envision LOUDOUN
our county • our future
Loudoun 2040 Comprehensive Plan

August 16, 2018 | Planning Commission Special Worksession
Recap: Decisions

1. Reformat Place Types Template
2. Remove Route 7/Route 28 UPA Designation
3. Consolidate Place Types
4. Develop Joint Land Management Area Place Types
5. Calculate Mixed Use Areas Using FAR
6. Incorporate Identified Items from Recommendations Lists
Meeting Workflow

- Consolidating Place Types
- Proposed Suburban & Urban Map Changes
- FAR/Density
- Additional Housing
- Data Center Uses
- Remaining Staff Recommendations
- Countywide Transportation Plan
Consolidating Place Types

Why Are Changes Needed?

• Too much overlap in Place Types of May 7th Loudoun 2040 draft
• Desire to condense the Place Types to make them easier to use
• Clearly show the priorities for the next 20 years
# Consolidated Place Types

<table>
<thead>
<tr>
<th>Current</th>
<th>Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suburban Regional Commercial</td>
<td>Suburban Mixed Use</td>
</tr>
<tr>
<td>Suburban Community Commercial</td>
<td></td>
</tr>
<tr>
<td>Suburban Mixed Neighborhood</td>
<td>Suburban Compact Neighborhood</td>
</tr>
<tr>
<td>Suburban Compact Neighborhood</td>
<td></td>
</tr>
<tr>
<td>Transition Commercial Center</td>
<td>Transition <em>Something</em></td>
</tr>
<tr>
<td>Transition Village</td>
<td></td>
</tr>
</tbody>
</table>
# Consolidated Place Types

<table>
<thead>
<tr>
<th>Current</th>
<th>Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special Activity</td>
<td>No longer a Place Type</td>
</tr>
<tr>
<td>Parks and Recreation</td>
<td>(continue to show parks on Place Types map)</td>
</tr>
</tbody>
</table>
### Further Place Type Consolidation

<table>
<thead>
<tr>
<th>Current</th>
<th>Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suburban Regional Commercial</td>
<td>Suburban Mixed Use</td>
</tr>
<tr>
<td>Suburban Community Commercial</td>
<td></td>
</tr>
<tr>
<td>Suburban Town Center</td>
<td></td>
</tr>
<tr>
<td>Suburban Employment</td>
<td>Suburban Employment</td>
</tr>
<tr>
<td>Suburban Light Industrial</td>
<td><em>(some land reclassified to Suburban Mixed Use)</em></td>
</tr>
<tr>
<td>Urban Community Commercial</td>
<td></td>
</tr>
<tr>
<td>Urban Community</td>
<td>Urban Mixed Use</td>
</tr>
</tbody>
</table>
Proposed Suburban & Urban Map Changes

- Consolidated Place Types
- Further Place Type Consolidation
- Former Route 7 Urban Area

Aim:
- *Bring clarity to where certain uses should go*
- *Will still keep the vision and density sought for all areas*
Mapping Consolidated Place Types

Changes Made:

• All Suburban Light Industrial to Suburban Employment
• Suburban Community Commercial, Suburban Regional Commercial, and Suburban Town Center consolidated to Suburban Mixed Use
• Some areas of original Suburban Employment shifted to Suburban Mixed Use to better match intent
• Special Activity to surrounding Place Types
• Urban Neighborhood and Urban Community Commercial to Urban Mixed Use
• Old Ashburn identified as an area to evaluate further per previous Commission decision

Missing Changes:

• All Suburban Mixed Neighborhood to Suburban Compact Neighborhood
Mapping Former Route 7 Urban Area

Changes Made:

• Areas along Route 7/Route 28 change to Suburban Mixed Use (SMU) except for the southern portion of Kincora which will be Suburban Employment (SE)
Other Place Type Considerations

• Preference on how to achieve the Suburban Compact Neighborhood and small Suburban Mixed Use
  • Currently both are small pockets throughout the Suburban Policy Area

Options:
• Keep them both as their own Place Types
  • Show on the Map and have their own sheet of characteristics
• Fold them into another Place Type and have a policy about each of them
  • Policies would explain when these styles of development would be allowed
  • Criteria would be listed that would need to be met in order to use the higher density or different use mix
FAR / Density

• The main decision point is to determine the character that is desired for areas within the County.
  • *Intensity/Density are set by desired character.*
# Current Issues with Place Type Intensity/Density Numbers

<table>
<thead>
<tr>
<th>Place Type</th>
<th>FAR</th>
<th>Residential %</th>
<th>Residential Density (du/ac)</th>
<th>Total Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Draft Loudoun 2040 Plan Numbers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban Transit Center (inner core)</td>
<td>Up to 6.0</td>
<td>0 to 80%</td>
<td>32 to 125</td>
<td>6,250</td>
</tr>
<tr>
<td><strong>Calculated Density</strong></td>
<td></td>
<td>6.0</td>
<td>80%</td>
<td>10,454</td>
</tr>
<tr>
<td>Urban Transit Center (outer core)</td>
<td>Up to 4.0</td>
<td>0 to 80%</td>
<td>24 to 48</td>
<td>2,400</td>
</tr>
<tr>
<td><strong>Calculated Density</strong></td>
<td></td>
<td>4.0</td>
<td>80%</td>
<td>6,970</td>
</tr>
<tr>
<td><strong>Draft Loudoun 2040 Plan Numbers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suburban Regional Commercial</td>
<td>Up to 2.0</td>
<td>0 to 50%</td>
<td>8 to 24</td>
<td>1,200</td>
</tr>
<tr>
<td><strong>Calculated Density</strong></td>
<td></td>
<td>2.0</td>
<td>50%</td>
<td>2,178</td>
</tr>
</tbody>
</table>

**Assumptions:** 50 acre site, 1,000 SF average unit size, Developed at maximum FAR
Additional Housing

• Loudoun is facing housing affordability issues, and the final housing forecast indicates to Staff that there is a need to further address housing through land use and housing policies.
  • Loudoun is currently missing a range of housing types: the “missing middle.”

• Proposal: Include limited SFA on the fringe of the Urban Policy Areas
## Market & Constrained Forecasts Residential Results

<table>
<thead>
<tr>
<th></th>
<th>SFD</th>
<th>SFA</th>
<th>MF</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Demand</strong></td>
<td>28,370</td>
<td>23,480</td>
<td>23,020</td>
<td>74,870</td>
</tr>
<tr>
<td><strong>Revised General Plan</strong></td>
<td>10,513</td>
<td>4,144</td>
<td>14,808</td>
<td>29,465</td>
</tr>
<tr>
<td><strong>Loudoun 2040</strong></td>
<td>12,144</td>
<td>7,160</td>
<td>18,888</td>
<td>38,192</td>
</tr>
<tr>
<td><strong>Difference</strong></td>
<td>16,226 (42%)</td>
<td>16,320 (30.5%)</td>
<td>4,132 (82%)</td>
<td>36,678 (51%)</td>
</tr>
</tbody>
</table>

Countywide Residential Units through 2040
(Net New Units)
Transition Policy Area

- Error in Plan for Upper Broad Run: Should also include **1 DU per 3 Acres** to reflect current RGP policy
RPA Land Conversion to TPA

- Land Bay P1/P2
  - **Current:**
    - .05 du/a if < 20 acres
    - .2 du/a if >/= 20 acres
    - Total units allowed: 85
  - **Proposed:**
    - 1 du/a in P1
    - Light Industrial in P2
    - Total units allowed: 181
  - **Difference of 96 units above RGP**
**RPA Land Conversion to TPA**

- **Land Bay Q1**
  - **Current:**
    - .05 du/a
    - Total units allowed: 114
  - **Proposed:**
    - 1 du/a
    - Total units allowed: 356
  - **Difference of 242 units above RGP**
Data Center Uses

• Refer to map of Place Types allowing Data Centers
envision
LOUDOUN
our county • our future
Loudoun 2040 Countywide Transportation Plan (CTP)

Planning Commission

August 16, 2018 | Loudoun County Comprehensive Plan
Transportation Policy Intent

This Plan Strives for:

• Greater clarity
• Streamlined policies
• Greater flexibility where appropriate
• Maintenance of supportable policy goals
• More context-sensitive transportation planning
• Improved integration with the General Plan
Transportation Policy Intent

Development of plan policy considered:

- Public Input
- Incorporation of 2003 Bicycle & Pedestrian Mobility Master Plan
- Incorporation of 2010 Countywide Transportation Plan
- Incorporation of draft Silver Line CPAM
- Alterations based upon County CIP expansion since 2010
- Stakeholder Committee
Considerations During Drafting

• Protect existing/planned aesthetic and context for each of the geographic policy areas in accordance with the General Plan
• Enhance relationship between General Plan and Transportation Plan policies
• Clarify definitions and policies
• Standardize plan and streamline policies to improve plan accessibility
• Create opportunities for better integration and place-making
Loudoun 2040 CTP Network Development & Evaluation

• Modifications made from currently adopted CTP to address Envision Loudoun proposed land use
• Public Outreach
• Stakeholders Committee
• Travel demand modeling exercise was used to evaluate the performance of the transportation network with the proposed land use plan
Transportation Roadway Network Development

Reviewed Existing and Planned County Road Network

- Existing vehicular, bicycle, and pedestrian facilities
- 2040 demand generated by Silver Line CPAM and RGP land uses
- Impacts from draft land use plan
- Opportunities for optimizing use of existing roads

Evaluated where road network changes might be needed

Considered the impacts of demand on the regional transportation system
Benefits of Identified Road Corridors

Reconsideration of Functional Classification

• Based on FHWA and VDOT Standards
• Will provide improved opportunities for regional funding
• Will facilitate improved information for BOS prioritization efforts

Preservation of Historic Corridors

• Provides specific designation for design and ultimate planned condition of corridor
Benefits of Identified Road Corridors

Addition of Neighborhood Collectors

- Highly-trafficked local streets
- Opportunities for improved multimodal provisions within existing section
- Help facilitate improved quality of life and community connectivity
- Provides VDOT with County direction for low-cost improvements
Key Changes from 2010 CTP

US Route 50 Alternate

- North of Route 50
- Direct route between Route 28 and Loudoun County Parkway
- Potentially Limited Access – Coordinated with MWAA

Route 606 Interchanges

- Identifies additional preliminary interchange locations on Route 606 (subject to future study)
- Allows County to ensure right-of-way is available
- Identifies opportunities for parallel collector roads
Key Changes from 2010 CTP

Lower Sycolin Road Network
- Enhanced network to support industrial development

Upper Broad Run Road Network
- Identification of additional roadway corridors to preserve network
- Consideration of more rural character to preserve desired aesthetic

Silver Line CPAM Network
- Incorporated into this plan as endorsed by Planning Commission with amendments approved by the BOS
Key Changes from 2010 CTP

Network Changes

• *Added 18 New Unbuilt Roadways*  
   (Red Color on Changes from 2010 CTP Map)

• *Added 79 Existing Built Roadways*  
   (Blue Color on Changes from 2010 CTP Map)
Transportation Demand Modeling
Transportation Demand Modeling – Envision Loudoun Scenario Results

Urban & Suburban Policy Area Capacity Constraints

• **Route 7 - Belmont Ridge Road to the Fairfax County Line**
  • Capacity remains available on parallel routes such as the Dulles Greenway, Gloucester Parkway, Riverside Parkway, and Russell Branch Parkway.

• **Connections around the future Metrorail Stations**
  • Including: Loudoun County Parkway, Metro Center Drive, Barrister Street, Route 606, and Moran Road.

• **The capacity constraints present on Route 28 and the intersecting roadways such as Waxpool Road, Gloucester Parkway, and Route 7 suggest that travel demand may be avoiding the Dulles Greenway.**
Transportation Demand Modeling – Envision Loudoun Scenario Results

Rural Policy Area Capacity Constraints

• Route 9 - west of Hillsboro, east of Route 287
• Route 287 north of Purcellville
• US Route 15 - Montresor Road to the Maryland Line
• Route 7 - Round Hill to Purcellville
• US Route 50 near Middleburg and Aldie
• US Route 15 south of US Route 50 into Prince William County

Transition Policy Area Capacity Constraints

• US Route 50 between US Route 15 and Northstar Boulevard
• Braddock Road between US Route 15 and Northstar Boulevard
• Gum Spring Road at the Prince William County line
Envision Loudoun Model & Currently Adopted Model

**Consistent constraints between both models**

- Route 7 and Route 28
- Arcola Boulevard / Gum Spring Road Corridor
- US 50 / US Route 15 Intersection
- Rural Corridors

**Improvement with Envision Loudoun Model**

- Route 606 constraints are improved by additional lane capacity between Loudoun County Parkway and Dulles Greenway (6 lanes in current CTP to 8 lanes in Envision Loudoun)
Transportation Demand Modeling – CTP Conclusions

• The proposed CTP network consists of improvements to an already robust transportation plan that largely addresses the travel demands of the Envision Loudoun land use plan.

• Limited access and capacity improvements on Route 7, US Route 50, Route 606 enable corridors to operate with few constraints.
  • Parallel routes to these major arterials have capacity as well.

• Growth and travel demand in neighboring jurisdictions create constraints along rural arterials.
Transportation Demand Modeling – CTP Conclusions

Rural Primary Roadway Recommendations

- No changes are currently proposed to add additional capacity to rural primary corridors in the draft Loudoun 2040 CTP.

- The draft Loudoun 2040 CTP reflects the currently adopted CTP for US Route 15 between Leesburg and Montresor Road, incorporating the four-lane widening approved by the Board in March 2018.

- Rural primary routes will be further evaluated based Board of Supervisors directed Safety and Operational Studies (SOS). This includes the ongoing study for US Route 15 north of Leesburg and the recently authorized (July 3, 2018) studies for Route 9 and US Route 15 south of Leesburg.

- Future Safety and Operational Studies are anticipated to be funded in future fiscal years for US Route 50, Route 287, and Route 7 west of Round Hill.
Questions?
DTCI
Recommendations
# Overall Recommendations

## DRAFT Staff Recommendations

Loudoun 2040 Countywide Transportation Plan

<table>
<thead>
<tr>
<th>#</th>
<th>DTCL Recommendation</th>
<th>Location</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Remove references to the Village of Ashburn (potentially refer to this area as, &quot;Old Ashburn&quot;)</td>
<td>Overall</td>
<td>Staff</td>
</tr>
<tr>
<td>2</td>
<td>Promote Sustainable Regional Mobility</td>
<td>Overall</td>
<td>Public Input</td>
</tr>
<tr>
<td>3</td>
<td>Install electric vehicle charging stations at County park and ride lots and encourage electric vehicle charging station installation at private parking lots</td>
<td>Overall</td>
<td>Public Input</td>
</tr>
<tr>
<td>4</td>
<td>Add additional pictures and infographics to further explain and clarify items in the plan</td>
<td>Overall</td>
<td>Public Input and Staff</td>
</tr>
<tr>
<td>5</td>
<td>Continue refinement of the bicycle and pedestrian network and clarify the facilities on the Bicycle and Pedestrian Map</td>
<td>Overall</td>
<td>Public Input and Staff</td>
</tr>
</tbody>
</table>
Chapter 1 & 2 Recommendation

<table>
<thead>
<tr>
<th>#</th>
<th>DTCL Recommendation</th>
<th>Location</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Consider combining Chapters 1 and 2; Possibly categorize Chapter 1 as a Preface</td>
<td>Chapters 1 and 2</td>
<td>Public Input</td>
</tr>
</tbody>
</table>
# DTCI Recommendation Location Basis

<table>
<thead>
<tr>
<th>#</th>
<th>Recommendation</th>
<th>Location</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Revise Functional Classification description to clarify Level 3 Principal Arterial terminology with respect to US 15 and certain other rural roadways.</td>
<td>Chapter 3</td>
<td>Staff</td>
</tr>
<tr>
<td>8</td>
<td>Add the Washington and Old Dominion Trail to Policy 3-2.13</td>
<td>Chapter 3</td>
<td>Public Input</td>
</tr>
<tr>
<td>9</td>
<td>Amend the Roadway Design Toolkit to specify the use of native plants and shrubs to reduce maintenance and increase sustainability.</td>
<td>Chapter 3</td>
<td>Public Input</td>
</tr>
<tr>
<td>10</td>
<td>Under maintenance, page 3-3: add the underlined in the first paragraph &quot;Roads are generally maintained either by VDOT or through private associations, such as homeowners associations. VDOT’s Road Design Manual, Road and Bridge Standards, and Secondary Street Acceptance Requirements (SSAR), which is currently part of the VDOT Road Design Manual, contain design and construction standards required for roads to be incorporated into the State Highway System and for road improvements for those facilities already a part of the State Highway System.&quot;</td>
<td>Chapter 3</td>
<td>STAC- VDOT</td>
</tr>
<tr>
<td>11</td>
<td>Amend language of Policy 3-1.26 to include the use of geometric design elements, such as roadway curvature, to control speed and minimize the need for future traffic calming measures. Language to this effect is in the currently adopted CTP.</td>
<td>Chapter 3</td>
<td>STAC- VDOT</td>
</tr>
<tr>
<td>12</td>
<td>Add a policy statement reflecting county’s position to widen existing divided roadways to the inside wherever feasible. This will allow for the ultimate right-of-way, turn-lanes, bicycle and pedestrian facilities, and drainage systems to be established with the initial widening in an effort to minimize the impact of adjacent properties.</td>
<td>Chapter 3</td>
<td>Staff</td>
</tr>
</tbody>
</table>
### Chapter 4 & 5 Recommendations

<table>
<thead>
<tr>
<th>#</th>
<th>DTCI Recommendation</th>
<th>Location</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>Add specific language regarding roundabouts to the suburban, transition, and rural policy area built environment policies. This is consistent with VDOT guidance for roundabout placement.</td>
<td>Chapter 4</td>
<td>Public Input and Staff</td>
</tr>
<tr>
<td>14</td>
<td>Add language to Policy 4-4.16 to prioritize facilities within and between rural activity centers.</td>
<td>Chapter 4</td>
<td>Public Input</td>
</tr>
<tr>
<td>15</td>
<td>Refine Chapter 5 to include information provided in MWAA Staff Technical Committee Comments.</td>
<td>Chapter 5</td>
<td>STAC- MWAA</td>
</tr>
</tbody>
</table>
## Chapter 7 Recommendations

<table>
<thead>
<tr>
<th>#</th>
<th>DTCI Recommendation</th>
<th>Location</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>Add language to ensure multi-way stop conditions, mid-block marked crosswalks, and marked crosswalks across uncontrolled approaches are not installed prior to acceptance by VDOT; unless supported by an engineering study.</td>
<td>Chapter 7</td>
<td>STAC- VDOT</td>
</tr>
<tr>
<td>17</td>
<td>Refine Chapter 7 to include information provided in MWAA Staff Technical Committee Comments.</td>
<td>Chapter 7</td>
<td>STAC- MWAA</td>
</tr>
</tbody>
</table>
# DRAFT Staff Recommendations

## Loudoun 2040 Countywide Transportation Plan

<table>
<thead>
<tr>
<th>#</th>
<th>DTCl Recommendation</th>
<th>Location</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>Provide measureable goals, benchmarks, and actions in the plan.</td>
<td>Chapter 10</td>
<td>Public Input, Stakeholders, and Staff</td>
</tr>
<tr>
<td>19</td>
<td>Set goals for increased mode share for walking, bicycling and transit use, as well as reduction of vehicle miles traveled.</td>
<td>Chapter 10</td>
<td>Public Input and Staff</td>
</tr>
</tbody>
</table>
## Glossary Recommendation

<table>
<thead>
<tr>
<th>#</th>
<th>DTCL Recommendation</th>
<th>Location</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>Enhance glossary terms to be more inclusive and improve clarity</td>
<td>Glossary</td>
<td>Public Input and Staff</td>
</tr>
</tbody>
</table>
# CTP Map Recommendations

## DRAFT Staff Recommendations

<table>
<thead>
<tr>
<th>#</th>
<th>DTCL Recommendation</th>
<th>Location</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>Retain note on Draft Loudoun 2040 Countywide Transportation Map that the design of any future improvements to Edwards Ferry Road will consider scenic and historic resources along the roadway</td>
<td>Maps</td>
<td>Staff</td>
</tr>
<tr>
<td>22</td>
<td>Update Road Names on Draft Loudoun 2040 Countywide Transportation Maps to be consistent with street naming ordinance, current street names, and naming conventions where possible</td>
<td>Maps</td>
<td>Staff</td>
</tr>
<tr>
<td>23</td>
<td>Refine Draft Loudoun 2040 Countywide Transportation Maps to include information provided in MWAA Staff Technical Committee Comments.</td>
<td>Maps</td>
<td>STAC- MWAA</td>
</tr>
<tr>
<td>24</td>
<td>Add general note to Draft Loudoun 2040 Countywide Transportation Maps: As this is a conceptual document and a planning tool, some street names do not conform to the county street naming ordinance, actual street names must conform to the county street naming ordinance.</td>
<td>Maps</td>
<td>Staff</td>
</tr>
<tr>
<td>25</td>
<td>Update street type abbreviations per USPS abbreviations</td>
<td>Maps</td>
<td>Staff</td>
</tr>
<tr>
<td>26</td>
<td>Include the existing four Washington and Dulles International Airport runways and the location of the future fifth runway on Loudoun County 2040 Countywide Transportation Plan maps</td>
<td>Maps</td>
<td>Stakeholders, STAC, and Staff</td>
</tr>
<tr>
<td>27</td>
<td>Add Red Hill Road to the CTP roadway map as a minor collector to provide an additional east-west connection between Watson Road and Evergreen Mills Road.</td>
<td>Maps</td>
<td>Staff</td>
</tr>
<tr>
<td>28</td>
<td>Change Loudoun 2040 Roadway Plan Map - Roadway Locational Note E to be as follows: The alignment of Pacific Boulevard from Old Ox Road to Innovation Avenue, including a westbound ramp to access the Dulles Greenway, will be determined as part of a future study in coordination with MWAA.</td>
<td>Maps</td>
<td>Staff</td>
</tr>
</tbody>
</table>
Additional DTCLI Recommendations
Additional DTCl Recommendations

• Further clarify the functional classification description for certain Principal Arterials including Route 15 North of Leesburg

• Revise location of Pacific Blvd South of Route 606 (Old Ox Road) through MWAA property

• Update Modeling Network Maps per public comment received after Stakeholders Committee

• Further review of proposed Dulles West Boulevard between Northstar Boulevard and Fleetwood Road
Questions?