TREND DEVELOPMENT SCENARIO

SCENARIO SUMMARY SHEET

The trend development scenario contemplates a future for the study area based on preferred development types, patterns, and intensities presented in the Loudoun County Comprehensive Plan and Zoning Ordinance. Suburban-scale, auto-dependent buildings on large lots generally support one or more “keynote” employment uses: corporate headquarters, office towers with parking decks, and mid-rise office buildings surrounded by surface parking lots. Data centers with security gates are also permitted under current zoning.

Residential development is not permitted in most of the study area under today’s “trend” policies. A special activity center identified north of the Loudoun Gateway Station (specific uses to be determined, but limited to non-residential categories) will be a future centerpiece for the area. Land in the floodplain for the Broad Run is preserved as open space.

Development Program:

Transportation investments in the study area follow closely the Loudoun Countywide Transportation Plan. Low-density development patterns and the physical distance between complementary uses (home – work – shopping) promote automobile travel.

Site design and building types assumed for vacant land in the study area were influenced largely by approved development plans and concept master plans available from Loudoun County. Market conditions anticipated through 2040 would not result in significant or widespread activity throughout the study area for the development types, patterns, and intensities called for in the Loudoun County Comprehensive Plan and Zoning Ordinance.

Aerial View of the Study Area (looking north) from Above Dulles International Airport Runway L1
The street network concept for the trend development scenario is for illustrative purposes only, and was created solely for testing different development types, patterns and intensities in the Loudoun County Land Use Scenario Planning Study. An actual future roadway network for the study area, or specific road alignments in the study area, will vary from the concept map and depend on the future land use plan and any appropriate revisions to the Countywide Transportation Plan.
The growth concept map for the trend development scenario is for illustrative purposes only, and created solely for testing different development types, patterns and intensities in the Loudoun County Land Use Scenario Planning Study. It is not intended to be something officially supported by the Loudoun County Board of Supervisors (or any county department participating in the scenario planning study) beyond the purpose stated above.
Note:
The growth allocation map (2040) for the trend development scenario is for illustrative purposes only, and was created solely for testing different development types, patterns and intensities in the Loudoun County Land Use Scenario Planning Study.
Space provided to take notes, make comments, or write down questions for further discussion.
Compact Development Scenario
COMPACT DEVELOPMENT SCENARIO

SCENARIO SUMMARY SHEET

The compact development scenario represents a paradigm shift in planning philosophy for the study area—one that transitions to compact activity centers or “town centers” with a mix of uses and densities throughout. The design and scale of development in the centers encourages active living, with many opportunities to live, work, shop and play in one community. The scenario also provides an environment more favorable to office tenants seeking a mixed-use environment.

A complete network of walkable streets supports multiple modes of transportation, including efficient transit service to Metro Stations. The diversity of close-by, complementary uses and local travel options within the activity centers encourages better distribution of trips and shorter trip lengths (although higher densities and increased activity at some intersections in the centers may result in increased congestion). Many residents and employees are expected to use Metrorail service to satisfy home-to-work and work-to-home trips into and out of the study area.

Undeveloped land surrounding one or more of the activity centers may be developed in the future or reserved for natural areas, open space, parks, county facilities, or future activity centers. A special activity center identified north of the Loudoun Gateway Station (specific uses to be determined, but limited to non-residential categories) will be a future centerpiece for the area.

All three activity centers presented in the scenario would become “unique places” over an extended period of time, which means county officials may need to take the long view for their full development. However, the current investment market for the Washington Region shows a strong preference for mixed-use, walkable, urban locations through 2040 (especially for areas near Metrorail service).

The compact development scenario implements many of the thoughts, ideas, and recommendations from the ULI Technical Assistance Panel Report dated May 8, 2014.

<table>
<thead>
<tr>
<th>Dwelling Units or Hotel Rooms at Full Build-Out</th>
<th>Square Feet at Full Build-Out</th>
</tr>
</thead>
<tbody>
<tr>
<td>FYT (2015)</td>
<td>HYT (2040)</td>
</tr>
<tr>
<td>SFD 0</td>
<td>BYT (2015) 0</td>
</tr>
<tr>
<td>SFA 0</td>
<td>HYT (2040) 0</td>
</tr>
<tr>
<td>MFA 257</td>
<td>0</td>
</tr>
<tr>
<td>MFAS 124</td>
<td>0</td>
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<tr>
<td>UMF 0</td>
<td>0</td>
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<tr>
<td>HLT 271</td>
<td>0</td>
</tr>
<tr>
<td>887,864</td>
<td>504,164</td>
</tr>
<tr>
<td>9,615,202</td>
<td>3,600,817</td>
</tr>
<tr>
<td>2,301,936</td>
<td>1,173,436</td>
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<tr>
<td>118,685</td>
<td>52,216</td>
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<tr>
<td>1,843,586</td>
<td>52,216</td>
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<tr>
<td>108,336</td>
<td></td>
</tr>
<tr>
<td>52,216</td>
<td></td>
</tr>
</tbody>
</table>

DATA – Data Center | IND – Industrial | OTR – Churches, Schools, Etc.
The street network concept for the compact development scenario is for illustrative purposes only, and was created solely for testing different development types, patterns and intensities in the Loudoun County Land Use Scenario Planning Study. An actual future roadway network for the study area, or specific road alignments in the study area, will vary from the concept map and depend on the future land use plan and any appropriate revisions to the Countywide Transportation Plan.
COMPACT DEVELOPMENT SCENARIO
GROWTH CONCEPT MAP

Note:
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Housing Choices Development Scenario

Loudoun County Land Use Scenario Planning Study
Board of Supervisors Presentation – September 16, 2015
HOUSING CHOICES DEVELOPMENT SCENARIO

The housing choices development scenario represents a suburban development pattern similar to what is seen in other parts of the County — one that recognizes strong, short-term demand for a variety of stand-alone, suburban-scale residential uses: single-family detached, single-family attached, multifamily attached, and multifamily stacked. Supporting suburban-scale, non-residential uses in the study area include: corporate headquarters, office towers with parking decks, mid-rise office buildings or shopping centers surrounded by parking lots, and data centers with security gates.

Low-density development patterns and the physical distance between complementary uses (home – work – shopping) promote automobile travel, particularly since transit cannot be provided efficiently to low-density development patterns and safe, convenient facilities are not easily available for pedestrians and bicyclists.

A special activity center identified north of the Loudoun Gateway Station (specific uses to be determined, but limited to non-residential categories) will be a future centerpiece for the area. Land in the floodplain for the Broad Run is preserved as open space.

Market conditions anticipated through 2040 support aggressive residential growth in the study area. Non-residential uses (except for data centers) in stand-alone buildings are expected to have more modest growth while the market seeks more mixed-use environments to develop.

Development Program:

**Dwelling Units or Hotel Rooms at Full Build-Out**

- **SFD** (Single-Family Detached)
- **SFA** (Single-Family Attached)
- **MFA** (Multifamily Attached)
- **MFAS** (Multifamily Stacked)
- **UMFA** (Urban Multifamily)
- **HTL** (Hotel)
- **DATA** (Data Center)
- **IND** (Industrial)
- **OTR** (Churches, Schools, Etc.)

**Square Feet at Full Build-out**

- **RET** (Retail)
- **OFF** (Office)
- **DATA** (Data Center)
- **IND** (Industrial)
- **OTR** (Churches, Schools, Etc.)

**Full Build-Out Potential**

- **427,464**

**Existing Development**

- **91**
- **2,109**
- **5,879**
- **124**
- **0**
- **1,329**

**Board of Supervisors Presentation – September 16, 2015**
The street network concept for the housing choices development scenario is for illustrative purposes only, and was created solely for testing different development types, patterns and intensities in the Loudoun County Land Use Scenario Planning Study. An actual future roadway network for the study area, or specific road alignments in the study area, will vary from the concept map and depend on the future land use plan and any appropriate revisions to the Countywide Transportation Plan.
The growth concept map for the housing choices development scenario is for illustrative purposes only, and created solely for testing different development types, patterns and intensities in the Loudoun County Land Use Scenario Planning Study. It is not intended to be something officially supported by the Loudoun County Board of Supervisors (or any county department participating in the scenario planning study) beyond the purpose stated above.
The growth allocation map (2040) for the housing choices development scenario is for illustrative purposes only, and was created solely for testing different development types, patterns and intensities in the Loudoun County Land Use Scenario Planning Study.
Loudoun County Land Use Scenario Planning Study

Space provided to take notes, make comments, or write down questions for further discussion.
The community workshop development scenario represents the project team’s synthesis of thoughts and opinions shared at events on August 26th and 27th, 2015. It generally represents a more intense version of the compact development scenario, including a highly-connected transportation system and several activity centers or “town centers” with a mix of uses and densities throughout.

The design and scale of development in the centers encourages active living, with many opportunities to live, work, shop and play in one community. The scenario also provides an environment more favorable to office tenants seeking a mixed-use environment.

A complete network of walkable streets supports multiple modes of transportation, including efficient transit service to Metrorail Stations. The diversity of close-in complementary uses and local travel options within the activity centers encourages better distribution of trips and shorter trip lengths (although higher densities and increased activity at some intersections in the centers may result in increased congestion). Many residents and employees are expected to use Metrorail service to facilitate home-to-work and work-to-home trips into and out of the study area.

Undeveloped land surrounding one or more of the activity centers may be developed in the future or reserved for natural areas, open space, parks, county facilities, or future activity centers. Two special activity centers identified north of the Loudoun Gateway Station (specific uses to be determined, but limited to non-residential categories) will be future centerpieces for the area.

The six activity centers presented in the scenario would become “unique places” over an extended period of time, which means county officials may need to take the long view for their full development. However, the current investment market for the Washington Region shows a strong preference for mixed-use, walkable, urban locations through 2040 (especially for areas near Metrorail service).
The street network concept for the community workshop development scenario is for illustrative purposes only, and was created solely for testing different development types, patterns and intensities in the Loudoun County Land Use Scenario Planning Study. An actual future roadway network for the study area, or specific road alignments in the study area, will vary from the concept map and depend on the future land use plan and any appropriate revisions to the Countywide Transportation Plan.

Legend:
- Study Area Boundary
- Future Metrorail Station
- Station Area Buffer (Quarter Mile)
- Station Area Buffer (Half Mile)
- Major Water Bodies
- Future Street Network

Note:
The street network concept for the community workshop development scenario is for illustrative purposes only, and was created solely for testing different development types, patterns and intensities in the Loudoun County Land Use Scenario Planning Study. An actual future roadway network for the study area, or specific road alignments in the study area, will vary from the concept map and depend on the future land use plan and any appropriate revisions to the Countywide Transportation Plan.
COMMUNITY WORKSHOP DEVELOPMENT SCENARIO

GROWTH CONCEPT MAP

Loudoun County Land Use Scenario Planning Study

Prepared by Stantec’s Urban Places Group

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The growth allocation map (2040) for the community workshop development scenario is for illustrative purposes only, and was created solely for testing different development types, patterns and intensities in the Loudoun County Land Use Scenario Planning Study.
Space provided to take notes, make comments, or write down questions for further discussion.
Side-By-Side Comparison of the Development Scenarios
## Potential Revenue & Expenditures (2040)

<table>
<thead>
<tr>
<th></th>
<th>BY</th>
<th>TD</th>
<th>CD</th>
<th>HC</th>
<th>CW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential Tax Revenue</td>
<td>$12.8 M</td>
<td>$43.7 M</td>
<td>$98.9 M</td>
<td>$85.3 M</td>
<td>$103.0 M</td>
</tr>
<tr>
<td>Cost of Facilities &amp; Services</td>
<td>$4.1 M</td>
<td>$10.6 M</td>
<td>$48.7 M</td>
<td>$60.5 M</td>
<td>$52.8 M</td>
</tr>
<tr>
<td>Net Revenue Potential</td>
<td>$8.7 M</td>
<td>$33.1 M</td>
<td>$50.2 M</td>
<td>$24.8 M</td>
<td>$50.2 M</td>
</tr>
<tr>
<td>Metro Tax District Revenue</td>
<td>$0.6 M</td>
<td>$1.9 M</td>
<td>$7.5 M</td>
<td>$6.7 M</td>
<td>$8.2 M</td>
</tr>
</tbody>
</table>

**BY** = Base Year (2015)  
**TD** = Trend Development Scenario  
**CD** = Compact Development Scenario  
**HC** = Housing Choices Development Scenario  
**CW** = Community Workshop Development Scenario
## Transportation System (2040)

<table>
<thead>
<tr>
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<th>HC</th>
<th>CW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicle Trip Generation</td>
<td>10,500</td>
<td>20,100</td>
<td>51,800</td>
<td>45,400</td>
<td>52,000</td>
</tr>
<tr>
<td>(new daily trips)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vehicle Miles Traveled</td>
<td>N/A</td>
<td>94%</td>
<td>97%</td>
<td>96%</td>
<td>____%</td>
</tr>
<tr>
<td>(% net increase, 2010 - 2040)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accessibility to Transit</td>
<td>N/A</td>
<td>1,220</td>
<td>16,360</td>
<td>17,115</td>
<td>18,100</td>
</tr>
<tr>
<td>(# of res. Living within ¼-mile of bus)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transit Efficiency</td>
<td>Very Low</td>
<td>Low</td>
<td>High</td>
<td>Medium</td>
<td>Very High</td>
</tr>
<tr>
<td>(service frequency &amp; cost per boarding)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walkable / Active Street Frontage</td>
<td>0 mi.</td>
<td>0 mi.</td>
<td>28.5 mi.</td>
<td>0 mi.</td>
<td>47.5 mi.</td>
</tr>
</tbody>
</table>

**Notes:**
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## Desirable Land Use Patterns (2040)

<table>
<thead>
<tr>
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<th>CD</th>
<th>HC</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Total Dwelling Units</td>
<td>124</td>
<td>618</td>
<td>9,053</td>
<td>5,887</td>
<td>10,039</td>
</tr>
<tr>
<td>Avg. Residential Density</td>
<td>19.1 du/ac</td>
<td>17.8 du/ac</td>
<td>56.7 du/ac</td>
<td>18.7 du/ac</td>
<td>41.3 du/ac</td>
</tr>
<tr>
<td>Dwelling Units in LDN 60</td>
<td>0</td>
<td>0</td>
<td>3,141</td>
<td>5,445</td>
<td>1,963</td>
</tr>
<tr>
<td>Housing Affordability</td>
<td>Limited</td>
<td>Limited</td>
<td>Choices</td>
<td>Choices</td>
<td>Choices</td>
</tr>
<tr>
<td>Acres of Open Space</td>
<td>419 ac</td>
<td>419 ac</td>
<td>694 ac</td>
<td>518 ac</td>
<td>514 ac</td>
</tr>
<tr>
<td>Number of Students</td>
<td>29</td>
<td>142</td>
<td>2,082</td>
<td>1,411</td>
<td>2,371</td>
</tr>
</tbody>
</table>

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# Employment Opportunities (2040)

<table>
<thead>
<tr>
<th></th>
<th>BY</th>
<th>TD</th>
<th>CD</th>
<th>HC</th>
<th>CW</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of Jobs</strong></td>
<td>5,576</td>
<td>13,632</td>
<td>21,292</td>
<td>13,851</td>
<td>20,211</td>
</tr>
<tr>
<td><strong>Mix of New Jobs</strong></td>
<td>OFF / DATA</td>
<td>OFF / DATA</td>
<td>RET / OFF / DATA</td>
<td>RET / OFF / DATA</td>
<td>RET / OFF / DATA</td>
</tr>
<tr>
<td><strong>Jobs-to-Housing Ratio</strong></td>
<td>44.97 j/ hh</td>
<td>22.05 j/ hh</td>
<td>2.35 j/ hh</td>
<td>2.35 j/ hh</td>
<td>1.96 j/ hh</td>
</tr>
</tbody>
</table>

*BY = Base Year (2015)  TD = Trend Development Scenario  CD = Compact Development Scenario  HC = Housing Choices Development Scenario  CW = Community Workshop Development Scenario*