What is density?
Density is generally the number of dwelling units per acre, calculated using only primary dwelling units. Residential zoning districts have maximum density limits. It is a measure of development intensity, but does not necessarily determine design. For example, a building with 12 dwelling units on a quarter-acre of land equals a density of 48 dwelling units/acre, and a 300-unit apartment complex on 6 acres comes in at 50 dwelling units/acre. In Durham's UDO, each residential zoning district establishes a maximum residential density.

What are lot dimensions?
The Unified Development Ordinance (UDO) establishes the minimum lot size and width of a platted lot in order to ensure sufficient space on site for the intended land use, and to create or maintain a consistent character of development. In Durham’s UDO, lot dimensions for residential zoning districts are dependent on both the Zoning District and the Housing Type.

What are flag lots?
As defined in the UDO, it is a lot with two distinct parts:

1. The flag, which is the only building site; meets the lot width requirement of the zoning district; and is located behind another lot; and

2. The pole, which connects the flag to the street; provides the only street frontage and access for the lot; and at any point is less than the minimum lot width for the zone.

How do density and lot dimensions work together?
Subdividing lots for new residential development must take into consideration both the density limits and dimensional requirements. A project may be able to meet dimensional standards, but if it would produce more units than what the density maximum would allow, it cannot be done.
Existing Conditions
An analysis of the Urban Tier demonstrates that just over half (57%) of the lots in residential zoning districts are over 8,000 square feet (SF). In the Suburban Tier, there are a higher percentage of small lots less than 5,000 SF, but a greater percentage (71%) of lots in residential districts are over 8,000 SF.

Zoning Background
- 1926 Zoning Ordinance: Regulated the lot width and area of single-family and two-family lots equally. Only four residential zoning districts—“A” (single-family), “B” (two-family), and “C” and “D” (multifamily).
- Future ordinances, including the current UDO, began to distinguish between single-family, duplex, and triplex lot requirements.
- Subsequent zoning ordinances also established additional, stratified zoning districts with various lot dimensional standards.
- Prior to the UDO, zoning ordinances allowed for various housing types such as single-family, duplex, triplexes, apartments, townhomes, and zero lot-line. The UDO explicitly differentiated them and changed some such as eliminating “triplex” and creating “multiplex”, or creating additional single-family housing types such as attached, traditional, and patio.
• 1994 Merged Zoning Ordinance- Transitioned the “RG” District to the R-3 zoning district and eliminated the ability for quads, while retaining the allowance for duplexes and triplexes, and maintaining additional lot area and width requirements.

• 2006 UDO- Transitioned the R-3 district to RU-5(2) and eliminated the allowance for triplexes and increased the lot requirements for duplexes from 6,000 square feet to 7,000 square feet.

• The UDO introduced density limitations for residential zoning districts. Previous zoning ordinances only regulated by lot dimensional standards.

• Flag lots have been typically allowed, but the UDO provided pole width minimum standards and yard requirements.

Summary of Existing Zoning Regulations

• Minimum lot dimensions are a function of both zoning district and housing type, and applies to both infill development and subdivision of land.

• Several options exist to reduce lot dimensions or allow flexibility:
  
  o **Affordable Housing Bonus.** When using the Affordable Housing Bonus, the lot area, width and yard requirements can be reduced up to 20 percent for single-family and duplex developments.
  
  o **Lot Averaging.** In subdivisions reductions to minimum lot area are possible where the average size of all of the residential lots meets minimum standards, but individual lots can only be reduced up to 15%.
  
  o **Cluster Subdivisions.** Where allowed (project area must be greater than 4 acres), cluster subdivisions offer flexibility for lot layout and size in exchange for the preservation of open space. Density limits cannot be exceeded.
  
  o **Conservation Subdivisions.** Only allowed in the Residential Rural (RR) zoning district, it allows for more lot design flexibility in trade for at least 50% of area protected/conserved. A modest increase in density is also allowed.

• The table below is an example of existing minimum dimensional standards using the various single-family detached housing types currently available in the UDO. For simplicity, conventional subdivision requirements are shown (lot averaging and cluster subdivisions are not shown).¹

¹ The 5,000 square foot minimum lot sizes are historically consistent zoning regulations. The 1940 zoning ordinance required a minimum lot size of 5,000 square feet for single-family (“Residence zone ‘A’”) and two-family (“Residence zone ‘B’”) zones.
### Minimum Lot Area and Width (square feet; feet) for Housing Types by Zoning District

<table>
<thead>
<tr>
<th></th>
<th>RS-20</th>
<th>RS-10</th>
<th>RS-8</th>
<th>RS-M</th>
<th>RU-5/ RU-5(2)</th>
<th>RU-M</th>
<th>RC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-Family Detached</td>
<td>20,000; 100</td>
<td>10,000; 75</td>
<td>8,000; 60</td>
<td>5,000; 35</td>
<td>5,000; 45</td>
<td>3,500; 35</td>
<td>5,000; 35</td>
</tr>
<tr>
<td>Zero Lot Line</td>
<td>--</td>
<td>10,000; 75</td>
<td>8,000; 60</td>
<td>5,000; 35</td>
<td>5,000; 45</td>
<td>3,500; 35</td>
<td>5,000; 35</td>
</tr>
<tr>
<td>Traditional</td>
<td>20,000; 100**</td>
<td>10,000; 75**</td>
<td>8,000; 60**</td>
<td>5,000; 35**</td>
<td>5,000; 45</td>
<td>3,500; 35</td>
<td>5,000; 35</td>
</tr>
<tr>
<td>Patio (per dwelling)**</td>
<td>--</td>
<td>3,000; 35</td>
<td>3,000; 35</td>
<td>3,000; 35</td>
<td>3,000; 35</td>
<td>3,000; 35</td>
<td>3,000; 35</td>
</tr>
<tr>
<td>Semi-Attached (per dwelling)***</td>
<td>--</td>
<td>3,000; 35</td>
<td>3,000; 35</td>
<td>3,000; 35</td>
<td>3,000; 35</td>
<td>3,000; 35</td>
<td>3,000; 35</td>
</tr>
<tr>
<td>Duplex</td>
<td>--</td>
<td>--</td>
<td>7,500; 60</td>
<td>--</td>
<td>7,000; 50</td>
<td>7,000; 50</td>
<td>7,000; 50</td>
</tr>
<tr>
<td>Townhouse</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>*</td>
<td>--</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Multiplex</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>*; 70</td>
<td>--</td>
<td>*; 70</td>
<td>*; 70</td>
</tr>
<tr>
<td>Apartment</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>*; 75</td>
<td>--</td>
<td>*; 75</td>
<td>*; 75</td>
</tr>
</tbody>
</table>

* Lot Area not specified.
** The regulations for Traditional House specifically do not allow them in RS districts. However, the same standards associated with Traditional House are found within the standards for the Single-Family Detached housing type.
*** These housing types have additional “per building” or “per group” area requirements.

- **Flag lots**
  - Allowed by-right
  - Minimum pole width for a flag lot is 20 feet.
  - Lot area and width requirements apply.

- **Density**
  The zoning regulations also regulate by density limits. Thus, if a lot could be subdivided with lots that meet base zoning dimensional standards, it may not be allowed based upon density limits. The table below provides the current density allowances per zoning district.

### Maximum Density by Zoning District

<table>
<thead>
<tr>
<th></th>
<th>RS-20</th>
<th>RS-10</th>
<th>RS-8</th>
<th>RS-M</th>
<th>RU-5/ RU-5(2)</th>
<th>RU-M</th>
<th>RC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. Density (dwelling unit/acre)</td>
<td>2</td>
<td>4</td>
<td>5</td>
<td>8 (18 with a development plan)</td>
<td>8</td>
<td>12 (20 with a development plan)</td>
<td>Core: 53 Support: 20</td>
</tr>
</tbody>
</table>
Summary of Survey Results

**Summer 2018**

**Question:** To better understand the impacts of expanding housing choices, please rate how you feel about allowing more housing types in your neighborhood (see chart).

This question does not ask specifically about lot dimension or density standards, but broad array of issues that relate to this topic. Overall, respondents appeared to hold a wide variety of opinions about the impact of expanding housing choices.

For details refer to Attachment C.

**November 2018- January 2019**

This survey asked respondents to comment on specific proposals regarding lot dimensions, density, and the proposed small house/small lot standards via “Right direction”, “Wrong direction”, or “Don’t Know/Uncertain”. Questions included incremental reductions in lot dimensional standards, incremental increases to density limits, and the proposed standards for the new small house/small lot concepts.

For questions regarding lot dimensions and density, responses were over 55% for “Right direction”.

For questions regarding small house standards, responses were over 75% for “Right direction”.

For details refer to Attachment E.
Additional Considerations
- In existing neighborhoods, reducing the minimum lot area could allow property owners to more easily subdivide their lot into two lots and add to the stock of housing. There are justifiable concerns about encouraging teardowns, particularly in neighborhoods with relatively small homes. However, market forces are already incentivizing this trend.
- Additionally, the relatively large lot development pattern has allowed for big backyards with mature trees important for wildlife, reducing the urban heat island, sequestering carbon, and improving the aesthetic of the community. Adjusting lot sizes to allow for more rooftops will impact impervious surface and the tree canopy.
- For new subdivisions, reducing the minimum lot areas could allow for a greater number of units to be built; however, the development would still be required to meet density standards.
- Approximately 1,050 properties within the Suburban Tier are zoned with RU zoning.
- Flag lots allow for subdivision of very deep lots, but also require somewhat wider lots to accommodate the minimum pole width requirements.

Summary of Proposed Revisions to Existing Regulations
- Current lot dimensional and density standards are maintained. A density bonus option is proposed that would allow two dimensional reduction/density increase options. Each option would also have a set of additional requirements or limitations.
  - **Option A**: A one-increment reduction in lot dimensional standards would be allowed (i.e., within the Urban Tier, the RS-8 minimum lot dimensions can be reduced to 5,000 square feet; 45-foot lot width). Density limits would also be increased (see table). In addition to any other applicable standards, the driveway location would be required to run along the side of the primary structure, require a ribbon driveway, require an additional tree, and require downspout placement. This option would not apply to RS-20 or RU-M.

<table>
<thead>
<tr>
<th>Maximum Residential Density by Zoning District</th>
<th>Base Allowance</th>
<th>Option A Allowance</th>
</tr>
</thead>
<tbody>
<tr>
<td>RS-20 (Urban Tier)</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>RS-10 (Urban Tier)</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>RS-8 (Urban Tier)</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>RS-M (Urban Tier)</td>
<td>$8^{1}/18^2$</td>
<td>$12^{1}/20^2$</td>
</tr>
<tr>
<td>RU-5</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>RU-5(2)</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>RU-M</td>
<td>$12^{1}/20^2$</td>
<td>$12^{1}/20^2$</td>
</tr>
<tr>
<td>RC (Support)</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>RC (Core)</td>
<td>53</td>
<td>53</td>
</tr>
</tbody>
</table>

1. Without a Development Plan
2. With a Development Plan
o **Option B** (formerly called *Small House/Lot Type*): A further lot and width reduction to 2,000 square feet and 25 feet is allowed, with an additional density increase to 12 units/acre, but with additional restrictions on building size, height, driveway location, and ADUs. This option would not apply to RS-20. This option would still allow as either single-family or duplex, but no ADUs would be allowed.

- The lot dimensional standards for “duplexes” and “single-family attached housing types” are aligned with the standard single-family detached housing type. These two housing types are very similar, the difference being that a duplex is a structure with two units on one lot, and the single-family attached is a structure with two units, but the units are on individual lots (like a two-unit townhouse building).
- Deletion of the Patio Home Housing Type, and modify the Attached Single-Family housing type to be consistent with Duplex and Detached Single-family dimensional standards.
- **Other development standards being modified:**
  o Lot width for Multiplexes is reduced from 75 feet wide to 50 feet only in the Urban and compact Neighborhood Tier.
  o Deletion of “total side yards” from Urban Tier requirements. Individual side yard requirements are maintained except for RS-8 which is reduced from 9 to 7 feet.
  o Deletion of the building separation requirement from shared parking in the Urban Tier for townhouses, multiplexes, and apartments. This allows more space on the lot devoted to the housing and not parking.
  o For larger townhouse developments, increase the allowance of two-unit building configurations in the Urban Tier from 25% to 50%.
  o Allow multiplexes as an allowable housing type for the current Thoroughfare Density Bonus (currently only allows townhomes).
  o Allow duplexes and townhomes in cluster and conservation subdivisions. This allows more flexibility in housing types within these subdivisions. These primarily develop in the Suburban Tier. No changes to the current density allowances are proposed.
  o Allow a narrow-pole option for flag lots (minimum 12 feet wide), limited to one from a parent lot, with additional limitations on building size and ADUs.

**Differences from the November Proposed Revisions**
The following changes have been incorporated into the revised draft as a result of feedback from the community.

- The proposed lot reductions and density increases are re-organized as a bonus program (option A). The reductions would still be by-right (requiring administrative approvals) but there are additional requirements in order to take advantage of the increased yield.
- The Small House/Small lot housing type is also incorporated into the lot reduction bonus method, with additional limitations (Option B).
- A density limit of 12 units/acre or the density allowed by the zoning district, whichever is greater, is proposed for Option B (formerly the Small House/Small lot proposed housing type). The November proposed revisions had no density limit.
- No ADUs would be allowed for narrow-pole flag lots and the Option B lot reduction allowance.
- The Attached Single-Family Housing Type (formerly called “Semi-attached”) has been modified to be consistent with the changes made for Duplexes. These are similar housing types (generally two units in a single structure), but the attached single-family
has a property line running between the two units and therefore each unit is technically on its own lot.

- A RS-8 side yard reduction is proposed to prevent a substantial increase in nonconforming structures. The proposed lot reduction allowances would bring many RS-8 lots into conformity with the zoning requirements (many were too small for the current RS-8 standards). Lots with nonconforming lot widths currently receive a 20% side yard reduction (many RS-8 lots fall into this category). Therefore, a side yard reduction is proposed (which equates to 20%) in order to not create a substantial amount of nonconforming structures.

The changes implemented from the November draft respond to concerns about the ultimate increased number of units that could be created. Staff’s intent has been to make the increases incremental while still maintaining the ability to generate additional units. Creating two options for reductions (a basic restructuring of the proposed November changes) make it explicit that the reductions are allowed by-right (administratively approved) but prescribe additional standards and limitations. The intent of the narrow-pole flag lot option was to create an ability to produce an “ADU-like” unit on its own lot, thus no additional ADU would be allowed and only one can be subdivided from the parent parcel.