

**BOARD OF SUPERVISORS
PUBLIC HEARING
STAFF REPORT**

SUBJECT: Fiscal Impact Committee's 2017 Capital Intensity Factor

ELECTION DISTRICT: Countywide

CRITICAL ACTION DATE: At the pleasure of the Board

STAFF CONTACTS: Erin McLellan, Management and Budget
Naeem Mia, Management and Budget

PURPOSE: To present the Fiscal Impact Committee's 2017 Capital Intensity Factor for Public Hearing and adoption by the Board of Supervisors.

RECOMMENDATIONS:

Board of Supervisors: At the Board of Supervisors (Board) Business Meeting on January 18, 2018, the Board approved (9-0) the 2017 Capital Intensity Factor (CIF) and direct staff to advertise the 2017 CIF at a future public hearing for adoption.

Finance/Government Operations and Economic Development Committee (FGOEDC): At the Finance/Government Operations and Economic Development Committee (FGOEDC) meeting on January 9, 2018, FGOEDC recommended (5-0) the Board of Supervisors approve the 2017 CIF and to advertise the 2017 CIF for a future public hearing.

Fiscal Impact Committee: At the Fiscal Impact Committee (FIC) meeting on December 7, 2017, FIC approved (5-2-6: Krueger and Capretti opposed; Bischoff, Erbs, Filyaw, Larkin, Miller, and Mitchel absent) and send the 2017 CIF to the FGOEDC for review and approval.

Staff: Staff concurs with the Board's direction.

BACKGROUND: The FIC began its review of the 2017 CIF on September 2, 2017, and completed its review on December 7, 2017. The 2017 CIF was developed using the 2016 Capital Facility Standards (CFS) (adopted by the Board of Supervisors (Board) on January 3, 2017)¹, the

¹<https://lfportal.loudoun.gov/LFPortalinternet/0/edoc/211732/Item%2008d%20FGOEDC-Fiscal%20Impacts%20Recommendations%20FY%2017%20Capital%20Facility%20Standards.pdf>

2017 FIC Guidelines (adopted by the Board on November 8, 2017)², and County staff's estimate of land values, construction costs for public facilities, and the projected need for public facilities (based on population growth) in different regions of the County.

The CIF establishes an estimate of the average capital facilities costs associated with a new residential unit in Loudoun County and is used in the evaluation and negotiation of proffers associated with residential rezonings. Proffers are voluntary contributions provided to the County to help offset the costs of future capital facility construction due to the rezoning of land. The current CIF was adopted by the Board in 2014 and the CIF is generally updated every two years. The Adopted 2014 CIF is included as Attachment 1 to this Public Hearing item for the Committee's reference.

The CIF serves as a guide to the County to determine the value of capital facilities that will need to be developed as a result of increased population growth resulting from increasing the residential density allowed on a property. Staff develops cost estimates for each type of capital facility constructed by the County using the 2016 CFS. The CFS determine the types of facilities for which cost estimates are developed, and the CFS acreage and square footage assumptions are used to determine the cost estimates for each type of facility.

The cost estimates are developed as per-capita costs for County facilities and per-child costs for schools. Using the 2017 FIC Guidelines for household size and student generation factors, these costs are applied to each housing unit type – Multi-Family Attached (MFA), Multi-Family Stacked (MFST), Single Family Attached (SFA) and Single Family Detached (SFD) – to determine guidelines for capital facility contributions on a per-housing unit basis. The 2017 FIC Guidelines for definitions of residential categories and the household sizes/student generation rates are provided in Attachment 2 for the Committee's reference.

The CIF is calculated using a mathematical formula as established in Chapter 11, page 1 of the Revised General Plan. The CIF is calculated using the following formula:

$$\text{CIF} = (\text{Household Size} \times \text{Facility Cost per Capita}) \\ + \\ (\text{Students per Household} \times \text{School Cost per Student})$$

The CIF is calculated for five different geographic areas (CIF regions) of the County. There are differing costs to construct capital facilities in the County based on per-acre land values in the different CIF regions. For example, facilities developed in the eastern suburbanized parts of the County will typically have higher development costs than facilities developed in the western portion of the County due to higher land costs in the east. In addition, the household size for SFD homes are lower in the western planning subareas than in the other planning subareas in the County.

²<https://lfportal.loudoun.gov/LFPortalinternet/0/edoc/274532/Item%2004%202017%20Fiscal%20Impact%20Committee%20Guidelines.pdf>

1. Eastern CIF region (comprised of the Ashburn, Potomac, and Sterling planning subareas)
2. Dulles CIF region
3. Leesburg CIF region
4. Route 7 West CIF region
5. Western CIF region (comprised of the Route 15 North, Route 15 South, Northwest, and Southwest planning subareas)

In addition, the Board approved on June 17, 2017, a different CIF calculation for development of age-restricted and continuing care retirement communities. The CIF calculation for these types of development exclude the costs of facilities for youth (e.g., teen centers, adolescent independent living residences, schools).

Tables 1-5 present the 2017 CIF for each of the regions of the County.

Table 1a. Eastern CIF Table (Ashburn, Potomac, Sterling) – Standard

<u>Housing Unit Type</u>	<u>Population Per Housing Unit</u>	<u>CIF Per Capita</u>	<u>County CIF</u>	<u>Child/Unit</u>	<u>CIF Per Child</u>	<u>School CIF</u>	<u>Total CIF</u>
SFD - Suburban	3.78	\$ 4,701.75	\$ 17,772.60	1.07	\$ 27,833.33	\$ 29,781.67	\$ 47,554.27
SFA	3.09	\$ 4,701.75	\$ 14,528.40	0.69	\$ 27,833.33	\$ 19,205.00	\$ 33,733.40
MF Attached	1.97	\$ 4,701.75	\$ 9,262.44	0.23	\$ 27,833.33	\$ 6,401.67	\$ 15,664.11
MF Stacked	2.42	\$ 4,701.75	\$ 11,378.23	0.49	\$ 27,833.33	\$ 13,638.33	\$ 25,016.56

Table 1b. Eastern CIF Table (Ashburn, Potomac, Sterling) – Age-Restricted and Continuing Care Retirement Communities

<u>Housing Unit Type</u>	<u>Population Per Housing Unit</u>	<u>CIF Per Capita</u>	<u>County CIF</u>	<u>Child/Unit</u>	<u>CIF Per Child</u>	<u>School CIF</u>	<u>Total CIF</u>
SFD - Suburban	3.78	\$ 4,659.56	\$ 17,613.14	1.07	\$ -	\$ -	\$ 17,613.14
SFA	3.09	\$ 4,659.56	\$ 14,398.05	0.69	\$ -	\$ -	\$ 14,398.05
MF Attached	1.97	\$ 4,659.56	\$ 9,179.34	0.23	\$ -	\$ -	\$ 9,179.34
MF Stacked	2.42	\$ 4,659.56	\$ 11,276.14	0.49	\$ -	\$ -	\$ 11,276.14

Table 2a. Dulles CIF Table – Standard

<u>Housing Unit Type</u>	<u>Population Per Housing Unit</u>	<u>CIF Per Capita</u>	<u>County CIF</u>	<u>Child/Unit</u>	<u>CIF Per Child</u>	<u>School CIF</u>	<u>Total CIF</u>
SFD - Suburban	3.78	\$ 5,998.42	\$ 22,674.03	1.07	\$ 31,833.33	\$ 34,061.67	\$ 56,735.70
SFA	3.09	\$ 5,998.42	\$ 18,535.12	0.69	\$ 31,833.33	\$ 21,965.00	\$ 40,500.12
MF Attached	1.97	\$ 5,998.42	\$ 11,816.89	0.23	\$ 31,833.33	\$ 7,321.67	\$ 19,138.55
MF Stacked	2.42	\$ 5,998.42	\$ 14,516.18	0.49	\$ 31,833.33	\$ 15,598.33	\$ 30,114.51

Table 2b. Dulles CIF Table – Age-Restricted and Continuing Care Retirement Communities

<u>Housing Unit Type</u>	<u>Population Per Housing Unit</u>	<u>CIF Per Capita</u>	<u>County CIF</u>	<u>Child/Unit</u>	<u>CIF Per Child</u>	<u>School CIF</u>	<u>Total CIF</u>
SFD - Suburban	3.78	\$ 5,949.45	\$ 22,488.91	1.07	\$ -	\$ -	\$ 22,488.91
SFA	3.09	\$ 5,949.45	\$ 18,383.79	0.69	\$ -	\$ -	\$ 18,383.79
MF Attached	1.97	\$ 5,949.45	\$ 11,720.41	0.23	\$ -	\$ -	\$ 11,720.41
MF Stacked	2.42	\$ 5,949.45	\$ 14,397.66	0.49	\$ -	\$ -	\$ 14,397.66

Table 3a. Leesburg CIF Table – Standard

<u>Housing Unit Type</u>	<u>Population Per Housing Unit</u>	<u>CIF Per Capita</u>	<u>County CIF</u>	<u>Child/Unit</u>	<u>CIF Per Child</u>	<u>School CIF</u>	<u>Total CIF</u>
SFD - Suburban	3.78	\$ 2,667.75	\$ 10,084.10	1.07	\$ 26,500.00	\$ 28,355.00	\$ 38,439.10
SFA	3.09	\$ 2,667.75	\$ 8,243.35	0.69	\$ 26,500.00	\$ 18,285.00	\$ 26,528.35
MF Attached	1.97	\$ 2,667.75	\$ 5,255.47	0.23	\$ 26,500.00	\$ 6,095.00	\$ 11,350.47
MF Stacked	2.42	\$ 2,667.75	\$ 6,455.96	0.49	\$ 26,500.00	\$ 12,985.00	\$ 19,440.96

Table 3b. Leesburg CIF Table – Age-Restricted and Continuing Care Retirement Communities

<u>Housing Unit Type</u>	<u>Population Per Housing Unit</u>	<u>CIF Per Capita</u>	<u>County CIF</u>	<u>Child/Unit</u>	<u>CIF Per Child</u>	<u>School CIF</u>	<u>Total CIF</u>
SFD - Suburban	3.78	\$ 2,615.38	\$ 9,886.14	1.07	\$ -	\$ -	\$ 9,886.14
SFA	3.09	\$ 2,615.38	\$ 8,081.52	0.69	\$ -	\$ -	\$ 8,081.52
MF Attached	1.97	\$ 2,615.38	\$ 5,152.30	0.23	\$ -	\$ -	\$ 5,152.30
MF Stacked	2.42	\$ 2,615.38	\$ 6,329.22	0.49	\$ -	\$ -	\$ 6,329.22

Table 4a. Route 7 West CIF Table – Standard

<u>Housing Unit Type</u>	<u>Population Per Housing Unit</u>	<u>CIF Per Capita</u>	<u>County CIF</u>	<u>Child/Unit</u>	<u>CIF Per Child</u>	<u>School CIF</u>	<u>Total CIF</u>
SFD - Suburban	3.78	\$ 1,928.88	\$ 7,291.18	1.07	\$ 24,448.72	\$ 26,160.13	\$ 33,451.31
SFA	3.09	\$ 1,928.88	\$ 5,960.25	0.69	\$ 24,448.72	\$ 16,869.62	\$ 22,829.87
MF Attached	1.97	\$ 1,928.88	\$ 3,799.90	0.23	\$ 24,448.72	\$ 5,623.21	\$ 9,423.11
MF Stacked	2.42	\$ 1,928.88	\$ 4,667.90	0.49	\$ 24,448.72	\$ 11,979.87	\$ 16,647.77

Table 4b. Route 7 West CIF Table – Age-Restricted and Continuing Care Retirement Communities

<u>Housing Unit Type</u>	<u>Population Per Housing Unit</u>	<u>CIF Per Capita</u>	<u>County CIF</u>	<u>Child/Unit</u>	<u>CIF Per Child</u>	<u>School CIF</u>	<u>Total CIF</u>
SFD - Suburban	3.78	\$ 1,925.47	\$ 7,278.28	1.07	\$ -	\$ -	\$ 7,278.28
SFA	3.09	\$ 1,925.47	\$ 5,949.70	0.69	\$ -	\$ -	\$ 5,949.70
MF Attached	1.97	\$ 1,925.47	\$ 3,793.18	0.23	\$ -	\$ -	\$ 3,793.18
MF Stacked	2.42	\$ 1,925.47	\$ 4,659.64	0.49	\$ -	\$ -	\$ 4,659.64

Table 5a. Western CIF Table (Northwest, Route 15 North, Route 15 South, Southwest) – Standard

<u>Housing Unit Type</u>	<u>Population Per Housing Unit</u>	<u>CIF Per Capita</u>	<u>County CIF</u>	<u>Child/Unit</u>	<u>CIF Per Child</u>	<u>School CIF</u>	<u>Total CIF</u>
SFD - Rural	3.39	\$ 1,944.12	\$ 6,590.56	0.92	\$ 23,884.62	\$ 21,973.85	\$ 28,564.41
SFA	3.09	\$ 1,944.12	\$ 6,007.33	0.69	\$ 23,884.62	\$ 16,480.38	\$ 22,487.71
MF Attached	1.97	\$ 1,944.12	\$ 3,829.91	0.23	\$ 23,884.62	\$ 5,493.46	\$ 9,323.37
MF Stacked	2.42	\$ 1,944.12	\$ 4,704.77	0.49	\$ 23,884.62	\$ 11,703.46	\$ 16,408.23

Table 5b. Western CIF Table (Northwest, Route 15 North, Route 15 South, Southwest) – Age-Restricted and Continuing Care Retirement Communities

<u>Housing Unit Type</u>	<u>Population Per Housing Unit</u>	<u>CIF Per Capita</u>	<u>County CIF</u>	<u>Child/Unit</u>	<u>CIF Per Child</u>	<u>School CIF</u>	<u>Total CIF</u>
SFD - Rural	3.39	\$ 1,944.12	\$ 6,590.56	0.92	\$ -	\$ -	\$ 6,590.56
SFA	3.09	\$ 1,944.12	\$ 6,007.33	0.69	\$ -	\$ -	\$ 6,007.33
MF Attached	1.97	\$ 1,944.12	\$ 3,829.91	0.23	\$ -	\$ -	\$ 3,829.91
MF Stacked	2.42	\$ 1,944.12	\$ 4,704.77	0.49	\$ -	\$ -	\$ 4,704.77

The CIF is calculated based on the following factors:

1. Cost estimates are developed for each type of County capital facility based on land values and construction costs developed by staff;
2. Cost estimates are developed for each type of School capital facility based on land values and construction cost data provided by Loudoun County Public Schools (LCPS);
3. The per-capita impact for developing each type of County and School capital facility is determined according to the adopted CFS population factors;
4. The per-capita cost of facilities already in operation or included in the Adopted FY 2017 – FY 2022 Capital Improvement Program (CIP) is subtracted out of the final CIF calculations since they already count towards satisfying the adopted CFS;³
5. The per-capita impact is multiplied by the household sizes and student generations rates developed under the 2017 FIC Guidelines for each type of residential housing unit to establish the County and School CIF.

It is important to note that the CIF develops a *general* estimate of the cost of a public facility. During the development of the County's CIP, cost estimates are further refined as a project moves through various development phases (planning, design, land acquisition, and construction).

ISSUES: The CIF has not been updated since 2014. Since that time, land values, construction costs, and population forecasts have changed and have affected both the cost and need for public facilities. In order to accurately measure and recover the impact of new residential housing on County facilities, it is recommended that a new and updated CIF be adopted by the Board.

³ The CFS identifies when a facility is "triggered" for development. Triggers for facilities may be based on either a population-driven standard (e.g., fire stations, libraries, community and neighborhood parks, schools) or a fixed number required in the County (e.g, recreation centers, regional and district parks).

In accordance with the Revised General Plan, revisions to the CIF must be considered at a Board of Supervisor's Public Hearing prior to adoption.⁴

Changes since the Adopted 2014 Capital Intensity Factor

In updating the 2017 Capital Intensity Factor, staff generally adhered to the 2014 methodology for calculating impacts. The following factors were updated or changed since 2014:

- 1. Land Values** – The 2014 CIF per-acre land values were based on estimates of land acquisitions by developers of residential and commercial properties in the Ashburn (for the Eastern CIF), Route 50 corridor (for the Dulles CIF), and downtown Leesburg/Route 7 corridor (for the Leesburg CIF).

For the 2017 CIF, staff analyzed sales of vacant commercial land from 2009 to 2016⁵ in the Ashburn, Sterling, Potomac, Dulles, and Leesburg subareas to develop an updated per-acre land value.

For the Route 7 West and Western CIF regions, staff updated the 2014 CIF land values for those regions using a 4% per year inflation factor.⁶ Due to a lack of supporting data, the 30% discount factor for land acquisitions above 10 acres established in the 2014 CIF was not assumed in the 2017 CIF.

Table 6 summarizes the differences in land values for each CIF region between the Adopted 2014 CIF and the 2017 CIF.

Table 6. Change in Land Value Estimates from 2014 CIF to 2017 CIF

CIF Region	Adopted 2014 CIF	2017 CIF
Eastern	\$900,000	\$500,000
Dulles	\$750,000	\$890,000
Leesburg	\$500,000	\$370,000
Route 7 West	\$150,000	\$170,000
Western	\$100,000	\$115,000

- 2. Construction Costs** – For County facilities, staff used the 2014 construction cost estimates (for per-square foot “hard” construction costs, excluding design, land, and other “soft” costs) as a baseline estimate and then applied 4.5% inflation factor to update to the 2017 cost

⁴ See Revised General Plan, Chapter 11, section A, subsection 2.

⁵ Source: Commissioner of Revenues – sales of vacant commercially zoned property from 2009 to 2016.

⁶ The CIF uses a 4% annual inflation factor to estimate future project costs.

estimates.⁷ These cost estimates are general in nature and may vary significantly from the actual cost of a public facility due to a variety of factors.

Construction cost data for school facilities were provided by LCPS and are based on the current per-square foot estimates used in the development of the LCPS CIP.

Attachment 3 provides a summary of the construction cost estimates for type of public facility in the 2017 CIF.

3. Facility Deficit Analysis – The CIF is based on the per-capita costs of providing various capital facilities resulting from additional residential density. To determine which facilities are needed for each CIF region, staff conducts a facility deficit analysis as follows:

1. Forecasts of the County's population growth are generated for each planning subarea based on anticipated residential growth;
2. The CFS establishes population standards for each type of capital facility in the County;
3. The number of facilities needed in each planning subarea is calculated by dividing the forecasted population in a given year by the population standards for the facility⁸; and
4. Existing and planned (in the Adopted CIP) facilities are subtracted from the total number of required facilities to calculate a deficit (or surplus).⁹

The Adopted 2014 CIF identified which types of facilities would be needed and located in a specific CIF region based on the then-available population forecasts in 2014 and the 2014 CFS population standards. This analysis was based on the projected need for a facility minus existing (or planned in the then-adopted FY 2015 – FY 2020 CIP) to calculate the deficit.¹⁰ If a deficit existed for a specific type of facility in a specific CIF region, then the per-capita impact of that facility would be included in the CIF for that region.

For the 2017 CIF, staff applied a similar analysis and methodology using updated population forecasts adopted in the 2017 FIC Guidelines and the 2016 CFS population standards to determine the number and location of facility deficits. Staff subtracted existing capital facilities or facilities planned in the FY 2017 – 2022 Amended CIP to identify deficits in each of the CIF regions.

⁷ Inflation factors were based on actuals as identified in the Baltimore Regional Construction Cost Index.

⁸ Example: If the population forecast for the Ashburn planning subarea is 100,000 residents in 2020 and the 2016 CFS identifies the need for a fire station for every 25,000 residents, then a total of four (4) fire stations will be required for Ashburn in 2020.

⁹ Example: If one fire station is already in operation and an additional one is planned, then the number of fire stations in deficit is two. To account for deficits caused by existing development, the CIF only includes the per-capita cost of the *next* fire station to be built. Therefore, the Eastern CIF would include the per-capita cost of a *single* fire station.

¹⁰ Facility deficits are evaluated in the ten-year period *following* the six-year CIP planning period; in essence, the facility deficit analysis determines which facilities should be included in the Capital Needs Assessment (CNA).

The 2017 CIF would take effect on the date of the Board's approval for any new rezoning applications or concept plan amendment that has not yet been heard by the Planning Commission.

- 4. Household Sizes and Student Generation Rates** – Staff used the 2017 FIC Guidelines for household sizes and student generations rates to update the County, School and total CIF for each type of residential unit.

FISCAL IMPACT: There is no fiscal impact related to the development of the Capital Intensity Factor. The Capital Intensity Factor is used to assess the impact on capital facilities as a result of new residential development and provides a guideline for proffer negotiations to offset those impacts during residential rezoning applications.

ALTERNATIVES: The Board may choose to:

1. Adopt the 2017 Capital Intensity Factor as recommended by the Finance/Government Operations and Economic Development Committee; or
2. Send the 2017 Capital Intensity Factor back the Finance/Government Operations and Economic Development Committee for further discussion.

DRAFT MOTIONS:

1. I move that the Board of Supervisors forward the 2017 Capital Intensity Factor to the April 3, 2018, Board of Supervisors Business Meeting for action.

OR

- 2a. I move that the Board of Supervisors suspend the rules.

AND

- 2b. I move that the Board of Supervisors approve the 2017 Capital Intensity Factor as provided in Tables 1-5 of the March 14, 2018, Board of Supervisors Public Hearing Staff

Report. OR

3. I move an alternate motion.

ATTACHMENTS:

1. Adopted 2014 CIF
2. 2017 FIC Guidelines (including Residential Category Definitions)

3. Construction cost estimates for the 2017 Capital Intensity Factor
4. Map of CIF Regions

Attachment 1: Adopted 2014 CIF

Eastern CIF

2014 CIF Table - Standard (Eastern)							
<u>Housing Unit Type</u>	<u>Population Per Housing Unit</u>	<u>CIF Per Capita</u>	<u>County CIF</u>	<u>Child/Unit</u>	<u>CIF Per Child</u>	<u>School CIF</u>	<u>Total CIF</u>
SFD - Suburban	3.78	\$ 8,147.57	\$ 30,797.81	0.86	\$ 25,128.77	\$ 21,610.74	\$ 52,408.56
SFA	2.88	\$ 8,147.57	\$ 23,465.00	0.54	\$ 25,128.77	\$ 13,569.54	\$ 37,034.54
MF Attached	1.97	\$ 8,147.57	\$ 16,050.71	0.23	\$ 25,128.77	\$ 5,779.62	\$ 21,830.33
MF Stacked	2.20	\$ 8,147.57	\$ 17,924.65	0.30	\$ 25,128.77	\$ 7,538.63	\$ 25,463.29

2014 CIF Table - Age Restricted and Continuing Care Facilities (Eastern)							
<u>Housing Unit Type</u>	<u>Population Per Housing Unit</u>	<u>CIF Per Capita</u>	<u>County CIF</u>	<u>Child/Unit</u>	<u>CIF Per Child</u>	<u>School CIF</u>	<u>Total CIF</u>
SFD - Suburban	3.78	\$ 8,088.98	\$ 30,576.34	0.86	\$ -	\$ -	\$ 30,576.34
SFA	2.88	\$ 8,088.98	\$ 23,296.26	0.54	\$ -	\$ -	\$ 23,296.26
MF Attached	1.97	\$ 8,088.98	\$ 15,935.29	0.23	\$ -	\$ -	\$ 15,935.29
MF Stacked	2.20	\$ 8,088.98	\$ 17,795.76	0.30	\$ -	\$ -	\$ 17,795.76

Dulles CIF

2014 CIF Table - Standard (Dulles)							
<u>Housing Unit Type</u>	<u>Population Per Housing Unit</u>	<u>CIF Per Capita</u>	<u>County CIF</u>	<u>Child/Unit</u>	<u>CIF Per Child</u>	<u>School CIF</u>	<u>Total CIF</u>
SFD - Suburban	3.78	\$ 4,694.32	\$ 17,744.53	0.86	\$ 22,636.46	\$ 19,467.36	\$ 37,211.89
SFA	2.88	\$ 4,694.32	\$ 13,519.64	0.54	\$ 22,636.46	\$ 12,223.69	\$ 25,743.33
MF Attached	1.97	\$ 4,694.32	\$ 9,247.81	0.23	\$ 22,636.46	\$ 5,206.39	\$ 14,454.20
MF Stacked	2.20	\$ 4,694.32	\$ 10,327.50	0.30	\$ 22,636.46	\$ 6,790.94	\$ 17,118.44

2014 CIF Table - Age-Restricted and Continuing Care Facilities (Dulles)							
<u>Housing Unit Type</u>	<u>Population Per Housing Unit</u>	<u>CIF Per Capita</u>	<u>County CIF</u>	<u>Child/Unit</u>	<u>CIF Per Child</u>	<u>School CIF</u>	<u>Total CIF</u>
SFD - Suburban	3.78	\$ 4,694.32	\$ 17,744.53	0.86	\$ -	\$ -	\$ 17,744.53
SFA	2.88	\$ 4,694.32	\$ 13,519.64	0.54	\$ -	\$ -	\$ 13,519.64
MF Attached	1.97	\$ 4,694.32	\$ 9,247.81	0.23	\$ -	\$ -	\$ 9,247.81
MF Stacked	2.20	\$ 4,694.32	\$ 10,327.50	0.30	\$ -	\$ -	\$ 10,327.50

Leesburg CIF

2014 CIF Table - Standard (Leesburg)

<u>Housing Unit Type</u>	<u>Population Per Housing Unit</u>	<u>CIF Per Capita</u>	<u>County CIF</u>	<u>Child/Unit</u>	<u>CIF Per Child</u>	<u>School CIF</u>	<u>Total CIF</u>
SFD - Suburban	3.78	\$ 4,049.49	\$ 15,307.07	0.86	\$ 22,174.92	\$ 19,070.43	\$ 34,377.50
SFA	2.88	\$ 4,049.49	\$ 11,662.53	0.54	\$ 22,174.92	\$ 11,974.46	\$ 23,636.99
MF Attached	1.97	\$ 4,049.49	\$ 7,977.50	0.23	\$ 22,174.92	\$ 5,100.23	\$ 13,077.73
MF Stacked	2.20	\$ 4,049.49	\$ 8,908.88	0.30	\$ 22,174.92	\$ 6,652.48	\$ 15,561.35

2014 CIF Table - Age-Restricted and Continuing Care Facilities (Leesburg)

<u>Housing Unit Type</u>	<u>Population Per Housing Unit</u>	<u>CIF Per Capita</u>	<u>County CIF</u>	<u>Child/Unit</u>	<u>CIF Per Child</u>	<u>School CIF</u>	<u>Total CIF</u>
SFD - Suburban	3.78	\$ 4,049.49	\$ 15,307.07	0.86	\$ -	\$ -	\$ 15,307.07
SFA	2.88	\$ 4,049.49	\$ 11,662.53	0.54	\$ -	\$ -	\$ 11,662.53
MF Attached	1.97	\$ 4,049.49	\$ 7,977.50	0.23	\$ -	\$ -	\$ 7,977.50
MF Stacked	2.20	\$ 4,049.49	\$ 8,908.88	0.30	\$ -	\$ -	\$ 8,908.88

Route 7 West CIF

2014 CIF Table - Standard (Route 7 West)

<u>Housing Unit Type</u>	<u>Population Per Housing Unit</u>	<u>CIF Per Capita</u>	<u>County CIF</u>	<u>Child/Unit</u>	<u>CIF Per Child</u>	<u>School CIF</u>	<u>Total CIF</u>
SFD - Suburban	3.78	\$ 2,055.30	\$ 7,769.03	0.86	\$ 19,590.31	\$ 16,847.67	\$ 24,616.70
SFA	2.88	\$ 2,055.30	\$ 5,919.26	0.54	\$ 19,590.31	\$ 10,578.77	\$ 16,498.03
MF Attached	1.97	\$ 2,055.30	\$ 4,048.94	0.23	\$ 19,590.31	\$ 4,505.77	\$ 8,554.71
MF Stacked	2.20	\$ 2,055.30	\$ 4,521.66	0.30	\$ 19,590.31	\$ 5,877.09	\$ 10,398.75

2014 CIF Table - Age-Restricted and Continuing Care Facilities (Route 7 West)

<u>Housing Unit Type</u>	<u>Population Per Housing Unit</u>	<u>CIF Per Capita</u>	<u>County CIF</u>	<u>Child/Unit</u>	<u>CIF Per Child</u>	<u>School CIF</u>	<u>Total CIF</u>
SFD - Suburban	3.78	\$ 2,055.30	\$ 7,769.03	0.86	\$ -	\$ -	\$ 7,769.03
SFA	2.88	\$ 2,055.30	\$ 5,919.26	0.54	\$ -	\$ -	\$ 5,919.26
MF Attached	1.97	\$ 2,055.30	\$ 4,048.94	0.23	\$ -	\$ -	\$ 4,048.94
MF Stacked	2.20	\$ 2,055.30	\$ 4,521.66	0.30	\$ -	\$ -	\$ 4,521.66

Western CIF

2014 CIF Table - Standard (Western)							
<u>Housing Unit Type</u>	<u>Population Per Housing Unit</u>	<u>CIF Per Capita</u>	<u>County CIF</u>	<u>Child/Unit</u>	<u>CIF Per Child</u>	<u>School CIF</u>	<u>Total CIF</u>
SFD - Rural	3.39	\$ 2,793.80	\$ 9,470.98	0.86	\$ 19,221.08	\$ 16,530.13	\$ 26,001.11
SFA	2.88	\$ 2,793.80	\$ 8,046.14	0.54	\$ 19,221.08	\$ 10,379.38	\$ 18,425.53
MF Attached	1.97	\$ 2,793.80	\$ 5,503.79	0.23	\$ 19,221.08	\$ 4,420.85	\$ 9,924.63
MF Stacked	2.20	\$ 2,793.80	\$ 6,146.36	0.30	\$ 19,221.08	\$ 5,766.32	\$ 11,912.68

2014 CIF Table - Age-Restricted and Continuing Care Facilities (Western)							
<u>Housing Unit Type</u>	<u>Population Per Housing Unit</u>	<u>CIF Per Capita</u>	<u>County CIF</u>	<u>Child/Unit</u>	<u>CIF Per Child</u>	<u>School CIF</u>	<u>Total CIF</u>
SFD - Rural	3.39	\$ 2,793.80	\$ 9,470.98	0.86	\$ -	\$ -	\$ 9,470.98
SFA	2.88	\$ 2,793.80	\$ 8,046.14	0.54	\$ -	\$ -	\$ 8,046.14
MF Attached	1.97	\$ 2,793.80	\$ 5,503.79	0.23	\$ -	\$ -	\$ 5,503.79
MF Stacked	2.20	\$ 2,793.80	\$ 6,146.36	0.30	\$ -	\$ -	\$ 6,146.36

2017 Fiscal Impact Committee Guidelines

Residential Category Definitions

Single-Family Detached (SFD): A dwelling that is not attached to any other dwelling by any means. This category includes accessory dwelling units and mobile homes. The distinction between suburban SFDs and Rural SFDs is made based on which planning subarea the unit is in (see Planning Subarea map). **Suburban:** SFD factors apply to the Potomac, Sterling, Ashburn, Dulles, Leesburg, and Route 7 West planning subareas. Route 7 West is included because the majority of its population resides in incorporated towns. **Rural:** SFD factors apply to the Northwest, Rt. 15 North, Rt. 15 South, and Southwest planning subareas.

Single-Family Attached (SFA): Dwelling units in a variety of attached configurations, including townhomes, duplexes, triplexes, and quadraplexes, where each unit has their own ground floor external entrance.

Multi-Family (MF): A building containing multiple dwelling units. **Multi-Family Attached (MFA):** Commonly referred to as "garden style," "mid-rise," and "high-rise" condominiums/apartments. A group of dwelling units contained within a building, where each dwelling unit in the building generally consists of a single floor or level, and each unit is accessed by one or more common entrances leading directly from the outdoors at ground level, except that a ground floor dwelling unit may have its own ground floor external entrance. **Multi-Family Stacked (MFST):** Commonly referred to as "stacked townhomes", "one-over-twos", and "two-over-twos." A grouping of dwelling units where each unit within the grouping has its own ground floor entrance or shares a ground floor entrance with only an adjacent unit. At least one dwelling unit within the grouping contains 2 or more stories and is situated over or under another dwelling unit.

Group Quarters (GQ): A Group Quarter (GQ) is a place where people live in a group living arrangement. Examples include nursing homes, congregate care, college dormitories, homeless shelters, and detention centers. Note: Independent-living age-restricted units are not considered group quarters. They are classified under the typical housing types of SFD, SFA, and MF.

Table 1.
Summary of Approved Inputs and Assumptions
Demographic and Economic

Variable	Approved Inputs 2016	Source/Comments	Variable	Approved Inputs 2016	Source/Comments
<i>Residential Components</i>					
Single-Family Detached			Multi-family		
Number of Units	66,408	Table A-3	Number of Units	23,104	Table A-3
Household Size (New Units)			Household Size (New Units)		
Suburban	3.78	Table A-7(b)	Attached	1.97	Table A-7(b)
Rural	3.39	Table A-7(b)	Stacked	2.42	Table A-7(b)
School Age Children/New Household			School Age Children/New Household		
Suburban	1.07	FIC, 7/18/17	Attached	0.23	FIC, 7/18/17
Rural	0.92	FIC, 7/18/17	Stacked	0.49	FIC, 7/18/17
Long-Run Vacancy Rate (New Units)			Long-Run Vacancy Rate (New Units)		
Suburban	2.0%	Table A-7(a)	Attached	6.5%	Table A-7(a)
Rural	5.0%	Table A-7(a)	Stacked	5.6%	Table A-7(a)
Long-Run Property Appreciation Factor (beyond inflation)	1.0%	FIC, 7/9/15	Long-Run Property Appreciation Factor (beyond inflation)	1.0%	FIC, 7/9/15
Property Value (New Units, less than 1 acre)	\$683,015	Table A-9	Property Value (New Condo Units)		
			Condo (Garden)	\$337,258	Table A-9
			Condo (Stacked)	\$332,588	Table A-9
Single-Family Attached					
Number of Units	40,261	Table A-3			
Household Size (New Units)	3.09	Table A-7(b)			
School Age Children/New Household	0.69	FIC, 9/7/17			
Long-Run Vacancy Rate (New Units)	2.5%	Table A-7(a)			
Long-Run Property Appreciation Factor (beyond inflation)	1.0%	FIC, 7/9/15			
Property Value (New Units)	\$473,089	Table A-9			

Construction Cost Estimates for the 2017 Capital Intensity Factor

<u>Department</u>	<u>Capital Facility</u>	<u>2017 Per-Square Foot (construction only)</u>	<u>2017 Per-Square Foot (all, excl. land)</u>	<u>2017 Facility Costs (excl. land)</u>
Animal Services	Animal Shelter		\$ 642	\$16,042,250
Sheriff's Office	Sheriff Station	\$ 457	\$ 648	\$11,659,620
Fire, Rescue and Emergency Management	Fire & Rescue Station	\$ 457	\$ 648	\$11,659,620
General Services	General Government Support Facilities (per capita)	\$ 343	\$ 470	\$1,880
General Services	Recycling Dropoff Center	\$ -	\$ -	\$0
General Services	Special Waste Dropoff Center	\$ 114	\$ 156	\$93,708
MHSADS	DS Residential Facility	\$ 343	\$ 511	\$1,737,694
MHSADS	MH Residential Facility	\$ 343	\$ 511	\$1,737,694
Transportation and Capital Infrastructure	Park and Ride Lot (per space)	\$ 9,138	\$ 12,005	\$4,201,841
Transportation and Capital Infrastructure	Transit Bus Maintenance and Storage Facility	\$ 400	\$ 563	\$15,759,000

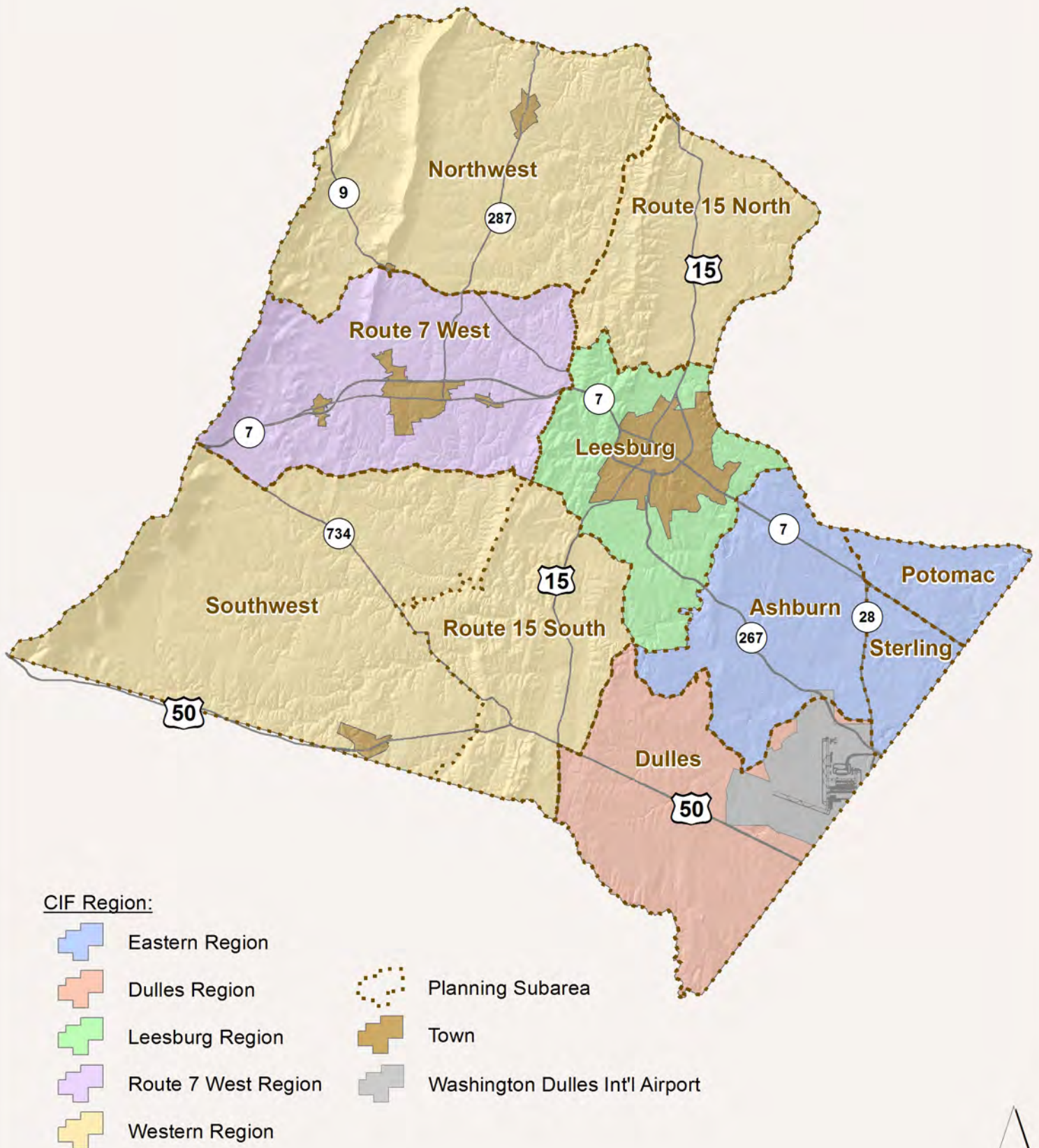
Construction Cost Estimates for the 2017 Capital Intensity Factor

<u>Department</u>	<u>Capital Facility</u>	<u>2017 Per-Square Foot (construction only)</u>	<u>2017 Per-Square Foot (all, excl. land)</u>	<u>2017 Facility Costs (excl. land)</u>
PRCS	Recreation Center	\$ 514	\$ 709	\$58,861,940
PRCS	Community Center	\$ 343	\$ 491	\$9,813,200
PRCS	Teen Center	\$ 343	\$ 489	\$9,788,200
PRCS	Senior Center	\$ 343	\$ 496	\$7,438,650
PRCS	Adult Day Center	\$ 343	\$ 526	\$3,679,370
PRCS	Satellite Maintenance Facilities	\$ 206	\$ 347	\$1,734,600
PRCS	Regional Park*	\$ 343	\$ 4,655	\$46,549,100
PRCS	District Park*	\$ 228	\$ 3,495	\$17,474,300
PRCS	Community Park*	\$ 228	\$ 8,531	\$6,824,888
PRCS	Neighborhood Park*	\$ 228	\$ 906	\$362,444
PRCS	Recreational Trails	\$ 11	\$ 11	\$23,232
* Includes cost of developing fields				

Construction Cost Estimates for the 2017 Capital Intensity Factor

<u>Department</u>	<u>Capital Facility</u>	<u>2017 Per-Square Foot (construction only)</u>	<u>2017 Per-Square Foot (all, excl. land)</u>	<u>2017 Facility Costs (excl. land)</u>
Library Services	Library	\$ 400	\$ 603	\$24,135,000
Family Services	Juvenile Detention Center	\$ 514	\$ 715	\$28,582,200
Family Services	Youth Shelter	\$ 343	\$ 519	\$4,149,280
Family Services	Adolescent Independent Living Residence	\$ 343	\$ 577	\$4,619,190
Family Services	Group Home	\$ 343	\$ 519	\$4,149,280
Family Services	Emergency Homeless Shelter	\$ 343	\$ 513	\$4,619,190
Schools CIF Calculation				
Loudoun County Public Schools	Elementary School	\$ 300	\$ 385	\$44,275,000
Loudoun County Public Schools	Middle School	\$ 324	\$ 415	\$83,000,000
Loudoun County Public Schools	High School	\$ 335	\$ 430	\$133,300,000

Capital Intensity Factor (CIF) Regions



0 5 10
Miles

ATTACHMENT 4

Map number 2014-289