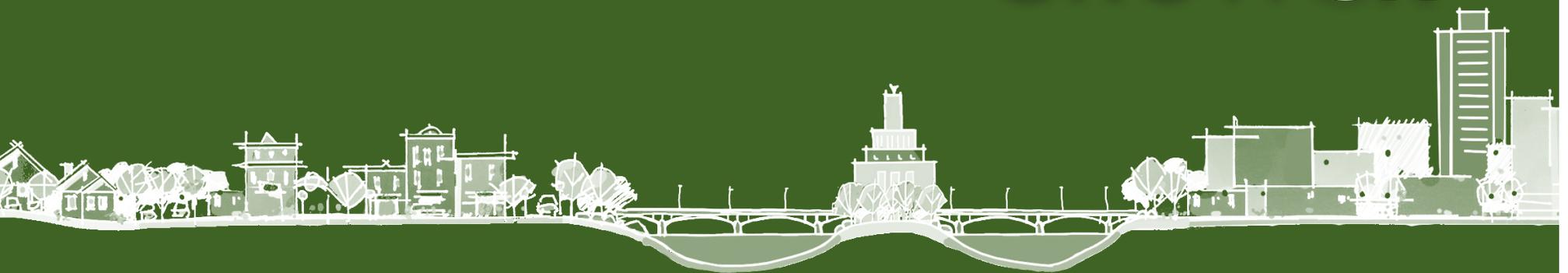


GROWCR



GROWCR

Cedar Rapids' ability to grow and evolve is vital to its future. City policy should encourage quality growth and assure that adequate land is available to accommodate anticipated development. During the last twenty-five years, Cedar Rapids has grown from a community of 108,000 people to 130,000. Physically, the city has expanded with residential subdivisions emerging on the fringe of the built areas and commercial development becoming even more decentralized along corridors. These patterns and changes have created a dispersed city pattern. Yet, thoughtful policies have also helped coordinate development and unified the city.

This section establishes the basic program for growth in Cedar Rapids during the next twenty years. This element works to manage growth for the long term benefit of the city. Population growth and changing markets will continue to create a demand for new housing and neighborhoods in Cedar Rapids. New population and trends will generate demand for commercial development. Economic development and diversification efforts will require new employment areas for changing needs. Despite this element's emphasis on growth, the plan's focus steers development through infill projects to existing areas of the community.

Flooding circumstances of the past force Cedar Rapids to be even more proactive to shape its future, rather than merely react to demands resulting from devastation. Development should not occur randomly, and its appropriate management and direction will contribute to the quality of the city. Indeed, present and prospective residents of cities increasingly demand more attractive and convenient communities. Cedar Rapids' character and quality will be important to future marketing and expansion efforts. New growth centers should be part of a coordinated policy leading to a stronger community.

This section considers the amount of land needed to accommodate the city's projected 2035 population of 161,073 (1% annual growth rate). It establishes a strategy to guide the city's growth, based on the premise that new growth is critical to Cedar Rapids' success as a community. Investments in the city's infrastructure, transportation system, public facilities, and community services should be designed to serve growth efficiently.

This section begins with an in-depth discussion of a new approach to development regulations and therefore, growth management. Following the discussion of Land Use Typology Areas (LUTAs), the specific goals are addressed.



GROWCR GOALS

1. Encourage mixed-use and infill development.
2. Manage growth.
3. Connect growing areas to existing neighborhoods.
4. Communicate and collaborate with regional partners.

FUTURE LAND USE

Contemporary growth in American cities has tended to “zone” different land uses away from one another. The very concept of single-use zoning grew out of a need to separate places in which people lived from major industries in order to protect their health. In some cases, neighboring uses can produce so much traffic, noise, smells, or other environmental effects that separation remains the most appropriate policy. But, increasingly, mixing of compatible but different uses creates interesting and attractive communities. A development pattern that encourages a mix of land uses and activities increases the vitality and sense of security of a place, and increases the number of people using public spaces. A variety of uses closer to one another can also reduce the number of miles that people must travel by car to conduct their daily lives.

A mixed land use pattern opens up opportunities to build a variety of housing types. The development of housing above office and commercial establishments adds vitality to business areas and increases the economic yield on property. Nationally, more communities are finding that by mixing land uses, neighborhoods are more attractive to workers who are looking at quality of life criteria when determining where to settle. Plans and land development policies that provide appropriate mixing of use also provide greater flexibility for those who build communities, and avoid unnecessary regulation.

LAND USE TYPOLOGY AREAS

To achieve all these goals, Cedar Rapids can use a framework of Land Use Typology Areas (“LUTAs”)¹. The LUTA framework allows differentiation between areas of the city and the types, forms, and intensities of development allowed in each area.

On the following pages, LUTAs are described in terms of their purpose, form, uses, intensity, and compatibility

requirements. The descriptions of LUTAs provide a sequence for land use designations with increasing levels of intensity. It is therefore appropriate to compare them one to another when reading descriptions. If, for example, Urban Medium Intensity is described as being more intense, it is understood that it is more intense than the previously described LUTA, which is Urban Low Intensity.

The LUTA framework relies on several core concepts, described below:

Intensity

In the LUTA concept, several different factors are used to describe present and future land uses. Most people are already familiar with the idea of land uses, like residential or commercial. But many of the LUTAs incorporate areas that have more than one of these broad categories. So the concept adds designations based on how much development occurs in an area and how that development affects its neighbors. This is measured by intensity and/or density of development.

- **Density** applies to residential use, and is measured by dwelling units per acre for net area of the project site.
- **Intensity** is measured by a factor called floor area ratio or FAR, calculated by dividing building area by site area.
- **Other factors**, like the amount of traffic a project generates or how it affects its neighbors also helps determine its intensity. See explanations on next page.

Integration and mixing of uses

One advantage of the LUTA concept is its ability to integrate rather than separate different land uses, providing both more interest and more efficiency in the city. Uses may

be integrated in two ways: horizontally and vertically. Horizontal integration keeps individual building purposes separate but relates buildings harmoniously to each other. Vertical integration puts more than one use in the same building.

Compatibility

One of the most important concerns in land use planning is the relationship between different uses and their relative compatibility with each other. In suburban style areas where densities are low, compatibility is usually achieved by spacing between buildings and by congregating like uses together. This simple method is easy to administer and understand; however it leads to some undesirable conditions such as increased commute times with employment and residential areas being further separated from each other. It creates an automobile dependent city, which leads to un-walkable neighborhoods, congestion, and increasing transportation expenses.

Compatibility in today’s world can be attained in a more sophisticated way by focusing on the performance of various uses and designing regulations that allow greater integration of uses. If carefully done, the integration of uses can be achieved so that commute times become shorter, and neighborhoods become more walkable and interesting, all while preserving privacy, security and aesthetics. The LUTAs described below exist on a continuum of intensity. This leads to a continuum of compatibility methods. That is to say, as LUTAs become more intense and uses become more integrated, compatibility methods focus less on spacing and congregating of similar uses, and more on performance-based methods that directly address issues such as noise, traffic, air quality, privacy, and aesthetics.

¹ The LUTAs concept emerged from the comprehensive planning process in Oklahoma City and was originally authored by its staff.

UNDERSTANDING INTENSITY AND MIXING OF USES

Understanding Density (du/A)

Calculating Density

In the photograph, six single-family houses are included on an acre of land. The density of this site, then, is 6 dwelling units per acre (du/A).

Residential density is calculated using the net area of the project site. All proposed residential densities must fit within the range specified by the LUTA for the particular property.



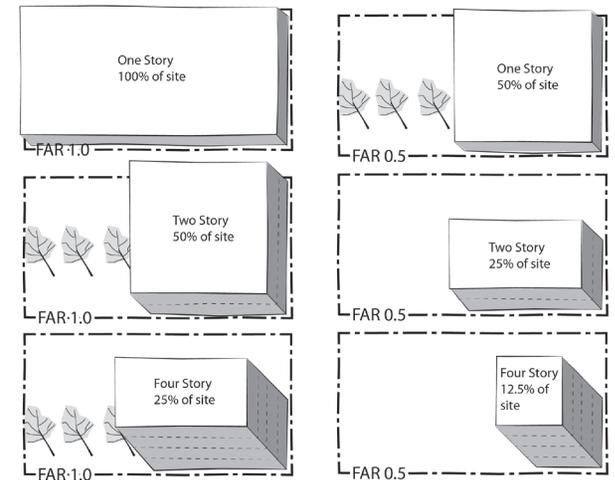
Understanding Floor Area Ratio (FAR)

Calculating FAR

In the top-right sketch, the total building area is 1/2 the site area, so the Floor Area Ratio or FAR=0.5. In the top-left drawing, the total building area is equal to the site area, so the FAR=1.0. However, as the other sketches show, there are different ways of designing a project that have the same ratio.

Floor Area Ratio (FAR) equals the total above-ground gross floor area of all buildings divided by the area of the project site.

FIGURE 1: Floor Area Ratio



Understanding Integration and Mixing of Uses

Horizontal Integration

Horizontal integration of uses means that different uses are housed in different buildings but are related to each other.

FIGURE 2: Horizontal Integration



Vertical Integration

Vertical integration of uses means that different uses are located in the same buildings.

FIGURE 3: Vertical Integration



UNDERSTANDING COMPATIBILITY

Compatibility

Table 1 shows the types of land uses proposed to be included in each of the LUTAs. EnvisionCR includes both location standards and criteria and compatibility standards for land uses. Table 2 shows the compatibility between different types of land use and each LUTA. Table 3 provides characteristics and considerations for each LUTA.

The relationship between different land uses and their relative compatibility with each other is important to successful execution of an integrated land use concept. Compatibility measures the ability by which different uses may be near or adjacent to each other without impacting either property.

EnvisionCR includes both:

- **Location and character standards** that will apply to each general land use category. They are designed to ensure that transportation and infrastructure are adequate to serve the proposed use.
- **Transitional standards** that ensure that methods are used to minimize potential incompatibilities between adjacent mixed uses. As LUTAs become more intense and uses become more integrated, compatibility methods focus less on spacing and congregating of similar uses, and more on performance-based methods that directly address issues such as noise, traffic, air quality, privacy, and aesthetics. Figure 4 demonstrates transitions in land use intensities.



FIGURE 4: Transitions in Land Use Intensities

LAND USE TYPOLOGY AREA SUMMARY

Table 1: Land Use Typology Areas

Land Use Typology Area	Description/Purpose	Residential density (du/A)	Non-residential or Mixed-use intensity (FAR)
AP Agricultural Preserve	Areas preserved for permanent farming and agricultural production.	1 unit/40 acres max	NA
R Rural	Areas that are unlikely to receive urban services. Agriculture and very low-density development will be the probable final use.	1 unit/2 acres max	NA
U-LL Urban-Large Lot	Areas with urban services including very low-density residential constrained by environmental elements, such as steep slopes, waterways, and woodlands.	0-6	0.50 max.
U-LI Urban-Low Intensity	Areas with urban services including relatively low-density residential and neighborhood commercial and service uses.	2-12	0.50 max.
U-MI Urban-Medium Intensity	Areas with urban services including medium-density residential and neighborhood and community commercial, office, and service uses.	4-24	1.0 max.
U-HI Urban-High Intensity	Areas with urban services including medium and high-density residential, major commercial, office, and service uses, and limited industrial in suitable locations.	8-40	3.0 max.
DT Downtown	High-intensity mixed uses focused on Downtown and immediate environs.	20 and up	1.0 and up
C Commercial	Areas dominated by major community and regional commercial development that are both large in scale and have high traffic impact. May include high-density residential use.	16-40	1.0 max.
I Industrial	Areas dominated by large-scale industrial uses.	NA	NA
ER Employment Reserve	Areas reserved for future large employers.	NA	NA
P Public, Semi-Public	Areas with major, typically land-intensive public, semi-public, or other civic uses.	NA	NA
OS Open Space	Areas intended to provide open space recreational uses, such as local and regional parks and for the preservation of environmentally sensitive areas. May include accessory or complementary uses if permitted by flood plain or other environmental regulations.	NA	NA
UR Urban Reserve Overlay	Areas that are unlikely to be served by urban infrastructure during the planning period but will be feasibly served and needed for urban development in the long-term.	1 unit/40 acres max	NA
EC Environmental Conservation Overlay	Areas will remain undeveloped due to sensitive environmental features and habitat.	NA	NA
FC Flood Control Study Area	Areas of the community currently under study for planned flood control project.	NA	NA

The table displays the range of typology areas that apply to Cedar Rapids. The majority of the city's area falls into U-LI, U-MI, and U-HI.

Table 2: Land Use Compatibility

Land Uses	AP Agriculture Preserve	R Rural	U-LL Urban Large Lot	U-LI Urban Low Intensity	U-MI Urban Medium Intensity	U-HI Urban High Intensity	DT Downtown	C Commercial	I Industrial	ER Employment Reserve	P Public, Semi-Public	OS Open Space	UR Urban Reserve Overlay	EC Environmental Conservation Overlay	FC Flood Control Study Area
Agriculture (agriculture and related activities)	●	●											●		
Single-family residential	●	●	●	●	●	○									
Two-family residential			○	●	●	○									
Multi-family residential				●	●	●	●	●							
Rural commercial (commercial uses that are compatible with rural and agricultural uses)	○	●											●		
Neighborhood commercial (Small scale commercial development appropriate for neighborhood settings. Includes smaller shops, convenience stores, restaurants and offices)				○	○	●	●	●	○	○					
Community commercial (Commercial developments which serve larger areas of the community and require access to arterial roads, such as supermarkets, medium sized office buildings, restaurants, and medium size retail centers)				○	○	●	●	●	○	○					
Regional commercial (Regionally significant office and commercial uses, such as shopping centers, malls, and major retailers)						○	○	●							
Limited industrial (light industrial uses, such as light manufacturing, assembly, warehousing, and distribution)					○	○	○		●	○					
Intensive industrial (heavy industrial uses, such as heavy manufacturing, refineries, and other labor and capital industrial activities)						○			●	○					
Employment centers (centers with major office and business uses, such as technology and research centers, corporate headquarters, and clean industry centers)					○	○			○	○					
Parks (open space recreational uses)	●	●	●	●	●	●	●	●			●	●	●	○	○
Public and civic facilities (public and semi-public uses, such as fire stations, libraries, schools, community centers, and utility facilities)		○	○	○	○	○	●	○	○		●				

The categories listed above are intended to be general in nature and not strictly applied to land uses in the Zoning Ordinance.

A mix of land uses are allowed and encouraged in many LUTAs, assuming the uses proposed are permitted by the Land Use Typology Area and the Zoning Ordinance.

● Normally permitted

○ Requires location and compatibility standards

RURAL TO URBAN



FIGURE 5: Rural to Urban Section - Cedar Rapids

RURAL



URBAN

Cedar Rapids is a community that transitions from a relatively high intensity typology (e.g. downtown) to a rural cross-section of exceptionally low-intensity. Thus when developing land use categories, the full range of the Cedar Rapids experience must be addressed.

OVERVIEW OF LAND USE TYPOLOGY AREAS (LUTA)



Land Use Typology Areas (LUTA)

The Land Use Typology Areas are described on the following pages.

Land Use Categories

- Urban - Large Lot (U-LL)
- Urban - Low Intensity (U-LI)
- Urban - Medium Intensity (U-MI)
- Urban - High Intensity (U-HI)
- Downtown (DT)
- Agricultural Preserve (AP)
- Rural (R)
- Commercial (C)
- Industrial (I)
- Employment Reserve (ER)
- Public/ Semi-Public (P)
- Open Space (OS)
- Flood Control Study Area (FC)

Overlays

- Environmental Conservation Overlay (EC)
- Urban Reserve (UR)

Table 3: Land Use Criteria and Descriptions

LUTA	Use/Form/Intensity Characteristics	Location/Compatibility Characteristics	Service and Infrastructure Considerations
Agricultural Preserve	<p>Agriculture will remain the principal use during the planning period.</p> <p>Very large minimum lot sizes.</p> <p>Maximum residential density of 1 unit/40 acres.</p>	<p>Rural areas focusing on areas with prime farmland soil.</p> <p>Minimal pressure or conflicts from residential or other uses.</p>	<p>Minimal infrastructure.</p> <p>Extension of urban services will not occur during the foreseeable future.</p>
Rural	<p>Very large lot, single-family residential.</p> <p>Maximum residential density of 1 unit/2 acres.</p> <p>Open space buffers should be provided along arterials for development at higher densities.</p>	<p>Rural areas where more intense is not planned.</p> <p>Buffering or separation from pre-existing agriculture or agricultural industries.</p>	<p>Extension of urban services is unlikely during the foreseeable future.</p> <p>Community water/wastewater systems in rural cluster developments.</p>
Urban-Large Lot	<p>Very large lot, single-family residential.</p> <p>Maximum residential density of 6 units/acre with typical lot sizes between 0.5 and 5 acres.</p>	<p>Areas within the city limits that, due to steep terrain or other environmental factors, cannot be developed to typical urban residential densities.</p> <p>Due to large lot sizes and limited uses, incompatibilities are minimized.</p>	<p>Full urban services.</p> <p>Low densities make provision of urban services and infrastructure less cost effective than in typical urban residential areas.</p>
Urban-Low Intensity	<p>Single-family, two family, and multi-family residential with typical densities between 2 and 8 units/acre and densities up to 12 units/acre allowed.</p> <p>Potential lot clustering.</p> <p>Innovative subdivisions or site configurations encouraged through planned unit developments.</p> <p>Commercial development clusters, may be integrated into mixed use projects with commercial/residential uses.</p> <p>Commercial uses should have frontage along streets, with limited direct surface parking exposure along right of ways. Pad sites may be used to shield parking lots. Cohesive sign design, with consistency of materials, lighting, and height .</p>	<p>Areas should be buffered from uses with adverse environmental effects, including noise, odors, air and light pollution, and heavy traffic.</p> <p>Compatibility may be achieved with density and land use transitions, from lower to higher densities.</p> <p>Locate new commercial facilities on commercial nodes, typically at median breaks or intersections of collector and/or arterial streets.</p> <p>Neighborhood nodes should restrict commercial uses to one or two quadrants of intersections.</p> <p>Locations may vary as part of a planned unit development.</p>	<p>Full urban services.</p> <p>Framework of interconnected streets and sidewalks and trails.</p> <p>Commercial uses should have direct access to collector or arterial streets. Shared access with other projects is encouraged to minimize curb cuts.</p> <p>When applicable, internal auto and pedestrian circulation systems.</p> <p>Direct pedestrian access from transit stops, public sidewalks and paths to business entrances.</p> <p>Transit and bicycle access is advisable.</p> <p>Convenient local access to surrounding neighborhoods with design that discourages external traffic.</p>

Table 3: Land Use Criteria and Descriptions

LUTA	Use/Form/Intensity Characteristics	Location/Compatibility Characteristics	Service and Infrastructure Considerations
Urban-Medium Intensity	<p>Single-family, two-family, and multi-family residential with typical densities between 6 and 12 units/acre and densities up to 24 units/acre allowed.</p> <p>Potential lot clustering.</p> <p>Innovative subdivisions or site configurations encouraged through planned unit developments. May incorporate up to community commercial – scale clusters of developments.</p> <p>Commercial uses should be integrated wherever possible into mixed use development with residential uses.</p> <p>Frontage along streets, with limited direct surface parking exposure along right of way lines.</p> <p>Cohesive sign design, with consistency of materials, lighting, and height.</p> <p>In areas with access to transit, direct pedestrian access from transit stop to business entrances is encouraged.</p> <p>Commercial and mixed use development should include public or assembly space, typically in a plaza or urban sidewalk configuration with user amenities.</p>	<p>Reasonable access or location on collector or arterial streets.</p> <p>Convenient access to neighborhood commercial services.</p> <p>Buffering from or mitigation of adverse environmental effects, including noise, odors, air and light pollution, and heavy traffic.</p> <p>Compatibility may be achieved with density and land use transitions.</p> <p>Locate new commercial facilities in commercial nodes, typically at median breaks or intersections of collector and/or arterial streets.</p> <p>Neighborhood nodes should restrict commercial uses to one or two quadrants of intersections.</p> <p>Locations may vary as part of a planned unit development.</p>	<p>Full urban services.</p> <p>Framework of interconnected streets and sidewalks or paths.</p> <p>Transit and bicycle access is advisable.</p> <p>May include internal or alley access.</p> <p>Commercial uses should have direct access to collector or arterial streets. Shared access with other projects is encouraged to minimize curb cuts.</p> <p>When applicable, internal auto and pedestrian circulations systems.</p> <p>Direct pedestrian access from public sidewalks and paths to major pedestrian ways within projects.</p> <p>Transit and bicycle access.</p> <p>Convenient local access to surrounding neighborhoods with design that discourages external traffic.</p>
Urban-High Intensity	<p>Single-family, two-family, and multi-family residential with typical densities between 12 and 40 units/acre and densities as low as 8 units/acre allowed.</p> <p>Innovative site configurations encouraged through planned unit developments.</p> <p>May be a component of mixed use projects, or include secondary retail and office uses. See Community Commercial in Urban-Median Intensity.</p>	<p>Adjacency to collector or arterial streets.</p> <p>Convenient access or integration into neighborhood and/or community commercial services.</p> <p>Buffering from or mitigation of adverse environmental effects, including noise, odors, air and light pollution, and heavy traffic.</p> <p>Compatibility may be achieved with density and land use transitions.</p>	<p>Full urban services.</p> <p>Framework of interconnected streets and sidewalks or paths.</p> <p>Transit and bicycle access.</p> <p>May include internal streets and connections to mixed uses.</p>

Table 3: Land Use Criteria and Descriptions

LUTA	Use/Form/Intensity Characteristics	Location/Compatibility Characteristics	Service and Infrastructure Considerations
Downtown	<p>Unique regional commercial, employment, cultural and governmental center. Land uses reflect the most mixed use district in the city.</p> <p>Multi-family residential with a minimum density of 20 units/acre.</p> <p>Building intensity is the greatest in the city, with a minimum FAR of 1.0 required.</p> <p>Variety of building types. Placement characterized by zero or minimal front yard setbacks.</p> <p>Parking frequently provided off-site in public parking facilities.</p>	<p>Historical location of downtown along the Cedar River. As the most intensively developed area, land use intensity drops off with distance from the center.</p> <p>Definition of limits of downtown difficult and subject to change over time. Downtown proper bordered by area with less intense downtown support services and public institutions.</p> <p>Transitions to area where off-street parking is a building requirement must be defined.</p>	<p>Full urban services.</p> <p>Focal point for transportation network and area of largest infrastructure needs due to density of development.</p>
Commercial	<p>Unique retail and/or entertainment destinations serving metropolitan areas and surrounding region, as well as medium to high intensity offices and low-impact business parks.</p> <p>Variety of building configurations.</p> <p>Retail centers should be integrated into large-scale mixed use development with high-intensity office and residential uses.</p> <p>Cohesive sign design, with consistency of materials, lighting, and height.</p> <p>Access to transit is a high priority, direct pedestrian access from transit stop to major center entrances is required, where feasible.</p> <p>Developments should include significant public or assembly space.</p>	<p>For new facilities, location at regional highway interchanges or at arterial intersections with superior regional access.</p> <p>Location at major intersections and transit stops is highly desirable.</p> <p>Locations may vary as part of a planned unit development.</p>	<p>Full urban services.</p> <p>Superior arterial and highway access. Internal auto, bicycle, and pedestrian circulation system.</p> <p>Direct pedestrian access from public sidewalks and paths to major pedestrian ways within project.</p> <p>Local and regional transit service.</p> <p>Shared access with other projects is encouraged to minimize curb cuts.</p>

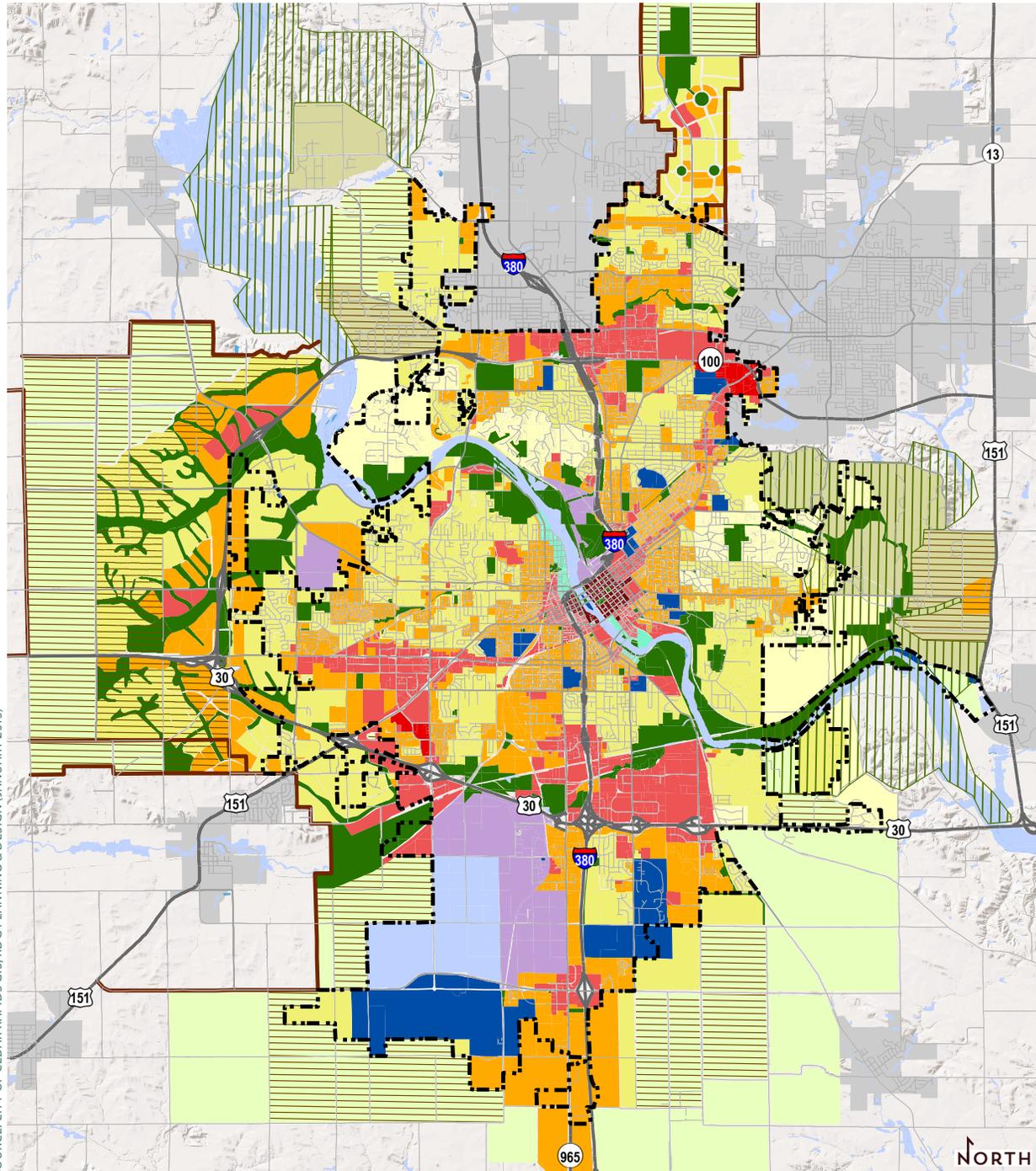
Table 3: Land Use Criteria and Descriptions

LUTA	Use/Form/Intensity Characteristics	Location/Compatibility Characteristics	Service and Infrastructure Considerations
Industrial	<p>Broad range of industrial uses allowed. May include warehousing and distribution, manufacturing, and office/flex buildings.</p> <p>May include very limited supporting retail and commercial uses for the primary purpose of serving employee and business needs.</p> <p>Landscaping and screening at perimeter and along street exposures.</p> <p>Screening of high impact site components. Special design controls to mitigate visual and operational impact.</p>	<p>Convenient access to major arterials, highways, and other transportation facilities, as needed.</p> <p>Locations with limited visibility along major civic corridors.</p> <p>Locations that are remote from or do not affect incompatible uses such as residential and major commercial.</p>	<p>Full urban services with adequate availability of water and sewer to serve needs.</p> <p>Excellent access to transportation facilities without encroaching lower-intensity uses, particularly residential.</p> <p>Transit service is desirable. May take the form of special services or transit “brokerages”.</p>
Employment Reserve	<p>Areas most suitable for large-scale industrial and business development.</p> <p>Desire retention of large land parcels to accommodate major employers.</p> <p>New uses to be employment or employment related, such as manufacturing, office, distribution, warehousing, technology and research centers.</p> <p>Only commercial uses that support employment base to be allowed.</p>	<p>Good freeway and rail access. Access to airport.</p> <p>Availability of water and sewer infrastructure.</p> <p>Proximity to other employment centers and accessibility from residential areas for workers.</p> <p>Compatibility with adjacent land uses. Need for appropriate buffering and screening from residential areas.</p> <p>Proximity to sensitive environmental areas, especially flood-prone areas.</p>	<p>Depending on nature of business, may have extraordinary water and sewer discharge/treatment needs.</p> <p>Employee and truck service traffic require extensive street and highway infrastructure.</p> <p>High-speed internet infrastructure needed for most new employment uses.</p>
Public, Semi-Public	<p>Uses range from colleges, campuses, cemeteries, and large public institutions.</p> <p>Intended for areas where the form and function of public and semi-public uses varies from the surrounding LUTAs. Examples include multi-building campuses, cemeteries, and other large planned areas. Public uses are permitted in any LUTA without map amendment provided that they generally conform to the design requirements of the underlying LUTA.</p>	<p>Individual review of proposals requires an assessment of operating characteristics, project design, and traffic management.</p> <p>Commonly allowed in areas zoned for residential or commercial.</p>	<p>Typically requires full public services.</p>

Table 3: Land Use Criteria and Descriptions

LUTA	Use/Form/Intensity Characteristics	Location/Compatibility Characteristics	Service and Infrastructure Considerations
Open Space	Areas intended to provide open space recreational uses, such as local and regional parks and for the preservation of environmentally sensitive areas. Uses include parks and undevelopable areas due to accessibility or extreme slopes.	Parks should be centrally located with easy access for both pedestrian and auto users. Ideally, residents should be within approximately a half a mile of a park facility. All parks should be connected through the city's trail and greenway systems.	Minimal impact on public infrastructure. Parks and policing services impacted.
Urban Reserve Overlay	Areas established in the plan as the long-term growth areas for Cedar Rapids. Goal is to keep rural residential development out of area to minimize conflicts with ultimate provision of city infrastructure and urban-scale development. Typically require residential development to have minimum 10 acre lot size to discourage development.	Typically consider watershed boundaries and natural drainage patterns for provision of sanitary sewer service. Other locational factors include natural features and pre-existing development. Also, existing municipal boundaries and competition for growth areas can be factors.	Requires inventory and capacity analysis of public infrastructure and service needs of growth area. Should conduct a cost/benefit analysis prior to establishment of future growth area.
Environmental Conservation Overlay	Environmentally sensitive areas that should be protected from development. Includes wetlands, prairies, floodplains, drainage channels and scenic corridors.	Should follow environmental features. Should be pre-designated in development areas. Can be incorporated into the city's trail system when appropriate.	Natural and improved drainage systems require periodic maintenance.
Flood Control Study Area	Land which may be impacted by the future Flood Control System. Uses should be limited to existing land use or open space until the Flood Control System alignment is finalized. Development or establishment of new uses should not be permitted unless it is determined that they will have no impact on the Future Flood Control System. Temporary LUTA designation which should be amended once final decisions are made on Flood Control System alignment.	Land near the Cedar River.	Flood protection strategies required and may need periodic maintenance.

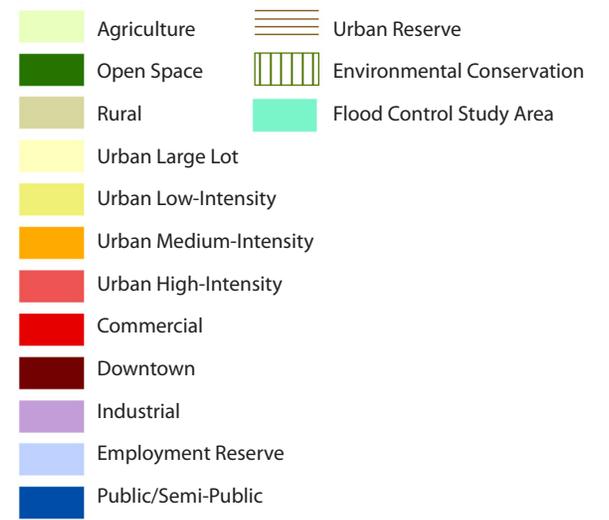
MAP 1: Future Land Use Map



SOURCE: CITY OF CEDAR RAPIDS GIS, RDG PLANNING & DESIGN (JANUARY 2015)

Due to the dynamic nature of the Future Land Use Map, all instances of this map shown in this document are intended to be representative. The official Future Land Use Map shall be maintained by the city and made available online or upon request.

Map available online. Visit: www.cedar-rapids.org/government/departments/community-development



LAND USE TYPOLOGY AREAS (LUTA)

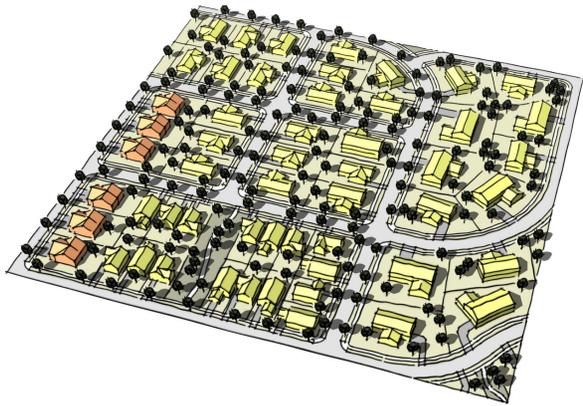


FIGURE 6: Urban-Low Intensity



Urban—Low Intensity (ULI)

To create smarter (more efficient, dense, walkable, bikeable) new suburban style development and encourage retrofitting of existing suburban style development to a more efficient, walkable pattern. As compared to denser LUTAs, Urban Low Intensity areas should offer more space and separation of uses in exchange for farther distances to destinations, fewer shared amenities, and less immediate access to jobs and cultural amenities.

Form, Uses, and Intensity

Suburban style development. At the lowest density—areas should be just dense enough to warrant urban utilities and urban levels of service. At the highest density—areas should be only dense enough to support minimal transit.

1. Residential densities typical range between 2 and 8 units/acre and densities up to 12 units/acre are allowed.
2. Non-residential or mixed-use floor area ratios (FARs) should be maxed at .50.
3. Use a high connectivity grid pattern to expand viable locations for commercial land uses, resulting in greater integration of land uses.
4. Residential neighborhoods include complementary uses like schools, small parks and religious institutions, and neighborhood retail or mixed use. These complementary uses are integrated into neighborhoods so that residents can access them easily by walking or biking.

Compatibility

Compatibility in these areas will be achieved through gradual increases of intensity transitioning from one land use to another. For example, a cross-section of this area may show large lot single family next to medium lot single family, next to small lot single family, next to townhomes, next to apartments, next to commercial. Although the focus is on gradual changes in intensity, these changes should occur at a small enough scale to ensure integration of land uses within an area roughly a quarter section in size in order to encourage walking, biking, and the reduction of auto trips.

1. Different intensities of land use are positioned to create a smooth internal transition from lower to higher intensity uses.
2. Larger commercial or office uses should cluster around arterial streets.
3. Smaller, neighborhood scale commercial uses may be appropriate on collector streets.
4. Complementary uses like schools, small parks and religious institutions, or neighborhood retail or mixed-use, are sited within neighborhoods where they take advantage of excellent connectivity, which allows for multiple access points and routes to and from the complementary uses.

LAND USE TYPOLOGY AREAS (LUTA)

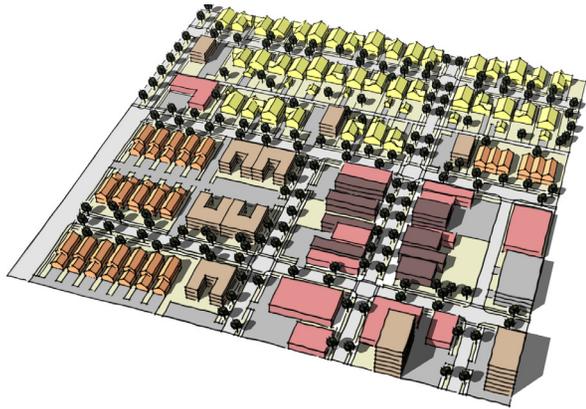


FIGURE 7: Urban-Medium Intensity



Urban—Medium Intensity (UMI)

Vibrant, urban areas that draw customers and employees from outside the immediate area. A greater degree of space and cost saving should be attained through increased FARs. Increased density improves opportunities for economic activity and social interaction and acts as an incentive to redevelop aging buildings and develop vacant lots.

Form, Uses, and Intensity

Includes multi-story residential and commercial uses.

1. Residential densities between 4 and 24 units/acre are allowed.
2. Non-residential or mixed use FAR are maxed at 1.0.
3. A high-connectivity grid pattern should be used to expand the viable locations for commercial land uses, resulting in greater integration of land uses.
4. Encourage more transportation, housing, and shopping choices in close proximity to each other.
5. Light industrial uses should be rare due to their low FAR.

Compatibility

Land uses and intensities should be integrated at a finer grain than within the Urban—Low Intensity designation. As compared to ULI areas, compatibility should be achieved through increased attention to traffic circulation and parking, site and building design, and on-site operations.

1. Land uses are sometimes mixed vertically resulting in complementary and alternating times of use and the ability to share parking areas.
2. Different intensities of land use are still positioned to create a smooth internal transition from lower to higher intensity uses; however, this transition happens over a shorter distance than within the ULI designation.
3. Larger commercial or office uses should cluster around arterial streets and rail lines.
4. Medium density, light industrial uses may be allowed with requirements that they mitigate any anticipated negative impacts on adjacent land uses and that they are located on arterial streets or rail lines.
5. Smaller, neighborhood scale commercial uses are appropriate on any street provided a smooth transition in intensity of uses is maintained.
6. Complementary uses like schools, parks and religious institutions, or neighborhood retail or mixed use, are sited within neighborhoods where they take advantage of excellent connectivity. This allows for multiple access points and routes to and from the complementary uses.
7. Urban amenities (e.g., parks, plazas, higher quality streetscapes, etc.) should be somewhat more prevalent than in the ULI areas, in order to offset the area's intensity level and enhance livability.

LAND USE TYPOLOGY AREAS (LUTA)

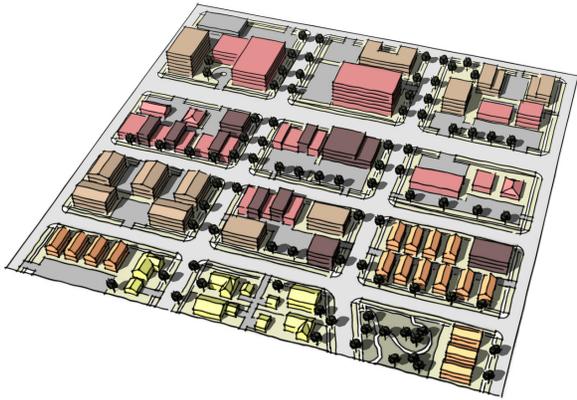


FIGURE 8: Urban - High Intensity



Urban—High Intensity (UHI)

Sub-regional and regional attractors with large office or medical buildings and high density residential living. High density improves economic performance and opportunities for social interaction, and acts as an incentive to redevelop aging buildings and develop vacant lots.

Form, Uses, and Intensity

1. Residential densities range between 8 and 40 units/acre are allowed.
2. Non-residential or mixed use FAR is maxed at 3.0. Parking garages are sometimes found in these areas.
3. Shared parking is encouraged to reduce land used as parking areas.
4. UHI areas should generally have good access to freeways, highways, arterials, and transit, while still being designed around pedestrians.
5. A high-connectivity grid pattern should be used to expand the viable locations for higher intensity land uses, resulting in greater integration of land uses.

Compatibility

Land uses and intensities should be fully integrated and mixed. As compared to UMI areas, compatibility should be achieved through increased attention to traffic circulation and parking, site and building design, and on-site operations.

1. Different land uses can be close together because high levels of service, design, and amenities take into account these juxtapositions and make appropriate accommodations.
2. Form and design rule and performance regulations address aesthetic and functional compatibility.
3. Industrial uses may be allowed with requirements that they mitigate any anticipated negative impacts on adjacent land uses and that they are located on arterial streets or rail lines.
4. Land uses should be fully integrated horizontally and mixed vertically, resulting in complementary and alternating times of use and the ability to share parking areas.
5. Higher levels of urban amenities are necessary to offset the area's intensity level and enhance livability.

LAND USE TYPOLOGY AREAS (LUTA)

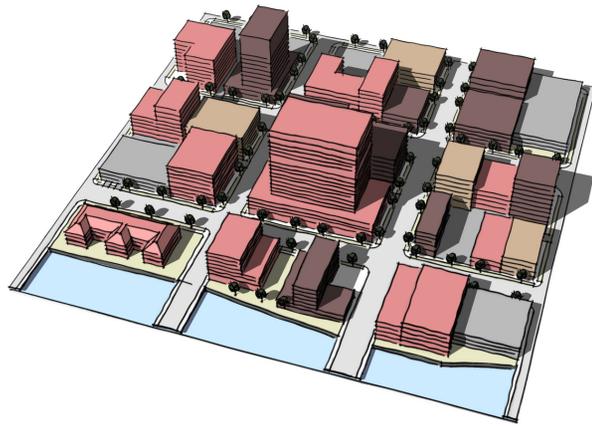


FIGURE 9: Downtown



Downtown (DT)

As the most intense area in the city for commerce and tourism, downtown should exhibit high density and intensity. The economic health of downtown benefits from close proximity between businesses. Downtown should allow for residential opportunities at all price points from affordable to high-end.

Form, Uses, and Intensity

High Density. Multiple land uses coexist horizontally and vertically in buildings.

1. Residential densities must achieve a minimum of 20 units/acre.
2. Non-residential and mixed-use development must achieve a minimum of 1.0 FAR.
3. Nearly all open space is public.
4. Encourage location of regional scale amenities and attractors to downtown.
5. Parking garages are used frequently and integrated into structures.

Compatibility

Because land uses and intensities are fully integrated and mixed, allowance is made for less harmonious neighbors through increased attention to traffic circulation and parking, site and building design, and on-site operations.

1. Different land uses can be close together because high levels of service, design, and amenities make appropriate accommodations.
2. Form/design rules address aesthetic and functional compatibility.
3. Limited industrial uses may be allowed if they meet design and compatibility standards, and mitigate any anticipated negative impacts.
4. Land uses should be fully integrated horizontally and mixed vertically, resulting in the ability to share parking areas.
5. The edge of the DT land use typology area should step down in form and intensity to match the character of adjacent areas.

LAND USE TYPOLOGY AREAS (LUTA)

Urban Large Lot (U-LL)

To provide low density, residential neighborhoods that have available urban services. Designation is intended for existing neighborhoods. Amendments to the Future Land Use Map to this LUTA is discouraged. Any proposed amendments would need to show confirmation of environmentally sensitive areas. Development would need to avoid any identified environmentally sensitive areas.

Form, Uses, and Intensity

Areas are served by urban utilities and urban levels of service.

1. Maximum residential density of 6 units/acre.
2. Development is limited due to sensitive environmental conditions. These should be documented and mapped:
 - Habitat and plants.
 - Soil quality, including texture, depth, and slope.
 - Wetlands, streams, rivers, waterways, and bodies of water.
 - Sensitive ecosystems for fishes, reptiles, birds, and mammals.

Compatibility

Compatibility in these areas will be achieved through gradual increases of intensity transitioning from one land use to another. Different intensities of land use are positioned to create a smooth internal transition from lower to higher intensity uses.

1. Complementary uses like parks, religious institutions, retail or mixed-use, are sited to take advantage of excellent connectivity to major streets.

Agricultural Preserve (AP)

To remain working agricultural ground or large estates long into the future.

Form, Uses, and Intensity

1. Maximum residential density of 1 unit/40 acres.
2. Minimal infrastructure (rural arterials; no transit, water, or sewer).
3. A small amount of commercial to serve rural residents is appropriate, and located at crossroads of major streets.

Compatibility

1. Minimize the conflict between agricultural operations and new development of any kind, including residential.
2. The large tracts needed for agricultural or livestock operations are kept available with minimal pressure from residential, or any other uses. AP land should not be permitted to develop at urban or rural residential densities until such land is designated for urban or rural residential development through a comprehensive plan amendment.
3. Rural commercial uses could be allowed, but must take added measures to ensure compatibility with the rural, agricultural character of this area. Such measures include large buffers of open space and appropriate design.



LAND USE TYPOLOGY AREAS (LUTA)

Rural (R)

To provide plentiful space for low density, rural residential neighborhoods to remain in perpetuity with no pressure to urbanize.

Form, Uses, and Intensity.

1. Maximum residential density of 1 unit/2 acres.
2. Rural character should be maintained by encouraging an appropriate mix of lot sizes and preventing concentrations of smaller lots. For example, two large subdivisions with 1 acre lots should not be adjacent to each other, but should instead be separated by a subdivision with much larger lots.
3. Subdivisions with smaller lots (1/2 to 2 acres). Project may accomplish this by including open space buffers along arterials to maintain rural character. Cluster developments may also require a buffer if development is clustered near arterials.
4. A small amount of commercial to serve rural residents is appropriate. These nodes are intended to be sufficient in number to allow flexibility for market choice, while still guiding the location of new commercial development to appropriate places.

Compatibility

1. Rural commercial uses could be allowed, but must take added measures to ensure compatibility with the rural, agricultural character of this area. Such measures include large buffers of open space and appropriate design.
2. Cluster development is appropriate; however, a minimum lot size is still necessary to maintain rural character. Cluster developments must include assurances such as easements or other mechanisms to ensure open space remains undeveloped in perpetuity.

LAND USE TYPOLOGY AREAS (LUTA)

Commercial (C)

This involves regional, community, and neighborhood scale areas where city investment, regulation, and policy is intended to enhance retail activity and performance, leading to stable neighborhoods and revenues. Special areas are reserved for their geographic positioning within markets and their appropriateness for retail uses. While other uses such as office and services may be allowed, the predominant uses should be retail in order to maximize effectiveness of city investment and policies.

Form, Uses, and Intensity

1. Includes retail, commercial, or office uses. Non-residential or mixed-use FAR is maxed at 1.0.
2. Residential densities between 16 and 40 units/acre are allowed.

Compatibility

The focus is on compatibility with development outside the commercial areas, as development within should all be similar in nature.

1. The edge of commercial areas should taper in form and intensity to achieve a compatible interface with the character of adjacent areas.
2. Uses in these areas are likely to require heavy lighting. Development in commercial areas should, therefore, have lighting standards to protect the character of adjacent areas. If needed, area boundaries could include buffers to mitigate visual (light and aesthetics) impacts on surrounding land.
3. Measures should be taken to ensure heavy traffic volumes do not impact adjacent areas.

Industrial (I)

The industrial designation allows for a broad range of industrial uses from small to large employers. Typical land uses range from outdoor storage to large indoor manufacturing and warehousing facilities.

Form, Uses, and Intensity

Industrial areas are intended to house all types of industrial uses including manufacturing, warehousing, distribution, and office/industrial flex space. Limited retail and services are allowed, such as a gas station. Uses in this area can be smaller in size than in the Employment Reserve (ER) areas and aesthetic and other standards are less stringent.

Consider the following criteria when making decisions regarding industrial uses:

1. Freeway access
2. Rail access
3. Proximity to water lines and availability of water
4. Proximity to sewer lines
5. Availability of sewer treatment capacity
6. Proximity to existing employment centers
7. Environmental constraints (floodplain, slope, etc.)
8. Compatibility of neighboring land uses
9. Brownfield status
10. Access route to freeway(s) and the impact of added employee/truck traffic to non-industrial uses along that route
11. Impact of added employee/truck traffic to the level of service of affected arterial roadways in the surrounding area



Compatibility

Development abutting an industrial boundary should be held to higher design and operational standards to ensure compatibility between employment uses inside and outside the area. Design standards should include land buffers, architectural and site design standards, and other appropriate standards implemented through Planned Unit Development (PUD) or new codes or guidelines. Operational standards should consider traffic, noise, lighting, and air quality.

LAND USE TYPOLOGY AREAS (LUTA)

Employment Reserve (ER)

Employment Reserve areas contain sites that are the most suitable for large industrial and business development in the city. Protection of these areas is essential for Cedar Rapids' economic stability and future growth. The Employment Reserve designation provides a competitive advantage for attracting new companies and retaining companies that need to expand. Large acreages should be maintained to maximize clustering for specialization, synergy, transportation efficiency, and knowledge exchange.

Form, Uses, and Intensity.

Employment Reserve areas are prime areas for manufacturing, warehousing, distribution, office, and office/industrial flex space uses. ER areas require a higher standard for industrial infrastructure, urban design, access, and other factors. Non-industrial and non-office uses should be limited to support services for the primary employment generators. This may include limited commercial development. Fragmentation of Employment Reserve areas by small-scale development or incompatible uses is strongly discouraged.

1. Ensure the bulk of land within Employment Reserve areas is used for manufacturing, warehousing, distribution, office, and other industrial uses that generate substantial employment.
2. Allow small-scale industrial or office uses that support and strengthen major employment generators provided these do not impair the viability of future industrial or office development within Employment Reserve areas by fragmenting viable parcels or impeding internal circulation or exterior connectivity.

3. Allow commercial and other uses within Employment Reserve areas only as needed to support the primary purpose of the Employment Reserve designation and only in locations that do not fragment or otherwise limit capacity for industrial and office development.
4. Support transportation and utilities infrastructure improvements, both within and outside ER areas, that increase the viability of these areas for industrial and office uses.
5. Transportation infrastructure improvements should provide for efficient street layouts and enhance connectivity and capacity.
6. Subdivisions that result in inefficient street layout, poor parcel configuration, or otherwise limit future development in ER areas should not be approved.
7. A perpetual inventory of development-ready land should be maintained. (Development-ready land has all necessary infrastructure in place, or has the ability to achieve that state in very short order.)
8. As Employment Reserve Areas develop, analyze the need for new industrial and employment reserve land. Employment Reserve Area lands that are developed may also need to be re-categorized accordingly.
9. Consider the following criteria when appropriating new ER lands:
 - Freeway access
 - Rail access

- Proximity to water lines and available capacity
- Proximity to sewer lines
- Availability of sewer treatment capacity to serve such development
- Proximity to existing employment centers
- Environmental considerations (floodplain, wetlands, slope, etc.)
- Compatibility of neighboring land uses
- Brownfield status
- Site size (Seek to include large parcels of various sizes, e.g., 25, 50, 100, 500 acres in size or larger.)
- Access route to freeway(s) and the impact of added employee/truck traffic to non-industrial uses along that route
- Impact of added employee/truck traffic to the level of service of affected arterial roadways in the surrounding area

Compatibility:

1. Do not allow uses that are incompatible with large-scale industrial or office development to locate within Employment Reserve areas. Such uses include but are not limited to residential and schools.
2. Ensure development adjacent to Employment Reserve areas is compatible with and will not compromise viability of employment lands. Uses considered incompatible inside the Employment Reserve area may be appropriate adjacent to the area if compatibility can be demonstrated through special development controls in a Planned Unit Development.

LAND USE TYPOLOGY AREAS (LUTA)

3. Apply special design controls to Employment Reserve areas. These controls could at first be implemented through Planned Unit Developments (PUDs) or design guidelines. Encourage industrial park design which includes sensitive design and placement of buildings, screening or prohibiting outdoor storage, parcel sizes which allow for long term expansion for individual users, special landscaping requirements, and buffering treatments for truck access and loading facilities. Design standards should mitigate negative aesthetic, traffic, and other impacts.
4. The creation of a new zoning classification should be considered to assist in obtaining the type and quality of development desired for this area.
5. Development abutting an ER boundary, whether inside or outside the boundary, should be held to higher design standards to ensure compatibility between employment uses inside the ER area and possible residential uses outside the area. Such design standards should include land buffers, architectural and site design standards, and other appropriate standards implemented through PUDs or new codes or guidelines.
6. In cases where infrastructure (e.g. sewer, transportation) has been installed with the express purpose of providing necessary capacity to Employment Reserve areas, any proposed rezone or subdivision outside of the Employment Reserve area must not impact the necessary capacity of the Employment Reserve.

Public/Semi-Public (P)

To provide space for educational, institutional and assembly, and other public uses, including hospitals, major campuses (high school, college, and university), cemeteries, airport, landfills, water plant, and major utilities.

- **Educational.** Educational uses are public, private, and parochial institutions at high school, or post-secondary level, or trade or business schools, that provide educational instruction to students.
- **Institutional and Assembly Uses.** Institutional and Assembly Uses generally include community facilities, cultural facilities, cemeteries and places where large groups of people assemble for a common activity.
- **Other Public Uses.** Other Public Uses include major public facilities, such as landfills, water treatment facilities, major utilities, or other large public campuses.

Open Space (OS)

Open spaces are important areas intended to provide open space recreational uses, such as regional and local parks and for the preservation of environmentally sensitive areas.

Form, Uses, and Intensity

Development is recreational and low impact in nature, while complementary to the purpose of the wider area as open natural space.

Compatibility

These areas are valuable for their natural character and so uses within them should have as close to zero impact on the area as possible. This requires minimal visual, auditory, and other pollutants that would reduce the pristine character of the areas. Aids for compatibility may include:

1. Heavy landscape screening
2. Very large buffers
3. Height limitations
4. Zero odor emissions
5. Strict air quality standards
6. Strict ambient noise requirements

LAND USE TYPOLOGY AREAS (LUTA)

Urban Reserve Overlay (UR)

To remain working agricultural ground or large estates until urbanization occurs. UR areas are adjacent to existing urban areas will eventually be urbanized. UR will help prevent premature extension of infrastructure resulting in additional, unnecessary maintenance costs and parcelization, which encourages “leapfrog” development and makes orderly and efficient growth difficult.

Form, Uses, and Intensity

1. Maximum residential density of 1 unit/40 acres.
2. Minimal infrastructure (rural arterial, no transit, water, or sewer)
3. A small amount of commercial to serve rural residents is appropriate; however such commercial should be allowed only at nodes specified on the Future Land Use Map.

Compatibility

Minimize the conflict between agricultural operations and new development of any kind, including residential.

1. The large tracts needed for agricultural operations are kept available with minimal pressure from residential, or any other uses. UR land should not be permitted to develop at urban or rural residential densities until such land is designated for residential development through a comprehensive plan amendment.
2. Low-impact industrial uses could be allowed only if the net impact is nearly the same as open space or farming. In other words, resulting new traffic, noise, smells, air pollution, visual impact, etc. should be negligible. In addition, aesthetics of new development should be consistent with the rural area to include large land buffers and appropriate architectural design.
3. Rural scale commercial uses may be allowed, but must take added measures to ensure compatibility with the rural character of this area. Such measures include large buffers of open space, appropriate architectural design, minimal signage, and appropriate improvements to transportation infrastructure to accommodate additional traffic.

Environmental Conservation Overlay (EC)

Areas of special environmental importance or sensitivity where basic land use policies are amended in consideration of the area's environmental significance. The EC overlays other LUTAs on the Future Land Use Map. EC policies are intended to be combined with other LUTAs. For example, if an EC area overlays a ULI area, policies from both designations apply. The EC areas are designated for the following attributes, yet require additional study.

- Groundwater Recharge.
- Species Preservation.
- Flood Zone, Riparian, Wetlands.
- Combinations of features may exist.

Form, Uses, and Intensity

Development may be of the same general uses, and form as allowable in the underlying LUTA; however, measures should be taken to ensure development is low-impact in nature. Such measures may include:

1. Clustering of development
2. Permeable pavement
3. Minimal site disturbance requirements
4. Green infrastructure
5. On-site water retention

Compatibility

The key consideration in these areas is minimizing the impact of development on the natural environment and seeking to integrate development into the natural environment in a symbiotic way. Development should preserve and enhance views, both from development and from streets and riparian corridors or other natural amenities.

MAP 2: Flood Control Study Area Map

Flood Control Study Area (FC)

These areas of the community are currently under study for planned flood control projects.

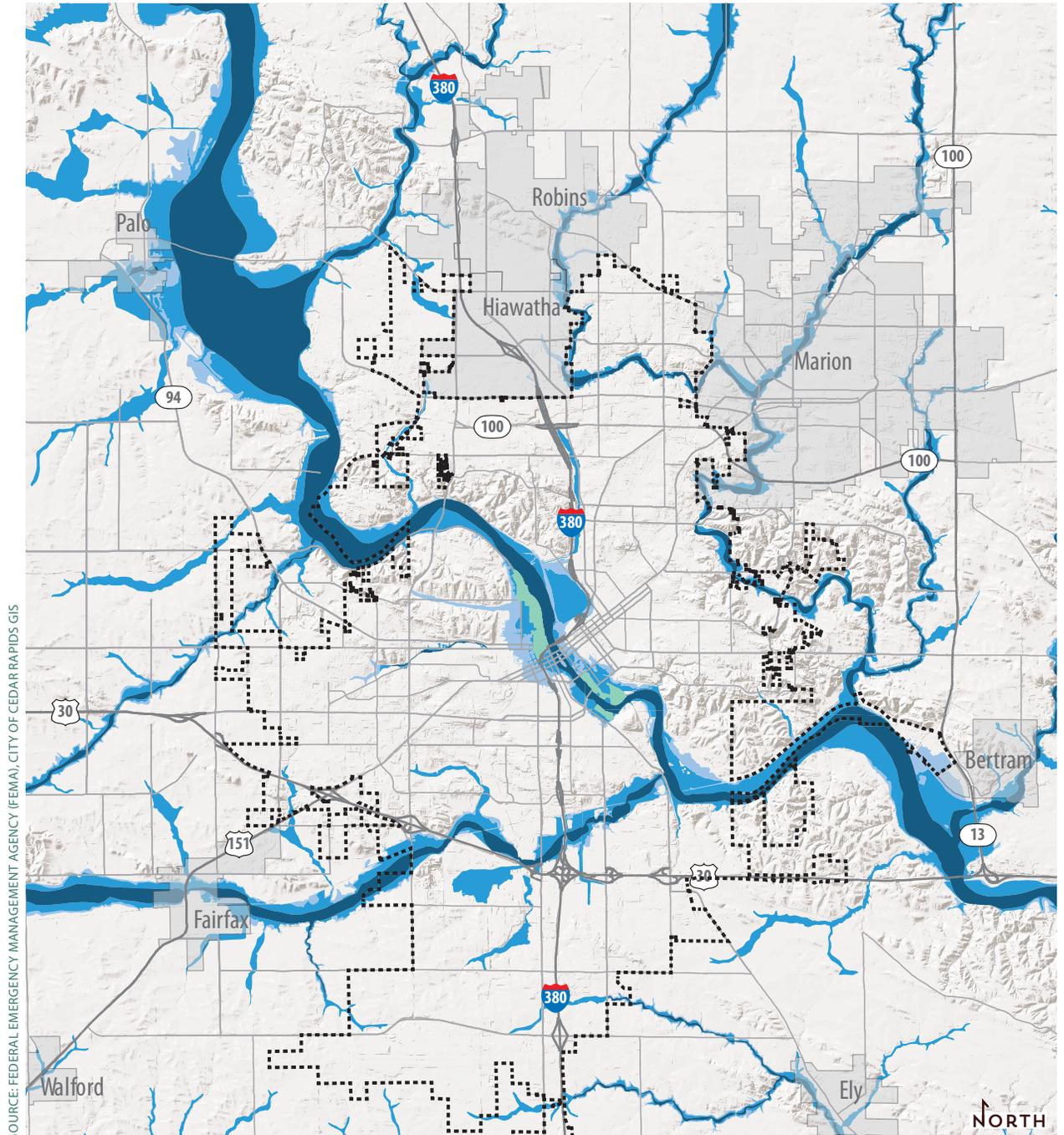
Form, Uses, and Intensity

Development should be limited in nature prior to adoption of the Flood Control Project by the City Council, at which point the future land use map should be updated to reflect anticipated future development. Open space and maintenance of existing structures should be a priority while this LUTA is used.

Compatibility

Any development within this area should carefully consider any impacts to future flood control. Development should ensure:

1. Land is reserved for the future flood control project or is incorporated into the site design.
2. Development will not be affected by the construction of the future flood control project.
3. Development provides an appropriate transition to adjacent properties.
4. Development meets the city's flood plain ordinance.
5. Development is serviceable by utilities and city services after the construction of the flood control project.



DEVELOPMENT REVIEW

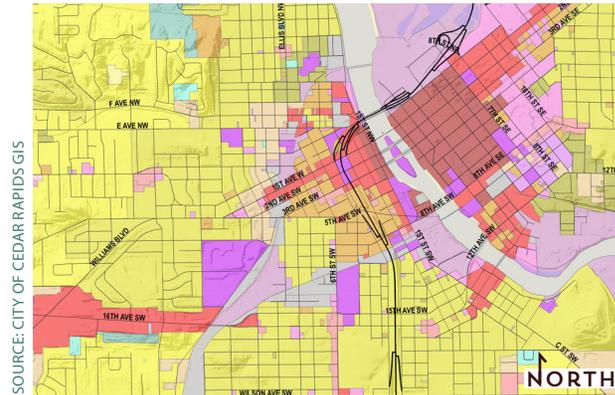
Cedar Rapids, like most cities, uses a Euclidean (use-based) zoning ordinance with 17 “base districts” dominated by a single major use classification (agricultural, residential, office, commercial, and industrial) and six special purpose and overlay districts. By consolidating some base districts, adding new districts, and other revisions, the city has substantially streamlined and improved its zoning ordinance. But while traditional Euclidean zoning (named after a landmark Supreme Court decision that sustained use-based zoning) addresses its primary purpose of separating incompatible uses, it has significant shortcomings, including its relative inflexibility, tendency to encourage decentralized development, and inability to accommodate mixed use urban development. These problems have led planners to propose alternatives such as performance zoning, “smart codes” that regulate building form, incentive zoning, and other techniques. In one way or another, each of these regulates how development is designed over what the development is. While these concepts have both adherents and successes, they have yet to replace the relative (if not necessarily advantageous) clarity of the single-use dominant district.

Transitioning Future Land Use from Use-Based to Intensity-Based

The EnvisionCR comprehensive planning process is moving toward a land use approach that makes greater use of intensity categories. The philosophical bases of this approach are that:

- Intensity (or density) of a development type is more influential in measuring impact on the land and potential compatibility than the specific land use. This concept replaces the traditional hierarchy of uses

MAP 3: Current Zoning, 2014



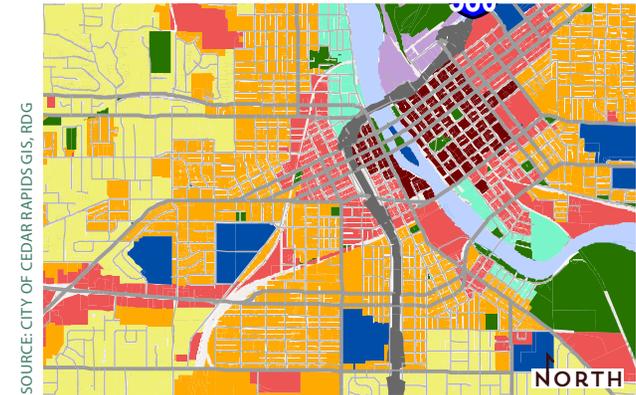
SOURCE: CITY OF CEDAR RAPIDS GIS

(agricultural, residential, office, commercial, and office in ascending order) with other measurements, such as residential density (typically measured by dwelling units per acre), floor area ratio (ratio of building area to site area), and traffic generation (measured by trips generated per day).

- It is impossible for a future land use map to anticipate a specific property’s use. Attempting to do so leads to so many comprehensive plan amendments that the overall point of the plan is lost in the clutter and the document itself becomes irrelevant.
- The growing preference for walkable and bikeable projects and neighborhoods, clearly manifest in Cedar Rapids, leads to development proposals that mix uses together. This mixing of uses, if managed carefully, leads to more desirable projects and major efficiencies, including complementary use of parking and reduced dependence on automobiles.

The Cedar Rapids approach, then, is moving toward

MAP 4: Future Land Use and Possible Zoning Pattern



SOURCE: CITY OF CEDAR RAPIDS GIS, RDG

intensity-based categories, or LUTAs (see previous pages for discussion). These categories define ranges of intensity of urban development (for example, low, medium, and high). Each of these categories can incorporate a variety of uses, corresponding to a level of intensity measured by objective metrics (du/A, FAR, ADT, for example). Thus, a land use area designated Urban-Low Intensity may include residential uses with a density range of 1-4 units per acre and certain non-residential uses with similar impact (such as an FAR below .30 and/or traffic generation below 50 daily trips per acre of development).

However, a zoning ordinance constructed around this mixed land use concept must also address the basic purpose of Euclidean zoning – management and reduction of potential land use incompatibilities. An ordinance that does not do this may be seen as not providing adequate protections for existing land uses. Thus, an ordinance that can provide both the flexibility of mixed use, intensity-based zoning and the perceived protections of use-based zoning should include three levels of compatibility and comprehensive plan consistency:

Level One: Intensity Ranges. Districts are based on specified intensity ranges, established by the comprehensive plan. In order to comply with the comprehensive plan, a development proposal should fall within the range of intensities for its intensity district. While most districts would be intensity-based, some single-use districts (particularly for regional commercial and industrial uses) will continue to be necessary. These would be used for types of development where mixed uses are extremely unlikely or even inadvisable.

Level Two: Standards for Appropriate Location. While the intensity-based concept proposes mixed uses, it does not mean that every land use is appropriate everywhere. Commercial and industrial uses have particular needs for transportation, surrounding conditions, utilities, and visibility. Urban uses in general require adequate water, wastewater, and utility infrastructure that can meet their demands for service. These individual requirements apply even in mixed use environments. This makes specific criteria for location and design of individual uses especially important. Developers and builders will use these criteria as they select sites and design projects. Neighborhood residents will be reassured that potentially incompatible uses will be directed to appropriate sites. Approving agencies will use criteria to evaluate the quality of development proposals and their compliance with the comprehensive plan.

Level Three: Transitional Standards. Finally, when different types of uses are adjacent or close enough to each other to create potential conflicts, design standards to moderate the transition should be in place. For example, a commercial use may be appropriately located next to a residential use according to level one and two. Transitional standards will further govern how that use is developed to prevent or minimize impact on its neighbors. The comprehensive plan will establish the thresholds for applying transitional standards and recommendations for guidelines that should then be incorporated into the zoning ordinance.

The city will develop an effective new ordinance based on these principles that combines the best aspects of different zoning models. But the transition to a new ordinance can be very difficult, especially when the framework changes dramatically. This transition can be managed through a hybrid approach, combining existing zoning districts with the intensity-based concept. This approach, in effect, overlays the intensity-based levels on the foundation of the existing ordinance. It works as follows:

1. A matrix is adopted in the ordinance that groups existing zoning districts into the intensity categories presented in the comprehensive plan. For example, R-1, R-2, R-3, C-1, and OS districts could all be permitted within an Urban Low Intensity area, because the intensities typical of these districts

may fall within the “Low Intensity” range. (Keep in mind that existing districts may appear in more than one intensity area, depending on the nature of the project). For example, a project at R-2 density would be appropriately located in a Low Intensity district, but might not comply with the comprehensive plan if proposed for a High Intensity area.

2. The location criteria and transition standards established in this plan may ultimately be incorporated into the zoning ordinance. Staff reviews would be guided by whether the project complies with the adopted location criteria.
3. Transition standards would come into play if specific thresholds for adjacencies or specific incompatibility are met. Project approval (including rezoning) would be contingent on satisfying these standards, either by site plan when the project is approved or during review at the building permit stage.

Other requirements of existing zoning would remain in place.

This transitional phase, then, would maintain existing zoning in place and achieve many (but not all) of the features of an intensity-based ordinance. They would also provide a valuable test of the concepts and provide the community with the chance to get familiar with a new and more flexible type of land use regulation, while a new ordinance is being drafted.

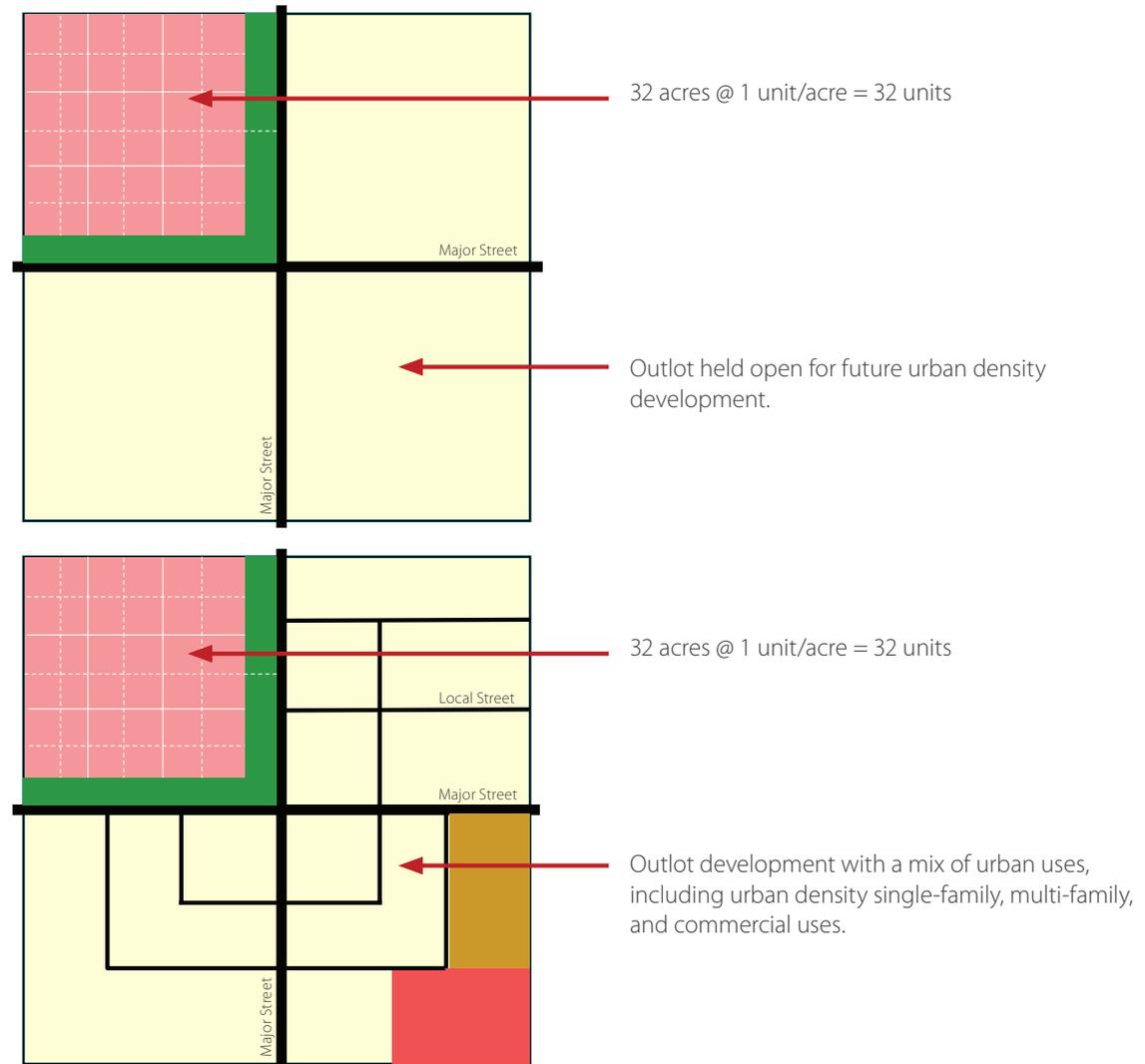
Build-Through Acreage Transition

Developers could build very low-density subdivisions in outlying areas, which would eventually interfere with the efficient extension of sewers and other infrastructure. The Build-Through Acreage (BTA) concept enables the owner to plat a specific part of a development parcel for permanent rural residential development. The remainder of the area is master planned and left open for eventual urban development of sufficient density to reach a specific target. This technique gives property owners the ability to take advantage of current demand for large lot residential but still protects the ability of the city to grow soundly within the urban services area.

Application

Under BTA standards, no more than 25% of a parcel may be subdivided into acreage or large lots with individual services. Again, the balance of the parcel would need to be master planned for future development with urban services and left open as an outlot until municipal services are available. This will allow the ability to "build-through" that area at a later date. Subdivision agreements should address the commitment to maintain the urban outlot as open space, recognize its eventual transition to urban development, and commit the developer to financing transition to urban services. The figure to the right shows an outlot being reserved for future development.

FIGURE 10: Build-Through Acreage Concept



SOURCE: RDG PLANNING & DESIGN



GOAL 1: Encourage mixed-use and infill development.

GrowCR provides a framework for increasing the diversity and density of land uses within the city. The new Future Land Use Map supports infill projects and provides greater flexibility to approaches for redevelopment.

Downtown Cedar Rapids. Downtown is the heart of the city. Downtown retains an intimate walkable scale, making it an attractive district that can form a cornerstone for additional central city development. Enhancements to its special features can strengthen its role as an attraction for both residents and visitors.

Commercial Clusters. Commercial clusters, such as Lindale Mall and Westdale have a high concentration of retail. Work is currently being done on Collins Road NE in front of Lindale Mall to improve access. Westdale Mall is being redeveloped into mixed use.

Commercial Corridors. Commercial corridors, such as 16th Avenue and 1st Avenue (among others), are oriented to automobiles. StrengthenCR establishes an initial program to stimulate further investment by the private market, while providing improved access and circulation.

Neighborhoods. Emerging from the 2008 flood came the revitalization effort for many neighborhoods. StrengthenCR reinforces these planning initiatives.



INITIATIVES

13. Analyze regulatory barriers to mixed-use and infill development, and amend the municipal code to remove barriers and incorporate regulatory incentives as part of the comprehensive update to the zoning code.

The intensity-based approach to land development requires an update (or rather rewrite) of Cedar Rapids' zoning code.





GOAL 2: Manage growth.

Cedar Rapids is a growing community, projecting to increase by about 30,000 people by 2035. Growth should occur first in areas that provide opportunities for infill and redevelopment. EnvisionCR recognizes that demand will emerge for development on the fringe of previously built areas, and proposes a strategic approach to manage that growth within a framework of growth areas.

The growth area approach will help maintain vibrant character, ensure efficiency in infrastructure and services, provide logical connections that improve access and mobility, and encourage a mix of uses. Each area functions as a neighborhood - it provides a balance of development types and community services, and requires community investments and features that create desirable living environments. Growth Areas are connected to one another by collector streets and greenways. This approach to growth helps maintain and enhance overall community character by extending Cedar Rapids' distinctive pattern of neighborhoods.

Future potential attributes of the Growth Areas, also found in many of Cedar Rapids' existing neighborhoods, include:

- A mixture of housing types and lot sizes.
- Organization of new neighborhoods around continuous street patterns, often including a street that links civic, educational and park facilities.
- New parks, trails and active recreation areas, designed as central open spaces that are focuses of the neighborhood.
- Development of higher-density residential and limited commercial, service, and civic uses at nodes along parkways or major streets, adjacent to open spaces, or at strategic locations that link communities.
- Care in establishing setbacks, landscaping, and streetscape standards along major streets.



POTENTIAL GROWTH AREAS

Map 5 defines the potential Growth Areas, and each area is discussed in detail on the following pages. Important considerations for each Potential Growth Area include:

- **West.** Orienting development in response to the Highway 100 expansion, and incorporating the natural environment as an amenity.
- **Southwest.** Dedicating land for industrial projects and establishing a network of streets for emerging neighborhoods.
- **South.** Dedicating land for major employer and large parcel projects, while completing a network of projects that would relate to Kirkwood Boulevard, while setting the stage for future growth past the southern ridgeline, which necessitates improved infrastructure.
- **North.** Dedicating land for residential development, accompanied by a continuous parkway that connects neighborhoods and parks.
- **Northwest.** The concept completes the street network for neighborhoods and discourages development past the ridgeline, which necessitates improved infrastructure.

Calculating Possible Population Yield

EnvisionCR presents possible population yields for growth areas. The calculation is only an assumption, and can be later used to assist in future transportation modeling. The development concept designates more land uses beyond the life of the plan. Population is calculated by:

- Measuring the acres for the area (gross acres).
- Assuming 20% of the land is reserved for transportation right-of-way and open space, results in net acres for development.

Table 4: Demonstration for Population Yield

	U-LL	U-LI	U-MI	U-HI
Gross area (acres)	100	100	100	100
Net area (acres)	80	80	80	80
Households per acre*	0.5-4	2-6	6-12	12-20
Total Households	40-320	160-480	480-960	960-1600
Avg. Household Size	2.2	2.2	2.2	2.2
Total Population	88-704	352-1,056	1056-2,112	2,112-3,520

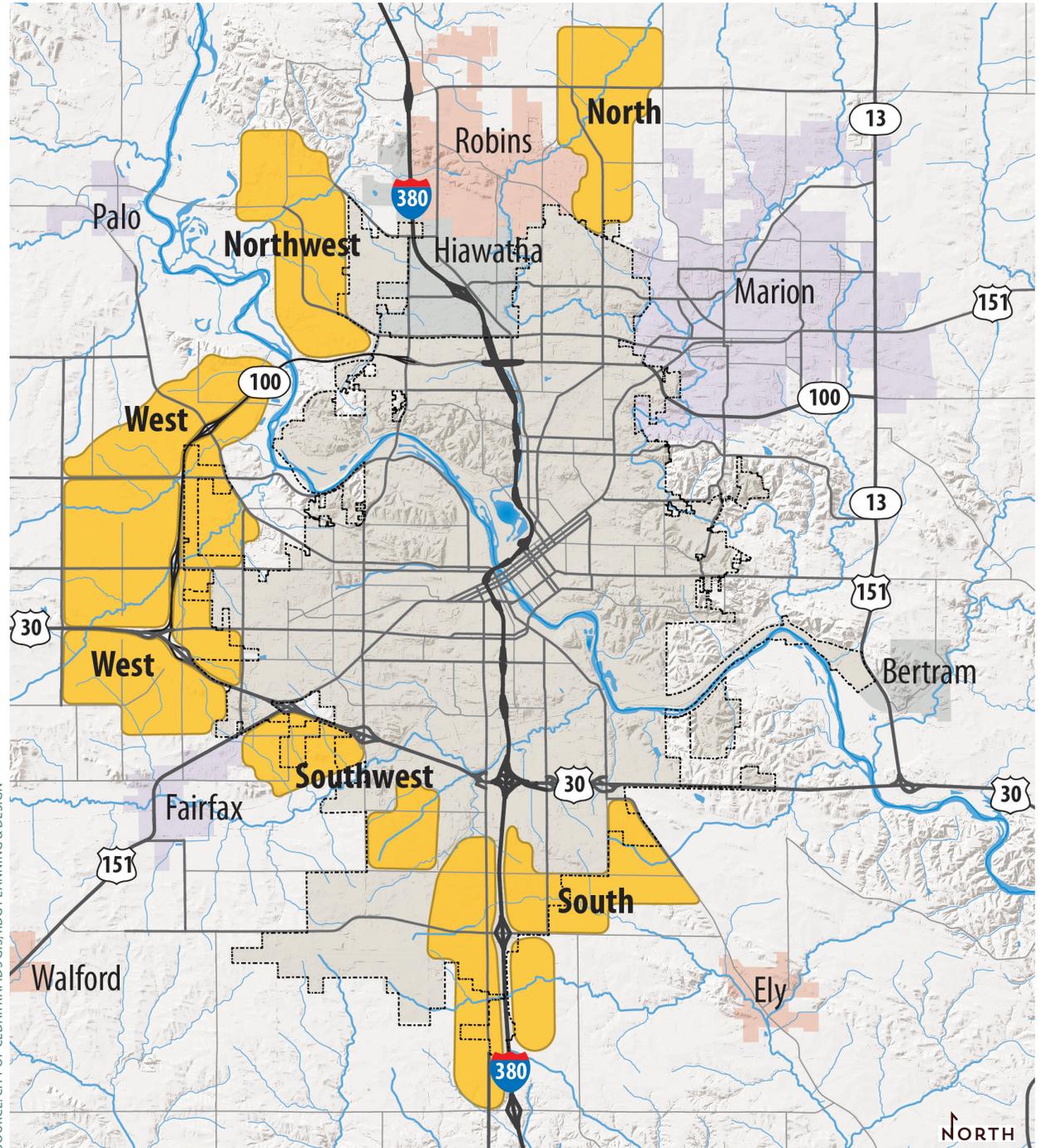
- * Calculating households per acre appropriate to the district in net acres.
- Applying an average household size of 2.2 people per household, results in population yield.

Master Legend

Map 6 to Map 10

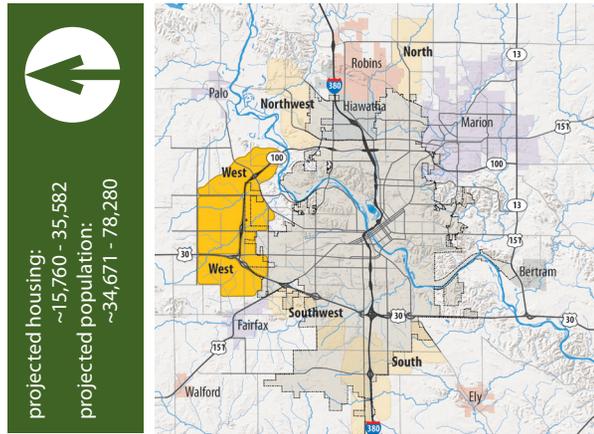
-----	Cedar Rapids Boundary
Existing	Proposed
—————	Arterials
—————	Collectors
—————	Local Roads
—————	Existing Trails
.....	EnvisionCR Trails
■	Agricultural Preserve
■	Rural
■	Urban - Large Lot
■	Urban - Low Intensity
■	Urban - Medium Intensity
■	Urban - High Intensity
■	Downtown
■	Commercial
■	Industrial
■	Employment Reserve
■	Public/Semi-Public
■	Park/Open Space
■	Urban Reserve

MAP 5: Potential Growth Areas



SOURCE: CITY OF CEDAR RAPIDS GIS, RDG PLANNING & DESIGN

WEST AREA



The West Area is one of the primary areas for growth in Cedar Rapids. The Highway 100 Corridor Management Plan provides more detail for the study area. Development in the area far exceeds the total demand for Cedar Rapids' 2035 land needs.

Land Use Features

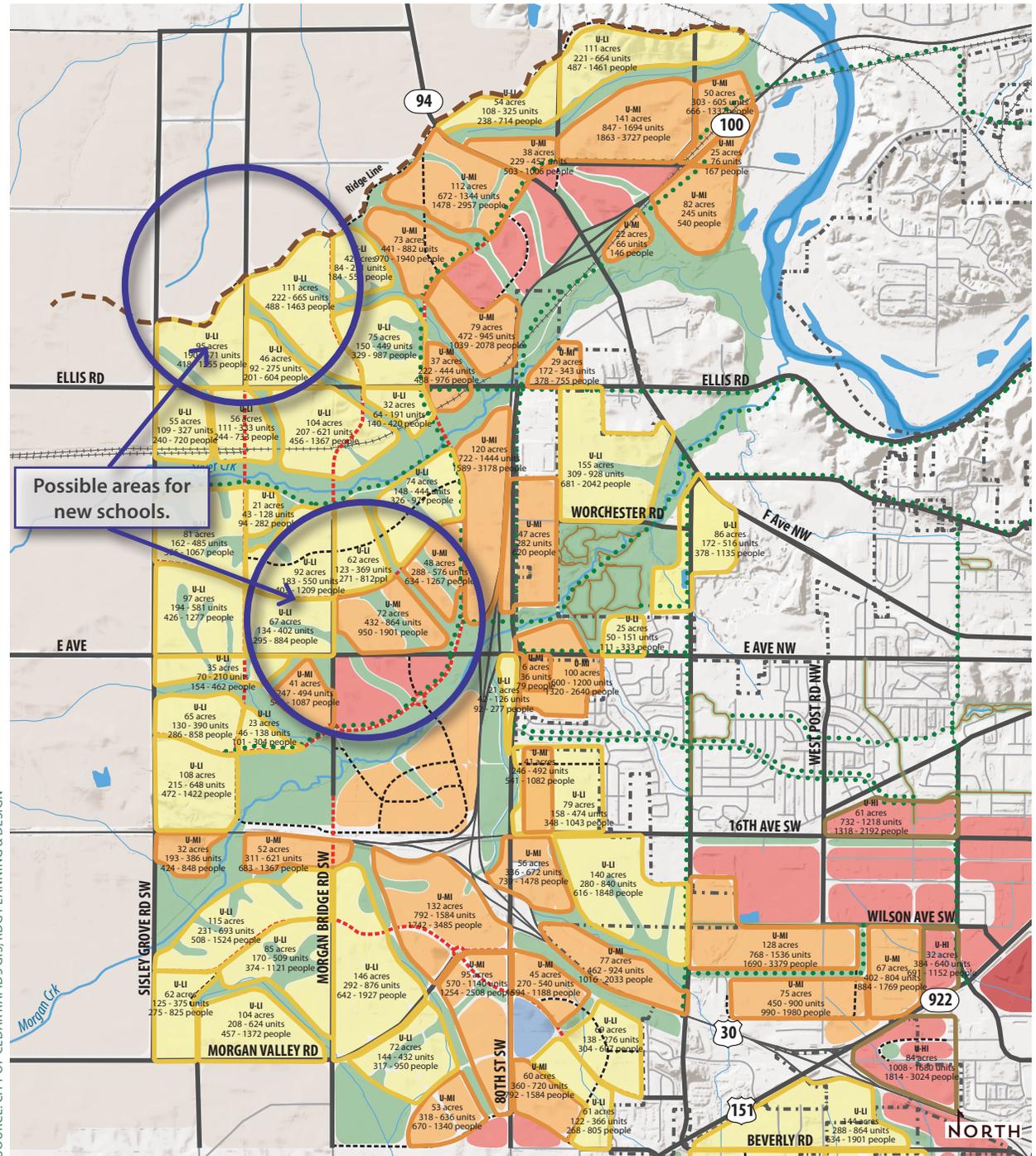
- Mix of development intensities.
- New commercial projects near major intersections, representing a likely demand for its development.
- New major commercial/office project near the crossroads of Highways 30 and 100.
- New community park that is connected by a greenway and trail to Morgan Creek.
- Limiting development to south of the ridgeline.
- Phasing of development and providing infrastructure.
- Strong consideration to environmental concerns.
- Possible new school(s).

Connectivity Features

ConnectCR discusses strategies for an interconnected and multi-modal transportation system. Major transportation elements in the West Area include:

- Network of streets to serve development.
- Extensions of E Avenue and Covington Road.
- Network of green spaces.

MAP 6: West Area

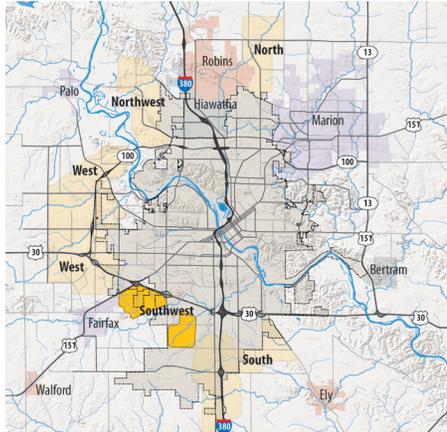


SOURCE: CITY OF CEDAR RAPIDS GIS, RDG PLANNING & DESIGN

SOUTHWEST AREA



projected housing:
~978 - 2,934
projected population:
~2,152 - 6,455



The Southwest Area considers the land uses to complete the gaps between existing built areas and the City of Fairfax.

Land Use Features

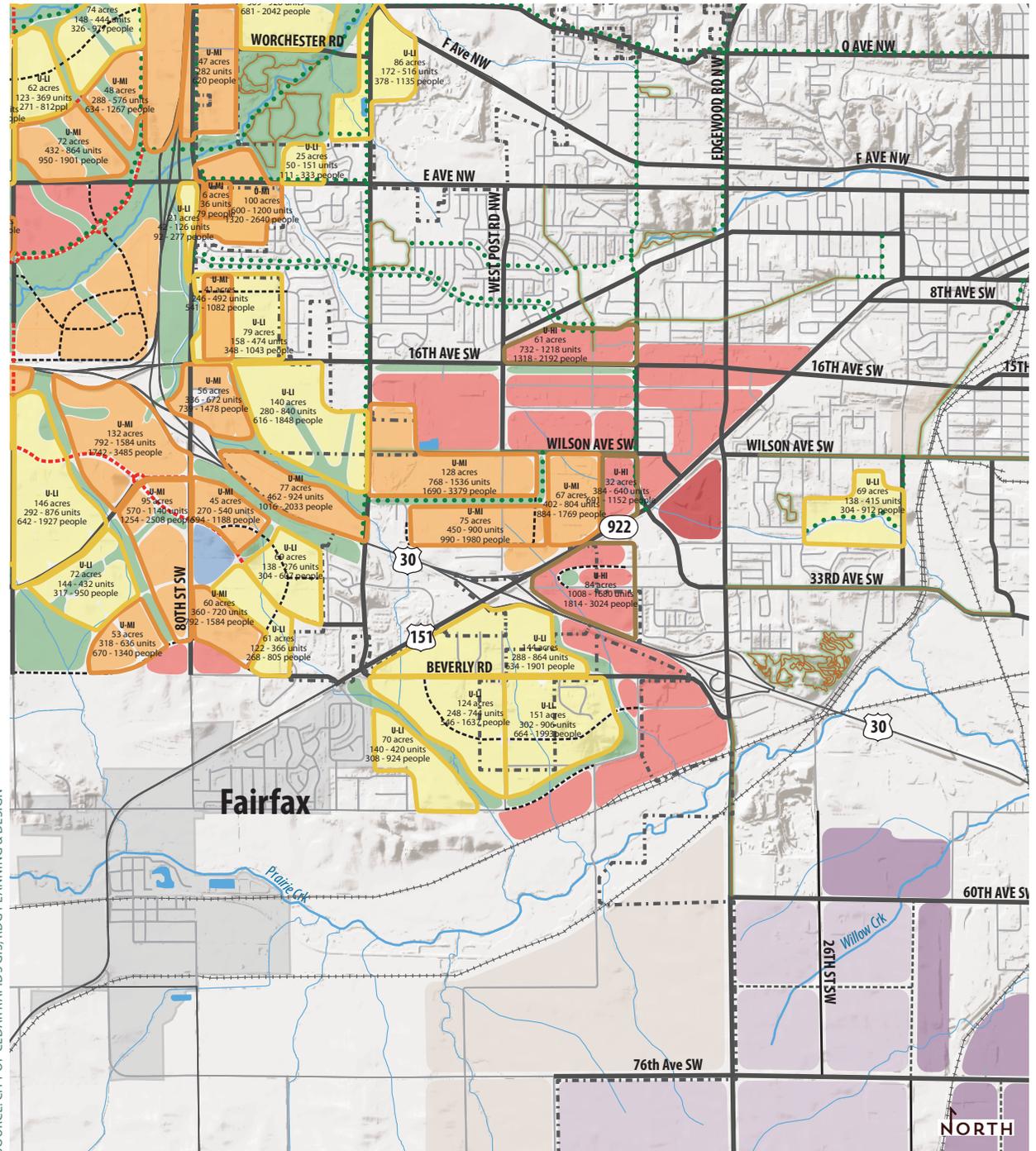
- Completing emerging neighborhoods.
- Increasing intensities north of Highway 30.
- Steering industrial uses to be near Highway 30 and along the railroad.
- Providing a mix of intensities west of Stoney Point Road SW.
- Establishing a system of green space and parks.
- Buffering between uses.

Connectivity Features

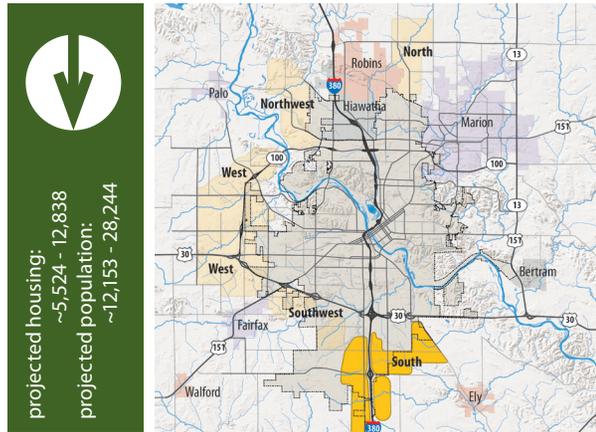
ConnectCR discusses strategies for an interconnected and multi-modal transportation system. Major transportation elements in the Southwest Area include:

- Extension of 44th Avenue SW.
- Extension of Lakeview Drive SW.
- Morgan Bridge Road SW over Highway 30.

MAP 7: Southwest Area



SOUTH AREA



The South Area is increasingly positioned for strong growth. This area is benefiting from major office development along Wright Brothers Boulevard and proximity to the airport, Prairie View Technology Park, and Kirkwood Community College. Highlights include:

Land Use Features

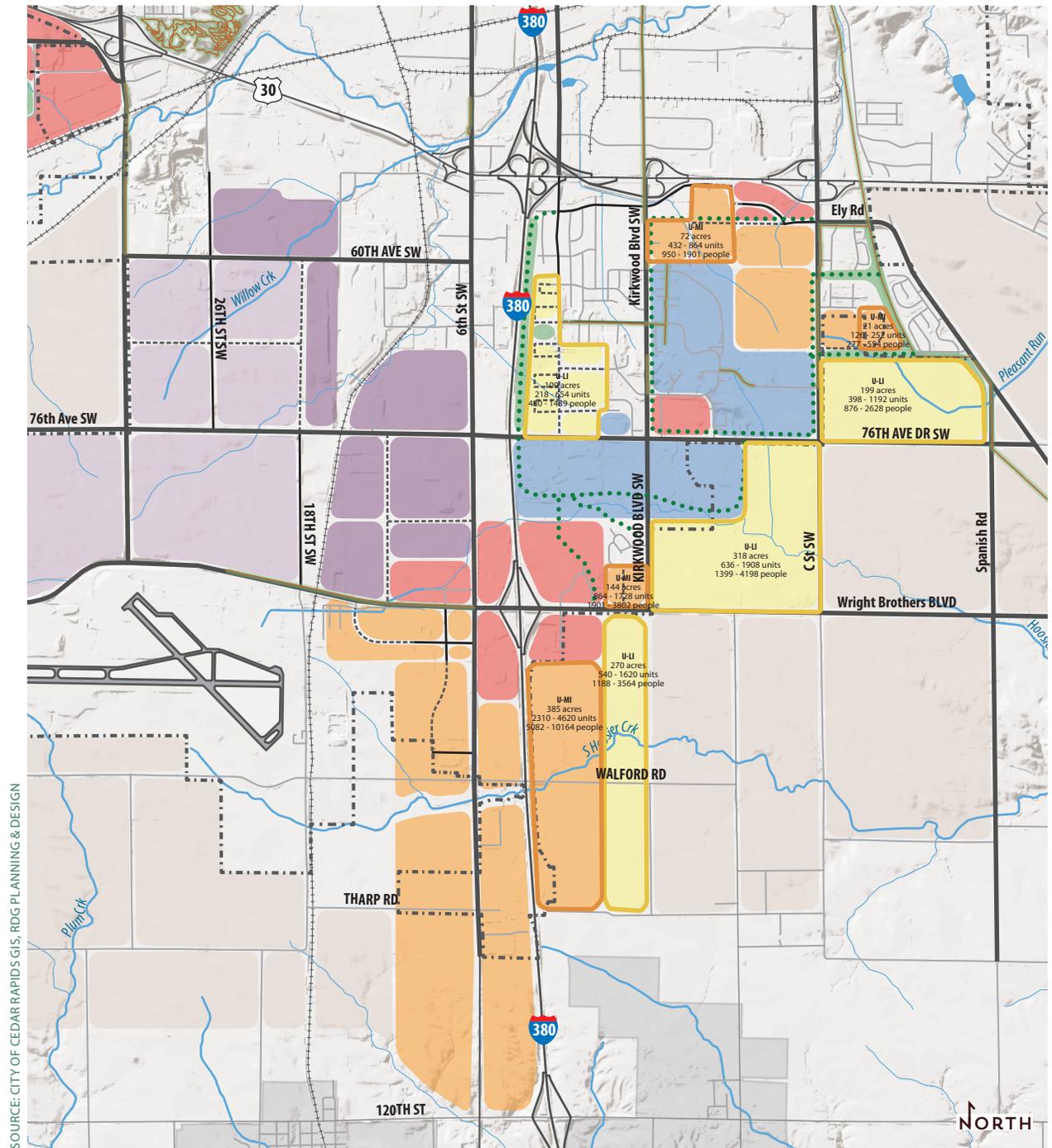
- Office uses near Kirkwood Community College.
- Area around airport reserved for future expansion.
- Employment Reserve near the airport, representing large land areas intended for new major employers.
- Industrial uses west of 6th Street SW.
- Continued development of Prairie View Technology Park.
- Low intensity uses in the southeastern part, along C Street SW, require a lift station.

Connectivity Features

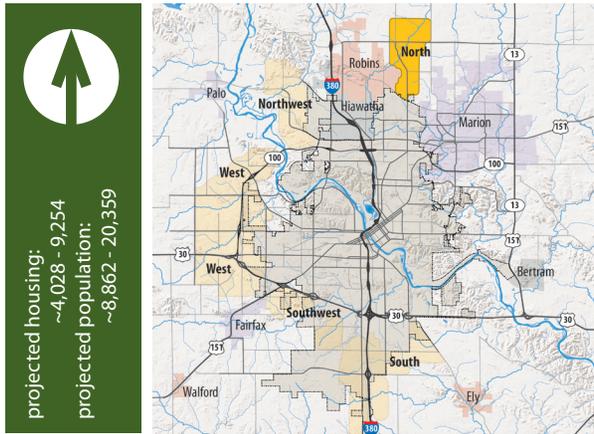
Major transportation elements in the South Area include:

- Prepare study for new street network to connect employment reserve and office park. A master plan should be developed to coincide with proposed development.
- Improve airport per Airport Master Plan.
- Linking campuses for College Community School District and Kirkwood Community College to the city's trail system.

MAP 8: South Area



NORTH AREA



The North Area is one of the primary areas for growth for Cedar Rapids. The Tuma Soccer Complex, located at the crossroads of C Avenue and County Home Road, is two miles north of Cedar Rapids' corporate limits. The development concept provides a concept for connecting the soccer complex into the city.

Land Use Features

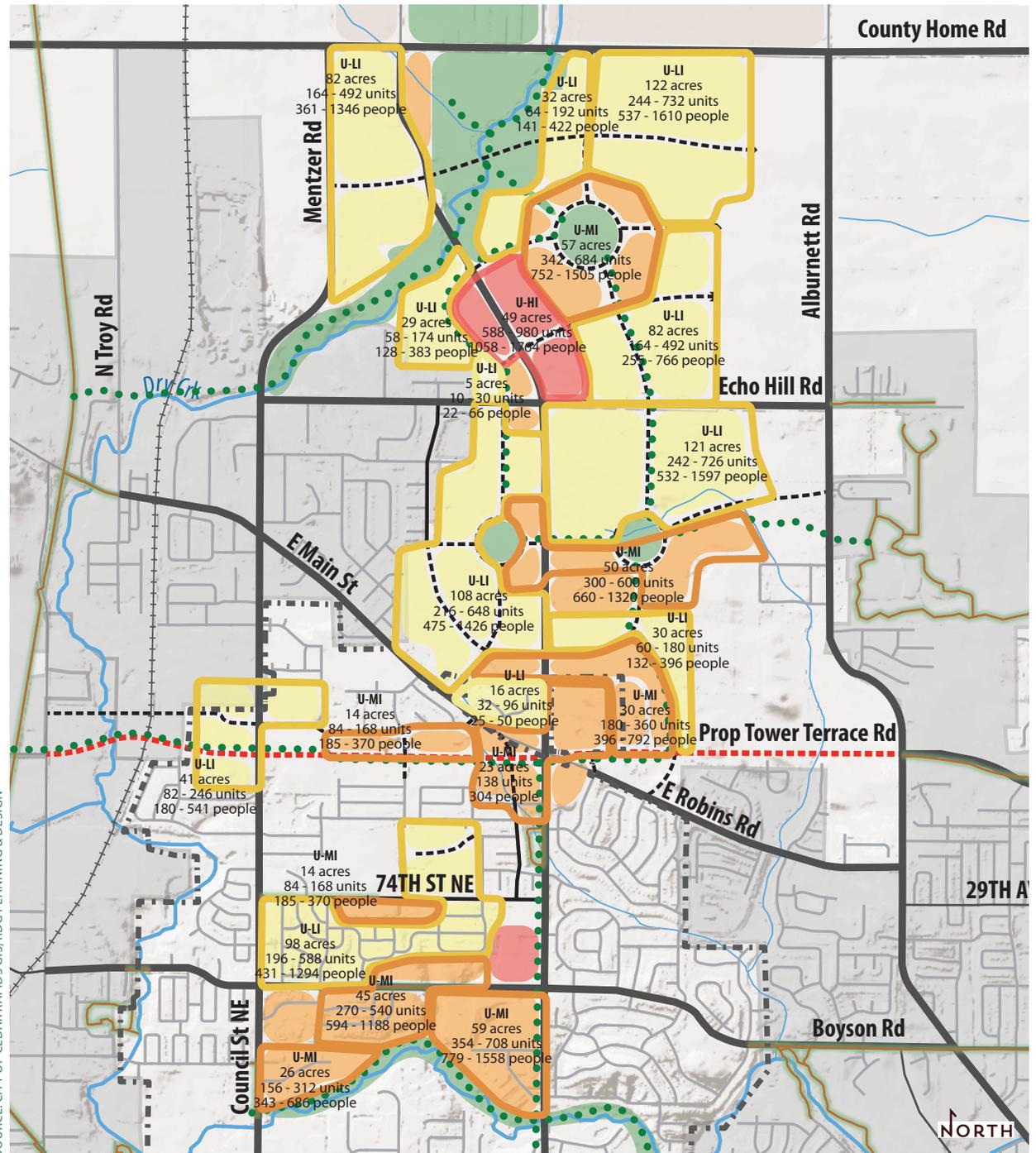
- Mixed-use commercial development at the intersection of Tower Terrace Road and C Avenue NE.
- Higher intensity uses near city limits, moving outward to lower intensity uses.
- Series of parks. Park spaces could be civic/public uses. Medium-intensity areas overlooking parks.
- Preserve greenways adjacent to waterways.

Connectivity Features

ConnectCR discusses strategies for an interconnected and multi-modal transportation system. Major transportation elements in the North Area include:

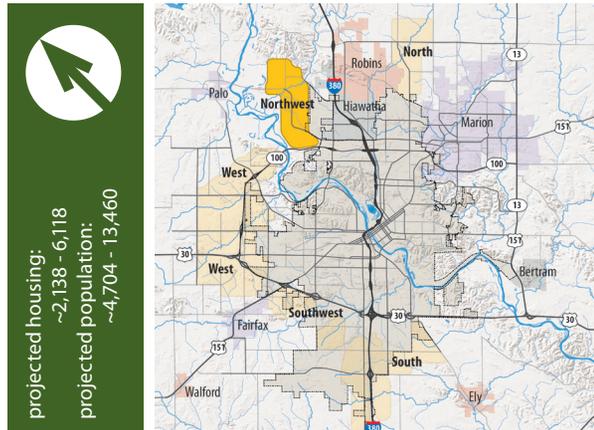
- Planned Tower Terrace Road improvements.
- New study required for a collector street running parallel to C Avenue, providing dedicated space for parks, trails, and bicycle paths.
- Extension of local streets to connect into the overall system.
- Extension of trails and bike paths.

MAP 9: North Area



SOURCE: CITY OF CEDAR RAPIDS GIS, RDG PLANNING & DESIGN

NORTHWEST AREA



The Northwest Area was one of the primary areas for growth in the 1999 Comprehensive Plan. Demand for its development has not emerged in 15 years. This area is not considered to be a major focus for the plan.

Land Use Features

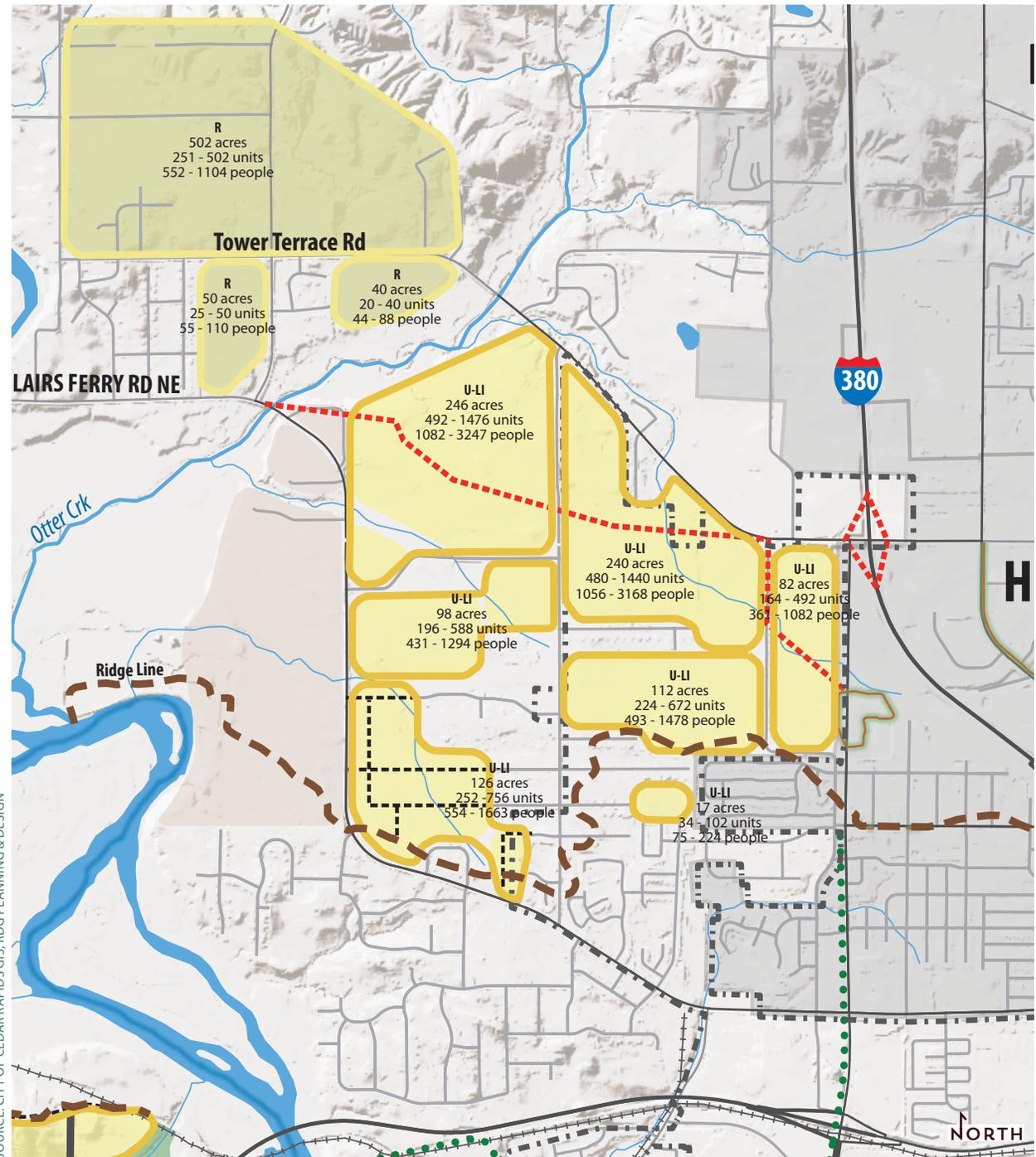
- Northwest Area is primarily Urban Reserve, indicating a need to limit development until other growth areas become built. Sanitary sewer service north of the ridge line, which is generally the alignment of Blairs Ferry Road, requires a lift station. This condition further limits constructability.
- Continue preservation of the riverfront and other areas prone to runoff and flooding issues.
- Linear development along Blairs Ferry Road should be prohibited.

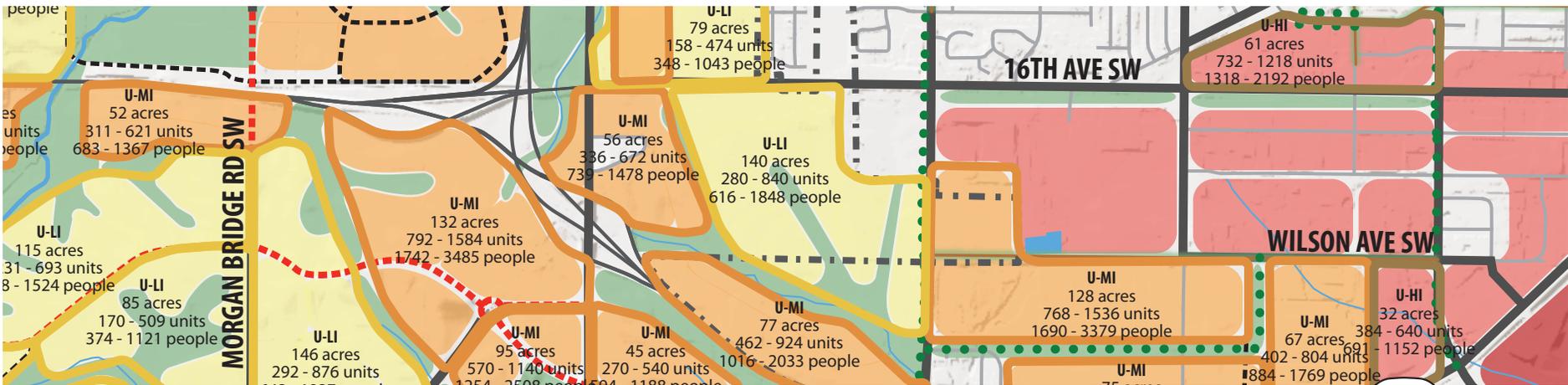
Connectivity Features

ConnectCR discusses strategies for an interconnected and multi-modal transportation system. Major transportation elements in the Northwest Area include:

- Ensure that all developments have multiple points of transportation access.
- Future roads should be connected, providing a network of streets.

MAP 10: Northwest Area





INITIATIVES

14. Coordinate with adjacent jurisdictions to preserve conservation areas identified in the Highway 100 Plan.

As the west growth area experiences development pressure, Cedar Rapids can ensure orderly growth and conservation leading to other jurisdictions.

15. Work with adjacent jurisdictions to identify conservation areas in future growth areas.

Cedar Rapids, in association with the county, nearby cities, and watershed authority, can identify and reserve land for conservation.

16. Study serviceability of infrastructure to growth.

ProtectCR provides a cursory review of infrastructure serviceability to growth areas. The city should commission detail studies for extending services to these growth areas.



GOAL 3: Connect growing areas to existing neighborhoods.

As Cedar Rapids grows, it should maintain a connected street network while providing options for moving about the city, including walking, biking, and using transit.

Cedar Rapids must maintain an effective transportation system to maintain good connections within and between neighborhoods, between neighborhoods and major activity centers, and for local and regional travel.

EnvisionCR reinforces Connections 2040 (Corridor MPO's Long-Range Transportation Plan), which specifically identifies connections between neighborhoods as a priority, stating:

Provide Accessibility to Existing and Future Development Areas: Providing a good transportation system to travel from home to work or shopping and a transportation system that provides good access to business are important for economic vitality. This transportation system can be responsive to land use growth patterns or provide a structural infrastructure element to promote target development areas, which are integrated with the land use system. - LSA Associates

Elements of this Cedar Rapids transportation system are considered in more detail in ConnectCR, and summarized:

Support Complete Streets

Complete streets are street corridors designed to accommodate all types of transportation, including motor vehicles, bicycles, and pedestrian transportation. The "complete street" concept applies to both arterial and collector streets and should be integrated into the transportation network of the city, particularly to the north and west growth areas.

Establishing a vocabulary of streetscape elements that span older and developing neighborhoods can unify the neighborhoods. Connected sidewalks, landscaping patterns, banners, neighborhoods graphics, and lighting are all elements of subtly connecting neighborhoods to each other.

Ensure Access

All neighborhoods should have multiple points of access. Subdivisions must be designed to allow for continuous movement and avoid streets that end in cul-de-sacs or stubs. Phasing of construction should be considered such that complete build-out accommodates vehicles, pedestrians, bicyclists, and possible transit.

Support Green Streets

Each person occasionally chooses travel routes based on the experience of the street. Pedestrian and bicyclists, who move at slower speeds and have a closer relationship with the street environment, gravitate toward attractive and secure corridors.

New collector streets should consider a tree planting pattern, while a reforestation program should be established for older neighborhoods.

Connect Trails and Parks

A pathway and greenway system knits neighborhoods together. A planned greenway system includes a network of trails, pathways, and greenspaces that connect neighborhoods, activity centers, and pathways along major streets. The city's street and pathway system provides some of the connecting tissue that assures that Cedar Rapids' neighborhoods are, in the end, components of a unified and diverse city.

Increased connectivity between existing and emerging neighborhoods strengthens the concept of a unified community made up of distinct parts.

Connect Natural Areas

Maintaining natural areas and open spaces between neighborhoods is relatively easy to accomplish in Cedar Rapids by preserving areas that are difficult to develop, such as hills, steep slopes, drainageways, and floodplains.

INITIATIVES

17. Identify ways to promote connectivity and accessibility as part of the comprehensive update to the zoning code.

Updates to the zoning and subdivision codes should ensure that policies are in place to maintain a high degree of connectivity with adjacent neighborhoods and centers of activity.



GOAL 4: Communicate and collaborate with regional partners.

Participants in EnvisionCR and other community leaders frequently cited a need to improve regional collaboration for communication and efficiency.

Cedar Rapids benefits from numerous regional organizations and initiatives already in operation, including Cedar Rapids Metro Economic Alliance, Iowa's Creative Corridor, ImpactCR, Leadership for Five Seasons, Diversity Focus, Greater Cedar Rapids Community Foundation (GCRCF), Iowa Cultural Corridor Alliance, and many more. All of these organizations and initiatives facilitate dialogue among various members of the community - living in or doing business in the area.

Organization

Iowa's Creative Corridor celebrates the region's culture and promotes the marketability of the region for business development. Through the leadership of the Economic Alliance, in association with Iowa City Area Development Group, the Iowa's Creative Corridor Project could expand to include a coordinated effort that effectively creates an umbrella initiative for all organizations that seek to improve the quality of life for the region.

Participants would organize themselves around the five principal capitals and be chaired by leaders in the region: financial, human, social, natural, and physical.

Adopting a common project to garner purpose and support will strengthen the communication and interaction among the various groups. Ultimately, chairs and co-chairs would become the central steering committee for the project and assist in coordinating sub-committees related to their capital.

- **Financial Capital.** Organizations and initiatives supporting the improvements of value. Possible organizations: Economic Alliance, banking and financial industry, and major employers.

- **Human Capital.** Organizations and initiatives supporting the improvements of people's health, knowledge, skills, motivation, and mental state. Possible organizations: college and universities, school districts and Grant Wood AEA, hospitals, health and human services organizations.

- **Social Capital.** Organizations and initiatives supporting stewardship of communication, relationships, and partnerships. Possible organizations: ImpactCR, Leadership for Five Seasons, Diversity Focus, GCRCF, and AARP.

- **Natural Capital.** Organizations and initiatives supporting the improvement of the natural environment. The health and quality of Natural Capital influences all other capitals. Possible organizations: Corridor Conservation Coalition, Linn County Conservation Board, Trees Forever, and Solid Waste Management.

- **Physical (Manufactured) Capital.** Organizations and initiatives producing goods and providing services. Possible organizations: Developers, major manufacturing, businesses that export goods.

Government Coordination

Communication between levels of government and with the public is essential to providing efficient and effective service. Actions for consideration to enhance local and regional communication include:

- Host annual open house. For example: Leawood, Kansas provides an annual open house for the community to learn about projects happening in their city. Departments have booths for people to approach managers to discuss projects that are adopted or being developed.

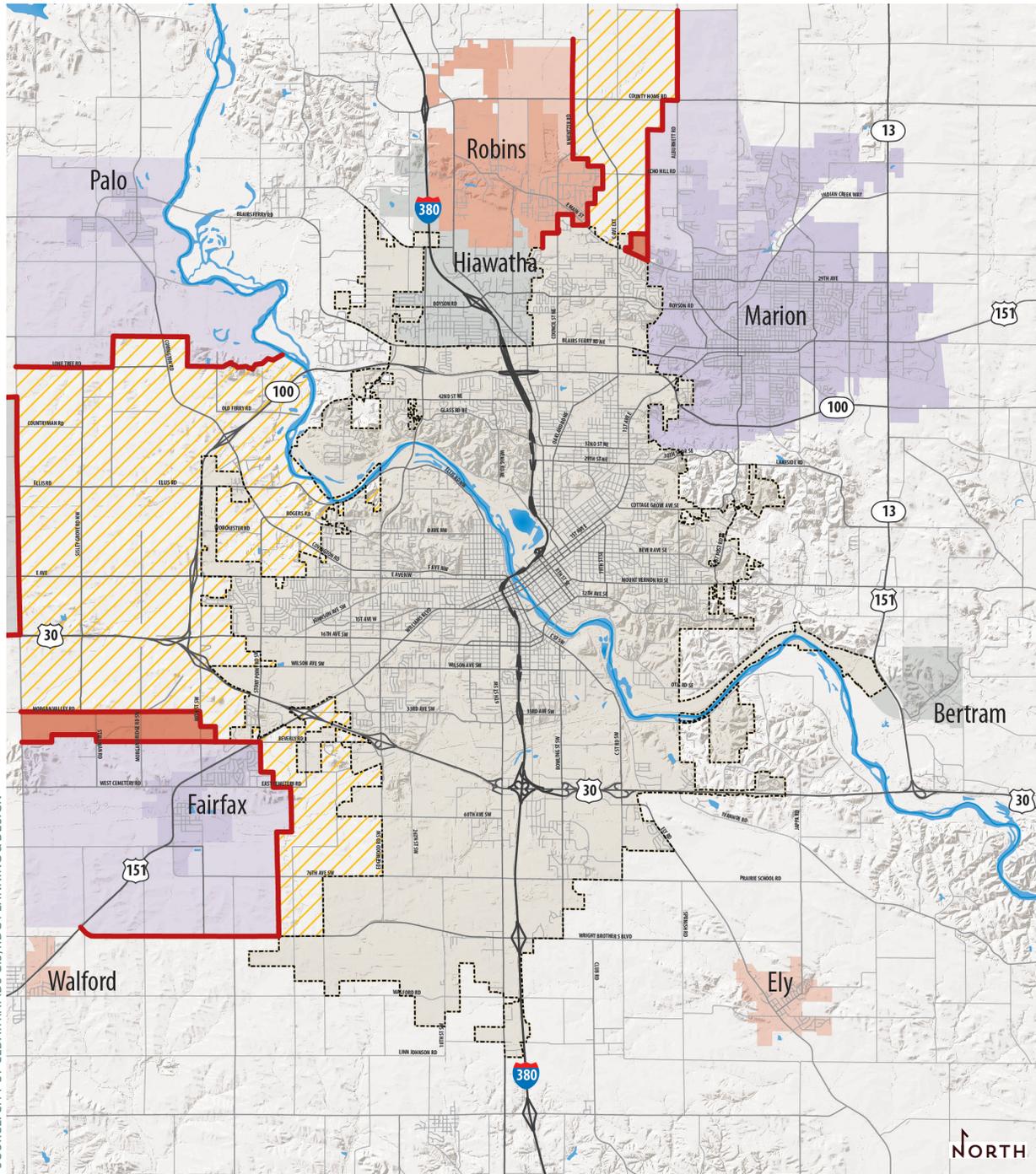
- Continue participation and coordination with the Corridor MPO.
- Initiate monthly meeting for mayors or city administrators in the region to discuss issues facing their community and region.

Update Annexation Agreements

The city should work with Linn County and nearby cities to assure consistent development standards for areas outside of Cedar Rapids' jurisdiction that are likely to be incorporated into the planning area during the next twenty years. Areas covered by annexation agreements are shown on Map 11. Areas considered for annexation should meet at least one of the following criteria:

- Areas outside the city that already have substantial commercial, office, or industrial development are logical candidates for annexation. In addition, existing residential areas developed to urban densities should be considered for potential annexation.
- A Positive Cost Benefit Analysis. The economic benefits of annexation, including projected tax revenues, should compensate for the additional cost of extending services to newly annexed areas. A financial analysis of areas considered for annexation should be performed to quantify the economic costs and revenues of expanding the corporate limits.
- Public Services. In many cases, public service issues can provide compelling reasons for annexation.

MAP 11: Annexation Agreement Areas



SOURCE: CITY OF CEDAR RAPIDS GIS, RDG PLANNING & DESIGN

INITIATIVES

Iowa's metropolitan regions have benefited tremendously by undertaking initiatives to improve dialogue between private and public sector organizations.

The purpose of the organizational effort is to enhance the region's marketability strength to compete with other metropolitan regions throughout the Midwest when attracting people and businesses to start or locate in Iowa.

18. Develop an annexation plan that incorporates infrastructure and service issues and costs, geographic features, environmental and other land use constraints, and market needs.

Cedar Rapids should maintain an annexation policy that incorporates areas that are experiencing development, meet state statutory requirements for annexation, and meet one or more criteria for incorporation into the city.

19. Continue to support regional planning efforts through coordination with school districts, other local jurisdictions, and the Corridor MPO.

Communication and collaboration among organizations for planning efforts ensures broader support and probable implementation.

- Annexation agreements
- Open areas covered by agreements
- Areas available for annexation
- City of Cedar Rapids