urbanized Browns Mazda.

6. PROPOSED INTERSECTION IMPROVEMENTS

Various efforts to ease traffic concerns and increase pedestrian safety. Proposed improvements at Chain Bridge Road and Eaton Place include a potential traffic circle and improved pedestrian crossings at McLean Road and Fairfax Boulevard.

7. PROPOSED GEORGE T. SNYDER TRAIL

Ongoing project to create a trail along Accotink Creek all the way to the Vienna Metro.



LAND USE HIGHLIGHTS

Land uses in Northfax are currently dominated by auto-oriented retail, hotel uses, and an anchor office building at Willow Wood. These areas are accessed by a limited internal public road network serviced by Fairfax Boulevard and Chain Bridge Road.

Within the study area vast amounts of surface parking and is derelict and vacant combined with flood prone parcels that define the character of the landscape. These uses have been

largely unchanged for decades.

These vehicular focused land uses continue across Fairfax Boulevard to the south with several hotels, auto-sales and repair shops, and restaurants.

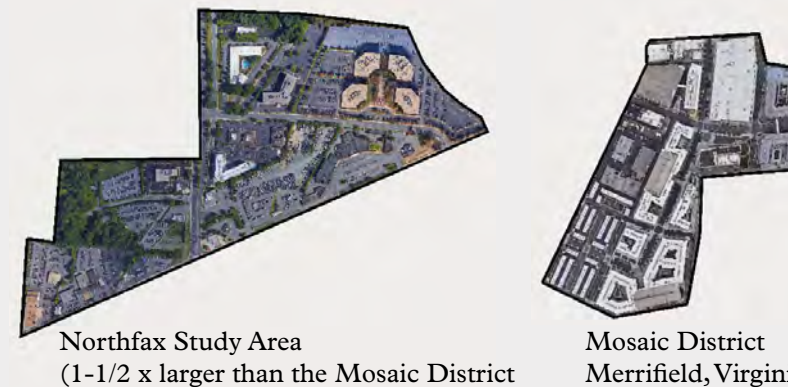
Land uses surrounding the study area include residential areas to the north, east and south as well as multifamily apartments in Fairfax County.

General characteristics include:

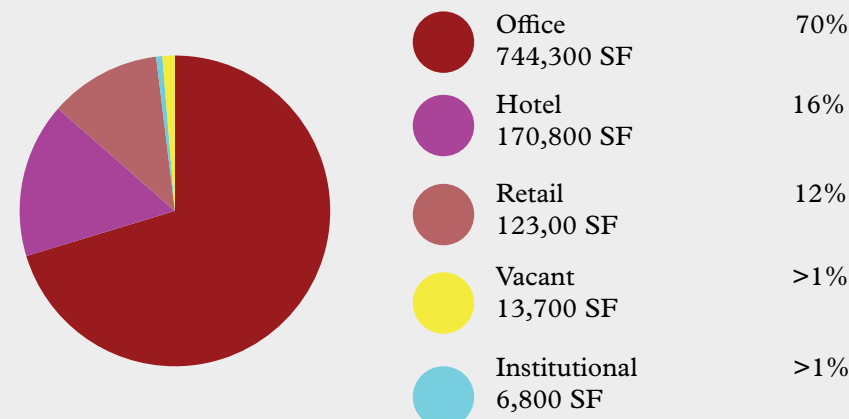
- 45 land parcels across 67 acres of privately-owned land area (20+ actual ownerships).
- Primarily auto oriented retail uses and activities.
- Dominated by surface parking and automotive uses.

SCALE AND LAND USE COMPARISONS

Below are comparisons of Northfax to the nearby mixed use Mosaic District in Merrifield, Virginia. In terms of size, Northfax is much larger than the Mosaic district- indicating that Northfax has the potential of a relatively large mixed use district. In terms of land use, while Northfax may not develop exactly the same as Mosaic, the illustration gives a broad sense of land use typologies like residential lacking in Northfax that could be limiting the mixed use goals outlined in the Comprehensive Plan.

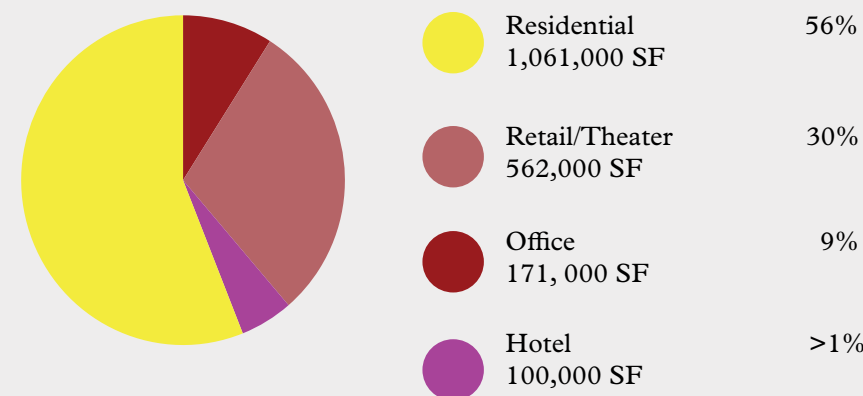


NORTHFAX - EXISTING USES



REGIONAL MIXED USE NEIGHBORHOOD ⁷

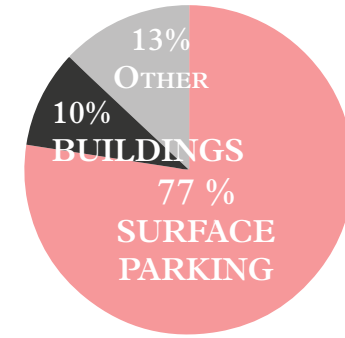
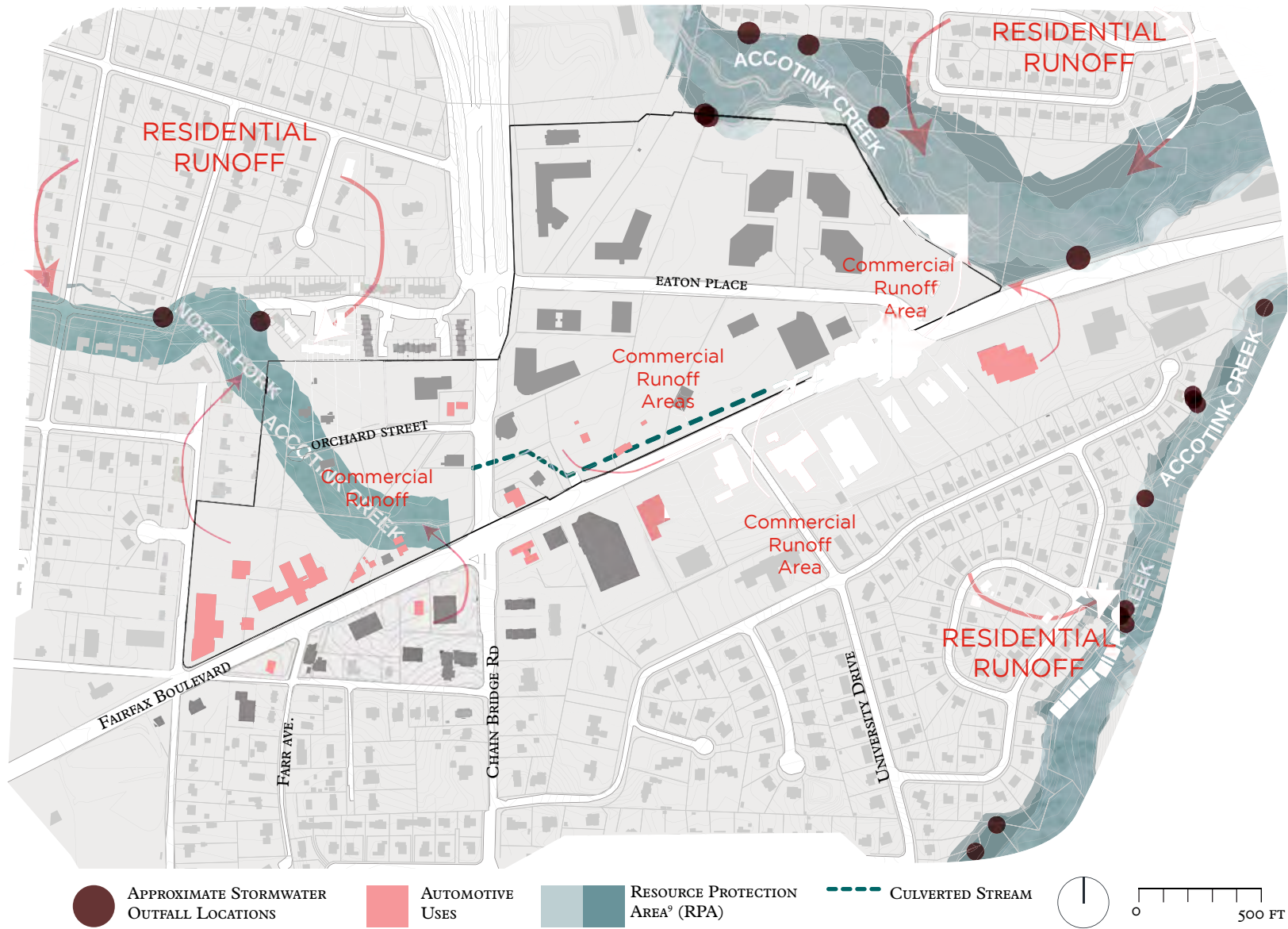
Below is a typical proportion of land uses found that occur in successful regional mixed use, walkable neighborhoods with vibrant retail and community spaces.



NORTHFAX: INVENTORY & USES⁸

1.1 million square feet of built inventory of which there is a 12% building to land coverage ratio.

- **Retail** – To the extent that exists, mostly local neighborhood (office, hotel, destination auto, residential) serving. A retail renaissance of sorts is already underway with the redevelopment of the Fairfax Shopping Center into the grocery anchored Point 50 project. Although the project is delivering less retail square footage than what previously existed, the retail offerings are more aligned with current market needs, including supporting nearby office, hotel and auto related uses. Note: land use inventory does not account for food trucks and food and beverage space inside / internal to existing office buildings.
- **Office** – Northfax houses the City's primary private sector corporate type of office buildings with close to 1.0 million square feet. Currently approximately 200,000 square feet is vacant (25%+).
- **Hotel** – Two properties with 282 rooms (and a third immediately outside the study area across Fairfax Boulevard). Stable occupancy is derived from 135,200 recorded visitor nights from hotels for visitor generated demand. New construction could be a possibility at some point but with three hotels already, there is not an apparent deficiency in supply.
- **Residential** – A few single-family units still exist on Orchard Drive but are mostly vacant as part of a lot consolidation process in anticipation of larger-scale redevelopment.
- **Other** – Institutional and vacant space account for approximately 2% of existing uses.



+/- 800 PARKING SPACES AT WILLOWWOOD PLAZA ALONE INCLUDING A PARKING GARAGE (ABOVE)

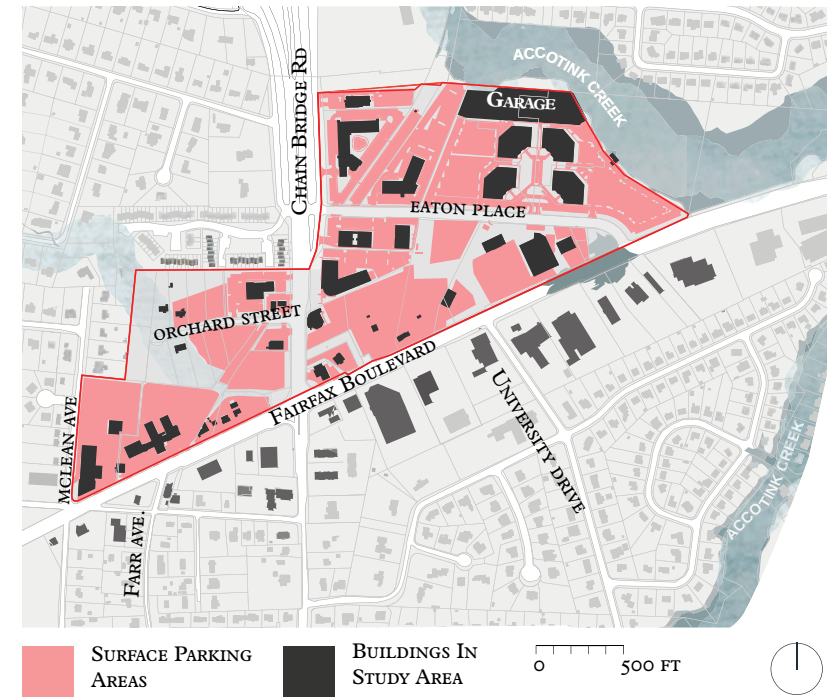
SURFACE PARKING & IMPERVIOUS SURFACES

The study area sits atop a topographic low point and an important watershed. During storm events, rainwater collects onto impervious surfaces and collects downhill into the Accotink Creek.

Today, over 75% of the land in Northfax is covered with impervious surface parking lots. These lots include surface parking for office and retail uses, as well as overflow parking for car dealerships and repair shops.

Impervious surface lots can contribute to poor watershed health, as well as significant erosion, and flooding. These issues are significant problems within the City of Fairfax and also the region generally.

Integrating robust stormwater management with the future development of Northfax will not only help mitigate flooding in the study area but also potentially help alleviate flood risk in other parts of the City. A significant approach to design must incorporate stormwater management and stewardship of the watershed.



NORTHFAX & THE WATERSHED

IMPROVING THE ACCOTINK CREEK SYSTEM

As one of the lowest points of topography in the city and at key stream watershed, Northfax is at a critical location for the prevention of pollution, erosion, and flooding downstream.

The Chesapeake Bay Foundation notes that “polluted runoff is one of the most harmful sources of pollution to the bay” with typical sources including “streets, parking lots, and other surfaces”. Northfax, with its high amount of impervious surfaces and critical location, could be an important point to stop runoff from surrounding areas.

Moreover, automotive facilities including service stations, maintenance facilities, dealerships, and car washes are identified by the United States Environmental Protection Agency as facilities that can directly and indirectly impact water quality when pollutants are not adequately managed. While the current businesses may be managing to prevent pollution, stormwater capture is an important tool that can be integrated in future urban plans to reduce risks of pollution in case of accidental contamination.

Stormwater management and landscape strategies can help mitigate pollution and erosion risk in Northfax. Tools, such as bioswales and rain gardens, can help capture stormwater during major storm events. This can not only reduce flooding and beautify the study area, but also reduce pollution reaching the Accotink Creek and the Chesapeake Bay.

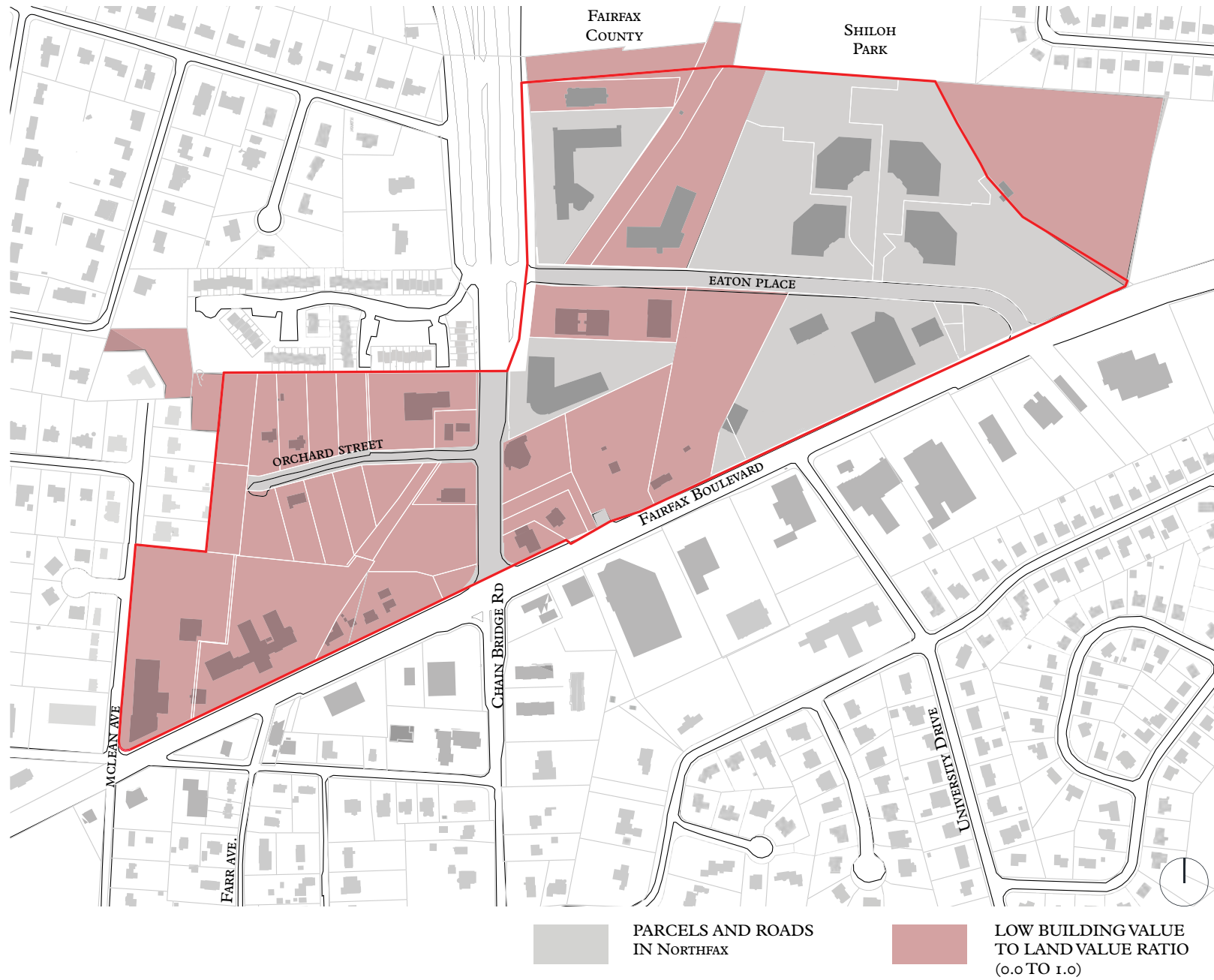
FLOOD MITIGATION

- The area of Northfax has had limited development opportunities because of risk of flooding and inadequate storm water infrastructure.
- Ongoing projects, including structured waterways, help mitigate flooding but future designs should be sensitive to flooding concerns.
- Future planning efforts should consider unpredictable flooding risks associated with climate change as well.



Intersection of Eaton Place & Fairfax Boulevard - September 8, 2011¹⁰

See Appendix for reference materials on stormwater management, pollution sources, and stormwater capture strategies from peer jurisdictions.



ECONOMIC OPPORTUNITIES & CONSTRAINTS

MARKET OPPORTUNITIES:

- New investment energy from proposed, planned and new projects (i.e. Point 50) and infrastructure.
- Multiple markets (office, hotel, auto-related) to support added node-serving needed amenities in the form of retail and public spaces.
- Possible destination themed retail, case-by-case.
- Larger parcel redevelopment opportunities (and economies).
- Creation of new infrastructure framework.
- Aging office properties could be prospects for redevelopment.
- The potential to transform identity of Northfax.



MARKET CONSTRAINTS

- Commercial market saturation elsewhere in the region.
- Static absorption office conditions (25% vacant).
- Negative perceptions.
- Unmet multi-year planning expectations.
- Unrealized residential development to date has been a disincentive for creating synergistic commercial uses.

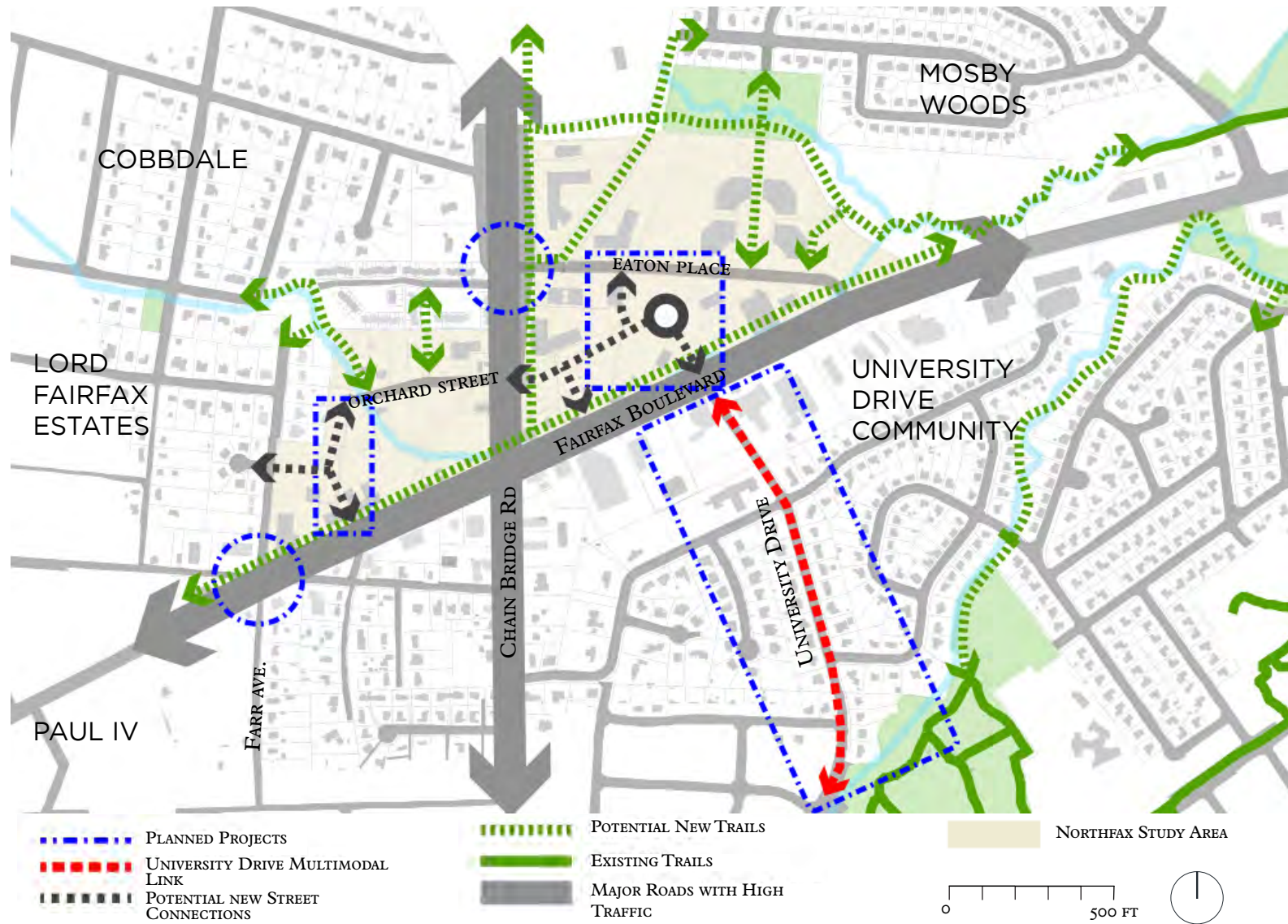
KEY NEAR TERM OPPORTUNITIES:

- **Opportunity Sites** – There are numerous larger underdeveloped properties characterized by building to land value ratios below 1.0 and low impervious surface sites.
- **Consolidated Properties at Orchard Street** – Has already initiated lot consolidation market opportunities through acquisitions and is currently coordinating with the City’s planning department regarding possible redevelopment concepts.
- **Brown Mazda** – Redevelopment of its existing car dealership use combined with additional new street infrastructure will give the western portion of Northfax a needed facelift and improved access for the Napolitano property.
- **To Be Determined Sites** - To try and leverage momentum adjacent to Point 50 on the east side of Northfax .

RESIDENTIAL AS ECONOMIC DRIVER

Residential is the essential driver and component of new mixed-use development. Affords opportunity to diversify the housing stock and density that can help subsidize other land uses and amenities. Contributes to incremental increase in retail demand.

Mix of product types - though not entirely multifamily- may be needed to underwrite public overlays and infrastructure as well as a means to activate retail.



TRANSPORTATION IN NORTHFAX

FOSTERING CONNECTIVITY

Transportation connectivity is limited in Northfax due to large block sizes, limited route options, and barriers created by wide high-speed and high-traffic volume roadways. These roadways include Chain Bridge Road and Fairfax Boulevard, which serve as the area's primary north-south and east-west connections, respectively.

Fairfax Boulevard and Chain Bridge Road are major roadways that carry regional automobile trips. The average daily traffic volumes on roadways within Northfax are as follow:

- Fairfax Boulevard: 38,000 vehicles per day
- Chain Bridge Road: 23,000-40,000 vehicles per day
- University drive: 6,400 vehicles per day

While the roadways are designed to accommodate regional traffic, local connectivity, especially for people walking and biking is close to non-existent. There are no dedicated bicycle facilities in the area, the existing sidewalks are narrow, and most crossings are limited

to wide signalized intersections. These conditions all contribute to creating an uncomfortable environment for people currently walking and biking, and discourages others from attempting to walk and bike.

Sidewalks are present along the main roadways in Northfax. However, sidewalk widths throughout Northfax are very narrow, with many sidewalks not wide enough to be compliant with ADA legislation that requires sidewalks to be 4-5 feet in width to accommodate wheelchairs and other mobility devices.



Intersection of Fairfax Boulevard & Chain Bridge Road



Eaton Place Looking West



View of Willow Wood Complex from Fairfax Boulevard

The City has invested significant resources in Northfax in the past few years. Apart from implementing drainage and utility infrastructure projects, the City is planning new transportation improvements, including the extension to the George Snyder Trail and a new roundabout at the intersection of Eaton Place and Chain Bridge Road.

Given the existing and upcoming commercial and retail establishments along with surrounding residential neighborhoods, Northfax has the potential to serve as a unique Activity Center for the City's residents, employees, and visitors. However, the lack of connectivity and comfortable facilities for people who walk, bike, or ride transit as well as lack of public spaces and amenities such as parks, plazas, and trails, may deter private investments from realizing the full potential of this area.

Redeveloping these superblocks into smaller block sizes with new internal street connections would improve walkability in the area. Additional street connections would increase access to businesses throughout the area, and redevelopment could include enhanced facilities for people who walk and bike, as well as added public spaces. New street connections can be designed as complete streets with inviting public realms along with them.

Beyond the improvements within the superblocks, there are many opportunities for Northfax to connect to adjacent neighborhoods through new pedestrian and bicycle trail connections or new streets. The new links will allow residents in surrounding communities a more direct route to access new destinations and amenities in Northfax. Shorter distance and a potential for a direct trip may encourage some residents to walk or bike rather than drive along Fairfax Boulevard or Chain Bridge Road.

Environmental assets near Northfax offer unique opportunities to expand the City's off-street trail network. New trails and natural open space for passive recreation along Accotink Creek can enhance the activity Center's connection to its natural surroundings.

Gateways can be used to create an identity and designate Northfax as a distinct area within the City of Fairfax. Wayfinding signs could be used to direct and inform visitors of notable locations within walking or biking distance, such as distance to parks, trails, Old Town, George Mason University.



KEY OBSERVATIONS

A PLACEMAKING & DEVELOPMENT APPROACH

Our analysis of the existing conditions - from economics and design to transportation and stormwater - points to a few key ideas that will inform our suggested development approach and the future identity of the neighborhood.

- Northfax is a Gateway Neighborhood to the City. Character and design elements could signal entering the city.
- The unique ecological conditions offers the opportunity to focus on green infrastructure.
- Connection to Nature can be a central design & economic marketing element.
- New Construction with Different Building typologies and Higher Density is Possible.
- Activity Center serving retail should be an economic focus.
- Focus on sustaining the existing office market.
- A New Place & Neighborhood.
- Future focused placemaking with inspiration from the history of ecology of the Accotink and auto-oriented uses.



Rendering, Strategic Investment Area Plan Charlottesville, Virginia - Cunningham | Quill Architects



Rendering, US 1 Corridor Sector Plan - College Park, Maryland - Cunningham | Quill Architects



The Wharf's Capital Yacht Club in Washington, DC designed by Cunningham Quill Architects fronts a walkable pedestrian oriented street.

CONNECTION TO NATURE

- Green assets, such as the Accotink Creek and the future trail system, should be used as core identity pieces in Northfax. Future developments should connect with these assets via open spaces and parks.
- Identifying opportunities to foster walkability and bikeability so that new and existing residents are outside on local trails and parks.
- Buildings & open spaces in Northfax can also serve as functional stormwater collectors, addressing the needs of the Accotink watershed.
- Social spaces are desperately desired in this community - Northfax represents a unique opportunity to address this need.

STRATEGIC MIXED-USE WITH WALKABILITY

The core design approach will be strategic implementation of dense mixed use developments with an emphasis on walkability Activity Center wide.

Walkability will allow these new residents to move into the city with less of an impact on vehicular traffic, potentially better health outcomes, and a less impact on the environment. Critical to this connective density is fostering better walkability to nearby neighborhoods, walking trails, and amenities so that the neighborhood can be truly pedestrian oriented.

Example neighborhoods include:

- Old Town Alexandria
- Shirlington, Arlington
- Mosaic District, Merrifield
- Fairfax Corner
- The Wharf, Washington DC

ENDNOTES

- 1 Idawriter, Wikipedia 29 June 2010 https://commons.wikimedia.org/wiki/File:29_Diner_-_panoramio.jpg
Accessed via Wikipedia Commons
- 2 Aerial Photographs of Northfax Study Area: 1937, 1997, 2019. Google Earth Accessed 1/2/2020
- 3 Ibid
- 4 Ibid
- 5 George Mason University Special Collections & Archives (SC&A), The Randolph H. Lytton
Historical Postcards
of Fairfax, Virginia Collection Accessed 1/2/2020. Uploaded 12/10/2004
- 6 “Point 50” Jul 5, 2017 Presentation from Board of Architectural Review hearing and approval
- 7 The data used to designate the Mixed Use Center in the chart comes from an analysis of regional mixed
use, walkable activity centers in the region. A common mix of uses was identified shown in the “generic pie
chart.
- 8 Fairfax Boulevard Commercial Development Market Analysis
- 9 “An RPA is a sensitive environmental corridor, that by state law, must be preserved or restored to a nat-
ural condition when disturbed. The purpose of the RPA is to provide a buffer between development and water
resources like streams”
See “Resource Protection Areas: Falls Church, VA - Official Website.” Resource Protection Areas | Falls Church,
VA - Official Website. Accessed April 15, 2020. [https://www.fallschurchva.gov/1369/Resource-Protection-Ar-
eas](https://www.fallschurchva.gov/1369/Resource-Protection-Ar-
eas).
10. rickfisherphotos. 2011. “Fairfax Blvd Flash Flood 3.” YouTube Video. Rickfisherphotos.
<https://www.youtube.com/watch?v=CymzW-b0hDA>.





4






HISTORIC RESOURCES ANALYSIS

As a part of this Small Area Plan report, Cunningham | Quill Architects was tasked with completing a “windshield” reconnaissance survey of the two study areas- NorthFax and Old Town- within the city of Fairfax. To this end, all resources within the study areas were reviewed from the public way. To augment this effort, all prior historic investigations were consulted. The limited scope of historic research was intended to support the proposals in the Small Area Plan, rather than complete

stand-alone preservation goals.

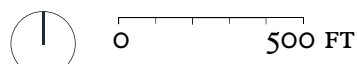
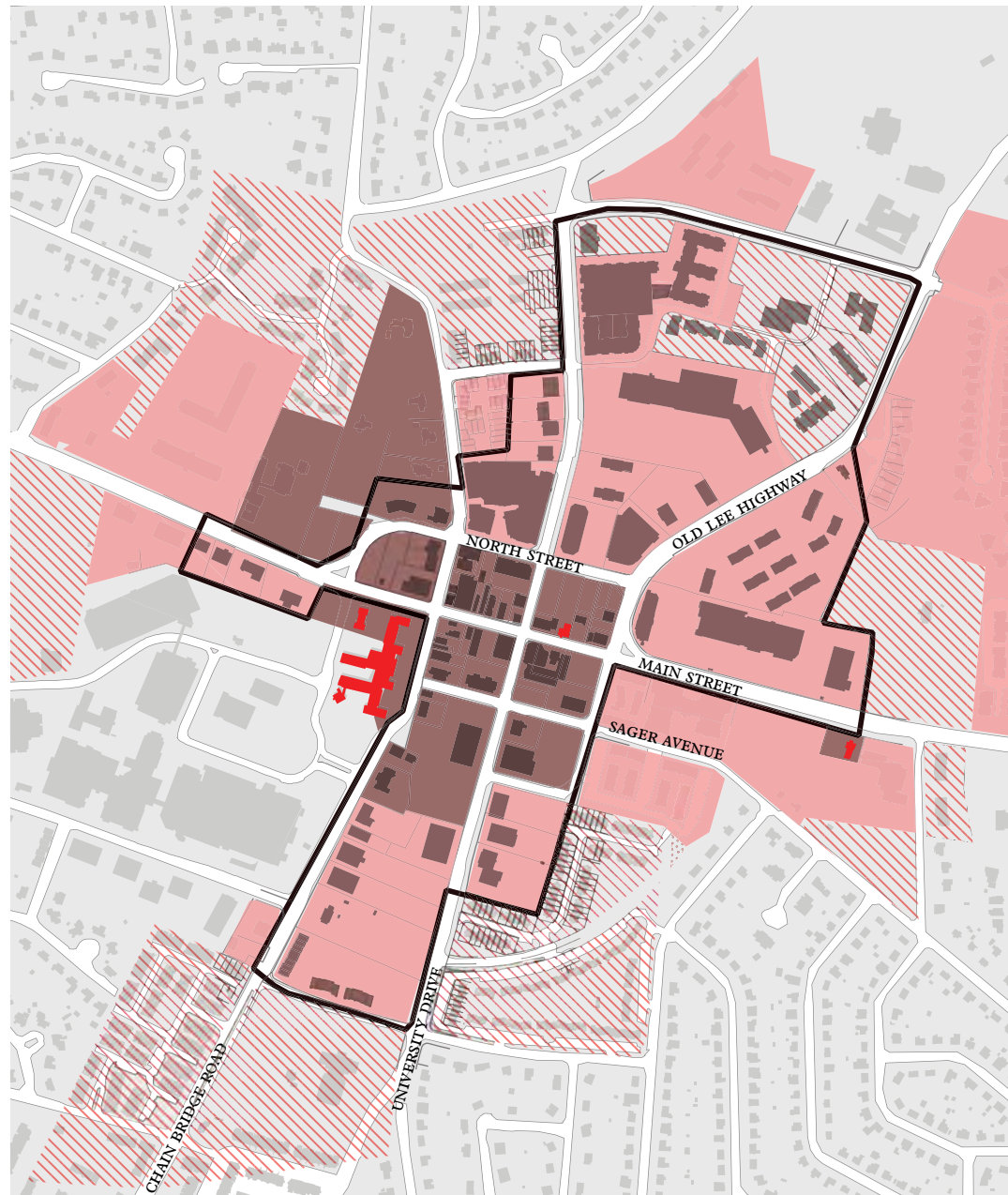
The two following pages summarize the existing historic resources and the city’s preservation processes for these two study areas. Following this information is an inventory of all resources within these two areas. The inventory is intended to be a reference tool for future historic research and preservation planning efforts. The potential eligibility of each resource to be listed either individually or as a part of an expanded or newly created historic district has been included. These preliminary judgments extend from the professional judgment as well as previously completed surveys, however they should be reviewed by preservation professionals and SHPO staff as a part of any future surveys and initiatives.

Our historic preservation findings reinforce those from earlier reports: (1) the Old Town Historic District is recommended for a survey update and boundary expansion to incorporate those resources which previously did not meet the 50-year age criteria and any eligible resources which fell outside of the initial boundaries. (2) No additional historic districts are likely within these two study areas, however the Northfax district lies along a prominent automobile route and the potential for an interpretive plaza or additional survey of the midcentury automobile-related resources is suggested. (3) Additional resources present local significance, but are unlikely to meet National Register criteria for eligibility. It is recommended that city staff collaborate with local leaders and citizens to identify and preserve these resources to extent desired.

-  City Old Town Historic District
-  Old Town Fairfax Transition District
-  Proposed Expansion of Old Town Fairfax Transition District
-  National Register Buildings
-  Study Area Boundary

Per the Comprehensive Plan, there is the intension to expand the transition overlay zone to include the entire Old Town Study area.

The Architectural Control District reviews all major commercial properties as well as single family attached to historic, or transition, or architecture control overlay districts. Exceptions include but are not limited to single family residential properties outside overlay district and townhouses/duplexes after intial construction.



HISTORIC DISTRICTS & DESIGN OVERSIGHT

CITY OF FAIRFAX ZONING AND APPROVALS

The Small Area Plans are an opportunity to address challenges to preserve the cultural heritage that has come to define the City of Fairfax.

The City has actively pursued preservation goals for several decades. In 1964, the city created the Old and Historic District via local ordinance to establish oversight control of new construction and alterations to existing structures with subsequent enlargements over the following years. The overlay zoning tool is used to

protect areas adjacent to the Old Town district as a separate locally-designated area referred to as the Transition Overlay District. The focus of this zone is to ensure that new construction and alterations are respectful and avoid competition with the historic structures of Old Town. Lastly, the city created the Architectural Control Overlay District to impose local review over new development along all non-residential corridors through the city. Per the City of Fairfax Design Guidelines, “preservation

is not a significant public goal” in the Architectural Control Overlay District, but rather the regulation of design character is central focus of this oversight boundary.¹

With these tools, the city has approval control over the entirety of the city’s bounds, excepting single-family residential areas. To address the distinct character of these areas of the city, officials have commissioned design guidelines specific to each overlay district.

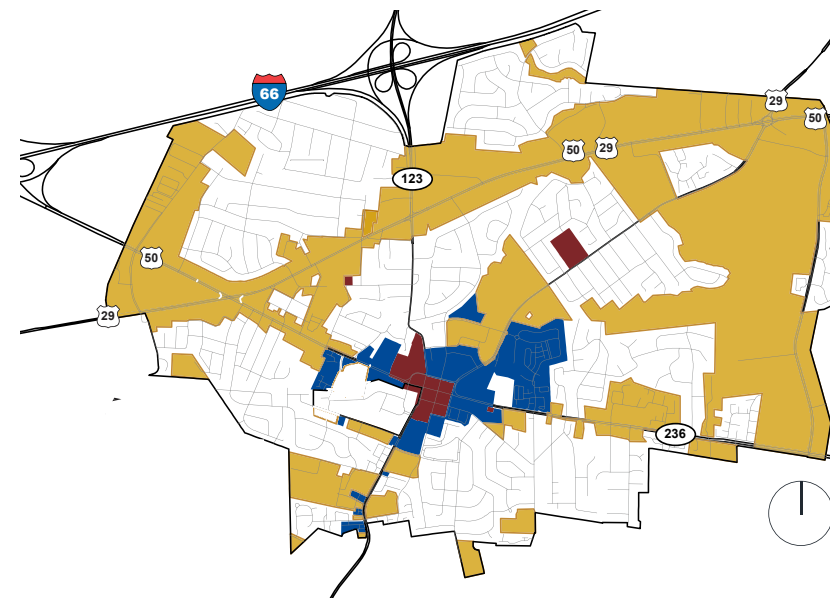


IMAGES:

1. Old Town Hall in Old Town
2. 29 Diner in Northfax
3. View of North Street- part of the transition overlay district of Old Town.



SPECIAL DISTRICT DESIGNATIONS (2018)²



Map per the City of Fairfax Design Guidelines (2018). Note the district has been revised since the creation of his map to include the new Capstone Collegiant parcels in the North of Old Town.

-  Historic Districts
-  Transition District
-  Architecture Control District

HISTORIC PRESERVATION GOALS





The City’s 2035 Comprehensive Plan, adopted in early 2019, proposes an array of goals which relate to historic preservation.

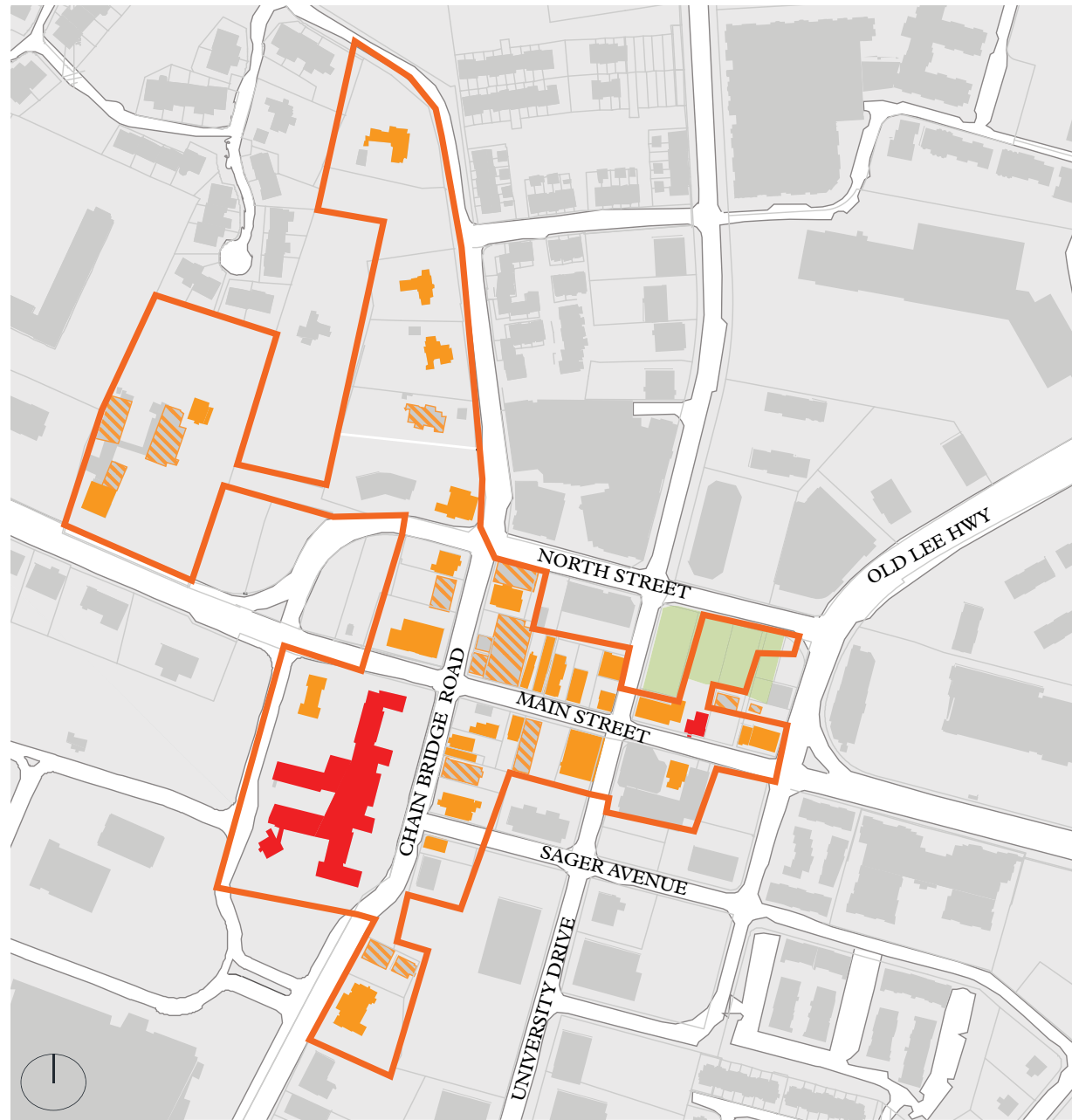
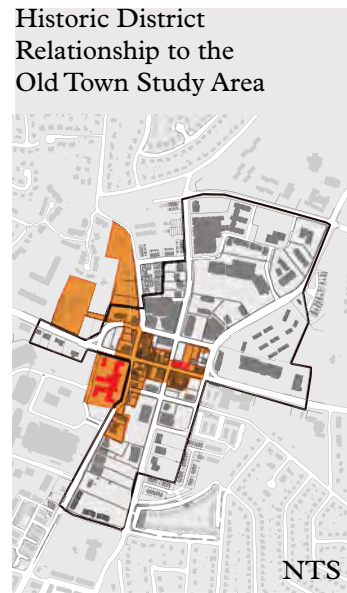
These objectives fit under the umbrella of two principal goals: (1) require high-quality, sustainable design and (2) protect and enhance historic resources.





Both goals focus on the addition and alteration of contemporary structures in the vicinity of the historic resources of Fairfax City as well as the substantive engagement with the municipality’s diverse historic fabric.

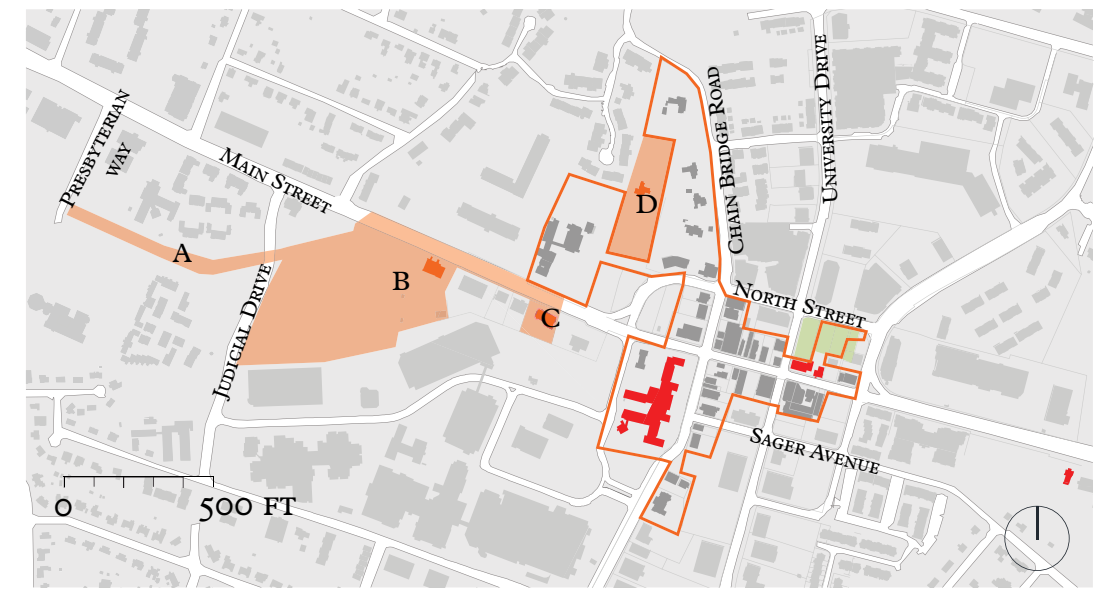
New structures are to be designed such that they respect the historic patterns of the built environment and executed in substantial and environmentally-sensitive manners. Meanwhile, the City also intends to expand upon the documentation efforts previously completed in various surveys and investigations.

Currently, the heart of the study area is dominated by the City Old Town Historic district. Regulations include restrictions on height, restrictions related to non-retail use, and design controls on signage. As properties age, the City should conduct periodi reviews of new inclusion of areas in the City of Fairfax Old Town Historic District. Moreover, as part of zoning, the city should investigate appropriateness of current regulations related to usage and height.

-  National Historic District Boundaries
-  Potentially Contributing Buildings (50+ Years)
-  Currently Contributing Buildings
-  National Register Buildings



-  Potential Expansion National Historic District Boundary
-  National Historic District Boundaries
-  National Register Buildings
-  Potentially Contributing Buildings



POTENTIAL NATIONAL REGISTER DISTRICT EXPANSION³

The 2004 historic resources survey by EHT Tracerics identified a possible expansion of the historic district. Remaining contributing resources as of 2020 to this expansion would include:

- A. Manassas Gap Railroad Bed to Presbyterian Way
- B. Fairfax Cemetery
- C. 10515 Main St
- D. The Van Dyck House at 1 Truro Lane

NATIONAL REGISTER & TAX CREDITS

The listing of these properties on the National Register is an important tool for both development and preservation. All contributing properties are eligible for application of the Virginia State Historic Rehabilitation Tax Credit and, if conditions are met per state review and approval, a renovation or restoration project would receive 25% of costs in tax credits. In addition, these contributing properties could potentially apply for federal Historic Rehabilitation of Tax Credits of 20% of project costs.

Making these incentives available for additional properties should be considered when pursuing new listings or update of existing listings.

NATIONAL REGISTER DISTRICT PAST STUDIES AND RECOMMENDATIONS

The city has five properties listed on the National Register for Historic Places. This figure does not include the Fairfax County Courthouse and Jail which, although located in the heart of downtown Fairfax City, is part of Fairfax County.

The first building in the city listed was the Radcliffe-Allison House on Main Street, whose nomination was approved in 1973. In 1987, the nomination of the Old Town Historic District was approved by the State

Historic Preservation Office. Five years later, the Tazee 29 Diner in Northfax was also listed on the National Register and later included in a Multiple Property Designation for historic diners across Virginia.

The other two properties, Blenheim and the Fairfax Public School, lie outside of the bounds of the study area. An additional property, the former residence of the city's first mayor John Wood, located at 10605 Cedar Avenue, was designated locally

with an overlay district after discussions of demolishing the structure prompted local preservation efforts. However, this historic district has since been removed as the Paul IV site was slated for planned redevelopment.



National Register Listed Properties:

1. Blenheim (*Not in Study Areas*)⁴
2. Fairfax County Courthouse⁵ (*Old Town Study Area*)
3. Ratcliffe-Allison-Pozer House⁶ (*Old Town Study Area*)
4. 29 Diner (*Northfax Study Area*)
5. Fairfax Public School (*Adjacent to Old Town Study Area*)

WINDSHIELD SURVEY INVENTORY

DHR ID# (If applicable)	Property Address	Property Name	Approx. Date of Const.	Style	Natl. Register of Historic Places? (Y/N)	Potentially Eligible or a Potentially Contributing Resource?	Notes on Preliminary Determination of Eligibility	Notes on Date of Construction
Old Town Study Area								
	4165 Chain Bridge Road	Condominium	1986	Colonial Revival	N	N	Less than 50 years old	
	4163 Chain Bridge Road	Condominium	1986	Colonial Revival	N	N	Less than 50 years old	
	4161 Chain Bridge Road	Condominium	1986	Colonial Revival	N	N	Less than 50 years old	
	4159 Chain Bridge Road	Condominium	1986	Colonial Revival	N	N	Less than 50 years old	
	4157 Chain Bridge Road	Condominium	1986	Colonial Revival	N	N	Less than 50 years old	
	4155 Chain Bridge Road	Condominium	1986	Colonial Revival	N	N	Less than 50 years old	
	4153 Chain Bridge Road	Condominium	1986	Colonial Revival	N	N	Less than 50 years old	
	4151 Chain Bridge Road	Condominium	1986	Colonial Revival	N	N	Less than 50 years old	
151-5465	4131 Chain Bridge Road	The Hill	1916	Colonial Revival	N	Y	Building may be individually eligible, but the property cannot be documented in a windshield survey due to its setback from road. It is unlikely that an expanded historic district would stretch to this location. Additional study would be necessary to determine individual eligibility. CQA is not aware of any historic studies previously prepared on this property and, although it indicates the incorrect construction date, the 2004 Traceries report also suggests a need for further study. Despite the historic nature of the property, it possesses minimal impact and legibility at the urban scale due to its setback and tree cover. With the development pressure on this site, the city has an opportunity to request/require some level of survey and documentation of this property prior to any alterations or removal.	
	4117 Chain Bridge Road		1988	Modern	N	N	Less than 50 years old	
	4103 Chain Bridge Road		1978	Modern	N	N	Less than 50 years old	
	4101 Chain Bridge Road		1960	Colonial Revival	N	N	Building is older than 50 years and it could be proposed as a part of a historic district boundary expansion. However, the building is not individually eligible and its inclusion in a historic district expansion is not likely due to distance from existing boundary.	
	4085 Chain Bridge Road	Kearney, Freeman, Fogarty, Joshi PLLC	1968	Modern	N	N	Building is older than 50 years and it could be proposed as a part of a historic district boundary expansion. However, the building is not individually eligible and its inclusion in a historic district expansion is not likely due to distance from existing boundary.	
151-0003-0003	4069 Chain Bridge Road	Barbour Building	1910	Colonial Revival	Y			
151-0003-0004	4057 Chain Bridge Road	The Law Buildings	1960	Vernacular	N	Y	2004 Traceries report and CQA survey concur that building may be eligible in a historic district update.	

WINDSHIELD SURVEY INVENTORY

DHR ID# (If applicable)	Property Address	Property Name	Approx. Date of Const.	Style	Natl. Register of Historic Places? (Y/N)	Potentially Eligible or a Potentially Contributing Resource?	Notes on Preliminary Determination of Eligibility	Notes on Date of Construction
151-0003-0005	4055 Chain Bridge Road	Second Chance Thrift Store	ca. 1925	Cape Cod	N	Y	2004 Traceries report and CQA survey concur that building may be eligible in a historic district update.	This building is not included on lot information in city database. Date from 2004 Traceries report was used.
151-0003-0006	4031 Chain Bridge Road	Legal Aid Building	1973	Colonial Revival	N	N	Less than 50 years old	
151-0003-0007	4029 Chain Bridge Road	National Bank of Fairfax	1900	Vernacular	Y			
151-0003-0008	4023 Chain Bridge Road	Oliver House	ca. 1830	Greek Revival	Y			The city assessment database states construction date of 1800, reports and historical marker indicate ca. 1830. In addition, its similiarity to the Gunnell House suggests a later date
151-0003-0009	4015 Chain Bridge Road	Jesse Building	1948	Colonial Revival	N	Y	2004 Traceries report and CQA survey concur that building may be eligible in a historic district update.	City assessment database states a date of 1914. However, the building does not appear to be in place in the 1937 aerial. Date should be
151-0003-0010	4011 Chain Bridge Road	McHugh and Hoffman	1908	Vernacular	Y			
151-0003-0011	4009 Chain Bridge Road	Rust Building	1907	Vernacular	Y			
151-0003-0012	3989 Chain Bridge Road	Leigh Building	1946	Colonial Revival	N	Y	2004 Traceries report and CQA survey concur that building may be eligible in a historic district update.	
151-0003-0013	3976 Chain Bridge Road	Dickson Building	1947	Colonial Revival	N	Y	2004 Traceries report and CQA survey concur that building may be eligible in a historic district update.	
151-0003-0014	3977 Chain Bridge Road	Ford Building	ca. 1835	Late Federal	Y			
151-0003-0015	3971 Chain Bridge Road	Ramparts	1950	Vernacular	N	Y	2004 Traceries report and CQA survey concur that building may be eligible in a historic district update.	The city assessment database states a construction date of 1800, this is clearly incorrect. Building first appears on 1953 aerial. Unclear if 10455 North Street and this property were constructed as a single building. Two different DHR numbers have been assigned to these addresses, however there is no apparent evidence that these are separate buildings. The city assessment database has the incorrect date for
151-0003-0016	3970 Chain Bridge Road	Marsh House	1930	Vernacular Colonial Revival	Y			
	3955 Chain Bridge Road	Old Town Village	2007	Colonial Revival	N	N	Less than 50 years old	
151-0003-0017	3950 Chain Bridge Road	Moore House	ca. 1840	Vernacular	Y			City assessment database states a date of 1895, however this appears to refer to the alterations, not the initial construction. The Moore House is indicated on the 1879 Hopkins map.

WINDSHIELD SURVEY INVENTORY

DHR ID# (If applicable)	Property Address	Property Name	Approx. Date of Const.	Style	Natl. Register of Historic Places? (Y/N)	Potentially Eligible or a Potentially Contributing	Notes on Preliminary Determination of Eligibility	Notes on Date of Construction
151-0003-0018	3936 Chain Bridge Road	Petersen House	1949	Contemporary Ranch	N	Y	2004 Traceries report and CQA survey concur that building may be eligible in a historic district boundary expansion.	
151-5454	10533 Main Street		1963	Colonial Revival	N	Y	CQA survey determines that building may be eligible in a historic district boundary expansion.	2004 Traceries report lists building as Non-Contributing, but also indicates a construction date of 1980.
151-5456	10523 Main Street	Infinite Technologies	1971	Modern	N	N	Less than 50 years old	
151-5457	10515 Main Street	Oud Resto & Hall	1970	Other	N	N	Although 50 years old, CQA survey determines that building lacks sufficient integrity to be included in a historic district boundary expansion.	
151-5458	10501 Main Street	Wells Fargo	1986	Colonial Revival	N	N	Less than 50 years old	
151-0003-0027	10440 Main Street	Bank of America	1932, 1937	Colonial Revival	Y			Hyphen addition constructed between 1960 and 1976 connected the 1931 building to the adjacent 1937 building. Additional study
151-0003-0028	10428 Main Street	Roseberry & Foster Bonding Co.	1945	Vernacular	N	Y	2004 Traceries report and CQA survey concur that building may be eligible in a historic district update.	
151-0003-0029	10418-10426 Main Street	Cake Shop	1955	Commercial Style	N	Y	2004 Traceries report and CQA survey concur that building may be eligible in a historic district update.	
151-0003-0030	10423 Main Street	Gas Station	1954	Commercial Style	N	Y	2004 Traceries report and CQA survey concur that building may be eligible in a historic district update.	
151-0003-0031	10417 Main Street	Graham Building	1930	Vernacular	Y			
151-0003-0032	10416 Main Street	Hav-A-Bite	1900	Commercial Vernacular	Y			
151-0003-0033	10414 Main Street	Eastwind	1900	Commercial Vernacular	Y			
151-0003-0034	10409 Main Street	Hazel Building	ca. 1935	Commercial Vernacular	N	Y	2004 Traceries report and CQA survey concur that building may be eligible in a historic district update.	City assessment database states date of 1945. Historic 1937 aerial shows this building already in place. Noted a date of circa 1935 accordingly.
151-0003-0035	10412 Main Street	Executive Press	1900	Commercial Vernacular	Y			
151-0003-0036	10410 Main Street	National Security	1938	Commercial Vernacular	Y			
151-0003-0037	10400 Main Street	Fairfax Herald Building	1900	Commercial	Y			
151-0003-0038	10403-07 Main Street	Ellicott Building	1910	Commercial Vernacular	Y			Recommend additional investigation to determine if 10403 and 10407 were constructed as separate dates
151-0003-0039	10385 Main Street	Victorian Square	ca. 1895, 1985	Contemporary	N	N	Property is non-contributing due to significant alterations dating to 1985.	City assessment database does not distinguish this property from 10381 Main Street.
151-0003-0052	10382 Main Street	The Coddling Building / Former Baptist Church	1928	Vernacular	N	Y	2004 Traceries report and CQA survey concur that building may be eligible in a historic district update.	

WINDSHIELD SURVEY INVENTORY

DHR ID# (If applicable)	Property Address	Property Name	Approx. Date of Const.	Style	Natl. Register of Historic Places? (Y/N)	Potentially Eligible or a Potentially Contributing Resource?	Notes on Preliminary Determination of Eligibility	Notes on Date of Construction
151-0003-0040	10381 Main Street	Part of Victorian Square	1890	Vernacular Queen Anne	Y			Appears that this property is combined with 10385 on the assessment database, unclear if the date applies to this building or the other address
151-0003-0041	10386 Main Street	Ratcliffe-Allision-Pozer House	ca. 1805	Vernacular	Y			No date information provided on City Assessment database
151-0003-0042	10386R Main Street	House	1927	Colonial Revival	Y			City database does not include the addition.
151-0003-0043	10376 Main Street	Exotica Florist	ca. 1925	Bungaloid	Y			Property not included on city's assessment database.
151-0003-0044	10364 Main Street	Draper House	1821	Federal	Y			
	10250-10344 Main Street	Main Street Shopping Center	ca. 2000	Contemporary Commercial	N	N	Less than 50 years old	
151-0003-0047	3995 University Drive	Old Town Hall	1900	Colonial Revival	Y			
151-0003-0048	3988 University Drive	Old Firehouse	ca. 1932	Vernacular	Y			
151-0003-0053	10455 North Street	City Cleaners	ca. 1950	Commercial Vernacular	N	Y	2004 Traceries report and CQA survey concur that building may be eligible in a historic district update.	Unclear if 3971 Chain Bridge Rd and this property were constructed as a single building. Two different DHR numbers have been assigned to these addresses, however, there is no apparent evidence that these are separate buildings. The city assessment database has the incorrect date for 3971 Chain Bridge and no date for 10455 North Street. Suggest removing this entry.
	10435 North Street	Office/Ice Cream Shop	1949	Modern	N	N	Although 50 years old, windshield survey suggests that insufficient integrity exists to include property in historic district update. Recommend inclusion in future study.	
	10427 North Street		2007	Modern	N	N	Less than 50 years old	
	10415 North Street	Old Town Square	2015	Modern	N	N	Less than 50 years old	
	10360 North Street	Fairfax Regional Library	2007	Colonial Revival	N	N	Less than 50 years old	
151-0003-0050	3940 Old Lee Highway	Draper House outbuilding	1900	Other	N	Y	2004 Traceries report and CQA survey concur that building may be eligible in a historic district update.	This structure/address is not in the city assessment database.
151-0003-0051	3936 Old Lee Highway	Surf Shop	1920	Barn	N	N	Site slated for redevelopment	
	3929 Old Lee Highway		1989	Colonial Revival	N	N	Less than 50 years old	

WINDSHIELD SURVEY INVENTORY

DHR ID# (If applicable)	Property Address	Property Name	Approx. Date of Const.	Style	Natl. Register of Historic Places? (Y/N)	Potentially Eligible or a Potentially Contributing Resource?	Notes on Preliminary Determination of Eligibility	Notes on Date of Construction
	3927 Old Lee Highway		1989	Colonial Revival	N	N	Less than 50 years old	
	3925 Old Lee Highway		1989	Colonial Revival	N	N	Less than 50 years old	
	3924 Old Lee Highway		1974	Commercial	N	N	Less than 50 years old	
	3923 Old Lee Highway		1989	Colonial Revival	N	N	Less than 50 years old	
	3922 Old Lee Highway		1974	Commercial	N	N	Less than 50 years old	
	3921 Old Lee Highway		1989	Colonial Revival	N	N	Less than 50 years old	
	3919 Old Lee Highway		1989	Colonial Revival	N	N	Less than 50 years old	
	3917 Old Lee Highway		1989	Colonial Revival	N	N	Less than 50 years old	
	3915 Old Lee Highway		1989	Colonial Revival	N	N	Less than 50 years old	
	3913 Old Lee Highway		1989	Colonial Revival	N	N	Less than 50 years old	
	3911 Old Lee Highway		1989	Colonial Revival	N	N	Less than 50 years old	
	3903 Old Lee Highway		1930	Bungalow	N	Y	CQA windshield survey indicates sufficient integrity and age to include in historic district boundary expansion. Further study needed to confirm that boundary expansion could stretch to include this property. Not previously recorded in earlier historic studies.	
	10500 Sager Ave		1976	Modern	N	N	Less than 50 years old	
	4085 University Drive	GMU Commerce Building	1971	Postmodern	N	N	Less than 50 years old	
	4084 University Drive		1973	International Style	N	N	Less than 50 years old	
	4081 University Drive	Fairfax Volunteer Fire Department	1965	Postmodern	N	N	Although more than 50 years old, CQA study suggests that the property would not warrant a historic district boundary expansion.	
	4041 University Drive		1972	Postmodern	N	N	Less than 50 years old	
	4031 University Drive		1974	Postmodern	N	N	Less than 50 years old	
	4021 University Drive		1972	Colonial Revival	N	N	Less than 50 years old	
	4020 University Drive		1976	Modern	N	N	Less than 50 years old	
	4010 University Drive		1982	Postmodern	N	N	Less than 50 years old	
	3975 University Dr		1986	Modern	N	N	Less than 50 years old	
	3801 University Dr		2009	Modern	N	N	Less than 50 years old	
	10302-10396 Willard Way	Courthouse Plaza	1978	Commercial	N	N	Less than 50 years old	
	3883 Plaza Dr		1980	Colonial Revival	N	N	Less than 50 years old	
	3875 Plaza Dr		1982	Colonial Revival	N	N	Less than 50 years old	
	3835 Plaza Dr		1980	Colonial Revival	N	N	Less than 50 years old	
	10398 Democracy Ln		ca.1980	Colonial Revival	N	N	Less than 50 years old	
	10340 Democracy Ln		1980	Postmodern	N	N	Less than 50 years old	
	10329 Democracy Ln		1984	Colonial Revival	N	N	Less than 50 years old	
	10301 Democracy Ln		1985	Postmodern	N	N	Less than 50 years old	
	10486 Armstrong Dr	Condominium	1986	Colonial Revival	N	N	Less than 50 years old	
	10484 Armstrong Dr	Condominium	1986	Colonial Revival	N	N	Less than 50 years old	
	10482 Armstrong Dr	Condominium	1986	Colonial Revival	N	N	Less than 50 years old	

WINDSHIELD SURVEY INVENTORY

DHR ID# (If applicable)	Property Address	Property Name	Approx. Date of Const.	Style	Natl. Register of Historic Places? (Y/N)	Potentially Eligible or a Potentially Contributing	Notes on Preliminary Determination of Eligibility	Notes on Date of Construction
	10480 Armstrong Dr	Condominium	1986	Colonial Revival	N	N	Less than 50 years old	
	10476 Armstrong Dr	Condominium	1986	Colonial Revival	N	N	Less than 50 years old	
	10474 Armstrong Dr	Condominium	1986	Colonial Revival	N	N	Less than 50 years old	
	10472 Armstrong Dr	Condominium	1986	Colonial Revival	N	N	Less than 50 years old	
	10470 Armstrong Dr	Condominium	1986	Colonial Revival	N	N	Less than 50 years old	

Fairfax Historic District resources outside of the Old Town SAP boundaries (included for reference only)

151-0003-0011	4000 Chain Bridge Road	Fairfax County Courthouse	1800	Roman Revival	Y			
151-0003-0019	3920 Chain Bridge Road	Fabio House	1880	Vernacular	Y		City assessment database has a date of 1915. NR nomination form cites residence of the building by a Capt. Donahoe in the late 19th century, suggesting that the building must be earlier than 1915.	
151-0003-0020	3906 Chain Bridge Road	McCandlish House	1928	Colonial Revival	Y			
151-0003-0021	3820 Chain Bridge Road	Prichard House	1916	Colonial Revival	Y			
151-0003-0022	10520 Main Street	Truro Rectory	1835/ 1911	Greek Revival	Y		City assessment database does not include each building on Truro campus as a discrete entry. Insufficient date information to coordinate each resource.	
151-0003-0023	10520 Main Street	Truro Church	1958	Colonial Revival	N	Y		
151-0003-0024	10520 Main Street	Truro Church School	1965	Colonial Revival	N	Y		
151-0003-0025	10520 Main Street	Truro Church	1953	Colonial Revival	N	Y		
151-0003-0026	10520 Main Street	Truro Chapel	1933	Colonial Revival	Y			

Northfax Study Area								
	10620 Fairfax Boulevard	DARCARS	1962	Modern	N	N	Building is older than 50 years, but it is not individually eligible and its inclusion in a new NR historic district unlikely due to heavy alterations of surrounding area.	
	10590 Fairfax Blvd	Brown's Mazda; Second	1981	Modern	N	N	Less than 50 years old	
	10570 Fairfax Boulevard	Brown's Mazda	1961	International	N	N	Building is older than 50 years, but it is not individually eligible and its inclusion in a new NR historic district unlikely due to heavy alterations of surrounding area.	
151-5230	10550 Fairfax Boulevard	Ahn's Autobahn Auto Repair	1960	Modern	N	N	2015 Dovetail report and CQA survey concur that building would not be eligible for listing.	
151-0039	10536 Fairfax Boulevard	29 Diner	1947	Moderne	Y			A secondary resource is located on the property, but not identified individually on the city assessment database.
151-5228	10530 Fairfax Boulevard	Auto Bank II	1950	Other	N	N	2015 Dovetail report and CQA survey concur that building would not be eligible for listing.	
	10480 Fairfax Blvd	Exxon Gas Station	1994	Commercial	N	N	Less than 50 years old	
	10470 Fairfax Blvd	Former Bank of America	1960	Other	N	N	Building is older than 50 years, but it is not individually eligible and its inclusion in a new NR historic district unlikely due to heavy alterations of surrounding area.	

WINDSHIELD SURVEY INVENTORY

DHR ID# (If applicable)	Property Address	Property Name	Approx. Date of Const.	Style	Natl. Register of Historic Places? (Y/N)	Potentially Eligible or a Potentially Contributing Resource?	Notes on Preliminary Determination of Eligibility	Notes on Date of Construction
	10460 Fairfax Blvd	McKay Chevrolet	1967	Auto Dealership	N	N	Building is older than 50 years, but it is not individually eligible and its inclusion in a new NR historic district unlikely due to heavy alterations of surrounding area.	
	10342-10412 Fairfax Blvd	Point 50 Shopping Center	2020	Other	N	N	Less than 50 years old	
	10400 Eaton Pl	10400 Eaton Place Office	1978	Modern	N	N	Less than 50 years old	
	10306 Eaton Pl	Willow Wood 1	1987	Modern	N	N	Less than 50 years old	
	10304 Eaton Pl	Willow Wood 2	2000	Modern	N	N	Less than 50 years old	
	10302 Eaton Pl	Willow Wood 2	2000	Modern	N	N	Less than 50 years old	
	10300 Eaton Pl	Willow Wood 1	1987	Modern	N	N	Less than 50 years old	2015 Dovetail report indicated a date of 1975 and excluded the resource from the survey.
151-5514	3575 Chain Bridge Rd	Vacant Commercial Building	1960	Modern	N	N	Building is older than 50 years, but it is not individually eligible and its inclusion in a new NR historic district unlikely due to heavy alterations of surrounding area.	
	3565 Chain Bridge Rd	Fairfax Harbor RE	2011	Postmodern	N	N	Less than 50 years old	
	3541-45 Chain Bridge Rd	Fairfax LTD II LLC	1973	Modern	N	N	Less than 50 years old	
	3535 Chain Bridge Rd	Best Western Hotel	1970	Modern	N	N	Building is older than 50 years, but it is not individually eligible and its inclusion in a new NR historic district unlikely due to heavy alterations of surrounding area.	
	3529 Chain Bridge Rd	Moose Lodge #2168	1973	Tudor Revival	N	N	Less than 50 years old	
	3570 Chain Bridge Rd	Bombay Bistro	1973	Restaurants	N	N	Less than 50 years old	
	3560 Chain Bridge Rd	Shell Gas Station	1962	Colonial Revival	N	N	Building is older than 50 years, but it is not individually eligible and its inclusion in a new NR historic district unlikely due to heavy alterations of surrounding area.	
	3554 Chain Bridge Rd	3554 Chain Bridge Rd Office	1986	Postmodern	N	N	Less than 50 years old	
	10514 Orchard St	Single Family Home	1955	Rambler	N	N	Building is older than 50 years, but it is not individually eligible and its inclusion in a new NR historic district unlikely due to heavy alterations of surrounding area.	
	10513 Orchard St	Single Family Home	1960	Rambler	N	N	Building is older than 50 years, but it is not individually eligible and its inclusion in a new NR historic district unlikely due to heavy alterations of surrounding area.	
151-5468	10500 Orchard Street	Washington, Arlington and Falls Church	1904	Other	N	N	determined that due to severe alterations the resource lacks the integrity to be eligible for listing. CQA was unable to determine	

WINDSHIELD SURVEY INVENTORY

GENERAL NOTE:

The “Potentially Eligible or Potentially Contributing Resource” column of the Inventory is a synthesis of the age, integrity, and condition information based on our windshield survey and the prior historic documentation reports. A firm, elaborated statement of integrity and condition on individual properties requires an intensive-level survey of all properties. We would recommend that any alterations to those currently listed properties or those indicated as potentially contributing or eligible (with a “Y” in either column) be reviewed carefully through a lens of historic preservation regardless of whether they are currently contributing resources to the national HD. The existing overlay district provides the city with all necessary powers and processes for these efforts in Old Town. Further, we will recommend an Intensive Survey to update and expand the City of Fairfax National Register Historic District. As for NorthFax, no properties beyond the 29 Diner are currently or potentially individually eligible nor is there a potential historic district in the study area. Therefore, in NorthFax, we do not foresee any necessity for historic preservation review outside of this single property. We would recommend that this property be added to the local historic register for necessary review and protection.

ADDITIONAL RESOURCES:

- Trieschmann, L. (2004). “HISTORIC PROPERTY SURVEY UPDATE OF THE CITY OF FAIRFAX, VIRGINIA”. EHT Traceries Retrieved from https://www.dhr.virginia.gov/pdf_files/SpecialCollections/FX-404_Historic_Properties_Survey_City_Fairfax_2004_Traceries_report.pdf
- Proper, E., Manning, M. C., & Blondino, J. (2016, March). “PHASE I CULTURAL RESOURCE SURVEY OF THE CHAIN BRIDGE ROAD SIDEWALK PROJECT AREA, CITY OF FAIRFAX, VIRGINIA.” Retrieved from <https://www.fairfaxva.gov/home/showdocument?id=6943>
- Jones, J. B., & Carlson-Drexler, C. G. (2008). “Fairfax Courthouse, 1861-1865: Civil War Archeological Resources in the City of Fairfax, Virginia (2008).” The William and Mary Center for Archeological Research. Retrieved from https://www.dhr.virginia.gov/pdf_files/SpecialCollections/FX-485_FairfaxCH_Civil_War_AE_Rsources_2008_WMCAR_Summary%20Booklet.pdf
- Lesiuk, A., Jacobe, S., Barile, K., & Staton, H. D. (2015, April). “Architectural Survey of the Proposed I-66 Corridor Improvemnts. Tier 2 Environmental Assessment, Fairfax and Prince William Counties and the City of Fairfax Virginia.” Dovetail Cultural Group, Retrieved June 01, 2020, from http://outside.transform66.org/documents/tier-2-technical-reports/ArchitecturalSurveyManagementSummary_I-66Tier2.pdf Resource for historic eligibility in NorthFax area.

Endnotes

- 1 City of Fairfax Design Guidelines, 24 July 2018
- 2 Ibid
- 3 Proper, E., Manning, M. C., & Blondino, J. (2016, March). PHASE I CULTURAL RESOURCE SURVEY OF THE CHAIN BRIDGE ROAD SIDEWALK PROJECT AREA, CITY OF FAIRFAX, VIRGINIA. Retrieved from <https://www.fairfaxva.gov/home/showdocument?id=6943>
- 4 “Bleheim” Aurbanski, Wikipedia 19 December 2010
https://commons.wikimedia.org/wiki/File:Blenheim_003.jpg Wikipedia Commons
- 5 “Fairfax Public School” Slowking4, Wikipedia 25 August 2012
<https://commons.wikimedia.org/wiki/File:Fairfax-public-school037.JPG> Wikipedia Commons
- 6 “29 Diner Panorama” Idawriter, Wikipedia 29 June 2010
https://commons.wikimedia.org/wiki/File:29_Diner_-_panoramio.jpg

OTHER APPENDICES

A. MARKET SUPPLEMENTS & REPORTS

1. History of Select Development Projects in the City of Fairfax
2. Recent commercial sales
3. Reference Map & City Owned Property

B. DESIGN RESEARCH SUPPLEMENTS

1. Highlighted City of Fairfax Sustainability Goals
2. Future Sustainability Focus
3. Sustainability Case Studies
4. Stormwater Capture and Pollution

C. TRANSPORTATION SUPPLEMENTS

1. Eaton Place Road Diet Memo
2. Old Town & NorthFAX Trip Generation Estimate Memo
3. Orchard Street Pedestrian Crossing Memo

D. COMMUNITY + STAKEHOLDER FEEDBACK

1. Community Townhall- Public Meeting Notes
2. Community Townhall - Public Meeting Comments
3. Joint Work Session Comments
4. Community Residential Meeting - NorthFAX
5. Community Charette - NorthFAX Comments
6. Community Charette - NorthFAX Community Maps

MARKET SUPPLEMENTS & REPORTS

HISTORY OF SELECT DEVELOPMENT PROJECTS IN THE CITY OF FAIRFAX

The majority of recent developments in the City are not by-right and have required zoning amendments and special exceptions during the entitlement process. Representative examples of different types of redevelopment projects provided below highlight: a change in approved uses; treatment of a mix of uses and product type; special exceptions (primarily for height maximums); treatment of affordable housing, utilities and other community requirements; rezoning and Comprehensive Plan amendments. Six projects which were approved within the last six years were reviewed to help inform implementation of the Small Area Plans.



PROJECT NAME

**The Enclave
9493 Silver King Court**

PROJECT FACTORS

In 2014, IDI-RJL began the process to replaced three planned office buildings on 3.8 acres deemed no longer economically viable with 80 condos in two 4-story buildings each above a one-level parking garage with a total of 128 spaces (70 underground garage and 58 surface) and a village green / open space. Construction began in 2016 and units started to deliver in 2018. Unit breakdown is 16 one-bedrooms (751sf), 48 two-bedroom (995-1,534sf) and 16 three-bedrooms (1,450-1,501sf).

KEY TAKEAWAYS

1. Change in Approved Uses from Office to Multifamily
2. Density: 21 units / acre and approximately a 1.0 FAR (floor area ration)
3. Parking Ratio: 1.6 spaces per unit
4. Special Exception for Building Height: Building height of 68 feet is above the maximum of 60 feet.
5. Developer Contributions (\$): The developer contributed funding to public schools, parks and recreation, and to affordable housing.



**Mount Vineyard
3971 Oak Street**

In 2018, Pulte Homes delivered the redevelopment of the 6-acre former 110-unit Oak Knolls apartment complex along Main and Oak Streets into 132 total units. There are two 4-story, 32-unit condominium buildings with elevators; 38 stacked condo units and 30 22-foot wide townhomes that ranged in size from 1,419 to 3,001sf (102 condos and 30 townhomes). A total of 290 parking spaces are provided (80 garage, 74 surface plus private garages).

1. Redevelopment of an Existing Multifamily Facility: 32 net new units
2. Density: 22 units / acre and an estimated 0.80 FAR
3. Diverse Product Type: Stacked condos, elevator building condos and townhomes
4. Integrated Open Space Features (fronting the street and interior to the facility)
5. Parking Ratio: 2.2 spaces per unit
6. Developer Contributions (\$): The developer funded all undergrounded utilities on site and in the adjacent rights of way on Oak and Main streets, constructed a bus shelter, donated money for improvements in nearby Pat Rodio Park and contributed funding to affordable housing. In addition, the developer is also making streetscape improvements, providing a pedestrian connection to the park and reducing about 95 percent of the site's surface water flow.



**Point 50
10334 Fairfax Boulevard
(Northfax Small Area Plan)**

Approved in 2017, Regency Centers shopping center redevelopment project began construction in 2019. Regency Centers is redeveloping the 6.27-acre 68,500 square foot Fairfax Shopping Center that was built in 1951 into a 48,200 square foot multiple building shopping center to include a 30,000 square foot Whole Foods / 365 grocery anchor. The project is situated on 6.27 acres and has a total of 322 parking spaces (note that this exceeds the maximum parking requirement of 269 spaces so the applicant was required to provide pervious pavers for certain spaces per zoning ordinance requirements).

1. Example of a Shopping Center Redevelopment
2. By-Right Land Use
3. Reduction in Density: Point 50 represents a decrease in size by approximately 20,000 square feet. This results in a reduction in density from 0.25 FAR to 0.18 FAR. At 48,800 square feet, less than 60 percent of the 82,268 square feet approved by-right gross floor area is being developed.
4. Parking Ratio: approximately 6.5 spaces per 1,000 square feet
5. Five Special Exceptions Required: All design related primarily pertaining to landscaping, front yard setbacks and sidewalk width.

MARKET SUPPLEMENTS & REPORTS

PROJECT NAME

PROJECT FACTORS

KEY TAKEAWAYS



Scout on the Circle 9450 Fairfax Boulevard

Approved in 2014, Combined Properties is in the process of redeveloping the 1960's Fairfax Circle Plaza Shopping Center into a mixed-use development comprising a 5-story 400-unit apartment building (6 percent affordable units), 29,000 square feet of retail on the first level divided between two buildings, and a 54,000 square foot free standing Giant Food store with pharmacy and two parking garages with a total of 1,072 spaces (640 residential spaces and 432 commercial spaces).

1. Market Rate Mixed-Use Redevelopment of a Shopping Center: Common mixed-use development comprising 4-5 stories of residential units on top of street level retail (and sometimes a parking podium).
2. Transient-Oriented Development: The location offers convenient access to multiple modes of transportation – a short walk to the Vienna Metrorail station, regional bike trails, and access to I-66. In addition, the site is at a prominent intersection and bound on all sides by major road.
3. Redevelopment Density: With 8.81 acres, the new mixed-use development has a 1.35 FAR.
4. Parking Ratio: 1.6 spaces per residential unit and 5.2 spaces per 1,000 square feet of commercial space.
5. Provides Mandatory Six Percent Affordable Housing Units
6. Timeframe: Redevelopment planning began over 20 years ago (after the arrival of Metrorail) in the 1990s. Lease expirations, market factors, community input, etc. all contributed to the long gestion period preceding redevelopment.



Capstone Collegiate 3807 University Drive (Old Town Small Area Plan)

Capstone Collegiate is planning to redevelop multiple low-rise office buildings with a total of 82,818 square feet surrounded by surface parking situated on 6.15 acres (0.31 FAR) into two connected four and five-story multifamily buildings totaling close to 420,000 square comprising 275 units (825 student maximum capacity) and a five-story 737+ space parking structure (231,500 sf). The project was approved in late 2018 and construction is currently in the site plan approval process.

1. Redevelopment of Office Use to Residential
2. Redevelopment Density: 45 units / acre; an estimated 1.6 FAR
3. Parking Ratio: 0.9 per student at maximum capacity; 2.7 spaces / unit
4. Rezoning: From the subject site's existing CR – Commercial Retail and Architectural Control Overlay District to PDR – Planned Development Residential and Old Town Fairfax Transition Overlay District, to allow development of multi-family housing.
5. 2035 Comprehensive Plan Amendment: Modify Future Land Use Map for the subject site from Business-Commercial District to Residential-High District.
6. Special Exception: To allow a modification of the forty eight (48) foot maximum building height within the Old Town Fairfax Transition Overlay District. Topography allowed for increased gross building area within the height restrictions.
7. Developer Contributions: Bus shelter improvements.

MARKET SUPPLEMENTS & REPORTS

RECENT COMMERCIAL SALES

Below is a chart describing recent commercial sales from 2017 - 2019 in the NorthFaz and Old Town Study Areas.

Summary of Recent Commercial Sales 2017 - 2019

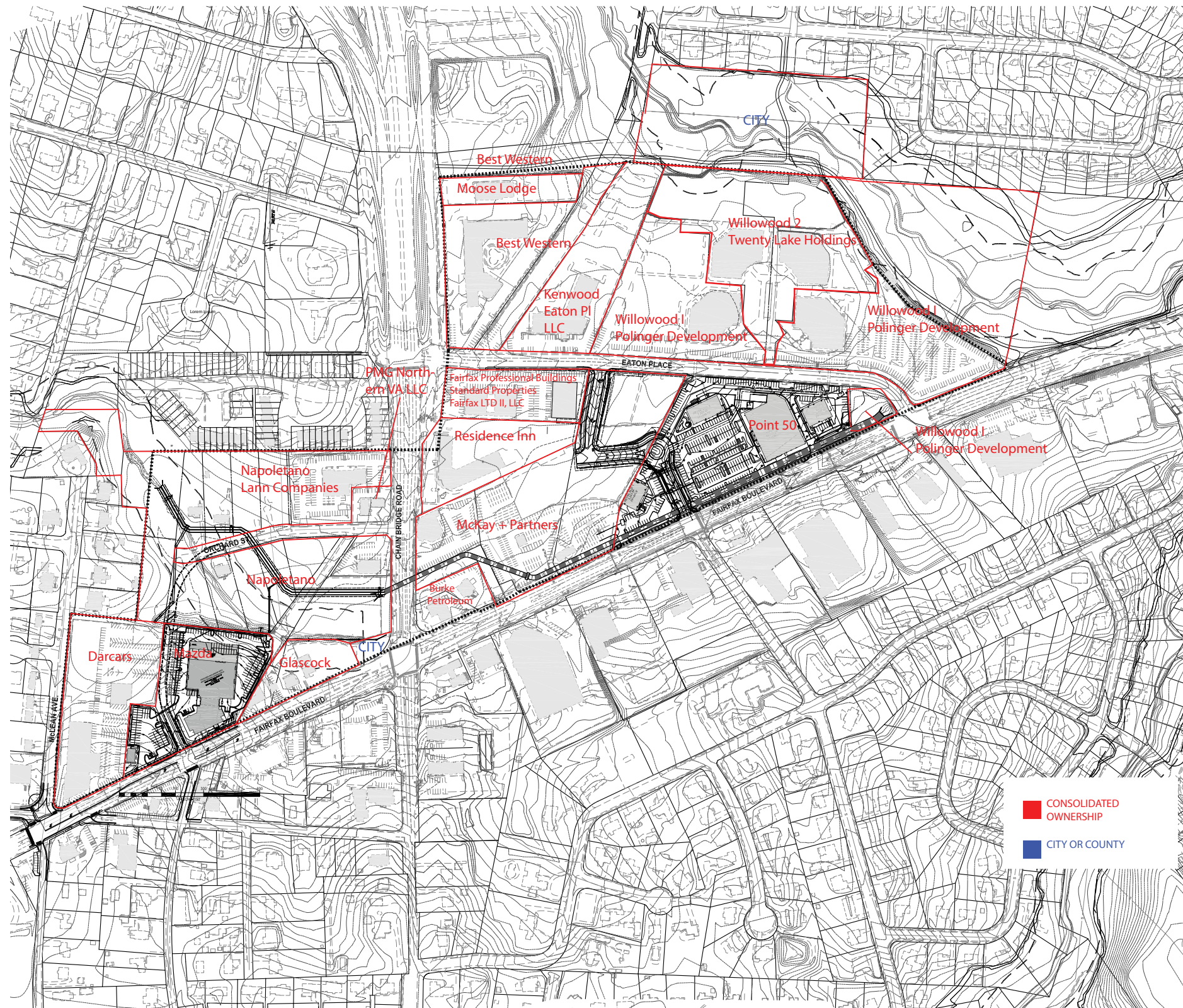
Use Description	Address	Year Built	Zoning	Land SF	Building SF	# Rooms / Units	FAR	Sale Date	Price	Price			Potential FAR ¹	\$ Potential FAR	2019 Tax Assessment			
										Land SF	Bldg SF	Room / Unit			Land	Building	Total	% Land
Apartments (Ivy Cardinal Court)	10801 Harvey Drive	1959	MF	125,932	58,320	60	0.46	3/5/2018	\$12,500,000	\$99	\$214	\$208,333	503,728	\$25	\$2,400,000	\$9,224,300	\$11,624,300	20.6%
Hotel (Marriott Res Inn) - in Northfax	3565 Chain Bridge Rd	2011	CR	111,218	106,080	155	0.95	7/31/2017	\$25,350,000	\$228	\$239	\$163,548	444,871	\$57	\$4,448,700	\$16,122,400	\$20,571,100	21.6%
Bank (United Bank) - in Old Town	4021 University Drive	1972	CR	21,395	7,344		0.34	7/25/2018	\$4,825,000	\$226	\$657		85,580	\$56	\$962,800	\$2,742,700	\$3,705,500	26.0%
Hotel (Hampton Inn)	10860 Fairfax Blvd	1990	CR	61,202	41,725	86	0.68	6/3/2019	\$7,770,000	\$127	\$186	\$129,500	244,807	\$32	\$2,448,100	\$5,808,300	\$8,256,400	29.7%
Office - in OT	4084 University Drive	1973	CO	44,863	33,220		0.74	3/30/2017	\$5,050,000	\$113	\$152		179,452	\$28	\$1,794,500	\$3,678,700	\$5,473,200	32.8%
Retail - in Old Town (vacant club)	10422-6 Main Street	1955	CR	14,183	19,489		1.37	4/30/2018	\$1,850,000	\$130	\$95		56,733	\$33	\$638,200	\$1,177,300	\$1,815,500	35.2%
Shopping Center (former Shop & Go)	11123 Lee Highway	1988	CR	79,505	27,400		0.34	3/4/2019	\$5,800,000	\$73	\$212		318,019	\$18	\$3,180,200	\$3,466,400	\$6,646,600	47.8%
Shopping Center (Fairfax Junction)	11001 Lee Highway	1980s	CR	309,084	80,786		0.26	2/8/2019	\$22,521,000	\$73	\$279		1,236,336	\$18	\$9,272,500	\$9,013,000	\$18,285,500	50.7%
Hotel (Holiday Inn Express)	10327 Fairfax Blvd	1985	CR	74,643	34,002	79	0.46	4/13/2018	\$8,750,000	\$117	\$257	\$110,759	298,572	\$29	\$4,637,200	\$2,985,700	\$7,622,900	60.8%
Bank (Wells Fargo) - in Old Town	10501 Main Street	1986	CG	36,659	3,721		0.10	8/16/2017	\$3,700,000	\$101	\$994		146,635	\$25	\$2,016,200	\$1,044,300	\$3,060,500	65.9%
Rest / Bombay Bistro - in Northfax	3570 Chain Bridge Rd	1973	CR	21,424	3,108		0.15	5/29/2019	\$1,850,000	\$86	\$595		85,696	\$22	\$857,000	\$434,400	\$1,291,400	66.4%
Retail (now Next Day Blinds)	11085 Lee Highway	1964	CR	43,400	5,250		0.12	12/27/2017	\$3,900,000	\$90	\$743		173,601	\$22	\$1,736,000	\$868,800	\$2,604,800	66.6%
Retail (Karate)	9590 Lee Highway	1970	CR	29,129	5,075		0.17	1/23/2019	\$2,307,000	\$79	\$455		116,516	\$20	\$1,200,000	\$581,700	\$1,781,700	67.4%
Bank (Capital One)	10100 Main Street	2006	CO	38,912	4,109		0.11	1/25/2019	\$2,000,000	\$51	\$487		155,648	\$13	\$1,459,200	\$276,000	\$1,735,200	84.1%
Restaurant (Espositos Pizza)	9917 Fairfax Blvd	1978	CR	49,963	4,735		0.09	3/28/2018	\$2,100,000	\$42	\$444		199,852	\$11	\$1,998,500	\$145,900	\$2,144,400	93.2%

¹ Potential FAR = 5 Stories so 80% (20% deduct to account for setbacks, access, etc.) of the land area is multiplied by 5

Sources: City of Fairfax Real Estate Assessment Database and Bolan Smart, 12/2019

MARKET SUPPLEMENTS & REPORTS REFERENCE MAP & CITY OWNED PROPERTY

Below is a reference map showing property consolidation and shared ownership as of January 2020 in NorthFaz.



City Owned Property NORTHFAX GATEWAY CORNER



10500 Fairfax Boulevard

Existing Property Characteristics

Site Area (sf)	8,977
Tax ID: 57-2-02-016 (acres)	0.206
Parcel Shape	Irregular / rectangular
Location	Gateway intersection with high visibility
Access	Challenged - westbound Rt 50 right turn only after busy intersection
Utilities	Available
Existing Improvements	Vacant land, access road to adjoining parcel to the north
Year Built	N/A
Physical Condition	No significant improvements

Use Conditions

Prior Use	Vacant Land
Current Zoning	CR - Commercial Retail
Existing Land Use	Vacant / Surface Parking
Adjacent Land Uses	North: Storm water culvert South: Retail East: Retail West: Auto-related retail
Potential Redevelopment SF (est)	None

Value Indicators

2020 Tax Assessment	\$359,100
Sale History	8/14/2006 for \$1.2M

Economic Feasibility Checklist

Market Supported Land Uses	Possible transferable development rights (TDRs) for fee
Transformational Potential	No
Economically / Financially Viable	No
Regulatory Permissible	Yes
Community Acceptable	Yes
Historic Preservation	No
Design Factors	Integrate with adjoining land area
Parking	N/A
Other	N/A

Implementation Factors

Property Owner Motivation	Neutral
End User Marketability	None
Redevelopment Cost Hurdles	None
Community Benefit	Improved open space?
Regulatory / Incentives / Etc.	None
Fiscal Impact Potential	None

Plan Recommended Uses

Stand Alone: No redevelopment potential. Signage or arts potential.
Block Consolidation: Convey to adjoining land owner for signage or arts potential. Possible transfer of density (TDRs)?

DESIGN RESEARCH SUPPLEMENTS

A. MARKET SUPPLEMENTS & REPORTS

1. History of Select Development Projects in the City of Fairfax
2. Recent commercial sales
3. Reference Map & City Owned Property

B. DESIGN RESEARCH SUPPLEMENTS

1. Highlighted City of Fairfax Sustainability Goals
2. Future Sustainability Focus
3. Sustainability Case Studies
4. Stormwater Capture and Pollution

C. TRANSPORTATION SUPPLEMENTS

1. Eaton Place Road Diet Memo
2. Old Town & NorthFax Trip Generation Estimate Memo
3. Orchard Street Pedestrian Crossing Memo

D. COMMUNITY + STAKEHOLDER FEEDBACK

1. Community Townhall- Public Meeting Notes
2. Community Townhall - Public Meeting Comments
3. Joint Work Session Comments
4. Community Residential Meeting - NorthFax
5. Community Charette - NorthFax Comments
6. Community Charette - NorthFax Community Maps

DESIGN RESEARCH SUPPLEMENTS

HIGHLIGHTED CITY OF FAIRFAX SUSTAINABILITY GOALS

Below are highlighted adopted sustainability goals per Comprehensive Plan & Solid Waste Management Plan. These are important to consider integrating in future studies of the small area plans and in conjunction with the future Sustainability Plan.

- **Comprehensive Plan Energy Reduction Goals**
 - o 100% renewable for government operations by 2035;
 - o 100% community wide renewable by 2050
 - o Reduce existing facilities energy usage by 30% (2018 benchmark) by 2035; 40% by 2040; 55% by 2050
- **Comprehensive Plan Stormwater Goals**
 - o ACTION NE1.1.2 Enhance zoning regulations and support initiatives that encourage the use of green stormwater infrastructure on private and public property.
 - o ACTION IU1.3.1 / Action IU1.3.2 Encourage continued stormwater federal/state compliance and green stormwater infrastructure where practical.
- **Comprehensive Plan Native Plant Goals**
 - o ACTION NE1.4.3 Provide education and partner with public and private groups to promote the preservation and planting of native plants, sustainable landscaping techniques, and management of invasive plants.”
 - o ACTION NE2.2.5 Develop integrated pest management and nutrient management plans.
 - o ACTION NE2.2.6 Promote the responsible use of pesticides and fertilizers.
- **Solid Waste Goals:**
 - o Integrating composting citywide- identified as major goal of Solid Waste Plan (2016) and encouraged to be implemented through the Comprehensive Plan
 - o Provide access to trash bins and recycling in public spaces.
- **Comprehensive Plan Lightng Goals**
 - o ACTION NE2.2.1 Enhance exterior lighting standards and pursue certification as an International Dark Sky Community to reduce light pollution and protect nighttime skies.
 - o ACTION IU1.5.2 Convert light fixtures and street lights to light emitting diodes (LEDs) and down-cast lighting.
- **Other Sustainability Initiatives in Comprehensive Plan:**
 - o ACTION SI2.1.1 Evaluate regulations that permit urban agriculture on publicly-owned property and/or space for community gardens in new multifamily and mixed-use developments.
 - o ACTION SI2.1.2 Work with Fairfax County to develop a healthy food access plan.
 - o ACTION NE1.4.2 Support the development of community and habitat gardens on underutilized parcels and public lands.

DESIGN RESEARCH SUPPLEMENTS

FUTURE SUSTAINABILITY FOCUSES

Below is a review of sustainability concepts for future study. These are useful resources that can help craft and guide a future sustainability plan for Fairfax City. As the small area plans are critical new growth areas- sustainability goals have the opportunity of being integrated early in the process.

CITYWIDE & STATEWIDE ENERGY GOALS

The city of Fairfax in the comprehensive plan has the ambitious goal of 100% renewable for all government operations by 2035 and a 55% reduction of energy usage citywide by 2050. In 2020, the state of Virginia passed the Virginia Clean Energy Act (VCEA) which was passed, mandating direct renewable investments statewide that include an 88% renewable energy portfolio by 2040 and 100% renewable energy by 2050¹.

As a key reality of the study areas are new buildings - there is an important opportunity to integrate new energy efficiency standards for buildings to meet these ambitious energy goals as well as identify sites for energy,

ENERGY PRODUCTION + INFRASTRUCTURE

SOLAR ENERGY: Solar energy capture with panels are a low-cost, easy to implement energy producing apparatus that increasingly are part of energy resiliency portfolios for cities to meet sustainability goals. Key barriers to solar is often difficult zoning and historic preservation or aesthetic guidelines -which restrict or limit their use, design challenges, and costs to developers.

DISTRICT WIDE ENERGY: Districtwide energy generation systems and energy sharing can help supplement on site generation, reduce waste, and allow for more technically complex sites of energy generation. Geothermal is the most common part of energy mixes for district systems. However, site constraints, high costs of installation, and technical difficulties can make geothermal systems or other energy sharing systems not feasible. Future zoning and sustainability plans should identify existing site conditions to explore feasibility in encouraging district wide energy sharing systems.

LIGHTING INFRASTRUCTURE: Energy efficient and pedestrian friendly lighting in publically owned sites can help the city achieve its net zero energy goals by reducing costs. Moreover, sustainably focused lighting can be a critical component of protecting wildlife particularly in key areas along the Accotink Creek.

SUSTAINABLE LANDSCAPES

NATIVE LANDSCAPES: By encouraging native plant species, the green spaces help support regional flora and fauna found within the Accotink creek system. Moreover, native plant species often are uniquely adapted to the environmental challenges facing the region. Lastly, placemaking begins with native landscapes. By using plant species native to the region- it helps tie the urban experience to the ecological history of the study area.

STORMWATER CAPTURE: One of the most critical components of stormwater management is in the landscape - where storm surges can be limited. By utilizing a variety of landscape elements from rain gardens to bioswales and green roofs - flooding risk can be mitigated. A key study for future sustainability plans is to expand stormwater management requirements and, where feasible, captured water to be integrated on street, open space, and proposed building design throughout the study area but particularly at linear parks, pocket parks, and areas adjacent to the Accotink Creek.

BUILDING EFFICIENCY

BUILDING EFFICIENCY: Building efficiency is of critical importance to reducing energy use and meeting net-zero goals. A citywide sustainability plan or green building code is the most important way to implement stronger efficiency measures. Standards such as earthcraft, LEED, and Passive House are important standards the city should investigate and integrate into future planning efforts.

WATER CONSERVATION & QUALITY: Water conservation reduces amount of water sent for sewage treatment and is part of a general sustainability strategy. Likewise, the city of Fairfax should continue to monitor underground tanks and other contamination threats to the Accotink watershed. A number of conservation measures can be put into place to encourage water conservation in the small area plans.

SUSTAINABLE LIFESTYLE

COMPOSTING: Composting is identified as a major goal of the 2016 Solid Waste Plan and 2035 Comprehensive Plan. A number of measures could make the small area plans a model for solid waste management practices for the rest of the city including expanding future composting drop off locations, partnering with local retailers, implementing pilot district wide composting measures, or more.

HEALTH + FOOD RESILIENCY: Food can be an important placemaking and community tool as well as help encourage a healthier lifestyle and health outcomes. Farmers markets, and community gardens along with encouraging pedestrian and bicycle infrastructure can help encourage a healthier outcomes for residents.

¹ Roberts, D. (2020, March 12). Virginia becomes the first state in the South to target 100% clean power. Retrieved June 01, 2020, from <https://www.vox.com/energy-and-environment/2020/3/12/21172836/renewable-energy-virginia-100-percent-clean>

DESIGN RESEARCH SUPPLEMENTS

SUSTAINABILITY CASE STUDIES

Below is a literature review of sustainability case studies and summary of key concepts for future study. These are useful resources that can help craft and guide a future sustainability plan for Fairfax City. As the small area plans are critical new growth areas- sustainability goals have the opportunity of being integrated early in the process.

COMMUNITY ENERGY GENERATION

- Community Geothermal and Solar programs are a new opportunity for the City of Fairfax. While community solar was previously banned and difficult to implement in Virginia¹, the 2020 Solar Freedom Bill / 2020 Clean Economy Act has relaxed a number of rules opening the door to solar with increased opportunities starting in 2020 to sponsor a statewide financing². The city of Fairfax should continue to look for ways to implement energy generation in their future sustainability plans. Below are case studies:
- West Union, Iowa (Population 2,500) In 2008 Geothermal system placed under town square and energy is sold to local buildings and businesses nearby.
- Klamath Falls, Oregon (Population 20,000) Installed 14 county and public buildings to system and 120 residences. Did extensive marketing to expand system as it became more popular. By 1994 expanded the system include heating of sidewalks and streets. Main lessons learned are to start with public spaces, expand to residences. Consider other benefits and cost savings. In Klamath, heated sidewalks/roads avoided snow plowing.

- Pringle Creek, Oregon, 32 acres “eco community” founded in 2004. The neighborhood created a district loop system with the network within the street right of way that then serviced each individual parcel/residence. Received numerous innovation awards, found to be 300% more efficient than gas furnace systems.
- Ann Arbor, MI Established an extensive program to create geothermal and sustainable infrastructure systems. Established “Neighborhood Improvement Authority” that develops plans and tax increment financing model to pay for geothermal and green systems. Financing sources included TIF, revenue bonds, creation of a special assessment district as well as partnerships with regional utility suppliers and rebate programs.
- Cedar Falls, Iowa (Population 40,000): In 2016, the city of Cedar Falls sponsored the creation of a solar farm on 8 acres of municipally owned land. The program produces roughly .5% percent of the city’s energy needs or enough to power 275 homes and utilizes a number of federal tax credits to make the system an affordable asset for the city.³
- Solar for All Program

Washington, DC (Population 700,000): The Solar for All program is aligned with the District’s net zero and social equity goals by connecting low-income households, businesses, nonprofits, and seniors to solar. The program helps finance rooftop solar panel systems but also connects residents to savings of new solar farms.⁴

SUSTAINABLE COMPOSTING + LANDSCAPES

- Curbside Composting: Curbside composting has been implemented in a variety of communities in the DC metropolitan region such as the City of Falls Church, City of Takoma Park, and City of Alexandria have curbside programs. DC is set to implement by 2025 with pilots ongoing. Models often have a fee attached and are voluntary.
- Native Landscapes: A number of jurisdictions have crafted policies to support native landscapes. Implementation has included creation of landscape committee which advises the local governing body, creation of landscape manuals, bans on toxic pesticides and fertilizers, and more. Model cities to reference include:
 - Sanibel, Florida⁵
 - Scottsdale, Arizona⁶
 - Washington, DC RiverSmart Homes Program⁷

1 Martin, I. (2020, March 18). New laws clear away barriers to small solar projects. Retrieved June 01, 2020, from <https://www.virginiamercury.com/2020/03/18/new-laws-clear-away-barriers-to-small-solar-projects/>

2 Ibid

3 Environmental and Energy Study Institute, & Eesi. (n.d.). Community Solar Case Studies. Retrieved June 01, 2020, from <https://www.eesi.org/obf/solar/casestudies>

4 Solar for All. (n.d.). Retrieved June 01, 2020, from <https://doee.dc.gov/node/1226501>

5 <https://doee.dc.gov/service/native-plants>

6 <https://www.scottsdaleaz.gov/Assets/ScottsdaleAZ/Building/Native+Plant+Ordinance+Guide.pdf>

DESIGN RESEARCH SUPPLEMENTS

STORMWATER CAPTURE & POLLUTION

Below is a literature review of stormwater capture and its' benefits on the environment that is referenced in the small area plan. .

STORMWATER RUNOFF

The 2035 Comprehensive Plan outlines major point and nonpoint sources of pollution including stormwater runoff. As the comprehensive plan notes “ On a per acre basis, urban land use including residential development generally produces higher annual nonpoint source pollutant loadings of nutrients, heavy metals, and oxygen-depleting substances than do rural agricultural uses.”

The Chesapeake Bay Foundation - one of the major regional nonprofit stakeholders focused on clean water for the bay - notes the following:

“stormwater runoff from cities and suburbs pick up oil, pesticides, and other chemicals as it flows across lawns, roads, and parking lots into nearby streams and storm drains¹. This type of pollution is significant and difficult to control. Once in our waters these chemicals disrupt the whole food web in a process called bioaccumulation. Small, bottom-dwelling aquatic organisms take up contaminants while feeding. Larger fish accumulate toxins in their tissues when they eat the contaminated organisms. In turn, birds, humans, and other wildlife eat the contaminated fish.”

UNDERGROUND STORAGE TANKS

The 2035 Comprehensive Plan, calls for the city to continue to work with property owners of underground tanks to ensure compliance. ²

Per EPA guidelines underground storage tanks - common for fuel stations and auto repair shops - are common sources for groundwater contamination.

Currently, the Virginia Department of Environmental Quality 's Department of Environmental Quality (DEQ) Water Division, works directly with owners in the City of Fairfax of underground storage tanks (USTs) to ensure that these tanks do not impact on groundwater quality. The DEQ, Water Division, has an extensive monitoring program to detect and mitigate any leaking USTs before substantial groundwater quality degradation can occur.

As of 2018, The City of Fairfax has 314 inactive underground storage tanks, 62 active underground storage tanks, and 62 above ground storage tanks, most of which are located in activity areas like Old Town and NorthFax.

IMPERVIOUS SURFACES & NONPOINT SOURCES OF POLLUTION

The 2035 Comprehensive Plan recommends analyzing impervious areas of the city in relation to the City's water sources to mitigate nonpoint point surfaces of pollution. The Comprehensive plan notes that redevelopment and education in these areas are “most likely to produce the greatest impact on the quality of the city's water”³.

The small area plans indicate the surface parking lots and other impervious areas within the activity areas. In the Old Town Small Area Plan, large lots particularly in the area indicated “Old Town South” seem to directly impact the headwaters of the Accotink. In the NorthFax study area, nearly the entire study area is filled with impervious surface and is critical to the watershed.

Further research to see impact of reduce impervious surfaces and capture stormwater runoff in these areas should be undertaken.

POLLUTION FROM AUTOMOTIVE USES

Automotive uses- current and historical- have dominated land use in the NorthFax study area. While these owners may properly manage waste produced by vehicles and repairs, they are present potential risk factors for pollution.

In 2005, The Environmental Protection Agency's National Center for Environmental Innovation at the EPA identified automotive mechanical repair and body shops, retail gasolines sales, and automotive salvage as a potential sector wide sources of pollution⁴.

They note that while “individual auto repair shops may present a relatively low environmental and health risk, environmental impacts of the sector as a whole can be significant.”⁵ Water quality issues can include storm water management, releases of fuel and oil from underground and aboveground storage tanks, and illegal discharges from floor drains. Many other common materials such as solvents, various toxic car parts, anti-freeze, batteries, break pads, used rags and towels can present further sources of pollution⁶.

Fueling stations present another, though lesser challenge to water quality. The Environmental Protection Agency notes:

“While gasoline offers a great advantage to us by powering our cars and buses, it has some drawbacks too. Gasoline is composed of over 200 different chemicals, but there are four that are toxic to humans – benzene, toluene, ethyl benzene, and xylene.....A spill of one gallon of gasoline can render one million gallons of water undrinkable.”

The Northfax study area in particular has had documented fueling stations for close to a century as well as car dealerships since at least the 1960s - long before pollution controls were implemented. Moreover, these areas will continue to be a location of several fueling stations in the foreseeable future. Most importantly, these uses lie within a critical headwater of the watershed.

Landscape and design efforts in the small area plan will seek to mitigate the risk factors associated with these uses and their effect on the watershed.

1 See Chesapeake Bay Foundation's Guide to Polluted Runoff - <https://www.cbf.org/issues/polluted-runoff/>

2 2035 Compresive Plan Appendix A

3 Ibid

4 See the EPA's Environmental Results Program - Automotive Repair Shops Guide https://www.epa.gov/sites/production/files/2016-09/documents/auto_repair_final_v6.pdf

5 Ibid

6 See EPA guide to pollution prevention at auto repair and auto body shops: <https://archive.epa.gov/region02/auto/web/html/index.html> and See <https://www.cbf.org/issues/chemical-contamination/>

TRANSPORTATION SUPPLEMENTS

MEMORANDUM

Date: May 28, 2020 Project #: 24024

To: Wendy Block-Sanford; Curt McCullough
Fairfax City
10455 Armstrong Street
Fairfax, VA 22030

From: Alek Pochowski, PE; Aditya Inamdar

Project: Fairfax City Small Area Plans

Subject: Eaton Place Road Diet

INTRODUCTION

As part of the Fairfax City Small Area Plans efforts in the Northfax and Old Town areas of Fairfax City, Kittelson & Associates, Inc. (Kittelson) reviewed the opportunity to reduce the number of lanes for people driving on Eaton Place between Fairfax Boulevard and Chain Bridge Road in the Northfax area. Currently, Eaton Place provides access to the WillowWood Plaza office complex and serves as a cut-through route for drivers traveling westbound on Fairfax Boulevard to north on Chain Bridge Road, or southbound on Chain Bridge Road to east on Fairfax Boulevard. Eaton Place is a 48 feet-wide (curb to curb width) four-lane roadway (two lanes in each direction) classified as a collector road by the Fairfax City. The road has a sidewalk on the north side of the road between Fairfax Boulevard and Chain Bridge Road and a sidewalk on the south side from the Chain Bridge Road/Eaton Place intersection for about 170 feet.

The Fairfax City Small Area Plans study recommends increased development activity in the Northfax area on both sides of Eaton Place. The development is intended to provide services and retail to the local community on both sides of the road and provide new residential development, along with retail serving local residents. With this new development, more comfortable crossings for people walking are desired across Eaton Place, along with more comfortable options for people to bike along Eaton Place. To provide more comfortable crossings for people walking and a more comfortable option for people biking, Kittelson conducted an operations analysis of the Chain Bridge Road/Eaton Place and Fairfax Boulevard/Eaton Place intersections to assess whether any lanes for vehicles could be removed along Eaton Place to provide space for pedestrian refuge islands or for bicycles.

As part of the analysis, Kittelson reviewed the intersection of Fairfax Boulevard/Eaton Place in its current configuration using traffic volumes provided by the City. The intersection of Chain Bridge Road/Eaton Place is proposed to be converted to a multilane roundabout. Kittelson reviewed this

intersection as a roundabout using future year traffic volumes found in the *Northfax Traffic Impact Study* updated April 30, 2020 for a nearby site development by Gorove/Slade. The results of this analysis are described in this memorandum. Figure 1 displays Eaton Place connecting Fairfax Boulevard and Chain Bridge Road, and Figure 2 displays the proposed roundabout at the Chain Bridge Road/Eaton Place intersection.



Figure 1. Eaton Place between Chain Bridge Road and Fairfax Boulevard



Figure 2. Proposed roundabout at the Chain Bridge Road/Eaton Place intersection (design developed by others)

ANALYSIS

Consistent with direction received from the City and community feedback, Kittelson analyzed both intersections during the critical weekday PM peak hour when vehicle queues along Eaton Place are the greatest. The Fairfax Boulevard/Eaton Place intersection was analyzed using Highway Capacity Manual 6th (HCM6) edition methodology as applied by the Synchro software package. Kittelson used traffic volumes and signal timing at the Fairfax Boulevard/Eaton Place intersection included in a Synchro file provided by the City. It was noted that the traffic volumes included in the file were several years old to reflect traffic volumes at their peak along Fairfax Boulevard prior to construction at the Fairfax Boulevard/Chain Bridge Road intersection.

The Chain Bridge Road/Eaton Place intersection was analyzed using the Sidra Standard roundabout capacity model and the HCM6 roundabout capacity model both as applied by the SIDRA Intersection 8 software package. The Sidra Standard roundabout capacity model is recommended for use by VDOT in the VDOT Traffic Operations and Safety Analysis Manual (TOSAM). Consistent with methodology described in the TOSAM, an Environment Factor of 1.05 was used to reflect the project location in Northern Virginia and the future-year condition. The HCM6 roundabout capacity was also used to provide a range of results. The HCM6 roundabout capacity model is the only roundabout capacity developed using data from the United States, and the use of the HCM6 roundabout capacity model provides a point of comparison to the Sidra Standard model applied with an Environment Factor of 1.05.

The roundabout analysis was completed using a modified version of the lane configuration shown in Figure 2. Because the eastbound and westbound approaches of the proposed roundabout only have one entry lane in both directions, and neither the northbound or southbound approaches have dual left-turn lanes, only one circulating lane is necessary adjacent to the northbound and southbound approaches. In addition, consistent with proposed guidance developed by the United States Access Board in the *Public Right-of-Way Accessibility Guidelines (PROWAG)*, the multilane pedestrian crossings across Chain Bridge Road at the proposed roundabout will require treatments such as a pedestrian hybrid beacon or other pedestrian-activated signal control options to meet accessibility requirements. However, the use of pedestrian-activated signal control was not included in the analysis.

RESULTS

The intersection operations analysis shows the signalized Eaton Place/Fairfax Boulevard intersection operating with a Level-of-Service (LOS) of D. The eastbound and westbound Fairfax Boulevard approaches operate at LOS B and C, respectively, and the northbound driveway and southbound Eaton Place approaches both operate at LOS F. The 95th percentile southbound queue is approximately 950 feet.

The roundabout is expected to operate with a critical movement volume-to-capacity (v/c) ratio of 0.57 using the Sidra Standard model, and a critical movement v/c ratio of 0.71 using the HCM6 model. The

expected 95th percentile westbound queue is 25 feet using the Sidra Standard model, and 50 feet using the HCM6 model. The use of the continuous flow right-turn bypass lane eliminates all queuing for the westbound right-turn movement at the intersection.

Figure 3 shows the area along Eaton Place where a three-lane cross section is necessary due to queue storage requirements (the eastern portion of the roadway), and design requirements (the western portion of the roadway). The middle section of Eaton Place is able to accommodate a two-lane cross-section. Figure 4 displays a transition between a two-lane cross-section and a three-lane cross section along Eaton Place.



Figure 3. Area along Eaton Place requiring a three-lane and two-lane cross section

The results of this analysis suggest that one vehicular lane along the entire length of Eaton Place between Chain Bridge Road and Fairfax Boulevard can be removed to provide buffered bike lanes. Further, the middle section of Eaton Place only requires two vehicular lanes allowing the use of pedestrian refuge islands in this area to improve pedestrian crossings.

Appendix 1 contains the intersection operations analysis worksheets.

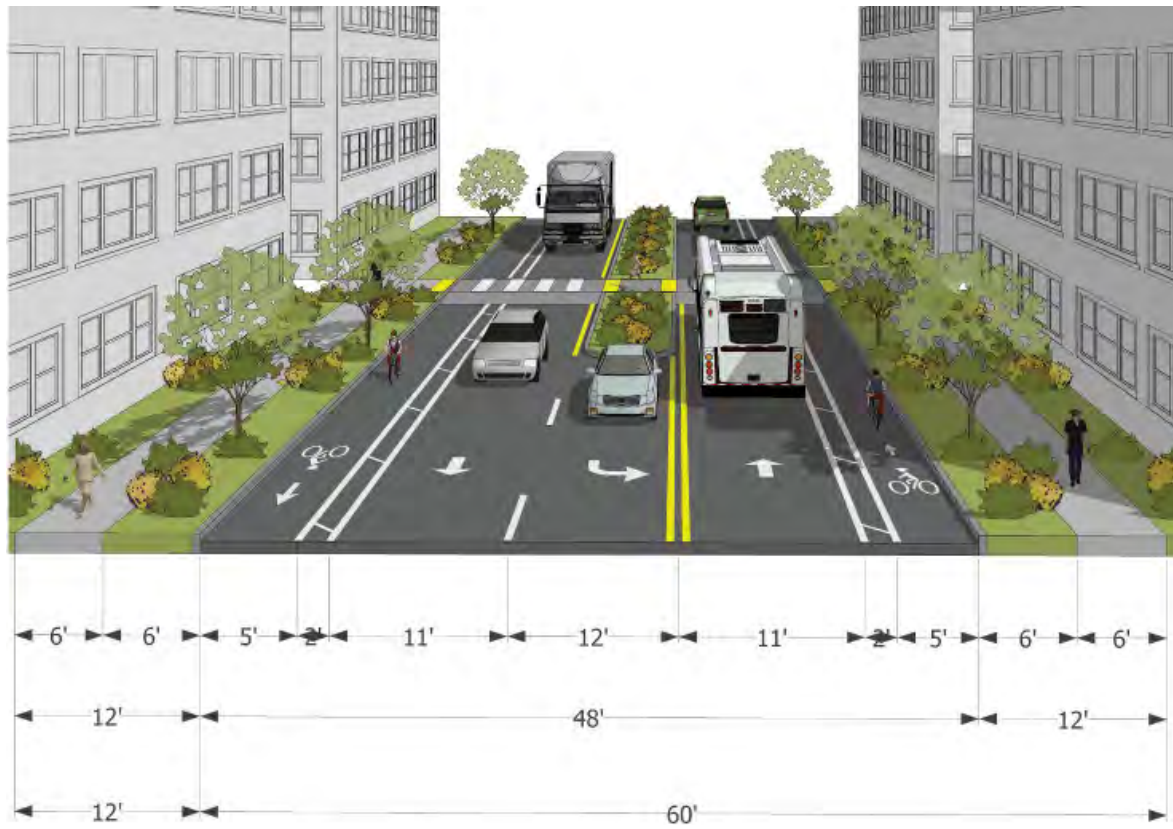


Figure 4. Transition between a three-lane and two-lane cross-section on Eaton Place.

Appendix 1 Intersection Operations Analysis Worksheets

TRANSPORTATION SUPPLEMENTS

Queues

34: Lobster Ln & Autobody/Eaton Place & Fairfax Blvd

05/05/2020



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBL	SBT	NEL
Lane Group Flow (vph)	25	1246	4	2143	538	7	340	126	16
v/c Ratio	0.27	0.34	0.01	0.89	0.47	0.12	1.50	0.38	0.18
Control Delay	38.1	10.0	13.5	24.1	8.3	106.8	307.2	31.7	101.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.1	10.0	13.5	24.1	8.3	106.8	307.2	31.7	101.3
Queue Length 50th (ft)	9	147	1	435	112	10	~691	46	23
Queue Length 95th (ft)	m41	265	m3	#1930	196	33	#926	114	53
Internal Link Dist (ft)		810		1202		100		99	220
Turn Bay Length (ft)	130		80						
Base Capacity (vph)	97	3671	353	2412	1139	63	226	328	189
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.26	0.34	0.01	0.89	0.47	0.11	1.50	0.38	0.08

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

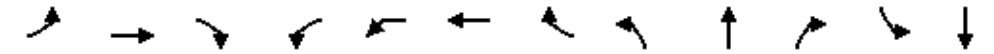
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis

34: Lobster Ln & Autobody/Eaton Place & Fairfax Blvd

05/05/2020



Movement	EBL	EBT	EBR	WBL2	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations	↵	↑↑↑			↵	↑↑	↵		↕		↵	↵
Traffic Volume (vph)	23	1144	3	4	0	1972	495	3	0	4	313	8
Future Volume (vph)	23	1144	3	4	0	1972	495	3	0	4	313	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	6.0			7.0	6.0	6.0		6.0		6.3	6.3
Lane Util. Factor	1.00	0.91			1.00	0.95	1.00		1.00		1.00	1.00
Frt	1.00	1.00			1.00	1.00	0.85		0.92		1.00	0.86
Flt Protected	0.95	1.00			0.95	1.00	1.00		0.98		0.95	1.00
Satd. Flow (prot)	1719	5084			1805	3539	1583		1717		1736	1635
Flt Permitted	0.03	1.00			0.19	1.00	1.00		0.98		0.95	1.00
Satd. Flow (perm)	50	5084			359	3539	1583		1717		1736	1635
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	25	1243	3	4	0	2143	538	3	0	4	340	9
RTOR Reduction (vph)	0	0	0	0	0	0	68	0	0	0	0	110
Lane Group Flow (vph)	25	1246	0	0	4	2143	470	0	7	0	340	16
Heavy Vehicles (%)	5%	2%	0%	0%	0%	2%	2%	0%	0%	0%	4%	0%
Turn Type	pm+pt	NA		pm+pt	pm+pt	NA	Perm	Split	NA		Split	NA
Protected Phases	5	2		1	1	6		7	7		3	3
Permitted Phases	2			6	6		6					
Actuated Green, G (s)	148.9	143.6			140.7	139.5	139.5		3.0		27.7	27.7
Effective Green, g (s)	150.9	145.6			142.7	141.5	141.5		4.0		28.7	28.7
Actuated g/C Ratio	0.69	0.66			0.65	0.64	0.64		0.02		0.13	0.13
Clearance Time (s)	8.0	8.0			8.0	8.0	8.0		7.0		7.3	7.3
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0		3.0		5.0	5.0
Lane Grp Cap (vph)	82	3364			247	2276	1018		31		226	213
v/s Ratio Prot	c0.01	c0.25			0.00	c0.61			c0.00		c0.20	0.01
v/s Ratio Perm	0.20				0.01		0.30					
v/c Ratio	0.30	0.37			0.02	0.94	0.46		0.23		1.50	0.08
Uniform Delay, d1	51.4	16.7			14.1	35.5	19.9		106.5		95.7	84.0
Progression Factor	2.18	0.71			0.97	0.60	0.57		1.00		1.07	2.98
Incremental Delay, d2	1.9	0.3			0.0	8.0	1.2		3.7		248.5	0.3
Delay (s)	113.8	12.0			13.7	29.4	12.6		110.2		351.0	250.8
Level of Service	F	B			B	C	B		F		F	F
Approach Delay (s)		14.0				26.0			110.2			323.9
Approach LOS		B				C			F			F

Intersection Summary

HCM 2000 Control Delay	54.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	220.0	Sum of lost time (s)	30.9
Intersection Capacity Utilization	97.6%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

TRANSPORTATION SUPPLEMENTS

HCM Signalized Intersection Capacity Analysis
34: Lobster Ln & Autobody/Eaton Place & Fairfax Blvd

05/05/2020



Movement	SBR2	NEL2	NEL	NER
Lane Configurations				
Traffic Volume (vph)	108	10	2	3
Future Volume (vph)	108	10	2	3
Ideal Flow (vphpl)	1900	1900	1900	1900
Total Lost time (s)			5.6	
Lane Util. Factor			1.00	
Frt			0.97	
Flt Protected			0.96	
Satd. Flow (prot)			1780	
Flt Permitted			0.96	
Satd. Flow (perm)			1780	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92
Adj. Flow (vph)	117	11	2	3
RTOR Reduction (vph)	0	0	0	0
Lane Group Flow (vph)	0	0	16	0
Heavy Vehicles (%)	0%	0%	0%	0%
Turn Type		Prot	Prot	
Protected Phases		4	4	
Permitted Phases				
Actuated Green, G (s)			7.6	
Effective Green, g (s)			8.6	
Actuated g/C Ratio			0.04	
Clearance Time (s)			6.6	
Vehicle Extension (s)			3.0	
Lane Grp Cap (vph)			69	
v/s Ratio Prot			c0.01	
v/s Ratio Perm				
v/c Ratio			0.23	
Uniform Delay, d1			102.5	
Progression Factor			1.00	
Incremental Delay, d2			1.7	
Delay (s)			104.2	
Level of Service			F	
Approach Delay (s)			104.2	
Approach LOS			F	
Intersection Summary				

Fairfax City Small Area Plans
May 27, 2020

Project #: 24024

LANE SUMMARY

Site: 102 [Chain Bridge Road @ Eaton - 2023 PM - TOSAM]

Chain Bridge Road/Eaton Place
Year 2023 with Proposed Development - Weekday PM Peak Hour
VDOT TOSAM Methodology (Sidra Standard with EF = 1.05)
Roundabout

Lane Use and Performance													
	Demand Total	Flows HV	Cap. %	Deg. Satn	Lane Util. %	Average Delay	Level of Service	95% Back of Queue Veh	Dist	Lane Config	Lane Length	Cap. Adj. %	Prob. Block. %
	veh/h	%	veh/h	v/c	%	sec		ft	ft		ft	%	%
South: Chain Bridge Road (NB)													
Lane 1	414	5.0	897	0.462	100	9.7	LOS A	3.5	91.3	Full	1600	0.0	0.0
Lane 2 ^d	549	5.0	1188	0.462	100	7.9	LOS A	3.6	93.8	Full	1600	0.0	0.0
Approach	963	5.0		0.462		8.7	LOS A	3.6	93.8				
East: Eaton Place (WB)													
Lane 1 ^d	165	5.0	957	0.173	100	5.4	LOS A	0.8	20.6	Full	1600	0.0	0.0
Lane 2	767	5.0	1595	0.481	100	0.1	LOS A	0.0	0.0	Full	1600	0.0	0.0
Approach	933	5.0		0.481		1.0	LOS A	0.8	20.6				
North: Chain Bridge Road (SB)													
Lane 1	710	5.0	1238	0.574	100	9.6	LOS A	4.6	120.3	Full	1600	0.0	0.0
Lane 2 ^d	872	5.0	1520	0.574	100	8.4	LOS A	4.8	125.3	Full	1600	0.0	0.0
Approach	1583	5.0		0.574		8.9	LOS A	4.8	125.3				
West: Cobbs Grove Lane (EB)													
Lane 1 ^d	98	5.0	611	0.160	100	7.8	LOS A	0.7	17.7	Full	1600	0.0	0.0
Approach	98	5.0		0.160		7.8	LOS A	0.7	17.7				
Intersection	3576	5.0		0.574		6.8	LOS A	4.8	125.3				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Signalised Intersections.

Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.

LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).

Roundabout Capacity Model: SIDRA Standard.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

^d Dominant lane on roundabout approach

SIDRA INTERSECTION 8.0 | Copyright © 2000-2019 Akcelik and Associates Pty Ltd | sidrasolutions.com

Organisation: KITTELSON AND ASSOCIATES INC | Processed: Tuesday, May 12, 2020 7:07:57 PM

Project: H:\24\24024 - Fairfax City Small Area Plans\2. Existing Conditions Analysis\Traffic Analysis\Northfax\Chain Bridge Road -- Fairfax Blvd Roundabout Analysis.sip8

TRANSPORTATION SUPPLEMENTS

Fairfax City Small Area Plans
May 27, 2020

Project #: 24024

LANE SUMMARY

Site: 102 [Chain Bridge Road @ Eaton - 2023 PM - HCM6]

Chain Bridge Road/Eaton Place
Year 2023 with Proposed Development - Weekday PM Peak Hour
HCM6 - Methodology based on US data
Roundabout

Lane Use and Performance													
	Demand Flows		Cap.	Deg. Satn	Lane Util.	Average Delay	Level of Service	95% Back of Queue Veh	Dist	Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	Total veh/h	HV %	veh/h	v/c	%	sec			ft		ft	%	%
South: Chain Bridge Road (NB)													
Lane 1	482	5.0	782	0.616	100	14.8	LOS B	5.2	134.7	Full	1600	0.0	0.0
Lane 2 ^d	482	5.0	782	0.616	100	14.8	LOS B	5.2	134.7	Full	1600	0.0	0.0
Approach	963	5.0		0.616		14.8	LOS B	5.2	134.7				
East: Eaton Place (WB)													
Lane 1 ^d	165	5.0	579	0.285	100	10.1	LOS B	1.0	26.9	Full	1600	0.0	0.0
Lane 2	767	5.0	1595	0.481	100	0.1	LOS A	0.0	0.0	Full	1600	0.0	0.0
Approach	933	5.0		0.481		1.9	LOS A	1.0	26.9				
North: Chain Bridge Road (SB)													
Lane 1	791	5.0	1115	0.710	100	14.2	LOS B	10.7	279.1	Full	1600	0.0	0.0
Lane 2 ^d	791	5.0	1115	0.710	100	14.2	LOS B	10.7	279.0	Full	1600	0.0	0.0
Approach	1583	5.0		0.710		14.2	LOS B	10.7	279.1				
West: Cobbs Grove Lane (EB)													
Lane 1 ^d	98	5.0	331	0.296	100	16.9	LOS C	1.0	25.6	Full	1600	0.0	0.0
Approach	98	5.0		0.296		16.9	LOS C	1.0	25.6				
Intersection	3576	5.0		0.710		11.2	LOS B	10.7	279.1				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.

LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

^d Dominant lane on roundabout approach

SIDRA INTERSECTION 8.0 | Copyright © 2000-2019 Akcelik and Associates Pty Ltd | sidrasolutions.com

Organisation: KITTELSON AND ASSOCIATES INC | Processed: Tuesday, May 12, 2020 7:07:58 PM

Project: H:\24\24024 - Fairfax City Small Area Plans\2. Existing Conditions Analysis\Traffic Analysis\Northfax\Chain Bridge Road -- Fairfax Blvd Roundabout Analysis.sip8



100 M STREET, SE, SUITE 910
WASHINGTON, DC 20003
P 202.450.3710

MEMORANDUM

Date: May 27, 2020 Project #: 24024

To: Wendy Block-Sanford; Curt McCullough
Fairfax City
10455 Armstrong Street
Fairfax, VA 22030

From: Alek Pochowski, PE; Aditya Inamdar

Project: Fairfax City Small Area Plans

Subject: Northfax and Old Town Trip-Generation Estimates

INTRODUCTION

Kittelison & Associates, Inc. (Kittelison) developed trip-generation estimates for the proposed development scenarios as part of the Fairfax City Small Area Plans efforts in the Northfax and Old Town areas of Fairfax City (the City). The proposed development scenarios are high-level reasonable build-out scenarios, and do not represent a specific development proposal. These trip-generation estimates are intended to help the City broadly understand the magnitude of trips that could be expected as part of these development scenarios. The trip-generation estimates were created under the assumption that transportation recommendations proposed as part of the Fairfax City Small Area Plans would be implemented, which results in a greater non-automobile mode split than without the transportation recommendations.

This trip generation analysis was conducted using the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 10th Edition. While this edition of the *Trip Generation Manual* is an improvement upon previous versions in terms of providing data for more urban environments, it is still best practice to adjust for mixed-use developments.

ITE recommends using the *Trip Generation Handbook*, 3rd Edition, to estimate internal capture for mixed-use developments. Internal capture accounts for trips that are made internally to the development area without using roads that are external to the site being analyzed. In the case of this small area development, most of these internal trips would likely be made by walking or biking. The *Trip Generation Handbook* provides detailed internal capture rates by use and time of day. These rates were taken from *National Cooperative Highway Research Program (NCHRP) Report 684: Enhancing Internal Trip Capture Estimation for Mixed-Use Developments*. The rates in NCHRP Report 684 were used to conduct this analysis, ensuring the trip generation estimate follows national best practices and

recommendations from ITE. For this analysis, the internal-capture methodology was applied to the entirety of Northfax and Old Town. As a result, the internal capture will be greater than if each development was analyzed separately.

OLD TOWN

The current land uses in Old Town consists of:

- 249,699 square feet of retail
- 916,558 square feet of office
- 111,857 square feet of library/institution/arts space

The current combination of land uses is estimated to generate approximately 1,304 vehicular trips (1,039 in, 265 out) in the weekday AM peak hour, and 3,032 vehicular trips (1,156 in, 1,876 out) in the weekday PM peak hour. Table 1 shows the breakdown of trip generation by existing land use.

The proposed land uses in Old Town consists of:

- 517,163 square feet of retail
- 816,849 square feet of office
- 173 units of single-family townhouses
- 2,320 units of mid-rise housing
- 150 units of senior housing
- 235,857 square feet of library/institution/arts space

This proposed combination of land uses is estimated to generate approximately 1,667 vehicular trips (977 in, 690 out) in the weekday AM peak hour, and 3,429 vehicular trips (1,544 in, 1,886 out) in the weekday PM peak hour. Table 1 shows the breakdown of trip generation by existing land use. This is a net gain of 363 vehicular trips (-62 in, 425 out), during the weekday AM peak hour, and 397 vehicular trips (388 in, 10 out) during the weekday PM peak hour, representing a 28% increase in trips during to and from Old Town during the weekday AM peak hour, and a 13% increase in trips to and from Old Town during the weekday PM peak hour. This estimate includes a 17% internal capture rate during the weekday AM peak hour, and a 25% internal capture rate during the weekday PM peak hour. Table 1 also shows the breakdown of trip generation by proposed land use.

Appendix 1 contains the trip generation estimate worksheets including the internal capture rate methodology.

Table 1. Old Town Existing and Proposed Trip Generation

Land Use	ITE Code	Size (KSF/Units)	Weekday AM Peak			Weekday PM Peak		
			Total	In	Out	Total	In	Out
Proposed								
Retail	820	517.163	486	301	185	1,833	880	953
Office	710	816.849	794	683	111	837	134	703
Single Family (Townhouse)	210	173	128	32	96	172	108	64
Housing Mid-Rise	221	2320	835	217	618	1,021	623	398
Senior Housing	252	150	30	11	19	38	21	17
Library (Institutional/Arts)	590	235.857	398	283	115	2,183	1,048	1,135
<i>Total with internal capture¹</i>			<i>2,223</i>	<i>1,303</i>	<i>920</i>	<i>4,572</i>	<i>2,058</i>	<i>2,514</i>
<i>Total with bike/ped/transit reduction²</i>			<i>1,667</i>	<i>977</i>	<i>690</i>	<i>3,429</i>	<i>1,544</i>	<i>1,886</i>
Existing								
Retail	820	249.699	235	146	89	1,070	514	556
Office	710	916.558	888	764	124	934	149	785
Single Family (Townhouse)	210	0	0	0	0	0	0	0
Housing Mid-Rise	221	0	0	0	0	0	0	0
Senior Housing	252	0	0	0	0	2	1	1
Library (Institutional/Arts)	590	111.857	181	129	52	1,026	492	534
Total			1,304	1,039	265	3,032	1,156	1,876
Net								
Net Vehicular Trips			363	-62	425	397	388	10

1. Assumes retail consists of 50% food-service establishments to account for retail that is predominantly expected to serve local uses
2. Assumes 25% non-automobile mode split

NORTHFAX

The current land uses in Northfax consists of:

- 127,491 square feet of retail
- 744,296 square feet of office
- 170,840 square feet of hotel

The current combination of land uses is estimated to generate approximately 926 vehicular trips (745 in, 181 out) in the weekday AM peak hour, and 1,520 vehicular trips (488 in, 1,032 out) in the weekday PM peak hour. Table 2 shows the breakdown of trip generation by existing land use.

The proposed land uses in Northfax consists of:

- 162,490 square feet of retail
- 766,510 square feet of office
- 116 units of single-family townhouses
- 1,646 units of mid-rise housing
- 200 units of senior housing
- 170,840 square feet of hotel

This proposed combination of land uses is estimated to generate approximately 1,263 vehicular trips (737 in, 526 out) in the weekday AM peak hour, and 1,548 vehicular trips (617 in, 931 out) in the weekday PM peak hour. Table 1 shows the breakdown of trip generation by existing land use. This is a net gain of 337 vehicular trips (-8 in, 345 out), during the weekday AM peak hour, and 28 vehicular trips (129 in, -101 out) during the weekday PM peak hour, representing a 36% increase in trips during to and from Northfax during the weekday AM peak hour, and a 2% increase in trips to and from Old Town during the weekday PM peak hour. This estimate includes a 13% internal capture rate during the weekday AM peak hour, and a 29% internal capture rate during the weekday PM peak hour. Table 2 also shows the breakdown of trip generation by proposed land use.

Appendix 1 contains the trip generation estimate worksheets including the internal capture rate methodology.

Table 2. Northfax Existing and Proposed Trip Generation

Land Use	ITE Code	Size (KSF/Units)	Weekday AM Peak			Weekday PM Peak		
			Total	In	Out	Total	In	Out
Proposed								
Retail	820	162.49	153	95	58	778	373	405
Office	710	766.51	747	642	105	788	126	662
Single Family (Townhouse)	210	116	87	22	65	117	74	43
Housing Mid-Rise	221	1646	593	154	439	724	442	282
Senior Housing	252	200	40	14	26	50	28	22
Hotel	310	170.84	80	47	33	102	52	50
<i>Total with internal capture¹</i>			1,486	867	619	1,821	726	1,095
<i>Total with bike/ped/transit reduction²</i>			1,263	737	526	1,548	617	931
Existing								
Retail	820	127.491	120	74	46	650	312	338
Office	710	744.296	726	624	102	766	123	643
Single Family (Townhouse)	210	0	0	0	0	0	0	0
Housing Mid-Rise	221	0	0	0	0	0	0	0
Senior Housing	252	0	0	0	0	2	1	1
Hotel	310	170.84	80	47	33	102	52	50
Total			926	745	181	1,520	488	1,032
Net								
Net Vehicular Trips			337	-8	345	28	129	-101

1. Assumes retail consists of 50% food-service establishments to account for retail that is predominantly expected to serve local uses
2. Assumes 15% non-automobile mode split

RESULTS

During the critical weekday PM peak hour, the proposed development is expected to result in a 13% increase in vehicular trips (397 net new vehicular trips) to and from Old Town, and a 2% increase in vehicular trips (28 net new vehicular trips) to and from Northfax. Unlike traditional single-site developments, this increase in trips would be distributed over the entirety of the Old Town and Northfax areas rather than be consolidated at individual access points.

Based on the results of this trip generation estimate, the proposed increase in development in both the Old Town and Northfax area coincides with a modest increase in vehicular trips. This is because of the combination of the complementary proposed land-uses within each community, along with improvements to the transportation network allowing greater access from people walking, biking, and riding transit.

Appendix 1 Trip Generation Estimate Worksheets

TRANSPORTATION SUPPLEMENTS

Project Information

Project Number	24024
Project Name	Fairfax City Small Area Plans
Scenario	Old Town
Analyst	Amelia Martin

Land Use	ITE Code	Size (KSF)	Weekday AM Peak			Weekday PM Peak		
			Total	In	Out	Total	In	Out
Proposed								
Retail	820	517.163	486	301	185	1,833	880	953
Office	710	816.849	794	683	111	837	134	703
Single Family (Townhouse)	210	173	128	32	96	172	108	64
Housing Mid-Rise	221	2320	835	217	618	1,021	623	398
Senior Housing	252	150	30	11	19	38	21	17
Library (Institutional/Arts)	590	235.857	398	283	115	2,183	1,048	1,135
<i>Total with internal capture</i>			2,223	1,303	920	4,572	2,058	2,514
<i>Total with bike/ped/transit reduction</i>			1,667	977	690	3,429	1,544	1,886
Existing								
Retail	820	249.699	235	146	89	1,070	514	556
Office	710	916.558	888	764	124	934	149	785
Single Family (Townhouse)	210	0	0	0	0	0	0	0
Housing Mid-Rise	221	0	0	0	0	0	0	0
Senior Housing	252	0	0	0	2	1	1	1
Library (Institutional/Arts)	590	111.857	181	129	52	1,026	492	534
<i>Total</i>			1,304	1,039	265	3,032	1,156	1,876
Net								
<i>Total</i>			363	-62	425	397	388	10

Six-Use Internal Capture Input

Project Information

Project Number	24024
Project Name	Fairfax City Small Area Plans
Scenario	Old Town
Analyst	Amelia Martin

Analysis Input

Analysis Period	AM Peak
-----------------	---------

Land Use	Land Use Type	Land Use Code	Description (optional)	Size	Trips	
					Enter	Exit
A	Office	710/590	Office, Library (Institutional)		966	226
B	Retail	820	Retail		151	93
C	Restaurant	820	Retail		151	93
D	Residential	10/221/25	Apartments, Townhouses, Senior		260	733
E	Cinema					
F	Hotel	310	Hotel		0	0

Category	Land Use						Total
	A	B	C	D	E	F	
Enter	895	84	74	251	0	0	1303
Exit	143	49	48	681	0	0	920
Total	1038	132	121	932	0	0	2223
Single Use Trip Generation Estimate	1192	243	243	993	0	0	2671
Internal Capture	16.77%						

12.92% 45.68% 50.21%

Six-Use Internal Capture Input

Project Information

Project Number	24024
Project Name	Fairfax City Small Area Plans
Scenario	Old Town
Analyst	Amelia Martin

Analysis Input

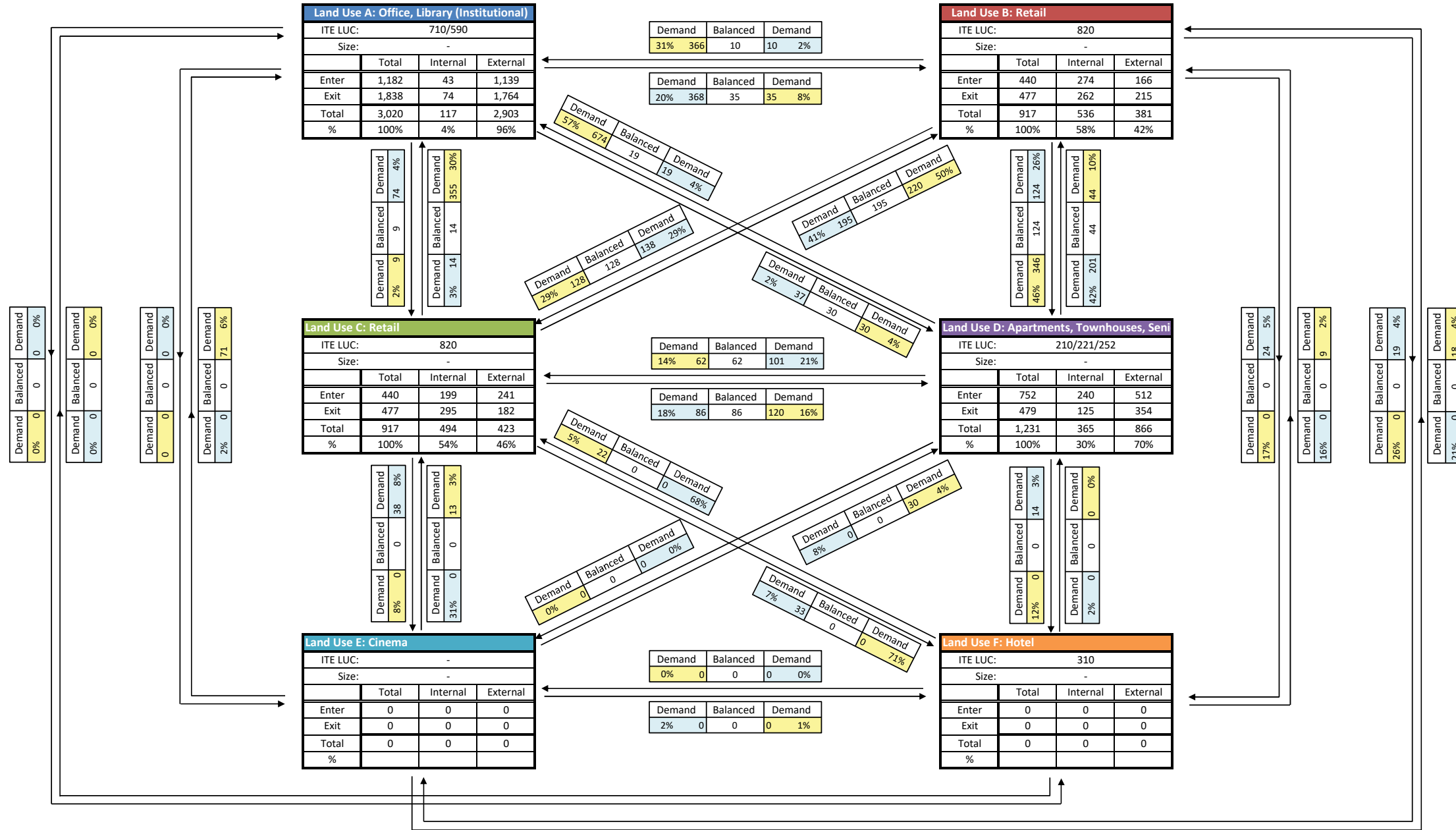
Analysis Period	PM Peak
-----------------	---------

Land Use	Land Use Type	Land Use Code	Description (optional)	Size	Trips	
					Enter	Exit
A	Office	710/590	Office, Library (Institutional)		1,182	1,838
B	Retail	820	Retail		440	477
C	Restaurant	820	Retail		440	477
D	Residential	10/221/25	Apartments, Townhouses, Senior		752	479
E	Cinema					
F	Hotel	310	Hotel		0	0

Category	Land Use						Total
	A	B	C	D	E	F	
Enter	1139	166	241	512	0	0	2058
Exit	1764	215	182	354	0	0	2514
Total	2903	381	423	866	0	0	4572
Single Use Trip Generation Estimate	3020	916.5	916.5	1231	0	0	6084
Internal Capture	24.85%						
	3.87%	58.48%	53.90%				

Multi-Use Internal Capture

Project Number: 24024
 Project Name: Fairfax City Small Area Plans
 Scenario: Old Town



Internal and External Trip Summary						
Origin Land Use	Total		Internal		External	
	Enter	Exit	Enter	Exit	Enter	Exit
A Office, Library (Institutional)	1182	1838	43	74	1139	1764
B Retail	440	476.5	274	262	166	215
C Retail	440	476.5	199	295	241	182
D Apartments, Townhouses, Senior	752	479	240	125	512	354
E Cinema	0	0	0	0	0	0
F Hotel	0	0	0	0	0	0
Internal Capture		24.85%				

TRANSPORTATION SUPPLEMENTS

Trip Origin-Destination Matrix (Outbound)						
Origin (From)	Destination (To)					
	A	B	C	D	E	F
A Office, Library (Institutional)		63	142	2	0	0
B Retail	27		12	13	0	0
C Retail	29	13		4	0	3
D Apartments, Townhouses, Senior	15	7	147		0	0
E Cinema	0	0	0	0		0
F Hotel	0	0	0	0	0	

Trip Origin-Destination Matrix (Inbound)						
Origin (From)	Destination (To)					
	A	B	C	D	E	F
A Office, Library (Institutional)		48	35	0	0	0
B Retail	39		75	5	0	0
C Retail	135	12		13	0	0
D Apartments, Townhouses, Senior	29	26	30		0	0
E Cinema	0	0	0	0		0
F Hotel	29	6	9	0	0	

Trip Origin-Destination Matrix (Balanced)						
Origin (From)	Destination (To)					
	A	B	C	D	E	F
A Office, Library (Institutional)		48	35	0	0	0
B Retail	27		12	5	0	0
C Retail	29	12		4	0	0
D Apartments, Townhouses, Senior	15	7	30		0	0
E Cinema	0	0	0	0		0
F Hotel	0	0	0	0	0	

Internal and External Trip Summary						
Origin Land Use	Total		Internal		External	
	Enter	Exit	Enter	Exit	Enter	Exit
A Office, Library (Institutional)	966	226	71	83	895	143
B Retail	151	93	67	44	84	49
C Retail	150.5	92.5	77	45	74	48
D Apartments, Townhouses, Senior	260	733	9	52	251	681
E Cinema	0	0	0	0	0	0
F Hotel	0	0	0	0	0	0

Internal Capture	16.77%
------------------	--------

Trip Origin-Destination Matrix (Outbound)						
Origin (From)	Destination (To)					
	A	B	C	D	E	F
A Office, Library (Institutional)		368	74	37	0	0
B Retail	10		138	124	19	24
C Retail	14	195		86	38	33
D Apartments, Townhouses, Senior	19	201	101		0	14
E Cinema	0	0	0	0		0
F Hotel	0	0	0	0	0	

Trip Origin-Destination Matrix (Inbound)						
Origin (From)	Destination (To)					
	A	B	C	D	E	F
A Office, Library (Institutional)		35	9	30	0	0
B Retail	366		128	346	0	0
C Retail	355	220		120	0	0
D Apartments, Townhouses, Senior	674	44	62		0	0
E Cinema	71	18	13	30		0
F Hotel	0	9	22	0	0	

Trip Origin-Destination Matrix (Balanced)						
Origin (From)	Destination (To)					
	A	B	C	D	E	F
A Office, Library (Institutional)		35	9	30	0	0
B Retail	10		128	124	0	0
C Retail	14	195		86	0	0
D Apartments, Townhouses, Senior	19	44	62		0	0
E Cinema	0	0	0	0		0
F Hotel	0	0	0	0	0	

Internal and External Trip Summary						
Origin Land Use	Total		Internal		External	
	Enter	Exit	Enter	Exit	Enter	Exit
A Office, Library (Institutional)	1182	1838	43	74	1139	1764
B Retail	440	476.5	274	262	166	215
C Retail	440	476.5	199	295	241	182
D Apartments, Townhouses, Senior	752	479	240	125	512	354
E Cinema	0	0	0	0	0	0
F Hotel	0	0	0	0	0	0

Internal Capture	24.85%
------------------	--------

Trip Origin-Destination Demand Matrix (Outbound)						
Origin (From)	Destination (To)					
	A	B	C	D	E	F
A Office, Library (Institutional)		28%	63%	1%	0%	0%
B Retail	29%		13%	14%	0%	0%
C Retail	31%	14%		4%	0%	3%
D Apartments, Townhouses, Senior	2%	1%	20%		0%	0%
E Cinema	0%	0%	0%	0%		0%
F Hotel	75%	14%	9%	0%	0%	

Trip Origin-Destination Demand Matrix (Inbound)						
Origin (From)	Destination (To)					
	A	B	C	D	E	F
A Office, Library (Institutional)		32%	23%	0%	0%	0%
B Retail	4%		50%	2%	0%	0%
C Retail	14%	8%		5%	0%	4%
D Apartments, Townhouses, Senior	3%	17%	20%		0%	0%
E Cinema	0%	0%	0%	0%		0%
F Hotel	3%	4%	6%	0%	0%	

Trip Origin-Destination Demand Matrix (Outbound)						
Origin (From)	Destination (To)					
	A	B	C	D	E	F
A Office, Library (Institutional)		20%	4%	2%	0%	0%
B Retail	2%		29%	26%	4%	5%
C Retail	3%	41%		18%	8%	7%
D Apartments, Townhouses, Senior	4%	42%	21%		0%	3%
E Cinema	2%	21%	31%	8%		2%
F Hotel	0%	16%	68%	2%	0%	

Trip Origin-Destination Demand Matrix (Inbound)						
Origin (From)	Destination (To)					
	A	B	C	D	E	F
A Office, Library (Institutional)		8%	2%	4%	1%	0%
B Retail	31%		29%	46%	26%	17%
C Retail	30%	50%		16%	32%	71%
D Apartments, Townhouses, Senior	57%	10%	14%		0%	12%
E Cinema	6%	4%	3%	4%		1%
F Hotel	0%	2%	5%	0%	0%	

TRANSPORTATION SUPPLEMENTS

Table ES-1: Proposed Unconstrained Internal Trip Capture Rates for Outbound Trips for PM Peak Period

Origin Land Use From	Destination Land Use To					
	Office	Retail	Restaurant	Residential	Cinema	Hotel
Office		20%	4%	2%	0%	0%
Retail	2%		29%	26%	4%	5%
Restaurant	3%	41%		18%	8%	7%
Residential	4%	42%	21%		0%	3%
Cinema	2%	21%	31%	8%		2%
Hotel	0%	16%	68%	2%	0%	

Table ES-2: Proposed Unconstrained Internal Trip Capture Rates for Inbound Trips for PM Peak Period

Origin Land Use From	Destination Land Use To					
	Office	Retail	Restaurant	Residential	Cinema	Hotel
Office		8%	2%	4%	1%	0%
Retail	31%		29%	46%	26%	17%
Restaurant	30%	50%		16%	32%	71%
Residential	57%	10%	14%		0%	12%
Cinema	6%	4%	3%	4%		1%
Hotel	0%	2%	5%	0%	0%	

Table ES-3: Proposed Unconstrained Internal Trip Capture Rates for Outbound Trips for AM Peak Period

Origin Land Use From	Destination Land Use To					
	Office	Retail	Restaurant	Residential	Cinema	Hotel
Office		28%	63%	1%	0%	0%
Retail	29%		13%	14%	0%	0%
Restaurant	31%	14%		4%	0%	3%
Residential	2%	1%	20%		0%	0%
Cinema	0%	0%	0%	0%		0%
Hotel	75%	14%	9%	0%	0%	

Table ES-4: Proposed Unconstrained Internal Trip Capture Rates for Inbound Trips for AM Peak Period

Origin Land Use From	Destination Land Use To					
	Office	Retail	Restaurant	Residential	Cinema	Hotel
Office		32%	23%	0%	0%	0%
Retail	4%		50%	2%	0%	0%
Restaurant	14%	8%		5%	0%	4%
Residential	3%	17%	20%		0%	0%
Cinema	0%	0%	0%	0%		0%
Hotel	3%	4%	6%	0%	0%	

Available Land Use

Office	2
Retail	3
Restaurant	4
Residential	5
Cinema	6
Hotel	7

Available Time Period

PM Peak
AM Peak

Project Information

Project Number	24024
Project Name	Fairfax City Small Area Plans
Scenario	North Fax
Analyst	Amelia Martin

Land Use	ITE Code	Size (KSF)	Total	Weekday AM Peak		Weekday PM Peak		
				In	Out	Total	In	Out
Proposed								
Retail	820	162.49	153	95	58	778	373	405
Office	710	766.51	747	642	105	788	126	662
Single Family (Townhouse)	210	116	87	22	65	117	74	43
Housing Mid-Rise	221	1646	593	154	439	724	442	282
Senior Housing	252	200	40	14	26	50	28	22
Hotel	310	170.84	80	47	33	102	52	50
<i>Total with internal capture</i>			1,486	867	619	1,821	726	1,095
<i>Total with bike/ped/transit reduction</i>			1,263	737	526	1,548	617	931
Existing								
Retail	820	127.491	120	74	46	650	312	338
Office	710	744.296	726	624	102	766	123	643
Single Family (Townhouse)	210	0	0	0	0	0	0	0
Housing Mid-Rise	221	0	0	0	0	0	0	0
Senior Housing	252	0	0	0	0	2	1	1
Hotel	310	170.84	80	47	33	102	52	50
<i>Total</i>			926	745	181	1,520	488	1,032
Net								
<i>Total</i>			337	-8	345	28	129	-101

Six-Use Internal Capture Input

Project Information

Project Number	24024
Project Name	Fairfax City Small Area Plans
Scenario	North Fax
Analyst	Amelia Martin

Analysis Input

Analysis Period	AM Peak
-----------------	---------

Land Use	Land Use Type	Land Use Code	Description (optional)	Size	Trips	
					Enter	Exit
A	Office	710/590	Office, Library (Institutional)		642	105
B	Retail	820	Retail		48	29
C	Restaurant	820	Retail		48	29
D	Residential	10/221/25	Apartments, Townhouses, Senior		190	530
E	Cinema					
F	Hotel	310	Hotel		47	33

Category	Land Use						Total
	A	B	C	D	E	F	
Enter	595	22	20	185	0	46	867
Exit	79	13	14	504	0	9	619
Total	674	35	34	689	0	55	1486
Single Use Trip Generation Estimate	747	76.5	76.5	720	0	80	1700
Internal Capture	12.59%						
	9.77%	54.90%	56.21%				

Six-Use Internal Capture Input

Project Information

Project Number	24024
Project Name	Fairfax City Small Area Plans
Scenario	North Fax
Analyst	Amelia Martin

Analysis Input

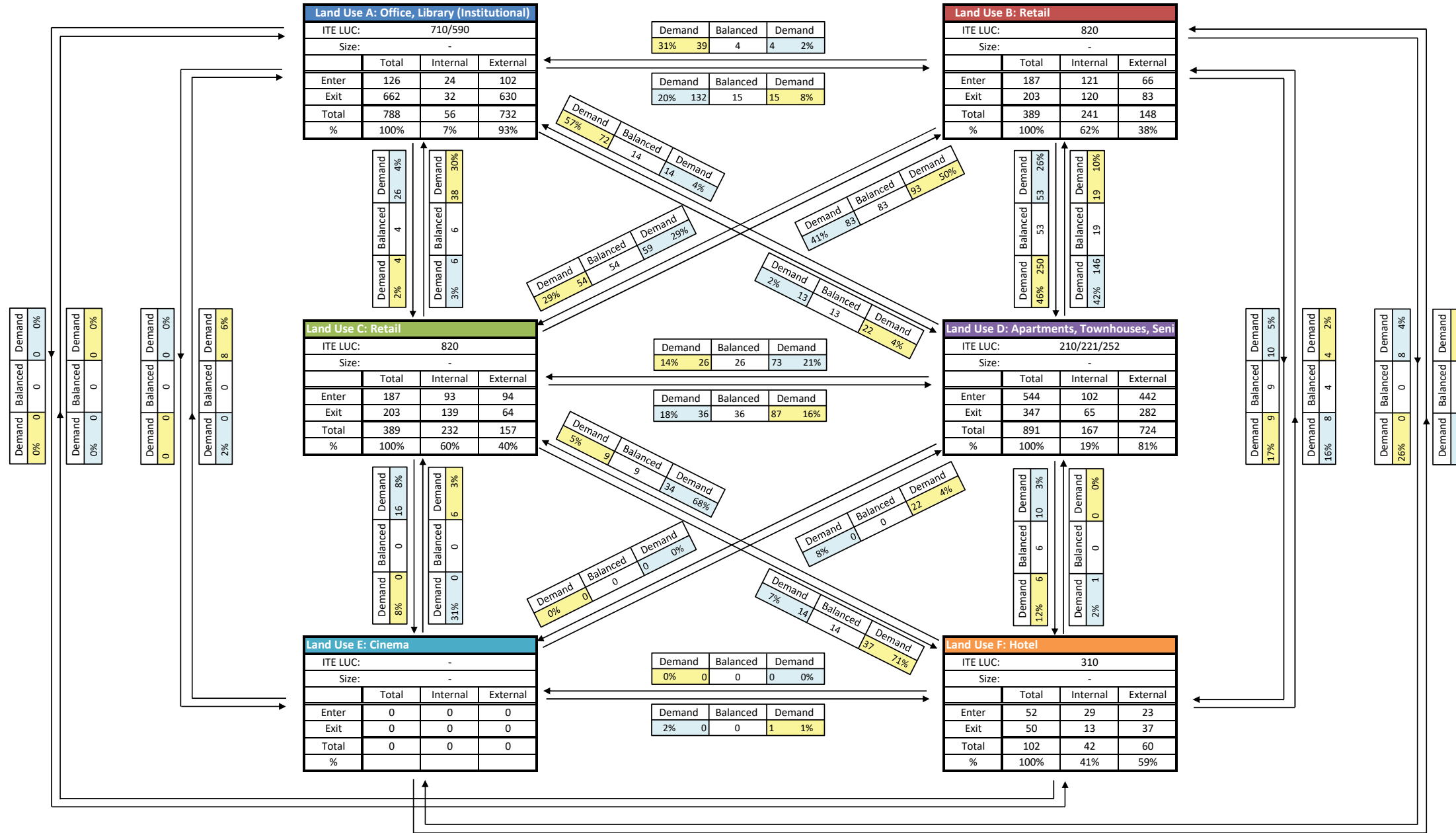
Analysis Period	PM Peak
-----------------	---------

Land Use	Land Use Type	Land Use Code	Description (optional)	Size	Trips	
					Enter	Exit
A	Office	710/590	Office, Library (Institutional)		126	662
B	Retail	820	Retail		187	203
C	Restaurant	820	Retail		187	203
D	Residential	10/221/25	Apartments, Townhouses, Senior		544	347
E	Cinema					
F	Hotel	310	Hotel		52	50

Category	Land Use						Total
	A	B	C	D	E	F	
Enter	102	66	94	442	0	23	726
Exit	630	83	64	282	0	37	1095
Total	732	148	157	724	0	60	1821
Single Use Trip Generation Estimate	788	389	389	891	0	102	2559
Internal Capture	28.84%						
	7.11%	61.95%	59.64%				

Multi-Use Internal Capture

Project Number: 24024
 Project Name: Fairfax City Small Area Plans
 Scenario: North Fax



Internal and External Trip Summary						
Origin Land Use	Total		Internal		External	
	Enter	Exit	Enter	Exit	Enter	Exit
A Office, Library (Institutional)	126	662	24	32	102	630
B Retail	186.5	202.5	121	120	66	83
C Retail	186.5	202.5	93	139	94	64
D Apartments, Townhouses, Senior	544	347	102	65	442	282
E Cinema	0	0	0	0	0	0
F Hotel	52	50	29	13	23	37
Internal Capture		28.33%				

TRANSPORTATION SUPPLEMENTS

Trip Origin-Destination Matrix (Outbound)						
Origin (From)	Destination (To)					
	A	B	C	D	E	F
A Office, Library (Institutional)		29	66	1	0	0
B Retail	8		4	4	0	0
C Retail	9	4		1	0	1
D Apartments, Townhouses, Senior	11	5	106		0	0
E Cinema	0	0	0	0		0
F Hotel	25	5	3	0	0	

Trip Origin-Destination Matrix (Inbound)						
Origin (From)	Destination (To)					
	A	B	C	D	E	F
A Office, Library (Institutional)		15	11	0	0	0
B Retail	26		24	4	0	0
C Retail	90	4		10	0	2
D Apartments, Townhouses, Senior	19	8	10		0	0
E Cinema	0	0	0	0		0
F Hotel	19	2	3	0	0	

Trip Origin-Destination Matrix (Balanced)						
Origin (From)	Destination (To)					
	A	B	C	D	E	F
A Office, Library (Institutional)		15	11	0	0	0
B Retail	8		4	4	0	0
C Retail	9	4		1	0	1
D Apartments, Townhouses, Senior	11	5	10		0	0
E Cinema	0	0	0	0		0
F Hotel	19	2	3	0	0	

Origin Land Use	Total		Internal		External	
	Enter	Exit	Enter	Exit	Enter	Exit
A Office, Library (Institutional)	642	105	47	26	595	79
B Retail	48	29	26	16	22	13
C Retail	47.5	29	28	15	20	14
D Apartments, Townhouses, Senior	190	530	5	26	185	504
E Cinema	0	0	0	0	0	0
F Hotel	47	33	1	24	46	9
Internal Capture	11.67%					

Trip Origin-Destination Matrix (Outbound)						
Origin (From)	Destination (To)					
	A	B	C	D	E	F
A Office, Library (Institutional)		132	26	13	0	0
B Retail	4		59	53	8	10
C Retail	6	83		36	16	14
D Apartments, Townhouses, Senior	14	146	73		0	10
E Cinema	0	0	0	0		0
F Hotel	0	8	34	1	0	

Trip Origin-Destination Matrix (Inbound)						
Origin (From)	Destination (To)					
	A	B	C	D	E	F
A Office, Library (Institutional)		15	4	22	0	0
B Retail	39		54	250	0	9
C Retail	38	93		87	0	37
D Apartments, Townhouses, Senior	72	19	26		0	6
E Cinema	8	7	6	22		1
F Hotel	0	4	9	0	0	

Trip Origin-Destination Matrix (Balanced)						
Origin (From)	Destination (To)					
	A	B	C	D	E	F
A Office, Library (Institutional)		15	4	13	0	0
B Retail	4		54	53	0	9
C Retail	6	83		36	0	14
D Apartments, Townhouses, Senior	14	19	26		0	6
E Cinema	0	0	0	0		0
F Hotel	0	4	9	0	0	

Origin Land Use	Total		Internal		External	
	Enter	Exit	Enter	Exit	Enter	Exit
A Office, Library (Institutional)	126	662	24	32	102	630
B Retail	186.5	202.5	121	120	66	83
C Retail	186.5	202.5	93	139	94	64
D Apartments, Townhouses, Senior	544	347	102	65	442	282
E Cinema	0	0	0	0	0	0
F Hotel	52	50	29	13	23	37
Internal Capture	28.33%					

Trip Origin-Destination Demand Matrix (Outbound)						
Origin (From)	Destination (To)					
	A	B	C	D	E	F
A Office, Library (Institutional)		28%	63%	1%	0%	0%
B Retail	29%		13%	14%	0%	0%
C Retail	31%	14%		4%	0%	3%
D Apartments, Townhouses, Senior	2%	1%	20%		0%	0%
E Cinema	0%	0%	0%	0%		0%
F Hotel	75%	14%	9%	0%	0%	

Trip Origin-Destination Demand Matrix (Inbound)						
Origin (From)	Destination (To)					
	A	B	C	D	E	F
A Office, Library (Institutional)		32%	23%	0%	0%	0%
B Retail	4%		50%	2%	0%	0%
C Retail	14%	8%		5%	0%	4%
D Apartments, Townhouses, Senior	3%	17%	20%		0%	0%
E Cinema	0%	0%	0%	0%		0%
F Hotel	3%	4%	6%	0%	0%	

Trip Origin-Destination Demand Matrix (Outbound)						
Origin (From)	Destination (To)					
	A	B	C	D	E	F
A Office, Library (Institutional)		20%	4%	2%	0%	0%
B Retail	2%		29%	26%	4%	5%
C Retail	3%	41%		18%	8%	7%
D Apartments, Townhouses, Senior	4%	42%	21%		0%	3%
E Cinema	2%	21%	31%	8%		2%
F Hotel	0%	16%	68%	2%	0%	

Trip Origin-Destination Demand Matrix (Inbound)						
Origin (From)	Destination (To)					
	A	B	C	D	E	F
A Office, Library (Institutional)		8%	2%	4%	1%	0%
B Retail	31%		29%	46%	26%	17%
C Retail	30%	50%		16%	32%	71%
D Apartments, Townhouses, Senior	57%	10%	14%		0%	12%
E Cinema	6%	4%	3%	4%		1%
F Hotel	0%	2%	5%	0%	0%	

TRANSPORTATION SUPPLEMENTS

Table ES-1: Proposed Unconstrained Internal Trip Capture Rates for Outbound Trips for PM Peak Period

Origin Land Use From	Destination Land Use To					
	Office	Retail	Restaurant	Residential	Cinema	Hotel
Office		20%	4%	2%	0%	0%
Retail	2%		29%	26%	4%	5%
Restaurant	3%	41%		18%	8%	7%
Residential	4%	42%	21%		0%	3%
Cinema	2%	21%	31%	8%		2%
Hotel	0%	16%	68%	2%	0%	

Table ES-2: Proposed Unconstrained Internal Trip Capture Rates for Inbound Trips for PM Peak Period

Origin Land Use From	Destination Land Use To					
	Office	Retail	Restaurant	Residential	Cinema	Hotel
Office	8%		2%	4%	1%	0%
Retail	31%		29%	46%	26%	17%
Restaurant	30%	50%		16%	32%	71%
Residential	57%	10%	14%		0%	12%
Cinema	6%	4%	3%	4%		1%
Hotel	0%	2%	5%	0%	0%	

Table ES-3: Proposed Unconstrained Internal Trip Capture Rates for Outbound Trips for AM Peak Period

Origin Land Use From	Destination Land Use To					
	Office	Retail	Restaurant	Residential	Cinema	Hotel
Office		28%	63%	1%	0%	0%
Retail	29%		13%	14%	0%	0%
Restaurant	31%	14%		4%	0%	3%
Residential	2%	1%	20%		0%	0%
Cinema	0%	0%	0%	0%		0%
Hotel	75%	14%	9%	0%	0%	

Table ES-4: Proposed Unconstrained Internal Trip Capture Rates for Inbound Trips for AM Peak Period

Origin Land Use From	Destination Land Use To					
	Office	Retail	Restaurant	Residential	Cinema	Hotel
Office		32%	23%	0%	0%	0%
Retail	4%		50%	2%	0%	0%
Restaurant	14%	8%		5%	0%	4%
Residential	3%	17%	20%		0%	0%
Cinema	0%	0%	0%	0%		0%
Hotel	3%	4%	6%	0%	0%	

Available Land Use

Office	2
Retail	3
Restaurant	4
Residential	5
Cinema	6
Hotel	7

Available Time Period

PM Peak
AM Peak



100 M STREET, SE, SUITE 910
WASHINGTON, DC 20003
P 202.450.3710

MEMORANDUM

Date: May 27, 2020 Project #: 24024

To: Wendy Block-Sanford; Curt McCullough
Fairfax City
10455 Armstrong Street
Fairfax, VA 22030

From: Alek Pochowski, PE; Aditya Inamdar
Project: Fairfax City Small Area Plans
Subject: Orchard Street Pedestrian Crossing

INTRODUCTION

As part of the Fairfax City Small Area Plans efforts in the Northfax and Old Town areas of Fairfax City, Kittelson & Associates, Inc. (Kittelson) reviewed the opportunity for a pedestrian crossing across Chain Bridge Road at the current Chain Bridge Road/Orchard Street intersection in the Northfax area. Figure 1 shows the current intersection, along with the intersection’s proximity to the adjacent Fairfax Boulevard/Chain Bridge Road intersection which is located 350 feet to the south of the Chain Bridge Road/Orchard Street intersection.

Currently, the Chain Bridge Road/Orchard Street intersection is signal controlled in the southbound direction, allowing drivers to turn left to go north, or turn right to go south from Orchard Street to Chain Bridge Road. Because the northbound through movement on Chain Bridge Road is uncontrolled, drivers turning from Orchard Street to Chain Bridge have an acceleration lane on Chain Bridge Road allowing them to match the speed of northbound Chain Bridge Road drivers before merging.

The Fairfax City Small Area Plans study recommends increased development activity in the Northfax area on both sides of Chain Bridge Road. The development is intended to provide services and retail to the local community on both sides of the road and provide new residential development (including senior housing), along with retail serving local residents. A senior housing complex is proposed on the west side of Chain Bridge, and grocery store is under construction on the east side of Chain Bridge Road. With this new development, people are going to be walking across Chain Bridge Road. As a result of this desire, Kittelson identified several options to allow people walking to feel comfortable crossing Chain Bridge Road. After some initial analysis and direction from the Fairfax City, Kittelson analyzed the possibility of a full signal at the Chain Bridge Road/Orchard Street intersection. The results of this analysis are described in this memorandum.

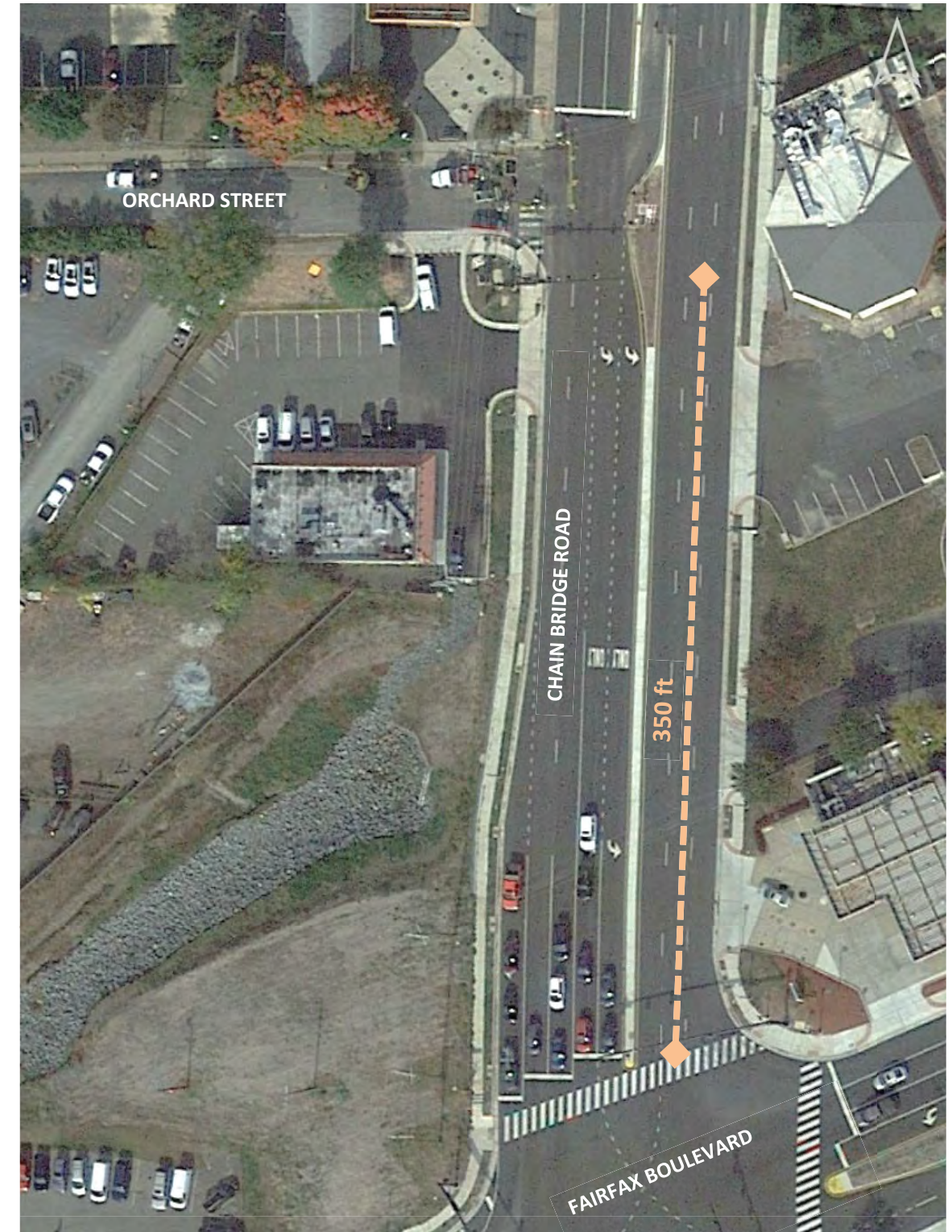


Figure 1. Existing Orchard Street/Chain Bridge Road and Fairfax Boulevard/Chain Bridge Road intersections

Kittelson & Associates, Inc.

Washington, D.C.

FILENAME: H:\24\24024 - FAIRFAX CITY SMALL AREA PLANS\4. REPORT\RAFT\TRAFFIC ANALYSIS WRITE-UPS\ORCHARD STREET PEDESTRIAN CROSSING\ORCHARD STREET PEDESTRIAN CROSSING.DOCX

TRANSPORTATION SUPPLEMENTS

PROPOSED CROSSING

As part of the development of the pedestrian crossing at the Orchard Street/Chain Bridge Road intersection, Fairfax City provided direction that a pedestrian crossing should not interfere with the operations of the Fairfax Boulevard/Chain Bridge Road intersection located 350 feet to the south of the Orchard Street/Chain Bridge Road intersection. In addition, the City directed Kittelson to keep the existing vehicular access to and from Orchard Street to the west, while only providing right-in-right-out vehicular access to the proposed Orchard Street to the east of Chain Bridge Road. To meet these requirements, Kittelson developed the design concept shown in Figure 2. This design concept adds a pedestrian crossing to the south side of the Orchard Street/Chain Bridge Road intersection, and adds signal control to the northbound Chain Bridge Road approach at the intersection.

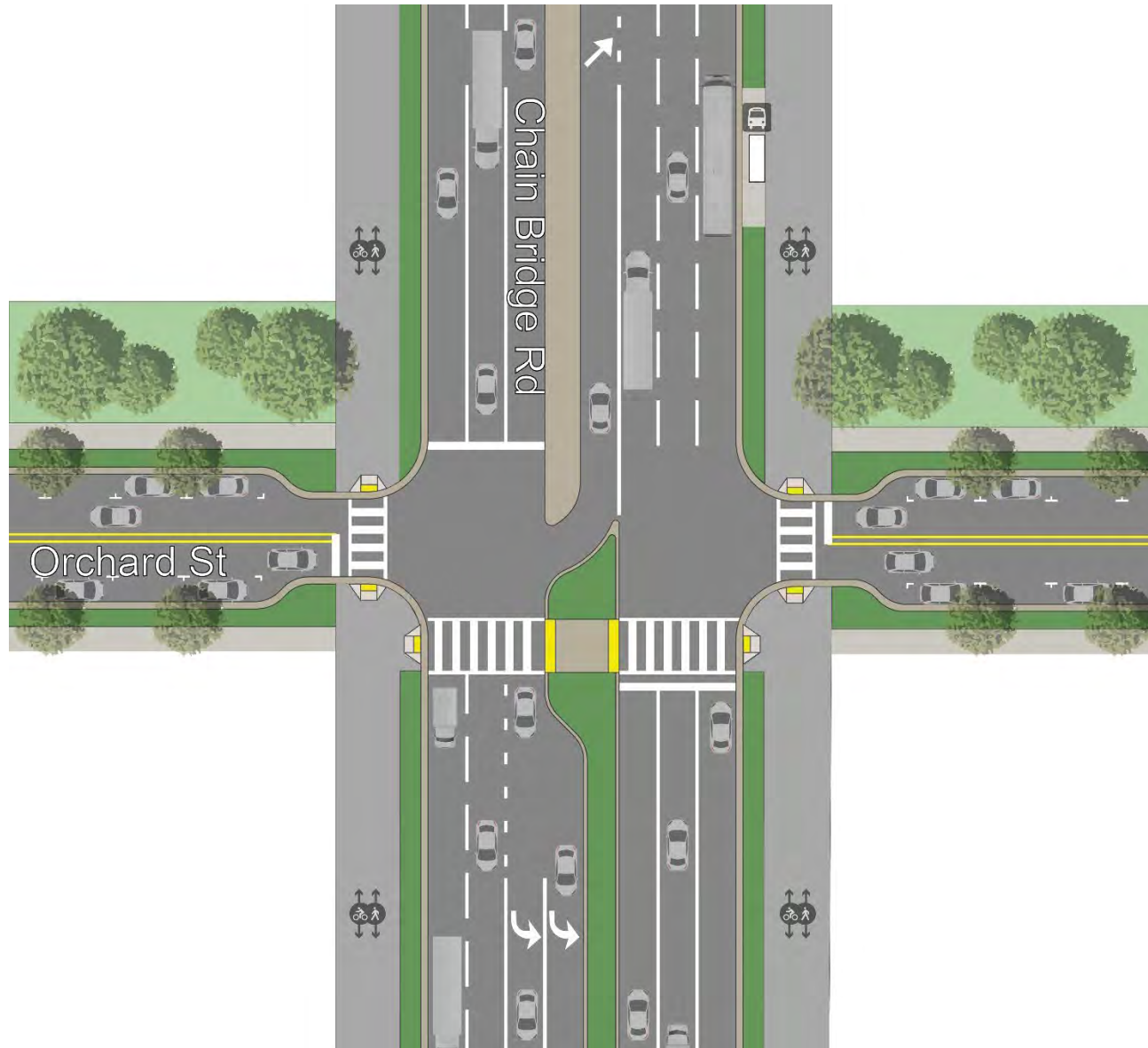


Figure 2. Proposed Orchard Street/Chain Bridge Road intersection configuration

ANALYSIS

Kittelson made several assumptions as part the analysis, including:

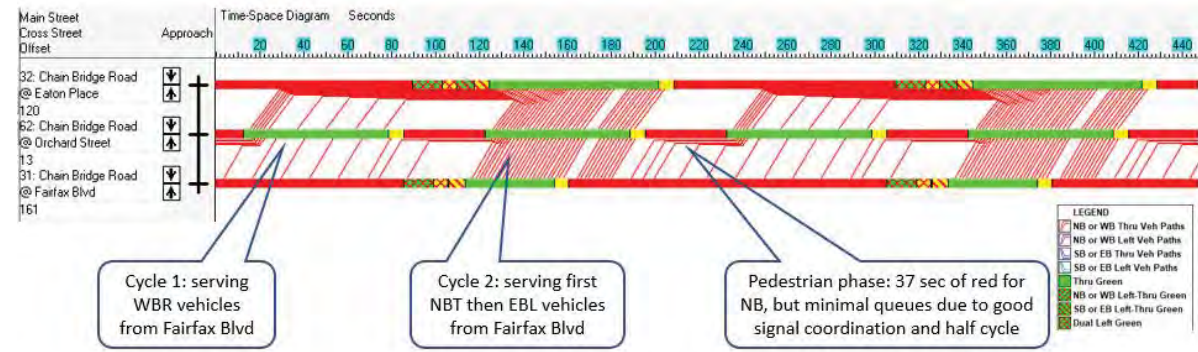
- A full signal at the Orchard Street/Chain Bridge Road intersection is assumed to provide a protected, single stage crossings for people walking across Chain Bridge Road
- For the east-west pedestrian signal crossing at Chain Bridge Road, 7 seconds of Walk and 24 seconds of Flashing Don't Walk are assumed. With the 3 seconds of amber and red clearance, a 37 second Minimum Split is assumed for Orchard Street
- A 110 second cycle length is assumed (i.e., "half cycle") to provide signal coordination between upstream and downstream intersections, and also to limit vehicle queue lengths, while reducing the risk of queue spillback especially in the northbound direction between the Orchard Street/Chain Bridge Road and Fairfax Boulevard/Chain Bridge Road intersections.
- For the east-west pedestrian crossing (i.e., crossing Chain Bridge Road), pedestrian recall was assumed. This was to test a conservative scenario in which the use of the pedestrian signal has the most adverse impact on intersection capacity and vehicle queue lengths (if pedestrian actuation is assumed, then the impact would be less pronounced)

RESULTS

Results using Highway Capacity Manual 6th edition methodology as applied by the Synchro software package show the Orchard Street/Chain Bridge Road intersection operating with Level-of-Service (LOS) A. The northbound and southbound Chain Bridge Road approaches at the intersection operate with LOS A, and the eastbound and westbound Orchard Street approaches operate with LOS C.

SimTraffic was used to measure expected queue lengths at the northbound approach of the Orchard Street/Chain Bridge Road intersection. Using SimTraffic, a 10-minute warm-up time was followed by an hour of analysis and recording time. The results showed the 95th percentile northbound queue to be approximately 120 feet, less than the 350 feet available between the Orchard Street/Chain Bridge Road and Fairfax Boulevard/Chain Bridge Road intersections.

This is further demonstrated in Figure 3, which shows the time-space diagram for the 90th flow obtained from Synchro for the northbound direction. The diagram shows two cycles (440 seconds) to demonstrate how the queue accumulates and dissipates when a pedestrian call is made. Because the Orchard Street/Chain Bridge Road intersection is proposed to operate with a half cycle (i.e., 110 seconds), there are two windows in which the north-south phases can be served. This helps to minimize the risk of queue spillback from the Orchard Street/Chain Bridge Road intersection to the Fairfax Boulevard/Chain Bridge Road intersection.



Appendix 1 Intersection Operations Analysis Worksheets

TRANSPORTATION SUPPLEMENTS

Lanes and Geometrics

62: Chain Bridge Road & Orchard Street

05/05/2020

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Ped Bike Factor												
Fr _t		0.897			0.865			0.999			0.999	
Fit Protected		0.988										
Satd. Flow (prot)	0	1651	0	0	1611	0	0	5080	0	0	5080	0
Fit Permitted		0.963										
Satd. Flow (perm)	0	1609	0	0	1611	0	0	5080	0	0	5080	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		40			57			1			2	
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		300			326			461			601	
Travel Time (s)		8.2			8.9			10.5			13.7	

Intersection Summary

Area Type: Other

Volume

62: Chain Bridge Road & Orchard Street

05/05/2020

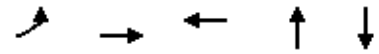
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	5	0	15	0	0	15	0	1214	5	0	1140	10
Future Volume (vph)	5	0	15	0	0	15	0	1214	5	0	1140	10
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	5	0	16	0	0	16	0	1320	5	0	1239	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	21	0	0	16	0	0	1325	0	0	1250	0

Intersection Summary

TRANSPORTATION SUPPLEMENTS

Timings 62: Chain Bridge Road & Orchard Street

05/05/2020

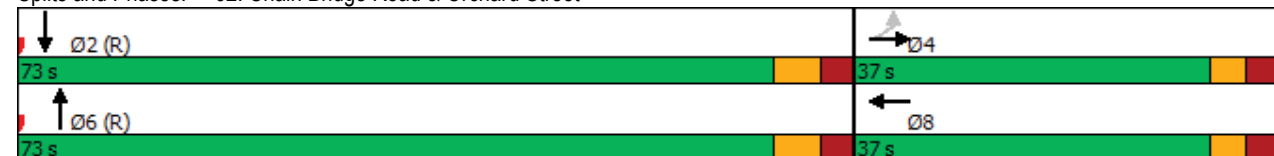


Lane Group	EBL	EBT	WBT	NBT	SBT
Lane Configurations		↔	↔	↑↑↑	↑↑↑
Traffic Volume (vph)	5	0	0	1214	1140
Future Volume (vph)	5	0	0	1214	1140
Turn Type	Perm	NA	NA	NA	NA
Protected Phases		4	8	6	2
Permitted Phases	4				
Detector Phase	4	4	8	6	2
Switch Phase					
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	37.0	37.0	37.0	20.0	20.0
Total Split (s)	37.0	37.0	37.0	73.0	73.0
Total Split (%)	33.6%	33.6%	33.6%	66.4%	66.4%
Yellow Time (s)	3.0	3.0	3.0	4.0	4.0
All-Red Time (s)	3.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0	6.0	7.0	7.0
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	Max	Max	Max	Max	Max
Act Effct Green (s)		31.0	31.0	66.0	66.0
Actuated g/C Ratio		0.28	0.28	0.60	0.60
v/c Ratio		0.04	0.03	0.43	0.41
Control Delay		3.8	0.1	5.2	9.1
Queue Delay		0.0	0.0	0.3	0.0
Total Delay		3.8	0.1	5.6	9.1
LOS		A	A	A	A
Approach Delay		3.8	0.1	5.6	9.1
Approach LOS		A	A	A	A

Intersection Summary

Cycle Length: 110
 Actuated Cycle Length: 110
 Offset: 13 (12%), Referenced to phase 2:SBT and 6:NBT, Start of Green
 Natural Cycle: 60
 Control Type: Pretimed
 Maximum v/c Ratio: 0.43
 Intersection Signal Delay: 7.2
 Intersection Capacity Utilization 40.2%
 Analysis Period (min) 15
 Intersection LOS: A
 ICU Level of Service A

Splits and Phases: 62: Chain Bridge Road & Orchard Street



Phasings 62: Chain Bridge Road & Orchard Street

05/05/2020



Lane Group	EBL	EBT	WBT	NBT	SBT
Protected Phases		4	8	6	2
Permitted Phases	4				
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	37.0	37.0	37.0	20.0	20.0
Total Split (s)	37.0	37.0	37.0	73.0	73.0
Total Split (%)	33.6%	33.6%	33.6%	66.4%	66.4%
Maximum Green (s)	31.0	31.0	31.0	66.0	66.0
Yellow Time (s)	3.0	3.0	3.0	4.0	4.0
All-Red Time (s)	3.0	3.0	3.0	3.0	3.0
Lead/Lag					
Lead-Lag Optimize?					
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0
Minimum Gap (s)	3.0	3.0	3.0	3.0	3.0
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0
Recall Mode	Max	Max	Max	Max	Max
Walk Time (s)	7.0	7.0	7.0		
Flash Dont Walk (s)	24.0	24.0	24.0		
Pedestrian Calls (#/hr)	20	20	20		
90th %ile Green (s)	31.0	31.0	31.0	66.0	66.0
90th %ile Term Code	MaxR	MaxR	MaxR	Coord	Coord
70th %ile Green (s)	31.0	31.0	31.0	66.0	66.0
70th %ile Term Code	MaxR	MaxR	MaxR	Coord	Coord
50th %ile Green (s)	31.0	31.0	31.0	66.0	66.0
50th %ile Term Code	MaxR	MaxR	MaxR	Coord	Coord
30th %ile Green (s)	31.0	31.0	31.0	66.0	66.0
30th %ile Term Code	MaxR	MaxR	MaxR	Coord	Coord
10th %ile Green (s)	31.0	31.0	31.0	66.0	66.0
10th %ile Term Code	MaxR	MaxR	MaxR	Coord	Coord

Intersection Summary

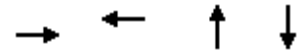
Cycle Length: 110
 Actuated Cycle Length: 110
 Offset: 13 (12%), Referenced to phase 2:SBT and 6:NBT, Start of Green
 Control Type: Pretimed

TRANSPORTATION SUPPLEMENTS

Queues

62: Chain Bridge Road & Orchard Street

05/05/2020



Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	21	16	1325	1250
v/c Ratio	0.04	0.03	0.43	0.41
Control Delay	3.8	0.1	5.2	9.1
Queue Delay	0.0	0.0	0.3	0.0
Total Delay	3.8	0.1	5.6	9.1
Queue Length 50th (ft)	0	0	112	93
Queue Length 95th (ft)	9	0	m79	97
Internal Link Dist (ft)	220	246	381	521
Turn Bay Length (ft)				
Base Capacity (vph)	482	494	3048	3048
Starvation Cap Reductn	0	0	961	0
Spillback Cap Reductn	52	0	0	224
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.05	0.03	0.63	0.44

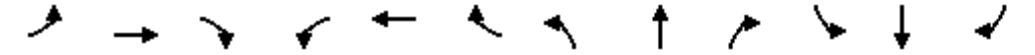
Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM 6th Signalized Intersection Summary

62: Chain Bridge Road & Orchard Street

05/05/2020



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↑↑↔			↑↑↔	
Traffic Volume (veh/h)	5	0	15	0	0	15	0	1214	5	0	1140	10
Future Volume (veh/h)	5	0	15	0	0	15	0	1214	5	0	1140	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No				No
Adj Sat Flow, veh/h/ln	1870	1870	1870	0	1870	1870	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h	5	0	16	0	0	16	0	1320	5	0	1239	11
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	0	2	2	0	2	2	0	2	2
Cap, veh/h	123	22	335	0	0	447	0	3151	12	0	3132	28
Arrive On Green	0.28	0.00	0.28	0.00	0.00	0.28	0.00	1.00	1.00	0.00	1.00	1.00
Sat Flow, veh/h	291	80	1187	0	0	1585	0	5419	20	0	5388	46
Grp Volume(v), veh/h	21	0	0	0	0	16	0	856	469	0	808	442
Grp Sat Flow(s),veh/h/ln	1558	0	0	0	0	1585	0	1702	1867	0	1702	1862
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0
Prop In Lane	0.24		0.76	0.00		1.00	0.00		0.01	0.00		0.02
Lane Grp Cap(c), veh/h	480	0	0	0	0	447	0	2042	1120	0	2042	1117
V/C Ratio(X)	0.04	0.00	0.00	0.00	0.00	0.04	0.00	0.42	0.42	0.00	0.40	0.40
Avail Cap(c_a), veh/h	480	0	0	0	0	447	0	2042	1120	0	2042	1117
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	28.7	0.0	0.0	0.0	0.0	28.7	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.0	0.0	0.1	0.0	0.6	1.2	0.0	0.6	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	0.0	0.0	0.3	0.0	0.2	0.4	0.0	0.2	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.9	0.0	0.0	0.0	0.0	28.8	0.0	0.6	1.2	0.0	0.6	1.1
LnGrp LOS	C	A	A	A	A	C	A	A	A	A	A	A
Approach Vol, veh/h		21			16			1325				1250
Approach Delay, s/veh		28.9			28.8			0.8				0.7
Approach LOS		C			C			A				A
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		73.0		37.0		73.0		37.0				
Change Period (Y+Rc), s		7.0		6.0		7.0		6.0				
Max Green Setting (Gmax), s		66.0		31.0		66.0		31.0				
Max Q Clear Time (g_c+I1), s		2.0		3.0		2.0		2.8				
Green Ext Time (p_c), s		12.0		0.1		13.2		0.0				

Intersection Summary

HCM 6th Ctrl Delay 1.2
 HCM 6th LOS A

COMMUNITY + STAKEHOLDER FEEDBACK

COMMUNITY + STAKEHOLDER FEEDBACK

COMMUNITY TOWNHALL - PUBLIC MEETING NOTES

On September 11, 2019 the project team hosted a kick-off community meeting that introduced the project goals and team to the broader community. General Discussion made by community members during the meeting are recorded below.

COMMUNITY DESIRES

- Some residents lamented the loss of a small-town feel with new development.
- Activity centers should add flexible spaces like parklets and plazas that can be programmed over weekends and holidays like farmer's markets or food trucks and provide an opportunity to add color/pop to Old Town and Northfax.
- Many attendees expressed interest in adding more green space/open space to downtown and Northfax.
- One business owner said that street lighting is an issue in downtown — not a very family-friendly place.
- Need for gateways/wayfinding with business names like in shopping malls in activity centers.
- Need more affordable housing in the city.
- Explore creating more events like the Art League to get more people to visit the city.
- Activity centers are the city's economic engines.
- Explore changing regulations to add more pop and color. The City currently doesn't allow painting on red brick walls.
- More commercial development can expand the City's tax base without necessarily expanding population. Schools can benefit from this model.
- The community sentiment agreed that the City Square Park in downtown has been a successful and positive development.

TRANSPORTATION, PARKING, & TRAFFIC

- One commercial property and business owner expressed the need to change/reduce parking regulations in the current zoning/development regulations to limit the surface parking in activity centers. Maybe adding more FAR or incentives for more FAR will help.
- The community agreed that Old Town has an abundance of parking availability, but the available supply does not match the demand
- One resident suggested a road reconfiguration on University Ave, north of Main Street. Change from four undivided motor vehicles lanes to two lanes for motor vehicles with a two-way left-turn lane and spot medians, and two lanes for bikes.
- Generally, the community expressed concerns over the ability to bike comfortably in the City.
- Many sidewalks and crosswalks/ramps are not ADA accessible.
- Sidewalks in downtown are too narrow.
- Traffic takes away from Small Town feel.
- There is too much traffic on North Street.
- Some homeowners expressed interest in joining one-on-one /small group stakeholder meetings. One resident asked if there is any forum/website to announce stakeholder meetings so people can join publicly.

- Some attendees expressed concern about implementation. There have been many plans in the past that have not been implemented. What can the City do to implement these plans?
- Lee Quill of Cunningham Quill explained that this plan is explicitly looking at parcel by parcel block development and talking to property owners. This process and expected outcomes are different than city-wide master plans or comprehensive plans

CONNECTIONS TO GEORGE MASON

- There has been a divide between GMU and downtown for many years. The residential neighborhoods between the campus and downtown present a gap in commercial activity that divides two areas.
- One GMU student and city resident who lives north of Northfax commutes to the campus. He expressed interest in seeing a more friendly connection for people walking and biking between the university, downtown, and Northfax.
- GMU students want more places to socialize, like coffee shops, bars, restaurants.
- Explore ways to make Fairfax a college town. Many thriving college towns have walkable and bikeable downtown and pleasant walking and biking connections to the campus. Boulder, CO, and Charlottesville, VA have pedestrian zones/streets. Fairfax should explore this idea.
- Explore partnerships with GMU to expand their programs in downtown.

COMMUNITY + STAKEHOLDER FEEDBACK

COMMUNITY TOWNHALL - COMMUNITY COMMENTS

On September 11, 2019 the project team hosted a kick-off community meeting that introduced the project goals and team to the broader community. Community comments written to the study team after the meeting are recorded below.

Comment	Hope	Concern	Old Town	Northfax	Politics	Economics	Green	Traffic & Safety	Density	Walking & Biking	Placemaking & Arts	College	Housing
"Mixed use" with living space above would add more traffic		X						x	x				
A smaller CUE bus with different routes throughout the city - not just major roads. Also to/from the city and university.										x			
Better safer walking areas	x												
Can we get signs in old town of local attractions? I went to the splash pad for years before I knew about Woody's Ice Cream and de Clieu. Like a directory for a mall for instance.	x												
City needs class A office space - modern and exciting.	x					x							
Concerned about an increase in commercial density		x							x				
Concern that people are resistant to change and try to keep things the same		x			x								
Deal with vacancies and for leases that can be filled	x												
Does this work include development of the property behind Safeway into graduate housing?													
Elimination of traffic congestion in center city is a top concern		x	x					x					
Encourage green building and construction	x						x						
Fairfax City will become a more vibrant community with businesses that are sustainable. We want more to remain in the city to make it worth coming into	x					x				x			
Fear nothing will be implemented. A lot of this has already been discussed in previous plans.		x			x								
Fear that Nothing comes out of this - property owners do nothing		x											
Greatest concern is that they will look at each parcel individually and not look at the city as a whole. For example downtown impacts northfax. The circle		x			x	x							
Greatest hope is a coordinated, cohesive development with a vibrant downtown area	x		x										
How do we get high tech companies to stay in Fairfax						x							
How will chain bridge road traffic be managed between Fairfax Boulevard and the historic downtown								x					
I am concerned about too much surface parking						x		x					
I am concerned it will be even harder to walk from Northfax to the historic town center										x			
I am concerned that Old Town Center will be high density. High density takes away from the quality of life. We want to keep the small town feel of the city.		x	x						x		x		
I am concerned that the arts will be ignored		x									x		
I am concerned too much traffic								x					
I am concerned about loss of park spaces/green spaces							x						
I am excited about the revitalization and I look forward to having more to do in Old Town. Please energize the Safeway center. I support increased	x		x							x			
I am looking for a safe pedestrian friendly small town area that is family friendly w/ good schools. There is no sidewalk on either side of Chain Bridge			x							x			
I am not afraid of more density, I fully support Capstone and similar projects	x								x				
I doubt Safeway is going to buy into making the store a modern development	x					x							
I want to see a college town that works for all	x											x	
I'd love to see the city of Fairfax become a genuine, vibrant college town with places like De Clieu; cinema arts might locate here; a good independent bookstore might open. The city might develop a space where GMU professors	x		x								x	x	
people away from the Old Town Square		x				x							
Improved pedestrian experience downtown: Bring nightlife, maybe a live theater, a reason to be there at night. Evening foot traffic, mosaic district	x								x		x		
Increase green/open space- plant more trees!	x						x						
Increase walkability in the city (wider streets?)	x									x			
It is a dark walk from GMU to downtown at night		x	x									x	

COMMUNITY + STAKEHOLDER FEEDBACK

COMMUNITY TOWNHALL - COMMUNITY COMMENTS

Comment	Hope	Concern	Old Town	Northfax	Politics	Economics	Green	Traffic & Safety	Density	Walking & Biking	Placemaking & Arts	College	Housing
Learn ways to use existing population (volunteers and to support schools and organization with transportation to get folks where they need to be)										x			
Lets have one of these community gatherings at GMU that includes students, faculty and the wider community.								x					
Lets leverage the county government and those businesses that are downtown	x		x		x								
Lets revitalize the farmers market! Its gotten smaller and more boring	x		x								x		
Look at the PVI future development with North Fax-10675 Fairfax Boulevard													
Love adding more art											x		
Love the work that your group has done, looking forward to it being done in Fairfax city													
Make the city a great place to attract GMU students to a fun vibrant center	x										x	x	
Make the city a great place to walk, ride bikes, and make streets safe	x									x			
More light! More walkability! More events, popus! Better use of space. Lots of waste and surface parking	x					x		x		x	x		
My biggest concern is things will take too long and taxes will go up .		x											
My greatest concern is these reports will be put on the shelf and not implemented. The developers will do what they want (and the council will let them) and it will not be best for the city		x			x								
My greatest hope about these studies is.... That my son, my wife, and I can walk and do things in the city as a matter of our everyday lives.	x									x			
My greatest hope is developers are given guidance and we get coherent redevelopment to (1) increase walkability (2) Lower housing costs and (3) Increase the tax base	x					x				x			x
My greatest hope is that the arts will find a strong presence in the city. Fairfax Art League, Fairfax theater and music locally need a permanent and viable space in the city	x										x		
My greatest hope is that we build a more exciting and active center city. How about more green space?	x		x				x						
My greatest hope is walkable, safe, low density open space, less expensive parking, Smart City!	x						x		x	x			
My son is a GMU student. He lives at home and takes a CUE bus. He tells me that finding reasonable places to rent off campus is very hard. Can we develop housing for students downtown?		x	x									x	x
No cityscape in Fairfax City. No one wants to live in a concrete environment							x		x				
Parking in Old Town improved: Some stores do not have convenient parking, or if it is there, it's not obvious	x												
Please consider closing Mainstreet from Old Lee Highway to Route 123. Can we narrow the road to a walkway. Not much traffic use this route but it backs up traffic in front of the TJ Max. Sidewalks are too narrow and closing the street will bring back Old Town historic charm	x		x					x		x			
Please do multi methods of communications to let me know when meetings will be													
Please do not consider building large data centers in the city		x				x							
Please look at the city publications to see the events that happen in the Old Town Square. Beer festivals, farmers market, holiday market and concerts			x										
Please send out the websites (URLS) in the presentation. It went through slides quickly to write down													
Preserve the historical feel	x										x		
Reduce traffic (fewer cut throughs) in the city	x							x					
Speak more about how we are going to get there with ideas on the ground. I am concerned the planning commission has not been fully engaged as a partner in developing the SAP		x			x								

COMMUNITY + STAKEHOLDER FEEDBACK

COMMUNITY TOWNHALL - COMMUNITY COMMENTS

Comment	Hope	Concern	Old Town	Northfax	Politics	Economics	Green	Traffic & Safety	Density	Walking & Biking	Placemaking & Arts	College	Housing
Studies are great, now we have a master plan. Hopefully this studies will be helpful in moving forward		x											
Sustainability - what about making fairfax city new buildings have sustainable energy? Routing through the city in a sustainable way?							x						
Take energy conservation and efficiency into account for the planning process	x						x						
The city can use more sustainable development but not overwhelming growth	x						x		x				
The city needs to do development without overwhelming infrastructure The Fairfax Art League operated out of the Old Town Hall (Or tries to). Whenever there is events occuring at the OTH the art league is booted out. This is not the way arts can flourish. Wherever art has flourished and is encouraged there is property and growth		x			x	x							
The process gets hijacked by political or reeconomic development interest There is/are no major "draw" to get people into town on a regular basis. Restaurants may do well in summer but die in the winter because there is no reason for someone to spend time in town. Several have closed because of lack of business especially in winter	x		x								x		
Think about an aging population and ways we can get them around without individual cars		x			x								
To get from downtown to GMU - walking, biking - we need lighting (?) and access for all transportation	x		x							x		x	
Underdeveloped parcels: Add to increase traffic? Already lots. Also lots of vacancies now.		X				x		x	x				
University Drive Speeds are too high. It is supposed to be 25 MPH but people speed. Would love to be more walkable and bikeable between Northfax and Old Town		X								x			
Want vibrant retail and exciting, upscale restaurants.						x							
We have no central community center - the simon center is an old school and shared with a child development center but no true interaction		X									x		
We need more affordable housing		x											x
We need more green space for more walking							x			x			
We need to preserve our green space. Currently there is a proposal to demolish green space between main street and sager avenue to build 28 new townhouses. We don't need more townhouses, we DO need the trees		x					x						x
What can be done about all the cars and people who just drive through and never stop in the city?	x					x		x					
Widen Chain Bridge Road hopefully	x					x							
Worried about addressing homeowners concerns		x			x								
Worried about failed retail filling up empty space.		x				x							
Worried about keeping businesses viable		x				x							
Worried about not addressing environmental issues and climate change		x					x						
Worried about studies not taking into account Speed (road) safety into concerns.		x						x					
Would like to see additional residential mixed with restaurants. A good mix of additional apartments for more density and walkability	x					x			x	x			x
Would like to see close coordination with Fairfax County in their development of the Massey Complex for best mixed use	x				x	x			x	x			

COMMUNITY + STAKEHOLDER FEEDBACK

JOINT WORK SESSION COMMENTS

Below is a transcription of comments from the Joint Work Session of the City Council and Planning Commission conducted with the city on November 5, 2019. The comments have been annotated for clarity.

Mayor Meyer: Lee, I want to express our appreciation for your work to date and also the fact you were able to get through 30 slides in 30 minutes. Your comments and observations were rather rich. Many of these we have heard anecdotally but to have them presented visually, with comparisons regionally. I think this sets the stage for your work. I took many notes. I think we will begin by asking..... for comments:

No questions or comments were provided by the Planning Commission. Questions were then opened to the Council:

Councilmember DeMarco: Looking at your next steps. I know the city manager put together an advisory group of citizens and representatives from the business community. Have you engaging them? Has that been value added if you will.

Lee Quill, Cunningham | Quill Architects: A lot of that has come in with the Old Town group. We will be continuing to interact with them and receive their thoughts. We have not only been meeting with individual property owners but also collective groups since that is a dynamic that is rich.

Councilmember Stehle: I have three main comments. One, consider expanding small area plan boundaries to the Sherwood Center. Two, please ensure to include discussions about possible hotel in Old Town. This is particularly important due to connection with Massey Complex and realism of the project happening. Three, (reading from the slide) Clarify “Strong residential market- opportunities to leverage value to underwrite other improvements”. Does this mean, if I put more bodies here I have better opportunities for success economically? If we put more people, we have better opportunity to underwrite other opportunities?

Eric Smart, Bolan Smart Associates: From an investors standpoint, they can leverage residential components to add commercial components, infrastructure, public amenities desired by the city.

Councilmember Stehle: I have one more comment. The graphic that distinguishes Old Town from NorthFAX is great. Its very easy to understand and clear. Keep with that sort of analysis.

Mayor Meyer: As we look at older commercial areas that are in need of redevelopment, the private capital is not moving into those areas without a residential component. The numbers simply do not work without it. That does not mean we just sit back and let it happen. It is a controlled burn if you would. We have to find the balance between the appropriate residential needed and the amount needed to make the commercial and retail viable. And do that without changing the nature of the city itself.

Different people are going to have different opinions on where on the continuum that is. It will differ from one activity area to the other and even within the activity center it will vary. The comment that the city is a “subregional marketplace” is something we need to reflect on. We often have said we want our city and parts of our city to be a destination areas for the region. I think it depends on talking about the Old Town being a restaurant destination versus somewhere else in the city. Subregional gives me pause

because that doesn’t need to be our goal. Maybe that’s where we are at the moment. You also comment that “there is a strong civic commitment to economic development” with “mixed community backing”. All of us know this by knocking on doors, talking to civic groups and individuals and community leaders... while they recognize this intellectual, viscerally they have some issues with the uncertainty with how their city is going to change. I appreciate that, I respect that, and it is a challenge for us. The complex regulatory environment. I also believe is a bit like the city of Fairfax is in a swim meet with other jurisdictions and some of our regulatory constraints are trying to do a freestyle with a brick tied around your ankle. We aren’t going to win these races when we unnecessarily impede our ability to be competitive.

Councilmember Yi: So, you mentioned earlier about college towns and the desire from feedback you have received that there is a desire among the community to be a college town.... Turn this into a Boulder, Colorado or a Charlottesville. I was at the outreach meeting, where was the poll taken.

Lee Quill, Cunningham | Quill Architects: Obviously there is a diversity of opinion. That is why we are here. You have a major university and driver at the George Mason University sitting right next to the City. When you walk into Old Town, you would not know George Mason is next door. You go to... other communities... you know its there. Whether its (signage), its capturing some of the marketplace of the students, they are identifying with the downtown as their downtown and there is an opportunity for sharing economic.

Councilmember Yi: I understand that, and I don’t anyone denies there is potential there. But given the city’s history with George Mason University... we basically deeded the land and other dealing where we have given them lots of land... They have not always done things that in my view are so beneficial to us. That said, we have the court system of one of the largest municipalities in the country right smack in the geographic center. We don’t talk about being a court town or a lawyer town. There are a lot of economic booms and possibilities here. When we talk about small area plan this is going to dictate the strategies of different areas of our city. You show the September 11 community meeting shows that there was a 140+ sign in sheet, I am curious, what was asked, how was it asked, to include this as a vibrant college town? Was this based on the comments? Was this universal?

Lee Quill, Cunningham | Quill Architects: Yes sir, it was based on... it was not universal as you well know since you were there. We have heard it several times and in conversation with other stakeholders.

Councilmember Yi: So I have that same opinion. I agree with you there is a diversity of opinion. I just want to make sure that diversity of opinion is representative. You are in the first stage here, you are going to continue to engage with the community - city staff, community members. Keep in mind that just because a few people spoke up in a room doesn’t indicate that is the entire view. Trust me, I’m one person out of seven, the rest of them may be shaking their heads right now. Its a big move to say we should strategically move on to be a college town. One more comment and concern, you show here there is a lack of affordable housing. How did you ask that question? Did you ask about AMI? Did people understand what that meant? You throw tag-lines of

affordable or vibrant college town. No one is going to disagree, I just want to make sure we capture the diversity of opinion and outreach.

Lee Quill, Cunningham | Quill Architects: Yes sir. Just so you are clear how we approach this. When we do community meetings like the first one. We shared some information to bring some knowledge up. They don’t want to hear us lecture about here is what is happening with your affordable housing. We sit back and let people talk. They can say they want to bring a bridge from here to the metro. Ok we will put that down. Is that a good idea? Maybe maybe not. IN our process we are very open and inclusive and let anyone speak to what they are thinking about. What you are seeing here is the “key takeaways”. This is what a number of people spoke about. That doesn’t mean that’s where the city should go. Its what we have heard and these we have heard from more than one. As we move along in the process, we start taking these comments like “the idea of the university town. Our next question is what do you mean by that? We have a university but where do...”

Councilmember Yi: Just do this cautiously. Its not about asking people do you want a university town? Everyone will say “sure”. When you say what is the definition of a university town. You will get people all riled up. The same thing about scooters. We are in a pilot stage- I don’t know if we are committed to redesigning our infrastructure for scooters. There are people e happy about scooters and people unhappy scooters. Before we redesign University Drive different and scooter friendly. Lets take it slower. I love what we are doing with these small area plans they are very important. they are going to make a huge impact and help us develop economically. I want to make sure the ingredients in there are the right ones.

Councilmember Miller: I am delighted you and your team are here with us this evening. I, while, much of what you have talked about tonight doesn’t come as a surprise. Some of the slides are interesting. When we look at NorthFAX and downtown and see the percentage of total land that is in surface parking lot. We have relatively large areas of this community that are undeserved and not planned and developed. I appreciate your comment some of the zoning related to NorthFAX isn’t the right type of zoning that will encourage the type of development we want need in that area. That will give us some clues on how to operate in the future. One of the things that I was also particularly delighted to see is the Watershed areas. I think this is important. We have residents just over the past couple of days raise this issue. It is great to see your team cares about issues of development in the 100 year floodplain so we don’t burden existing, new, or future homeowners.

Additionally, I do think a few areas we need to look at is different types of housing whether we want to call it affordable housing or senior housing. We don’t have specific types of residential that are geared towards those groups. The issue of working with Mason is always an interesting area to explore particularly because George Mason is a small town in and of itself with its own retail and restaurant mix. That does not mean we cannot continue to work with them and encourage students, faculty and staff to be a part of the broader community. I look forward to our meetings into December and report back in January and February.

COMMUNITY + STAKEHOLDER FEEDBACK

COMMUNITY RESIDENTIAL MEETING: NORTHFAX

On December 4th, 5th, and 18th the project team held Community Outreach meetings tailored to the residential neighborhoods adjacent to the two study areas.

- “We already have a ton of new construction - townhouses, mixed used- it sounds great for the businesses but is just straining the city infrastructure.”
- “There is a lot of space poorly used. We have parking lots and more parking lots. It’s always been here. They can go. There is no real community center. In cobdale, we use schools whereas the center of Fairfax has the community spaces.”
- “I think there some older buildings that are sitting there waiting for something to happen.”
- “I would love to see more walkable to new things. Movies. Restaurants. Want somewhere I can walk ten minutiae as get a bag of onions.”
- “This is a real barrier for pedestrians is Route 50. Also Chain Bridge, Main Street and North street also in Old Town. Part of the danger has to do with driver behavior. I walked here from university. It was scary to cross. That’s hard to control driver behavior.”
- “One thing I’d suggest is a tunnel or bridge. Pedestrians need a safe way to across.”
- “To go along with the Mann here talking about residential impacts. If you put more housing, everyone getting to 50. I lived in Centerville, I moved to Fairfax and cut my time. So they build 1000 units the drive is back to an hour from Fairfax.”
- “These five centers. What is the character of the study areas? They need to be their own character but what if they tied together to give a sense of being in the city.”
- “A year ago, when we did heated debates about extending university drive, there was some thought or residential near the new point 50 development.”
- “If you go back to the land use map..... why we haven’t included the southern strip on the southern edge of Fairfax. I encourage you to have your drawings go outside of study area.”
- “I am pleased to see more green space being added. I compliment thinking of the green space and less parking lots with runoff.”
- “How do you implement ideas like bringing in green space? It seems like the property owners would be reluctant.”
- “Northfax is the gateway to the city. Right now you have nothing but traffic lights.”
- “The barriers. Highways determine who goes where. If you look at the area north, the western area is more residential, East is more retail. Why not build on the uses already there.
- You can’t walk anywhere. The west side is more residential. Hopefully single or duplex. There are no parks in northfax but you could have a great attraction there.”
- Y”ou can draw from nearby neighborhoods to get the residential density needed to support the businesses. It’s very unsafe for us to walk into Northfax.”
- “If I can’t walk out of my neighborhood to get to Northdax it’s development won’t benefit me. Sidewalks are key. My seven-year-old cant get from historic residential areas to Northfax.”
- “Let’s start with sidewalks on Fairfax Boulevard. “
- “Keep Northfax as green as possible.”
- “I live in fairchester woods, you go from a wood green area ease into a retail area. No glass building high rises.”
- “It should be neighborhood. Bungalows not high rises.”
- “What sort of retail? All we have is nail salons, dry salons, and pizza places. I would like to see more specialty niche retail. Bookstores.”
- “Our retail is struggling. Wouldn’t it be nice if we had a movie theater maybe that would be conducive. We don’t need another sandwich shop in this area.”
- “I appreciate the walk ability. We all want to walk but we have to drive to go to doctors and more. I’m trying to imagine a new shopping center in Northfax. The traffic is terrible. What are we going to do?”
- “Look at our demographics. We have money and we have people but things are struggling.”
- “Destinations are key. Not pass through.”
- “Is there any talk about connectivity to the metro system? Trail system?”
- “The residents in Mosby Woods will need connectivity to this neighborhood.”
- “I would love the boundary of Northfax to cross Fairfax boulevard. Those car dealerships and strip retail is a barrier. One thing to be mindful of, this is one of the most industrial areas of Northfax. You don’t have a lot of softness.”
- “I see buildings going up in Northfax.”
- “What is going to draw people? What about a dog park connecting to the trail system? Pet friendly?”
- “Could you make a stronger walkable link at university or where Eaton hits Fairfax boulevard to connect these southern neighborhoods. All nearby neighborhoods should be able to walk there so they don’t have to drive.”
- “Draws. If you have a great anchor store like Target other stuff sometimes follows”
- “Is there any potential for Metro in Fairfax.”
- “We need branding so people know they are entering Fairfax City.”
- “Mass transit. I’m what about CUE bus? It runs at times only convenient to mass transit. It’s often hard to get to the bus stop and knowing it’s frequency outside of rush hour. Not everyone is going to drive or bike. Let’s accommodate the bus to link these areas”
- “By 2035 office spaces are going to change a lot. Future residents may be working from the bedroom. This could be a special space for those of us who work from home .”
- “If we add more residential we will need schools. Let’s add that to this plan.”
- “I work from home too. I know many of us do. Walkability needs to be key for that.”
- “We need branding”
- “You had mentioned experiential type of retail. What does that mean?”
- “I would like to see more arts and maybe culturally based activities.”

COMMUNITY + STAKEHOLDER FEEDBACK

COMMUNITY CHARRETTE: NORTHFAX

On January 30, the consultant team presented initial concepts for the NorthFAX study area and invited community members and stakeholders to offer suggestions, feedback, and comment through a drawing charrette. Below are the maps and written comments provided back to the consultant team.

Table Number	Full Comment	Housing	Economics & Equity	Green/ Sustainability	Transportation	Density	Walking & Biking	Specific Location	Community Space, Placemaking & Arts	Misc. Comments
Table 1	Community gardening			x					x	
Table 1	Frederick MD, example of public space								x	
Table 1	More greenery - green facades for buildings, more trees, green roofs?			x					x	
Table 1	North signage either circle or green scan bridge			x					x	x
Table 1	Place Bridges at Mclen/Solzy, University/Solzy, New Colvert/Green Way				x		x		x	
Table 1	Retail Signs, Visibility after trees grow			x						
Table 1	Street car to metro and back up. Tunnel under 123.				x					
Table 1	To try and make this successful - example of Soul Korea Chan Chong River	x							x	x
Table 1	Traffic/Affordable Housing Issue	x			x					
Table 2	bring back metro station plan for NorthFAX				x					
Table 2	Central park space surrounded by activity (convertible ice rink, concerts, movies, art festival)			x					x	
Table 2	Concern about removing floodplain, traffic concerns with roundabout and tanker trucks			x	x			x		
Table 2	Connections to existing neighborhoods				x		x			
Table 2	Fairfax blvd & chain bridg parcel park are visually interesting								x	
Table 2	is it possible to have smaller vehicles with more frequent trips			x	x					
Table 2	Nothing to do along boulevard							x		
Table 2	Prioritize biking, density, and social spaces		x				x		x	
Table 2	Retail along bike trail		x				x			
Table 2	Signal at Eaton Place and connection to Northfax East				x		x	x		
Table 2	Taller Buildings are okay by hotels									x
Table 3	Circulator/Bus to connect the region				x	x				
Table 3	Community event space/ a place to linger								x	
Table 3	Connectivity(ferry) trails through Willow Wood				x		x			
Table 3	Eaton - Desgned to take people away from CBR - traffic slowing down				x					
Table 3	Green components, approach to National Parks			x						
Table 3	Need for residential to support retail	x	x							

COMMUNITY + STAKEHOLDER FEEDBACK

COMMUNITY CHARETTE: NORTHFAX

Table Number	Full Comment	Economics &				Transportation	Density	Walking & Biking	Specific Location	Community Space, Placemaking & Arts	Misc. Comments
		Housing	Equity	Green/ Sustainability							
Table 1	Community gardening			x					x		
Table 1	Frederick MD, example of public space								x		
Table 1	More greenery - green facades for buildings, more trees, green roofs?			x					x		
Table 1	North signage either circle or green scan bridge			x					x	x	
Table 1	Place Bridges at Mclen/Solzy, University/Solzy, New Colvert/Green Way				x		x		x		
Table 1	Retail Signs, Visibility after trees grow			x							
Table 1	Street car to metro and back up. Tunnel under 123.				x						
Table 1	To try and make this successful - example of Soul Korea Chan Chong River	x							x	x	
Table 1	Traffic/Affordable Housing Issue	x			x						
Table 2	bring back metro station plan for NorthFax				x						
Table 2	Central park space surrounded by activity (convertible ice rink, concerts, movies, art festival)			x					x		
Table 2	Concern about removing floodplain, traffic concerns with roundabout and tanker trucks			x	x			x			
Table 2	Connections to existing neighborhoods				x		x				
Table 2	Fairfax blvd & chain bridg parcel park are visually interesting								x		
Table 2	is it possible to have smaller vehicles with more frequent trips			x	x						
Table 2	Nothing to do along boulevard							x			
Table 2	Prioritize biking, density, and social spaces		x				x		x		
Table 2	Retail along bike trail		x				x				
Table 2	Signal at Eaton Place and connection to Northfax East				x		x	x			
Table 2	Taller Buildings are okay by hotels									x	
Table 3	Circulator/Bus to connect the region				x	x					
Table 3	Community event space/ a place to linger								x		
Table 3	Connectivity(ferry) trails through Willow Wood				x		x				
Table 3	Eaton - Desgned to take people away from CBR - traffic slowing down				x						
Table 3	Green components, approach to National Parks			x							
Table 3	Need for residential to support retail	x	x								

COMMUNITY + STAKEHOLDER FEEDBACK

COMMUNITY CHARETTE: NORTHFAX

Table Number	Full Comment	Housing	Economics & Equity	Green/ Sustainability	Transportation	Density	Walking & Biking	Specific Location	Community Space, Placemaking & Arts	Misc. Comments
Table 3	Universal design in future multi-family	x								
Table 3	Dense Residential/Multi Family	x				x				
Table 4	Access on old railroad right of way from mostly woods to link up to University Spire to the University				x					
Table 4	Broad appeal, not just local. Not another mosaic, but mosaic-like								x	x
Table 4	Consolidation on West of properties is good progress		x							x
Table 4	Elevation changes in the west part of NorthFax, is that practical, should we rethink bikes?			x			x	x		
Table 4	Environmental motif is a good idea, i.e. ecodistrict			x					x	
Table 4	How do you get from West to East, North to south of Northfax?				x			x		
Table 4	How much taxpayer money is involved? Shared expenses w/ developers? Relax building restrictions on height and density?	x	x							
Table 4	Metro station, Leave it open for future plans				x					
Table 4	Never get action on previous plans									x
Table 4	Northfax is unappealing									x
Table 4	Public art in the green space								x	
Table 4	Road connections, walk and bike			x			x			
Table 4	Smarter growth principals are good		x	x						
Table 4	What about an area on the south side of fairfax boulevard as part of the SAP?							x		
Table 4	Where does snyder trail connect?						x	x		
Table 5	Old Fuddruckers is an eyesore							x		
Table 5	Liked Patriot's Bar and Grill that go t relocated with the redevelopment of the Farifax SC into Point 50		x					x		
Table 5	Point 50 development has too narrow of sidewalk fronting Route 50. Not enoguh space for people to feel comfortable						x	x		
Table 5	Focus on pedestrian connectivity- encourage people to walk not to drive. Mulimodal is key				x		x			
Table 5	Aggregate retail around a focus area but good ot have floating zones for alterantive retail to allow for development flexibility within the activity center		x							

COMMUNITY + STAKEHOLDER FEEDBACK

COMMUNITY CHARETTE: NORTHFAX

Table Number	Full Comment	Housing	Economics & Equity	Green/ Sustainability	Transportation	Density	Walking & Biking	Specific Location	Community Space, Placemaking & Arts	Misc. Comments
Table 5	actiate streets with parks. Don't mandate reail in all 1st floors			x					x	
Table 5	Intespections Route 50/123; orchard and chain bridge road and university drive at route 50 not perceived to be safe for pedestrians/walkable so people will not use them.				x		x			
Table 5	Suggested affordable housing units if the Best Western redevelops.	x								
Table 5	Make buildings more inviting with gathering areas / sense of places.								x	
Table 5	Liked the green spine and emphasized the importance of trail connectivity to adjacent neighborhoods (Cobbdale).			x	x		x			
Table 5	Eleven Oaks is a good example stepping up to higher density. Also liked Madison Mews.	x						x		
Table 5	Bus pullouts are needed along Rt 50.				x					
Table 5	Illustrative building in concept plan look closed and uninviting. Open up building SW of the new circle fronting Rt 50 and create and interior building public green.		x	x		x		x		
Table 5	Culvert direction is challenging.		x					x		
Table 5	Orchard Street connectivity would be good.				x			x		
Table 6	Minimize the removal during construction. (NOTE: drawn at proposed George Snyder Trail. Presumed removal of trees)			x				x		
Table 6	Focus on creek restoration			x				x		
Table 6	Will the new linera park be ADA accessible?		x	x				x		
Table 6	Large Trees Please			x				x		
Table 6	Need to park war (ADA) near resturauns or grocery store. More ADA parking next to retail and resturaunts		x	x				x		
Table 6	Reduce trucks please				x			x		
Table 6	Solar please			x				x		
Table 6	More greenery (at linear park)			x				x		
Table 6	Native trees encouraged			x				x		
Table 6	Permeable pacements			x				x		
Table 6	Minimize ugly water features							x	x	
Table 6	Absolutely NO over or under passes (for pedestrians)				x		x	x		
Table 6	No runoff			x				x		

COMMUNITY + STAKEHOLDER FEEDBACK

COMMUNITY CHARETTE: NORTHFAX

Table Number	Full Comment	Housing	Economics & Equity	Green/ Sustainability	Transportation	Density	Walking & Biking	Specific Location	Community Space, Placemaking & Arts	Misc. Comments
Table 6	Overhead walkways between buildings?							x		x
Table 6	Senior friendly housing	x						x		
Table 6	No brick sidewalks. Stoller friendly				x			x	x	
Table 6	No standing water. No mosquitos!			x				x		x
Table 6	Need to be able to get across on bike without driving . Also scoter, walker, strtoller. Connect Northfax to 1-66 trail to encourage commuter cycling						x	x		
Table 7	Aging population approaching retirement, increasing demand for assited living	x								
Table 7	Changing work conditions (live-work, telework, shared work spaces)		x						x	x
Table 7	Complexity of intersection at Eaton place and CBR				x					
Table 7	Conern that location wont be appealing to older citizens because of high activity level		x	x		x				
Table 7	Connectivity to neighborhoods outside of study area				x		x			
Table 7	Consistently increasing property value generally, concern that changes could negatively affect property values.	x	x							
Table 7	Creating a walkable destination				x		x			
Table 7	Creation of gridded street network				x					
Table 7	Difficulty & long duration of property consolidation		x							
Table 7	Difficulty of accessing older office spaces across from Best western						x	x		
Table 7	Higher density and more room for green space			x		x			x	
Table 7	Increase of traffic as result of new development				x					x
Table 7	Lack of modern Class A office Space		x					x		x
Table 7	Lack of pedestrian connections to neighborhoods				x		x	x		
Table 7	More height allows for more green space			x		x				
Table 7	Opportunity for shuttles to metro due to new development				x					
Table 7	Pass through traffic on fairfax boulevard				x					
Table 7	People want to be outside								x	
Table 7	Preserve green spaces that exist			x						

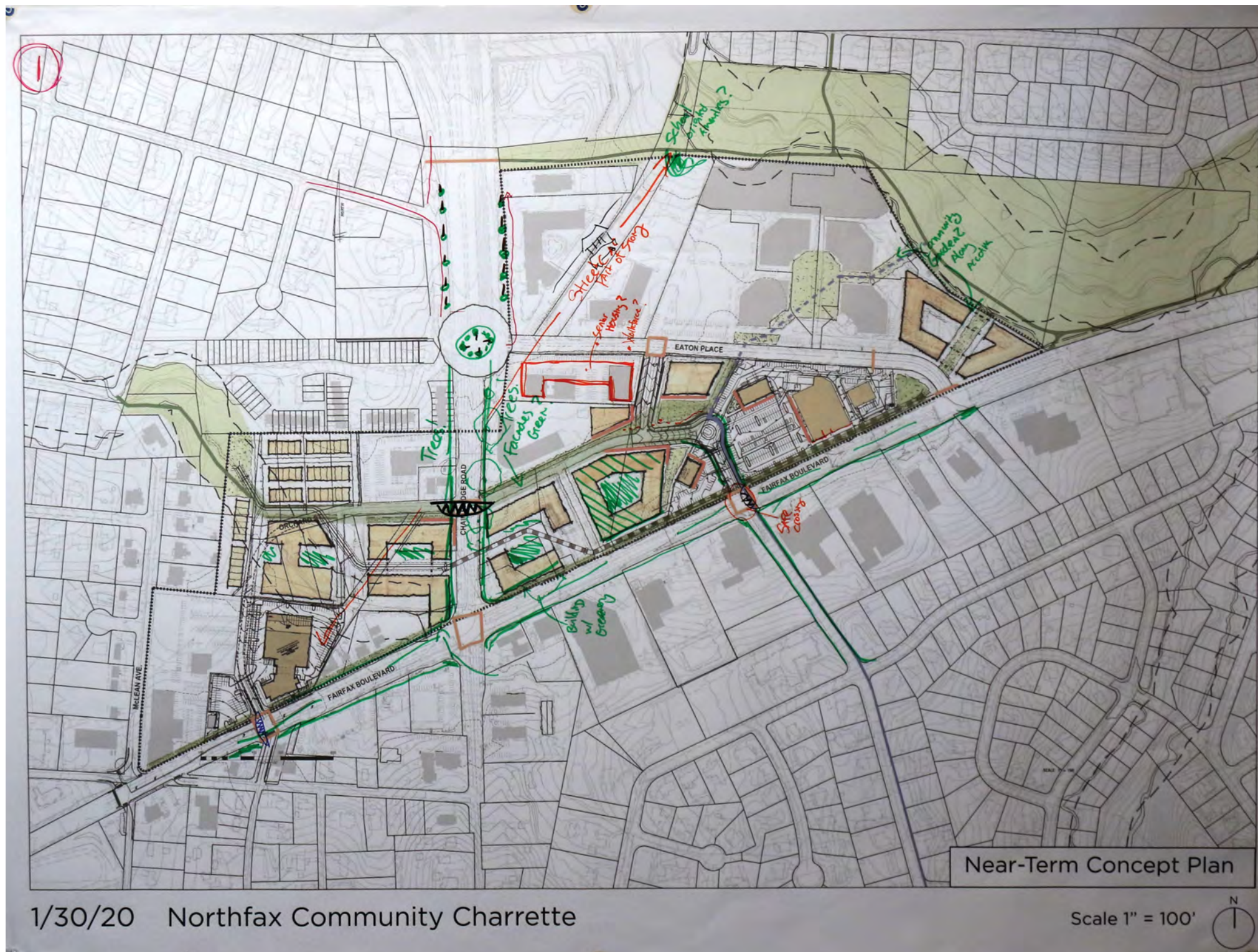
COMMUNITY + STAKEHOLDER FEEDBACK

COMMUNITY CHARETTE: NORTHFAX

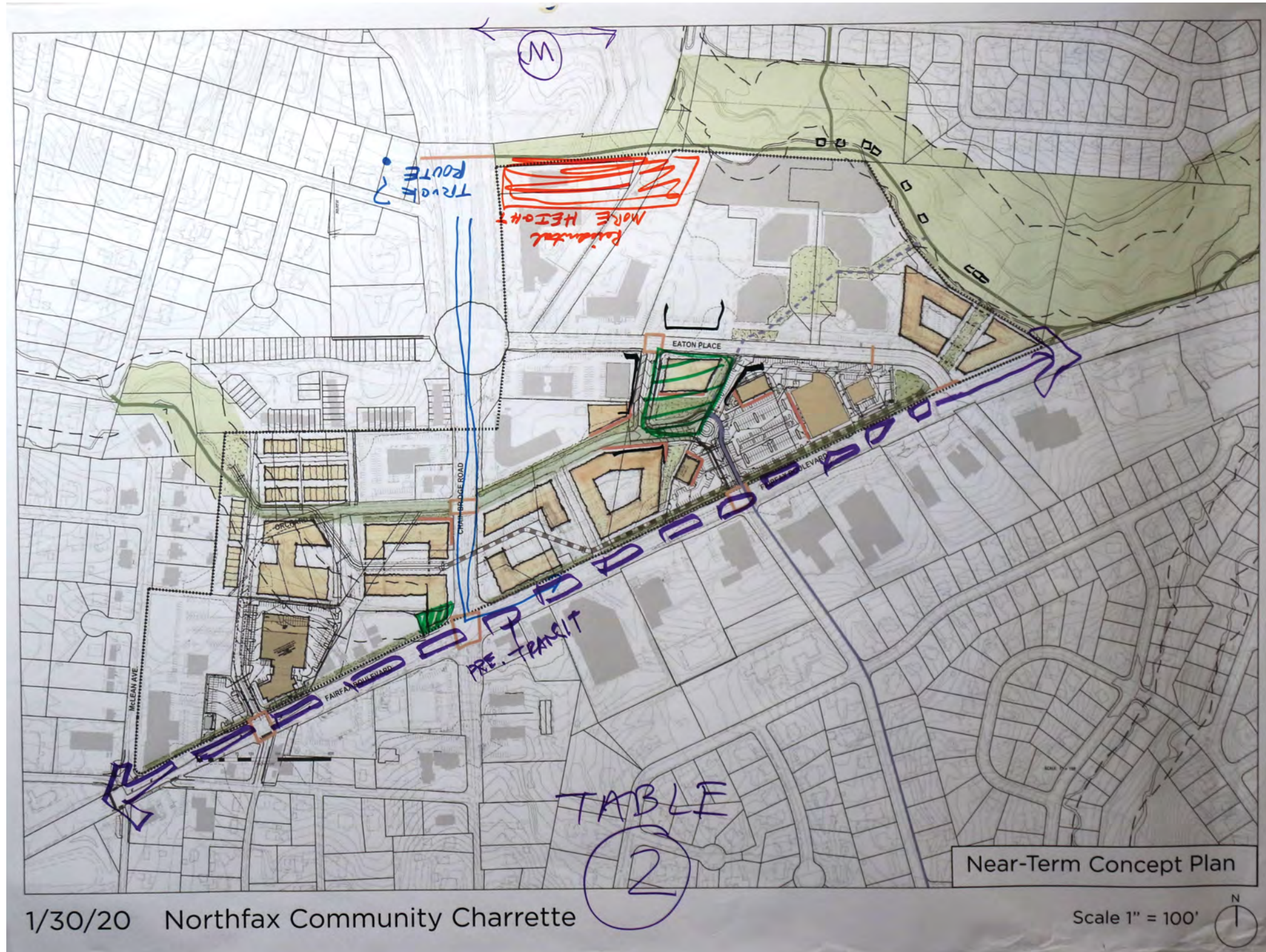
Table Number	Full Comment	Housing	Economics & Equity	Green/ Sustainability	Transportation	Density	Walking & Biking	Specific Location	Community Space, Placemaking & Arts	Misc. Comments
Table 7	Value in creating a concept for an ideal condition in 50 years		x							
Table 7	Value in using roundabouts				x					
Table 7	Value in working natural features into built space									x
Table 7	weakness of office market		x						x	
Table 7	Working nature into design will make it attractive and unique				x				x	
Table 7	Inside out value creation. Start at center & development will work outwards		x					x	x	x
Table 7	Introducing new mixed-use w/o negatively affecting existing neighborhoods	x	x							x

*NOTE TABLE 6 Comments noted on map rather than separate paper during charrette.

COMMUNITY + STAKEHOLDER FEEDBACK
COMMUNITY CHARETTE MAPS: NORTHFAX
TABLE 1



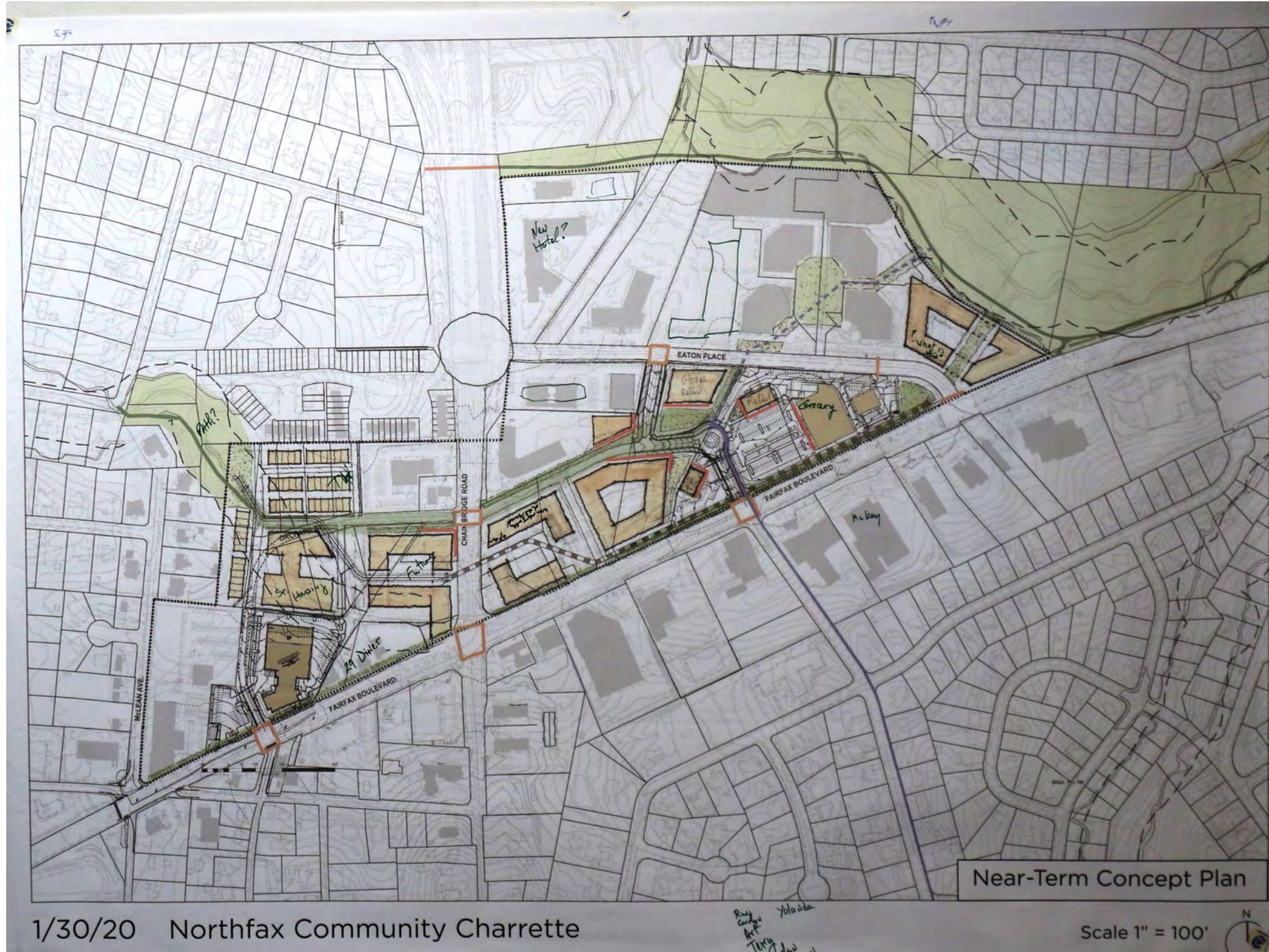
COMMUNITY + STAKEHOLDER FEEDBACK
COMMUNITY CHARETTE MAPS: NORTHFAX
TABLE 2



1/30/20 Northfax Community Charette

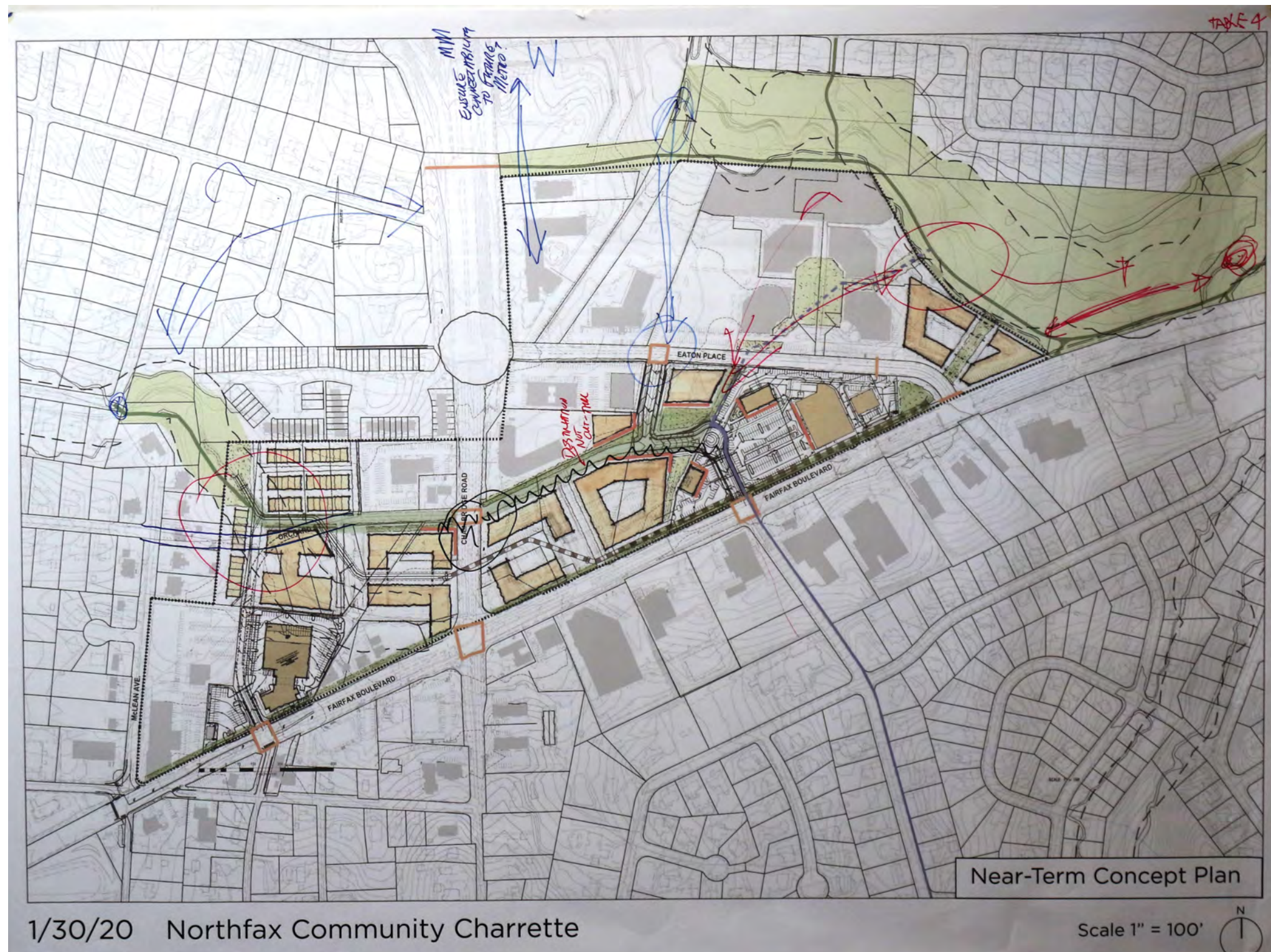
Scale 1" = 100'

COMMUNITY + STAKEHOLDER FEEDBACK
COMMUNITY CHARETTE MAPS: NORTHFAX
TABLE 3



COMMUNITY + STAKEHOLDER FEEDBACK
COMMUNITY CHARETTE MAPS: NORTHFAX

TABLE 4

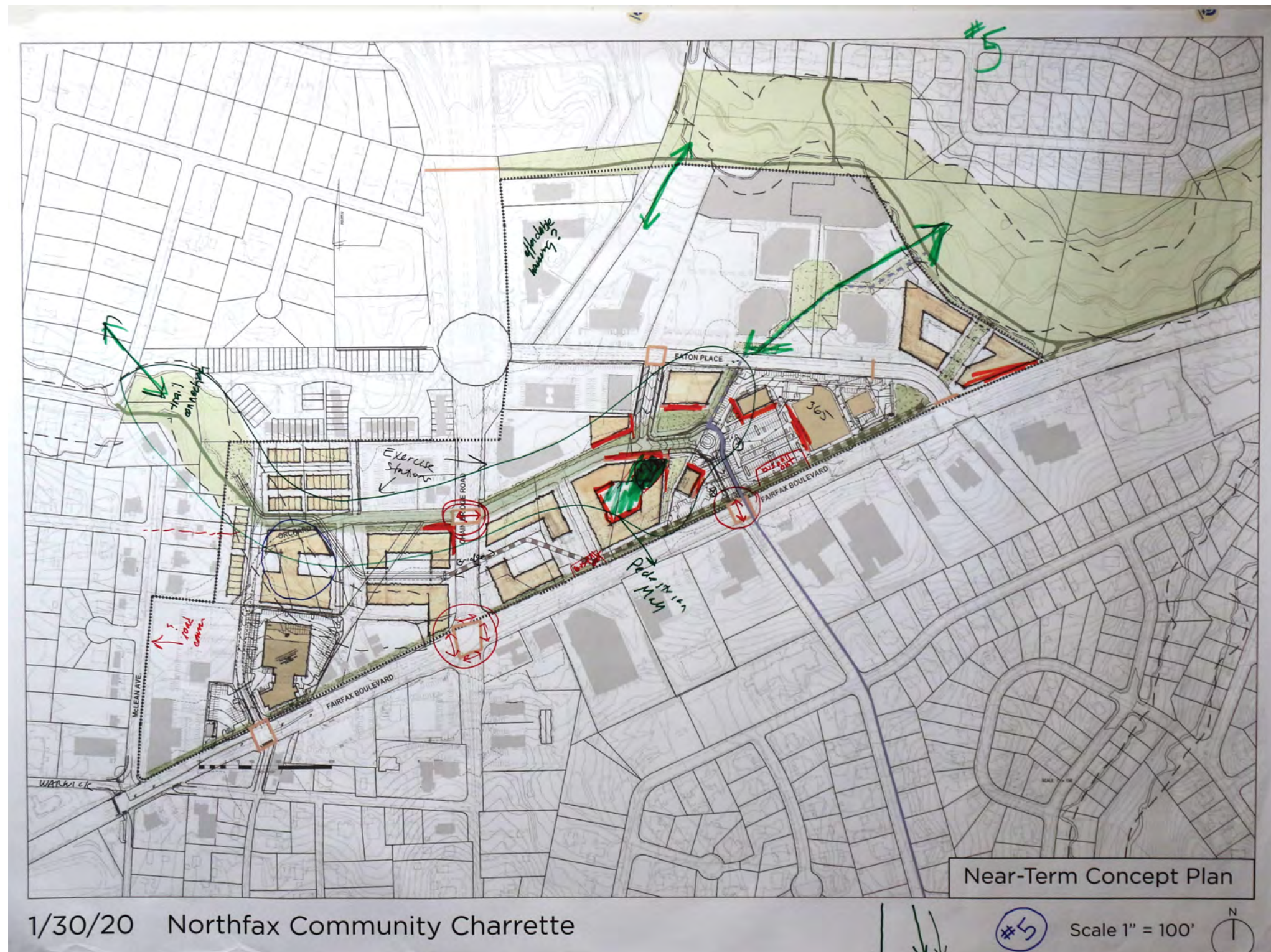


1/30/20 Northfax Community Charrette

Scale 1" = 100'

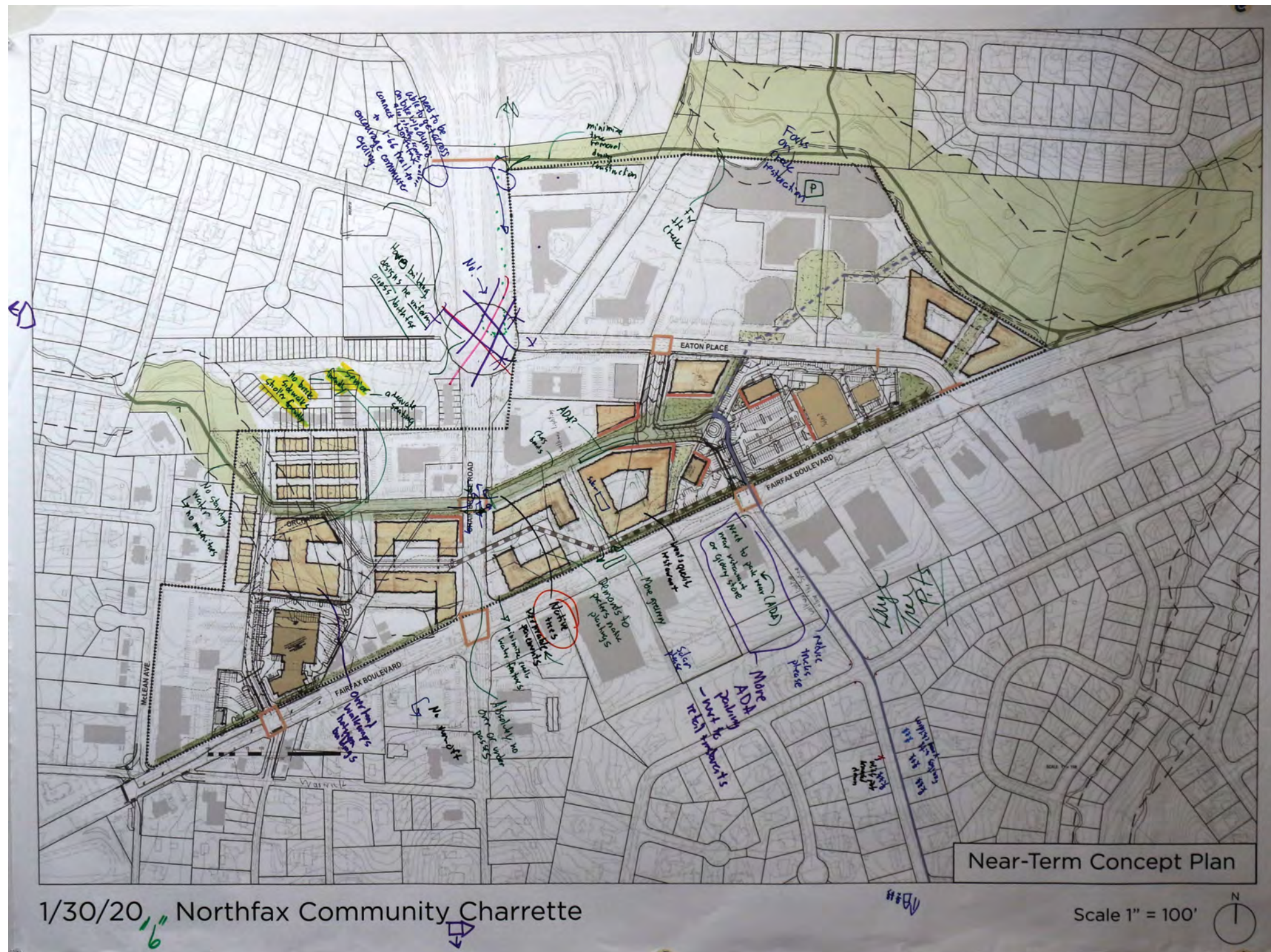


COMMUNITY + STAKEHOLDER FEEDBACK
COMMUNITY CHARETTE MAPS: NORTHFAX
TABLE 5

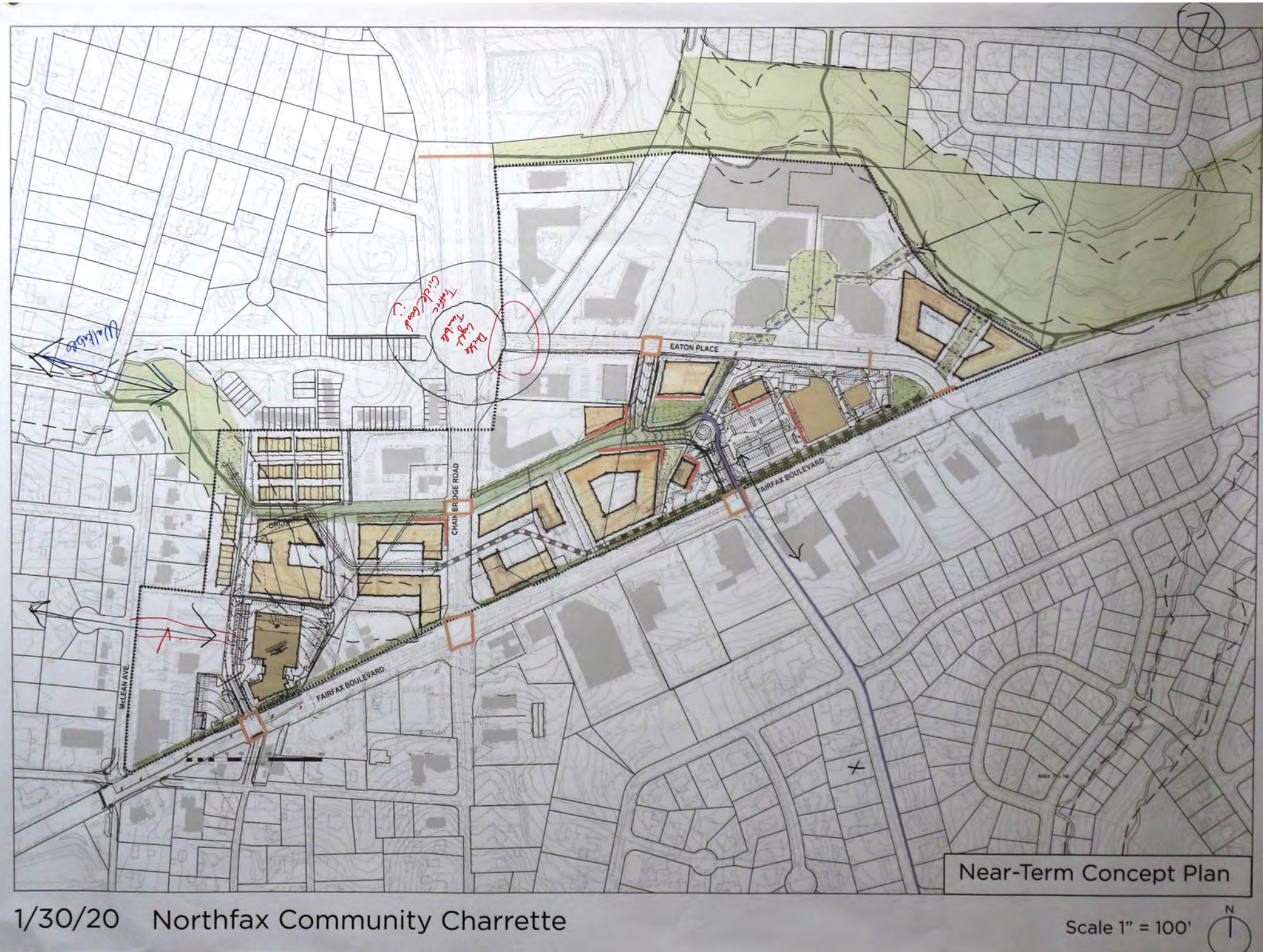


COMMUNITY + STAKEHOLDER FEEDBACK
COMMUNITY CHARETTE MAPS: NORTHFAX

TABLE 6



COMMUNITY + STAKEHOLDER FEEDBACK
COMMUNITY CHARETTE MAPS: NORTHFAX
TABLE 7



1/30/20 Northfax Community Charette

Scale 1" = 100'

Near-Term Concept Plan

COMMUNITY + STAKEHOLDER FEEDBACK