LAND USE

INTRODUCTION
A critical product of the Comprehensive Planning process is the creation of a future land use plan and map. The future land use lays out a plan for the growth and development patterns of a city. There are implications for future zoning and streets decisions. Research and public input gathered during the planning process influenced the crafting of the future land use plan. One important step in creating the future land use is to examine the existing land use composition in Ankeny. The distribution and amount of different existing land uses help guide future land use layouts. The final step before outlining the future land use plan is to define the type of future land uses to be present in Ankeny. Part of this chapter includes descriptions and images of the preferred future land uses in Ankeny, including density limits and use restrictions.

EXISTING LAND USE
The first step in land use planning is to gain an understanding of the existing land use conditions present in Ankeny. These categorizations were found through publicly available parcel data from Polk County. Within Ankeny there are many different existing land use types at various densities. In determining the future land use, two levels of analysis were performed: a general and a specific breakdown.

GENERAL LAND USE
The general land use breakdown in Ankeny was determined using the parcel’s county tax assessor assigned property class value. These class designations were used to classify each parcel into one of the following categories:
- Residential
- Multi-Family Residential
- Commercial
- Industrial
- Government*
- Schools
- Agriculture

*Including right-of-way (ROW), parks, utilities

This categorization served to provide a general view of the land breakdown in Ankeny. For a suburban community like Ankeny, there are general trends one expects to find in the dividing of land between residential, commercial, and industrial uses. Using the more general categorizations, within its 2017 city limits Ankeny has the following breakdown:
- Residential: 27.8%
- Multi-Family Residential: 3.0%
- Commercial: 10.5%
- Industrial: 3.7%
- Government*: 25.0%
- Schools: 3.9%
- Agriculture: 26.2%

SPECIFIC LAND USE
While the general land use breakdown was useful in terms of understanding the land use make up of Ankeny, a more specific analysis of each parcel provided a more in depth look at the style and density of land uses in Ankeny. The information on specific land uses was used for various analyses in this report.
The second categorization divided by more specific land use types and indicators. For instance, many housing types make up the single-family and multi-family residential general land uses. Each housing type, whether it be a single-family home or a townhome, has different density and household implications.

The specific land use information was put together to create the following land use categories:

- Single-Family Residential (single-family homes only)
- Medium Density Residential (townhomes, duplexes, bi-attached)
- High Density Residential (condos, apartments)
- Ag / Open Space
- Golf Course / Club House
- Parks and Rec
- Commercial
- Office / Employment
- Institutional / Schools
- Industrial, Warehouse, + Flex
- Government
- Utility
- Right-of-Way (ROW)
- Vacant / Semi-Improved Land

A breakdown of the land use composition by acres is described in Figures 12.1 and 12.2. The information gathered through the more detailed land use classification was used to inform many pieces of the Comprehensive Plan. Figure 12.3 shows the geographic distribution of the land use.

**FIGURE 12.1 - Ankeny City Limits Existing Land Use Breakdown**

The specific land use information was put together to create the following land use categories:

- Agriculture / Open Space (25.4%)
- Single-Family Residential (23.8%)
- Right-of-Way (ROW) (15.3%)
- Institutional / Schools (5.2%)
- Industrial / Warehouse / Flex (4.9%)
- Parks + Recreation (4.9%)
- Medium Density Residential (3.8%)
- Commercial (3.5%)
- High Density Residential (2.7%)
- Government (2.7%)
- Vacant / Semi-Improved Land (2.6%)
- Office (2.3%)
- Golf Course / Club House (2.0%)
- Airport (1.1%)

**FIGURE 12.2 Planning Boundary Existing Land Use**

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Acres</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ag / Open Space</td>
<td>4,793.5</td>
<td>25.4%</td>
</tr>
<tr>
<td>Single-Family Residential</td>
<td>4,494.7</td>
<td>23.8%</td>
</tr>
<tr>
<td>Right-of-Way (ROW)</td>
<td>2,904.2</td>
<td>15.3%</td>
</tr>
<tr>
<td>Institutional / Schools</td>
<td>973.7</td>
<td>5.2%</td>
</tr>
<tr>
<td>Industrial / Warehouse / Flex</td>
<td>918.2</td>
<td>4.9%</td>
</tr>
<tr>
<td>Parks and Recreation</td>
<td>915.6</td>
<td>4.9%</td>
</tr>
<tr>
<td>Medium Density Residential</td>
<td>711.6</td>
<td>3.8%</td>
</tr>
<tr>
<td>Commercial</td>
<td>650.8</td>
<td>3.5%</td>
</tr>
<tr>
<td>High Density Residential</td>
<td>505.5</td>
<td>2.7%</td>
</tr>
<tr>
<td>Government</td>
<td>500.1</td>
<td>2.7%</td>
</tr>
<tr>
<td>Vacant / Semi-Improved Land</td>
<td>487.2</td>
<td>2.6%</td>
</tr>
<tr>
<td>Office</td>
<td>441.4</td>
<td>2.3%</td>
</tr>
<tr>
<td>Golf Course / Club House</td>
<td>373.1</td>
<td>2.0%</td>
</tr>
<tr>
<td>Airport</td>
<td>200.72</td>
<td>1.1%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>18,858.06</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Source: Confluence, with inputs from Polk County, City of Ankeny
FIGURE 12.3 Ankeny Existing Land Uses (2016)

Legend
- Ankeny City Limits
- Parcel
- Single-Family Residential
- Medium Density Residential
- High Density Residential
- Ag / Open Space
- Golf Course / Club House
- Office
- Commercial
- Institutional / School
- Industrial, Warehouse, + Flex
- Government
- Vacant / Semi-Improved Land
- Parks and Recreation

Land Use | 181
LAND USE CONSIDERATIONS
Future land use mapping is a complex process involving multiple overlapping and competing variables. Factors considered during the future land use mapping drafting include:

- Community Needs and Desires
- Utility and Sewer Service Capacity
- Existing Land Use
- Existing Zoning and Land Use Plan
- Accessibility / Existing Roadway
- Future Roadway / Roadway Expansions
- Floodplain Boundaries
- Annexation Boundaries and Agreements
- Landforms
- Streams, Rivers, and Natural Habitats
- Current Growth Patterns

COMMUNITY NEEDS AND DESIRES
During the public engagement exercises completed for The Ankeny Plan 2040, many exercises attempted to decipher the future land use type, style, and density level most desired by the community. Through public meetings, special event booths, and the community survey, information of land use preferences were gathered. Overall, there was significant diversity in the responses given by the public, but also many areas of consensus.

Single-family residential homes had nearly universal support. Many suggested single-family residential in the area east of the Ankeny city limits, across Interstate 35 as well as continuing the residential growth in the northern section of the planning boundary.

There was agreement on turning the eastern side of the 36th Street / NE 110th Avenue interchange into a mixed-use commercial area. Some also pushed for office space in this area as well.

Medium and higher-density residential areas were generally recommended along major streets and at major street intersections. There were several comments made that too many townhomes and apartments were being built in Ankeny.

There was a push for employment land uses such as industrial land or office space in the southeastern and northeastern corners of the planning boundary.

UTILITY AND SEWER CAPABILITY
Any future land use mapping needs to take into consideration the capacity and practicality to serve a given area with utilities including water and sanitary sewer. Chapter 8: Infrastructure examines the impacts of the future land use map on water and sanitary sewer facilities.

EXISTING LAND USE
The existing land uses present in Ankeny played a large role in drafting the future land use map. Given the high growth Ankeny has experienced in the past two decades, much of the current development in the community is still relatively young. This fact, in combination with the wide availability of undeveloped / vacant land, makes it unlikely large portions of Ankeny will be torn down or redeveloped. Rather, new development and growth will have to complement the existing land distribution. In a more land locked and built-up community, redevelopment might have more of a focus in the land use plan. There are a few areas, mostly older residential / commercial neighborhoods where redevelopment or revitalization could greatly benefit the community. These areas have a future land use category different from their existing land use. This includes manufactured home locations
and some areas surrounding Ankeny High School near Ankeny Boulevard and Magazine Road.

TRANSPORTATION NETWORK
The existing and proposed transportation network plays a large role in determining the best location of residential, commercial, and industrial land uses. In general, low-density residential land is better suited for slower and smaller collector and local roads while commercial and medium/high-density residential are more often located on the busier arterial streets.

LANDFORMS
Geographically, there are few obstacles to growth in Ankeny. Saylorville Lake sits west of Ankeny, but is not within the planning boundary. One environmental and administrative obstacle to growth within the planning boundary is a designated wetland setback located in the northeastern boundary of the planning area. This federally and state recognized wetland setback surrounds a series of wetlands around which animal feedlots are prohibited within a specific buffer setback to protect this valuable environmental ecosystem. Various other wetlands exist within the planning boundary which are not delineated for specific protection. Determinations should be made on a case by case basis, depending on state/federal requirements.

In addition to the federal wetland setback, one landform to be aware of is the location of remnant coalmines underground in Ankeny. Certain areas of town are already developed over existing coalmines. There are areas in the growth area with closed underground coalmines present. The intensity of the land uses for areas once occupied by coalmines should be carefully considered. In Iowa, we generally do not raise concerns with former underground coalmines, but issues with subsidence of land related to coalmines can occur.

FLOODPLAIN, STREAMS, AND HABITATS
As discussed in Chapter 4: Environment, most of Ankeny’s special environmental considerations revolve around the location and extent of the streams and creeks in Ankeny. The location of streams in Ankeny is comparable to the location of the floodplain and any special flood hazard areas in Ankeny. To protect these environmentally sensitive areas and the property of Ankeny residents, areas within the floodplain have been designated as Agriculture/Open Space on the future land use map. Other environmentally sensitive areas, such as those locations with significant tree cover were also included in this category where appropriate. Tree cover was identified using landcover analysis completed by Iowa Department of Natural Resources and through the presence of a Forest Reserve Tax Credit in the Polk County Assessor’s parcel file.

GROWTH PATTERNS
Currently, there is significant residential and commercial growth occurring in the northern portion of Ankeny. However, there are some limits to the sanitary sewer capacity in the northern section of Ankeny. Also, there are valid concerns about retaining the agricultural and low-intensity nature of the area. Given the availability of undeveloped land and the possible introduction of the proposed Northeast Beltway, it is recommended for growth to begin expanding across Interstate 35 in eastern Ankeny.

In the past ten years, the residential growth in Ankeny has generally occurred to the north and northwestern area of Ankeny with some development continuing in and around the Prairie Trail development south of the John Deere plant. Various other pockets of residential growth have occurred in south Ankeny near the city limit boundaries and in two areas across Interstate 35.

The major commercial areas of Ankeny currently exist along Ankeny Boulevard and 1st Street and then at the intersection of Oralabor Road and Interstate 35.
The Prairie Trail development is emerging as a mixed-use commercial district in Ankeny as well. The historic downtown area of Ankeny, known as Uptown, is located south of 1st Street near Ankeny City Hall.

Ankeny has a strong industrial presence in the southeastern areas of Ankeny, along Interstate 35 near the Ankeny Regional Airport. Given the presence of Casey’s, Tones, Toro and other light industrial, shipping, and distribution businesses in the southeast corner, it is important to protect this industrial district of Ankeny when composing the future land use plan. There are some existing circumstances in which residential land is located next to industrial land, but in the future these land uses should generally be separated. John Deere’s plant is also a strong force in the Ankeny economy. Due to the size of the property and the layout of its facility, the impacts of this plant on the surrounding neighborhoods appear to be very limited. The existing industrial uses located along the south side of SW Ordinance Road between SW State Street and S. Ankeny Boulevard may no longer be best suited for the area based upon the existing and recent residential development as well as the proximity to the Southview Middle School and Ankeny High School.

**AGRICULTURE**

Ankeny is located on the edge of the Des Moines metropolitan area. As such, considerable portions of the planning boundary are actively used for agricultural purposes. In general, much of the land within the planning boundary has a high agricultural land value (see Figure 4.3 on page 39). While several areas of the planning boundary remain designated as open space in the future land use plan, other areas have been designated as other uses such as low density. In the areas where agriculture and non-agricultural land uses are adjacent to one another, it is recommended to consider remedies that create a buffer between the agricultural and non-agricultural uses. This can help to protect the remaining agricultural land from encroachment from non-agricultural land uses. Similarly, it can help keep agricultural realities such as spray drift, livestock, or other potential nuisances separate from the residential areas.

There are several agricultural buffer practices used by municipalities abutting agricultural land while wanting to maintain agricultural preservation efforts. The approaches to the problem vary in their intensity and thoroughness. One common, minimum buffer is the creation of a fencing plan and maintenance agreement for the placement of agriculture-quality fencing. This would mean fencing able to withstand livestock and able to adequately prevent trespass onto agricultural land. In addition to fencing, some communities require setback requirements, with distances varying based on intensity of the agricultural activity and the proposed adjacent land uses, higher setbacks for residential, etc. Further, some require a combination of tree and shrub buffers to help enforce the separation between the land uses. Under the new low-density land use category, existing agricultural land would likely be located near to low-density residential development. The transition area between these two uses are locations where a buffer system would be beneficial to protect the interests of both land uses.

Another possibility for incorporating agriculture into the low-density character of Ankeny is the creation of agrihoods. Agrihoods are housing developments generally designed around a working farm to offer local, often organic food to residents. The farm acts as a shared amenity for the residents providing opportunities to learn about the origins of their food. These developments often are designed around the concepts of sustainability and community with opportunities to connect with the land and one’s neighbors. Access to nature and trails are common features. By permitting agrihoods in Ankeny’s low-density land use category, the City could achieve the twofold goal of preserving agricultural land while also maintaining the low-density character of the community but with a new take on the style and opportunities available to residents.
CIVIC AND SCHOOL USES
In the future land use plan, existing civic uses including the locations of city owned or occupied buildings, parks, and schools are identified as part of the Civic / Parks / Recreation land use category. There are a handful of future civic locations identified in the 2010 Ankeny Comprehensive Plan that were included in this plan’s future land use map. The Ankeny Plan 2040 future land use plan does not further identify areas of future civic land use. There are several reasons for this decision. By labeling a property a future civic space, there is a question of whether this decision obliges the City to purchase the land set aside for civic use. Another issue revolves around the location of future schools. Ultimately, the school board will make its own decisions regarding future school site locations independent of the future land use plan. Schools are an allowable use within many land use categories and therefore do not require special land use designations in the future land use plan. Further, the goal of the plan is not to overly sway residential and commercial development with the promise of a future school that may or may not materialize. The same principles apply to the location of civic and park spaces.

There are certainly areas where parks would make sense such as areas with mature trees or access to water features, but the location of parks will rely heavily on the phasing of residential development, property availability, among other factors. In general, elementary schools should be situated within residential neighborhoods and should front along medium-volume local streets and low to medium-volume collector streets. When possible, new elementary schools should be located next to neighborhood park site in order to afford an opportunity for the City and the school district to share facilities. Due to the higher traffic volumes generated, middle and high schools should be sited along medium-volume collector streets and lower-volume collector-arterial streets. Middle and high schools should also be located in predominately residential areas and not near retail uses. Amendments to the future land use should be considered when the location of future civic uses are finalized to ensure future land use decisions are based on the best available data.

PLANNING BOUNDARY
In the early stages of the planning boundary, the Comprehensive Planning Advisory Committee (CPAC) discussed the planning boundary to be used in the future land use plan and various other planning functions. Several factors were considered including annexation agreements with area cities and the anticipated rate of growth.

PROPOSED NORTHEAST BELTWAY
The Northeast Beltway is a proposed new roadway that would provide a connection between Interstate 80 and Interstate 35 to reduce congestion on key corridors and promote economic development opportunities in northeast Polk County. If the proposed Northeast Beltway becomes a reality, the street will have an enormous impact on the land use in the eastern portion of the planning boundary. The improved transportation infrastructure access would likely prove valuable to a variety of commercial and industrial activities in addition to being an attractive location for residential development.
Before creating the future land use map, demand by land use type was calculated to ensure the land use distribution was based in economic realities. Future land use demand was estimated as part of Chapter 10: Economic Development of The Ankeny Plan 2040.

Land demand was estimated based on a combination of needed units and desired density then translated into acreage demand. Acreage demand by housing type was calculated for the following scenarios:

- **Low Growth / High Density**
- **High Growth / High Density**
- **Low Growth / Low Density**
- **High Growth / Low Density**

### SINGLE-FAMILY RESIDENTIAL

Regarding the future single-family residential demand, the following breakdown was assumed:

- Small Lot Homes (6-8 units/acre) would account for 30%, or 2,042, new units
- Medium Lot Homes (3-5 units per acre) would account for 40% of new homes, or 2,722 units
- Large Lot Homes (1-2 units per acre) would account for 30% of new homes, or 2,042 units

With this percentage breakdown and the associated high and low densities, net acres required by growth scenario and density level was calculated for a ten-year period. The results are summarized above. For a ten-year period, Ankeny will need an estimated total of 1,639 to 3,618 acres for single-family homes.

### ATTACHED OWNERSHIP RESIDENTIAL

Attached Ownership Residential demand has forecasted the number of units and required acres to accommodate the units for housing types such as townhomes and rowhouses. Unit and acre demand was calculated for the four growth and density scenarios. The unit demand for a ten-year period was 766 units. To build these units, Ankeny will need between 43 to 84 acres for townhomes and condominiums.

### RETAIL APARTMENTS

For a ten-year period, Ankeny growth will create a demand for approximately 2,296 apartment units. To build these units, Ankeny will need to develop between 103 to 168 acres depending on density level and growth rate.

Overall, Ankeny will have a demand for approximately 9,868 residential units in a ten-year period. Depending on the chosen density level and the actual level of growth, Ankeny will need between 1,785 to 3,871 acres of land to dedicate to residential development over ten years.

### RETAIL

Ankeny’s ten-year demand for retail, including grocery, neighborhood, big box, and others, will be 1,219,000 square feet. When translated into developable acres needed, Ankeny will need between 101 to 168 acres of land to dedicate to retail to fulfill this market demand.

### OFFICE

Based on the market analysis performed for Ankeny, the amount of square feet demand for...
office space in Ankeny for a ten-year period will be around 486,000 square feet. Depending on the density of the building and the growth rate, Ankeny will need to develop between 40 and 61 acres for office space.

INDUSTRIAL / FLEX / R+D
The market study for Ankeny revealed a significant level of square feet demand for Industrial / Flex / R+D in a ten-year period. The demand per decade of industrial land is 1,191,000 square feet. This will translate to an acre demand of 98 to 150 acres.

LODGING
The amount of hotel/motel demand for lodging space in Ankeny over a ten-year period was estimated to be 360,000 square feet. To accommodate for these new lodging units, Ankeny will need to develop between 25 to 36 acres.

TOTAL LAND DEMAND
Overall, Ankeny faces markedly different land use development scenario based on both the density of which land is developed and the growth rate.

If Ankeny experiences lower growth rates, but begins to build at a higher density, a net parcel acreage of 2,049 acres of developed land can be achieved.

If Ankeny experiences high growth rates and still decides to build at a higher density, Ankeny can develop over a ten-year period using only 2,504 acres.

A low growth scenario in combination with low density growth scenario occurs, Ankeny can accommodate for this growth by developing 3,496 net parcel acreages.

Finally, if Ankeny continues to experience high growth rates and develops land at a lower density, an estimated 4,273 acres will be needed over a ten-year period. The difference between a low and high growth rate and a low and high-density level can be a difference of 2,224 acres. The more land required to accommodate for the increase in population expected over the next ten-year period, the higher the cost of infrastructure expansion and services and the more agricultural land transforming to non-agricultural uses.

LAND USE DEFINITIONS
In creating the future land plan for The Ankeny Plan 2040, a new set of land use categories were identified and defined. These land use categories will be used to allocate future land use to different areas of the planning boundary both inside and outside of the existing city limits.

The following land use categories have been defined:

- Open Space
- Low Density
- Medium Density Residential
- High Density Residential
- Neighborhood Commercial
- Community Commercial
- Highway Commercial
- Office / Business Park
- Light Industrial
- Heavy Industrial
- Airport Business Park
- Civic / Public Parks / Recreation
- Neighborhood Mixed Use
- Mixed use
- Uptown
LAND USE CATEGORIES

OPEN SPACE
This land use category includes land within the floodplain, contains wetlands, nature preserves, steep slopes, or significant tree cover. Typical uses include natural areas, land devoted to agricultural use or crop production, and very low density residential development. Residential dwellings should be limited to no more than 1 dwelling unit per 20 acres. This land use also includes city managed greenspace such as greenbelts that have remained more natural and provide passive, low impact recreational activities.

LOW DENSITY
This land use category is dominated by single-family detached dwellings with a typical density of 1 to 5 dwelling units per acre and may include the continuation of existing agricultural operations. Typical lot sizes will range from 7,500 to 15,000 sq. ft. Lots should include public or private street frontage and driveway access and may also be served by an alleyway. Development in this area may include residential clustered developments; religious, educational, and institutional uses and structures; and public and private parks and recreational areas and structures.
MEDIUM DENSITY RESIDENTIAL
This land use category is designed for single family dwelling units that are detached or attached horizontally to one or more units, typically referred to as cottage homes, townhomes, and rowhouses. Densities range from 5 to 12 dwelling units per acre. Land uses may also include single-family detached dwellings, ‘tiny home’ developments (planned communities with single-family detached homes that are generally less than 500 square feet in total floor area); residential clustered developments; religious, educational, and institutional uses and structures; and public and private parks and recreation areas and structures. This land use category can serve as a transition between low density and high-density land uses.

HIGH DENSITY RESIDENTIAL
This land use category is for multi-family dwelling units both horizontally or vertically attached with two or more dwelling units, typically referred to as apartments or condominiums. Also, included in this category are mobile home subdivisions or parks. Densities are generally 12+ dwelling units per acre. Units may or may not have public street frontage and may be served by an alleyway. Garages may be tuck-under, first floor, or stand-alone garage units in a common parking area. Uses may also include horizontally attached single-family dwellings; manufactured housing developments; religious, educational, and institutional uses and structures; child day care centers; and public and private parks and recreational areas and structures.
NEIGHBORHOOD COMMERCIAL
This land use category is for smaller neighborhood scale retail and office uses located close to residential areas and are intended to serve the daily retail needs for the residents. Retail buildings are typically 1 story tall and less than 35,000 sq. ft. for single-tenant buildings and less than 50,000 sq. ft. for multi-tenant buildings. Retail uses are intended to provide access to a limited range of products and services to the local residential area, the community, and/or the regional area. Sites are generally 5 to 20 acres. Site and building design should include features to minimize negative impacts from noise, light, and vehicular traffic and accommodate pedestrian and bicycle circulation as well as vehicular access.

COMMUNITY COMMERCIAL
This land use category is designed for large-scale retail and entertainment uses typically located along high traffic corridors. These retail and entertainment uses are intended to serve the entire community and motoring public as well as attract customers from outside of the city with a typical service area of up to 5 miles or more. The locations should be along minor/major arterial streets or major collectors with multiple access points. These retail areas typically consist of large box stores and multi-tenant shopping centers. Sites are generally greater than 20 acres.
HIGHWAY COMMERCIAL
This land use category is designed to be located along major highways with the intent of providing commercial products and services to the local, regional, and general motoring public. Typical uses include gas stations, car washes, car dealerships, fast food and sit-down restaurants, convenience stores, hotels, banks, and auto repair shops. Maximum size should be around 50 acres per intersection quadrant, with a maximum of 100 acres. Sites for highway commercial should be located only along major highway and interstate interchanges.

OFFICE / BUSINESS PARK
This land use category is designed to retain and promote employment opportunities for the City. The land use category includes a combination of professional office and medical uses, research and development and testing facilities, and corporate campuses consisting of single or multi-tenant buildings that are 1 or more stories tall. Limited office support type retail uses (including restaurants, office supply stores, coffee shops, and dry cleaners) may be allowed. Site sizes can range from small single user building lots to large corporate campuses. This land use can serve as a transition to buffer low and medium density uses from more intense commercial and industrial uses.
LIGHT INDUSTRIAL
This land use category is designed to accommodate most types of light industrial uses as well as warehouse and distribution facilities. Appropriate light industrial activity includes fabrication, manufacturing, assembly, or processing of materials that are in refined form and do not require transformation that creates smoke, gas, odor, dust, vibrations, soot, or other noxious elements. Lot sizes will vary based on specific use, but will typically require larger lots with a minimum of 10,000 sq. ft. Sites should be located on arterial and/or collector streets.

HEAVY INDUSTRIAL
This land use category includes large scale assembly of goods and materials processing and may include outdoor storage. Uses may also include those uses allowed within Office/Business Park and Light Industrial. Heavy industrial uses should be located away from major residential areas which are generally incompatible and threaten the long-term viability of an industrial site.
AIRPORT BUSINESS PARK
This land use category is designed for the Ankeny Regional Airport and the immediately surrounding area and is meant to protect the airport and airspace from incompatible land uses. Aircraft noise and other safety and environmental impacts make many land uses such as residential, schools, and churches incompatible. Uses that are more compatible to airport activity include industrial, business parks, and some other commercial activity. Consideration should be made for any future expansion of the airport.

CIVIC / PUBLIC PARKS / RECREATION
This land use category includes government buildings, education centers, libraries, parks, and public recreational activities such as public golf courses and aquatic centers. These land uses are typically open to the public and owned by the local government entity.
**NEIGHBORHOOD MIXED USE**

This land use category is designed to provide flexibility in uses and building design in an area that can accommodate either mixed-use or single-use buildings and developments. Allowable uses include multi-family residential, office, and retail as well as convenience stores, fast-foot restaurants, and other uses with vehicle drive-up and drive-thru services. Buildings may be three stories in height with shared off-street surface or structured parking. The area is meant to provide a buffer or transition between commercial and residential developments. Possible uses include coffee shops, fast-food restaurants, or small-offices.

![Representative Photos](image1)

**MIXED USE**

This land use category includes areas that are developed at a higher more urban density with multi-story buildings including a combination of residential, retail, and office uses. Retail and office uses are generally located on the first floor (street level) with multi-family residential dwelling units located on the upper floors. The number of dwelling units per acre is generally over 12. Buildings should be between 2 to 4 stories in height with shared parking that is either on-street or in-structure located within, under, or rear to the building.

![Representative Photos](image2)
UPTOWN
This land use category is meant to secure and promote the distinct area around Uptown Ankeny near SW 3rd Avenue west of S Ankeny Boulevard. This area is the closest to a downtown available in Ankeny and that should be preserved and celebrated. A focus on creating pedestrian level, walkable environment with one or two-level buildings with a mixture of retail and commercial uses with the possibility of second-level residential. The possibility of design standards for streetscapes and building facades should be explored.

LAND USE + ZONING DISTRICTS
A land use map serves as a guide, helping to direct where certain uses should occur. Land use classifications provide a means for describing preferred use of land within the community and serve as a basis for zoning decisions. The future land use categories previously described need to fit within the existing zoning districts in Ankeny.

Ankeny currently has the following zoning districts:
- One-Family Residence (R-1)
- One-Family and Two-Family Residence (R-2)
- Multiple-Family Residence (R-3)
- Planned Multiple-Family Residence (R-3A)
- Mobile Home Residence (R-5)
- Neighborhood Retail Commercial (C-1)
- General Retail, Highway Oriented and Central Business Commercial (C-2)
- Central Business Commercial (C-2A)
- Limited Highway Oriented Commercial (C-3)
- Light Industrial (M-1)
- Heavy Industrial (M-2)
- Planned Unit Development (PUD)
- Conservation and Public Utility (U-1)
ZONING COMPATIBILITY MATRIX

The matrix below in Figure 12.5 shows how the proposed future land use categories relate to the Ankeny’s current zoning districts. The C mark indicates the zoning district and land use category are compatible and the P mark indicates the land use and zoning district are partially compatible. As land is annexed into Ankeny, this matrix will help identify appropriate zoning districts based on the prescribed future land use for the area. This process may also help identify Comprehensive Plan updates required if land use and desired zoning are incompatible.

**FIGURE 12.5  Zoning Compatibility Matrix**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural / Open Space</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Density</td>
<td>C</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>P</td>
</tr>
<tr>
<td>Medium Density Residential</td>
<td>P</td>
<td>C</td>
<td>C</td>
<td>P</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>P</td>
</tr>
<tr>
<td>High Density Residential</td>
<td></td>
<td>C</td>
<td>C</td>
<td>C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>P</td>
</tr>
<tr>
<td>Neighborhood Commercial</td>
<td></td>
<td></td>
<td>C</td>
<td>P</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>P</td>
</tr>
<tr>
<td>Community Commercial</td>
<td></td>
<td></td>
<td>P</td>
<td>C</td>
<td>C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>P</td>
</tr>
<tr>
<td>Highway Commercial</td>
<td></td>
<td></td>
<td>P</td>
<td>C</td>
<td>C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>P</td>
</tr>
<tr>
<td>Office / Business Park</td>
<td></td>
<td></td>
<td>P</td>
<td>P</td>
<td>P</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>P</td>
</tr>
<tr>
<td>Light Industrial</td>
<td></td>
<td></td>
<td>P</td>
<td>P</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>P</td>
</tr>
<tr>
<td>Heavy Industrial</td>
<td></td>
<td></td>
<td>P</td>
<td>P</td>
<td>C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>P</td>
</tr>
<tr>
<td>Airport / Business Park</td>
<td></td>
<td></td>
<td>P</td>
<td>C</td>
<td>C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>P</td>
</tr>
<tr>
<td>Civic / Public Parks / Recreation</td>
<td></td>
<td></td>
<td>P</td>
<td>C</td>
<td>P</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>C</td>
</tr>
<tr>
<td>Neighborhood Mixed Use</td>
<td></td>
<td></td>
<td>P</td>
<td>P</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>P</td>
</tr>
<tr>
<td>Uptown</td>
<td></td>
<td></td>
<td>C</td>
<td>C</td>
<td>C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>P</td>
</tr>
<tr>
<td>Mixed Use</td>
<td></td>
<td></td>
<td>C</td>
<td>C</td>
<td>P</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>P</td>
</tr>
</tbody>
</table>

C = Compatible
P = Partially Compatible
The land use categories described on the previous pages were used to create the future land use map for Ankeny. This map outlines the preferred land use in Ankeny through 2040. The breakdown of the land uses can be viewed in Figures 12.6 and 12.7. The future land use map is in Figure 12.10.

The largest future land use category within the planning area is the Low Density which includes future single-family residential as well as existing agriculture. This accounts for 40.7% of the planning boundary and is the most prevalent land use. Open Space is second highest with just over 11%. This is land that is intended to remain undeveloped due to its environmental significance. The percent of land dedicated to Right-of-Way (ROW) is 9.3%, but this amount will increase as more land is developed and more right-of-way acquired to accommodate new streets. The second-highest residential land use category is medium density residential which includes townhomes and rowhouses. The land use plan also calls for an increase in land set aside for office/business parks. This allows for growth in this important employment-based land use. The plan has identified a healthy amount of commercial land use to serve the existing and future residents and visitors of Ankeny. A variety of mixed-use, both neighborhood-scale and larger, have been scattered throughout the community in key intersections and neighborhoods. Light industrial land use, another important employment-based land use, has remained predominantly in the southern areas of Ankeny. Just over 3% of land within the planning area has been identified as high density residential for development of new apartment complexes and higher-density townhome developments.

Over time, this distribution of land use categories may need to be adjusted to account for changes in population growth, consumer preferences, or the local and national economy among other reasons.
### Existing Land Use

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ag / Open Space</td>
<td>25.4%</td>
</tr>
<tr>
<td>Single-Family Residential</td>
<td>23.8%</td>
</tr>
<tr>
<td>Right-of-Way</td>
<td>15.3%</td>
</tr>
<tr>
<td>Institutional / Schools</td>
<td>5.2%</td>
</tr>
<tr>
<td>Industrial / Warehouse / Flex</td>
<td>4.9%</td>
</tr>
<tr>
<td>Parks and Recreation</td>
<td>4.9%</td>
</tr>
<tr>
<td>Medium Density Residential</td>
<td>3.8%</td>
</tr>
<tr>
<td>Commercial</td>
<td>3.5%</td>
</tr>
<tr>
<td>High Density Residential</td>
<td>2.7%</td>
</tr>
<tr>
<td>Government</td>
<td>2.7%</td>
</tr>
<tr>
<td>Vacant / Semi-Improved Land</td>
<td>2.6%</td>
</tr>
<tr>
<td>Office</td>
<td>2.3%</td>
</tr>
<tr>
<td>Golf Course / Club House</td>
<td>2.0%</td>
</tr>
<tr>
<td>Airport</td>
<td>1.1%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>

*Source: Confluence, with inputs from Polk County, City of Ankeny*

### Future Land Use

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Density</td>
<td>40.7%</td>
</tr>
<tr>
<td>Open Space</td>
<td>11.1%</td>
</tr>
<tr>
<td>Right-of-Way (ROW)</td>
<td>9.3%</td>
</tr>
<tr>
<td>Medium Density Residential</td>
<td>7.9%</td>
</tr>
<tr>
<td>Office / Business Park</td>
<td>5.6%</td>
</tr>
<tr>
<td>Civic / Public Park / Recreation</td>
<td>5.3%</td>
</tr>
<tr>
<td>Light Industrial</td>
<td>5.1%</td>
</tr>
<tr>
<td>High Density Residential</td>
<td>3.3%</td>
</tr>
<tr>
<td>Highway Commercial</td>
<td>2.4%</td>
</tr>
<tr>
<td>Mixed Use</td>
<td>2.0%</td>
</tr>
<tr>
<td>Community Commercial</td>
<td>1.8%</td>
</tr>
<tr>
<td>Airport Business Park</td>
<td>1.8%</td>
</tr>
<tr>
<td>Neighborhood Commercial</td>
<td>1.6%</td>
</tr>
<tr>
<td>Heavy Industrial</td>
<td>1.0%</td>
</tr>
<tr>
<td>Neighborhood Mixed use</td>
<td>1.0%</td>
</tr>
<tr>
<td>Uptown</td>
<td>0.1%</td>
</tr>
</tbody>
</table>

*Source: Confluence, with inputs from Polk County, City of Ankeny*
FIGURE 12.10 - Ankeny Future Land Use Map

Legend
- Planning Boundary
- Floodplain
- Low Density
- Medium Density Residential
- High Density Residential
- Open Space
- Uptown
- Office / Business Park
- Highway Commercial
- Community Commercial
- Neighborhood Commercial
- Mixed Use
- Neighborhood Mixed Use
- Civic / Public Parks / Recreation
- Airport Business Park
- Light Industrial
- Heavy Industrial

Future Land Use
- Parcel
- Ankeny City Limits
- Low Density
- Medium Density Residential
- High Density Residential
- Open Space
- Uptown
- Office / Business Park
- Highway Commercial
- Community Commercial
- Neighborhood Commercial
- Mixed Use
- Neighborhood Mixed Use
- Civic / Public Parks / Recreation
- Airport Business Park
- Light Industrial
- Heavy Industrial

Future Road Classification
- Interstate / Highway
- Principal Arterial
- Minor Arterial
- Collector
- Future Road Classification
- Principal Arterial
- Minor Arterial
- Collector

Interchange Improvements
- NE Beltway Interchange

Road Classification
- Interstate / Highway
- Principal Arterial
- Minor Arterial
- Collector

THE ANKENY PLAN 2040

Land Use

199
LAND USE GOALS + POLICIES

Goal 1: Reduce conflicts between existing agricultural uses and new development

Action 1.1 - Evaluate the creation of a requirement for new development to establish an agricultural buffer and formation of a farm to residence fencing plan and agreement

Action 1.2 - Create a new Agricultural zoning district or modify the U-1 Conservation and Public Utility District to include Agriculture in its title and use this zoning designation for on-going agricultural operations within the City

Action 1.3 - Evaluate the development of agriculturally centered planned “agrihoods”

Goal 2: Minimize the impact from flooding

Policy 2.1 - Continue to discourage all development within the floodway and the 100-year floodplain as determined by FEMA

Goal 3: Encourage the development of professional office buildings and corporate headquarters within the City

Action 3.1 - Develop an Office zoning district with regulations specific to office uses and buildings

Goal 4: Encourage the creation of new mixed-use developments

Action 3.1 - Adopt new Mixed-use zoning districts or zoning overlays including design guidelines to minimize the approval process required for creating new mixed-use developments

Goal 5: Establish additional guidelines to address the physical impacts of new multi-family developments

Policy 5.1 - Encourage the use of townhomes and rowhouses as a transition from single-family homes to apartments and condominiums

Action 5.2 - Split the R-3 Multiple Family Residence Zoning District into two separate zoning districts: one district horizontally attached residential dwelling units (traditionally referred to as townhomes and rowhouses) and one district for both horizontally attached dwelling units and vertically attached residential dwelling units (traditionally referred to as apartments and condominiums)

Action 5.3 - Develop specific building architectural design guidelines for multi-family residential buildings specifying site layout, building shape and form, overall project scale, building entryway, and exterior building materials in order to maintain a minimum level of quality and architectural value

Policy 5.4 - Vary the scale of individual apartment projects to reduce their visual impact on the surrounding neighborhood and their dominance along major roadways through means such as staggering, building materials, and limits on the number of dwelling units per acre

Goal 6: New development, including development within the City’s 2-mile extraterritorial platting jurisdiction and within the city’s planning boundary, should construct and have adequate public infrastructure (sanitary sewer service, water service, public streets, and energy and communications utilities), utility easements, and public street right-of-way necessary to serve the development

Policy 6.1 - New development shall connect to and construct public sanitary sewers adequate to serve the development

Policy 6.2 - New development shall connect to the City’s water system and construct public water mains necessary to serve the development and provide adequate water pressure and volume for fire protection

Policy 6.3 - New development must be served, connected, and accessed by at least one public street that is paved and is of adequate size, location, and design capacity necessary to handle the traffic impact of the new development
 LAND USE GOALS + POLICIES CONTINUED

Goal 7: Ensure all new development, including development within the City’s 2-mile extraterritorial platting jurisdiction, is served by adequate public infrastructure, does not exceed the capacity of existing infrastructure, and accommodates future growth and development

Policy 7.1 - New development that is beyond the reach of current public infrastructure or exceeds the capacity of the existing public infrastructure shall be responsible for the extension and/or upgrade of the infrastructure as necessary to serve the development

Policy 7.2 - New development shall extend public infrastructure and provide utility easements and public street right of-way through and to the edge of their property

Action 7.3 - The City should review and update the subdivision regulations and minimum infrastructure installation requirements as necessary to ensure the provision of adequate public infrastructure

Goal 8: Minimize the number of private streets serving multiple properties

Policy 8.1 - Individual lots and parcels, including small townhome lots, should be accessed and served by public streets designed and built to City standards