

**REVISED**

**STAFFORD COUNTY PLANNING COMMISSION  
COMPREHENSIVE PLAN SUB-COMMITTEE**

**AGENDA**

**GEORGE L. GORDON, JR., GOVERNMENT CENTER  
CONFERENCE ROOM ABC  
1300 COURTHOUSE ROAD**

**JANUARY 16, 2016  
9:00 A.M.**

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CALL TO ORDER

ROLL CALL OF MEMBERS AND DETERMINATION OF QUORUM

NEW BUSINESS

1. Review of “The Central Stafford Trade, Commerce and Technology Park, 2015-2045” Plan
  - Presentation by Philip Hornung
- 1.a. Stafford Regional Airport – Existing and Future Plans and Impact on the Local Economy
  - Comments by Stafford Regional Airport Authority Representatives
2. Review of concept integrating Airport Compatible Land Use recommendations into the Comprehensive Plan 2010 – 2030 Document
  - Presentation by Michael Zuraf

UNFINISHED BUSINESS

3. Review of Future Deliverables
4. Next Meeting Date
  - Future Land Use Mapping

PUBLIC COMMENT

ADJOURNMENT

THE CENTRAL STAFFORD  
TRADE, COMMERCE AND  
TECHNOLOGY PARK  
2015 - 2045

**THE CENTRAL STAFFORD TRADE, COMMERCE  
AND TECHNOLOGY PARK (THE PARK)**

**A 2015 - 2045 ECONOMIC DEVELOPMENT VISION  
PLAN**

**AN ALTERNATIVE TO CERTAIN 2010 – 2015 URBAN  
DEVELOPMENT AREAS (UDA)**

**Presented to**

**The Stafford County Community  
The Comp Plan Sub-Committee  
The Stafford County Planning Commission  
The Stafford County Board of Supervisors**

**On the occasion of  
The 2015-2020 Comprehensive Land Use Plan  
Update**

**November, 2015**

## **DEDICATION**

This Central Stafford Trade, Commerce & Technology Park (**The Park**) Economic Development Vision Plan is dedicated to the following ordinary citizens I had the pleasure and honor to work with who served Stafford County in extraordinary times (1982–1989).

**The Honorable Alvin Y Bandy, deceased**

**The Honorable E. Lloyd Chittum, deceased**

**The Honorable G. W. Embry, deceased**

**The Honorable Ralph Marceron, deceased**

**The Honorable James Persinger, deceased**

**The Honorable John Porter, deceased**

**The Honorable Ferris Belman**

**The Honorable Lindy Fritter**

**The Honorable Rebecca Reed**

**The Honorable Charles Wandrick**

**Richard “Dick” Bain, County Administrator**

**C. M. Williams, Jr., County Administrator**

By

Philip E. Hornung

Former member of the Stafford County Planning Commission

Former Chairman of the Stafford County Board of Supervisors

Former Chairman of the Joint Planning Commission/ Stafford County Board  
of Supervisors Airport Committee

Former Vice-Chairman Potomac Rappahannock Transportation Commission

[Phornung1@verizon.net](mailto:Phornung1@verizon.net)



## I. EXECUTIVE SUMMARY

**The Park** envisions, at buildout, being the largest and most unique business employment complex on the East Coast. It is located within the County's Urban Services Areas along the I-95 corridor. **The Park** Study Area consists of approximately 7,750 acres located in Central Stafford just 25 miles south of the Capital Beltway. The Stafford Regional Airport's runway extension will make nonstop flights to and from anywhere in the country as well as some international flights a reality.

**The Park's** integrated intermodal transportation infrastructure systems and state of the art dark-fiber serving NoVa and Richmond is unequalled anywhere on the East Coast.

**The Park** complex would provide a one of a kind seamless opportunity for business incubation, start-up companies, small business growth as well as large scale campus style consortiums of national and international corporate entities. The complex would provide seamless growth opportunities for all stages of business growth and development eliminating the need for businesses to relocate as they grow, expand and change their operational focus.

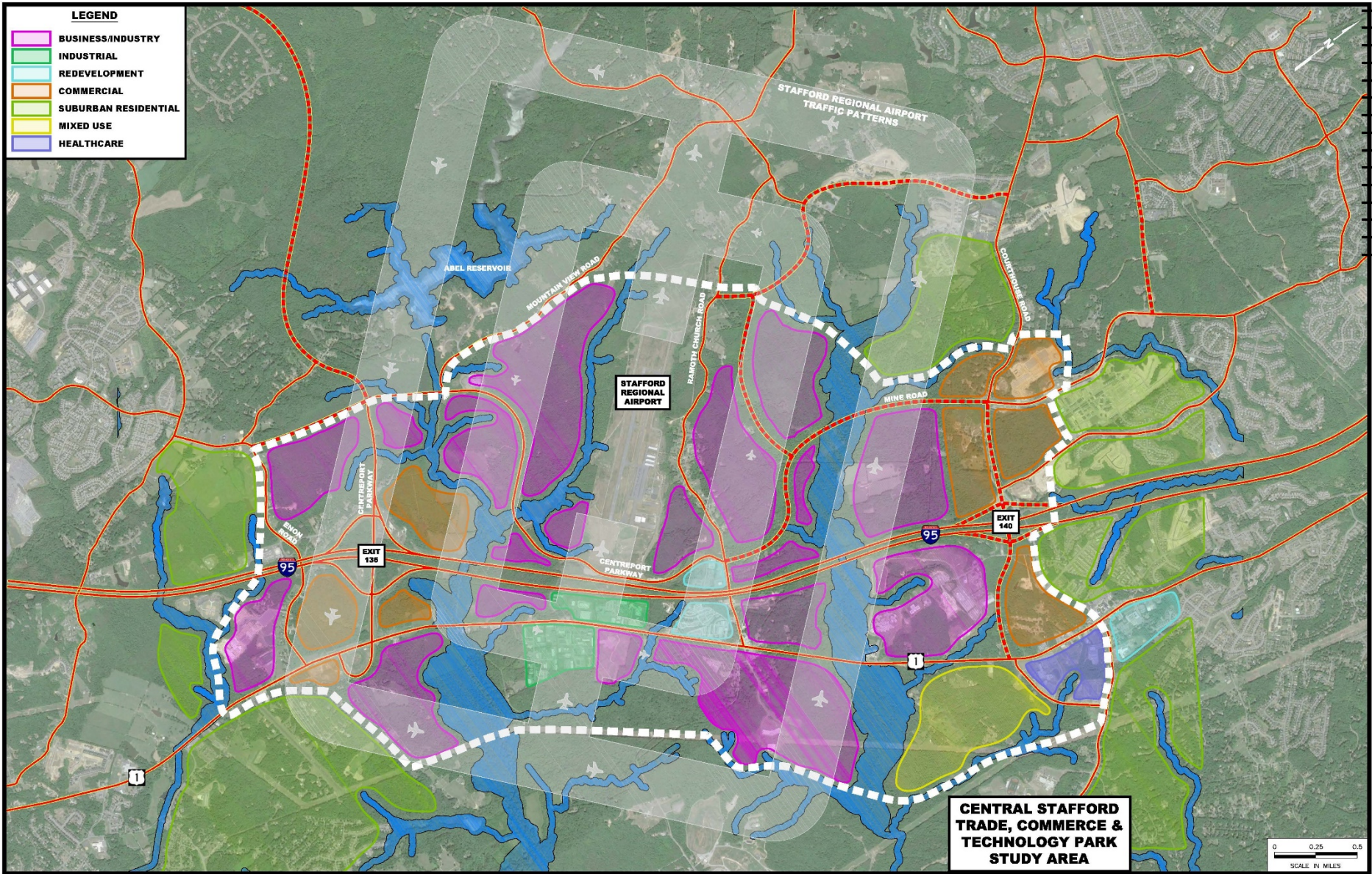
**The Park's** business community would provide critical intellectual and manpower resources for each other. A Germanna Community College Stafford Campus located within the complex could provide all the needed technical training skills for entire Park business complex.

**The Park** with the County's highly educated workforce, most of whom travel outside the County, with its 7<sup>th</sup> wealthiest per-capita average income in the nation and a prestigious AAA bond rating from Standard & Poor's has the potential of generating as many as twenty thousand of new high paying jobs.



**LEGEND**

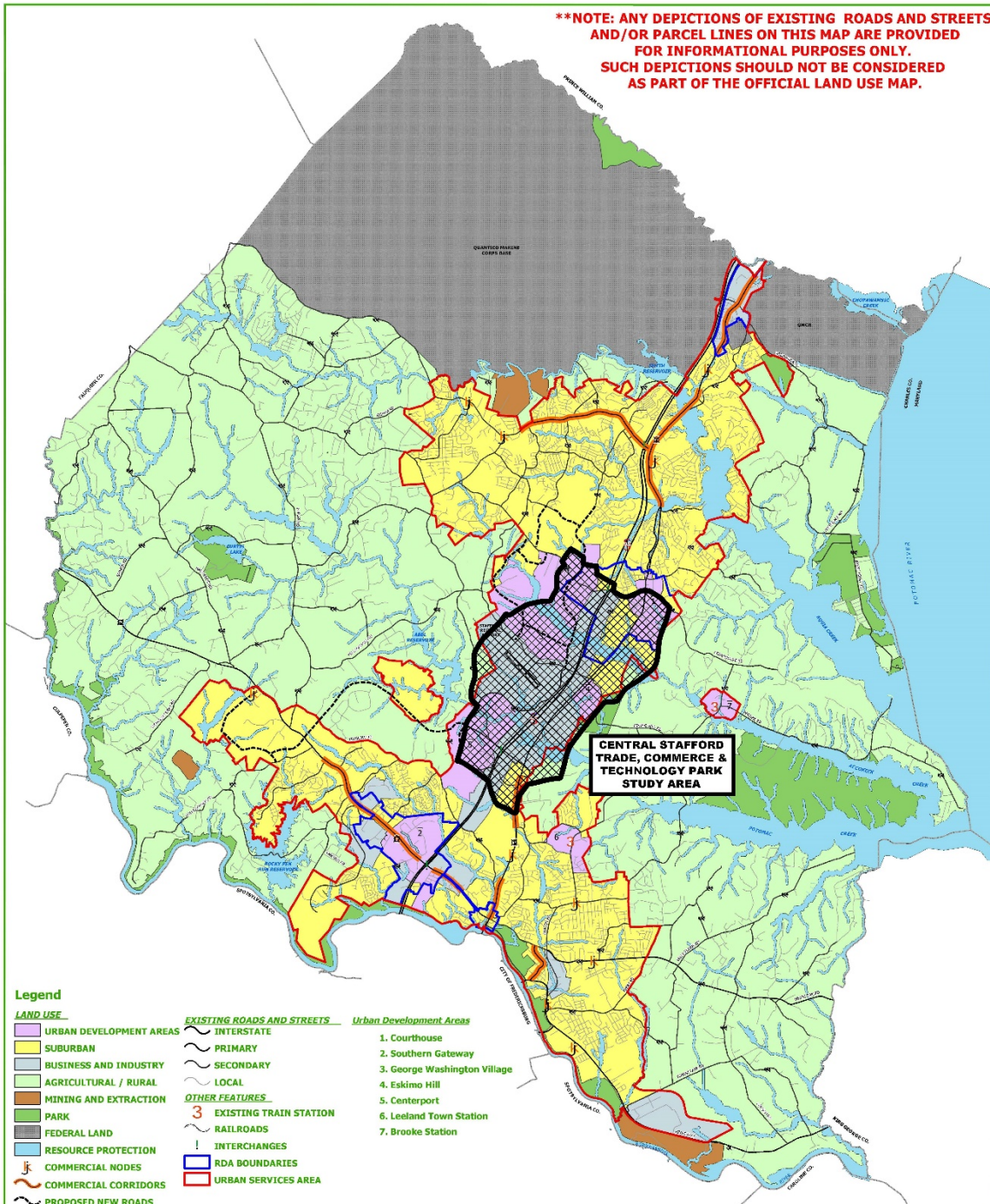
- BUSINESS/INDUSTRY
- INDUSTRIAL
- REDEVELOPMENT
- COMMERCIAL
- SUBURBAN RESIDENTIAL
- MIXED USE
- HEALTHCARE



**CENTRAL STAFFORD  
TRADE, COMMERCE &  
TECHNOLOGY PARK  
STUDY AREA**



**\*\*NOTE: ANY DEPICTIONS OF EXISTING ROADS AND STREETS AND/OR PARCEL LINES ON THIS MAP ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY. SUCH DEPICTIONS SHOULD NOT BE CONSIDERED AS PART OF THE OFFICIAL LAND USE MAP.**



**FIGURE 3.6**  
**FUTURE LAND USE**  
Stafford County Comprehensive Plan

Stafford County, Virginia  
Adopted on June 7, 2011  
Amended on March 18, 2014



**5**

0 0.5 1 1.5 2 Miles

The following is the County's explanation for the 2015 – 2010 Comprehensive Plan 5-year update.

## **Comprehensive Plan Amendments - Targeted Growth Areas and 5-year Update**

The Planning Commission is in the process of amending the Comprehensive Plan, specifically to:

- 1) Amend currently designated Urban Development Areas.
- 2) Consider a 5-year update to the Comprehensive Plan.

## **BACKGROUND**

The Stafford County Comprehensive Plan is a guide to the physical development of Stafford County. The latest large scale amendment to the Plan was completed in December of 2010.

Occasionally, the Plan is amended to reflect the latest goals of the County.

### 2010 Urban Development & Targeted Growth Areas

UDAs are an element of the Comprehensive Plan that was once mandated under the Code of Virginia. It required localities to designate areas that would accommodate at least half of the County's planned growth. Growth in these areas would have been required to follow rigid requirements for higher density urban scale development. This requirement has since been made optional as the result of changes in state legislation and the County Board of Supervisors has directed the Planning Commission to revise the Future Land Use Plan and Map to amend this land use concept. Prior discussion on the issue has suggested renaming these UDAs as Targeted Growth Areas (TGAs) with the location of, and the amount and type of, growth to be modified to best fit in with the existing conditions and future trends in Stafford County.

Recent projections identify future population growth to result in an increase of 89,966 people by the year 2035. This equates to 31,746 future dwelling units. A primary goal of this effort is to determine the most appropriate location for the additional future dwelling units, whether that be in TGAs or other areas.

In addition, State Code Section 15.2-2230 requires the review of the Comprehensive Plan every 5 years. A 5-year review will determine if any elements of the Comprehensive Plan need to be updated, including changes to existing conditions and data, in addition to recommendations with the Goals, Objectives, and Policies.

## **2015 – 2020 Comprehensive Plan Land Use Plan Up-Date**

### **URBAN DEVELOPMENT AND PROPOSED TARGETED GROWTH AREAS**

The 2010 – 2030 Comprehensive Plan, established Urban Service Areas (USA) to cost effectively control future growth throughout the county. The (USA) were designated areas within the County where more compact development patterns are recommended. Anticipated government and community services and facilities would be concentrated in these areas. (See Urban Services Area Map and Future Land Use Map).

The USA was further divided into seven Urban Development Areas (UDA), i.e., Courthouse, Southern Gateway, George Washington Village, Centerport, Eskimo Hill, Leland Station and Brooke Station.

Since its adoption, the Board of Supervisors found these UDA development models to be too restrictive. The Virginia General Assembly has made the UDA optional for local jurisdictions, eliminating any state mandated residential requirements.

As part of its 2015 - 2020 Five Year Comprehensive Plan Update, the Board asked the Planning Commission to consider changing the UDAs into Targeted Growth Areas (TGAs) to provide for more flexible development options.

In addition, the Commission was asked by the Board to identify any other areas of the Comprehensive Plan that needed to be highlighted and to incorporate other appropriate changes for the Plan Update.

On April 22, 2015, the Planning Commission unanimously recommended to the Board of Supervisors approval of the *Comprehensive Plan Amendment: Urban Development Areas as part of the 2015 – 2020 Comprehensive 5-year Update*.

On July 6, 2015, the Chairman of the Planning Commission, corresponded with the Chairman of the Board of Supervisors concerning three matters regarding the Comprehensive Plan Update, two of which are noted here.

First: "Stafford Regional Airport Strategy: There have been a number of recent requests to change the zoning of properties for residential uses in the County that has caused the Stafford Regional Airport Authority (SRAA) to appear at public hearings in opposition to the proposals. The SRAA was concerned about residential development uses not being compatible with airport operations due to safety and quality of life (noise) issues as well as being a detriment to the county's economic development efforts.

"Since November of 2014, the Planning Commission has worked closely with the SRAA to develop land use compatibility guidelines around the airport. Through this effort, it became apparent that a lack of a strategic plan between the County and the ARAA, on how to best promote economic development of the Airport as well as the areas surrounding the Airport, would benefit the county

and future planning efforts. The Planning Commission believes consideration should be given to developing a strategic plan that can foster economic growth and minimize community conflicts with the Airport.

Second: "Central Stafford Business District: In recent deliberations, Mr. Philip E. Hornung provided both the Planning Commission and the Board of Supervisors with his concept for a Central Stafford Business District, The concept looks at converting the Centerport, George Washington Village and Courthouse UDA/TGA areas into a cohesive commercial and industrial complex. The Planning Commission believes that the Board should consider this in their deliberations regarding all the items in this letter".

On July 7, 2015 the Board of Supervisors held a public hearing on the proposed Comprehensive Plan Update – Proposed TGA Amendments. County citizens expressed concerns centered on the recommended significant amount of new residential units, already overly congested roads, the adverse impact on already near capacity schools, the negative impact on the Airport operations, public safety, quality of life and economic development opportunities. Many citizens asked for more public involvement into the development of the proposed Targeted Growth Areas.

The Board of Supervisors sent the proposed Comp Plan Update - TGA amendments to the Comprehensive Plan regarding the existing Urban Development Areas (UDA) and the Five-Year Plan Update back to the Planning Commission for further study. In addition, they asked the Commission to consider adding the Blaisdell tract to the Southern Gateway TGA and make any other amendments deemed necessary.

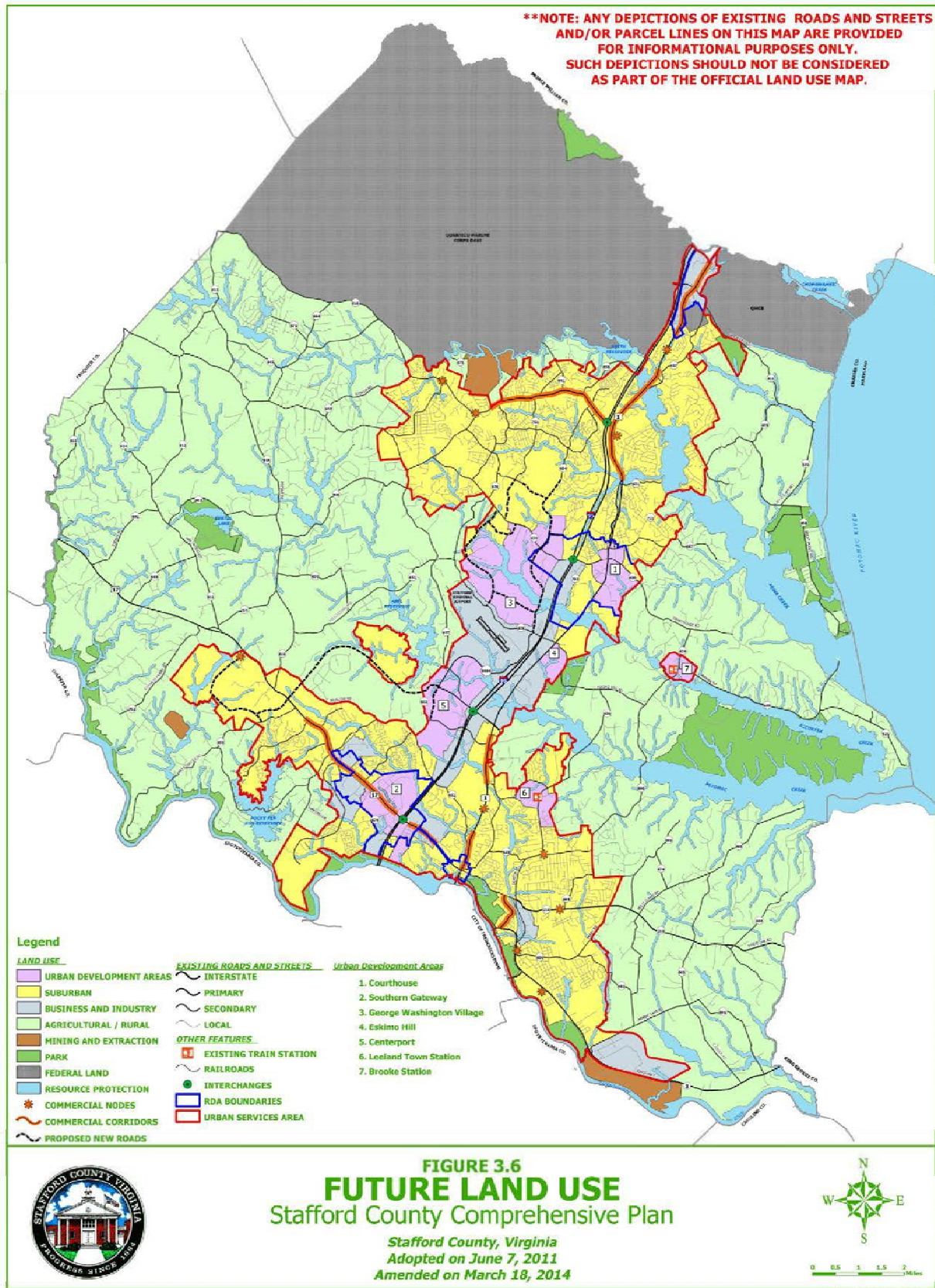
On July 22, 2015 the Planning Commission asked that the Board allow them until January 31, 2016 to comply with the Board's

specific requests and for permission to address the following items, including but not limited to the following:

- Step back from the UDA/TGA concept and consider alternatives to accommodate planned growth;
- Reevaluate the George Washington Village TGA and Centerport TGA in relationship to the airport and the following factors:
  - Ensure all planned units fit into the TGA;
  - Consider modification of limits, land use and/or number of dwelling units;
  - Consider relocating TGA density to the expanded Southern Gateway TGA (Blaisdell tract).
- **Consider deleting references to the Airport Land Use Compatibility Plan;**
- Reevaluate the goals and objectives of the Plan;
- **Consider other proposed development scenarios such as the Central Stafford Business District;**
- Consider the extent of public involvement in the effort;
- Consider alignment of the Capital Improvement Plan(CIP) with the proposed Comp Plan; and
- Consider additional changes to the Urban Services Area boundary.

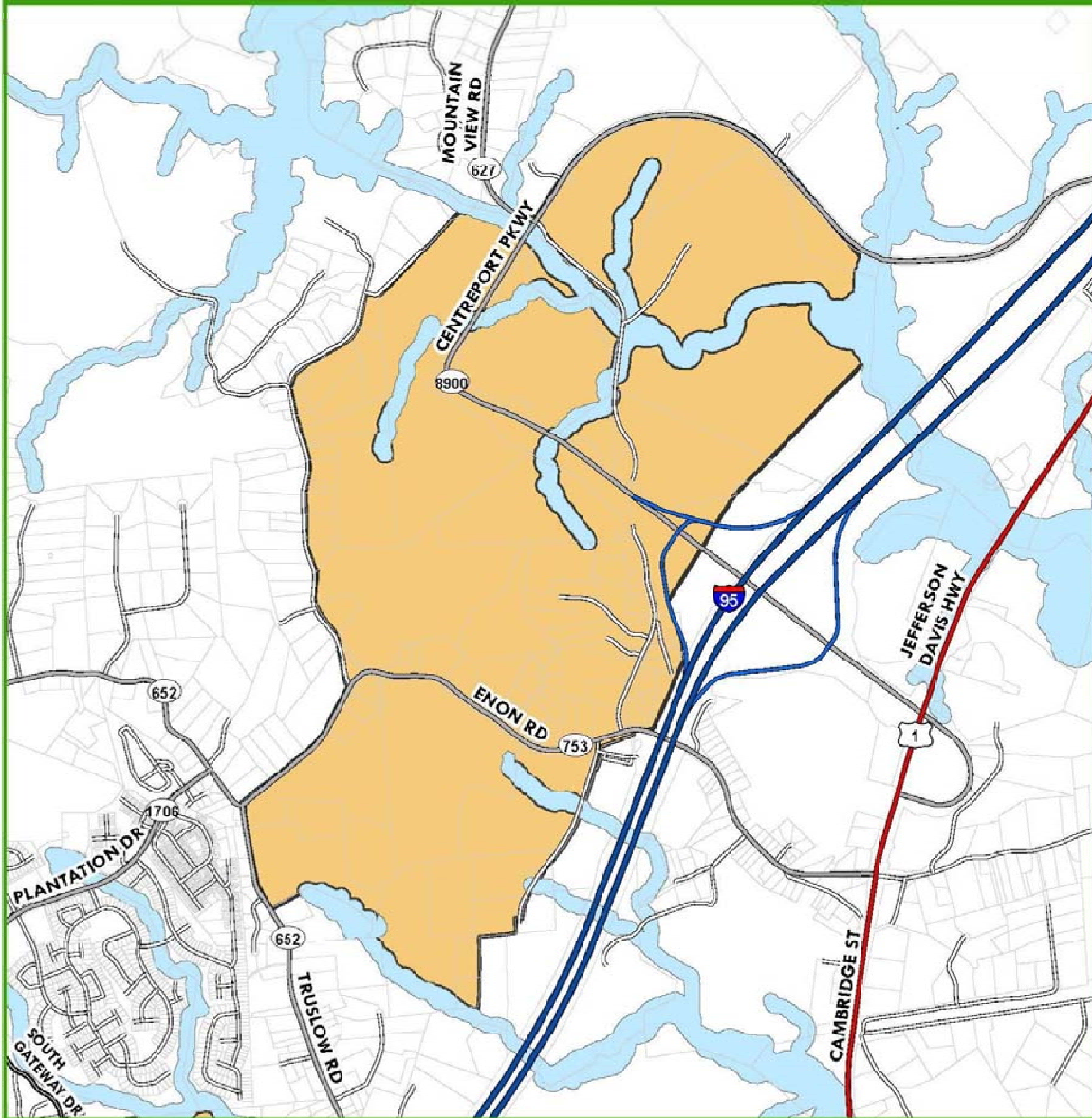
On August 18, 2015 the Board unanimously adopted a resolution granting a time extension until January 31, 2016 for the Planning Commission to consider these possible amendments to the 2015 – 2020 Comprehensive Plan Update.







**FIGURE 3.7D**  
**Centerport TGA**  
**Stafford County Comprehensive Plan**  
 Stafford County, Virginia  
 Adopted On December 14, 2010  
 Amended On June 7, 2011



**Legend :**

- Resource Protection Area (RPA)
- Targeted Growth Area (TGA)

0 700 1,400 2,800 Feet

Data layers are compiled from various sources and are not to be construed or used as a "legal description." Data layers are believed to be accurate, but accuracy is not guaranteed.

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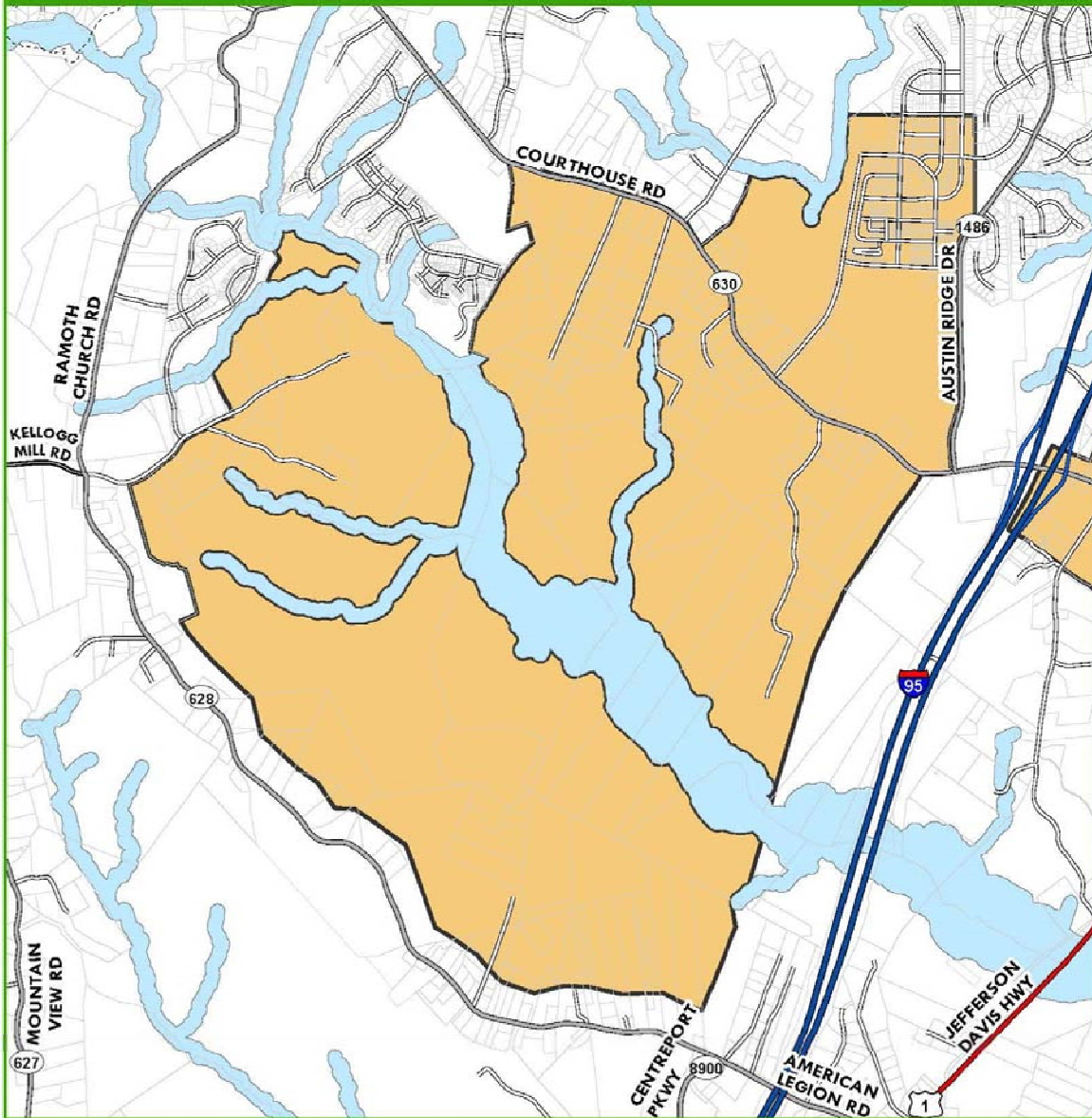
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# **FIGURE 3.7C** **George Washington Village TGA** **Stafford County Comprehensive Plan**

Stafford County, Virginia  
 Adopted On December 14, 2010  
 Amended On June 7, 2011



## **Legend :**

-  Resource Protection Area (RPA)
-  Targeted Growth Area (TGA)

0 750 1,500 3,000 Feet

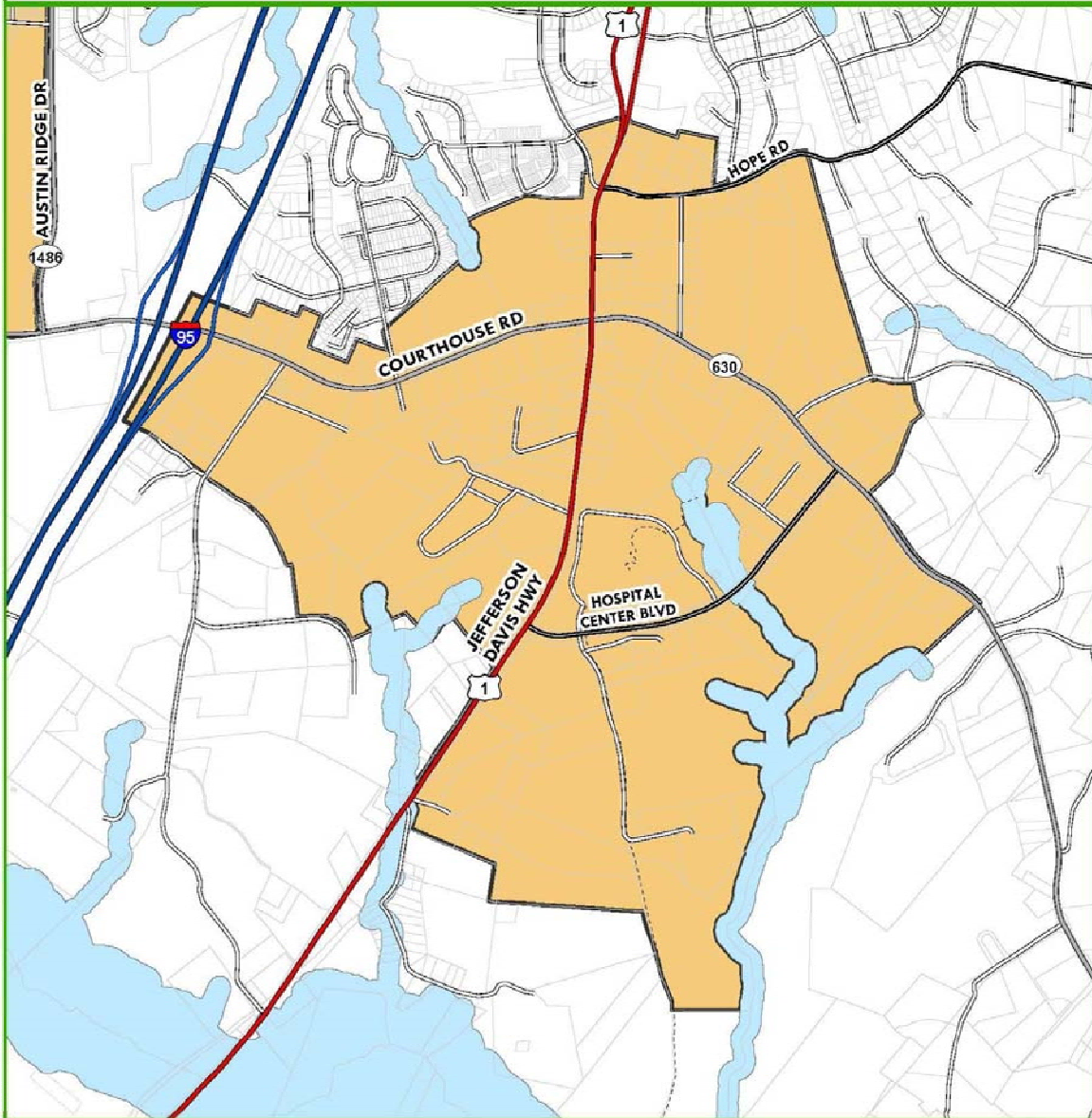
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**FIGURE 3.7A**  
**Courthouse TGA**  
**Stafford County Comprehensive Plan**  
 Stafford County, Virginia  
 Adopted On December 14, 2010  
 Amended On June 7, 2011



**Legend :**

- Resource Protection Area (RPA)
- Targeted Growth Area (TGA)

0 500 1,000 2,000 Feet

Data layers are compiled from various sources and are not to be construed or used as a "legal description." Data layers are believed to be accurate, but accuracy is not guaranteed.

### 2015 – 2020 Comp Plan Amendments Table 3.3 UDA/TGA Development Summary Table

Residential Dwelling Units	Commercial
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UDA	Multi-Family	Townhouse	Single Family	Total	Total square footage
Courthouse Area	656	150	580	1,386	2,727,310
George Washington Village	1,080	450	2,650	4,180	11,434,400
Centerport	750	300	2,720	3,770	1,878,400
Total Units	2,486	900	5,950	9,336	16,040,110

Residential Dwelling Units	Commercial
----------------------------	------------

Target Growth Area	Multi-Family	Townhouse	Single Family	Total	Total square footage
Courthouse Area	600	400	1,240	2,240	2,291,710
George Washington Village	2,870	930	1,380	5,180	3,506,800
Centerport	1,560	636	1,080	3,270	1,878,400
Total Units	5,030	1,966	3,700	10,690	7,676,610

**UDA:** The Centerport, George Washington Village and Courthouse TGAs call for 9,336 new residential units and require 16,040,110 square ft. of brick and mortar commercial to offset the county's cost of residential development.

**TGA:** The Centerport, George Washington Village and Courthouse TGAs call for 10,690 new residential units and require 7,676,610 square ft. of brick and mortar commercial to offset the county's cost of residential development.

## EXISTING UDA & PROPOSED TGA CHALLENGES

1. Brick & mortar commercial development is a 20<sup>th</sup> century economic development model which is no longer a commercial/retail mainstay in the 21<sup>st</sup> century i.e.,

a. According to the 24/7 Wall St. analysis "Several Big Names are Struggling: With the growth of e-commerce still outpacing the overall growth of retail sales, retailers are continuing to close brick-and-mortar outlets.

"While total U.S. retail sales grew 3.7% in the fourth quarter of 2014 compared to the same quarter in 2013, e-commerce sales jumped 14.6% in the fourth quarter. One year earlier, total sales grew 3.8% year-over-year, while e-commerce sales increased 16.0%.

"As e-commerce increasingly grabs a larger share of retail sales, several retailers are reducing their physical presence, including department stores and specialty retailers such as clothing stores, bookstores and electronic outlets. Some retailers saw sales reduced due to strategic mistakes or consolidation through mergers and still others due to over-expansion."

2. SHOWROOMING:

Showrooming has become a worldwide practice and is becoming more prevalent and a nightmare for an increasing number of brick and mortar retailers. i.e., A "customer" comes into an establishment and peruses a number of items. Finds a particular garment, say a piece of clothing, tries it on and then returns it to the clothing rack after scanning or taking a Smart Phone picture of the bar code and leaves the store. The "customer" goes home locates the exact item on any number of on-line sites, shops for the best price and

purchases it with no charge for shipping and probably pays no sales tax and the item is delivered the next day.

3. Stafford County already has a glut of planned and existing unoccupied commercial/retail space.
4. Recently the Board of Supervisors converted an ageing commercially zoned property to mixed-use development in an effort to rejuvenate the Aquia Towne Center, a commercial/retail shopping center. The renovation decreased the original commercial footprint of the Center, added 256 apartment units and was provided \$6.25M in tax incentives.
5. Oakenwold Rezoning Reclassification: This proposed mixed-use development in the Centerport UDA/TGA called for 695 new residential units. Most of the residential units were to be located directly beneath the standard aircraft approach traffic patterns of the Stafford Regional Airport.

The proposed 250,000 square feet of brick and mortar commercial floor area was to mitigate the project's cost for providing county services.

The Planning Commission recommended denial of the reclassification and on September 16, 2014 the Board of Supervisors denied the reclassification. Non-invested citizen opposition was unanimous throughout all public hearings.

6. George Washington Village Reclassification: This proposed mixed-use development proposal called for 2957 new residential units. Most of the residential units were to be located directly beneath the standard aircraft approach



traffic patterns of the Stafford Regional Airport. It's proposed 1.85 million square feet of brick and mortar commercial space was to mitigate the project's cost for providing county services.

The Planning Commission unanimously recommended denial of the reclassification. In October 2015 the Chairman of the Board of Supervisors stated that there was no Board support for the project. Due to the absence of any support by the Board of Supervisors, the applicant withdrew the reclassification proposal. Community opposition to the project had been unanimous throughout nine months of public hearings.

7. Single family residential development lots are already significantly cheaper to develop outside than inside the Urban Services.

The cost of preparing a single family lot in Stafford County has undergone a dramatic shift. It is estimated that the average cost to develop a single family detached lot in Stafford County in a newly rezoned subdivision within the county's Urban Services Areas is approximately \$120,000 - \$140,000.

On the other hand, it is estimated that the average cost to develop a single family 3-acre lot outside the Urban Services Areas is \$30,000 - \$40,000.

There is a real danger that the properties within these TGAs will be developed as currently rezoned A-1, 3-acre single family residential lots. This could have disastrous implications for the County's proposed Urban Services Area (USA) development plans.



8. The Stafford Regional Airport is located within the Centerport TGA. Its standard aircraft traffic flight patterns encompass much of the acreage of the Centerport, George Washington Village and Courthouse TGAs.

On May 15, 2015, the Planning Commission at the request of the Board of Supervisors and after extensive research working in conjunction with the Stafford Regional Airport Authority, unanimously recommended that the Board of Supervisors approve an amendment to Chapter 3 of the "Land Use Plan" incorporating the Airport Land Use Compatibility Area Guidelines which recommend appropriate land uses and Development Guidelines. These development guidelines address the different aircraft traffic pattern areas in the vicinity of the airport to ensure the safety of people and property on the ground from aircraft flying overhead and the long term viability of the Airport. (See Airport Impact Overlay with Future Land Use Map.)

On June 16, 2015, the Board of Supervisors rejected the proposed amendment to Chapter 3 of the "Land Use Plan" incorporating the Airport Land Use Compatibility Area Guidelines.

9. LEGOLAND is still looking for a location on the East Coast. Its theme parks in San Diego, CA and Winter Haven, FL are open yearlong. For the past several years Legoland has considered establishing a theme park on 75 acres within the Centerport UDA/TGA. The County's financial incentive package hinges on whether it could once again get the general assembly to give it authority to tax admissions at an entertainment venue. The Commonwealth of Virginia gave Stafford a one-year authorization to implement this power to tax as part of its financial incentive package. This authority expired on June 30, 2015.

When the County did not get a response to meet Legoland's financial requirements, the admissions taxation renewal request was removed from the County's 2016 legislative requests from the general assembly on October 8, 2015., *Legoland theme park still uncertain for Stafford*, The Free Lance Star, Vanessa Remmers, October, 15, 2015.

Since Merlin International, the owner of Legoland, does not publish its annual attendance figures it is almost impossible to calculate and prepare for the increased traffic congestion likely to occur on I-95. Most of these visitors would access the theme park via I-95 adding to its existing miserable traffic congestion.

10. While it is important that the County not only provide for fiscally responsible residential property for future county residents, it is more important that it provide ample opportunities for the more than half of our current workforce who must leave the county each day to find meaningful, gainful employment. This is the most significant quality of life issue facing our county residents. These three proposed TGAs do little to accomplish this goal. It is more of the same, i.e., increased residential density with its own retail/commercial brick and mortar development attempting to offset the cost of providing county services.

11. The majority of our well educated workforce continues have to leave the County to find meaningful and gainful employment creating serious family quality of life issues. The majority of the future would-be residents of these 10,000 residential units would more than likely travel out of the County for employment to meaningfully support their families.

## **THE CENTRAL STAFFORD TRADE, COMMERCE & TECHNOLOGY PARK**

**The Park** envisions, at buildout, being the largest and most unique business employment complex on the East Coast. It is located within the County's Urban Services Areas along the I-95 corridor. **The Park** Study Area consists of approximately 7,750 acres located in Central Stafford just 25 miles south of the Capital Beltway. The Stafford Regional Airport's runway extension will make nonstop flights to and from anywhere in the country as well as some international flights a reality.

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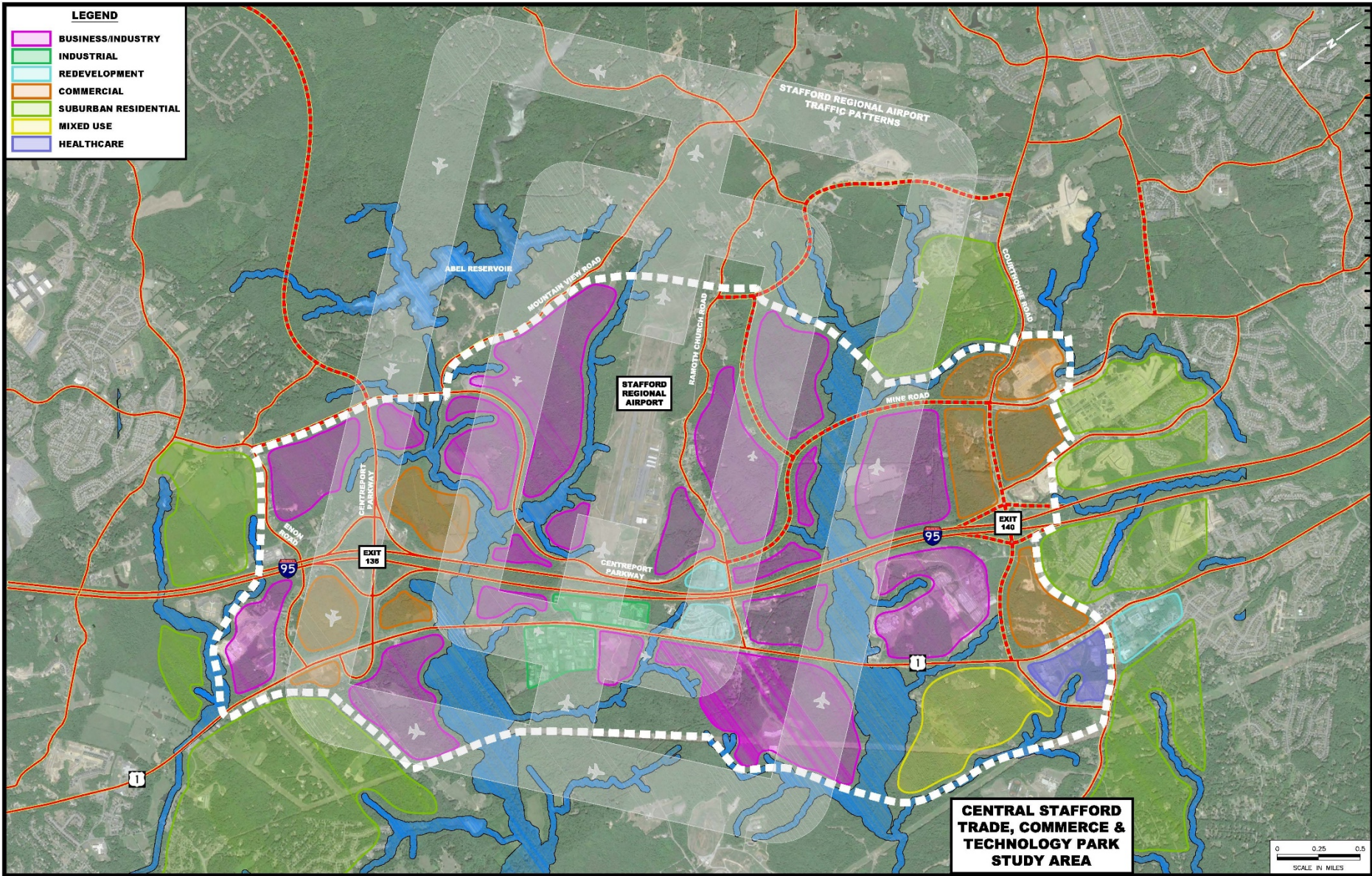
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**LEGEND**

- BUSINESS/INDUSTRY
- INDUSTRIAL
- REDEVELOPMENT
- COMMERCIAL
- SUBURBAN RESIDENTIAL
- MIXED USE
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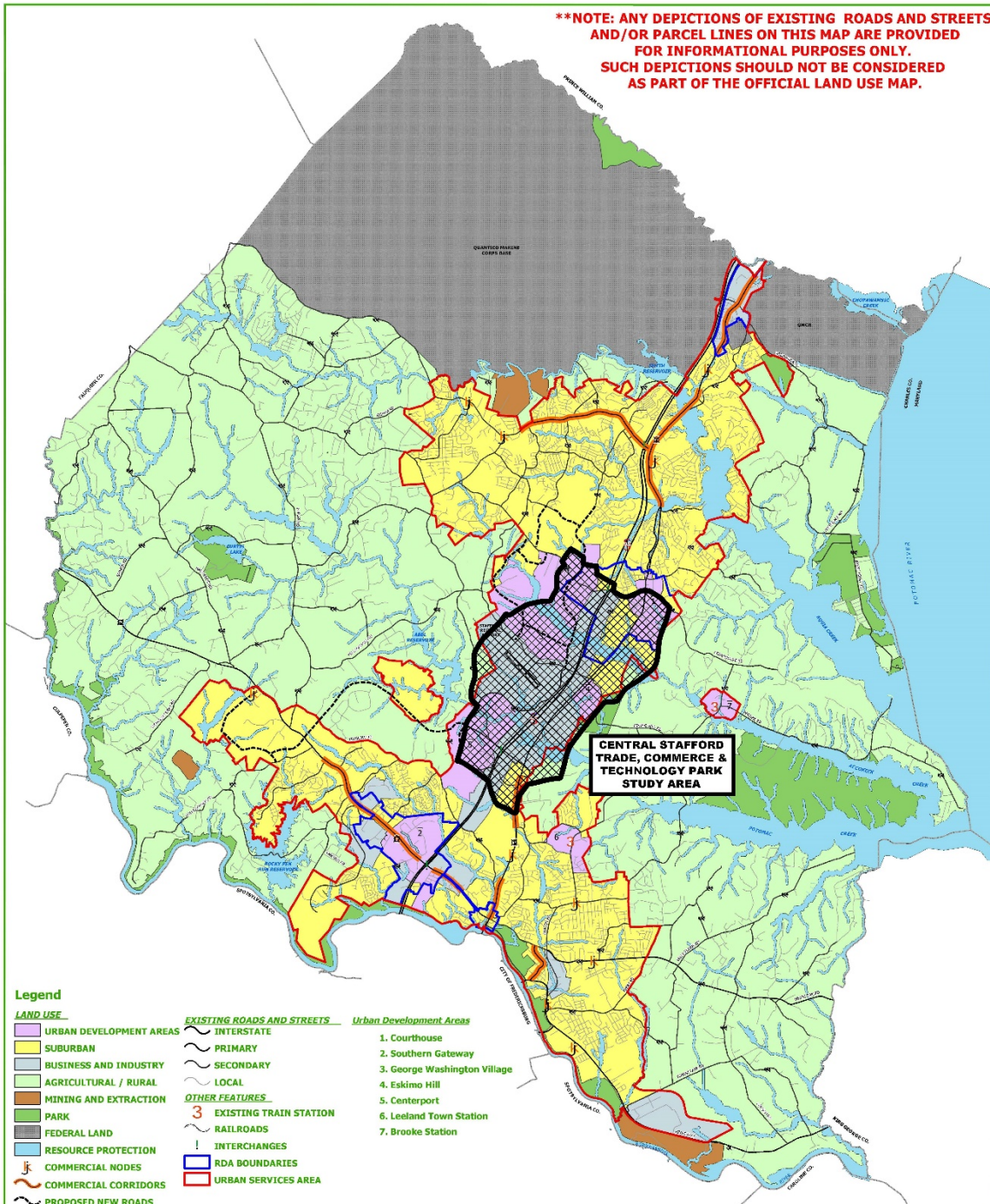


**CENTRAL STAFFORD  
TRADE, COMMERCE &  
TECHNOLOGY PARK  
STUDY AREA**

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SCALE IN MILES



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**FIGURE 3.6**  
**FUTURE LAND USE**  
Stafford County Comprehensive Plan

Stafford County, Virginia  
Adopted on June 7, 2011  
Amended on March 18, 2014

**5**

0 0.5 1 1.5 2 Miles

## BACKGROUND

In the early 1980's, Stafford was on the threshold of becoming the first political subdivision in the Commonwealth of Virginia since the Civil War to declare bankruptcy. The County was borrowing money biweekly to meet its payroll commitments and facing rampant, unplanned residential growth and overcrowded schools. Its finances were under investigation by the Federal Bureau of Investigation.

The then Board Members (See Appendix I.) and staff began the daunting and difficult task of overhauling the county government with sound planning laying a solid financial foundation the fruits of which County residents enjoy today.

With rampant growth in North and South Stafford, they envisioned the Central core of Stafford to become the County's corporate/business employment center for residents living in North and South Stafford. The Board of Supervisors laid the foundation for this vision when it incorporated their nationally recognized U. S. Route One Corridor Plan into the Comprehensive Land Use Plan in 1986 and updated it in 1989. (See Appendix II.)

Major transportation infrastructures were added to Central Stafford to enhance this vision. The Board subsequently located the Stafford Regional Airport and the Centerport I-95/ U.S. Route One (Airport) interchange. The Stafford Regional Airport opened in December 2000. The I-95/U.S. Route One Airport Interchange opened in 2007.

The 2010 – 2030 Land Use Plan lacks compatibility guidelines around the airport to guide and protect the health, safety and quality of life of county residents and to provide guidelines and protections for corporate development surrounding the Stafford Regional Airport.

The proposed Central Stafford Trade, Commerce and Technology Park, Study Area (**The Park**) encompasses the Centerport,

George Washington and Courthouse UDAs as well as the Courthouse Redevelopment Area. These Areas total approximately 3,760 acres.

## **I. THE PARK'S TRANSPORTATION INFRASTRUCTURE**

The 2010 – 2030 Comprehensive Land Use Plan's Transportation Goal calls for the creation of an "intermodal" system of transportation which implements the Land Use Plan by providing a safe, efficient and affordable means for our people and products to move safely in and through Stafford County.

Transportation infrastructure funding has been grossly inadequate at state and federal levels due to congressional political gridlock. Successful long-term planning for the future growth of Stafford is highly dependent on adequate, responsible and timely transportation funding from the Federal Highway Administration and the Virginia Department of Transportation. Until that happens, Stafford County has to make the most of limited existing and uncertain future funding by maximizing the use of its current transportation systems.

"Despite years of warnings that the nation's roads, bridges and transit systems are falling apart and will bring nightmarish congestion, the House of Representatives on Thursday (November 5, 2015) passed a six-year transportation bill that maintains the spending status quo." The Free Lance Star, *House transportation bill leaves funding questions*, by Joan Lowy, Associated Press.

## **A. Existing Transportation Systems to support the The Central Stafford Trade, Commerce & Technology Park (The Park)**

**The Park** cohesively maximizes the existing, extensive and diversified countywide transportation network.

### **1. ROADS**

#### Interstate 95

- Interstate 95 is the major north/south interstate highway serving the Country from Maine to Florida.
- **The Park** would be served by two existing Interstate 95 interchanges, i.e., the Centerport and State Route 630 Interchanges.
- Both interchanges would provide **The Park** direct interchange access to U.S. Route One as well.
- The existing State Route 630 interchange is currently being relocated and its divergent/diamond design is to relieve the existing massive traffic backups on Interstate I-95.

The new 630 Interchange would integrate the Courthouse Redevelopment Area into **The Park**.

- Currently the I-95 HOT Lanes extend south to State Route 610. The eventual extension of these HOT lanes south of State Route 630 will provide easier vehicular access to and from Northern Virginia and **The Park**.



## U.S Route One

- U.S Route One would provide local traffic direct access to **The Park** via the Centerport and State Route 630 Interchanges.
- Local traffic would also be provided access to **The Park** via the intersections of U.S. Route One at State Route 628 and State Route 627 and the Centerport Parkway spine road.
- State Route 628 Eskimo Hill Road at its intersection with U.S. Route One would provide a 6 minute direct access to and from the Brooke Commuter Rail Station and the Brooke Station UDA/TGA.

## Areas East of Interstate 95

U.S Route One would provide local transportation access for employees living east of I-95 in North and South Stafford and for the provision of goods and services serving **The Park**.

## Areas West of Interstate 95

- A north/south spine road consisting of a planned extension from U.S. 17 to the existing Centerport Parkway and a planned road extension from the existing Centerport Parkway north to the existing Mine Road and the existing Mine Road north to State Route 610 would provide local transportation access for employees living west of I-95 in North and South Stafford and for the provision of goods and Areas services serving the Business District.

## **B: Planned Secondary Transportation Improvements**

The 2010 – 2030 Comprehensive Plan's Transportation Plan has already identified the following needed improvements that would service **The Park**:

1. Upgrade Ramoth Church Road (SR-628) from Courthouse Road (SR-630) to Kellogg Mill Road (SR-651) to a rural two-lane major local standard.
2. Upgrade Embrey Mill Road (SR-733) from Winding Creek Road (SR-628) to Eustace Road (SR-751) to an urban two-lane major local standard.
3. Widen Courthouse Road (SR-630) from an urban two lane major local to a four lane divided major collector from Austin Ridge Drive (SR-1486) to Walpole Street (SR-709).
4. Upgrade Eskimo Hill Road (SR-628) from Jefferson Davis Highway (US-1) to Potomac Run Road (SR-626) to a rural / urban two-lane major local standard.
5. Upgrade Brooke Road (SR-608) from New Hope Church Road (SR-605) to Andrew Chapel Road (SR-629) to a rural / urban two-lane major local standard.
6. Upgrade Andrew Chapel Road (SR-629) from Courthouse Road (SR-630) to Brooke Road (SR-608) to a rural / urban two-lane major local standard.
7. Upgrade Mine Road (SR-684) from Garrisonville Road (SR-610) to Settlers Way (SR-1460) to a four lane major collector standard.

8. Upgrade Truslow Road (SR-652) from Cambridge Street (US-1) to Poplar Road (SR-616) to a rural / urban two lane major local standard.

## **2. Air Transportation**

The Stafford Regional Airport is an operating regional reliever airport. The facility was developed by an authority comprised of representatives from Prince William County, Stafford County, and the City of Fredericksburg. The airport began operating in December 2001. It is located within **The Park** along Centerport Parkway on the south side of Ramoth Church Road, west of I-95 in Central Stafford County.

The airport site is approximately 656 acres in size. The runway is 5,000 feet in length and 100 feet in width with a full parallel taxiway system. Plans to extend the length of the runway to 6,000 feet are well underway. The extension will allow aircraft to take on additional fuel and pay-loads and will make nonstop flights to and from anywhere in the country as well as some international flights a reality.

A reliever airport is a general aviation airport which the Commonwealth of Virginia and the Federal Aviation Administration (FAA) have identified as being close enough to a commercial airport (Reagan National and Dulles International Airports) to provide congestion relief for commercial air traffic. General aviation airports serve business and personal transportation, emergency rescue, express delivery, news reporting, law enforcement, federal agencies as well as military flights. Most general aviation aircraft are small single and twin engine aircraft as well as business and corporate jets with wing spans up to 80 feet.

Stafford Regional Airport is located 3.2 miles outside the Special Flight Rules Area (SFRA) surrounding Washington D.C.

This enables aircraft operators access to the National Capital region without the need for special flight plans or equipment required to access Manassas or Dulles airports.

The Resurgence of Business Jet Usage: According to Crain's Detroit Business, *Corporate; advantages rise above past scorn aviation taking off again*, Dustin Walsh, November 7, 2015, "The value of new corporate jets to U.S. businesses and operators, an indicator of industry health, peaked in 2008 at \$14.5 billion before, plummeting to \$7.1 billion in 2009 according to aviation analysis firm **Teal Group Corp.** But the industry is hitting the runway again, and deliveries of new business jets are climbing, reaching \$10.5 billion in 2014".

J. David VanderVeen, director of central services for Oakland County, CA stated that "Generally, aviation is the first to enter the recession and the last out."

John Hatfield, chairman of the Michigan Business Aviation Association said," how executives spend their time is critical and corporate aviation jets leverage and multiply their ability to be effective.... Time is not a renewable resource; we are all bound by the same 24 hours a day. What we can do within that 24 hours makes a difference on how effectively we run our businesses and corporate jets leverage and multiply that ability to be effective."

Rick Nini, president and CEO Corporate Eagle, operates fractional jet ownership and jet management out of Oakland County Airport is quoted as saying," "Business aviation is coming back, but it is coming back different. Many companies own their own planes, but we're seeing more and more fractional ownership."

## **Bus Service**

1. FREDericksburg Regional Transit (FRED) serves as the local and regional bus provider throughout the City of Fredericksburg and Caroline, Spotsylvania and Stafford counties. Additional routes would be added to provide commuter service to, from and within **The Park**.
2. FRED could provide regular employee access to and from the Brooke Commuter Rail Station and residents of the Brooke Station UDA/TGA.

## **Commuter Rail Service**

1. Virginia Railway Express (VRE) is supported by Stafford County, Spotsylvania County, Fairfax County, Arlington County, City of Alexandria, Prince William County, City of Manassas, City of Manassas Park and the City of Fredericksburg. Commuter rail service is primarily a work-related commuting option operating in the morning from Fredericksburg and Manassas to Washington, D.C. and reversing itself for the evening commute.
2. State Route 628 East at its intersection with U.S. Route One is a short 6 minute, 4-mile drive to Brooke Commuter Rail Station from **The Park**.
3. VRE planned service improvements would provide morning and evening transit access for **The Park** employees who might need to conduct business in the Washington Metropolitan Area.

## CYCLING

1. The 2010 – 2030 Comprehensive Plan Goal 4.4.7 Bicycle states that “All new, reconstructed, or expanded roadways should include bicycle and pedestrian routes. Inside the Urban Service Area, subdivisions should accommodate pedestrian and bicycle facilities. Development for bicycles and pedestrians should comply with VDOT standards. The Virginia U, S. Route 1 bike route traverses Stafford County through The Park. Bicycle accommodations along this state designated route should be provided”.
2. U.S. Route One is a north/south designated cycling route which would provide commuters the option of cycling to and from **The Park**.
3. The north/south spine roads west of Interstate 95 would also provide commuters the option of cycling to and from **The Park**.
4. Cycling within **The Park** would reduce employee dependence on motorized vehicles.

## THE BROOKE UDA/TGA

1. The Brooke TGA has the potential of becoming the only true designed “commuter rail community” served by the Virginia Railway Express (VRE). Its potential should be maximized. Residents would have an easy commute to and from home to work to areas served by the VRE. In addition, **The Park** employees living in this community would be less than 10 minutes from home by car or bus. All of this could be accomplished without having to travel on U.S. Route One and Interstate I-95.

2. The Virginia Railway Express, Commuter Rail has been liked to adding another traffic lane on Interstate I-95. It is currently looking to close a \$1.8 funding gap and ridership is down this first quarter of its 2016 fiscal year.
3. Stafford County is currently grappling with the stale zoning of Crow's Nest Harbour and several related lawsuits brought by vested property owner's in the area. Many see these developments as possible threats to the precious resources of the state-operated Crow's Nest Natural Area Preserve. A comprehensive long range plan for this area of the County is needed to equably satisfy all parties concerns.

## **II. UTILITIES INFRASTRUCTURE**

In 1982 the Stafford County Board of Supervisors abolished the failing Sanitary Districts and established a self-supporting Department of Utilities enterprise system. It operates today without any subsidy from the County's General Fund. Its budget is solely supported by connection and sewer and water service fees. It is the sole provider of public water service to the County. The public water and sewer service area is within the entire Urban Service Area (USA) of the County. The capital costs of utility system expansions and increases in system capacity to serve new development are the responsibility of new development.

### **Water Utilities**

1. The County's water supply and treatment system consists of two surface water reservoirs and two water treatment facilities with existing capacity to meet the build-out needs of **The Park**.

2. The water transmission and storage system consists of two ground level water storage tanks, 12 elevated water storage tanks, four major water pumping stations, and approximately 570 miles of water mains ranging in size from 2 inch to 24-inch diameter. The County currently has 6 individual pressure zones.

## **Wastewater Utilities**

1. The Stafford County Department of Utilities is the sole provider of public sewer service to the County. Its public sewer service area is within the entire Urban Service Area (USA) of the County.
2. Its responsibility is to monitor and increase service to accommodate projected needs as required. Expansions of the service area and improvements of the wastewater transmission system are done in accordance with criteria in the Comprehensive Plan. All future development within the USA will be required to utilize the public wastewater system.

## **Utility Department Capital Improvement Plan Update**

On April 21, 2015, The Director of Utilities provided the Board of Supervisors with a CIP Utilities Department Update. His power point presentation noted several projects that have been added to the CIP to address areas where there are key economic development prospects lacking sufficient infrastructure to accommodate them. It noted that the Courthouse Redevelopment Area, Centerport Parkway and Boswell's Corner Redevelopment will work to spur economic development and grow jobs in the County.



The 11 needed sewer projects in the Courthouse Area include a sewer collection system for the area, a pump station, force main and capacity improvements in the downstream pipes.

It also noted that the Centerport Area is another area of the County with a great deal of economic development potential but the lack of sewer and water capacity has discouraged development interest due to the extensive cost of bringing the needed sewer and water infrastructure into the area, i.e., NOTE: The Stafford Regional Airport is serviced by a sewage pump-and-haul system.

It further noted that in order to market this area for economic growth the water and sewer infrastructure needs to be improved. The Utility Department's proposed CIP projects include a main sewer transmission line to collect and transport sewer from this area to the Potomac Creek Pump Station, the acceleration of capacity improvements to that pump station and force main and water system improvements including an accelerated timeline for a water tank and booster pump station.

Finally, it stated that these economic development concerns have existed for years and that is why the Department has decided to accelerate the needed utility improvements to meet the Board's priority to spur economic development and grow jobs in the County. Future economic development projects will be required to pay their share of prorate and availability fees.

### **III. CYBER HIGHWAY: ON-SITE DARK FIBER ACCESSIBILITY**

SummitIG owns, operates and maintains all fiber throughout its footprint in Northern Virginia (NoVa) and Central Virginia Markets. Its cyber highway connects NoVa and Richmond and

passes through **The Park** Study Area along I-95 with accessible manholes at the Centerport and Route 630 Exits. Mr. Sidney Downs, Vice-President of the company has stated the they would make the connections from these manholes to each of the businesses located within **The Park**. (See Appendix III.)

### **SummitIG's Overview Statement**

SummitIG is a bandwidth infrastructure company enabling customers to interconnect between over 40'neutral data centers in NoVa with Metro X – Connects. Fiber-rich NoVa metro network in complemented with a unique long haul routes from Richmond to Ashburn.

This growing company's base includes carriers, data center providers, content providers, large enterprises and government agencies.

The company owns, operates and maintains all fiber throughout its footprint in NoVa and Central Virginia markets.

- All New and Purpose-Built Fiber infrastructure
- 100% Unique and Underground State of the Art FOC; Multiple Conduit Systems
- All 'Single Mode Fiber' – (SMF – 28)
- Network Built to industry standards

Dense fiber count with 432/864 Fibers along key segments with additional conduits to replicate dense FOC

The company continues to build and deepen its NoVa and Richmond footprint, addressing more data centers and commercial buildings each month

The company is led by seasoned leaders in the fiber infrastructure space, with an average of 20 + years of experience  
Backed by Columbia Capital ([www.colap.com](http://www.colap.com))

## **IV. SCHOOL INFRASTRUCTURE**

### **A. Stafford County Public Schools**

**The Park**, per say, need not contain any residential development and, if so, school infrastructure costs would be zero.

### **B. Germanna Community College**

Germanna Community College has a presence in Stafford County and is looking to establish a permanent Campus for its Center for Workforce & Community Education. Adam and Rhonda Fried recently donated \$1 million to Germanna for a new Stafford Center. The Center is scheduled to be located on the property being donated by developer HHHunt near the Stafford Hospital Center.

**The Park's** business community could provide critical intellectual and manpower resources for each other. A Germanna Community College Stafford Campus, if located within the complex, could greatly expand its National Security Curriculum as well as its Center for Workforce and Community Education. It could provide all the needed technical training skills for entire business employees working within **The Park**.

## V. POSSIBLE IMPLEMENTATION STRATEGIES

### Stafford County Historical Growth Trends

Reportedly, since 1960, Stafford County's population has increased over 660%. New residents are primarily drawn to Stafford in search of affordable housing, a less urban lifestyle and a higher quality of life for raising a family. It is estimated that over 60% of our gainfully employed residents commute outside the County for work and the current mean one-way travel time to work is estimated to be nearly 40 minutes. Commercial growth has occurred; however, it has primarily been in the form of commercial/retail strip mall establishments supporting a resident commuting population. While County officials have struggled to provide services for this exploding residential growth, high-end employment opportunities have not kept up with the County's highly-trained and highly-educated workforce.

Question: Stafford's farms and natural areas have been converted into suburban and rural residential neighborhoods for commuters. Should we blame landowners for selling their land to homebuilders? Or, are homebuilders solely responsible for consuming so much County land with suburban sprawl? What about our elected officials who failed to reverse these growth trends?

The answer: The answer is that none of these groups is to blame. Land development in Stafford County has and will continue to occur organically, based upon the free market and the highest and best use of land for its owners. For decades, suburban residential development and by-right rural residential development have yielded greater and safer returns for landowners. For illustrative purposes, consider the example below.

Free Market Example: The Johnson family has owned a 100-acre farm for 80 years. Mr. & Mrs. Johnson have retired and they

can't take care of their farm any more. Their children have left home and live out-of-state. The Johnsons decide to sell their property and move to a condo in Naples, Florida. They could:

- a) Sell the property as a farm for \$400,000. Close in 6 months.
- b) Wait for infrastructure to be constructed and for business and industry demand to increase. Sell to a developer for \$20,000/acre = \$2,000,000 for commercial development subject to rezoning, proffers, utility extension, permits, etc. Close in 10 years.
- c) Sell the property to a residential builder for 30 by-right 3-acre lots @ \$30,000/lot = \$900,000 subject to well/septic permits. Close in 12 months.
- d) Sell the property to a residential builder for 150 1/2-acre lots @ \$10,000/lot = \$1,500,000 subject to rezoning, proffers, utility extensions, permits, etc. Close in 24-36 months.
- e) Do nothing, stay on the property for the rest of their lives, leave the property to their children who then sell the property in accordance with c) or d) above, and pay inheritance taxes on the sale.

In the history of Stafford County, landowners have almost always chosen options c), d), or e). For most of us, our home and property represent the majority of our net worth and the primary source of inheritance for our children. As with any investment, people cannot be faulted for seeking the best return for themselves and their family in line with their goals and objectives.

## **The Central Stafford Trade, Commerce & Technology Park Study Area**

The Central Stafford Trade, Commerce & Technology Park Study Area Map is a schematic land use concept plan for the area between Exit 136 and 140 in Stafford County immediately surrounding the Stafford Regional Airport. **The Park** Study Area is the last remaining land mass in Stafford County that is capable of supporting large scale employment opportunities for County residents. It is also the largest undeveloped land mass with immediate I-95 access between Washington D.C. and Thornburg. With the reconstruction of Exit 140, Stafford County will boast 2 interchanges within a 4-mile stretch separated by sparsely developed land, presenting an enormous untapped opportunity for Stafford County. The area within and surrounding **The Park** Study Area has come under the scrutiny of County leaders over the last few years as residential development rezoning proposals have been proposed by developers.

The majority of **The Park** Study Area is currently zoned A-1 Agricultural, which allows 3-acre residential lots by-right. By-right development as rural residential development is the quickest, easiest and most profitable form of development for landowners within **The Park** Study Area at this time. So, how can the County reverse 50 years of development trends and guide the future development of **The Park** Study Area without infringing on the property rights of its citizens? The bottom line is that the County must make fulfillment of **The Park** Study Area plan more profitable for landowners than by-right or alternate development scenarios.

**The following are some suggestions for the framework of a comprehensive County development incentive strategy for the PARK:**

### **1. Incentivize Patience**

The development of **The Park** Study Area into a large-scale employment center could take 25 to 50 years or more. By that point, most of **The Park** Study Area will likely be consumed with by-right residential development or higher density residential development approved through future rezoning requests. Two potential methods for “incentivizing patience” amongst **The Park** Study Area landowners are:

- a. Adopt a Land Use Program for qualifying undeveloped land within **The Park** Study Area similar to the County’s existing Land Use Program for agricultural and forest land uses. Undeveloped properties within **The Park** Study Area would pay reduced real estate taxes as long as the property remained available and listed for sale for qualifying uses. Upon development, the property would be subject to a rollback tax similar to that collected for the existing land use program.
- b. Assign **The Park** Study Area as a “sending area” for a new TDR district whereby existing residential development rights could be sold to property owners within a designated “receiving area.” Unlike previous TDR proposals, residential development rights within **The Park** Study Area would be forfeited in exchange for commercial development rights consistent with **The Park** Study Area master plan. In this manner, property owners could receive compensation for reserving their land for future **The Park** Study Area development.

## 2. Reduce Development Costs

Due to steep slopes, environmental areas, acidic soils, and lack of utility infrastructure, the cost to develop parcels within **The Park** Study Area is likely to be relatively higher than other parts of the County. The County can help reduce development costs and attract commercial development to **The Park** Study Area by

- a. Expediting the County's Water and Sewer Master Plan within **The Park** Study Area;
- b. Completing the infrastructure projects listed in the CIP Fund and the road improvements shown in the Comprehensive Plan's Proposed Transportation Improvements Map. These arteries are vital to the success of **The Park** Study Area and
- c. Creating an economic incentive program whereby utility connection and availability fees are waived or reimbursed through an EDA grant for qualifying businesses locating within **The Park** Study Area.
- d. The County should agree to freeze tax assessments on new qualifying businesses for a period of five years after occupancy permit.
- e. The County should agree to waive or reimburse through an EDA grant permit and application fees for qualifying businesses within **The Park** Study Area.

## 3. Unconventional Attraction of "Anchors"

As with any commercial shopping center, employment centers need "Anchors." In the Washington D.C. Metro Area, employment anchors are government agencies or large corporations that bring not only their employees to the development, but also complimentary and supporting businesses.



The lack of a major employment anchor is a glaring reality in Stafford County. In order to attract an anchor, the County should consider unconventional marketing methods such as:

- a. Entering into public-private partnerships with office developers to help share in the risk of constructing new spec Class A office space.
- b. Constructing Class-A office space for lease to government agencies, contractors, aviation related businesses and corporations at reduced or free rent for a specified timeframe.
- c. Participate in the acquisition and development of land for development through the EDA. The Cummings Office Park in Huntsville, Alabama is an example of a municipality's aggressive and highly successful strategy for attracting research and technology firms to their City.
- d. Example: Cummings Research Park, Huntsville, Alabama (See Appendix IV.)

#### **4. Accelerate the Process**

Early in the development of Centerport, the development surrounding the airport, opportunities to attract new commerce were thwarted by the perception that the County's zoning and approval process was too time consuming and laborious. The County should be willing to commit to accelerated zoning and approval processes for targeted industries. Competition for employers is fierce across the country and a relatively painless and quick approval process is a necessity.

#### **Why Go to these Efforts?**

The arguments against the incentive strategy outline above will likely be that the County will be subsidizing landowners and

future developers at the expense of existing taxpayers. To some extent, this may ring true. However, current landowners within **The Park** Study Area are under no obligation to develop their property consistent with a County vision plan and developers will only follow a vision plan if it can be made financially viable. The bottom line is that without such a program, **The Park** Study Area will likely suffer the same sprawling residential fate as the rest of Stafford County has over the past 50 years.

At the same time, creating **The Park** is a sound investment for the future of Stafford County. When we think of our quality of life in Stafford County, we usually think of our schools, parks, government services and the environment. Shouldn't a comprehensive strategy to reduce the time County residents spend commuting to work be considered an equal investment? Creating **The Park** will improve the lives of County citizens, creating as many as 20,000 high paying jobs, providing increase tax revenues, helping establish a "sense of place" in our community bridging the gap between north and south Stafford. The Courthouse Redevelopment Area along U.S. Route-I could eventually be extended throughout the length **The Park**.

Rarely, if ever, does an existing community have the opportunity to create its downtown business district from scratch.

#### Virginia Needs Our Help:

The Chief Executive, *2015 Best & Worse States for Business*, ChiefExecutive.net, 8-20- 2015 published the results of their 11<sup>th</sup> annual survey. It clearly showed that CEOs favor states that foster growth through progressive business development programs, low taxes and a quality living environment, Virginia was rated 14<sup>th</sup> dropping from 11<sup>th</sup> last year. **The Park** addresses these concerns.

On April 26, 2015 Jonathan O'Connell reported, "Overall 13 of the top 20 employers in the state are public agencies or contractors depending on public spending – a troubling over-reliance on government for jobs.... With those troubling indicators, McAuliff in January reworked his priorities to accentuate economic development, an arena in which he could unleash his relentless – some would say obsessive – appetite to make a deal.... He will go anywhere. He will call anyone, said Maurice Jones, Virginia's Secretary of Commerce and Trade. *Gone Fishing? At every chance.*" The Washington Post, Business, Sunday April 26, 2015, [jonathanoconnell@washingtonpost.com](mailto:jonathanoconnell@washingtonpost.com)

O'Connell subsequently reported, "If Virginia's economy is booming as Gov. Terry McAuliff has asserted, the numbers don't show it. The effects of the great recession, sequestration and weening Virginia's economy off its historic dependence on the Defense Department has been devastating to Virginia's economy." *With zero GDP growth, Virginia's economy flatlines despite McAuliff's best efforts*, The Washington Post, Jonathan O'Connell, June 11, 2015.

On May 13, 2015, Governor Terry McAuliff spoke to the Fredericksburg, Stafford, and Spotsylvania Chamber of Commerce about significant challenges in recent years and how local jurisdictions can help the Commonwealth counteract the devastating effects of sequestration and the need for large and small business diversification.

He spoke of the importance of judiciously providing transportation funding in this recovery and cautioned that there will never be enough money to meet all of Virginia's transportation needs. Its most vital priorities can be addressed if decisions are based on transportation requirements instead of politics.

On June 18, 2015, Scott Shenk of the *Free Lance Star* ("State's new Transportation Prioritization Program Approved") reported

that the State's Commonwealth Transportation Board unanimously approved a new program that will change the way many transportation projects are funded. Localities can start submitting projects that the State will evaluate from October through January. There will be \$1 billion up for grabs for prioritization projects which will be reflected in the state's 2017-23 six-year plan.

The prioritization program signed into law last year will score certain road and transit projects according to a weighted system based on six factors: accessibility, congestion management, economic development, environmental quality, safety and land use.

Reportedly, only projects that are part of a regional network or a "corridor of statewide significance" will be part of the new program. The program uses four categories for transportation districts across the state. The categories give each of the weighing factors more or less importance depending on a district's needs and transportation issues.

Shenk noted that Stafford and Spotsylvania are included in the category that gives congestion management and land use the most weight. The I-95-Rte 630 interchange has loss of \$35.5 million in funding due to this prioritization program. By going forward with the Country's third largest Trade, Commerce & Technology Park which includes the Route 630/ I-95 interchange, the needed interchange improvements should be at the top of all the prioritization categories.

On June 14, Kathy Jett of the *Free Lance Star* reported on the occasion of the Stafford Economic Development Authority's annual business appreciation reception. The Keynote speaker, Virginia's Secretary of Technology, Karen Jackson pointed out "that many of the businesses in the county are lean and nimble, but – unlike the economic announcement the governor made Friday – won't bring 500 jobs to the county. What's next? She asked."

Ms. Jackson, who had earlier attended a Cyber Guard exercise in Suffolk to Richmond and a Virginia Power-certified data center site. Cyber Guard exercises are designed to test operational and interagency coordination as well as tactical level operations to protect, prevent, mitigate and recover from a domestic cyberspace incident... Stafford is well positioned to be part of the conversation. It has a lot of those assets in place."

She also stated that "Stafford is in a prime position to be involved in the discussion about how best to integrate unmanned aircraft systems into the nation's airspace. Not only is the county close to Washington, but Virginia Tech is one of six drone test sites in the country."

She concluded, "I am going to leave Stafford with the Challenge of What's next?"

## **RECOMMENDATION:**

It sounds like Governor McAuliffe needs a new lure in his tackle box – **The Park**. Stafford should engage the Governor and his staff as well as our elected officials at the federal and state levels in making this one of a kind economic development initiative a reality.

The Park deserves a full and complete community vetting as the County considers *Amendments and a 5-Year Update to the 2010 Comprehensive Plan*. If county residents support this economic development initiative, The Board should begin the development of its long range masterplan.

## **APPENDIX I**

pdf FLS artist rendition of the 1982 Board of Supervisors



1982 Stafford County Board of Supervisors beginning the arduous task of righting the County's finances as depicted by the Free Lance Star in January 1982 ·

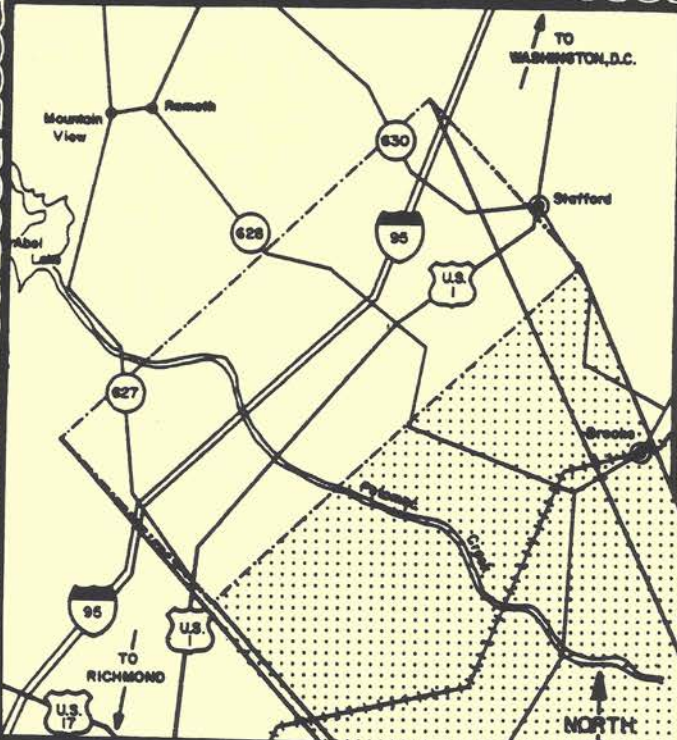


## **APPENDIX II**

Pdf U. S. Route One Corridor Plan 1989 Up-Date

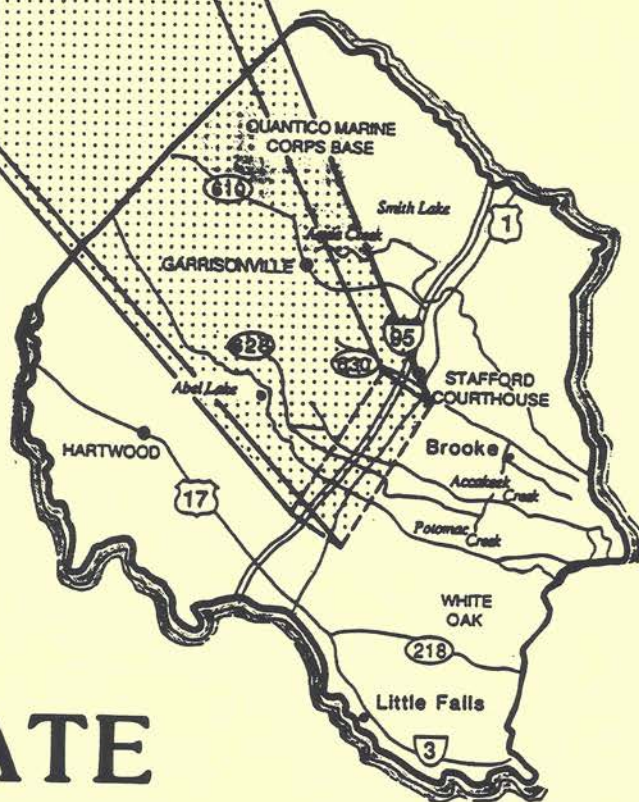


# THE CORRIDOR



## STAFFORD COUNTY

### 1989 UPDATE





## INTRODUCTION

### STRATEGIC STAFFORD - THE CAPITAL EDGE

Stafford County continues to be one of the fastest growing counties in the Commonwealth of Virginia. Industrial development is the County's number one priority and its resources have been committed to that end. Stafford County was first explored by Captain John Smith in 1608 during expeditions up the Potomac and Rappahannock Rivers. The area quickly became an important center for Colonial transportation and industry. Today, this prime location is responsible for much of the County's prosperity. Located at the midpoint of the lucrative urban corridor of the Eastern United States, Stafford is within easy reach of major trade areas from Atlanta to Boston. In fact, as the southernmost County in the Washington Metro Area, Stafford is located within just minutes of the world's largest consumer, the Federal Government. Within five hundred miles are nearly one hundred million additional consumers. Stafford County is "On The Capital Edge."

## THE CORRIDOR

The Corridor is an homogeneous and newly planned - light industrial/commercial - area in Stafford County. It encompasses approximately ten square miles in Central Stafford and is bordered on the south by Mountain View Road (State Route 627 West) and by Courthouse Road (State Route 630) on the north. It extends approximately one mile east and west of Interstate 95 and Jefferson Davis Highway (U. S. Route 1). It is to be served by eight existing and planned transportation systems, county utilities - sewer and water, and private utilities - electricity, telephone, and natural gas. The Corridor is another of Stafford's innovative public/private partnership economic development projects. The County Board of Supervisors formally launched this initiative in February, 1986, when it was incorporated in the County's Comprehensive Land Use Plan. Several improvements to the plan have been made since that time.

## INFRASTRUCTURE COMMITMENTS

### A. TRANSPORTATION SYSTEMS

1. Interstate 95 traverses Stafford from north to south which serves as the East Coast's major distribution system for goods and services from Maine to Florida. It has recently been widened to six lanes, three in each direction.

2. Jefferson Davis Highway is a four lane primary highway which parallels Interstate 95 throughout the County. The current Comprehensive Land Use Plan provides for sufficient building setbacks to allow for the eventual six lane widening of this highway throughout The Corridor with a functional and attractive median.

3. Ramoth Church Road/American Legion Road (State Route 628 West) beginning .2 mile west of Interstate 95 and terminating at its intersection with Jefferson Davis Highway has been upgraded - strengthened and widened - to industrial standards to accommodate the anticipated industrial traffic.



4. Stafford's commuter rail station will be located at Brooke. Service is scheduled to begin in mid 1991 with four trains providing four morning and four evening trips to and from Washington. Commuter rail will not only serve Stafford residents but will also provide unencumbered access for area businesses to the Washington Metropolitan Area. Brooke is three and one-half miles (3-1/2) miles east of the Jefferson Davis Highway and Eskimo Hill Road (State Route 628 East) intersection.

5. The Fredericksburg Area Outer Connector is a planned beltway encircling the City of Fredericksburg through the surrounding counties. It is part of the Virginia Department of Transportation Fredericksburg Area Transportation Plan. While the specific location of the right-of-way has yet to be determined, it is expected to intersect Interstate 95 and Jefferson Davis Highway north of where Mountain View Road presently crosses Interstate 95.

6. The Commonwealth of Virginia has expressed a strong interest in constructing a Western Bypass around Washington and Baltimore. A prime location under consideration for this

proposed limited access highway to intersect with Interstate 95 is north of American Legion Road (State Route 628). It is to proceed west and north of Washington and intersects with Interstate 70 in Maryland. If the Western Bypass is not built at this location, a new interchange at American Legion Road and Interstate 95 is contemplated.

7. The site of the Stafford County Regional Airport is west of, and perpendicular to, Interstate 95 in the vicinity of the North Stafford Industrial Park. Initial plans are for a general aviation facility with a 5,000-foot runway to serve the needs of eastern Prince William, Stafford, Spotsylvania, King George, and Caroline Counties, and the City of Fredericksburg. An important reason for the new east-west runway alignment is the ability to increase the runway length, if and when, needed. The final decision to proceed with the construction of this facility will be made in late Fall, 1989. The Virginia Department of Aviation has determined that "once the airport's infrastructure is complete, it is reasonable to anticipate a \$20,300,000 annual benefit to the region." Representatives from Stafford and Prince William Counties have begun discussions of a possible joint venture of the regional airport.



8. The planned interchange north of Mountain View Road (State Route 627) and Interstate 95 is the County's "Number One Interstate Priority". It is being designed to accommodate the proposed Fredericksburg Outer Connector. When constructed, it will provide immediate interstate access for the businesses located within The Corridor, the regional airport, as well as an essential link with other transportation systems serving The Corridor.

The confluence of these existing and planned transportation systems will provide unequalled transportation and distribution opportunities unavailable anywhere within Virginia's Golden Crescent (Northern Virginia through Richmond to Hampton Roads).

#### B. COUNTY UTILITIES: WATER

Sufficient water capacity to serve this entire business area is available. A twelve inch water line exists along Jefferson Davis Highway throughout The Corridor. In addition, there is an existing eight inch water line west of Jefferson Davis Highway along Mountain View Road. An additional twelve inch

line proceeds from Jefferson Davis Highway along Eskimo Hill Road for approximately a mile and a half. The Abel Lake Water Treatment Plant (Abel Reservoir) has been expanded to 6.0 million gallons per day (mgd). The Smith Lake Water Treatment Plant (Smith Reservoir), a 1.0 mgd facility, will be replaced with a new 5.0 mgd plant in 1991.

#### C. COUNTY UTILITIES: SEWER

The Corridor traverses the Potomac and Accokeek Creek Drainage Basins. Presently, there is a six inch force main with a reserved capacity of 200 gpm for the North Stafford Industrial Park. This line proceeds from the park east along Ramoth Church Road/American Legion Road to Jefferson Davis Highway and then north through the Accokeek Creek Drainage Basin to the Aquia Advanced Wastewater Treatment Plant. The Potomac Creek Drainage Basin is served by a gravity sewer system with sufficient capacity to serve all of the envisioned light industrial and commercial development projected to occur within this portion of The Corridor. A similar system is envisioned for the Accokeek Creek Drainage Basin and will be constructed on demand.

The Potomac Creek Drainage Basin will be served by a new 4.0 mgd wastewater treatment facility to be located at Little Falls Run on the Rappahannock River. This facility should be operational in the Fall of 1990, and will be expandable to 8.0 mgd. The Accokeek Creek Drainage Basin is served by the Aquia Wastewater Treatment Plant, AAWTP, located on Austin Run. This 3.0 mgd treatment facility is to be expanded to 7.0 mgd in 1991.

## II. PRIVATE UTILITIES: ELECTRICITY AND NATURAL GAS

Stafford enjoys an excellent working relationship with area private utility companies. Virginia Power has sufficient electrical power in place to serve the development needs of The Corridor. Commonwealth Gas is developing plans to extend its natural gas distribution line along Jefferson Davis Highway through The Corridor and to serve additional points in northern Stafford.

## III. FUTURE EXPANSION

The Corridor has the potential for expansion to the west and east in response to future commercial and industrial



development needs. Such expansion has the potential to add a ninth transportation system - rail freight - with direct access to the RF&P Railroad lines.

#### IV. NATIONAL RECOGNITION

The Corridor, a light industrial/commercial district in Stafford County, has been awarded a 1988 National Association of Counties Achievement Award. This project was selected from among numerous projects submitted throughout the Nation because of its innovative approach, ingenuity, and creativity in expanding Stafford's industrial and commercial base.

#### V. PRIVATE INDUSTRY RESPONSE

Private investment interest in the Corridor began soon after The Central Stafford U. S. Corridor Plan (November, 1985) was officially incorporated into The Stafford County Land Use Plan (February, 1986). While much of the interest was speculative in nature, "Centreport" is the first large industrial/commercial complex planned for The Corridor to be filed with the County. Its first contact with the County was June, 1986. As planned, "Centreport," consisting of



approximately 856 acres, will create over 4.1 million square feet of quality and industrial office space for light industry, distribution, research and development, business services, and regional and corporate headquarters. This compares to less than 2.0 million square feet of such space in Stafford today.

It is projected that "Centreport" and the associated commercial center will generate employment opportunities for as many as 9,200 workers; this exceeds the number of jobs in the County today in all sectors, public and private. These new jobs could greatly reduce the need for County residents to commute out of the County to work. By comparison, in 1980, less than twenty percent (20%) of the 17,000 resident workers in Stafford County found employment within the County.

## VI. SUMMARY

Stafford County's number one priority is expansion of its industrial and commercial base. Its most recent initiative has been to make substantial infrastructure commitments for transportation and sewer and water improvements within The Corridor. Further information may be obtained from the Director of Economic Development, P. O. Box 339, Stafford, Virginia 22554-0339, (703) 659-8681 or by visiting the office at 1739 Jefferson Davis Highway.

# 1988 COUNTY ACHIEVEMENT AWARD NATIONAL ASSOCIATION OF COUNTIES

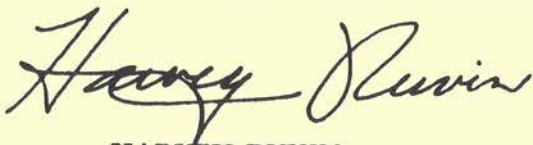
**In recognition of distinguished and continuing contributions  
to the cause of strong and efficient County Government  
in the United States of America**

*Presented to*

**Stafford County, Virginia**

*for*

**The U.S. Route 1 Corridor Development Plan**



**HARVEY RUVIN**  
*President*



**JOHN P. THOMAS**  
*Executive Director*

Over seventeen hundred counties are members of the National Association of Counties, NACo. NACo's Achievement Awards Program was established to provide recognition of significant and innovative programs that improve the organization, management or services of member counties. Twenty one Achievement Awards were given to member counties this year for Land Use and Land Planning. Stafford County was the recipient of one of these prestigious awards. With the acceptance of this award, Stafford agrees to share with other interested counties any and all aspects of the plan development.

## **APPENDIX III**

**Pdf SummitIG dark fiber & The Park**



# SummitIG Company Overview

**November 2015**



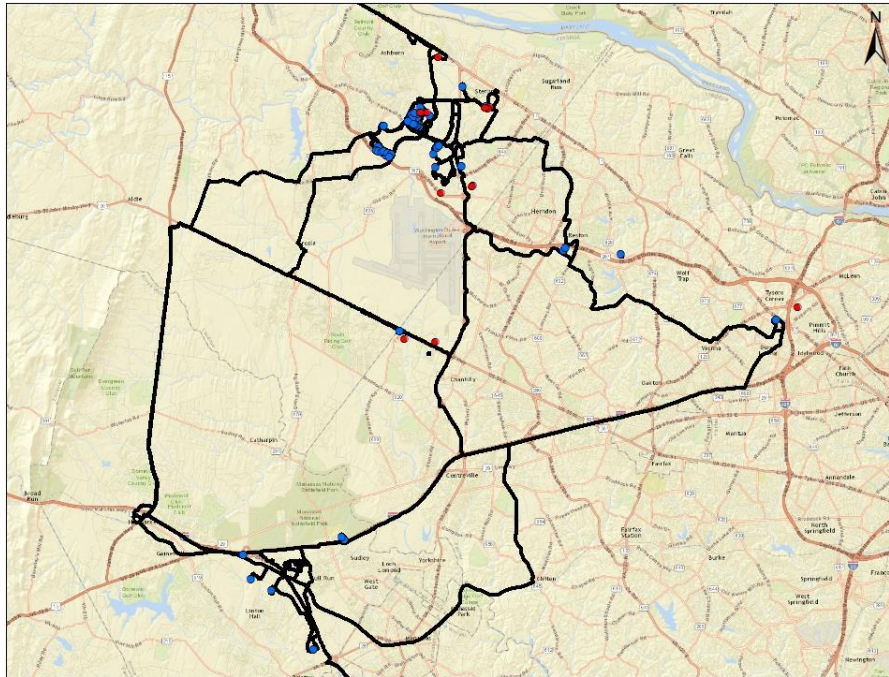
**22375 Broderick Dr., Suite 165  
Dulles, VA 20166**



- Bandwidth infrastructure company enabling customers to interconnect between over 40 'neutral' data centers in Northern Virginia (NoVA) with Metro X-Connects. Fiber-rich NoVA metro network is complemented with a unique long haul route from Richmond to Ashburn.
- Growing customer base includes carriers, data center providers, content providers, large enterprises and government agencies
- Company owns, operates, and maintains all fiber throughout its footprint in NoVA & Central VA markets
  - All New and Purpose-Built Fiber Infrastructure
  - 100% Unique and Underground
  - State of the Art FOC; Multiple Conduit Systems
  - All 'Single Mode Fiber' – (SMF-28)
  - Network Built to Industry Specs
- Dense fiber count with 432/864 Fibers along key segments with additional conduits to replicate dense FOC
- Continuing to build and deepen NoVA and Richmond footprint; adding more data centers and commercial buildings each month
- Company is led by seasoned leaders in the fiber infrastructure space, with an average of 20+ years of experience.
- Backed by Columbia Capital ([www.colcap.com](http://www.colcap.com))



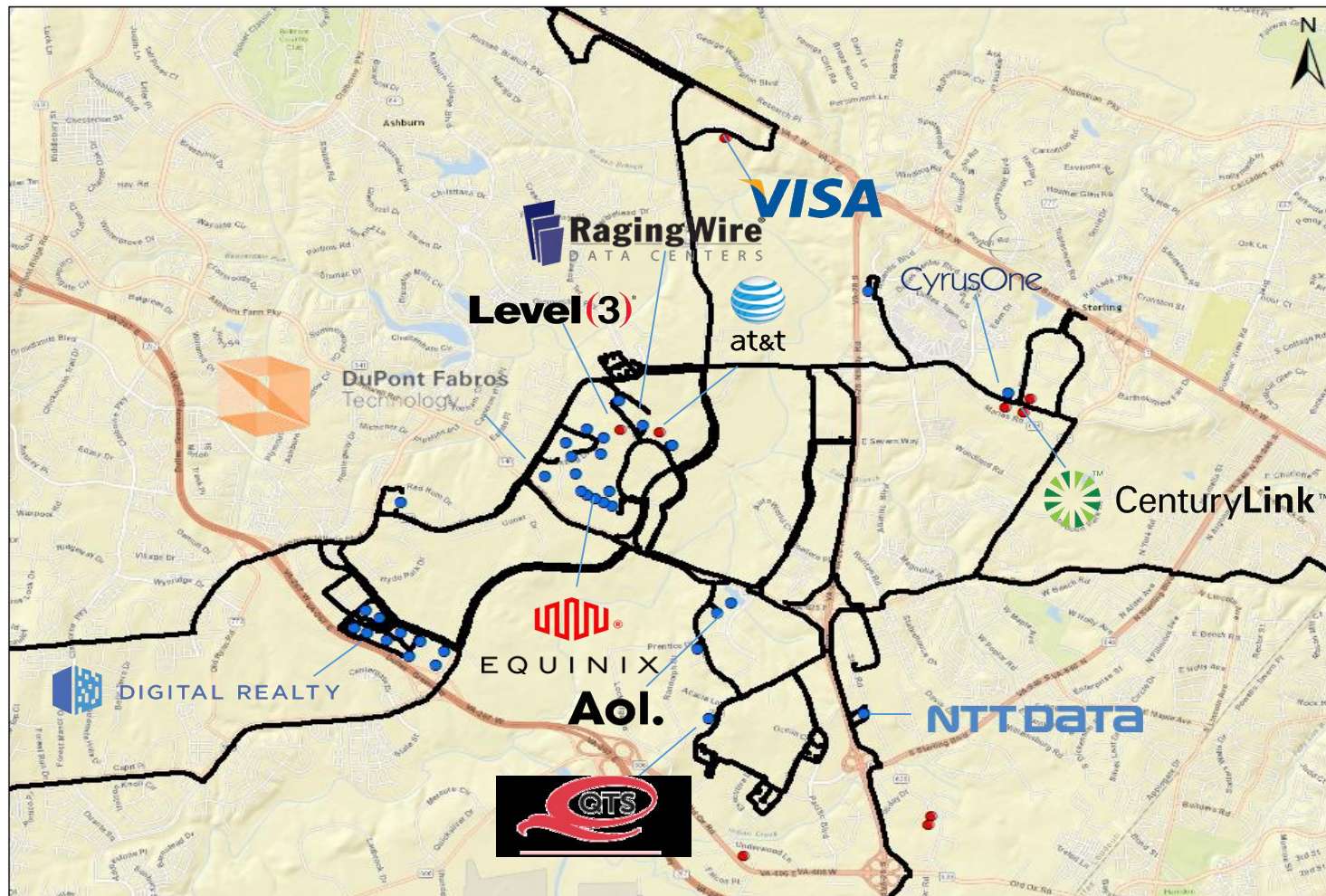
## Network Footprint



## Metro Network

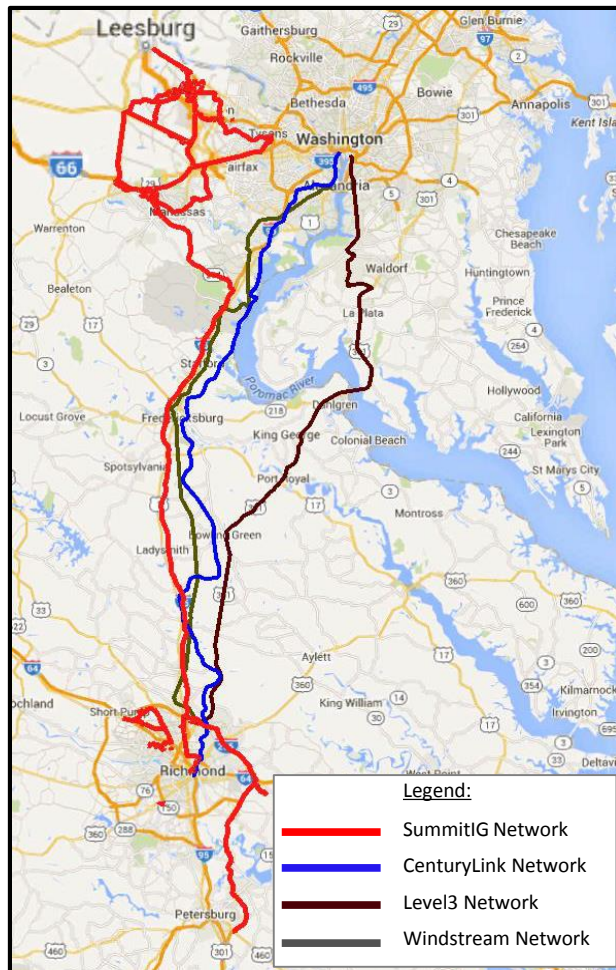
- Large Market in Ashburn / Loudoun County
  - 60+ data centers; largest data center concentration in the world
  - 7M+ square feet of data center space; growing to 9M+ by 2018
  - State of VA provides special tax exemptions
  - Price per MW is up to 34% lower than US average
  - 70% of worlds daily internet traffic travels through the Ashburn Corridor
- Dense Network
  - 25+ on-net buildings and continue to add 1-3 more buildings every month
  - Route Miles: 225
  - Conduit Miles: 850
- Largest Network Footprint
  - SummitIG has the ability to offer custom dark fiber solutions between key data centers and other facilities at competitive pricing
  - Substantial infrastructure inventory due to fiber density; 864 FOC
  - Continue to supplement existing network infrastructure for enhanced customer redundancy and reach
- Metro X-Connects
  - Equinix supports over 10,000 cross connects in Ashburn
  - Estimate 70% of data center is occupied by servers and 20% for data storage
  - SummitIG is the only bandwidth provider with the density of network required to rapidly provision dark fiber cross connects between data centers
  - Ability to deliver fiber solutions quickly to meet growing market demand (server-to-server architecture)
  - Break down the data center walls and create one large ecosystem for customers

# Data Center Alley – Ashburn Corridor





## Network Footprint



## Long Haul – NoVA to Richmond

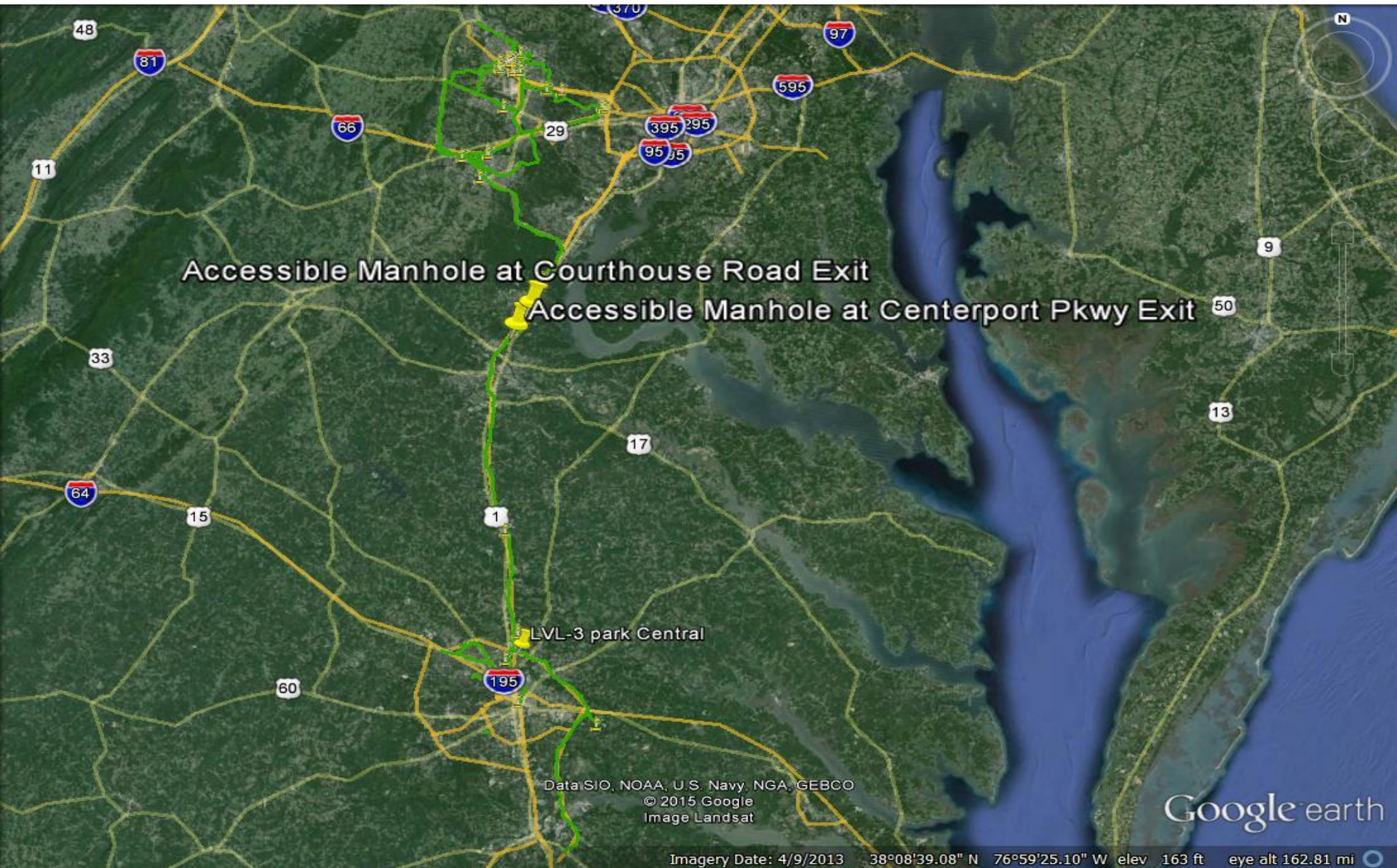
### ■ Highlights

- Unique and lowest latency route between NoVA and Richmond and further South, avoiding Washington, DC
- Reduce the current routes between ASH-RIC (through WDC) by 20%
- Exclusive right of way along I-95
- Ideal solution for latency sensitive and distance limited applications (i.e. DR/BC, Asynchronous replication)
- 170 route miles populated with 432 count dark fiber
- Construction completed and service launched Q4 2014

### ■ Existing Carrier Routes

- Level3 route along Route 301 (XO, TWTC, Cox, MBC)
- CenturyLink/Qwest route along CSX railroad
- Windstream route along Dominion HVT lines
- Competitive infrastructure is either at capacity, aging or above ground





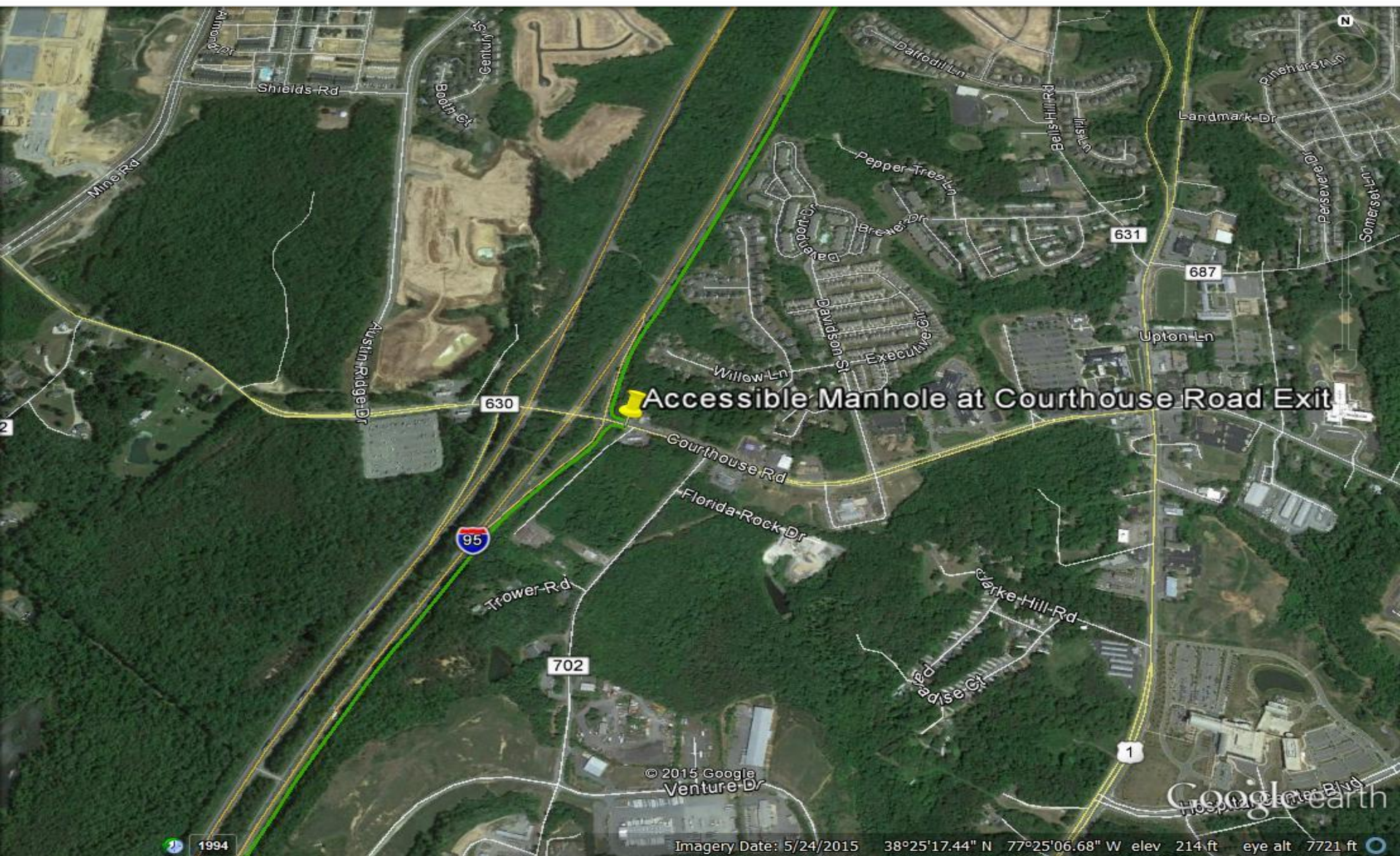












## **APPENDIX IV**

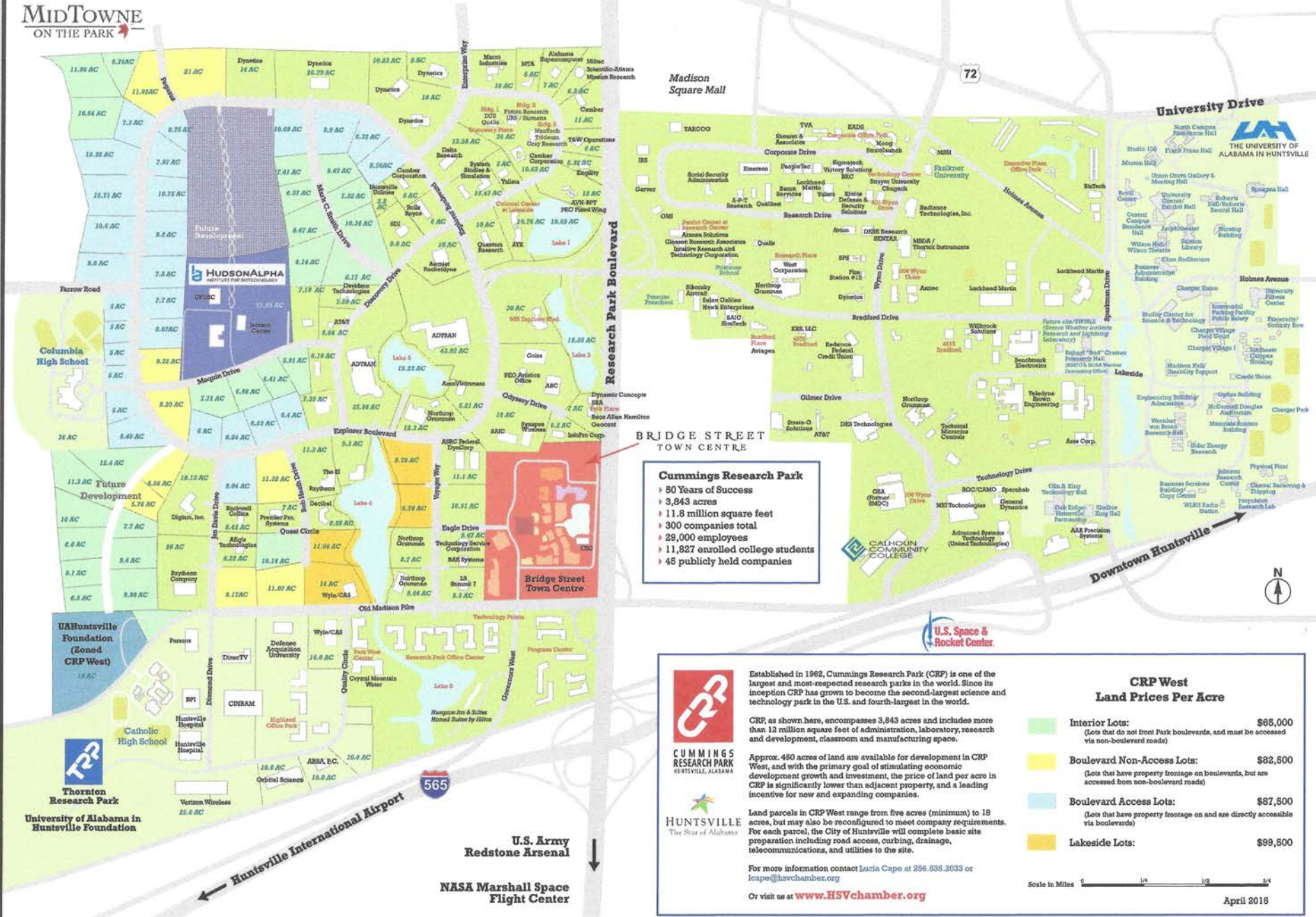
Pdf Cummings Research Park Layout



MIDTOWNE  
ON THE PARK

HUNTSVILLE, ALABAMA

center of attention  
CUMMINGS RESEARCH PARK



## **Cummings Research Park (CRP)**

The Research Park was officially established in March 1962. Reportedly, it is one of the world's science and technology parks. It purports to be the second largest research parks in the country and the fourth largest in the world. It covers 3,843 acres and employs roughly 25,000 employees. There are currently 175 buildings that house more than 285 different companies with a capacity of nine million square feet.

CRP's major industries are aerospace, defense, engineering, biotechnology, advanced manufacturing, software development and information technology.

The Mayor of Huntsville, Tommy Battle, stated that CRP has been the foundation of the city's economic development and that their biggest challenge could be a good thing, "What if the CRP is too successful and runs out of land too quickly."

O'Neal Smitherman, executive vice president of Hudson Alpha Institute of Biotechnology, a major company in CRP, said in an interview in March, 2013, "Everybody talks about how we are in a knowledge economy, but my thought is that we have always been in a knowledge economy".

An RFP issued for CRP's Master Plan, May 4, 2015 by the Huntsville Chamber of Commerce called for an "overdue update."

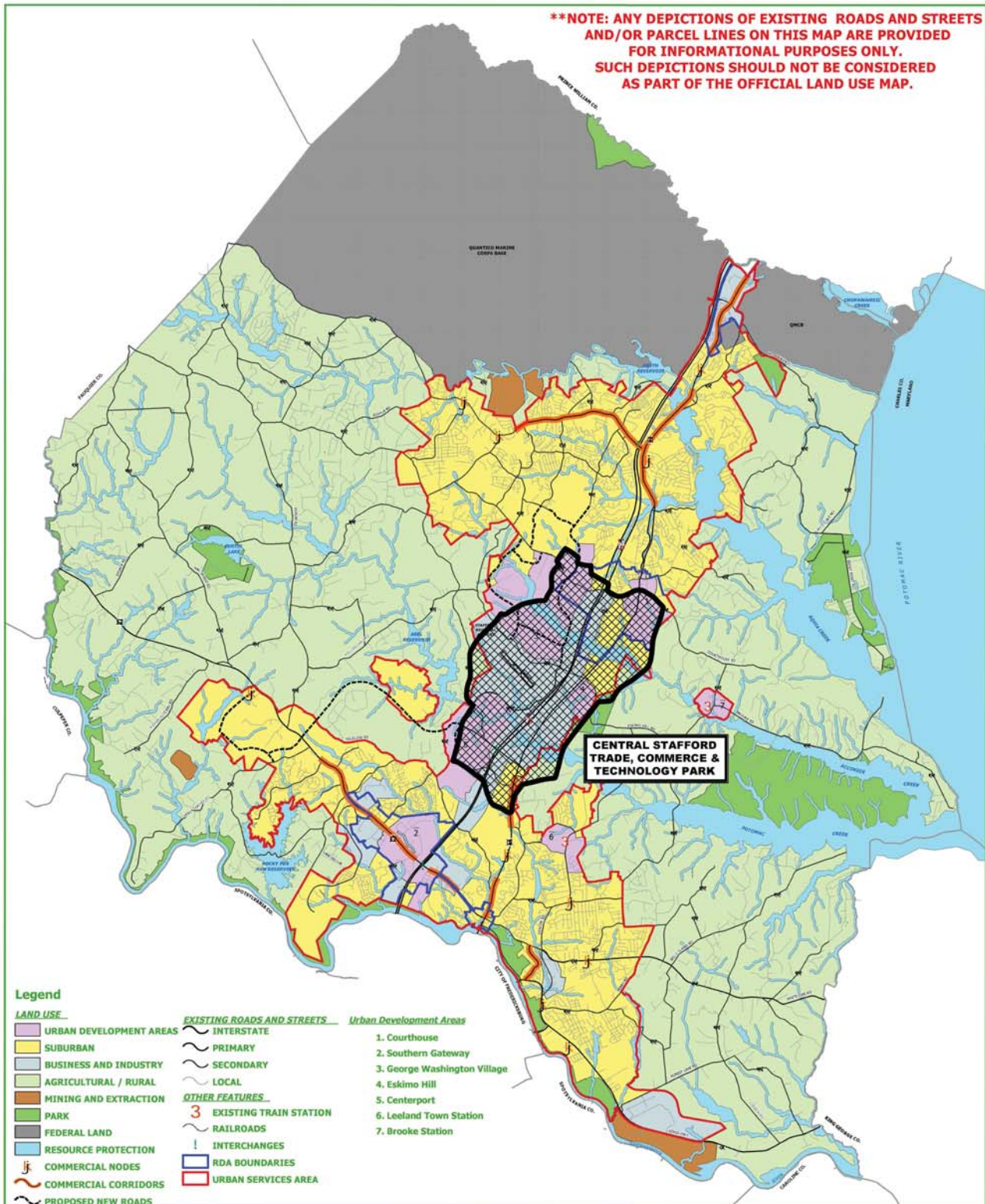
The Chamber noted several factors, including federal spending cuts, older office designs and lack of appeal to emerging commercial and technology companies.

CRP's physical features are also under scrutiny, as there are few walkable connections beyond its boundaries. Many existing buildings are perceived as "islands" because of limited access to and from business campuses. The City would like to bring fiber to

the premises however the current infrastructure lacks the capacity needed for a high-tech research park.



**\*\*NOTE: ANY DEPICTIONS OF EXISTING ROADS AND STREETS AND/OR PARCEL LINES ON THIS MAP ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY. SUCH DEPICTIONS SHOULD NOT BE CONSIDERED AS PART OF THE OFFICIAL LAND USE MAP.**



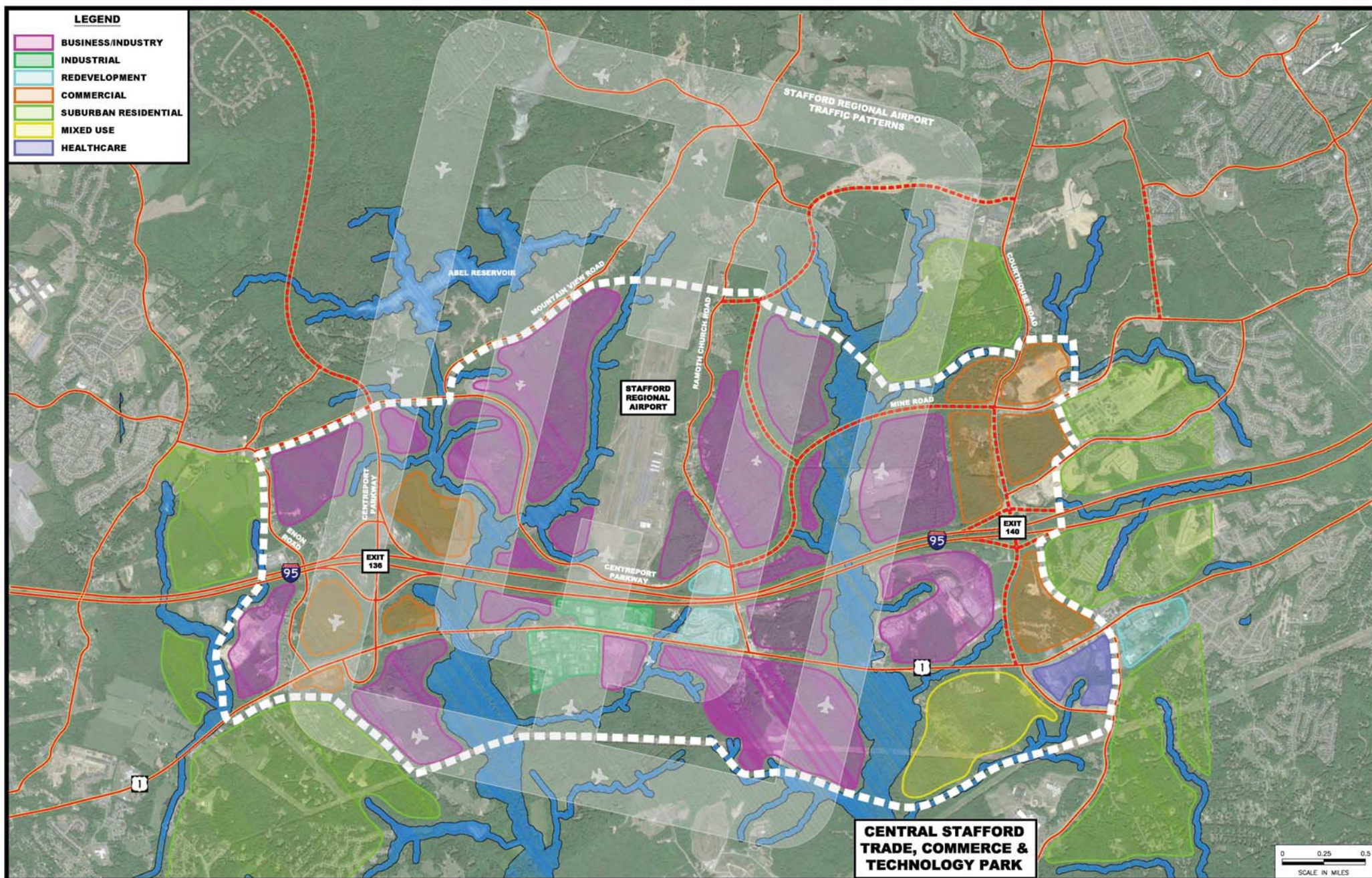
# **FIGURE 3.6** **FUTURE LAND USE** Stafford County Comprehensive Plan

Stafford County, Virginia  
 Adopted on June 7, 2011  
 Amended on March 18, 2014

**5**

0 0.5 1 1.5 2 Miles







**Board of Supervisors**

Robert "Bob" Thomas, Jr., Chairman  
Laura A. Sellers, Vice Chairman  
Meg Bohmke  
Jack R. Cavalier  
Wendy E. Maurer  
Paul V. Milde, III  
Gary F. Snellings

Anthony J. Romanello, ICMA-CM  
County Administrator

January 16, 2016

MEMORANDUM TO:       Stafford County Planning Commission  
                                  Comprehensive Plan Sub-Committee

FROM:                    Michael J. Zuraf, AICP *MZ*  
                                  Principal Planner

SUBJECT:                *Airport Compatibility Land Use recommendations - Integration into the  
                                  Comprehensive Plan 2010 – 2030 Document*

The proposal to amend the Comprehensive Plan to incorporate the Airport Land Use Compatibility Guidelines (attached) into the Plan was not approved by the Board. Reasons cited for not approving the amendment included that the document was confusing and too involved. For discussion purposes, staff is proposing the following alternative to integrate the Airport Land Use Compatibility Plan recommendations into the Comprehensive Plan 2010 – 2030 document.

Benefits and elements of this proposal include:

- Links the Airport Compatibility recommendations more directly with the underlying land use recommendations in the Land Use Plan to avoid multiple and conflicting land use recommendations on any one property. This Plan calls out uses, otherwise supported in a specific land use district that would not be permitted or would be permitted under special circumstances due to their proximity to the airport.
- Provide more specific land use recommendations in sub areas of a larger land use district around the airport. For example, in the Business and Industry Area, the sub-area to the east of the airport along US Route 1, which is generally in the approach area to the airport, the Plan includes more specific recommendations beyond the basic countywide land use recommendations and recommendations applicable to the specific area and its proximity to the airport. The Plan represents these more specific recommendations with inset maps in the Chapter 3 Land Use Plan
- The original, more detailed document is recommended to be retained in the format originally proposed, as Appendix H of the Comp Plan and retitled as the "Airport Compatible Land Use Study" to serve as background document and basis for the more specific recommendations that one can refer to.

Attached are excerpts of Chapter 3: Future Land Use from the main Comprehensive Plan Document, including:



- New Section 3.5, entitled Airport Compatibility, would be located in front of the Land Use Designation section of Chapter 3. It serves as an executive summary, providing background on the Stafford Regional Airport, a summary of the Study, and how land use recommendations are applied within the Land Use chapter.
- Sample sub-areas are provided in the George Washington Village UDA & Business and Industry land use districts to show how the areas are subdivided, illustrated in the document, and land use recommendations applied. Staff notes that the recommendations link back to the Compatibility Matrix developed in the original plan. The Committee is asked to consider this concept. Should this be acceptable, staff would develop recommendations for the remaining sub-areas affected by the airport for future consideration and based on future land use recommendation amendments that result from future Committee meetings.
- The original plan serving as Appendix H is provided for reference.

JAH:mz

Attachments

### 3.5 Airport Compatibility

The Stafford Regional Airport is located in center of the County on the west side of Interstate 95, between Ramoth Church Road and Mountain View Road. This is an area of the County that is anticipated to experience growth in the future. The area surrounding the Stafford Regional Airport was primarily agricultural and rural residential with very low density housing when it was initially sited in 1987. The growth pattern in the area has changed since that time with the construction of the Centerport Parkway in 2006 and amendments to the Future Land Use Plan in 2010 which allows for the potential of higher density development. The Airport Master Plan anticipates the extension of the existing runway and an increase in operations. Objective 4.9 of this Plan is to: Minimize the noise impacts and potential safety hazards generated by general aviation at public and private airfields in the County.

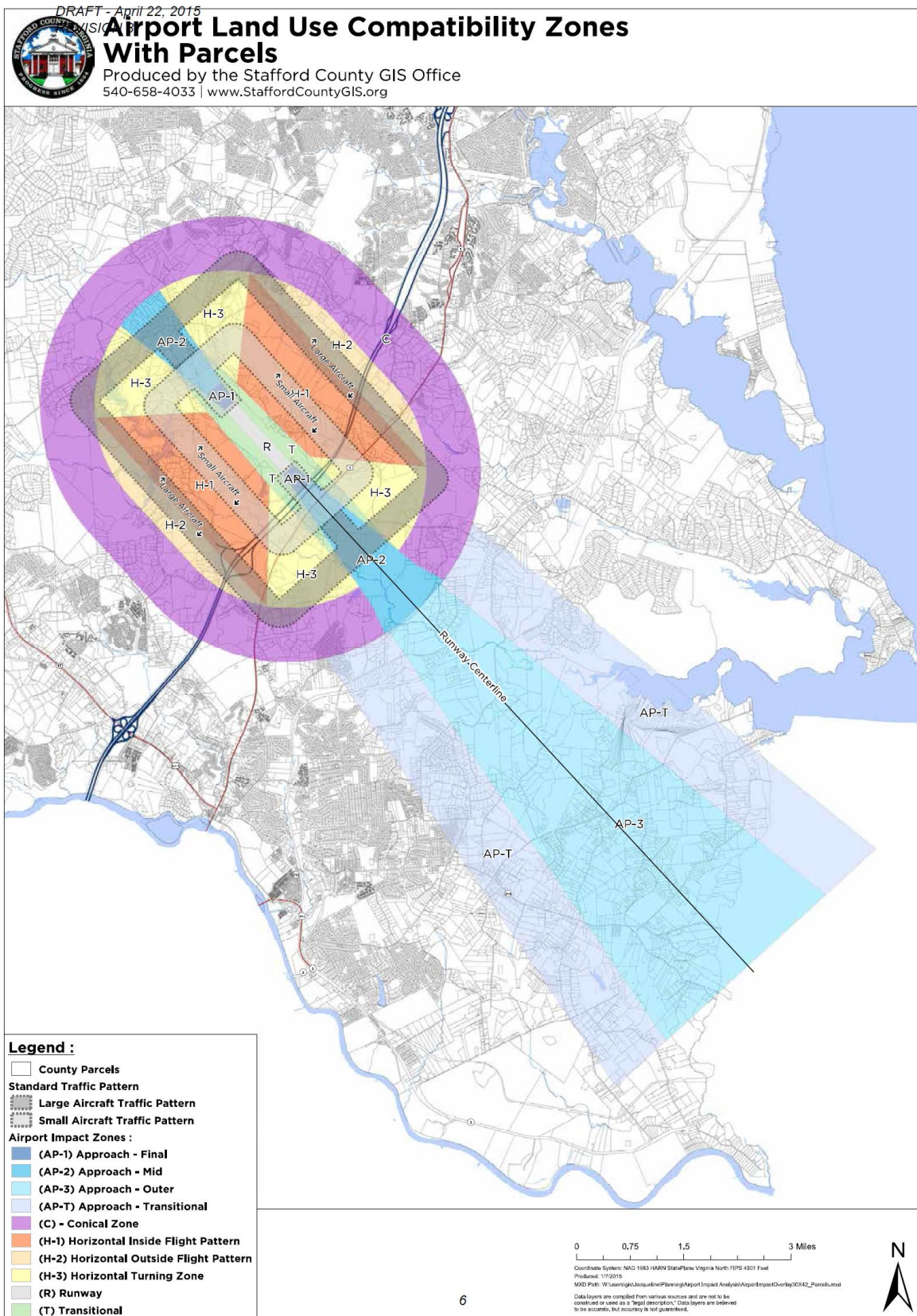
#### Airport Compatible Land Use Study

A Compatible Land Use Study “the Study” (see Appendix X) was prepared in 2014 as a joint effort between the Stafford Regional Airport Authority and Planning Commission to further define and address the specific planning considerations related to land use compatibility including potential impacts related to exposure to aircraft noise, land use safety with respect both to people on the ground and the occupants of aircraft; the protection of airport airspace; and general concerns related to aircraft overflights. The Study was based on industry standards and utilized the comprehensive Airport Cooperative Research Program Report sponsored by the FAA and model guidelines from other states and jurisdictions. The Study established: Impact Zones based on aircraft maneuvers around the airport; Goals and Policies; a Compatible Land Use Matrix; Additional Review Standards; and Implementation recommendations.

#### Compatible Land Use Recommendations

to support a future land use pattern that promotes safety and quality of life of the population around the airport and economic viability of the airport itself, the Land Use recommendations the compatible land uses recommended in the Study have been incorporated into the Future Land Use recommendations in Section 3.6 of this Chapter. Sub-areas of the individual land use districts are identified based on airport impact zones. Within each sub-area, the Plan identifies uses otherwise recommended in the land use district that would not be considered compatible or may require additional review to be considered compatible. Uses requiring additional review should comply with the recommendations provided in the Airport Compatible Land Use Study. Recommendations include site layout, use intensity, building material, and/or notification considerations.





**UDA 3: George Washington Village**

Clustered around two town centers, George Washington Village will be a mixed-use community consisting of approximately 4,180 dwelling units and 11,434,400 square feet of commercial retail and office space in order to meet the density requirements for Urban Areas. The boundaries of this UDA are ¼ mile to the west of Interstate 95, land that includes the southern half of the planned Embrey Mill subdivision and the south side of Courthouse Road, 500 feet to the north of Ramoth Church Road, and Colonial Forge development to the west. George Washington Village encompasses approximately 1,878 acres.

Development in George Washington Village would be centered around three nodes: a town center on the north side of Courthouse Road (GW Village North – Embrey Mill); a town center on the south side of Courthouse Road (GW Village South), and; a business campus south of Accokeek Creek (GW Village Business Campus). These three areas are described below.

**GW Village North – Embrey Mill**

This area incorporates the southern portion of the approved Embrey Mill Subdivision. The center of this area of the UDA would include a town center, which should be modeled using the principles of new urbanism. It should include buildings three to four stories in height consisting of a mix of approximately 1,100,000 square feet of commercial space and 330 condominiums on 80 acres. A residential neighborhood should be located to the north of the town center and east of Mine Road with a mix of 150 townhouses and 250 single-family homes. To the west of Mine Road, would be several public facilities to serve the needs of the new residents in this area.

**GW Village South**

The center of this area of the UDA would include a town center, which should be modeled using the principles of new urbanism with buildings three to four stories in height consisting of a mix of approximately 1,622,400 square feet of commercial space and 750 condominiums on 100 acres, and surrounded by 300 townhouses on 50 acres. Adjacent to the town center would be 1 or more single family home neighborhoods on up to 600 acres with approximately 2,400 single family homes.

**GW Village Business Campus**

500 acre business campus oriented toward Stafford Regional Airport with another 8,712,000 square feet of commercial office space. Architectural standards (i.e., building height, mass, materials, amenities, and signage), minimum and maximum setback requirements, environmentally friendly materials, and other design features will be incorporated in the village.

Getting the residents of George Washington Village to and from work and other destinations without creating an undue hardship on them and other residents of Stafford County and the Commonwealth of Virginia, the provision of adequate transportation facilities (beyond the internal community road network) will be necessary. In order to avoid burdening any single

interchange, Mine Road extended from Courthouse Road to Ramoth Church Road will need to be built in order to distribute the traffic volume between the Courthouse Road and Centerport Parkway interchanges. Furthermore, a transit facility including a 1,400-space park and ride lot with bus stop shelter, as well as a commuter van pool and bus transit station will need to be completed to reduce increased vehicle volumes on I-95 during peak commute periods.

Because of the residential density required for Urban Development Areas, and the lack of nearby recreational facilities, the provision of adequate parks and recreational facilities is necessary. This will require that the developer or developers of George Washington Village provide approximately 250 acres of suitable park property (suitable for passive and active recreational— not encumbered by restrictive easements and capable of supporting at least 50 athletic fields and a network of trails—activities) and construct a recreational facility with a variety of indoor amenities such as gymnastics, aerobics, a 50 meter swimming pool and/or other activities. It is not the intent to require the construction of 50 athletic fields. Rather, the intent is parkland should meet the characteristics of having gradual terrain with limited sensitive resources and allow for flexible design and location of park facilities. Although the parks are not required to be located entirely within the UDA, they shall conform with the location criteria provided in the introduction of the UDA section of the Plan.

The development of so many new dwelling units will by their nature increase the demand on Stafford County schools. In order to offset the capital cost of that demand, a new elementary school and a new middle school will have to be constructed. The middle school is a proffered site within the Embrey Mill Subdivision. These new dwelling units, as well as the commercial development, will also increase the need for public safety assets and therefore two (2) new fire and rescue stations (one station on a proffered site in the Embrey Mill Subdivision) will have to be constructed.

As previously mentioned in the UDA summary section entitled “Public Infrastructure and Services,” these new infrastructure requirements are the result of the new development, its density and location, and therefore will be the responsibility of the developer or developers of George Washington Village UDA.

Consistent with this goal, a proposed rezoning should offset the impacts of the new development – both on existing public infrastructure and on future public infrastructure needs. Impacts may be offset by voluntary proffers of such things as cash contributions, land dedication for a public facility, or construction of a public facility, as appropriate. Proffers may also include restrictions on the intensity and type of development. In the case of uses requiring a conditional use permit or special exception, the approving body may impose conditions to offset the impacts of the new development.

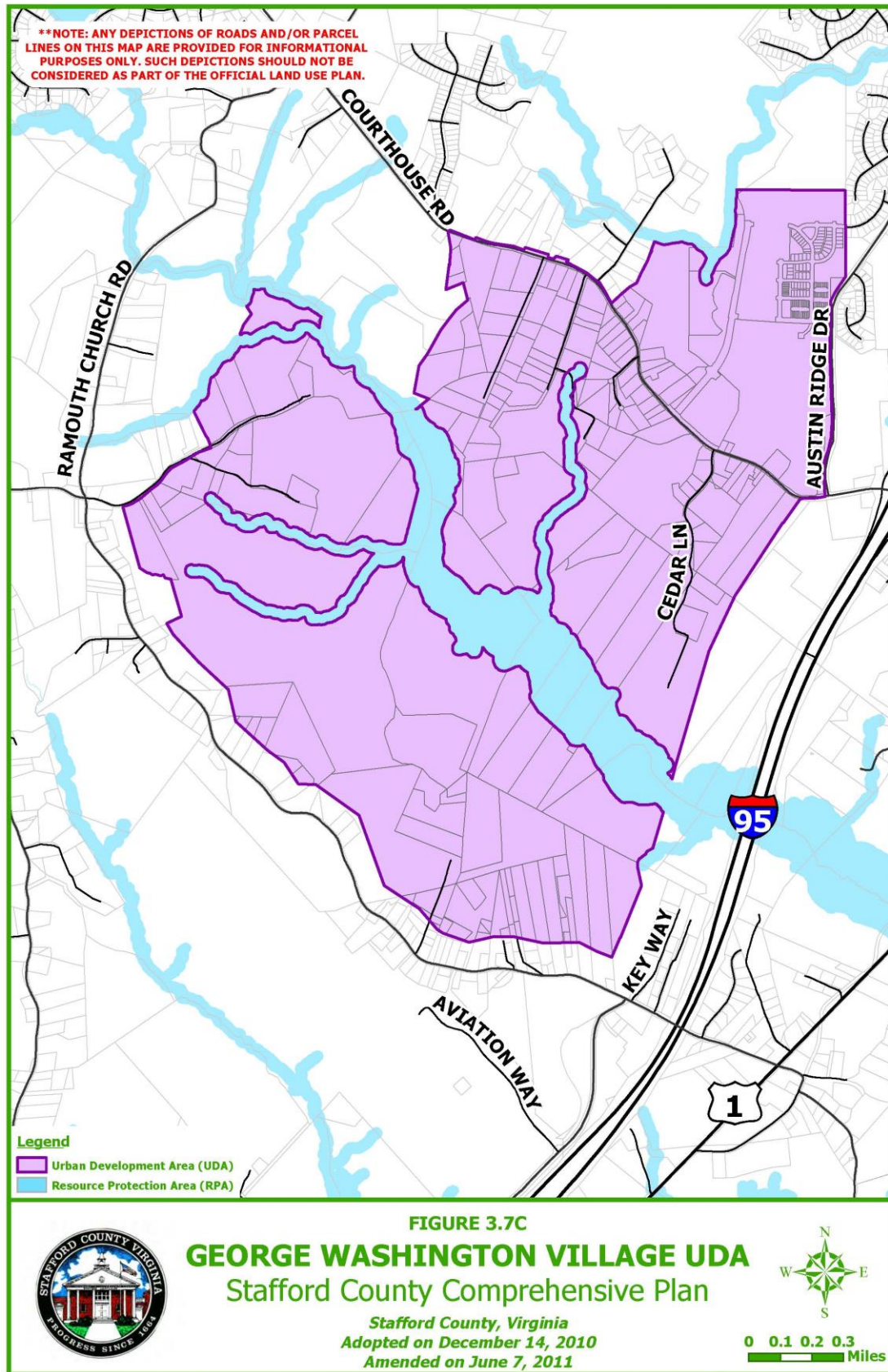
Summary

Projected New Dwelling Units: 4,180  
Projected New Commercial Sq. Footage: 11,434,400

## Facility needs:

Extension of Mine Road from Embrey Mill across Courthouse Road  
to Ramoth Church Road as shown in Figure 4.3  
1,400 space park and ride lot with bus stop shelter  
Commuter van pool and bus transit station  
250 acres of parkland (passive and active)  
Recreational facility with indoor amenities  
1 elementary school  
1 middle school  
2 fire and rescue stations

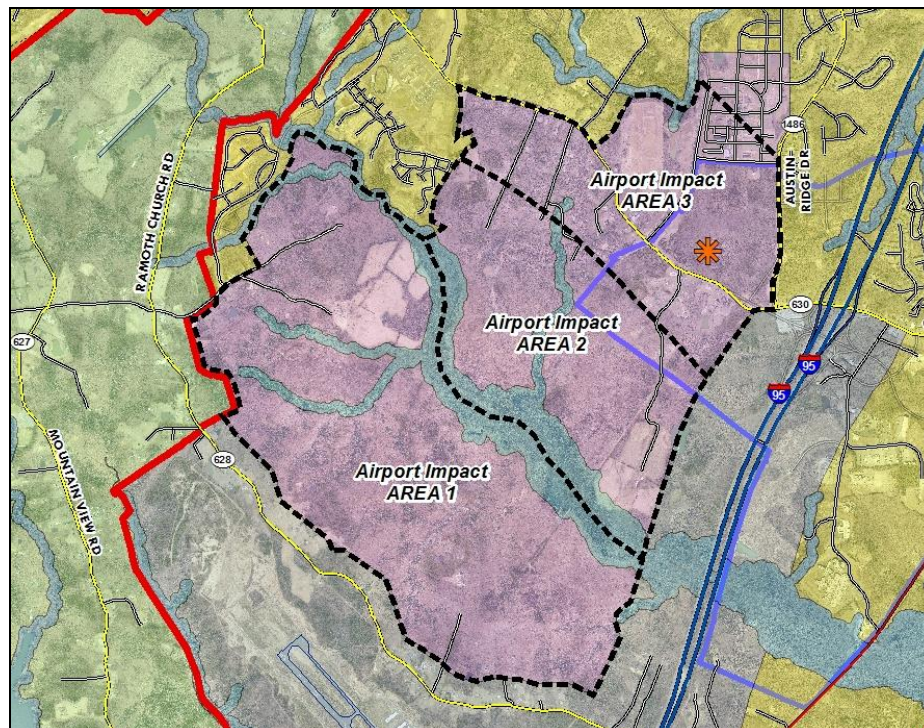






### Airport Impact Area

The George Washington Village UDA is almost entirely within the Airport Impact Area. The UDA is affected by anticipated air traffic patterns on the north side of the airport. Due to the size of the UDA, there are different influences from aircraft operations, thus varying degrees of land use compatibility across this area. The UDA is divided into three sub-areas: Area 1, south of Accokeek Creek; Area 2, north of Accokeek Creek; and Area 3, along Courthouse Road, including portions of Embrey Mill. The following is a map of these sub-areas with a listing of uses that are considered not compatible and uses that may require additional review.



No use recommended in the George Washington Village land use district is considered to be not compatible in any portion of this area.

### AREA 1

#### Uses requiring additional review:

All uses otherwise recommended in the UDA require additional review. These uses should be measured against the Additional Review Standards provided in **Appendix X**.

- Assembly (schools, place of worship, daycare)
- Hospitals
- Community (Police, fire and rescue, neighborhood centers)
- Vertical Infrastructure (Electric Transmission, Water Towers, Telecommunication Towers)
- Single family Residential - Small lot (<1 acre) & *Townhomes*\*\*
- Multi-family Residential (Three or more units per building)\*\*

*\*\* Residential uses are discouraged, but individual projects may be considered appropriate if it is determined that it satisfactorily addresses the Additional Review factors highlighted in Table 2 of the Airport Compatible Land Use Study.*

- Group Living (Nursing homes, group homes)
- Transient Lodging
- General Retail and Service (shopping centers & stores, restaurants, convenience, vehicle fueling)
- Low-rise Office (1-3 stories)
- Mid/High-rise Office (4+ stories)
- Passive Recreation (trails & natural areas)
- Active Recreation (community sports fields, golf, indoor facilities)
- Amusement (Stadiums, amusement parks, fairgrounds)

### AREA 2

Uses requiring additional review:

All uses otherwise recommended in the UDA require additional review. These uses should be measured against the Additional Review Standards provided in **Appendix X**.

- Assembly (schools, place of worship, daycare)
  - Hospitals
  - Vertical Infrastructure (Electric Transmission, Water Towers, Telecommunication Towers)
  - Single family Residential - Small lot (<1 acre) & Townhomes\*\*
  - Multi-family Residential (Three or more units per building)\*\*
- \*\* Residential uses are discouraged, but individual projects may be considered appropriate if it is determined that it satisfactorily addresses the Additional Review factors highlighted in Table 2 of the Airport Compatible Land Use Study.*
- Group Living (Nursing homes, group homes)
  - Transient Lodging
  - Mid/High-rise Office (4+ stories)
  - Amusement (Stadiums, amusement parks, fairgrounds)

### AREA 3

These areas are within the outer conical zone. Most uses otherwise recommended in this district are considered compatible with airport operations, with the exception of Vertical Infrastructure. These uses require additional review and should be measured against the Additional Review Standards provided in **Appendix X**.

The following design criteria should apply to industrial development in Suburban Areas.

- Industrial development should be adequately screened and set back from nearby residential uses to minimize visual and noise impacts.
- *Maximum floor area ratio should not exceed 0.35 and open space ratio should be at least 0.20;*
- *All loading areas abutting residential uses should be screened with opaque fencing and natural vegetation. Where natural vegetation is insufficient, a variety of evergreen and deciduous landscaping may be substituted;*
- *Maximum building height should be 40 feet;*
- *All parking areas should be landscaped;*
- *Adequate lighting should be provided. Fixtures should be cutoff style and not exceed twenty feet in height. Lighting should be directed away from abutting properties;*

### **Business and Industry Areas**

Areas of the county where large scale business and industry activities are encouraged. These areas are to be the primary economic engines for the County. Such businesses and industries would primarily serve markets that stretch beyond the County borders. Activities will typically include retail, wholesale, corporate and professional offices, research and development, entertainment, manufacturing, distribution and transportation. Special consideration shall be given when locating heavy industrial uses in these areas. Buildings would typically be large in nature with extensive setbacks, parking and lot coverage requirements. They should be located in proximity to major transportation facilities. Residential activities in the area should be discouraged. Where such areas abut existing residential communities, berms, buffers, noise attenuation measures and additional setbacks may be necessary to minimize community conflicts.

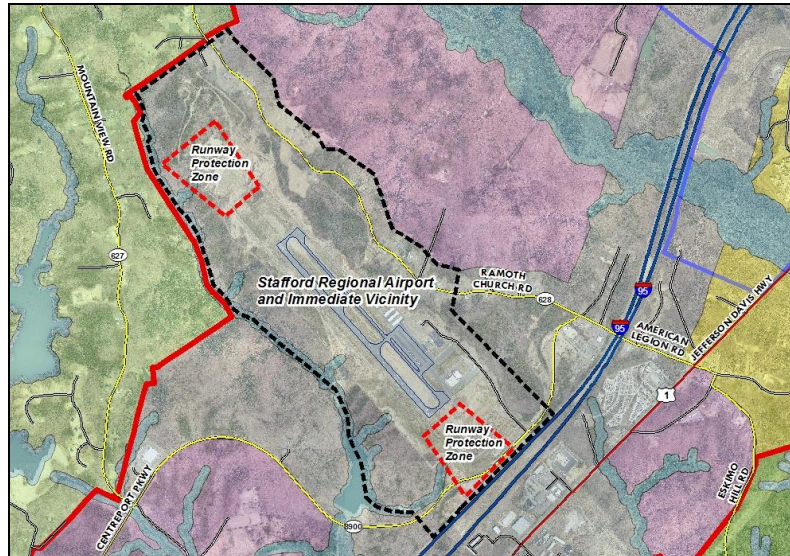
It is noted that new and used vehicle sales, including automobiles and boats, shall also be considered in Business and Industry areas along major arterials, where compatible uses exist. This includes areas along Jefferson Davis Highway between Ramoth Church Road and Potomac Creek.

### **Airport Impact Areas:**

#### **Airport Impact Area – Stafford Regional Airport and Immediate Area**

This sub-area includes the airport property and closest properties to the airport west of Interstate 95 and includes properties along Ramoth Church Road to the north, portions of Centerport Parkway, and south to xx. It is located under the final eastern and western approaches to Stafford Regional Airport. Most land uses are considered incompatible in this area due to low flying aircraft on final approach to the runway and nearby noise impacts.





This area includes a Runway Protection Zone the area closest to each end of the runway. Development is discouraged in these areas. In the remaining area the following land use standards apply:

Uses not compatible:

The following uses otherwise recommended in the district are not considered compatible with aircraft operations in this area.

- Mid to high rise office uses (4+ stories)
- Heavy Industrial Uses (Landfill, Heavy Manufacturing, bulk fuel storage, mining, uses that emit smoke or create sun glare)
- Vertical Infrastructure (Electric Transmission, Water Towers, Telecommunication Towers)
- Most community uses, except for police or fire and rescue stations.
- Transient Lodging

Uses requiring additional review:

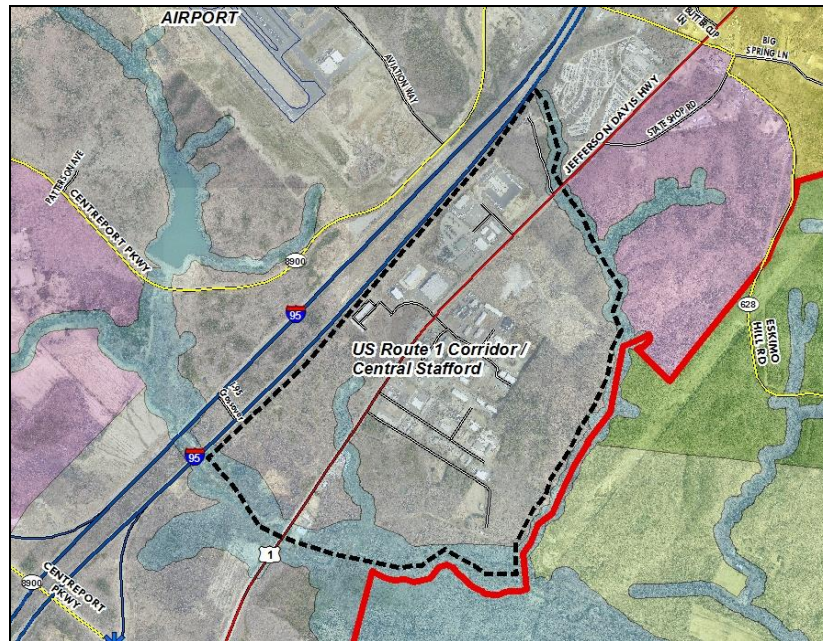
The following uses otherwise recommended in the district require additional review. These uses should be measured against the Additional Review Standards provided in **Appendix X**.

- Light Industrial Uses (manufacturing, storage, warehouse)
- Low Rise Office Uses (1-3 stories)
- General Retail and Service (shopping centers and stores, restaurants, convenience, vehicle fueling)
- Automobile related (sales lot, repair, storage)
- Police or Fire and Rescue stations



### Airport Impact Area – U.S. Route 1 Corridor / Central Stafford

This sub-area of the Business and Industry land use district is located along U.S. Route 1, east of Interstate 95 and north of Potomac Creek. It is located under the eastern approach to Stafford Regional Airport. Land Use considerations should account for low flying aircraft on final approach to the runway.



#### Uses not compatible:

The following uses otherwise recommended in the district are not considered compatible with aircraft operations in this area.

- Mid to high rise office uses (4+ stories)
- Heavy Industrial Uses (Landfill, Heavy Manufacturing, bulk fuel storage, mining, uses that emit smoke or create sun glare)
- Vertical Infrastructure (Electric Transmission, Water Towers, Telecommunication Towers)
- Most community uses, except for police or fire and rescue stations.

#### Uses requiring additional review:

The following uses otherwise recommended in the district require additional review. These uses should be measured against the Additional Review Standards provided in **Appendix X**.

- Light Industrial Uses (manufacturing, storage, warehouse)
- Low Rise Office Uses (1-3 stories)
- General Retail and Service (shopping centers and stores, restaurants, convenience, vehicle fueling)
- Transient Lodging

## **APPENDIX H: AIRPORT COMPATIBLE LAND USE STUDY**

### **A. Introduction**

The Stafford Regional Airport is located in an area of the County that is anticipated to experience growth in the future. The area surrounding the Stafford Regional Airport was primarily agricultural and rural residential with very low density housing when it was initially sited in 1987. The growth pattern in the area has changed since that time with the construction of the Centerport Parkway in 2006 and amendments to the Future Land Use Plan in 2010 which allows for the potential of higher density development. The Airport Master Plan anticipates the extension of the existing runway and an increase in operations.

The Comprehensive Plan recognizes the need to plan for growth that is compatible with the airport in the following ways:

Chapter 2 (page 2-26) includes a recommendation for the development of land use compatibility standards:

*Objective 4.9. Minimize the noise impacts and potential safety hazards generated by general aviation at public and private airfields in the County.*

*Policy 4.9.1. The County should develop land use compatibility standards for new development to conform to within the aircraft approach patterns of airports and landing strips.*

Chapter 6 (page 6-10) includes the recognition of the current zoning overlay district:

#### *Overlay Districts*

*In addition to the base zoning districts, the Stafford County Zoning Ordinance contains eight overlay districts. The purposes of the districts vary from protecting historical and environmental resources, reducing conflicts between established facilities, and mitigating potential hazards.*

*Overlay districts add a variety of standards to the underlying districts. These standards could include use restrictions, preservation requirements, or stricter density regulations. The following is a list of the overlay districts used in Stafford County:*

*AD Airport Impact - Provides an overlay zone in areas subject to intense and/or frequent emissions of noise and vibration from airports and prevents obstructions of airport zones which may result in an air navigation hazard.*

An Airport Planning Area is established in order to further define and address the specific planning considerations related to land use compatibility including potential impacts related to exposure to aircraft noise, land use safety with respect both to people on the ground and the occupants of aircraft; the protection of airport airspace; and general concerns related to aircraft overflights. The Airport Planning Area consists of Airport Impact Zones that are defined in section C of this chapter.

## **B. Background of the Stafford Regional Airport**

The Stafford Regional Airport is located in the center of Stafford County and is situated approximately 40 miles southwest of Washington D.C., 50 miles north of Richmond, Virginia and approximately 5 miles north of Fredericksburg, Virginia.

The need for a new public general aviation airport in Stafford County was determined in 1972 as part of the National Airport System Plan. In 1977 Stafford County conducted a feasibility study which detailed a need for a transport category airport in the region. A series of environmental studies were conducted between 1977 and 1992 and resulted in the final selection of an airport site in the central Stafford County area, adjacent to Interstate 95. Construction of the Airport began in 1997 and the airport opened in December 2001. The Airport was completed for just over \$41M dollars, \$5M under its allocated budget. This included an investment of \$820k from the Stafford Regional Airport Authority, almost \$39M from the Federal Aviation Administration (FAA) and approximately \$1.25M in Commonwealth of Virginia funding. The Airport Improvement Program Handbook states, with regard to any airport sponsor, "It (the airport sponsor) will take the appropriate action, to the extent reasonable, including the adoption of zoning laws, to restrict the use of land adjacent to or in the immediate vicinity of the airport to activities and purposes compatible with normal airport operations, including landing and takeoff of aircraft."

Significant airport development of more than \$14M has occurred since the Airport was originally constructed with the bulk coming from the FAA. This construction includes the addition of T- Hangars, two corporate hangars, apron areas, auto parking, fuel farm, security fencing, an instrument landing system (ILS), an approach lighting system and a new terminal building that opened in January 2014. The FAA and DOAV provide nearly all of the funding for future airport improvements and it is imperative that Stafford County establish and maintain high quality development compatibility standards to insure that future expenditures are used to improve the airport instead of noise abatement measures due to poor development planning.

The Airport is governed by a seven member Airport Authority (Stafford Regional Airport Authority or SRAA). These appointed members serve four year terms and represent Stafford County (four members), Prince William County (two members), and the City of Fredericksburg, Virginia (one member). A fulltime airport manager is located at the Stafford Regional Airport and handles the daily operation of the facility.

The Stafford Regional Airport service area includes Stafford County and portions of eight surrounding counties plus the City of Alexandria and Washington D.C. as determined by the Virginia Department of Aviation (DOAV) 2003 Virginia Air Transportation System Plan (VATSP) and airport records.

The Stafford Regional Airport is served by a single 5,000' x 100' grooved runway (15-33) as shown on the Airport Layout Plan in Exhibit 1. This runway is oriented 150 and 330 degrees and has a full-length parallel taxiway. Runway 15-33 utilizes High Intensity Runway Lights (HIRL) which can be operated by pilots using the Airport's Unicom frequency (122.725). Medium Intensity Taxiway

Lighting (MITL) is also available to pilots to assist in night operations, giving the facility 24-hour operational capability.

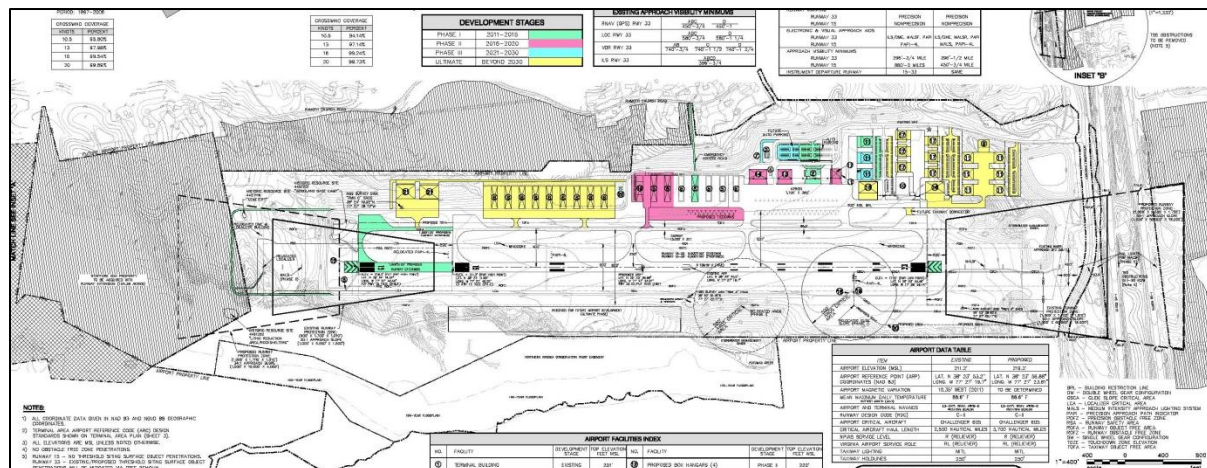


Exhibit 1: Airport Layout Plan

The Stafford Regional Airport currently has three instrument approach procedures consisting of an ILS approach, VOR approach, and a GPS approach. The ILS is an Instrument Landing System which uses radio waves broadcast from the Airport to align aircraft with the approach path to the runway. Runway 33 at the Airport has a Category 1 ILS System which enables aircraft with IFR (Instrument Flight Rules) equipment to land at RMN in inclement weather. Non-Precision instrument approaches (GPS or RNAV) for runway 15 have been developed and reviewed by the FAA but not implemented at this time.

Aircraft operating at the Stafford Regional Airport use existing traffic patterns based on the type and speed of the aircraft. The Airport currently operates with a standard left-hand traffic pattern for runway 33 and a nonstandard right-hand pattern for runway 15 as shown in Exhibit 2. This nonstandard pattern was temporarily implemented due to the proximity of a landfill which can serve as a bird attractant. Airport layout plans call for reinstituting the standard left-hand traffic pattern on Runway 15 once the closest landfill cell to the Airport is closed as shown in Exhibit 3.

An operation is defined as either a takeoff or a landing at the airport. Existing airport activity exceeds 23,000 operations per year and a modest growth rate of approximately 1,000 operations per year for the next several years is projected. This figure is supported by the FAA and DOAV as indicated in the approved Airport Master Plan update that was completed in April 2013.

According to the 2011 Virginia Statewide Economic Impact Study, the Stafford Regional Airport provided 105 direct and indirect jobs and contributed \$18.2M in economic activity to the region in 2010. This impact demonstrates the value that the Stafford Regional Airport adds to the region as an economic engine.

(Source: *Stafford Regional Airport Compatible Land Use Study*, May 2014, Talbert and Bright, Inc.)



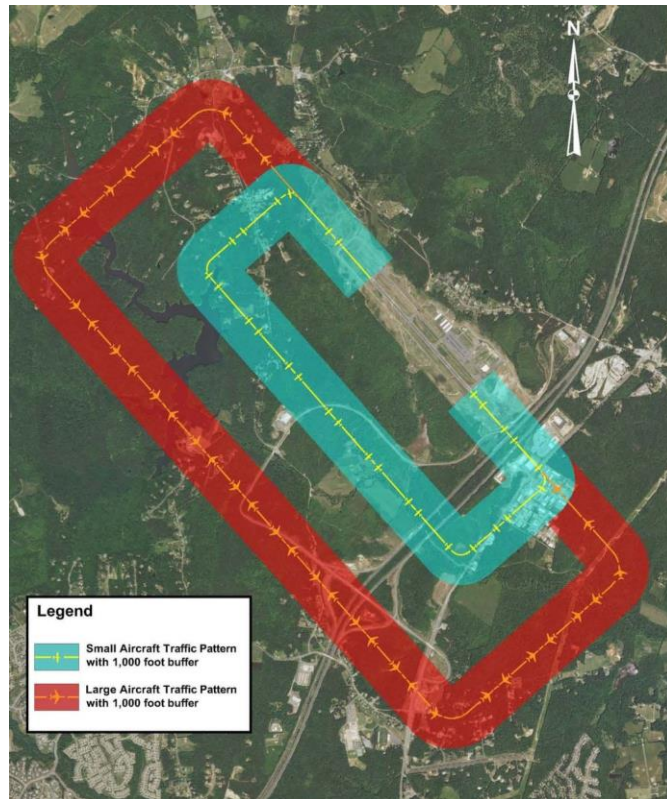


Exhibit 2: Non-standard Traffic Pattern

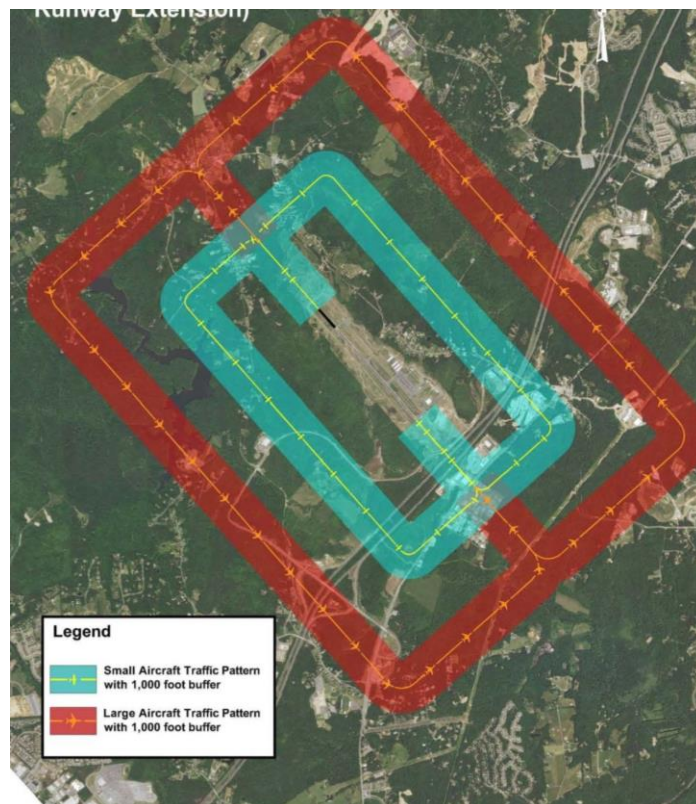


Exhibit 3: Standard Traffic Pattern

### **C. Airport Impact Zones**

The Airport Impact Zones that make up the Airport Planning Area define and address the specific planning considerations related to land use compatibility in the area identified in the Airport Impact Overlay District and the Stafford Regional Airport Master Plan. The specific planning considerations include potential impacts related to exposure to aircraft noise, land use safety with respect both to people on the ground and the occupants of aircraft; the management of airport airspace; and general concerns related to aircraft overflights. This Plan designates Airport Impact Zones that closely correspond with the existing Airport Impact Zoning Overlay District. The zones are utilized in establishing the corresponding land use compatibility standards.

**Approach zones** reflect the approach and departure areas for the runway and are divided into several sub areas.

***Approach –Final, Runway Protection Zone (AP-1).*** The closest area at the end of each runway, beginning 200-feet from the end of each runway, extending approximately two thousand five hundred (2,500) feet to the east and one thousand seven hundred (1,700) feet to the west.

***Approach – Mid (AP-2).*** The area that fans out from the Runway Protection Zone, extending fourteen thousand (14,000) feet to the east and ten thousand (10,000) feet to the west.

***Approach – Outer (AP-3).*** The area that fans out to the east of the runway that extends from fourteen thousand (14,000) feet to fifty thousand (50,000) feet from the runway.

***Approach – Transitional (AP-T).*** A 5,000 foot wide area extending along each side of the Outer Approach, beyond the Conical zone.

***Transitional (T).*** The area that fans away perpendicular to any airport runway centerline and approach surfaces

**Horizontal** zones include the area that is established by swinging arcs of ten thousand (10,000) feet radii from the center of the end of the primary surface of an airport runway and connecting adjacent arcs by drawing lines tangent to those areas. The horizontal zone excludes the approach and transitional zones. The area is divided into two sub-areas for the purpose of land use compatibility.

***Horizontal – Inside Flight Pattern (H-1).*** The inner portion of the Horizontal zone that encompasses the majority of the existing and future aircraft traffic patterns.

***Horizontal – Outside Flight Pattern (H-2).*** The outer portion of the Horizontal Zone that encompasses the outer edge of the Jet/Turboprop (large) aircraft traffic patterns.

***Horizontal – Turning Areas (H-3).*** The area of the Horizontal zone that encompasses the portion of the traffic pattern area where turning movements occur, where aircraft generate louder noise and there is increased accident probability.

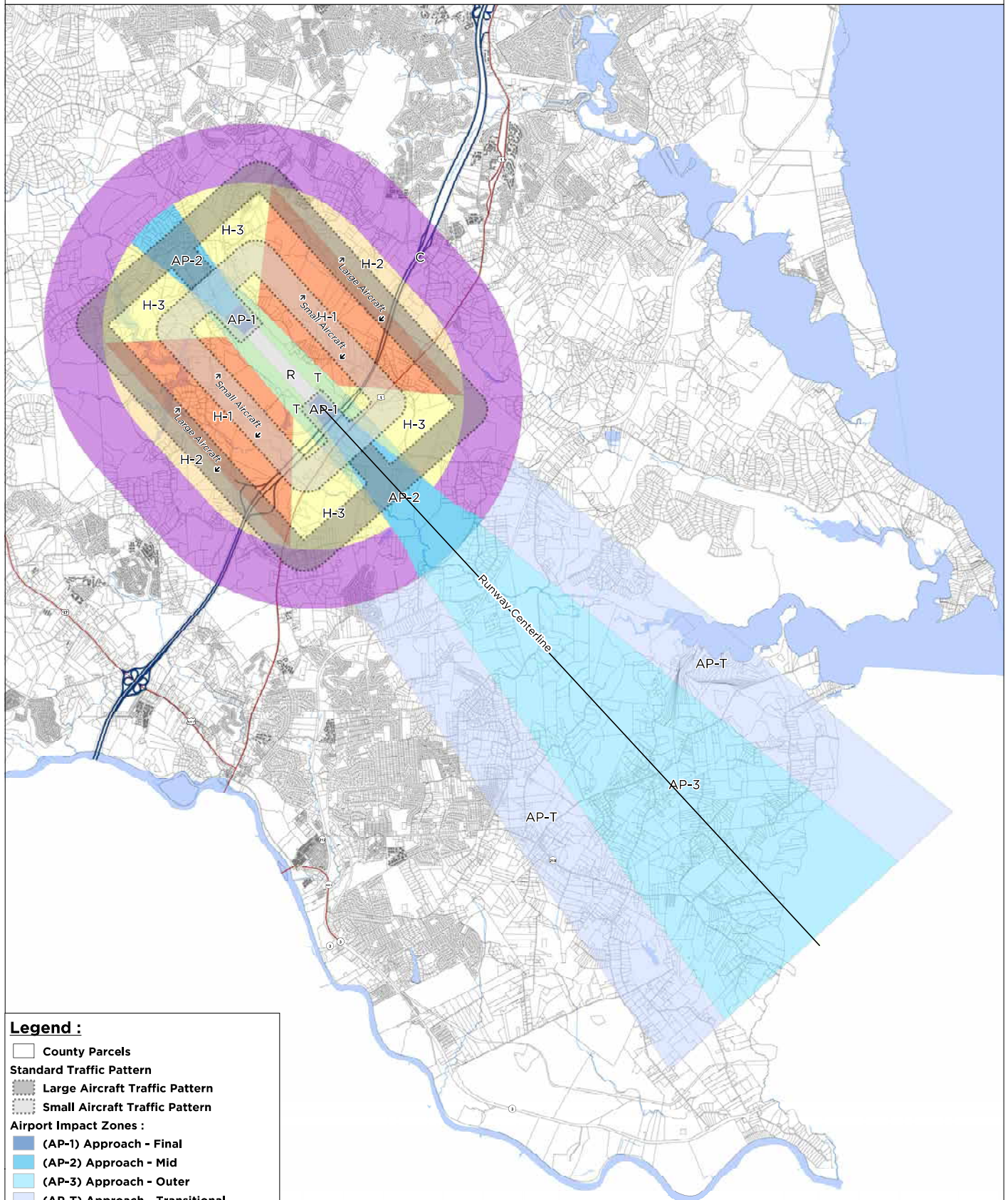
***Conical (C).*** The area that surrounds and commences at the periphery of the horizontal zone (10,000 feet from the Runway Clear Zone) and extends outward from there for a distance of four thousand (4,000) feet.





# Airport Land Use Compatibility Zones With Parcels

Produced by the Stafford County GIS Office  
540-658-4033 | www.StaffordCountyGIS.org



## Legend :

- County Parcels
- Standard Traffic Pattern**
- Large Aircraft Traffic Pattern
- Small Aircraft Traffic Pattern
- Airport Impact Zones :**
- (AP-1) Approach - Final
- (AP-2) Approach - Mid
- (AP-3) Approach - Outer
- (AP-T) Approach - Transitional
- (C) - Conical Zone
- (H-1) Horizontal Inside Flight Pattern
- (H-2) Horizontal Outside Flight Pattern
- (H-3) Horizontal Turning Zone
- (R) Runway
- (T) Transitional

0 0.75 1.5 3 Miles

Coordinate System: NAD 1983 HARN StatePlane Virginia North FIPS 4501 Feet  
Produced: 1/7/2015  
MXD Path: W:\users\gis\Jacqueline\Planning\Airport Impact Analysis\AirportImpactOverlay30262\_Parcels.mxd  
Data layers are compiled from various sources and are not to be construed or used as a "legal description." Data layers are believed to be accurate, but accuracy is not guaranteed.



#### **D. Analysis of the Planning Area**

The following analysis shows the area of existing zoning classifications within each zone and the future land use designations, which identify the types of potential development that may occur. When comparing current zoning to future land use, the greatest potential for incompatible development to occur is within the Horizontal Zone. The majority of the area is zoned A-1, Agricultural, with the potential of being rezoned as the land is planned for Business and Industry, Suburban and Urban Development Area (UDA) future land use designations. The land use designations within the Horizontal Zone are described below:

*Business and Industry* – 1,533 acres - Uses include retail, wholesale, corporate and professional offices, research and development, entertainment, manufacturing, distribution and transportation; possible heavy industrial uses; new and used vehicle sales, including automobiles and boats.

*Suburban* – 725 acres - Uses include single family detached dwelling units, typically on ¼ to ½ acre lots, maximum density of 3 du/ac; neighborhood and community oriented activity centers, places of worship, parks and play areas, and retail and business activities with a maximum floor area ratio (FAR) of 0.4.; industrial uses include warehousing, wholesaling, manufacturing, processing operations, mixed-use commercial/industrial development, and flex office space.

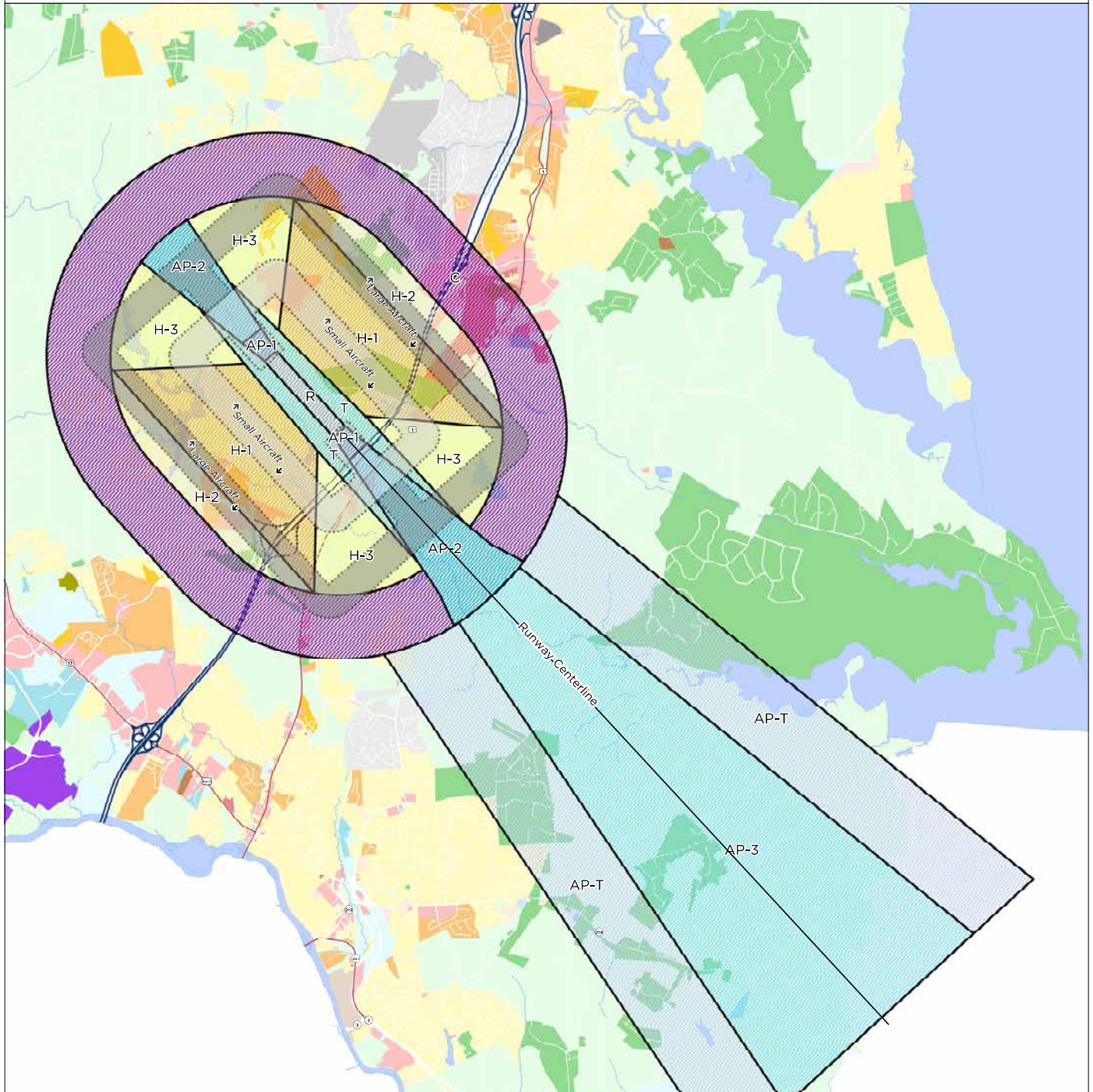
*Urban Development Areas* – mix of uses including approximately 8,829 dwelling units and 13,900,800 square feet of commercial retail and office space in an area totaling approximately 3,196 acres, 2,300 acres of which are within the Horizontal Zone.





# Airport Land Use Compatibility Zones With Zoning

Produced by the Stafford County GIS Office  
540-658-4033 | [www.StaffordCountyGIS.org](http://www.StaffordCountyGIS.org)



## Legend :

### Standard Traffic Pattern

- Large Aircraft Traffic Pattern
- Small Aircraft Traffic Pattern

### Airport Impact Zones :

- (AP-1) Approach - Final
- (AP-2) Approach - Mid
- (AP-3) Approach - Outer
- (AP-T) Approach - Transitional
- (C) - Conical Zone
- (H-1) Horizontal Inside Flight Zone
- (H-2) Horizontal Outside Flight Zone
- (H-3) Horizontal Turning Zone
- (R) Runway
- (T) Transitional

### Zoning :

- A1 - Agricultural
- A2 - Rural Residential
- R1 - Suburban Residential

- R2 - Urban Residential - Medium Density
- R3 - Urban Residential - High Density
- R4 - Manufactured Homes
- LC - Life Care/Retirement
- B1 - Convenience Commercial
- B2 - Urban Commercial
- B3 - Office
- M1 - Light Industrial
- M2 - Heavy Commercial
- SC - Suburban Commercial
- HI - Heritage Interpretation
- RC - Rural Commercial
- RBC - Recreational Business Campus
- UD - Urban Development
- PD1 - Planned Development 1
- PD2 - Planned Development 2
- PTND - Planned-Traditional Neighborhood

0 0.75 1.5 3 Miles

Coordinate System: NAD 1983 HARN StatePlane Virginia North FIPS 4501 Feet  
Produced: 1/7/2015

MXD Path: W:\users\gis\Jacqueline\Planning\Airport Impact Analysis\AirportImpactOverlay30262\_Zoning.mxd

Data layers are compiled from various sources and are not to be construed or used as a "legal description." Data layers are believed to be accurate, but accuracy is not guaranteed.

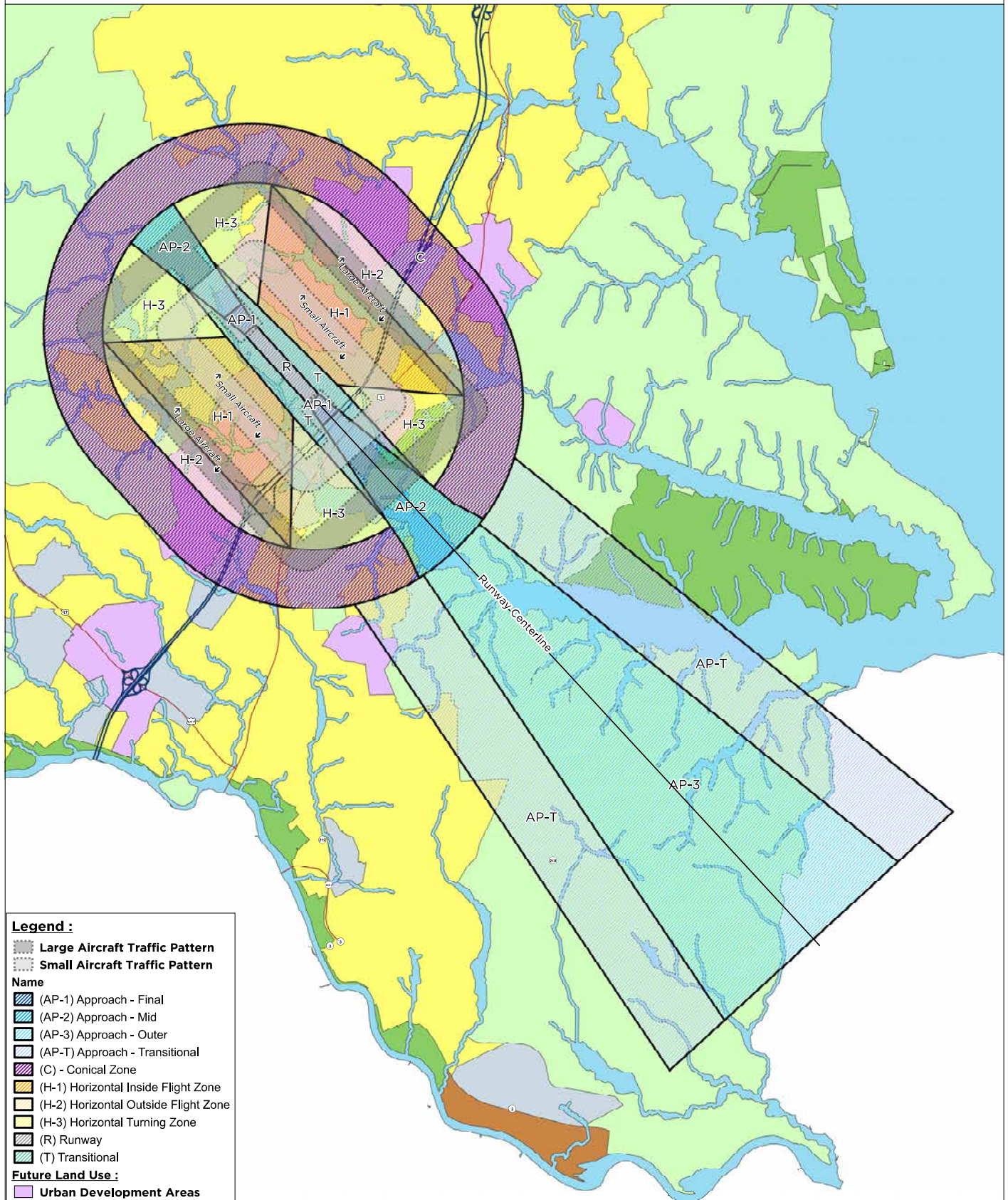






# Airport Land Use Compatibility Zones With Future Land Use

Produced by the Stafford County GIS Office  
540-658-4033 | www.StaffordCountyGIS.org



## Legend :

- Large Aircraft Traffic Pattern
- Small Aircraft Traffic Pattern

## Name

- (AP-1) Approach - Final
- (AP-2) Approach - Mid
- (AP-3) Approach - Outer
- (AP-T) Approach - Transitional
- (C) - Conical Zone
- (H-1) Horizontal Inside Flight Zone
- (H-2) Horizontal Outside Flight Zone
- (H-3) Horizontal Turning Zone
- (R) Runway
- (T) Transitional

## Future Land Use :

- Urban Development Areas
- Suburban
- Business and Industry
- Agricultural/Rural
- Federal
- Park
- Mining and Extraction
- Resource Protection

0 0.75 1.5 3 Miles

Coordinate System: NAD 1983 HARN StatePlane Virginia North FIPS 4501 Feet  
Produced: 1/7/2015

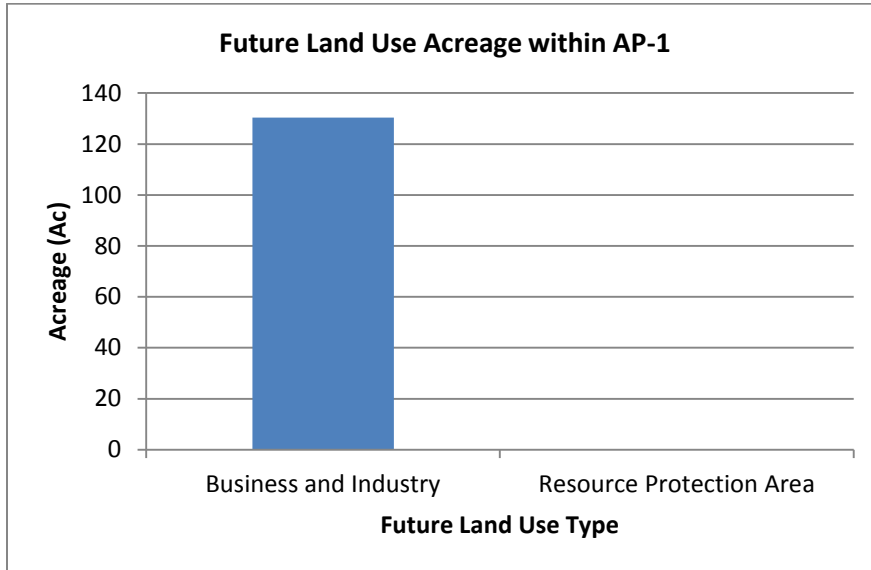
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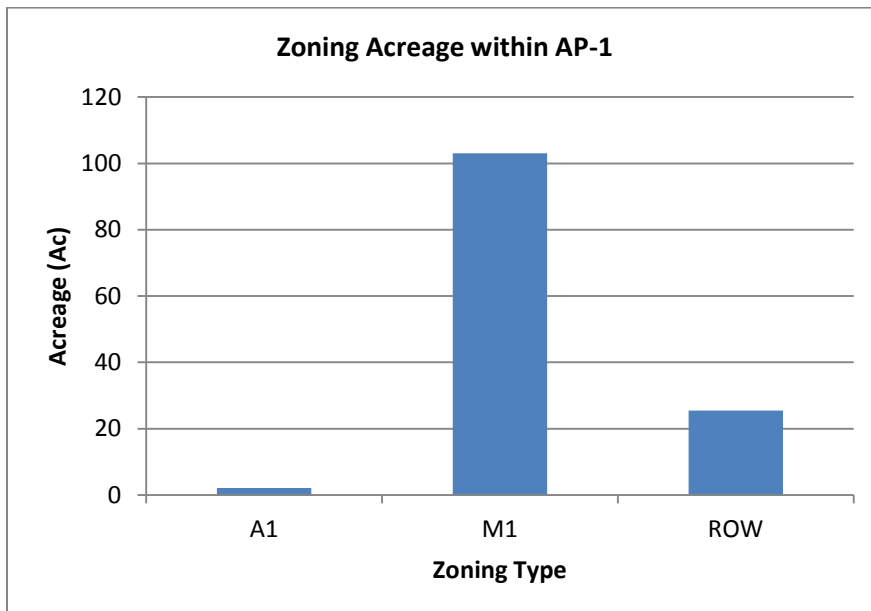


**Existing Future Land Uses and Zoning District Classifications by Airport Impact Zone**

**1. Final Approach Compatibility Zone (AP-1)**

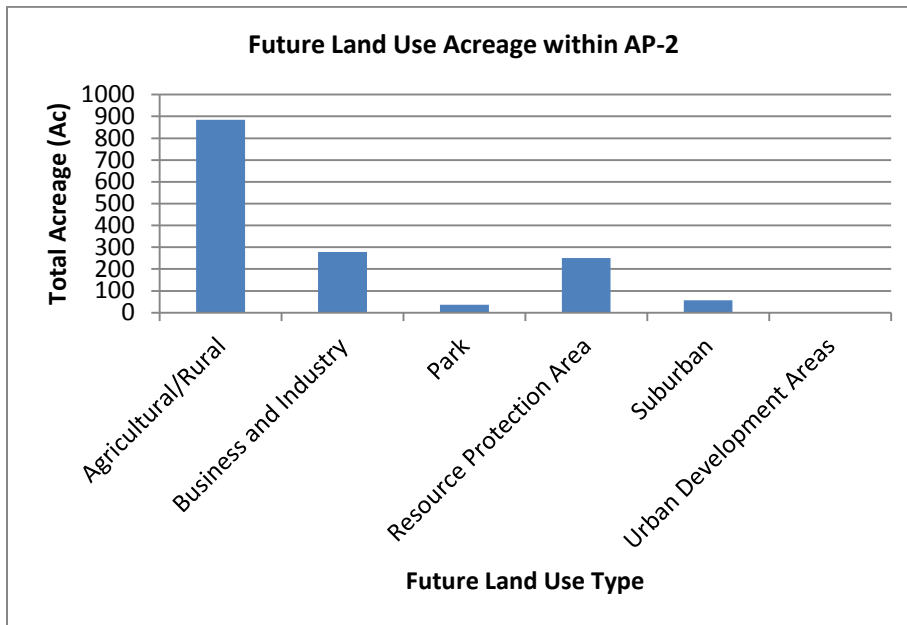


<u>Future Land Use</u>	<u>Acres</u>
Business and Industry	130.42
Resource Protection Area	0.21

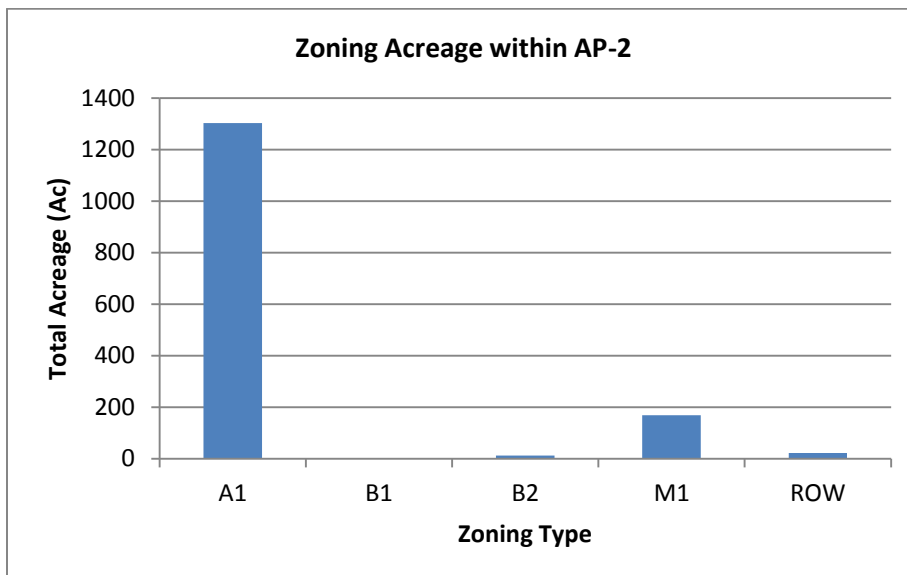


<u>Zoning</u>	<u>Acres</u>
A1	2.12
M1	103.05
ROW	25.46

## 2. Middle Approach Compatibility Zone (AP-2)



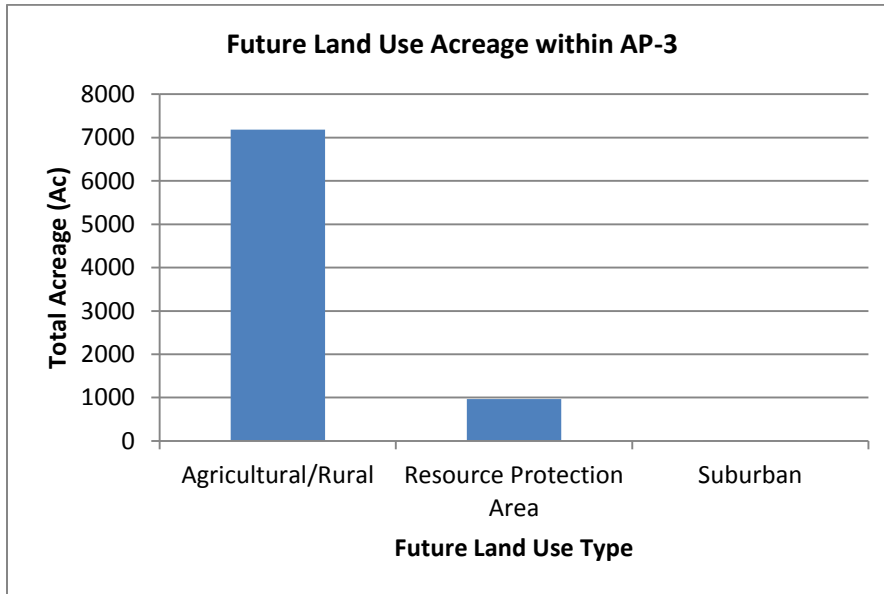
<u>Future Land Use</u>	<u>Acres</u>
Agricultural/Rural	885.18
Business and Industry	278.98
Park	36.74
Resource Protection Area	251.23
Suburban	57.30
Urban Development Areas	0.33



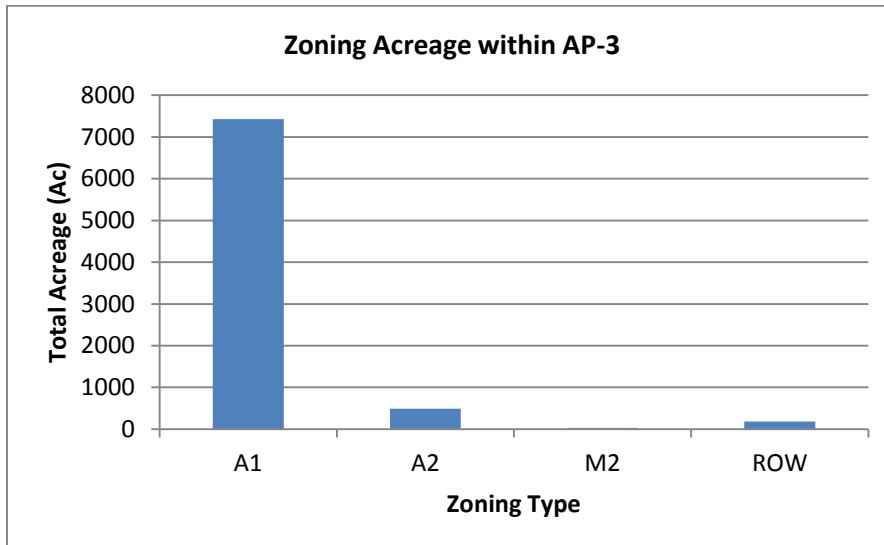
<u>Zoning</u>	<u>Acres</u>
A1	1303.13
B1	1.74
B2	12.48
M1	169.78
ROW	22.62



### 3. Outer Approach Compatibility Zone (AP-3)

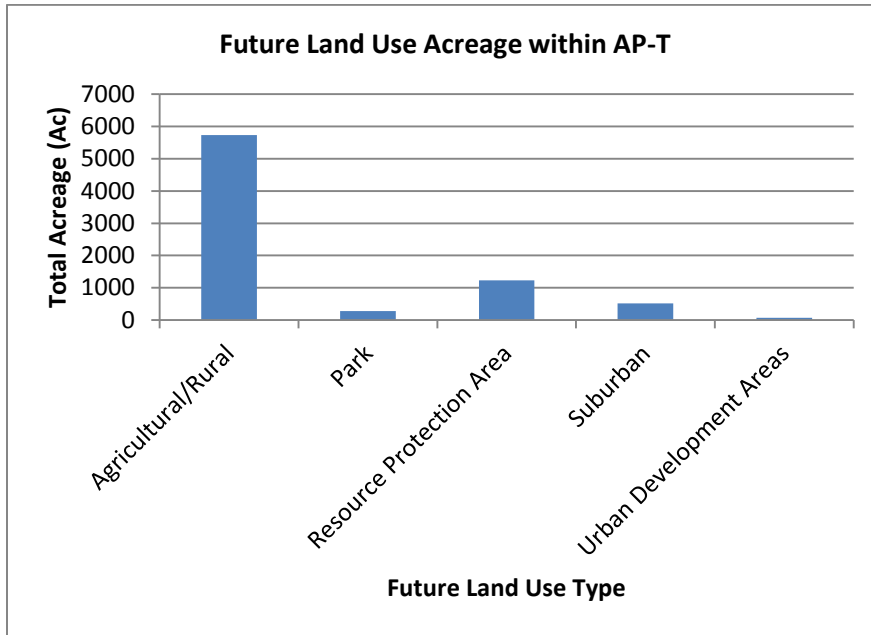


<u>Future Land Use</u>	<u>Acres</u>
Agricultural/Rural	7183.19
Resource Protection Area	962.46
Suburban	0.95

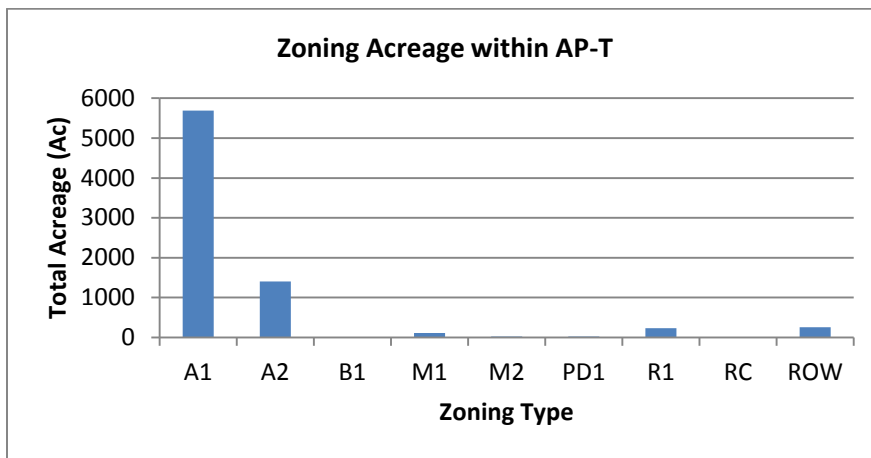


<u>Zoning</u>	<u>Acres</u>
A1	7430.01
A2	490.70
M2	31.96
ROW	184.95

#### 4. Transitional Approach Compatibility Zone (AP-T)

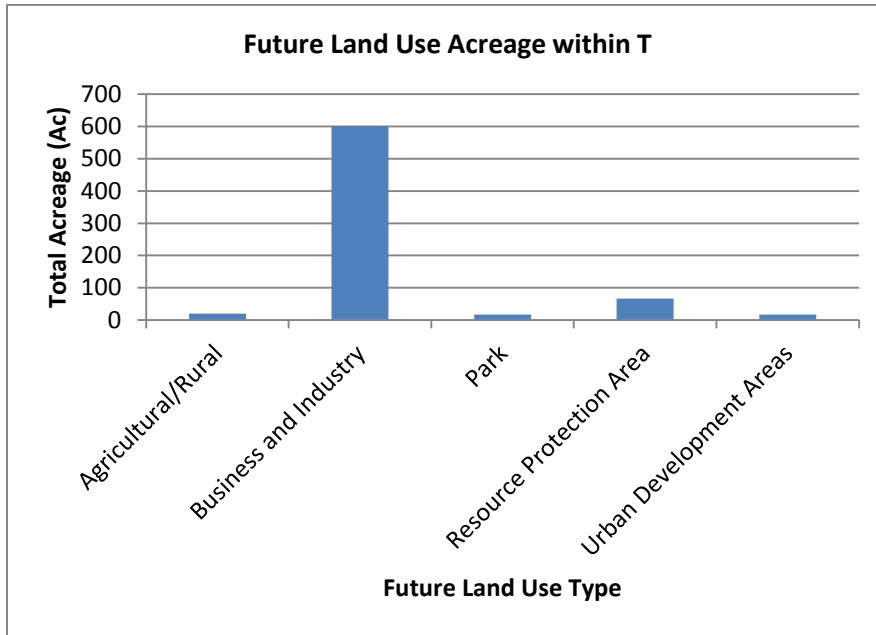


<u>Future Land Use</u>	<u>Acres</u>
Agricultural/Rural	5733.86
Park	273.53
Resource Protection Area	1232.03
Suburban	513.13
Urban Development Areas	63.26

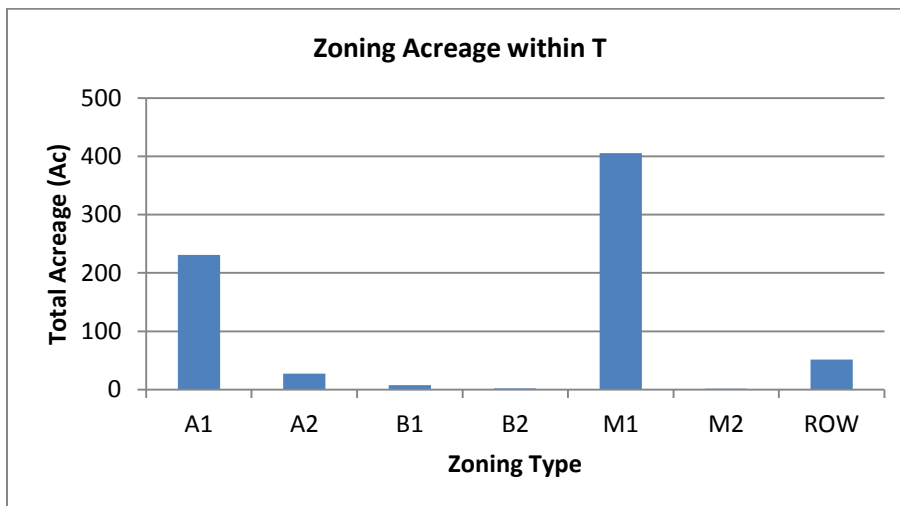


<u>Zoning</u>	<u>Acres</u>
A1	5689.74
A2	1404.22
B1	3.62
M1	109.61
M2	20.69
PD1	24.81
R1	232.76
RC	3.80
ROW	260.43

## 5. Transitional Compatibility Zone (T)

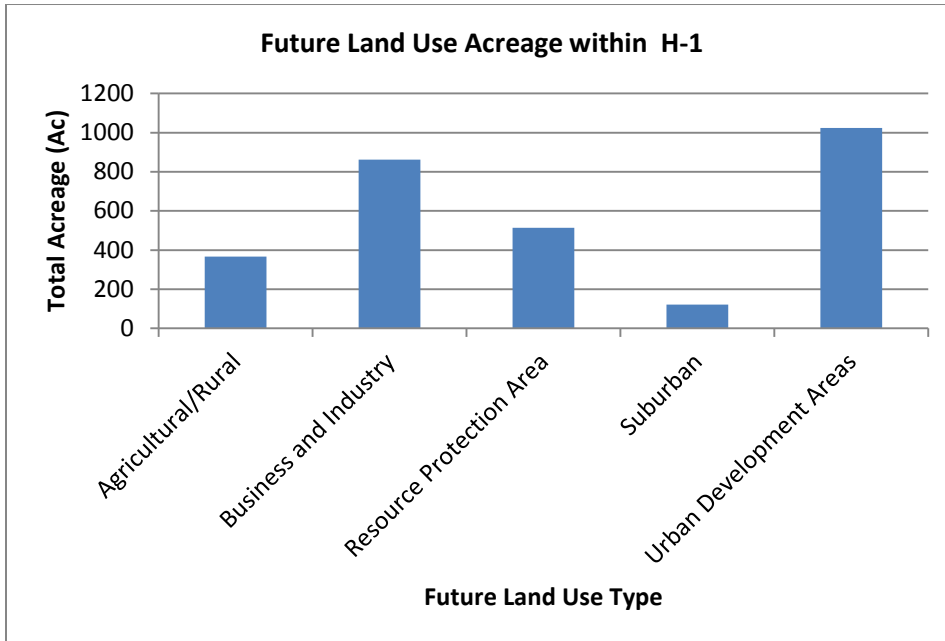


Future Land Use	Acres
Agricultural/Rural	19.69
Business and Industry	601.24
Park	17.16
Resource Protection Area	66.32
Urban Development Areas	16.74

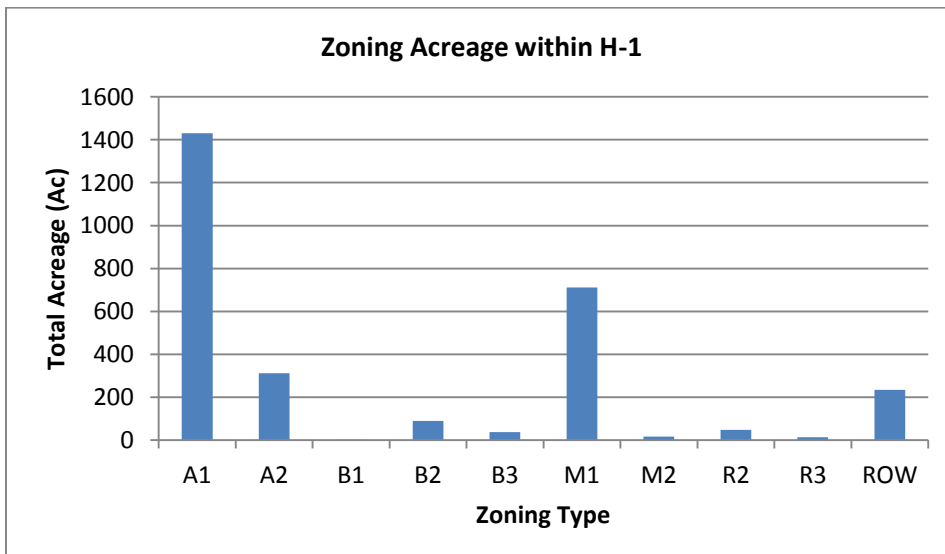


Zoning	Acres
A1	231.17
A2	27.46
B1	7.21
B2	2.11
M1	406.01
M2	1.33
ROW	51.36

## 6. Inner Horizontal Compatibility Zone (H-1)



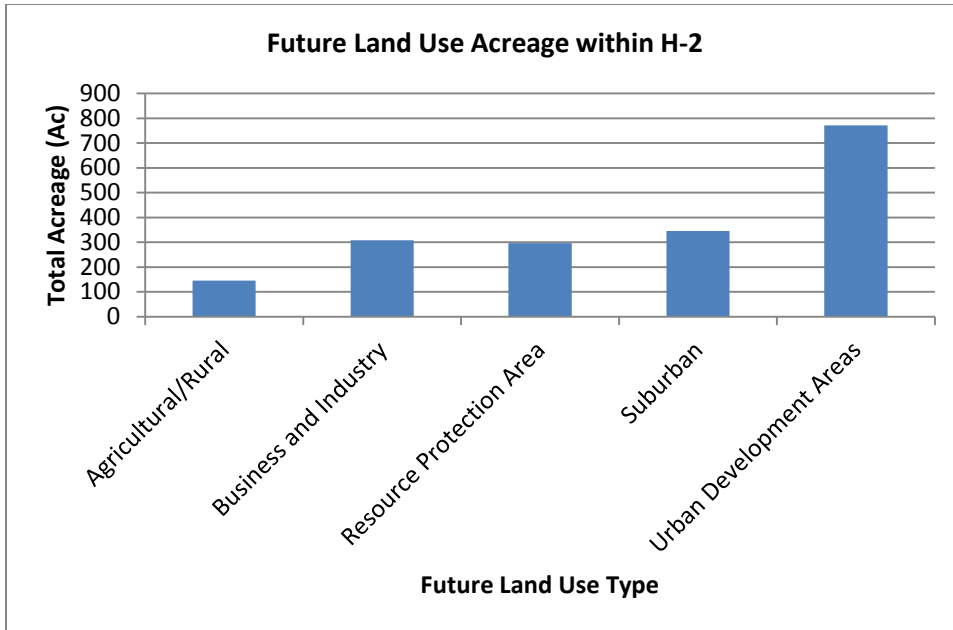
<u>Future Land Use</u>	<u>Acres</u>
Agricultural/Rural	367.09
Business and Industry	862.89
Resource Protection Area	513.69
Suburban	121.38
Urban Development Areas	1024.09



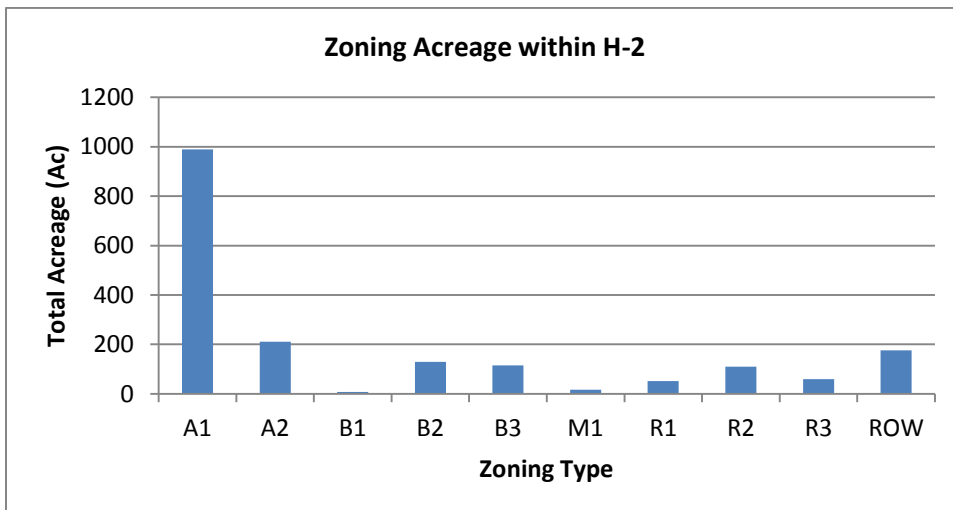
<u>Zoning</u>	<u>Acres</u>
A1	1431.06
A2	311.37
B1	0.40
B2	89.20
B3	36.59
M1	711.89
M2	15.96
R2	46.85
R3	12.34
ROW	233.49



## 7. Outer Horizontal Compatibility Zone (H-2)

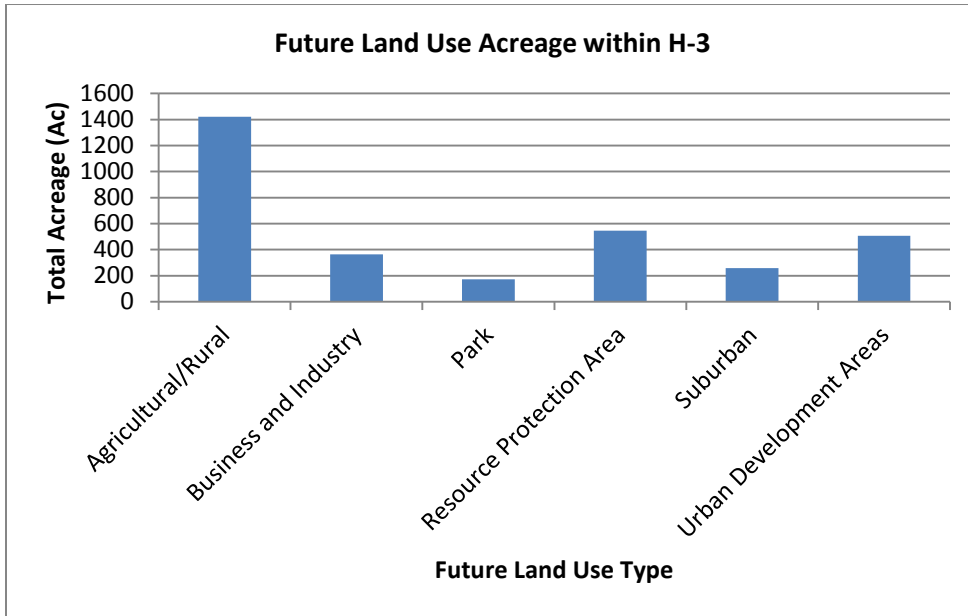


<u>Future Land Use</u>	<u>Acres</u>
Agricultural/Rural	144.72
Business and Industry	307.29
Resource Protection Area	296.36
Suburban	345.19
Urban Development Areas	770.89

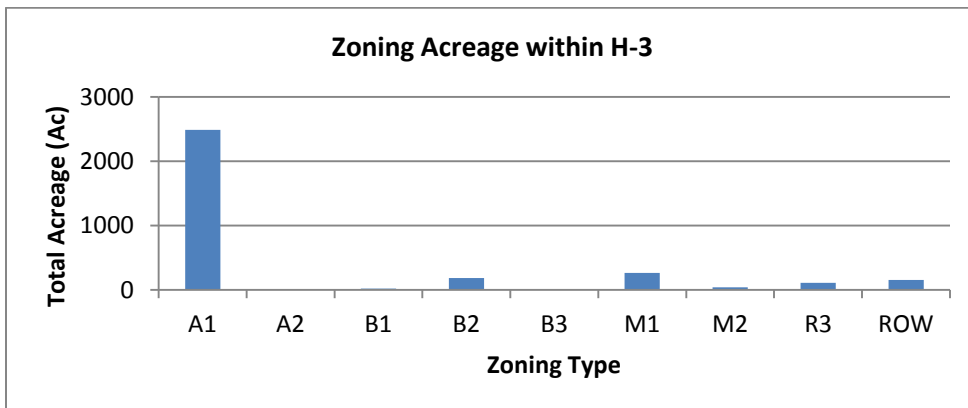


<u>Zoning</u>	<u>Acres</u>
A1	989.03
A2	210.99
B1	7.31
B2	129.36
B3	114.76
M1	16.78
R1	51.32
R2	110.35
R3	58.94
ROW	175.86

## 8. Horizontal Turning Zone (H-3)

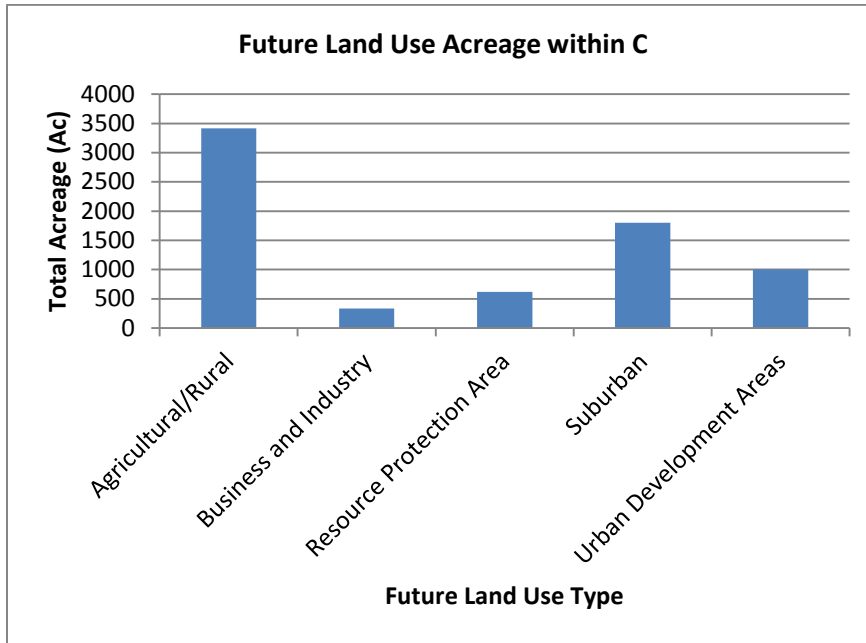


<u>Future Land Use</u>	<u>Acres</u>
Agricultural/Rural	1421.77
Business and Industry	363.01
Park	172.44
Resource Protection Area	546.92
Suburban	258.66
Urban Development Areas	505.66

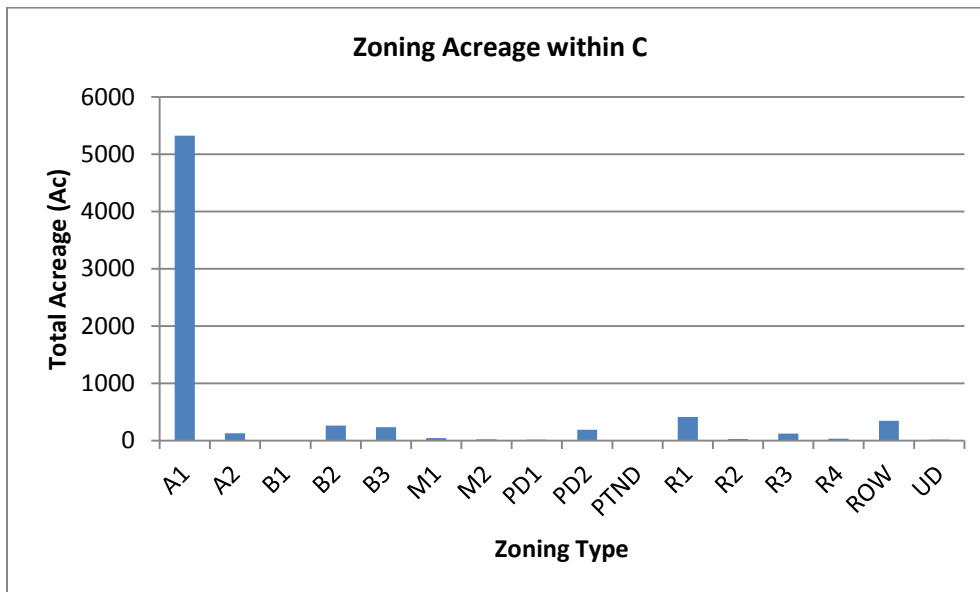


<u>Zoning</u>	<u>Acres</u>
A1	2488.64
A2	1.78
B1	19.31
B2	182.38
B3	5.23
M1	265.50
M2	41.38
R3	111.65
ROW	152.64

## 9. Conical Compatibility Zone (C)



<u>Future Land Use</u>	<u>Acres</u>
Agricultural/Rural	3413.87
Business and Industry	334.81
Resource Protection Area	617.88
Suburban	1802.59
Urban Development Areas	1000.08



<u>Zoning</u>	<u>Acres</u>
A1	5325.93
A2	125.04
B1	10.37
B2	262.13
B3	232.20
M1	39.43
M2	22.36
PD1	13.65
PD2	185.72
PTND	11.00
R1	412.15
R2	27.65
R3	119.17
R4	30.45
ROW	344.38
UD	11.68

#### **E. Land Use Compatibility Guidelines**

The following guidelines are proposed in order to better address the potential for incompatible land uses and development within the Airport Planning Area:

GOAL: Stafford County shall promote the appropriate use of land in the Airport Planning Area to maintain and support the viability of the Stafford Regional Airport and protect and promote the general health, safety, welfare of the citizens, and overall economy in the airport area.

OBJECTIVE 1: Identify the compatibility of various land uses and establish development standards in relation to airport operations to minimize potential impacts related to exposure to aircraft noise, land use, and safety with respect both to people on the ground and the occupants of aircraft and ensure the protection of airport airspace.

Policy 1.1 General concerns related to aircraft overflights shall be identified and mitigated during the development review process for all applications for uses within the Airport Planning Area.

Policy 1.2: All development within the Airport Planning Area shall be consistent with the Land Use Compatibility Matrix (Table 1) that identifies whether uses are Compatible, require Additional Review or are Incompatible within each Airport Impact Zone.

Policy 1.3: The compatibility guidelines shall be applied in conjunction with the requirements of the Future Land Use Plan recommendations.

Policy 1.4: The impacts of the following factors shall be considered for any development application within the Airport Planning Area:

1. Height of all structures and vegetation per the FAR Part 77 requirements;
2. Management of earth disturbances and the creation of open dirt areas during activities such as farming and construction to minimize dust emissions;
3. Reflective surfaces which cause glare, including storm water retention ponds, solar panels and/or light-colored or mirrored building materials;
4. Light emissions shining upward into the flight path, flashing lights or lights arranged in a linear pattern;
5. Uses that generate smoke, steam or fog;
6. Potential to attract wildlife and create habitat, such as open space and agricultural uses;
7. Number of people per unit of area per proposed use;
8. Existence of above ground storage of large quantities of materials that are hazardous, such as flammable, explosive, corrosive, or toxic materials;
9. Location of proposed uses where mobility of users is limited, such as schools, hospitals and nursing homes;
10. Location of critical community infrastructure, such as power plants, electrical substations, and public communications facilities, away from areas where damage or destruction could occur



and cause significant adverse effects to public health and welfare beyond the immediate vicinity of the facility;

11. Proposed percentage of open space, including usable open space, in relation to the development area. For the purposes of this document, usable open space should be open areas that are long, level and free of obstacles that could serve as an emergency landing site to promote public safety. The ideal site would be at least 300 feet by 75 feet and be clear of obstacles;
12. Compatibility of all proposed uses with the Compatibility Matrix in Table 1.

Policy 1.5: The following standards shall apply to all development within the Airport Planning Area:

1. Final subdivision plats, site specific development plans, or any other document filed as part of any approval process with Stafford County shall contain the following disclosure statement:  
*All or a portion of this property lies within the Airport Overlay District. Persons on the premises may be exposed to noise and other effects as may be inherent in airport operations;*
2. Avigation easements shall be dedicated to Stafford Regional Airport for all new residential, commercial, industrial, institutional or recreational buildings or structures intended for habitation or occupancy by humans or animals to allow unobstructed passage for aircraft related to the height requirements per FAR Part 77;
3. Applicable use restrictions shall apply only to the area of development within the respective compatibility zone;
4. Height restrictions are effective at all times;
5. Underground utilities are encouraged for all development located within approach zones (AP-1 & AP-2) and traffic pattern areas (H-1, H-2, & H-3);
6. Minimize the occurrence of sunlight glare and wildlife attractants from stormwater management ponds affecting pilots by limiting the size of ponds to under ½ acre in size and encouraging dry ponds;
7. All development within the Airport Planning Area must, at a minimum, be consistent with Federal Aviation Regulation Part 77 and Advisory Circular 150/5300-13A and any subsequent revisions.

Policy 1.6: Uses identified in Table 1 as requiring “Additional Review” shall follow the specific development standards identified in Table 2. The factors to consider during “Additional Review” shall include, but may not be limited to: size, scope and scale of a development, such as the area, building height, and number and square footage of structures; proposed use(s); location of the development in relation to the airport; location of uses on an individual site; proposed mitigation measures; population concentrations; and project externalities, defined as impacts related to the development of the project that may extend beyond the limits of the project both horizontally and vertically.

Policy 1.7: The following additional standards shall apply to Non-Residential Uses that require Additional Review in Table 1:

1. Activities and structures associated with the use shall not exceed the maximum building envelope ratio and/or site population limitation;
2. Incorporate shielding, such as the use of full cut-off lighting, lower intensity or other techniques to avoid the occurrence of light emissions shining upward into the flight path; flashing lights; or lights arranged in a linear pattern;
3. Waste disposal facilities shall not be located within 10,000 feet of the runway protection zone;
4. Provision of new private airfields or runways shall not be permitted within the planning area;
5. Additional open space requirements, height limitations and square footage limitations will apply to uses with concentrations of people.

Policy 1.8: The following additional standards shall apply to Residential Uses that require Additional Review in Table 1:

1. Development proposals shall not exceed the maximum density limitations established and further described in the Table 2 Additional Review Standards;
2. Development within the airport operations area shall be constructed to include sound insulation methods to achieve maximum internal noise levels of 45 dBC Ldn (average daily noise level);
3. Disclosure notification for all future purchasers of the property will be required for all residential development within an airport compatibility zone;
4. Provide contiguous open space in conjunction with clustering of residential development areas.

Policy 1.9: Specific projects which are Not Compatible, as identified in Table 1 may be appropriate if it can be demonstrated that the specific project would not negatively impact airport operations or safety of the general public upon additional review, consistent with the guidelines.

Policy 1.10: If a proposed use is not listed in Table 1, the use determined to be most similar would apply and would be evaluated against the related Additional Review criteria and any other standards deemed appropriate.

Policy 1.11: The County shall support efforts of the Airport Authority or other entity to acquire land and/or purchase development rights by coordinating receiving areas outside of the planning area in order to encourage compatible land uses within the planning area.

#### IMPLEMENTATION POLICIES

Policy 1.12: For projects in the Airport Planning Area, the County shall coordinate review of all proposed development applications, including, but not limited to, zoning reclassifications, conditional use permits, site plans, and preliminary plans, with the Airport Authority for compatibility with airport operations and plans for the purpose of receiving advisory comments and encouraging participation at County development review meetings.

Policy 1.13: The Zoning Ordinance shall be revised to implement the Compatibility Guidelines recommendations, including use restrictions, and development and building standards, and make commensurate adjustments to the Airport Overlay District.

Policy 1.14: Comprehensive Plan amendments and Ordinance amendments applicable to land within the Airport Planning Area shall be reviewed for compatibility with the Regional Airport Master Plan, Compatibility Matrix (Table 1) and related criteria and standards.

**TABLE 1: CONSOLIDATED LAND USE COMPATIBILITY MATRIX**

ZONE CODE	AP-1	AP-2	AP-3	AP-T	T	H-1	H-2	H-3	C
ZONE DESCRIPTION	APPROACH - FINAL RUNWAY PROTECTION ZONE	APPROACH - MID -14,000' EAST -10,000' WEST	APPROACH - OUTER (EAST)	APPROACH - TRANSITIONAL	TRANSITIONAL ZONE	HORIZONTAL ZONE - INSIDE FLIGHT PATTERN	HORIZONTAL ZONE - OUTSIDE FLIGHT PATTERN	HORIZONTAL - TURNING ZONE	CONICAL ZONE
USES									
<b>INSTITUTIONAL</b>									
Assembly (schools, place of worship, daycare)	NC	NC	AR	C	NC	AR	AR	NC	C
Hospitals	NC	NC	AR	C	NC	AR	AR	NC	C
Community (Police, fire and rescue, neighborhood centers)	NC	AR	AR	C	AR	AR	C	AR	C
Vertical Infrastructure (Electric Transmission, Water Towers, Telecommunication Towers)	NC	NC	AR	AR	NC	AR	AR	AR	AR
<b>RESIDENTIAL</b>									
Single-Family - Rural (Maintain 3 acre density with min. lot size of 1 acre outside the USA, while inside the USA, lot sizes can be smaller than 1 acre if significant areas are retained for open space and the lowest density recommendations of the land use plan are not exceeded)	NC	AR	AR	C	NC	AR	AR	AR	C
Single-family - Small Lot (<1 acre) & Townhomes	NC	NC	AR	C	NC	AR <sup>1</sup>	AR <sup>1</sup>	NC	C
Multi-Family (Three or more units per building)	NC	NC	AR	C	NC	AR <sup>1</sup>	AR <sup>1</sup>	NC	C
Group Living (Nursing homes, group homes)	NC	NC	AR	C	NC	AR	AR	NC	C
Transient Lodging	NC	AR	C	C	NC	AR	AR	AR	C
<b>COMMERCIAL (RETAIL/OFFICE)</b>									
General Retail & Service (shopping centers & stores, restaurants, convenience, vehicle fueling)	NC	AR	C	C	AR	AR	C	AR	C
Automobile related (sales lot, repair, storage)	NC	C	C	C	AR	C	C	C	C
Low-rise Office (1-3 stories)	NC	AR	C	C	AR	AR	C	AR	C
Mid/High-rise Office (4+ stories)	NC	NC	AR	C	NC	AR	AR	NC	C
<b>INDUSTRIAL</b>									
Light (Light Manufacturing, Storage, Warehouse)	NC	AR	C	C	AR	AR	C	C	C
Heavy (Landfill, Heavy Manufacturing, bulk fuel storage, mining, uses that emit smoke or create sun glare)	NC	NC	NC	AR	NC	AR	AR	AR	AR
<b>RECREATION AND OPEN SPACE</b>									
Passive (trails & natural areas)	NC	AR	C	C	NC	AR	C	AR	C
Active (community sports fields, golf, indoor facilities)	NC	AR	AR	C	NC	AR	C	AR	C
Amusement (Stadiums, amusement parks, fairgrounds)	NC	NC	AR	C	NC	AR	AR	NC	C

<sup>1</sup> Residential uses within zones H-1 and H-2 are discouraged. Individual projects may be considered appropriate if it is determined that it satisfactorily addresses the Additional Review factors highlighted in Table 2.



ZONE CODE	AP-1	AP-2	AP-3	AP-T	T	H-1	H-2	H-3	C
ZONE DESCRIPTION	APPROACH - FINAL RUNWAY PROTECTION ZONE	APPROACH - MID -14,000' EAST -10,000' WEST	APPROACH - OUTER (EAST)	APPROACH - TRANSITIONAL	TRANSITIONAL ZONE	HORIZONTAL ZONE - INSIDE FLIGHT PATTERN	HORIZONTAL ZONE - OUTSIDE FLIGHT PATTERN	HORIZONTAL - TURNING ZONE	CONICAL ZONE
USES									
AGRICULTURAL									
<i>Grazing, Crops</i>	AR	AR	C	C	AR	AR	C	AR	C
<i>Processing (Lumber mill, grain elevators and silos)</i>	NC	NC	C	C	NC	AR	AR	AR	AR
OTHER									
<i>Aboveground storage tanks of fuel and flammable materials (except residential uses)</i>	NC	NC	NC	C	NC	NC	C	NC	C

Key: C = Compatible

AR = Additional Review – uses or activities that may be compatible with airport operations depending on their location and specifics of each project. Refer to design standards.

NC = Not Compatible – uses or activities that should not be permitted

## ADDITIONAL REVIEW STANDARDS

### Overview

Uses identified in Table 1 requiring “Additional Review” shall follow the specific development standards identified in Tables 2 and 3. The factors to consider during “Additional Review” shall include, but may not be limited to: size, scope and scale of a development, such as the area, building height, and number and square footage of structures; proposed use(s); location of the development in relation to the airport; location of uses on an individual site; proposed mitigation measures; population concentrations; and project externalities, defined as impacts related to the development of the project that may extend beyond the limits of the project both horizontally and vertically.

### Residential proposals (Single-family - small lot & Multi-family) within the H-1 and H-2 zones

In consideration of a new residential rezoning request from the A-1 or A-2 zoning district, where all of the Additional Review criteria is satisfied, projects not exceeding a density increase of 50% over the current density may be considered Compatible. Rezoning from any commercial or other residential zoning district that adds or increases the permitted residential density is considered Not Compatible.

### Uses in the AP-3, Approach Outer zone requiring Additional Review

Given the size and extent of the AP-3 zone, which extends east to King George County, uses may be deemed more compatible the farther away they are from the airport. Application of the additional review standards will be based on the location on a case by case basis and dependent on the site conditions and specific development proposal.

**TABLE 2: ADDITIONAL REVIEW STANDARDS**

<u>USE</u>	<u>ZONE(S) REQUIRING ADDITIONAL REVIEW</u>	<u>STANDARD</u>
<b>INSTITUTIONAL</b>		
<i>Assembly (schools, place of worship, daycare)</i>	H-1; H-2	<ul style="list-style-type: none"> <li>• Limit population concentration thresholds within the low to mid- level range;</li> <li>• Limited to independently mobile populations;</li> <li>• Public and private grade schools and stand-alone daycare are not permitted;</li> <li>• Provide usable open space.</li> </ul>
<i>Assembly (schools, place of worship, daycare)</i>	AP-3	<ul style="list-style-type: none"> <li>• Uses considered generally compatible; siting located laterally offset of the extended centerline of the runway is preferred.</li> </ul>

<u>USE</u>	<u>ZONE(S) REQUIRING ADDITIONAL REVIEW</u>	<u>STANDARD</u>
<i>Hospitals</i>	AP-3; H-1; H-2	<ul style="list-style-type: none"> <li>• Permitted if deemed a critical service need by the Fire/Safety division;</li> <li>• Limited to independently mobile patients and/or short term care of critical patients or use as a triage center;</li> <li>• Provide usable open space;</li> <li>• Limit building height to 1 story.</li> </ul>
<i>Community (Police, fire and rescue, neighborhood centers)</i>	AP-2; AP-3; T; H-1; H-3	<ul style="list-style-type: none"> <li>• Emergency services are permitted if deemed a critical service need by the Fire/Safety division;</li> <li>• Provide usable open space.</li> </ul>
<i>Vertical Infrastructure (Electric Transmission, Water Towers, Telecommunication Towers)</i>	AP-T; H-1; H-2; H-3; C	<ul style="list-style-type: none"> <li>• Permitted if it does not interfere with airport communications and does not exceed height limitations, or otherwise causes safety concerns;</li> <li>• Monopole type of structure is preferred over lattice or guy-wire type;</li> <li>• Consider the height of the tower in relation to the site elevation.</li> </ul>
<b>RESIDENTIAL</b>		
<i>Single-Family - Rural (Maintain 3 acre density with min. lot size of 1 acre outside the USA, while inside the USA, lot sizes can be smaller than 1 acre if significant areas are retained for open space and the lowest density recommendations of the land use plan are not exceeded)</i>	AP-2; AP-3; H-1; H-2; H-3	<ul style="list-style-type: none"> <li>• Encourage clustering with usable open space requirement;</li> <li>• Encourage TDR program participation as a sending area;</li> <li>• Require real estate disclosure notice on initial deed of transfer within the AP-2, H-1, H-2, and H-3 zones;</li> <li>• Require notification statement on all plans of development and marketing literature;</li> <li>• Encourage noise mitigation measures as part of construction if under the flight pattern to reduce internal noise levels at or below 45dB.</li> </ul>
<i>Single-family - Small Lot (less than 1 acre) &amp; Townhomes</i>	AP-3	<ul style="list-style-type: none"> <li>• Encourage clustering with usable open space requirement;</li> <li>• Minimum of 50 percent overall open space, including usable open space;</li> <li>• Require notification statement on all plans of development and marketing literature.</li> </ul>

<u>USE</u>	<u>ZONE(S) REQUIRING ADDITIONAL REVIEW</u>	<u>STANDARD</u>
<i>Single-family - Small Lot (less than 1 acre) &amp; Townhomes</i>	H-1, H-2	<ul style="list-style-type: none"> <li>• Use prohibited within 3000 feet of the centerline of the runway;</li> <li>• Areas of a proposal located within routine overflight zone should meet the usable and site open space requirements;</li> <li>• Development should be clustered outside of the overflight zone area;</li> <li>• Require real estate disclosure notice on initial deed of transfer;</li> <li>• Require notification statement on all plans of development and marketing literature;</li> <li>• Encourage noise mitigation measures as part of construction if under the flight pattern.</li> </ul>
<i>Multi-Family (Three or more units per building)</i>	AP-3; H-1; H-2	<ul style="list-style-type: none"> <li>• Use prohibited within 3000 feet of the centerline of the runway;</li> <li>• Areas of a proposal located within routine overflight zone traffic pattern should be utilized to meet the usable and site open space requirements within a residential development; Cluster residential density outside of the overflight area if feasible;</li> <li>• Limit number of units per building;</li> <li>• Limit height to three stories;</li> <li>• Require real estate disclosure notice on initial deed of transfer within the H-1 and H-2 zones;</li> <li>• Require notification statement on all plans of development and marketing literature;</li> <li>• Encourage noise mitigation measures as part of construction if under the flight pattern.</li> </ul>
<i>Group Living (Nursing homes, group homes)</i>	AP-3; H-1; H-2	<ul style="list-style-type: none"> <li>• Population concentration thresholds within low to mid-level range shall not be exceeded;</li> <li>• Limited to independently mobile patients;</li> <li>• Require notification statement on all plans of development and marketing literature.</li> </ul>
<i>Transient Lodging</i>	AP-2; H-3	<ul style="list-style-type: none"> <li>• Use should not exceed a height of 3 stories;</li> <li>• Population concentration thresholds within low to mid-level range shall not be exceeded;</li> <li>• Encourage noise mitigation measures as part of construction if under the flight pattern;</li> <li>• Parking lot lighting shall not be linear in design to avoid confusion with runway lighting.</li> </ul>



<u>USE</u>	<u>ZONE(S) REQUIRING ADDITIONAL REVIEW</u>	<u>STANDARD</u>
<i>Transient Lodging</i>	H-1; H-2	<ul style="list-style-type: none"> <li>• Use should not exceed a height of 3 stories;</li> <li>• Population concentration limits for site and single-acre shall not be exceeded;</li> <li>• Encourage noise mitigation measures as part of construction if under the flight pattern;</li> <li>• Parking lot lighting shall not be linear in design to avoid confusion with runway lighting.</li> </ul>
<b>COMMERCIAL (RETAIL/OFFICE)</b>		
<i>General Retail &amp; Service (shopping centers &amp; stores, restaurants, convenience, vehicle fueling)</i>	AP-2; T; H-1; H-3	<ul style="list-style-type: none"> <li>• Population concentration limits for site and single-acre shall not be exceeded;</li> <li>• Larger shopping centers should provide usable open space;</li> <li>• Parking lot lighting shall not be linear in design to avoid confusion with runway lighting.</li> </ul>
<i>Automobile related (sales lot, repair, storage)</i>	T	<ul style="list-style-type: none"> <li>• Limited to vehicle storage or open space;</li> <li>• Parking lot lighting shall not be linear in design to avoid confusion with runway lighting.</li> </ul>
<i>Low-rise Office (1-3 stories)</i>	AP-2; AP-3; T; H-1; H-3	<ul style="list-style-type: none"> <li>• Provide usable open space requirements;</li> <li>• Maximum population thresholds shall not be exceeded;</li> <li>• Parking lot lighting shall not be linear in design to avoid confusion with runway lighting.</li> </ul>
<i>Mid/High-rise Office (4+ stories)</i>	AP-3; H-1; H-2	<ul style="list-style-type: none"> <li>• Population concentration limits for site and single-acre shall not be exceeded;</li> <li>• Consider limitations to building height based on the elevation of the site and proximity to the airport and flight patterns;</li> <li>• Parking lot lighting shall not be linear in design to avoid confusion with runway lighting.</li> </ul>
<b>INDUSTRIAL</b>		
<i>Light (light manufacturing, storage, warehouse)</i>	AP-2; T; H-1	<ul style="list-style-type: none"> <li>• Low level of population concentration limits shall not be exceeded;</li> <li>• Compatible without externalities;</li> <li>• Provide usable open space;</li> <li>• Parking lot lighting shall not be linear in design to avoid confusion with runway lighting.</li> </ul>

<u>USE</u>	<u>ZONE(S) REQUIRING ADDITIONAL REVIEW</u>	<u>STANDARD</u>
<i>Heavy (landfill, heavy manufacturing, mining, uses that emit smoke or create sun glare)</i>	AP-T; H-1; H-2; C; H-3	<ul style="list-style-type: none"> <li>• Compatible without externalities;</li> <li>• Provide usable open space;</li> <li>• Utilities that affect public health, safety and welfare not permitted within 4,000 feet of the runway;</li> <li>• Consider limitations to structure height based on the elevation of the site and proximity to the airport and flight patterns;</li> <li>• Parking lot lighting shall not be linear in design to avoid confusion with runway lighting.</li> </ul>
<b>RECREATION AND OPEN SPACE</b>		
<i>Passive (trails &amp; natural areas)</i>	AP-2; H-3	<ul style="list-style-type: none"> <li>• Avoid the incorporation of elements, vegetation and/or materials that attract birds,</li> <li>• Limit water retention areas to no greater than .5-acres;</li> <li>• Limit height and types of new and existing vegetation in accordance with the FAR Part 77 requirements.</li> </ul>
<i>Active (community sports fields, golf, indoor facilities)</i>	AP-2; AP-3; H-1; H-3	<ul style="list-style-type: none"> <li>• Population concentration limits for site and single-acre shall not be exceeded;</li> <li>• Limit water retention areas to no greater than .5-acres;</li> <li>• Avoid new features, vegetation and/or materials that attract birds.</li> </ul>
<i>Amusement (Stadiums, amusement parks, fairgrounds)</i>	AP-3; H-1; H-2	<ul style="list-style-type: none"> <li>• Compatible with increased open space;</li> <li>• Within population concentration limits for site and per acre;</li> <li>• High intensity uses, such as stadiums, are not permitted;</li> <li>• Parking lot lighting shall not be linear in design to avoid confusion with runway lighting.</li> </ul>

## POPULATION CONCENTRATION THRESHOLDS

The population concentration threshold ranges referenced in Table 2 are further defined below. These serve as a measurement tool to determine whether the population density for a given use may be too intense for a particular zone.

**TABLE 3: POPULATION CONCENTRATION THRESHOLDS**

<b>ZONE(S)</b>	<b>SITEWIDE AVERAGE INTENSITY*</b>	<b>SINGLE-ACRE INTENSITY**</b>
AP-1	Sitewide Intensity: Exceptions can be permitted for agricultural activities, roads, and automobile parking provided that FAA criteria are satisfied	
AP-2	Sitewide Intensity: Low to Mid: 40 - 50 people per acre Mid to High: 51 - 60 people per acre	Single-Acre Intensity: Low to Mid: 80 -100 people per acre Mid to High: 101 -120 people per acre
T	Sitewide Intensity: Low to Mid: 70 - 85 people per acre Mid to High: 86 -100 people per acre	Single-Acre Intensity: Low to Mid: 210 - 255 people per acre Mid to High: 256 - 300 people per acre
H-1; H-2	Sitewide Intensity: Low to Mid: 200 - 250 people per acre Mid to High: 251 - 300 people per acre	Single-Acre Intensity: Low to Mid: 800 - 1000 people per acre Mid to High: 1001 - 1200 people per acre
H-3	Sitewide Intensity: Low to Mid: 70 - 85 people per acre Mid to High: 86 - 100 people per acre	Single-Acre Intensity: Low to Mid: 210 - 255 people per acre Mid to High: 256 - 300 people per acre

Source: California Airport Land Use Planning Handbook (Handbook) released October 2011 by the California Department of Transportation, Division of Aeronautics.

\*Sitewide Average Intensity: calculated by determining the total number of people expected to be on the site at any given time under normal conditions and dividing by the total number of acres of the project site.

\*\* Single-Acre Intensity: calculated by determining the total number of people expected to be within any one-acre portion of the site at one time.

## **STAFFORD REGIONAL AIRPORT SAMPLE REAL ESTATE DISCLOSURE STATEMENT**

The following is a sample disclosure statement that is recommended to be incorporated into the initial sale of new homes located within the Airport Impact Areas:

### **STAFFORD REGIONAL AIRPORT DISCLOSURE**

The purchaser(s) of property at the following address: \_\_\_\_\_, on Assessor's Parcel \_\_\_\_\_, located in Stafford County Virginia, hereafter referred to as "property", acknowledges that the property lies in proximity to Stafford Regional Airport, and that the property is subject to aircraft operations and aircraft overflight, with related noise and safety concerns.

While air traffic may be generalized into tracks, it is, by nature, dispersed. Aircraft may approach and depart the airport from any number of directions. Flight paths vary depending on a variety of factors including origin/destination, wind conditions and other aircraft in the traffic pattern. As a result, any property in the vicinity of an airport is likely to be subject to aircraft overflight and its impacts to some degree. Stafford County's Comprehensive Plan has an exhibit that depicts the aircraft traffic patterns associated with the airport.

Flight patterns may shift or change over time. Changes in operations may occur due to weather, changes in users, changes in aircraft type, military missions, weather conditions, etc. The airport is relatively new and still growing. Runway expansion and expansion of ground facilities are planned that will likely increase the number of flights in and out of the airport. The Stafford Regional Airport has a Master Plan that identifies plans for future expansion and development needs.

The undersigned purchaser(s) of said tract of land certify(ies) that he/she (they) has (have) read the above disclosure statement and acknowledge(s) the pre-existence of the Stafford Regional Airport and the noise exposure due to the airport.

Dated this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
Purchaser's Signature

\_\_\_\_\_  
Purchaser's Signature

\_\_\_\_\_  
Purchaser's Signature



**STAFFORD REGIONAL AIRPORT SAMPLE NOTICE**

For full disclosure of the proximity to Stafford Regional Airport to prospective purchasers, the following sample notice should be included on all subdivision and site plans and record plats filed with Stafford County and used in sales contracts, brochures and promotional documents, including any illustrative site plans, and homeowner's association documents:

"STAFFORD REGIONAL AIRPORT: This property is located within the proximity to Stafford Regional Airport, specifically the Airport Impact Areas and Aircraft Traffic Pattern areas around the airport, as identified in the Stafford County Comprehensive Plan and Stafford Regional Airport Master Plan. The property is likely to be subject to aircraft overflight and noise impacts of varying degrees."