Silver Line CPAM

Board of Supervisors
November 29, 2016
Purpose

1. Review the Transportation and Land Use Committee’s (TLUC) Draft Silver Line CPAM Recommendation

2. Develop the Board’s Recommended Draft CPAM by providing direction on 11 Decision Points

3. Receive any Additional Board Recommendation
Presentation Outline

1. Goals for Silver Line CPAM
2. Existing Conditions In Study Area
3. Forecasted Uses Within Study Area
4. Fiscal Impact Analysis
5. Overview of Decision Points
6. Review of Decision Points
7. Board’s Direction on Each Decision Point
8. Next Steps
Background: CPAM Goals

Desirable Land Use Patterns

Maximize Employment Opportunities

Maximize Tax Revenue to support Metrorail operations

Minimize Impacts on the Transportation System
Background: Fiscal Goals

1. Support and Encourages New Development with Metrorail Service District (Generates Revenues to Pay for Future Metrorail costs)
2. Limit the Impact on the County’s Overall Fiscal Balance
Planned Land Use Map – TLUC Changes (Iteration 5)

Urban Residential to Mixed Use, Medium
Compact, Walkable Office to Mixed Use, Medium
Compact Walkable Non-Residential and Suburban Employment to Mixed Use Medium
Stays Route 28 Business
Roadway Network Plan Changes

Highlighted Roads and Roundabouts have been removed

Horsepen Run Connector (Broad Run Crossing) has been added
## Forecasted Uses

### Forecasted New Housing Units in Silver Line Plan Area
#### 2015 to 2040

<table>
<thead>
<tr>
<th>Type</th>
<th>Revised General Plan and Entitlements</th>
<th>Proposed Plan, October Version (Staff Recommendation)</th>
<th>Proposed Plan, TLUC’s November Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>SFA</td>
<td>1,209</td>
<td>5,611</td>
<td>1,209</td>
</tr>
<tr>
<td>MF</td>
<td>5,888</td>
<td>16,595</td>
<td>16,595</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>7,142</strong></td>
<td><strong>22,251</strong></td>
<td><strong>17,849</strong></td>
</tr>
</tbody>
</table>
## Forecasted New Square Footage in Silver Line Plan Area
### 2015 to 2040

<table>
<thead>
<tr>
<th>Type</th>
<th>Revised General Plan and Entitlements</th>
<th>Proposed Plan, October Version</th>
<th>Proposed Plan, November Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office</td>
<td>3,424,410</td>
<td>5,876,481</td>
<td>5,876,481</td>
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<tr>
<td>Data Center</td>
<td>4,298,060</td>
<td>4,046,817</td>
<td>4,046,817</td>
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<tr>
<td>Light Industrial/Flex</td>
<td>1,065,000</td>
<td>519,333</td>
<td>519,333</td>
</tr>
<tr>
<td>Retail</td>
<td>1,238,000</td>
<td>1,894,854</td>
<td>1,894,854</td>
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<tr>
<td>Other</td>
<td>2,017,262</td>
<td>1,693,263</td>
<td>1,693,263</td>
</tr>
<tr>
<td>Total</td>
<td>12,042,732</td>
<td>14,030,748</td>
<td>14,030,748</td>
</tr>
</tbody>
</table>
Entitled Residential Development

- Old Ryan Road
  - SFA Units Remaining: 32
  - MF Units Remaining: 0

- Loudoun Station
  - SFA Units Remaining: 0
  - MF Units Remaining: 1157

- Moorefield Station
  - SFA Units Remaining: 919
  - MF Units Remaining: 4237

- Dulles Parkway Center
  - SFA Units Remaining: 0
  - MF Units Remaining: 494
Entitled Non-Residential Development

- Ashburn Technology Park
  - Approved Square Footage: 498,595
  - Under Construction Square Footage: 141,518

- Dupont Fabros (Loudoun Center)
  - Vacant Square Footage: 4,007,520
  - Under Construction Square Footage: 362,108

- Digital Loudoun III
  - Approved Square Footage: 2,254,000
  - Under Construction Square Footage: Grading Permit Only

West Dulles Station

Loudoun County
Entitled Non-Residential Development

Dulles Parkway Center
Vacant Square Footage
Max FAR Density: 679,536

Under Construction Square Footage
Flex/Industrial Storage Facility: 109,000

West Dulles Station
Vacant Square Footage
Max FAR Density: 487,872
Fiscal Impact Analysis
Two Impacts

• Fiscal Balance: Countywide fiscal impact
  - Revenues minus expenditures
  - Expenditures include operating and capital costs

• Metrorail Tax District Revenues
  - Additional $0.20 real property tax rate in this area

*Consider the general direction and magnitude of results*
Focus: What Changes With the Plan

- Measure the fiscal difference between the current and proposed land use plan

- Based on development
  - beyond current entitlements
  - beyond that allowed under the current plan

- For Fiscal Balance: excluding any shifts in development from outside the Silver Line plan area to inside the area

*Shifts in location do not change the fiscal balance of the County*
Methodology

• Use reduced pupil generation rates and household sizes for multi-family units
• Identify need for new capital facilities based on current standards
• Characterize change in fiscal balance using FY 2016 budget and constant dollars
• Use average assessed values coinciding with the FY 2016 budget (January 1, 2015 values)
• Forecast tax district revenues using $0.20 real property tax rate
Formula Adjustments Since the November 29 Packet

- School revenues
- Residential vehicle personal property revenues
- School expenditures in Scenario 1

Affects Countywide fiscal balance calculations, making scenarios more fiscally positive.
Sensitivity Tests

Fiscal Balance; Capital Needs

- Balance of residential and nonresidential development
- Number of residents and school children per multi-family unit

<table>
<thead>
<tr>
<th>Per Unit</th>
<th>Pupils</th>
<th>Residents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan vision: small multi-family units</td>
<td>0.15</td>
<td>1.87</td>
</tr>
<tr>
<td>Current multi-family rates</td>
<td>0.23</td>
<td>1.97</td>
</tr>
</tbody>
</table>

Tax District Revenues; Capital Financing Costs

- When and how rapidly development occurs
Countywide Fiscal Balance
Change in the Countywide Fiscal Balance, 2040

For the mix of development and smaller multi-family units envisioned for the proposed plan

<table>
<thead>
<tr>
<th></th>
<th>Revenues</th>
<th>Operating Expenditures</th>
<th>Net Operating Flows</th>
<th>Capital Expenditures Related to Affordable Units</th>
<th>Fiscal Impact</th>
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<tbody>
<tr>
<td>November</td>
<td>$53.5 M</td>
<td>$35.3 M</td>
<td>$18.2 M</td>
<td>$2.5 M</td>
<td>$15.7 M</td>
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<tr>
<td>October</td>
<td>91.1</td>
<td>78.1</td>
<td>13.1</td>
<td>4.7</td>
<td>+$8.4</td>
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<tr>
<td>Difference</td>
<td>-$37.6</td>
<td>-$42.8</td>
<td>+$5.1</td>
<td>-$2.2</td>
<td>+$7.3</td>
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</tbody>
</table>

Capital expenditures based on residential development over 23 years
Metrorail Tax District Revenues
Metrorail Service Tax District

Additional $0.20 real property tax goes to the Metrorail District
Plan Area and Metrorail Service Tax District
Operating Tax Districts
Metrorail Service Tax District Revenues

November plan (Iteration 4). In constant dollars.

<table>
<thead>
<tr>
<th>Development beginning 2018 (residential) /2021 (office)</th>
<th>Tax District Revenues, 2040</th>
<th>Cumulative Revenues Through 2040</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$ 4.6 M</td>
<td>$ 54.1 M</td>
</tr>
<tr>
<td>Development beginning 2031</td>
<td>$ 4.6 M</td>
<td>$ 25.4 M</td>
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</table>
## Fiscal Results per 1,000 Units/1 M SF Office

<table>
<thead>
<tr>
<th></th>
<th>1,000 Small Multi-Family Units (using reduced rates)</th>
<th>1,000 Multi-Family Units (using current rates)</th>
<th>1,000 Townhomes (using current rates)</th>
<th>1 M SF Office</th>
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<tbody>
<tr>
<td>Development Timeframe Assumption</td>
<td>2031 - 2040</td>
<td>2031 - 2040</td>
<td>2021 - 2030</td>
<td></td>
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<tr>
<td>Population</td>
<td>1,739</td>
<td>1,832</td>
<td>2,794</td>
<td>-</td>
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<tr>
<td>School Children</td>
<td>140</td>
<td>214</td>
<td>524</td>
<td>-</td>
</tr>
<tr>
<td>Capital Facility Needs: Acres</td>
<td>18</td>
<td>20</td>
<td>37</td>
<td>-</td>
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</tbody>
</table>
Decisions

1. Mixed Use on the East Side of Loudoun County Parkway
2. Urban Multifamily Residential on the East Side of Loudoun Gateway Station
3. Single Family Residential at the Regency Subdivision and Vantage Pointe Subdivision
4. Mixed Use along Ashburn Village Boulevard
5. Urban Residential Designation
6. Identification of Possible Areas for Parks and Schools
7. Residential Development within the Ldn 65 noise contours of the Airport Impact Overlay District
8. Changes in CPAM Document
9. Townhomes within Mixed Use Designation
10. Removal of Two Proposed Urban Two-Lane Roads
11. New Roadway Across Broad Run Between Barrister Street and Commerce Center Court
1. Mixed Use on the East Side of Loudoun County Parkway
1. Mixed Use on the East Side of Loudoun County Parkway

Presented to TLUC

TLUC Recommendation
1. Mixed Use on the East Side of Loudoun County Parkway

**TLUC** Recommends changing to Mixed Use Medium and requested new policy that the County be sensitive to residential development within the 65 Ldn of the 2005 EIS

**Staff** can Support change; however, there are some challenges

- a. May Compete with Other Mixed Use Areas Closer to the Metro
- b. May cause reduced density/development closer to Metro
- c. Compact Walkable Employment and Compact Walkable Non-Residential generate less demand for services
- d. Lower priority since farther from metro
- e. Separated from Ashburn Metro by 6-lane road
1. Mixed Use on the East Side of Loudoun County Parkway (Letourneau)
1. Mixed Use on the East Side of Loudoun County Parkway (Buffington)
1. Mixed Use on the East Side of Loudoun County Parkway (Meyer)
1. Mixed Use on the East Side of Loudoun County Parkway

Presented to TLUC

TLUC Recommendation
2. Urban Multifamily Residential on the East Side of Loudoun Gateway Station
2. Urban Multifamily Residential on the East Side of Loudoun Gateway Station (Meyer)
2. Urban Multifamily Residential on the East Side of Loudoun Gateway Station

Presented to TLUC

TLUC Recommendation
2. Urban Multifamily Residential on the East Side of Loudoun Gateway Station

Staff and TLUC Recommend properties remain Route 28 Business

a. Most land already developed
b. Land designated for Compact, Walkable Non-Residential may exceed market
c. Removing Route 28 Business may limit land for flex and industrial uses
3. Single Family Residential at the Regency and Vantage Pointe Subdivisions
3. Single Family Residential at the Regency and Vantage Pointe Subdivisions

Presented to TLUC

TLUC Recommendation
3. Single Family Residential at the Regency and Vantage Pointe Subdivisions

**Staff and TLUC** Recommend properties remain designated as Single Family Detached

- a. Detached single family is not desired near Metro
- b. Units are already developed
- c. Long term redevelopment opportunity may exist
- d. Single family designation is appropriate to maintain character
4. Mixed Use along Ashburn Village Boulevard
4. Mixed Use along Ashburn Village Boulevard

Presented to TLUC

TLUC Recommendation
4. Mixed Use Along Ashburn Village Boulevard

**TLUC** Recommends Change to Mixed Use Medium

**Staff** can support changing designation to Mixed Use Medium

a. Properties are within $\frac{1}{2}$ mile of Ashburn Station

b. Due to limited market, additional revenue is not anticipated in the short term
5. Urban Residential Designation

**Primary Land Uses**
- Urban Style Townhomes
- Apartment Buildings
- Condominiums
- Two-over-Two Units
- Multi-family Attached

**Secondary Land Uses**
- Schools
- Churches
- Community Centers
- Limited neighborhood retail like drugstores and convenience stores in an urban, walkable format

**Undesirable Land Uses**
- Suburban style townhomes
- Suburban style retail uses

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**URBAN RESIDENTIAL FORM AND PATTERN**

<table>
<thead>
<tr>
<th>Land Use Mix</th>
<th>Separated Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential Density</td>
<td>8 – 24 du/ac</td>
</tr>
<tr>
<td>Non-Residential Intensity</td>
<td>N/A</td>
</tr>
<tr>
<td>Prevailing Building Height</td>
<td>3 – 6 Stories (70’ Max)</td>
</tr>
<tr>
<td>Primary Transportation Modes</td>
<td>Transit, Walk, Bike, Auto</td>
</tr>
</tbody>
</table>

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**RESIDENTIAL LAND USES**

- Primary Land Uses
- Secondary Land Uses
- Undesirable Land Uses
5. Urban Residential Designation

**TLUC** recommends making Townhomes an undesirable use

**Staff** recommends urban townhomes remain a primary use in the Urban Residential Category
5. Urban Residential Designation

1. Reduced need for facilities and services with no townhomes

2. Land at Moorefield Station already entitled for low density townhomes
   a) New designation may encourage rezoning to urban townhomes with more walkable format
   b) Urban townhomes likely to generate less school age children per unit

3. Additional units may have negative impact on general fund, but also generate revenues for tax district
5. Property owners unlikely to seek rezoning to multi-family based on current market demand and current entitlements likely to be built

6. Need to provide for market flexibility to provide a variety of housing types.

7. Additional residents create increased demand for non-residential uses
Single-Family Attached Units

- Auto Oriented
- Front or Rear Garages
- Typically ~2,200 SF
- Units set back from roads
- Typically have yards
- Up to 24 Feet wide
- ~8 Dwelling Units per acre
- Typically 3 stories

Urban Townhome

- Pedestrian Oriented
- Rear Load Garages
- Typically ~1,800 SF or less
- No or minimal setbacks
- Common open space
- Generally less than 20 Feet wide
- ~16 Dwelling Units per acre
- Up to 4 stories
Multi-Family Units

Multi-Family

- Auto Oriented
- Typically 1,500 SF
- ~20 DU per acre
- Setbacks from roads
- Typically surrounded by open space

Urban Multi-Family

- Pedestrian Oriented
- Typically 1000 SF
- ~48 DU per acre
- No or minimal setbacks
- Open space provided in courtyards or similar
Student Generation

- Multi-Family: 0.23
- Multi-Family Stacked: 0.30
- *Urban Multi-Family*: **0.15 Based on Study**
- Single-Family Detached: 0.86
- Single-Family Attached: 0.54
- *Urban Townhouse*: **0.54 Used (possibly lower)**
Household Size

- Multi-Family: 1.97
- Multi-Family Stacked: 2.20
- Urban Multi-Family: 1.87 Based on Study
- Single-Family Detached: 3.78
- Single-Family Attached: 2.88
- Urban Townhouse: 2.88 Used (possibly lower)
<table>
<thead>
<tr>
<th>Place</th>
<th>Avg. Household Size</th>
<th>Family Households %</th>
<th>Students per Household</th>
<th>Age 5 to 19</th>
<th>Households</th>
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</thead>
<tbody>
<tr>
<td>East Falls Church</td>
<td>2.71</td>
<td>42.9</td>
<td>0.00</td>
<td>0</td>
<td>7</td>
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<tr>
<td>Mosaic District *</td>
<td>1.77</td>
<td>39.0</td>
<td>0.10</td>
<td>12</td>
<td>123</td>
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<tr>
<td>Wheaton *</td>
<td>1.75</td>
<td>34.2</td>
<td>0.18</td>
<td>69</td>
<td>389</td>
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<tr>
<td>Vienna *</td>
<td>1.74</td>
<td>36.2</td>
<td>0.10</td>
<td>46</td>
<td>456</td>
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<tr>
<td>Virginia Square</td>
<td>1.66</td>
<td>28.6</td>
<td>0.03</td>
<td>7</td>
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<td>Clarendon</td>
<td>1.57</td>
<td>28.1</td>
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<td>Courthouse</td>
<td>1.57</td>
<td>26.0</td>
<td>0.06</td>
<td>12</td>
<td>204</td>
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<td>Silver Spring</td>
<td>1.54</td>
<td>27.3</td>
<td>0.04</td>
<td>14</td>
<td>344</td>
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</tbody>
</table>

* Outside Beltway
6. Identification of Possible Areas for Parks and Schools

Approximate size of 1
Urban Recreation Park
6. Identification of Possible Areas for Parks and Schools

TLUC and Staff recommend plan include policies for reduced land requirements and more urban facilities and encouraged use of private facilities.

1. Fiscal Impact Analysis uses current suburban standards
2. Plan policies for call for new urban facility standards in CPAM area
6. Identification of Possible Areas for Parks and Schools

Approximate size of 1 Urban Recreation Park
6. Identification of Possible Areas Schools
7. Residential development within the LDN 65 noise contours of the Airport Impact Overlay
7. Residential development within the LDN 65 noise contours of the Airport Impact Overlay

TLUC and Staff recommend policy and zoning requirements of not allowing residential uses in the LDN 65 noise contours of the Airport Impact Overlay District

1. Current plan policy and zoning ordinance:
   a) Prohibit residential development in LDN 65
   b) Require acoustical treatment and aviation easements for development in LDN 60 to 65
8. Changes in CPAM Document

TLUC’s and Staff Recommendations:
1. Clarification of text and adding language to address anchor uses and multimodal transportation
2. Addressed Economic Development comments including:
   a. Overall Enhancement of Economic Development Section
   b. Addressing by-right uses and entitlements;
   c. Improving Data Center Language;
   d. Providing More flexibility; and
   e. More Visionary Language
3. Strengthen Policies to Support Smaller and More Urban-Like Community Facilities
9. Townhomes within Mixed Use Designation

**TLUC** recommends making Townhomes an undesirable use

**Staff** recommends urban townhomes remain a secondary use in the mixed-use medium Category

1. Removing townhomes may delay realization Tax District revenues
2. Urban townhomes may be appropriate in certain situations
10. Removal Two Proposed Urban Two-Lane Roads

Highlighted Roads and Roundabouts have been removed

Horsepen Run Connector (Broad Run Crossing) has been added

Two-Lane Roadways Removed
11. New Roadway Across Broad Run Between Barrister Street and Commerce Center Court

Highlighted Roads and Roundabouts have been removed

Horsepen Run Connector (Broad Run Crossing) has been added

New Bridge Across Broad Run Added
Updated Roadway Network Plan
PM Peak Hour Model Results – Iteration 4 land uses
(as revised by TLUC 10-14-16)

Modeled with initial transportation network
(presented at TLUC on October 14, 2016)

Modeled with Revised transportation network
(as revised by TLUC on October 14, 2016)
Comparisons to Nearby Urban Centers

Silver Line Policy Area
(with Iteration 4 land uses and transportation network as revised by TLUC October 14, 2016)

Reston Town Center
Transportation Network Findings

- Either proposed network accommodates the anticipated traffic generated by the proposed land use in 2040

- Both proposed networks encourage use of transit, bicycling, and walking

- Forecasted levels of congestion under either of the alternative scenarios are less severe than in comparable urban centers
10. Removal of Two Proposed Urban Two-Lane Roads

1. Designation on map ensures roads are built
2. CPAM policies support grid like pattern
3. Removal of road from map gives developers additional flexibility

Staff’s recommendation is to have the Board direct staff to include language that supports a comprehensive system of streets grids to ensure connectivity and access for pedestrians and vehicles to major corridors, adjacent developments, and transit services.
Issue 11 – New Roadway Across Broad Run Between Barrister Street and Commerce Center Court

1. New Road would:
   a) Serve as 6th crossing of Broad Run
   b) Require interchange at Old Ox Road
   c) Potentially cost between 103 and 118 Million including interchange

2. Traffic can operate acceptable with or without new roadway
Impact of the Horsepen Run Connector

• The additional Broad Run crossing will divert traffic from parallel roads

• Parallel crossings will accommodate forecasted traffic volumes with or without the Horsepen Run Connector

• The total estimated cost for the roadway and bridge is $28,000,000. This does not include the cost of an interchange that model results indicate would likely be needed at Old Ox Road.
Horsepen Run Connector at Old Ox Road

- An interchange is recommended due to heavy traffic volumes on Old Ox Road
- The interchange area is constrained by existing buildings, the Horsepen Run floodplain and the new Metro rail yard
- Construction of an interchange may require reconfiguration of the Dulles Greenway interchange
Silver CPAM

Additional Board Recommendations
Next Steps

- Direct Staff to Revise CPAM according to Board Direction
- Forward to Planning Commission for its review and recommendation
## Revised Project Schedule (Tentative)

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 2016</td>
<td>TLUC Briefing/Discussion and Board Feedback</td>
</tr>
<tr>
<td>November 2016</td>
<td>TLUC Meeting on Revised Draft Plan</td>
</tr>
<tr>
<td>November 2016</td>
<td>Board Discussion and Direction of TLUC’s Revised Draft Plan</td>
</tr>
<tr>
<td>January 2017</td>
<td>Planning Commission Public Hearing</td>
</tr>
<tr>
<td>February 2017</td>
<td>Planning Commission Work Session and Recommendation</td>
</tr>
<tr>
<td>March 2017</td>
<td>Board Public Hearing</td>
</tr>
<tr>
<td>March/April 2017</td>
<td>Board Endorsement of Draft Plan</td>
</tr>
<tr>
<td>June/July 2017</td>
<td>VDOT Completes Review Board Adopts CPAM</td>
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