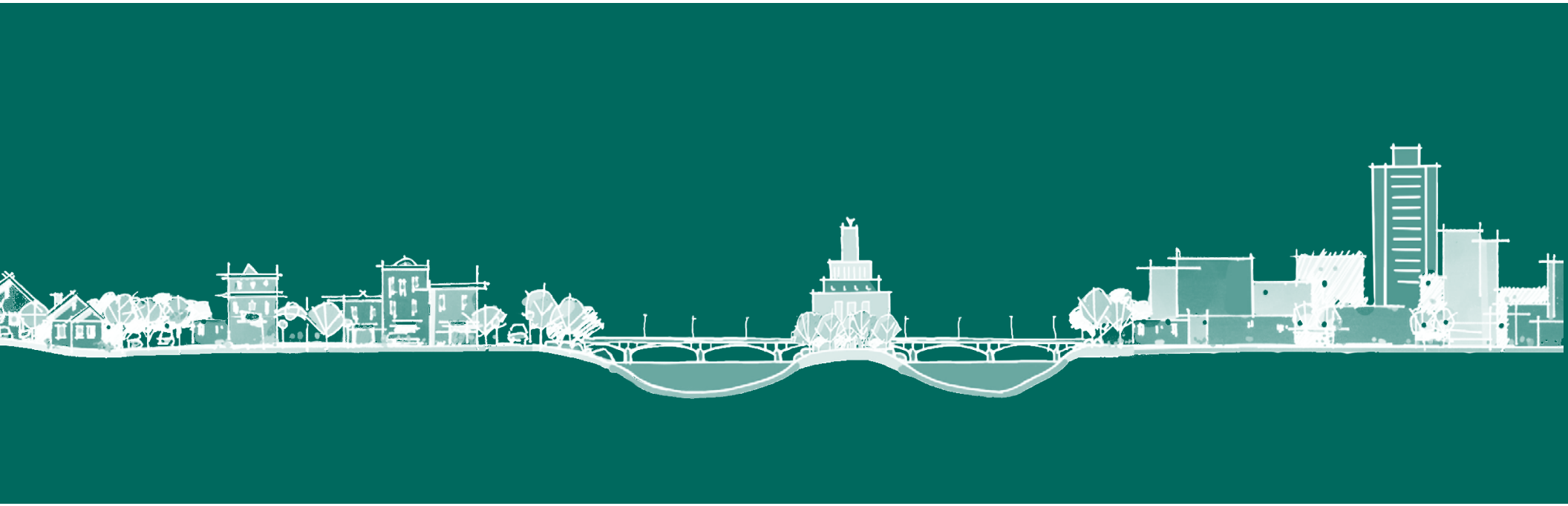
EnvisionCR



A COMPREHENSIVE PLAN FOR CEDAR RAPIDS, IOWA

UPDATED FEBRUARY 23, 2016

PREPARED BY
RDG PLANNING & DESIGN
HR GREEN, INC.

CEDAR RAPIDS
City of Five Seasons®

THANK YOU

City Manager
City of Cedar Rapids

It is with gratitude that I thank and acknowledge the Cedar Rapids community for their interest, involvement, and active participation in the planning process of EnvisionCR. It can be challenging to wrap your mind around something as vast as a comprehensive plan, but Cedar Rapids residents have shown us they are willing and active participants in helping shape the long-term vision of our community.

During the months of pre-planning leading up to the launch of the new plan, we knew we wanted to involve the community in every stage of the process. The plan previously on the books was more than 15 years old, and we were eager for fresh insight and a realigned sense of community aspiration and identity.

Under the skilled and experienced leadership of our Community Development staff, the department set out to engage residents of all ages and backgrounds in a process that would ultimately span the course of 13 months. This product is the result of collaboration to the highest degree, from high-school students to senior executive leadership.

From face-to-face interaction and open houses, to nontraditional forms of digital outreach, the community embraced the planning process and responded with thoughtful, intentional feedback. Our team was amazed at not only the sheer number of participants, but their level of engagement and anticipation of the future plan.

Internally, our efforts have also included cross-departmental collaboration and unity in plan adoption and implementation. The goals set forth in the comprehensive plan will be adopted by all departments, collectively using EnvisionCR as a blueprint for prioritization, funding considerations, and long-term planning.

It is with great anticipation that we look forward to the next chapter and see the initiatives start to unfold. Our planning efforts would not have been possible without the collaboration and participation of the community we serve. Again, thank you for your engagement and expectations. We look forward to answering the call.

Sincerely,

Jeff Pomeranz, City Manager
City of Cedar Rapids

ACKNOWLEDGEMENTS

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Ann Poe | At-Large
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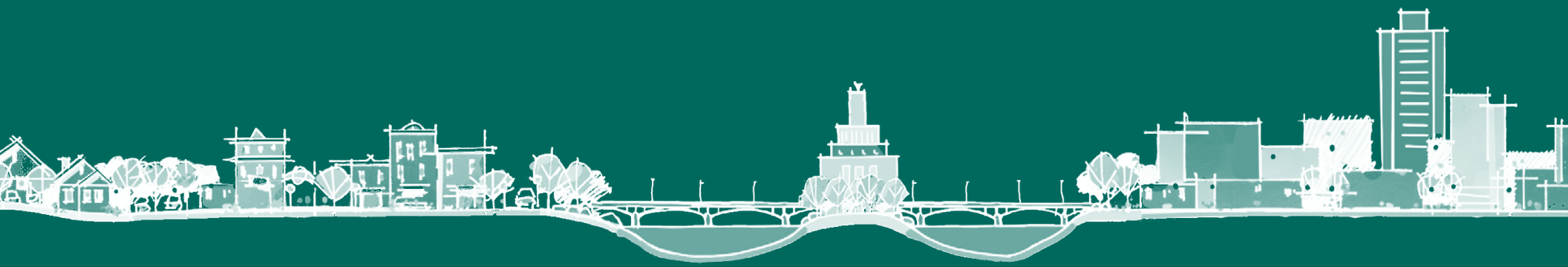

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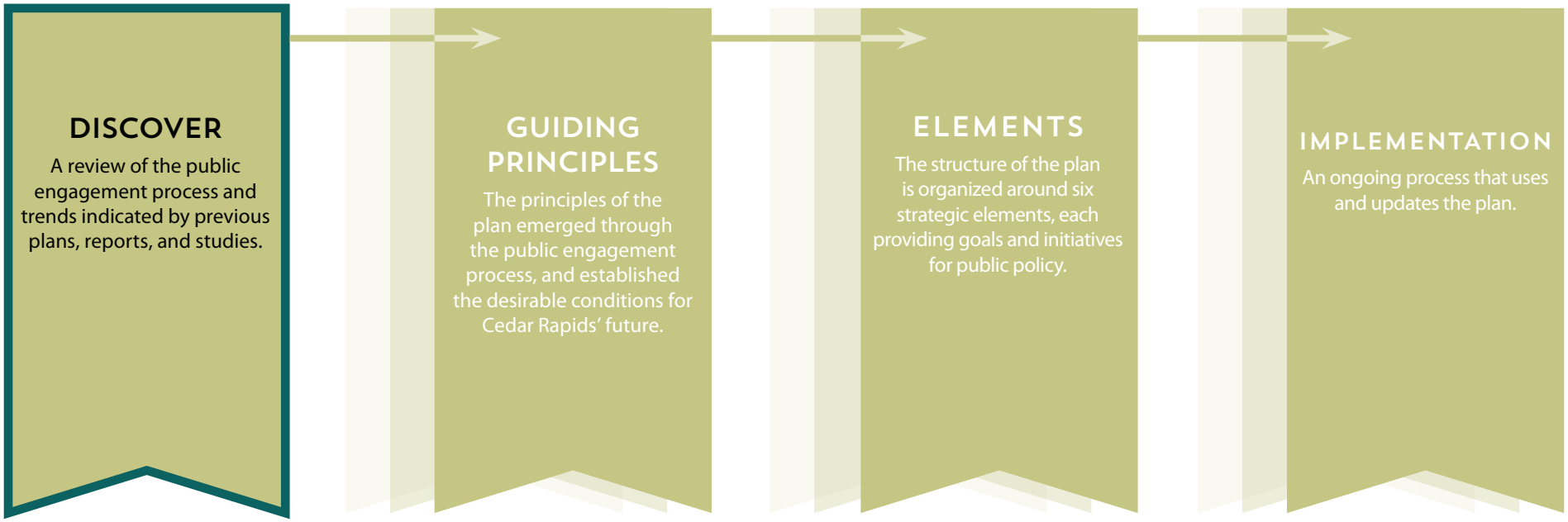


DISCOVER
AN INTRODUCTION

In March 2014, the city formally kicked-off its new comprehensive plan – EnvisionCR, a plan to engage residents hands-on and inspire them to create a vision for Cedar Rapids' future.

We want to thank the hundreds of residents who invested their time and insight to help roadmap a strong future. EnvisionCR is a true document of the people.

As comprehensive planners, we worried the post-flood planning required of Cedar Rapids residents would leave the community survey-weary and reluctant to move forward. We've never been so wrong.

You turned up by the hundreds at public open houses, and responded in droves online.

Nearly everywhere we turned, residents welcomed the chance to partner with city officials to build a dynamic future. You've shared your vision for neighborhoods, downtown retail, entrepreneurship and industry, active riverfront opportunities, and more.

The theme that underpins all of these exceptional visions is faith in what Cedar Rapids is, and what it can become. City leaders have heard your desire to build on these themes and create a community of exceptional choices – a hub of the Midwest, where people clamor to live, work, learn, and play.

We work across the country with city leaders who are creating fresh new plans, but rarely do we get to enjoy a community this involved - this empowered to shape its future. We were particularly wowed by a powerful think-tank of nearly 100 local high school students who offered intelligent ideas in creative and passionate ways, loving the opportunity to talk directly with city officials.

Thank you, Cedar Rapids – for your vision, your passion, and your faith in the future.

RDG PLANNING ● DESIGN

RDG Planning & Design

By way of introduction to this comprehensive plan, the consulting team's letter to the community, published in the Cedar Rapids Gazette on August 25, 2014 bears repeating:

THEMES

THEMES THAT UNDERPIN THE ENTIRE PLAN

SUSTAINABILITY

Sustainability is the ability to meet the needs of the present generation without compromising the ability of future generations to meet their needs by working toward a healthy environment, community, and economy.

HEALTH

Healthy places support residents' mental and physical health and in so doing, quickly attain a distinction as a place for families and young professionals to call home. For example, trails and parks spaces support the health of the body, while education and cultural facilities support intellectual development.

PLACEMAKING

People will often identify with one particular place within their city. Sometimes this location is a school, a park, or even one's home. Placemaking is about building memories through public spaces and activities, often associated with a destination like the riverfront, downtown or a given neighborhood.

EFFICIENCY

Efficiency is about doing things in an optimal way, for example completing an infrastructure project in the fastest or in the least expensive way. Effectiveness is about doing the right task, completing activities and achieving goals. The plan is about being both efficient and effective.

OVERVIEW

You will find here a visionary plan for action, rooted in the strong commitment of the residents of Cedar Rapids to continue what they have so well-started: to build an ever-better Cedar Rapids.

The plan's structure is simple. Here, in the **DISCOVER** section, you will get an introduction to the background materials and process that drove the plan. You will also see the four themes that drive the plan forward: sustainability, health, placemaking, and efficiency. These themes are ever-present throughout the plan.

The **GUIDING PRINCIPLES** section demonstrates the foundation for the plan, built from the grassroots up. These principles should drive decision-making within Cedar Rapids and throughout the region for many years to come. The public engagement process led directly to these principles and their resulting land use maps. This is a critical section for decision-makers and for the public to understand the broad-sweeping overall direction of the plan.

Then you will see six detailed sections or plan **ELEMENTS** – these make up the essence of the plan. Each element consists of a background discussion before introducing you to the element's goals. Each goal is supported by a series of initiatives that will help the city achieve that goal over time and reach the vision embodied through that element.

Finally, this plan reiterates the **INITIATIVES** in summary form, complete with timelines, roles and responsibilities – the information essential to creating a plan for action.

But this plan begins at the beginning – with a basic understanding of the purpose of a comprehensive plan.

ELEMENTS

The elements of this plan, with their associated goals, are as follows:

StrengthenCR. Make bold moves in community planning to retain the character of neighborhoods and corridors.

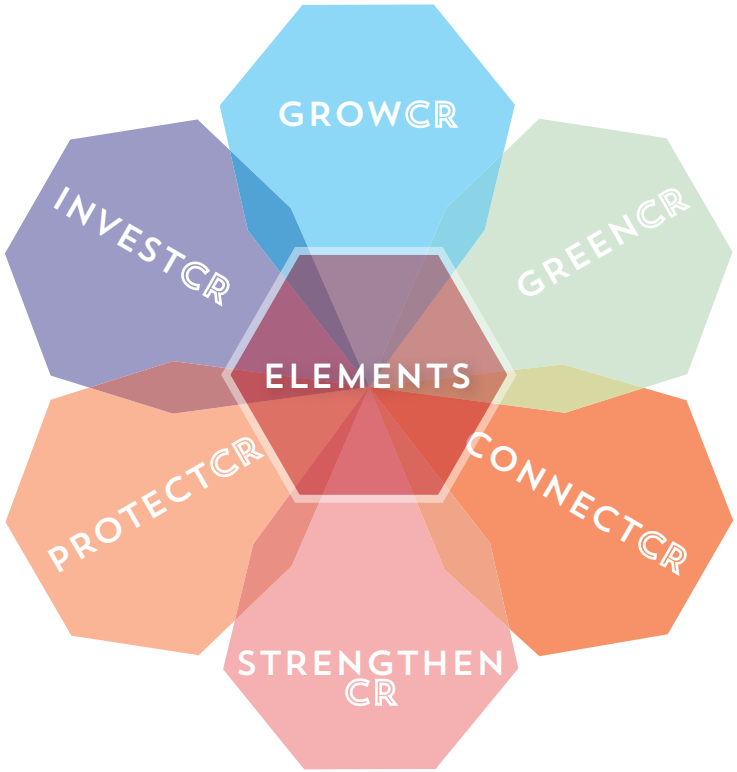
GrowCR. Make bold moves in future planning to encourage sustainable connections of growth areas to existing neighborhoods.

ConnectCR. Create a culture that enhances transportation options for pedestrians and cyclists through complete streets, trails, and public transportation.

GreenCR. Buffer and connect existing parks, trails, and streams to build a natural network in addition to regional collaborations and individual efforts to improve stormwater management, water quality, wildlife habitat, and outdoor recreation.

InvestCR. Make Cedar Rapids a desirable place for businesses to start, move, and grow by leveraging resources to invest in business districts and amenities that keep and attract a skilled workforce.

ProtectCR. Provide quality services to increase neighborhood safety and keep moving forward with the flood control system.



THE ELEMENT NAMES HAVE BEEN ADOPTED AS THE CITY COUNCIL'S GOALS. THE DESCRIPTIONS OF THE CITY COUNCIL GOALS HAVE BEEN USED TO DESCRIBE THE ENVISIONCR ELEMENTS AS SHOWN ON THIS PAGE.

PURPOSE OF THE PLAN

The EnvisionCR comprehensive plan provides a vision for the future of Cedar Rapids, with a focus on priorities for city policies and public investments in the next 20 years.

Primary Roles

The plan serves three primary roles:

1. Community Building. Comprehensive planning provides an opportunity for residents to create a shared vision for their community. Residents and city staff identified issues and opportunities for Cedar Rapids' land use, infrastructure, public facilities, and natural resources, among other areas. These findings were used to set public priorities and provide a set of action steps that can improve quality of life and make the city more attractive for potential growth.

2. Legal Basis for Land Use Regulations. Section 414 of the Code of Iowa allows cities to adopt land use regulations such as zoning and subdivision ordinances, and to promote the "health, safety, morals or general welfare of the community." These regulations govern how land is developed within a municipality and its extra-territorial jurisdiction. Land use regulations recognize that people live cooperatively and have certain responsibilities to coordinate and harmonize the uses of private property. The comprehensive plan provides a legal basis for these regulations.

3. Guidance for Decision-Makers. The plan will serve as a guide for city staff, the Planning Commission, City Council, and other city boards and commissions, as they set policy and make investment and land use decisions.

The plan is designed as a flexible document that can be updated as conditions change over time.

Iowa's Smart Planning Legislation

In 2010, the Iowa State Legislature passed the "Iowa Smart Planning Act" as a way to guide and encourage the development of local comprehensive plans. The legislation outlines ten smart planning principles and 13 comprehensive plan elements that Iowa cities should use to develop comprehensive plans. These guidelines are intended to improve economic opportunities, preserve the natural environment, protect quality of life, and ensure equitable decision-making processes.

The smart planning principles and comprehensive plan elements as defined in the legislation are listed above. Though the sets of elements and principles may look similar, they differ in that the ten smart planning principles are meant to be the overarching values that inform each of the 13 elements of the plan.

The Cedar Rapids comprehensive plan was created in compliance with the guidelines of the Iowa Smart Planning Act. The plan addresses all 13 elements of a comprehensive plan required by the Iowa Smart Planning Act, but is organized in a format that fits Cedar Rapids' public engagement process and planning needs. Cedar Rapids received an Iowa smart planning grant that partially funded the creation of this plan.

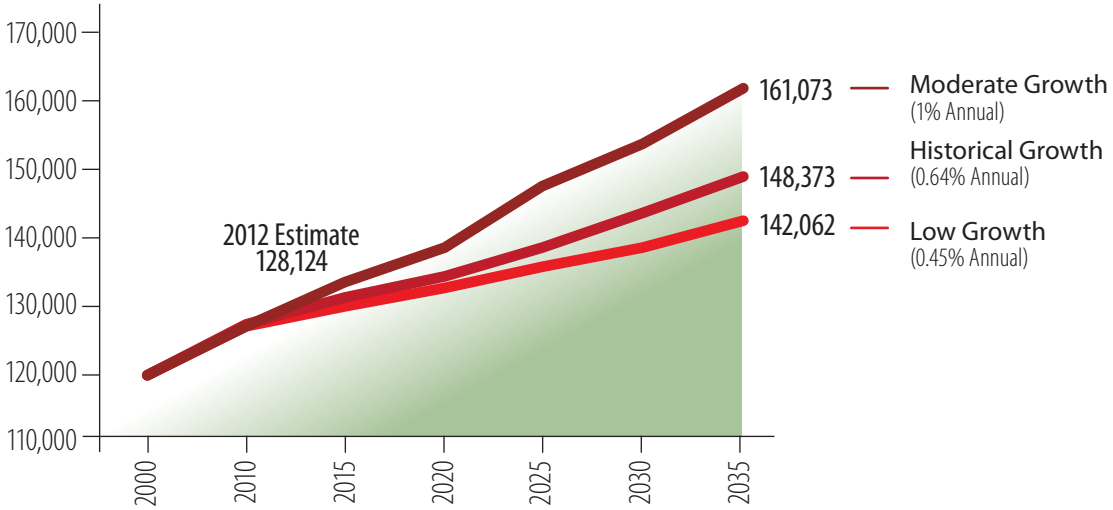
Population Projection

As Cedar Rapids prepares for its future, the first step in the process is to understand trends. Population projections help Cedar Rapids plan efficiently for future land use and community services. It is helpful to plan for a slightly optimistic growth rate. A one percent growth rate results in a 2035 population of about 161,000. This change raises immediate questions.

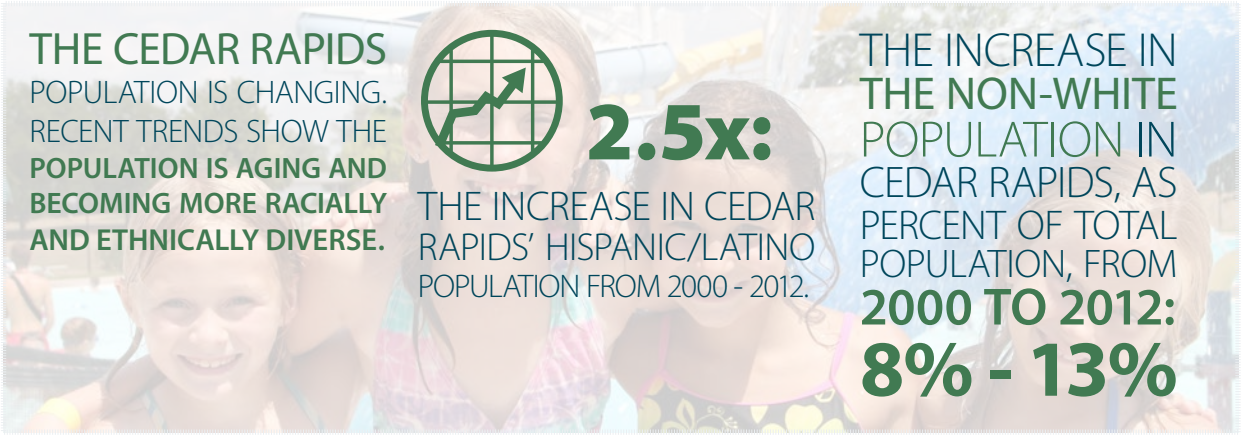
- Where will people live and what will be their housing preferences?
- Where will the city attract and support new employment for industrial and commercial growth?
- How will the city best provide access to existing neighborhoods and emerging growth areas? Infrastructure, too?
- How will Cedar Rapids develop differently to promote health, recreation, and mobility options?
- What will it take to improve the experience of living and visiting Cedar Rapids? How does the city enhance amenities to ensure quality of life improvements?

Cedar Rapids' residents and businesses are enormous community assets and their participation was essential to answering these, and many other, questions during the planning process.

CHART 1: Population Change and Projection



CHANGING DEMOGRAPHICS



PUBLIC ENGAGEMENT

This section of the plan describes outreach efforts of a community engagement program unprecedented in scope and its efforts to involve as many people from Cedar Rapids as possible. The campaign for maximizing communication and opportunities for the public input process include:

Steering Committee

The steering committee was an important team of decision-makers and involved citizens focused on a vibrant future for Cedar Rapids, based on resident needs and recommendations. The steering committee met throughout the development of this plan, guiding the process overall and ensuring the people's voices were well heard and considered.

Data Collection

Background materials related to the existing plan, past growth and land use, natural resources, neighborhoods, economy and a variety of other factors were developed to set the stage for understanding the importance of comprehensive planning. They also provided the starting point for building this plan and introducing the planning process to the steering committee, decision makers and the public-at-large.

Ongoing Feedback and Social Media

Throughout the process, the public has been invited to share ideas and input via the city's website, including participation in www.crtalks.com, directly e-mailing the Community Development Department (communitydevelopment@cedar-rapids.org) and/or participating via Twitter or Facebook. On March 24, 2014, the city also launched an on-line forum specific to EnvisionCR via Google Hangout. Panelists participating in the forum included representatives of the Iowa Cultural Corridor Alliance, Greater Cedar Rapids Community Foundation, Blue Zones, ImpactCR, and the Cedar Rapids Gazette. Public comments are viewable via the web through easy links from the EnvisionCR page on the city's website.

Kick-off Celebration

On March 26, more than 300 residents engaged in a dynamic open house, that outlined essential content for the plan and seeking the public's input on each of the categories:

- Neighborhoods and housing
- Land use and environment
- Parks and recreation
- Transportation
- Infrastructure and facilities
- Economic development
- Population and growth

At that kick-off event, and throughout the course of the public engagement process, the public was also asked to share its big ideas for the future of Cedar Rapids. Comments ranged from skate parks to support for industry and entrepreneurs. All comments were considered and many incorporated as the process moved forward – translating into principles, goals, initiatives, or additional critical background information for this document.

Stakeholder meetings, small group discussions, and interviews.

Throughout the process, but particularly in the winter and early spring of 2014, the consulting team and city Community Development staff conducted an ongoing series of conversations, reaching out to audiences from the following backgrounds:

- Natural resources and the environment
- Utilities, infrastructure, and energy production
- Police, fire, hazard mitigation, public safety
- Economic development and the financial community
- Industry and entrepreneurism
- Technology and communications
- Education and social services
- Neighborhood residents and leaders
- Downtown development
- Arts, culture and historic preservation
- Non-profit organizations
- Public health and medicine
- Regional services and initiatives
- Developers
- Planners

These conversations included discussions of the city's current strengths and challenges, potential opportunities, desired future, and obstacles to achieving that future. Comments of both a broad-sweeping and specific nature were encouraged. These sessions provided critical insight to prepare for additional conversation with the public and stakeholders and for direct input into this plan.

Stakeholder Workshop

Two stakeholder workshops with 30-50 participants each were conducted to focus on key input aspects to the plan. The first workshop (March 26, 2014) involved visioning elements/big ideas and identifying gaps between a preferred future for Cedar Rapids and current conditions. A second workshop (June 17, 2014) saw the stakeholders developing goals, action steps, and considering measures of success.

Community Workshop

EnvisionCR covers a large and diverse area. In order to address specific local issues, one week-long planning workshop was held, allowing the public to stop by throughout the week and essentially become part of the

planning team. They identified issues and expressed ideas for their neighborhoods and businesses in words, sketches, and maps. This workshop took place in April 2014.

Student Program

Cedar Rapids may well lead the nation in involving youth in its comprehensive planning efforts, particularly through a series of highly interactive sessions involving four high school classrooms, reaching nearly 100 students. Initially, a member of the consulting team and/or city staff visited each classroom to gain insights into student likes/dislikes and big ideas for Cedar Rapids. These sessions were followed by a half-day event involving all classrooms at once, where students crafted visions, goals, and actions to move their community forward. They reported their results with a mix of flip chart bullet points, and dramatically more creative means (including art work and song). As one student put it at the conclusion of the event, "This makes me think I'd like to stay here after all."

Mainstream Media

Articles, letters to the editor, radio and television interviews provided opportunities to communicate the plan's purpose, objectives and emerging recommendations.

Open Houses

In addition to the kick-off celebration, two additional open houses provided key points of opportunity for public input and feedback on the plan as developed at that point in time. Held on August 27, 2014 and November 10, 2014, these open houses generated 100+ participants each and high quality feedback, including detailed review on the part of many citizens of the draft goals and initiatives using a pencil-and-paper feedback instrument.

DIALOGUE OPENS DOORS FOR CITY PLANNING

By Kyle Skogman
Published in Corridor Business Journal
August 25, 2014

Public engagement can be a challenging and rewarding component of civic planning. Over the last several months, I've been encouraged to see the city facilitate meaningful dialogue as part of the new comprehensive plan, EnvisionCR.

I've been afforded the opportunity to advocate for diverse community and business representatives by participating on the EnvisionCR steering committee, a role that has allowed me to glimpse a wide-array of public feedback.

This opportunity has only grown my respect for the varying perspectives we share as a community, and for the well-rounded structure the city is giving to their comprehensive plan.

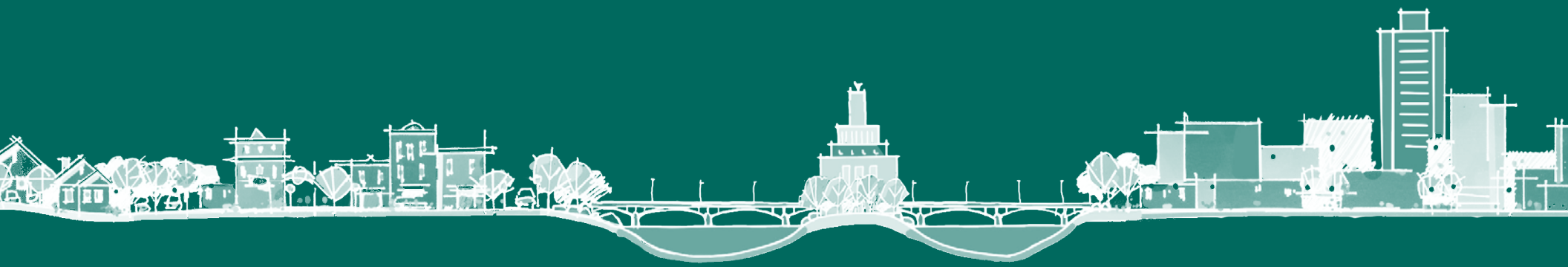
Alongside representatives from non-profits, young professional networks, developers, business owners, educational professionals, corporations, and City Council members, the steering committee has helped champion the direction of the draft plan, and helped unravel a myriad of public feedback comments.

While our perspectives are diverse, we have found that our goals are very much the same. We see the need to keep building on the momentum of downtown, from Newbo to Kingston. We see the value and the importance of studying our transportation system – we want to avoid repeats of infrastructure that has brought frustrations or challenges. We have expressed a desire for a robust economic development strategy, giving traction to young entrepreneurs and making ourselves attractive to outside businesses.

Together, key stakeholders have wrestled with questions that fundamentally shape the Cedar Rapids landscape; questions like what does it mean to be an economic leader? How do we establish ourselves as the hub of the region? How can we promote mixed-use development? What can we do to ensure Cedar Rapids offers activities that appeal to a wide age range?

I have been proud to help facilitate this critical dialogue as Cedar Rapids moves forward with the next steps of their comprehensive plan.

GUIDING PRINCIPLES

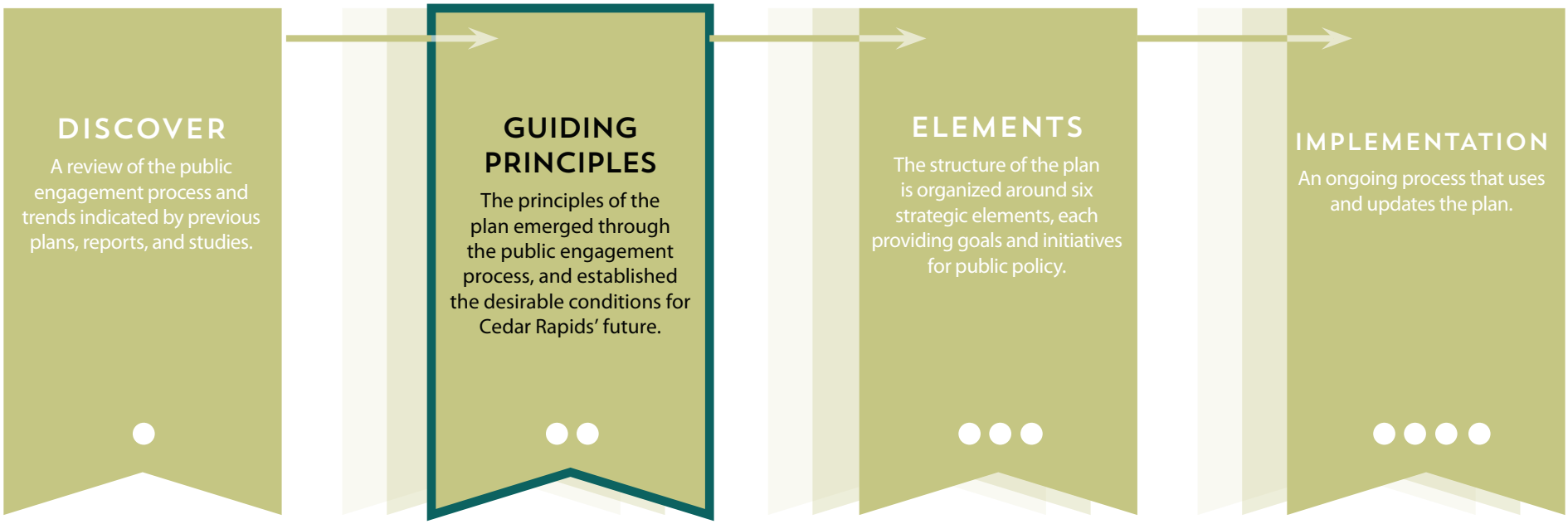


"There is no logic that can be superimposed on the city; people make it, and it is to them, not buildings, that we must fit our plans."

- Jane Jacobs, Author

STRUCTURE

THE ORGANIZATION OF THE PLAN



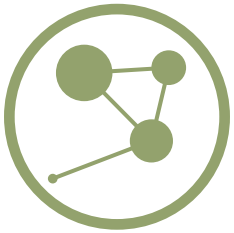
GUIDING PRINCIPLES

ACHIEVE A UNIFIED VISION

LIVE HEALTHY

STRENGTHEN NEIGHBORHOODS

KEEP BUSINESS VIBRANT



CONNECT THE CITY

EMBRACE THE OUTDOORS

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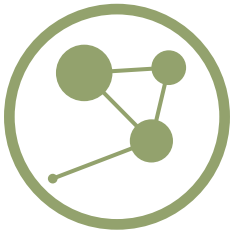


CONNECT THE CITY

EMBRACE THE OUTDOORS

STREAMLINE SERVICES

As an urban center in an agricultural region, Cedar Rapids is comfortable in balancing diverse interests, exploring options, and supporting a broad spectrum of lives and livelihoods.

EnvisionCR's guiding principles reflect a community focused on a vibrant and dynamic future of lasting value - one that promotes public health, social engagement, a robust economy, natural resources and life-long learning. At the same time, Cedar Rapids embraces history and a future of artistic, cultural, scientific, and technical vitality.

The tragic flooding of Cedar Rapids in 2008 left a city of districts significantly ravaged. That the people's spirit rose well above the river levels leaves a flood legacy dramatically counter to the original destruction. And now Cedar Rapids looks forward with enthusiasm. The city has done much planning post-flood. Residents could easily have grown planning-weary, unable to wrap their arms around yet another effort in the city's recovery. That has not proved the case. The residents and leaders here have welcomed the opportunity to plan for a long-term future in the hopes they can continue on the post-flood trajectory of Cedar Rapids: better than ever.

The people of Cedar Rapids now plan proactively for their future. Their conversations point to a set of principles that should shape the city's work ahead for years to come. It should be noted the four themes of sustainability, health, placemaking, and efficiency are ever present as an undercurrent to these guiding principles. These principles - intended to drive decision-making - are derived from the many stakeholder conversations and broad public input sessions held in support of this plan.

The guiding principles are followed immediately by the land use maps, as they are a direct result of these principles and foundational to the overall plan.

ACHIEVE A UNIFIED VISION

COLLABORATE TO ACHIEVE A UNIFIED VISION FOR THE CITY AND REGION.

REGIONALISM

Cedar Rapids desires to facilitate a regional environment that supports not just individual community or neighborhood needs, but recognizes the importance of regional collaboration and regional vision. The Cultural Corridor, annexation and utility agreements, and the trails network serve as features in getting this work underway. Enhanced regional functions and goals need to be a part of the future of Cedar Rapids and its surroundings.

CREATIVE HUB TO THE CREATIVE CORRIDOR

Cedar Rapids' role in the Cultural Corridor referenced above reinforces this concept of regionalism. A cultural corridor implies cultural exchange, not single direction transfers. Cedar Rapids residents want to see NewBo, Paramount, the Czech-Slovak District, the McGrath Amphitheatre and more coalesce into a critical cultural mass with traction.

LIVE HEALTHY

CREATE A HEALTHY AND DESIRABLE PLACE TO LIVE.

Healthy places support residents' mental and physical health and in so doing, quickly attain a "buzz" – a distinction as a place for families and young professionals to call home. Cedar Rapids has been designated a Bicycle Friendly Community and recently named an All-American City. These designations confirm Cedar Rapids' alignment with this principle.

A COMMUNITY OF CHOICE

Cedar Rapids' residents ask for options. Many speak to a desire to embrace diversity in all things. They want to walk as well as ride, promote entrepreneurship while embracing industry, connect to the river or enjoy an upland neighborhood. They welcome an opportunity to design daily living that meets their personal, family, inter-generational, and cultural needs.

DOWNTOWN VITALITY

The public sees the current downtown as mostly business interests - but they aspire to see boutiques and start-ups and artful spaces. They love NewBo and want more.

INDUSTRY EMBRACED

Cedar Rapids' riverfront reflects its river-industry roots at key points in the heart of the city. How might Cedar Rapids embrace that history and tell its story - not just as economic advantage but as potential cultural icon? How do smokestacks shift from perceived blight to a source of texture, authenticity and appreciation? Residents anticipate this as a challenge they intend to address over time.

STRENGTHEN NEIGHBORHOODS

STRENGTHEN THE QUALITY OF CEDAR RAPIDS' NEIGHBORHOODS. CREATE HOUSING OPTIONS FOR ALL.

TRADITIONS AND FUTURE NEEDS

Strong neighborhoods honor the traditions of the past, but keep a mindful eye to resident needs for the future – through social, cultural, work, health, learning and recreation opportunities. Historic preservation also helps play a key role in this endeavor. Developing neighborhoods rich in living options supports the community of choice theme and builds community character.

NEIGHBORHOOD HUBS PRESERVING COMMUNITY CHARACTER

Neighbors speak to a need for greater empowerment, identity, and a resulting strengthening of character and community. Cedar Rapids residents ask for connections throughout Cedar Rapids, but they still desire hubs of vitality dispersed throughout the community - allowing each neighborhood its focal point, its distinction.

KEEP BUSINESS VIBRANT

REINVEST IN THE CITY'S BUSINESS CORRIDORS AND DISTRICTS. COMPETE SUCCESSFULLY FOR PRIVATE INVESTMENT.

Cedar Rapids continues to support and benefit from the long-term employers, many with agricultural, technological or other innovative roots. New opportunities emerge through entrepreneurship, incubators, and innovation corridors. Cedar Rapids has enjoyed success through attracting small satellites of larger businesses and encouraging their local growth.

AUTHENTIC EXPERIENCES

Residents want to provide the foundation for experiences both tactile and technological, adventurous and reflective, entrepreneurial and artisan. The Maker Movement, "authentic networking," local foods, and cultural creatives need increasing room(s) - indoors and out - to experiment, stretch and grow here.

SKILLED WORKERS

Industry and economic development experts want Cedar Rapids to better integrate education and specific work-force needs in the community. They speak of a potential shortfall in the jobs they need filled and what the workforce can provide. Interest in improved integration of Cedar Rapids' dynamic education centers into the fabric of the community surfaces here. Ongoing dialogue between businesses and academia are important.

CONNECT THE CITY

CONNECT ALL PARTS OF THE CITY. INTEGRATE LAND USES AND ENCOURAGE PEDESTRIAN-SCALED DESIGN.

Cedar Rapids' growth of the future includes increased linkages and/or bringing services and choices together for access, collaboration, and synergism.

PLACES AND PATHS

Residents seek physical connections that reflect the "community choice" theme. Walking, cycling, and public transportation must be as accessible as options for the car. Closer proximity of areas where residents can live, work, learn, and play allow for easy pathways and/or merged services.

EMBRACE THE OUTDOORS

PRESERVE NATURAL AREAS AND MANAGE IMPACTS. ESTABLISH A PREMIER SYSTEM FOR PARKS AND RECREATION.

A post-flood Cedar Rapids has already made great strides in embracing its natural systems. Relatively recent studies speak to the value of environmentally sensitive areas and large tracts of habitat to support diverse plants and wildlife. Residents need nature integrated into daily living for physical and mental health.

A GREENER CITY

The riverfront greenway is just one piece of a community seeking at every turn to make its mark in the arena of sustainability. Pockets of dynamic social spaces coupled with relatively high per capita park acres have inspired residents and leaders to promote public health in daily living, to support restoration, multi-family housing, energy conservation and alternative fuels, complete streets, sustainable sites, easy-access trails - the list goes on. They ask for a community that makes a commitment to sustainability.

STREAMLINE SERVICES

PROVIDE EFFICIENT URBAN SERVICES.

STREAMLINED GOVERNMENT, EFFECTIVE PARTNERSHIPS

Many see the public-private partnership - in varied configurations - as one of the paths to Cedar Rapids' future success. They see those partnerships most enriched through government systems that foster collaboration and coordination. One-stop-shops, all stakeholder roundtables and consistency across boundaries in rules and rule-making surface as potential tools for Cedar Rapids' progressive future.

UNDERSTANDING MAPS

The Development Concept map, Map 1, shows land uses and road connections for potential growth areas. The elements of the development concept are explained in detail in the elements of this plan. The concept shows more land than needed to accommodate 2035 population projections.

The Future Land Use Map on the opposite page - combines the development concept with existing land uses and longer term growth areas. This map shows land use transitions that will not occur for many years, beyond the 2035 time frame.

Both the development concept and future land use map are based on the guiding principles and adopt an intensity-based approach to managing land development.

Important Points About the Maps

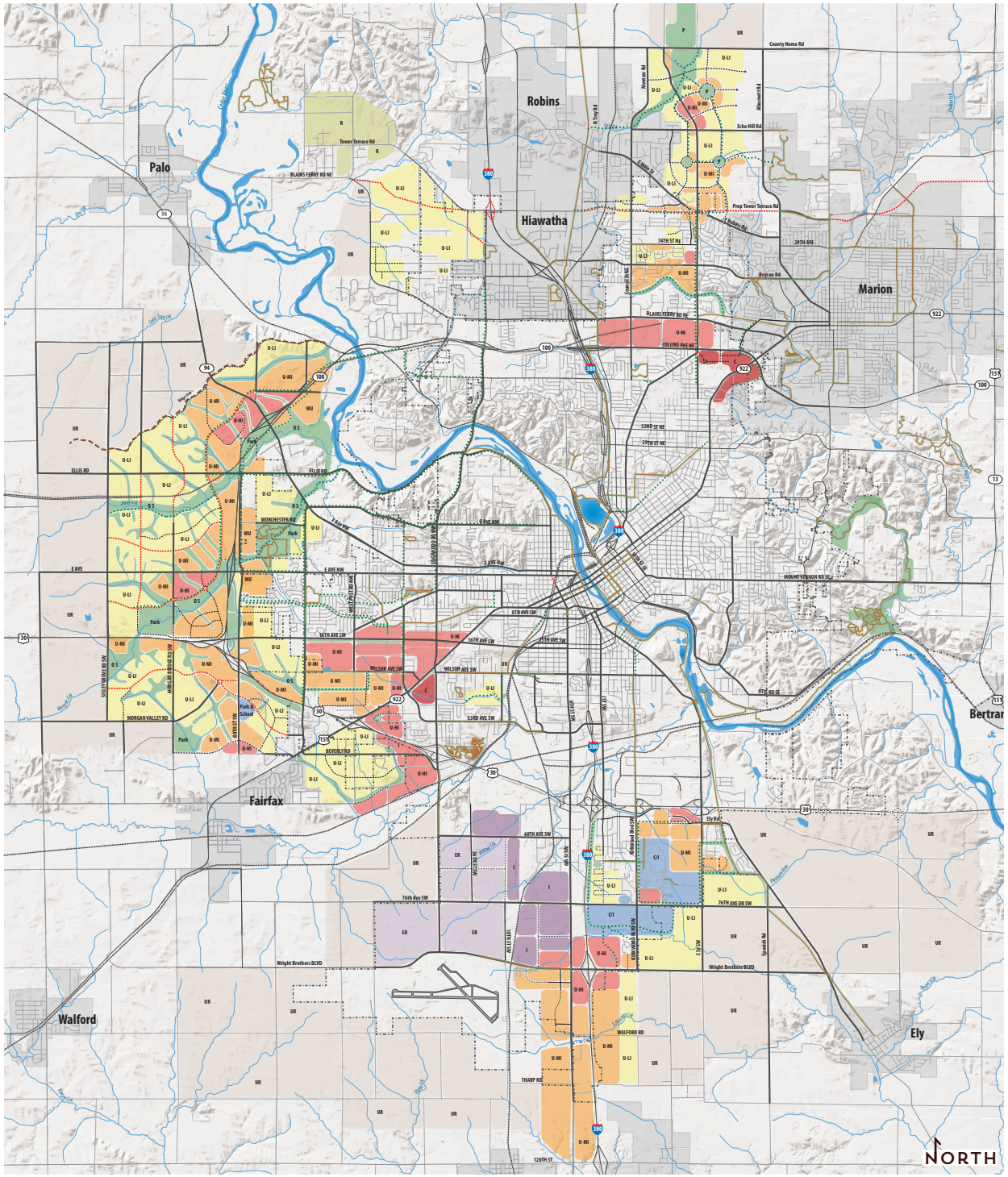
The maps depict new land uses for privately owned properties. The transition of these properties from their current use to the depicted use is expected to occur over time, in response to market demands, as property owners voluntarily sell, develop, or change the use of their land.

- Agriculture
- Open Space
- Rural
- Urban Large Lot
- Urban Low-Intensity
- Urban Medium-Intensity
- Urban High-Intensity
- Commercial
- Downtown
- Industrial
- Employment Reserve
- Public/Semi-Public

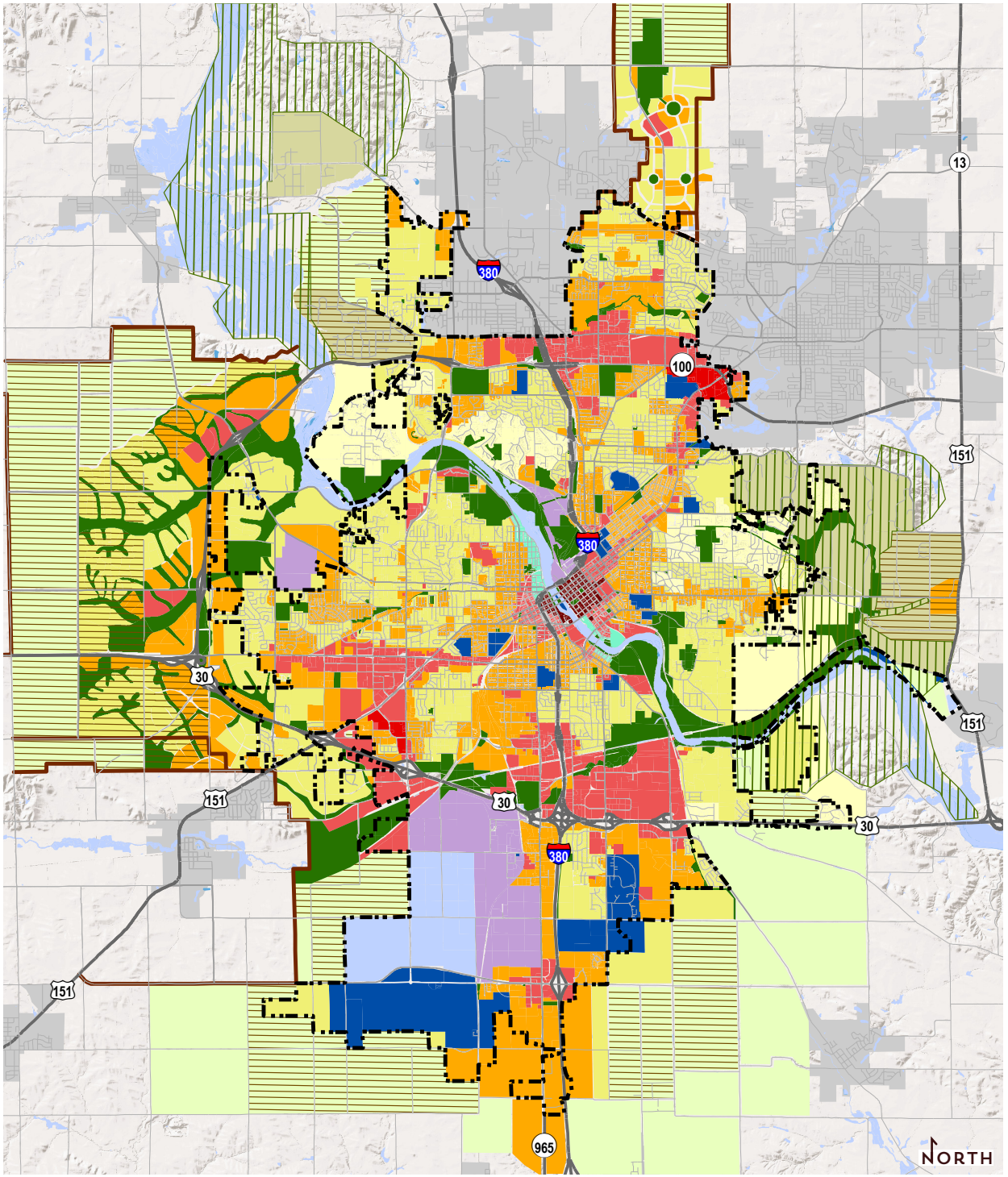
FLU Map only

- Urban Reserve
- Environmental Conservation
- Flood Control Study Area

MAP 1: Development Concept Map



MAP 2: Future Land Use Map



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.

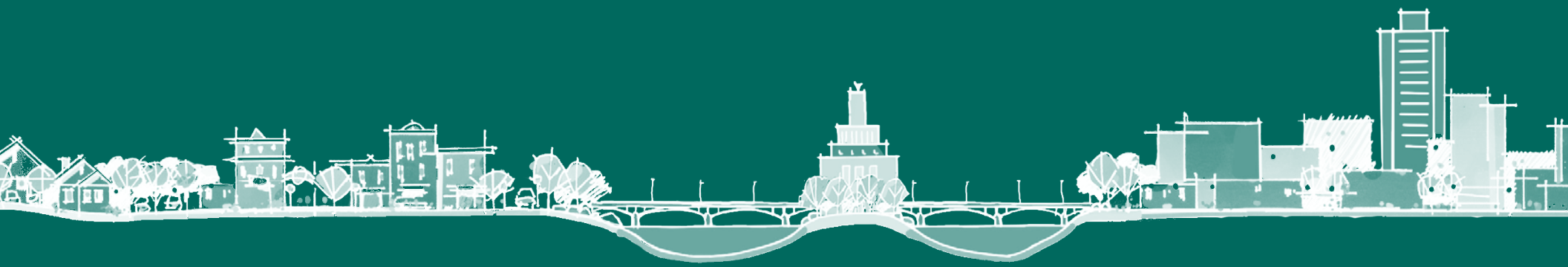
The Future Land Use Map presents the land uses envisioned for the future. The new land uses represented on this map will transition over time, as property owners voluntarily sell, develop, or change their property.

Future Land Use Map. The Future Land Use map provides flexibility for a variety of land uses within each Land Use Typology Area (LUTA). The map should provide guidance for:

- Levels of intensity and density.
- Generalized land use locations and transitions: Minor variations in land use, such as a small civic use on a residential block, are not reflected in this generalized map, but may still be permitted per new zoning regulations.
- Collector and Arterial Street connections: Critical arterial and collector street connections are specified on this map, though the exact routes will depend on detailed engineering studies. Local streets will be determined as development occurs. See ConnectCR.
- Critical Natural Resource Areas: Areas are based on the development suitability map in GreenCR. The boundaries of these areas should be given significant weight in decision-making.

Guide for Land Use Decisions. The Future Land Use map will guide the land use and development decisions of the City Planning Commission and the City Council. As such, it serves to inform property owners and encourage development proposals that are consistent with the community vision.

ELEMENTS

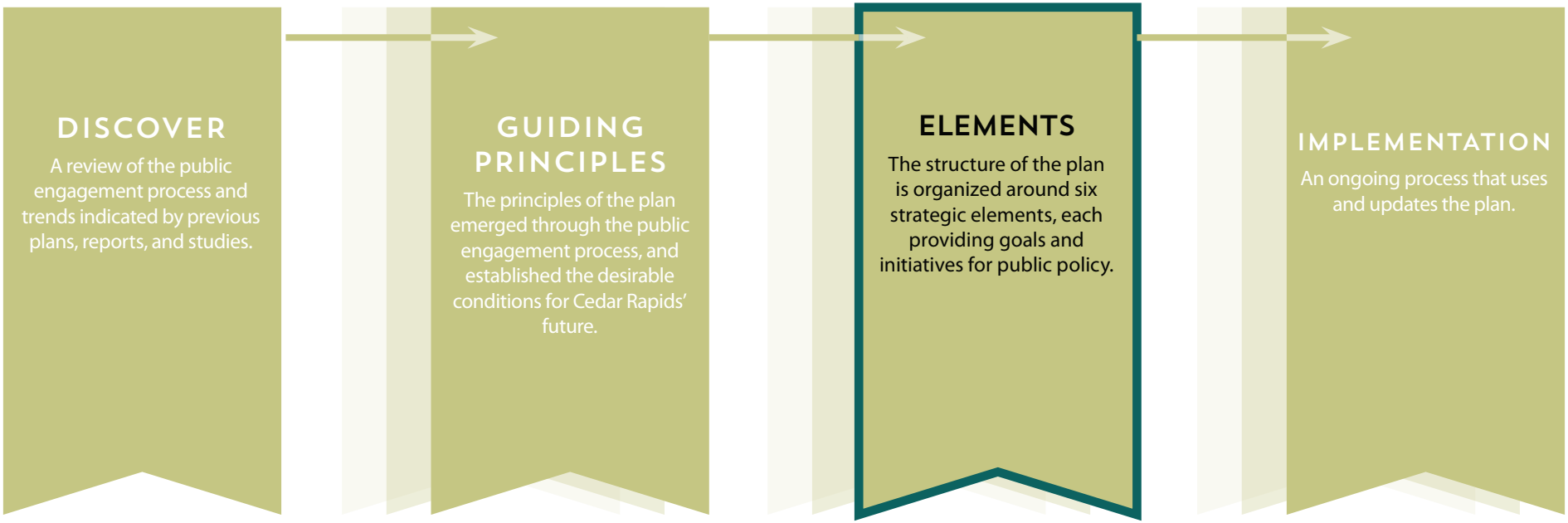


STRUCTURE

THE ORGANIZATION OF THE PLAN

"Isn't it astonishing that all of these secrets have been preserved for so many years just so we could discover them!"

- Orville Wright, former resident of Cedar Rapids



ELEMENTS

STRATEGIC APPROACH TO ACCOMPLISHING GOALS

The elements of this plan, with their associated goals, are as follows:

StrengthenCR. Make bold moves in community planning to retain the character of neighborhoods and corridors.

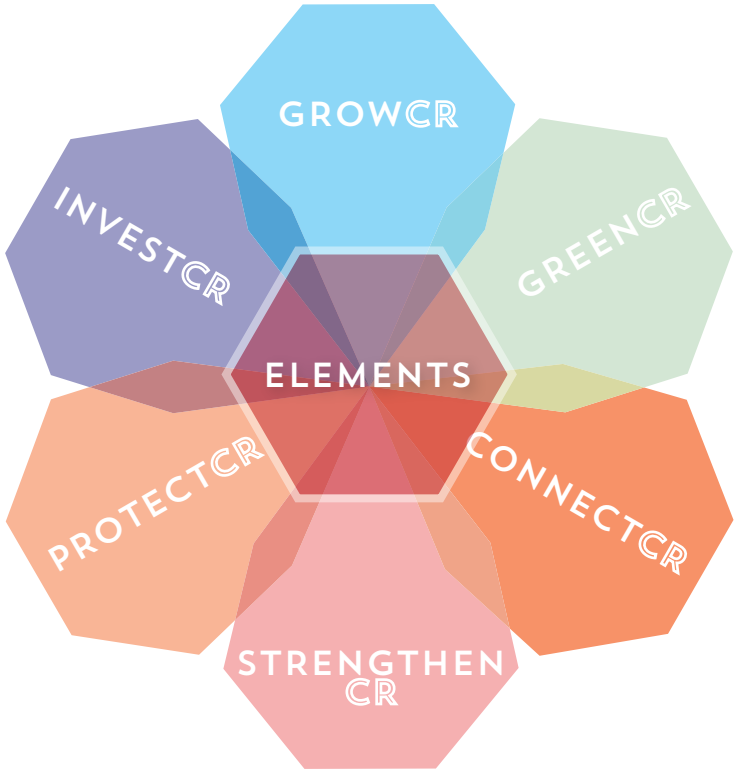
GrowCR. Make bold moves in future planning to encourage sustainable connections of growth areas to existing neighborhoods.

ConnectCR. Create a culture that enhances transportation options for pedestrians and cyclists through complete streets, trails, and public transportation.

GreenCR. Buffer and connect existing parks, trails, and streams to build a natural network in addition to regional collaborations and individual efforts to improve stormwater management, water quality, wildlife habitat, and outdoor recreation.

InvestCR. Make Cedar Rapids a desirable place for businesses to start, move, and grow by leveraging resources to invest in business districts and amenities that keep and attract a skilled workforce.

ProtectCR. Provide quality services to increase neighborhood safety and keep moving forward with the flood control system.



STRENGTHENCR

STRENGTHENCR

StrengthenCR focuses on strengthening Cedar Rapids' neighborhoods. This element covers topics related to land use, housing, mobility, services and infrastructure, and other topics important to neighborhoods. This element identifies specific strategies and initiatives to ensure Cedar Rapids is a city of strong and vibrant neighborhoods, and also outlines an approach to planning for its diverse communities.

AN APPROACH TO FUTURE PLANNING EFFORTS

EnvisionCR provides the foundation for all future planning efforts. Recognizing that planning is continually happening, StrengthenCR outlines an approach to planning that provides a mechanism for neighborhoods, residents, and other stakeholders to work with the city to develop plans that respond to their diverse needs and contexts. Specifically, StrengthenCR outlines four types of planning initiatives:

1. **Neighborhood Action Plans**. Neighborhood Actions Plans are reserved for neighborhood associations.
2. **Area Action Plans**. Area Action Plans cover areas of the city that are located outside of neighborhood associations.
3. **Corridor Action Plans**. Corridor Action Plans focus on important transportation corridors. Corridor action plans may be integrated into a neighborhood or area action plan, or may be stand-alone.
4. **Study Areas**. Certain areas of the city may require more in-depth study and technical analyses prior to any formal planning process. These areas will be studied further prior to initiating one of the aforementioned action plans.

All action plans will be tailored toward the unique geographic, demographic, and social diversity of each area. They will involve stakeholders, including but not limited to residents, businesses, property owners, city departments, regional agencies, and adjacent jurisdictions. At a minimum plans will be developed using the following guidelines also shown in Figure 1:

- Assess existing conditions, including a "Visual Preference Survey" and a "Character Analysis".
- Review and evaluate land use policy issues.
- Review and evaluate the transportation network and identify improvements that meet the needs of all users and ensure multi-modal connectivity.
- Review and evaluate service and utility needs and identify issues and solutions.
- Explore opportunities for infill and redevelopment of vacant and underutilized parcels.
- Identify specific goals and outline policy initiatives and action steps to achieve those goals.

STRENGTHENCR GOALS

1. Support existing and new neighborhood associations through the development of Neighborhood Action Plans.
2. Improve the quality and identity of neighborhoods and key corridors.
3. Adopt policies that create choices in housing types and prices throughout the city.
4. Create a city that is affordable and accessible to all members of the community.

Visual Preference Survey

A visual preference survey, or an equivalent, will aid in determining those aspects of development character deemed to be positive and negative. This technique asks stakeholders to score images that illustrate various elements of development character.

Character Analysis of the Built Environment

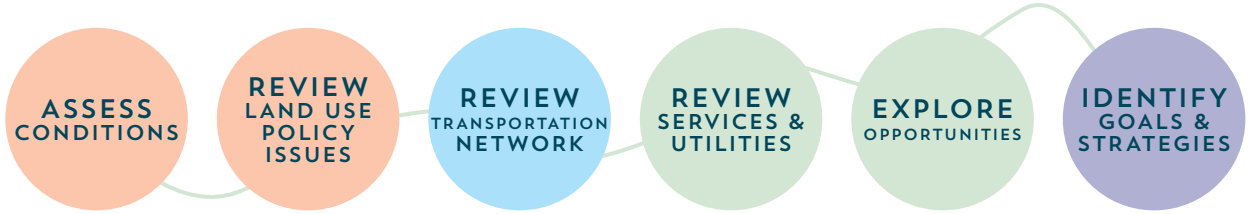
Based on the feedback from the visual preference survey on what types of development are considered positive and what types are considered negative, a character analysis will be conducted. The character analysis examines the built environment and determines the positive and negative development features and identifies the dominant development characteristics – both positive and negative.

Review Development Regulations

A review of the development regulations is an important part of any planning effort. Based on the results of the character analysis, development regulations can be reviewed to evaluate whether they support the maintenance of the positive characteristics and provide tools to correct the negative characteristics. If existing regulations are inconsistent with this analysis, recommendations for revisions of current regulations or the creation of new regulations should be incorporated into the list of identified policy initiatives and action steps.

Figure 2 is a diagram of the various planning efforts that show the relationship to EnvisionCR. Neighborhood Action Plans, Area Action Plans, and Corridor Action Plans act as components of EnvisionCR, the foundational document, and must be consistent with its goals.

FIGURE 1: Minimum Plan Development Guidelines



An example of an approach to a Character Analysis:

1. General Character:
   - Is development suburban or urban character?
   - What is the density of development?
   - Is there residential diversity (single-family/attached/multi-family)?
   - What are the dominant building forms?
   - Is there integration or separation of land use types?
2. Street and Block Patterns:
   - Is there a grid street pattern, or irregular block shapes with cul-de-sacs?
   - Are alleys prevalent?
   - Are there sidewalks? Where are they?
   - Is there on-street parking?
   - What is the public area and private landscaping?
3. Building Placement and Location:
   - What are the dominant single-family front/side setbacks?
   - What are the dominant multi-family and commercial setbacks?
   - What is the commercial building orientation?
   - What is the location of surface parking?
4. Building Height:
   - What are the typical heights of single-family, multi-family and commercial buildings?
5. Mobility:
   - What is the neighborhood's reliance on the automobile verses accommodation of pedestrian, bicycle and multi-modal transportation systems?

GOAL 1: Support existing and new neighborhood associations through the development of Neighborhood Action Plans.

Some areas of Cedar Rapids do not have a formal neighborhood group. Without encouragement by city officials, neighborhood groups typically only form and become active to address ongoing serious neighborhood issues or take advantage of a specific opportunity. For example, many of today's more active neighborhood groups were re-invigorated in response to the flood of 2008. However, this often leaves many neighborhoods without a clear impetus to organize, despite the potential benefits. In order to encourage more neighborhoods to become active and organize, the city created a Neighborhood Certification Program.

Currently, Cedar Rapids has 13 neighborhood associations, as shown in Map 1. Neighborhood groups can be a huge benefit to a community – they can help plan and support neighborhood improvements, create a stronger sense of community, and act as a liaison with the city.

To date, the focus of Cedar Rapids' neighborhood planning efforts has been on the downtown and central city neighborhoods. These neighborhoods were most impacted by the 2008 flood, and the flood recovery process created an immediate need to plan for the future of these neighborhoods. In each of these planning processes, neighborhood residents, property owners, business people, and other stakeholders were brought together to identify neighborhood issues and develop goals and strategies to address the most serious problems.

NEIGHBORHOOD ACTION PLANS

While the planning that has occurred since the 2008 flood has been successful, many areas of the city may benefit from more specific, targeted planning efforts. These planning efforts will allow a more detailed look at the city's diverse communities.

StrengthenCR outlines an approach to future planning efforts and establishes a process by which residents and other stakeholders may engage in a planning process that addresses the issues and identifies the opportunities unique to individual communities. Specifically, Neighborhood Action Plans, which are reserved for certified neighborhood associations, will be developed.

Neighborhoods are often defined by a combination of factors, ranging from social to economic, but the physical geography of the community typically plays a fundamental role. The series of maps in this section illustrates the physical features that in many cases help to define neighborhoods.

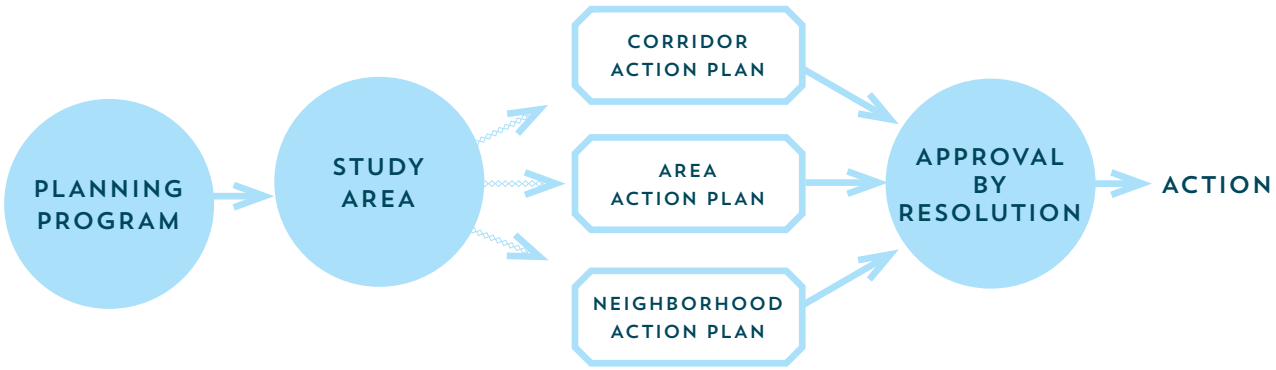
Over time new neighborhood groups will form, and this is encouraged through the city's Neighborhood Certification Program. The focus of Neighborhood Action Plans is on these formally organized groups of citizens with defined neighborhood boundaries. Within these areas, the city is committed to working with neighborhood groups and other stakeholders on the development of future Neighborhood Action Plans.

PLANS ONLINE

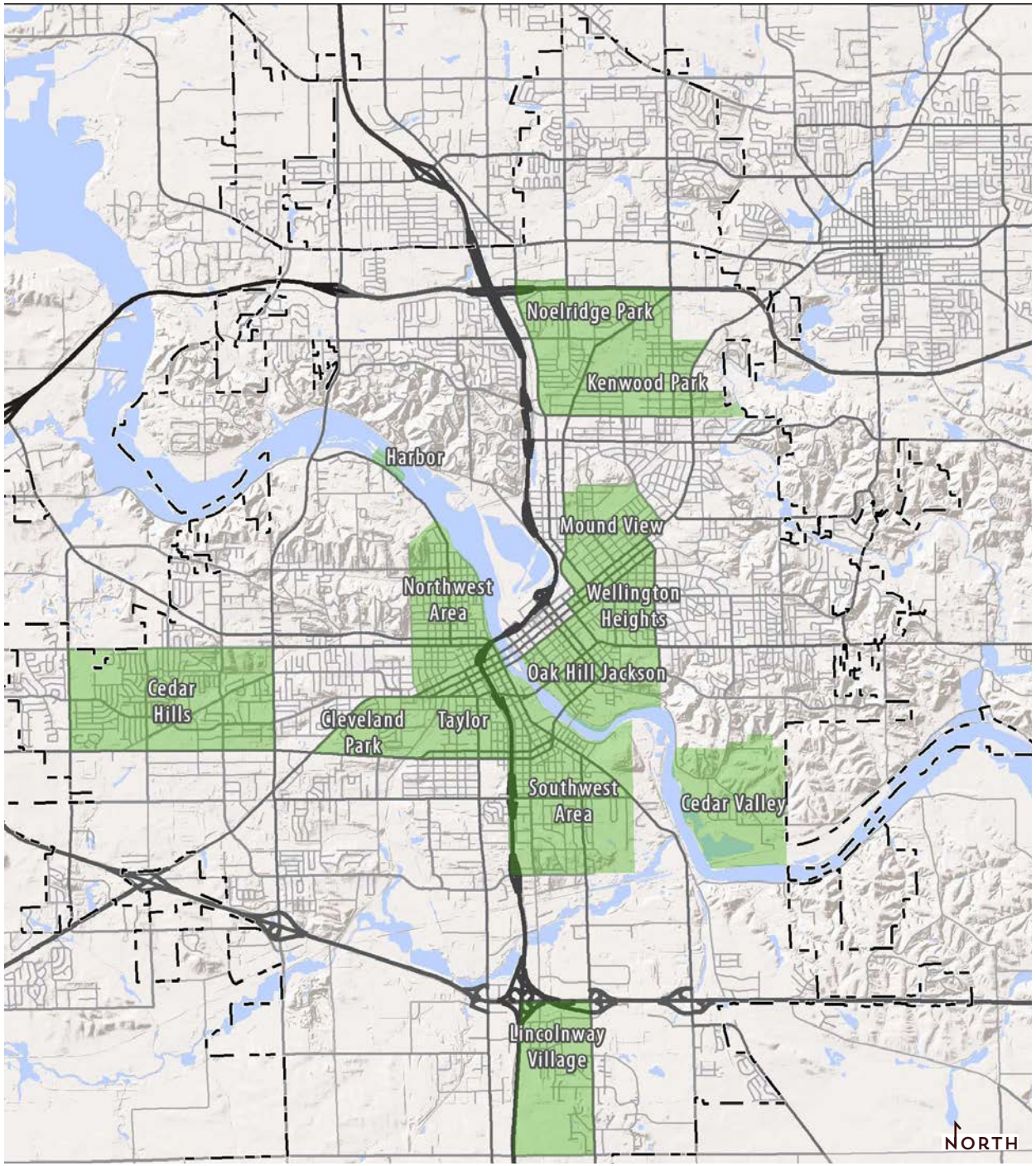
The Wellington Heights Neighborhood Plan is an example of a Neighborhood Action Plan. Visit:

www.cedar-rapids.org/government/departments/community-development

FIGURE 2: EnvisionCR Planning Program



MAP 1: Neighborhood Associations in Cedar Rapids - 2014



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

INITIATIVES

1. Track progress of the Neighborhood Certification Program work plan projects.

Neighborhood groups should seek to be recognized by the city as a Certified Neighborhood. Receiving the designation will assist in communication between grassroots interests and projects and possible support from the city.

2. Provide the Neighborhood Service Delivery Program (NSD) to existing and newly formed neighborhood associations.

Programs and tools organized by the city to deliver to neighborhoods, address issues such as safety, maintenance, infrastructure, connectivity, and city responsiveness; build relationships among neighborhoods; bring government closer to people; and increased visibility.

3. Work with existing and new neighborhood associations to develop Neighborhood Action Plans.

Neighborhood Action Plans, initiated by the city or neighborhood group, are strategic plans supported by the city.

Neighborhood Boundary

Neighborhoods

GOAL 2: Improve the quality and identity of neighborhoods and key corridors.

The character and quality of neighborhoods and corridors help define the city. In addition, improving the quality of these areas improves perceptions, provides a strong sense of place, and helps to attract and retain a vibrant population. Making improvements and enhancing the quality of the city's diverse communities requires an approach to planning that incorporates the unique character of each area, but also considers a variety of topics that impact all communities.

NEIGHBORHOODS

Land Use and Transportation Connection

Every community is unique, but many communities' most celebrated areas have an integrated mix of land use and a multi-modal transportation system that meets the needs of all users. In planning for Cedar Rapids' communities, it is important to consider how land use patterns impact people's mobility. Promoting multiple land uses and higher intensities, as opposed to low-density sprawl, encourages biking, walking, and transit use. This also promotes a more active lifestyle and leads to healthier and more sustainable communities.

Creating Opportunities for Infill Development

Promoting infill development is a land use strategy that reduces the amount of land consumed and also reduces the cost of providing infrastructure and services. Development on vacant and underutilized sites that have access to public utilities is encouraged.

Brownfield sites, which are environmentally contaminated or potentially contaminated sites, also provide opportunities for infill development. There are challenges to developing these sites, as costs for remediation are often expensive. In many cases, financing, incentives, or other programs are necessary in order to promote redevelopment on brownfields. The Iowa Department of Natural Resources maintains an inventory of contaminated sites, which provides useful information for planning purposes.

Restoring the historic fabric in neighborhoods is a tool for economic development. For example, adapting the Water Tower Place introduced housing in NewBo, which ultimately became a catalyst for additional neighborhood investment. These examples, along with hundreds of projects completed throughout Iowa, are examples of how historic preservation can stimulate new investment in existing neighborhoods.

Neighborhood Design

In addition to a mix of land uses and a variety of transportation options, design, including sustainable design, as well as arts and cultural and historic preservation can improve the overall health of a community.

Cedar Rapids has a rich history that stretches over more than a century. This history is partially reflected in the city's older buildings and important sites, most notably in and surrounding downtown but also in some residential and mixed use areas outside of the central district, such as the Czech Village. In addition, features that older adults consider relatively "new" now qualify for historic designations. For example, buildings constructed in the mid 1950s now meet the 50-year old guideline used by the National Register of Historic Places. These buildings and sites are important assets for the city, provide the possibility of significant economic return, and help tell the city's story.

Much of the design for older neighborhoods focused on having sidewalks that connected people to schools, parks, neighborhood commercial; porches that engaged the neighborhood; trees and landscaping that framed the street; and garages were subordinate to the home and tucked behind the main facade. These distinctive characteristics of Cedar Rapids' pre-WWII neighborhoods are positive neighborhood attributes that need to be preserved and emulated.

Infill development should respect the established urban character of the neighborhood and reinforce design that promotes walkability, convenience, and engagement with neighbors. Incentive programs could be designed to support private initiatives that encourage walkable characteristics.

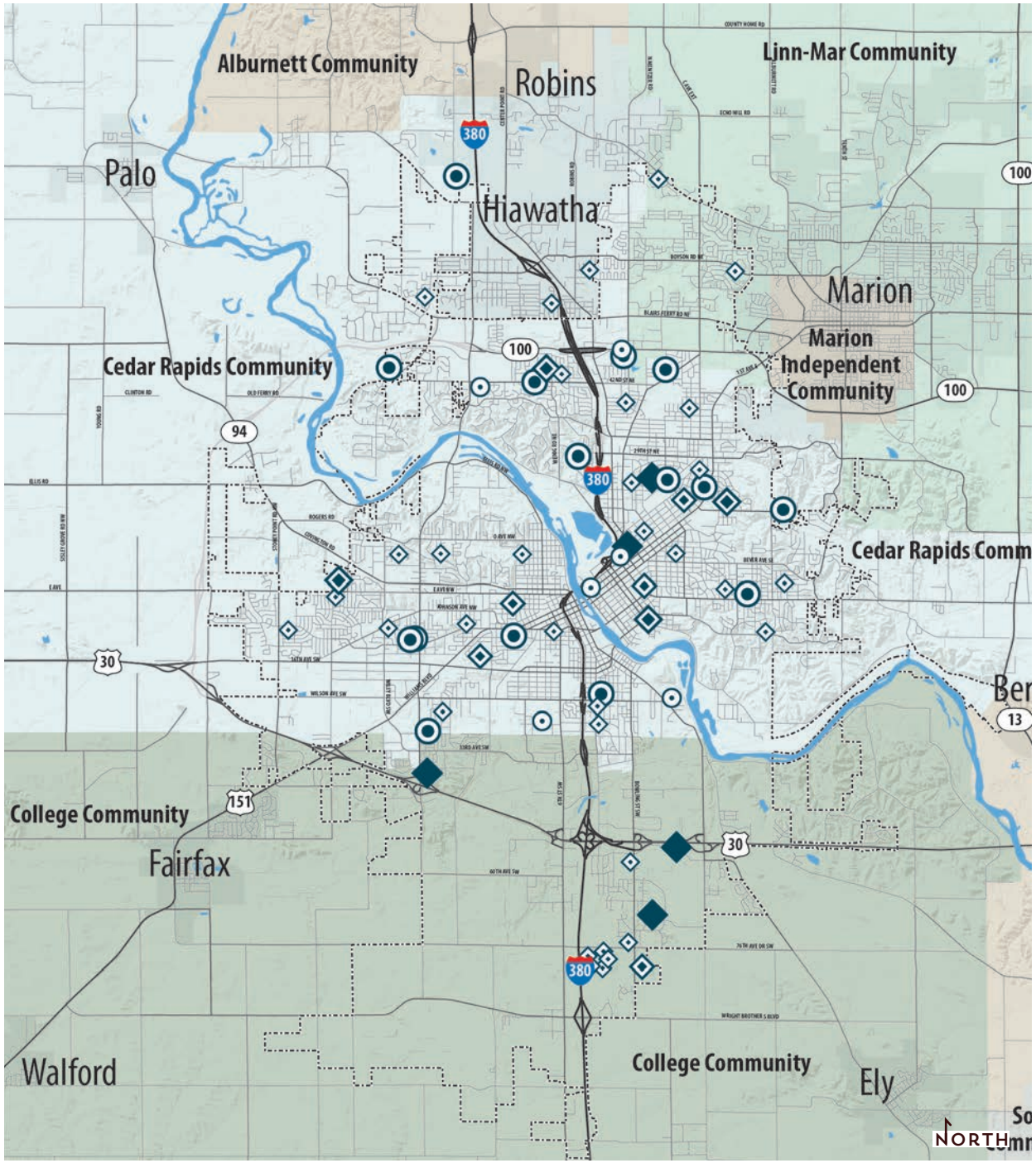
Green Building Practices

The city should create a "Green" Building Program that facilitates projects that incorporate green building and low-impact development features. For example, the city supports replacing windows, HVAC, or toilets with more efficient systems that reduce demand on energy and water.

Placemaking

The presence of cultural facilities can enhance specific districts (neighborhoods/areas/ etc.) and the community as a whole. These can include museums, performance spaces, galleries, civic buildings, public art and other public and private institutions. Existing cultural resources are an important part of the community and should be incorporated into future plans. Community planning efforts should identify opportunities to enhance districts with public art, gateway features and the thoughtful placement of potential future cultural facilities.

MAP 2: School Locations



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

Connection to Schools

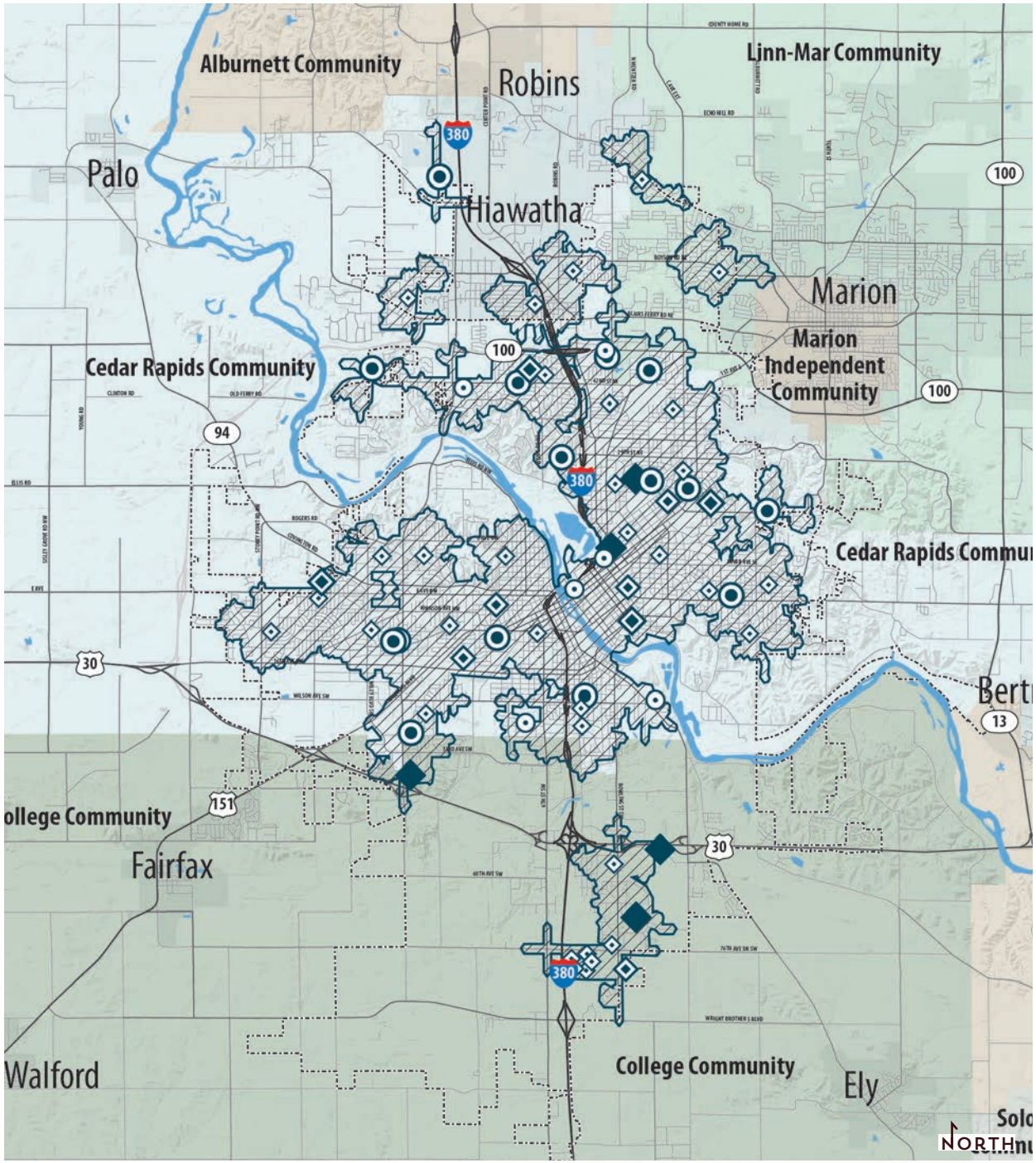
Neighborhood schools are the core of a neighborhood. Map 2 shows the school locations of the school districts that serve Cedar Rapids. The identity of many Cedar Rapids' neighborhoods is wrapped up in their schools – they are the focal point of the neighborhood, they create a gathering place for nearby residents, and often provide an attractive amenity by offering playgrounds and green space that are open to the public. Neighborhood schools are an important part of what attracts people to live in a neighborhood, and they play a role in creating the emotional connection that keeps residents there over time. This emotional component has a tangible effect on whether residents continue to invest in their properties and neighborhoods, and is thus a critical part of preventing neighborhood deterioration.

- Elementary School
- Middle School
- High School
- University/College
- Private School
- Alternative School

Map 3 identifies a 15-minute walk time around individual schools. These areas are priority areas for maintaining and improving connectivity in neighborhoods. Overcoming barriers to walkability will increase the number of people on sidewalks. These include.

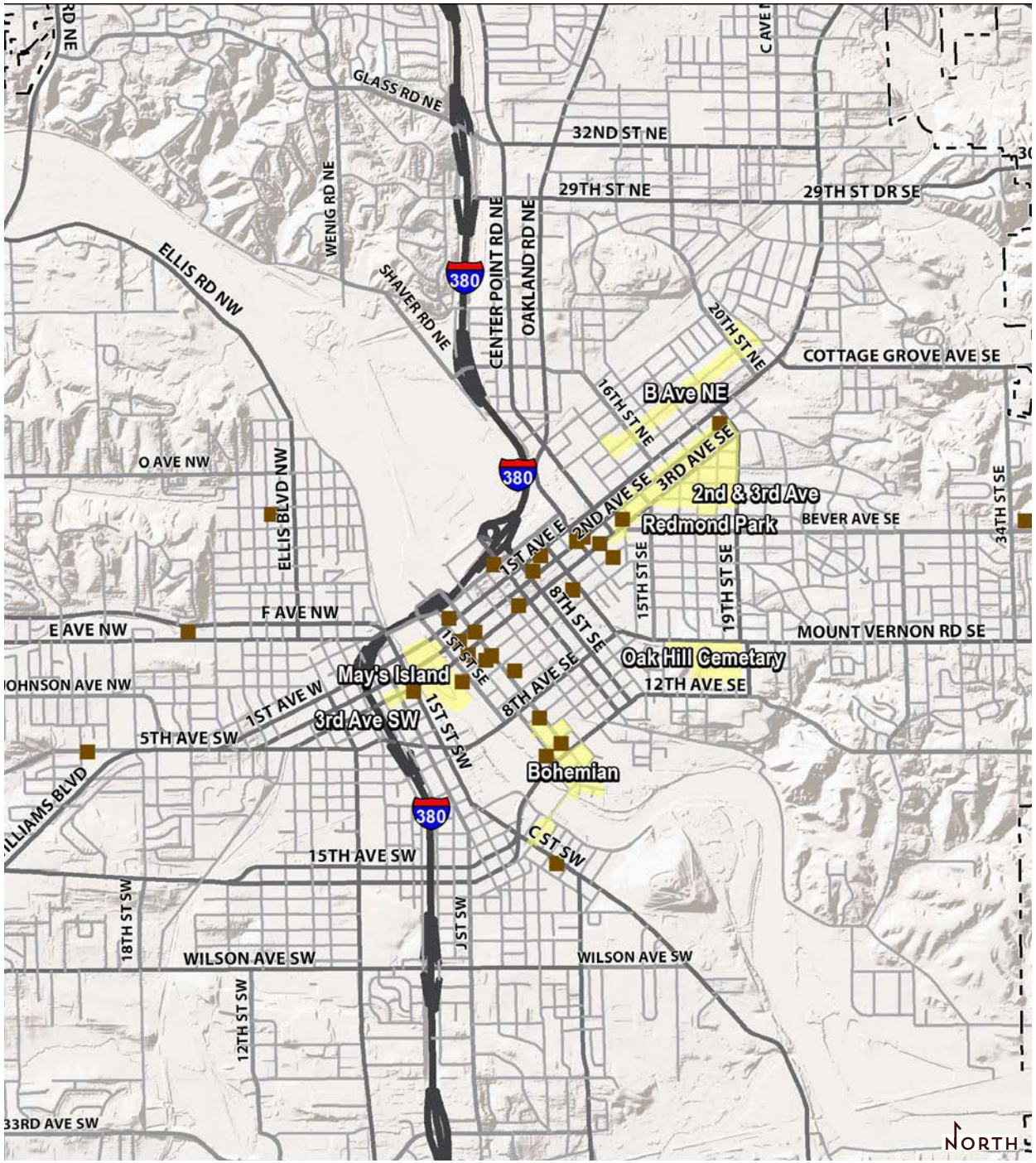
- **Physical Barriers.** Natural and built features can limit walkability and convenience. These features include rivers, steep slopes, busy streets, poor connection among streets, and lack of sidewalks.
- **Psychological Barriers.** Aside from the physical barriers, walkers are influenced by their sense of security - their level of anxiety while traveling to their destination. Poor lighting and distressed housing/ property can influence a person's decision to walk to school, visit a friend by bike, run an errand, exercise and other routine activities.

MAP 3: 15-Minute Walk Time near Schools



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

MAP 4: Local and National Historic Districts



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

Historic Resources

Historic resources are an important part of Cedar Rapids' identity. They enhance quality of life, economic vitality, and environmental sustainability, which can lead to a community's overall space well being. Investment in these assets is a priority of the City of Cedar Rapids, and therefore, future planning efforts should carefully consider the role of historic preservation.

Map 4 outlines the city's seven national historic districts.

Local and National Districts

1. 2nd & 3rd Avenue Historic District
2. Redmond Park – Grande Avenue Historic District

National Districts Only

1. 3rd Avenue SW Commercial National Historic District
2. B Avenue NE National Historic District
3. Bohemian Commercial National Historic District
4. May's Island National Historic District
5. Oak Hill Cemetery National Historic District

National Register of Historic Places

Historic District

The Highway 100 Corridor Management Plan is an example of an Area Action Plan. This plan is a partnership between the Corridor Metropolitan Planning Organization, the City of Cedar Rapids, and Linn County. The plan will include a development concept and provide recommendations on development phasing, serviceability, parks, and infrastructure needs.

Area Action Plans

Area Action Plans allow for planning efforts to take place in areas outside of neighborhood associations. Generally, Area Action Plans will cover areas of the city and in some cases could incorporate Corridor Action Plans, which are discussed below.

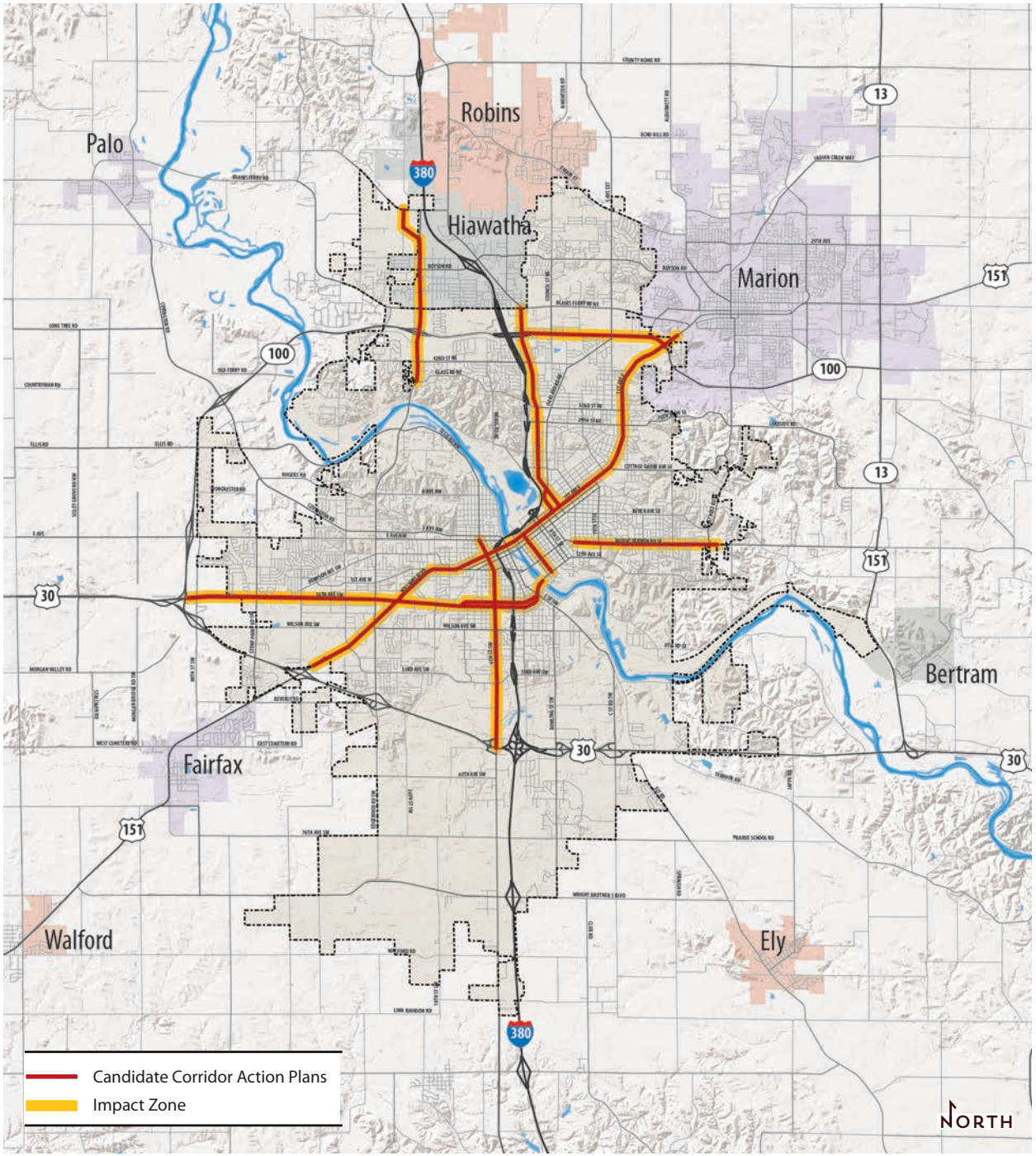
Corridor Action Plans

Corridor Action Plans focus on corridors that provide key linkages and connections throughout the city. Corridor action plans may be integrated into a Neighborhood or Area Action Plan, or may be stand-alone.

Map 5 identifies strategic corridors that appear in need of revitalization or land use redirection that may be good candidates for Corridor Action Plans. In addition, Maps 6-11 identify the following potential opportunities related to some of these candidate corridors.

- **Catalyst Sites.** Market demand suggests that redevelopment of these sites may result in additional redevelopment interest along the corridor.
- **Policy Areas.** Policy areas may include design standards, parking consolidation, and organizational support.
- **Key Intersections.** The appearance and function of these intersections influences people's perception of the area. These intersections should be improved.

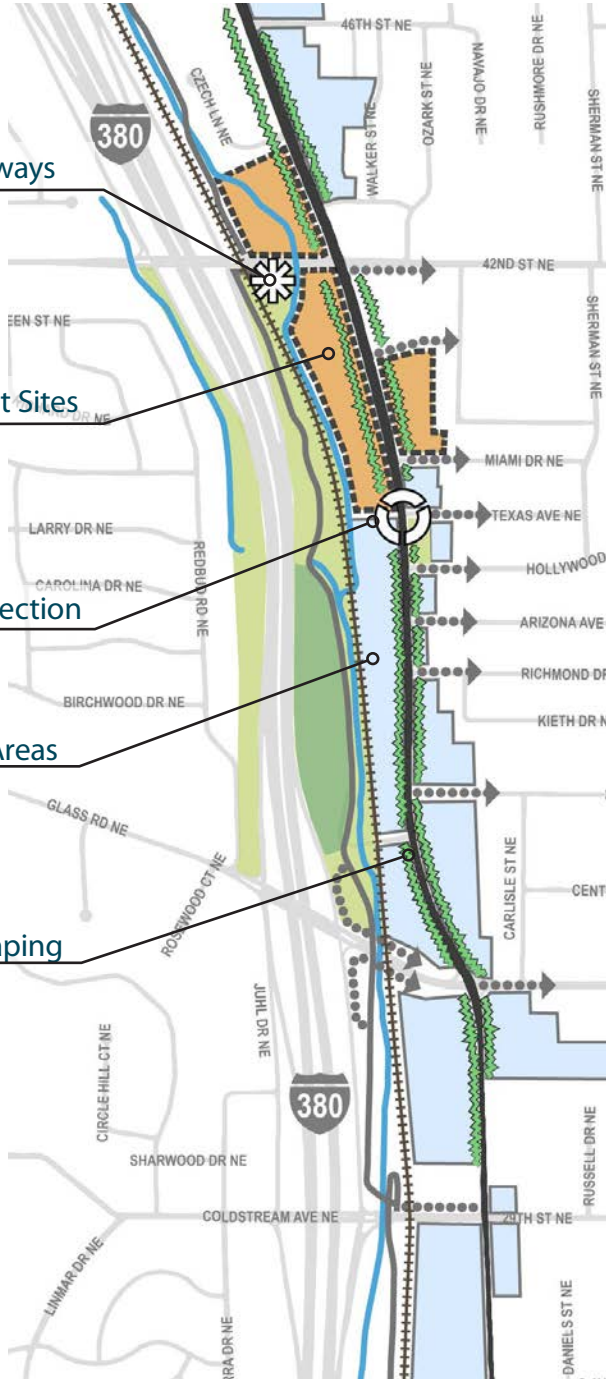
MAP 5: Corridor Action Plan Candidate Corridors



SOURCE: CITY OF CEDAR RAPIDS, HR GREEN, INC., RDG PLANNING & DESIGN

MAP 6: 6th Street Opportunities

MAP 7: Center Point Road Opportunities



Ellis Boulevard Area Plan is an example of a corridor action plan. Although described as an area plan, the Ellis Boulevard Area Plan focused on the main corridor of the area - Ellis Boulevard - and explored options to create a viable business corridor.

- **Gateways.** Gateways mark the arrival to the district. Signage, landscaping, art installations, and graphics are all possible features at gateways.
- **Access Management.** Corridor requires further study for improving the safety and circulation of vehicles entering the street from adjacent properties.
- **Landscaping.** Basic landscaping enhancements that may include shrubs, flowers, maintained lawn, and other plantings.
- **Streetscaping.** Enhancements may include landscaping, sidewalk improvements, street furniture, lighting, and graphics.
- **Streetscaping Master Plan.** Public initiative and probable financing to establish a uniform approach.
- **Enhanced Greenspace.** Large open spaces along corridors should be well-maintained.

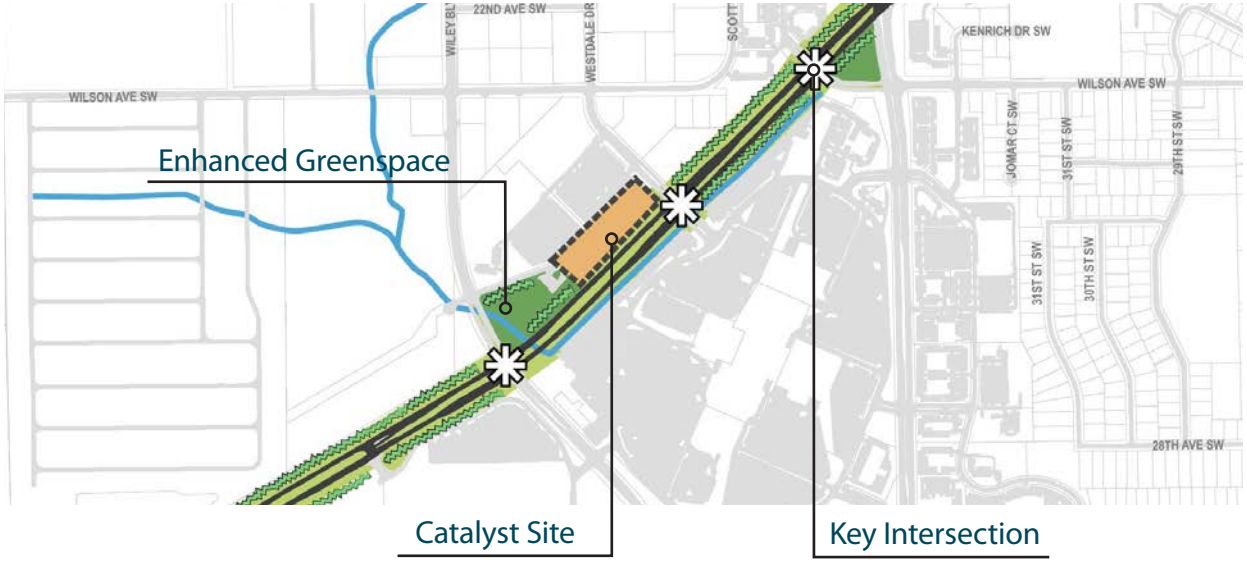
Master Legend

Map 6 to Map 11

- Catalyst Sites
- Policy Areas
- Greenspace
- Enhanced Greenspace
- Key Intersection
- Gateway Node
- Railroad
- Connecting Streets
- Waterway
- Streetscaping
- Access Mangement

MAP 8: Collins Road Opportunities

MAP 9A: Williams Boulevard Opportunities



MAP 9B: Williams Boulevard [Overview] Opportunities

MAP 10: Mt. Vernon Road Opportunities

Landscaping
- STREETSCAPE
- LIGHTING
- PLANTS

Catalyst Sites
- REDEVELOPMENT OPPORTUNITY
- ASSEMBLE PROPERTIES

Policy Areas
- DESIGN GUIDELINES
- LANDSCAPING
- SETBACKS
- SIGNAGE
- ACCESS

Key Intersection
- STREETSCAPE ELEMENTS

MAP 11: 16th Avenue Opportunities

Key Intersection

Catalyst Sites

Policy Areas

Access Management

Landscaping

STUDY AREAS

The Study Area component of the city's approach to planning ensures that certain areas with unique issues or challenges are comprehensively analyzed prior to the commencement of any planning process. This ensures a full analysis and a complete understanding of all of the issues, which will help to inform any future planning efforts in that area.

INITIATIVES

4. Developing a Planning Program.

Many of the planning efforts since 2008 have focused on the central city and surrounding neighborhoods. This initiative expands planning and redevelopment interests to corridors and districts throughout the community.

5. Comprehensive update to Chapter 32 (Zoning) of the city's municipal code to ensure consistency with EnvisionCR.

EnvisionCR proposes a new approach to managing future land use, which requires updating some codes to align appropriately..

6. Modify Chapter 31 (Subdivisions) of the city's municipal code to ensure consistency with Envision CR.

EnvisionCR proposes a new approach to managing future land use, which requires updating some codes to align appropriately..

7. Create a green building program.

City to provide incentives to private property owners - residents or businesses - to improve their building with features that reduce demand for water and energy consumption.

8. Amend the requirements for urban agriculture.

City to evaluate gardens and farming in urban areas. This may include urban community supported agriculture (CSA), temporary gardens in vacant lots, and community gardens.

GOAL 3: Adopt policies that create choices in housing types and prices throughout the city.

The city's housing stock should accommodate residents of all life stages, incomes, and preferences. Providing a variety of housing choices helps to attract and retain residents and contributes to overall community vitality.

HOUSING AFFORDABILITY

Cedar Rapids should continue to integrate a variety of housing types in existing and new growth areas. Land development ordinances should provide adequate flexibility to accommodate innovative and economical designs within traditional town patterns. Some of these configurations may include:

- **Cluster Subdivisions.** Clusters are useful when infrastructure cost should be minimized or environmental features exist which should be protected.
- **Single-Family Attached Development.** Single-family units have a common wall, allowing for construction economies and more useful side yards.
- **Townhouses.** Townhouses provide construction and land use efficiencies, while continuing the sense of a single-family neighborhood.
- **Multi-Family.** Multi-family development should be integrated into the structure of new neighborhoods, rather than developed on peripheral sites. Design standards should provide a residential scale and prevent creating a "project" look.

Neighborhoods may include a mix of housing types and target multiple price points in the market, allowing for a mix of housing options and incomes.

PRESERVATION OF EXISTING HOUSING STOCK

The preservation of existing neighborhoods and housing stock becomes especially important when there is a shortage of affordable units. Indeed, rehabilitation and preventive maintenance are the city's most cost-effective ways to assuring a continued supply of good housing. Neighborhood conservation strategies include:

- **Land Use Policies.** Cedar Rapids should maintain zoning and land use policies that protect the integrity of its neighborhoods.
- **Rehabilitation.** Cedar Rapids should promote SAFE-CR and other programs listed in Goal #4 to promote the rehabilitation of housing stock that is in need of significant rehabilitation.

In addition to conventional rehabilitation programs, Cedar Rapids should promote the use of programs which help to convert existing rental housing stock to owner-occupancy in targeted neighborhoods. These programs include the FHA 203(K) program, an FHA mortgage insurance program, which combines loans for purchase and rehabilitation of property into a single, unified loan.

Development and enforcement of a strong housing standards ordinance, together with upgrading the housing stock through new affordable construction, can put significant competitive pressure on these units to upgrade or leave the market.

REGULATORY POLICIES THAT AFFECT HOUSING TYPE AND AFFORDABILITY

The primary regulatory tool that impacts housing type and affordability is zoning. Through the zoning code the city has the ability to shape the type of land uses it desires by location and to determine a baseline for appearance standards for those uses.

Through the adoption of local zoning standards, there is the potential that a community can develop "exclusionary" housing policies that limit the availability of housing. This often results in the community limiting housing to primarily expensive single-family homes, prohibiting smaller-lot affordable homes and severely limiting multi-family housing.

Cedar Rapids' zoning code shows little evidence of exclusionary housing policies. Specifically, the zoning code promotes housing on smaller lots that can help to promote affordable homeownership by allowing less expensive smaller lots in new developments. In addition, a mix of land uses, especially commercial and residential mix use, are allowed and encouraged in multiple zones. The land use approach outlined in EnvisionCR will further help to promote a mix of land uses and a variety of housing types.

Many other elements of the zoning code also affect housing diversity, affordability, and accessibility. Therefore, as part of the city's comprehensive update to the zoning code (see StrengthenCR Goal #2), the city will explore the allowance of density bonuses for affordable housing, second units, and joint live/work units in certain zoning districts.

INITIATIVES

9. Analyze the zoning and subdivision codes to ensure consistency with federal and state fair housing laws.

EnvisionCR proposes a new approach to managing future land use, and ultimately development regulations. The code must comply with federal and state housing laws.

GOAL 4: Create a city that is affordable and accessible to all members of the community.

Providing housing opportunities to low and moderate income housing, seniors, persons with disabilities, and the homeless is particularly important to the city since these groups often do not have the resources to participate in private sector housing.

HOUSING NEEDS

Since the 2008 flood, the city has commissioned housing market analyses periodically to monitor absorption of replacement housing. Maxfield Research, Inc. prepared a comprehensive housing needs analysis for Cedar Rapids in October 2014, as seen in Table 1. The report includes a snapshot of Cedar Rapids' demographics, housing characteristics, rental housing market analysis, senior housing market analysis, for-sale housing market analysis, and finally housing needs analysis.

Recommendations outlined in the most recent housing study align with the goals of StrengthenCR. They include:

Market Rate Rental

- Continue to encourage new rentals in the Downtown Central Business District targeted to middle- to upper-income households.
- Because of construction and development costs, relative to market rate rents and housing prices, it may be difficult for a market rate apartment to be financially feasible. The city needs to participate in a public/private partnership to accomplish market rate rental projects, such as the existing downtown housing program.

Affordable Rental

- Continue to partner to undertake moderate-income affordable rental projects in accordance with identified market demands.

Senior Housing

The housing study includes a number of specific recommendations regarding the accommodation of various types of senior housing. There is pent-up demand for additional subsidized senior rental units. City support of these efforts will range from supporting rezoning requests for project sites to potentially partnering with developers where market conditions require a public subsidy.

Housing Programs

The city should consider additional housing programs that address gaps and build upon the momentum of expiring disaster recovery housing programs. These programs would address identified needs in the Cedar Rapids housing market. These programs could include:

- Expand Downtown Housing Program to other targeted neighborhoods
- Infill Housing Programs (replicating the success of the "ROOTs" Programs)
- Targeted Neighborhood Rehabilitation Program (in conjunction with Neighborhood Plans)
- Historic Preservation Low-interest Loans
- Foreclosure Home Improvement Loan Program
- Rent to Own Program

Contact Community Development at City Hall for the most recent copy of the Comprehensive Housing Needs Analysis.

TABLE 1: Housing Needs Analysis Update

Housing Demand, 2014-2020	Number of Units
Market Rate Rental	793
Affordable Rental	439
Subsidized Rental	238
For-Sale Single-family	2,139
For-Sale Multifamily	504
Subtotal	4,113
Senior Housing Demand	**Number of Units**
Active Adult Ownership	258
Active Adult Market Rate Rental	204
Active Adult shadow-subsidy	55
Congregate	151
Assisted Living	153
Memory Care	225
Subtotal	1,046
TOTAL	5,159

Source: Maxfield Research, October 2014 (page 6)

HOUSING SUPPLY

The Maxfield Housing Study reports:

- "As of 2013, the City of Cedar Rapids is estimated to have approximately 53,145 housing units, of which about 68% are owner-occupied and 32% are renter-occupied."
- "Most of the homes in Cedar Rapids were built between 1950 and 1980 (44%). An estimated 23% of homes in Cedar Rapids were built pre-1950 and the remaining 33% were built in 1980 or later. Except for the core central city neighborhoods, most of the housing in Cedar Rapids is newer."
- "Typically, a healthy rental market maintains a vacancy rate of roughly 5%." Cedar Rapids' vacancy rate is below, representing a need for additional rental units."

Privately Held Affordable Housing

According to the Maxfield Housing Study, there are seven subsidized senior projects totaling 587 units. Two of those seven projects are affordable independent senior projects, which currently have no vacancies. In terms of family housing, there are three subsidized family housing projects totaling 157 units, with no vacancies.

Shadow rental market is not accurately inventoried. "Shadow rentals are previously owner-occupied single-family homes, townhomes, or condominiums. The shadow market was fueled by homeowners who lost their home to foreclosure who opt to not rent in a traditional rental complex. Typically, short sales and foreclosures have resulted in substantial price reductions which have allowed buyers or investors to charge rents below market while still maintaining a profit (Maxfield Housing Needs Analysis)."

City's Housing Programs

The city currently administers the federally-subsidized Section 8 Housing Choice Voucher program, providing rental housing assistance to low-income residents. In 2014, a total of 1,149 families received assistance under the program, and there is a two-year waiting list.

The city administers a single-family replacement housing program, locally known as Rebuilding Ownership Opportunities Together ("ROOTs") that provides incentives for replacement of owner-occupied housing, primarily on infill lots. Low and moderate income buyers receive down payment assistance of up to 25%. The program has to a large extent replaced housing lost as a result of 2008 flooding, however current funding will expire in 2015. A companion Multi-family New Construction Program has produced 547 replacement rental units, 51% of which must be affordable to low and moderate-income renters.

The city also administers two owner-occupied housing rehabilitation programs. The Emergency Rehabilitation Program assists approximately 40 homeowners annually with emergency repairs that prevent the home from becoming uninhabitable. A Comprehensive Rehabilitation Program assists low and moderate-income homeowners with more substantial repairs that bring the entire property into standard condition. The Comprehensive Rehabilitation Program assists 5-10 homeowners annually.

INITIATIVES

10. Identify and track progress towards addressing recommendations related to for-sale housing, market rate rental, affordable rental, and senior housing from the Comprehensive Housing Needs Analysis.

11. Update the housing study regularly. (Completed - 2015)

12. Identify resources to create housing programs.

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.

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 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.

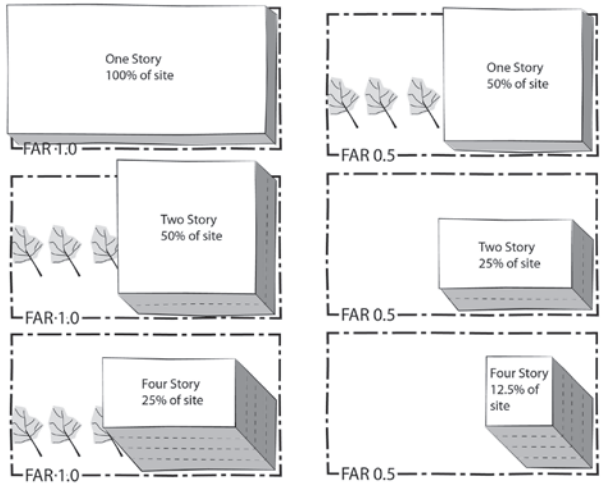
Understanding Floor Area Ratio (FAR)

Calculating FAR

In the top-right sketch, the total building area is 1/2 the site area, so the Floor Area Ration 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 Radio (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

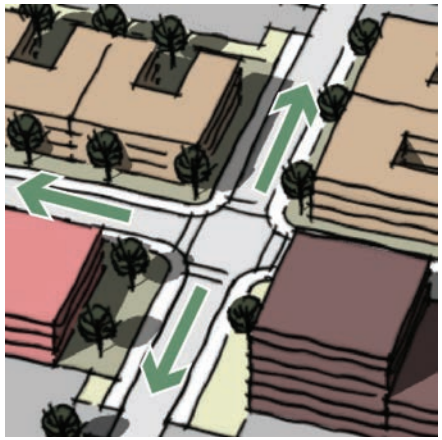


Understanding Integration and Mixing of Uses

Horizontal Integration

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

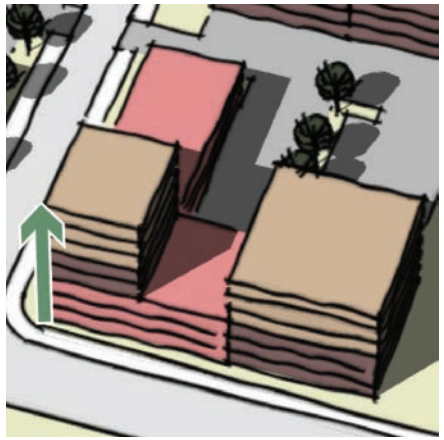
FIGURE 2: Horizontal Integration



Vertical Integration

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

FIGURE 3: Vertical Integration



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 incompatibilties 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

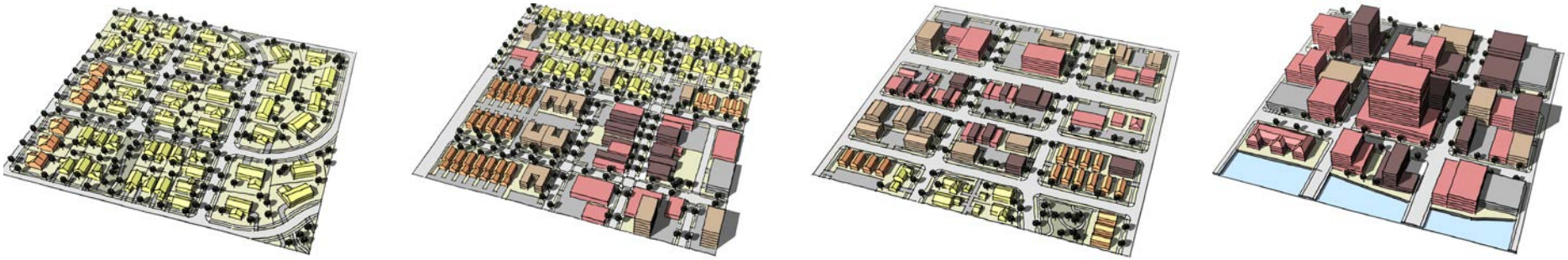
RURAL TO URBAN

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)



LOW INTENSITY MIXED USES

HIGH INTENSITY MIXED USES

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

Table 3: Land Use Criteria and Descriptions

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

Table 3: Land Use Criteria and Descriptions

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

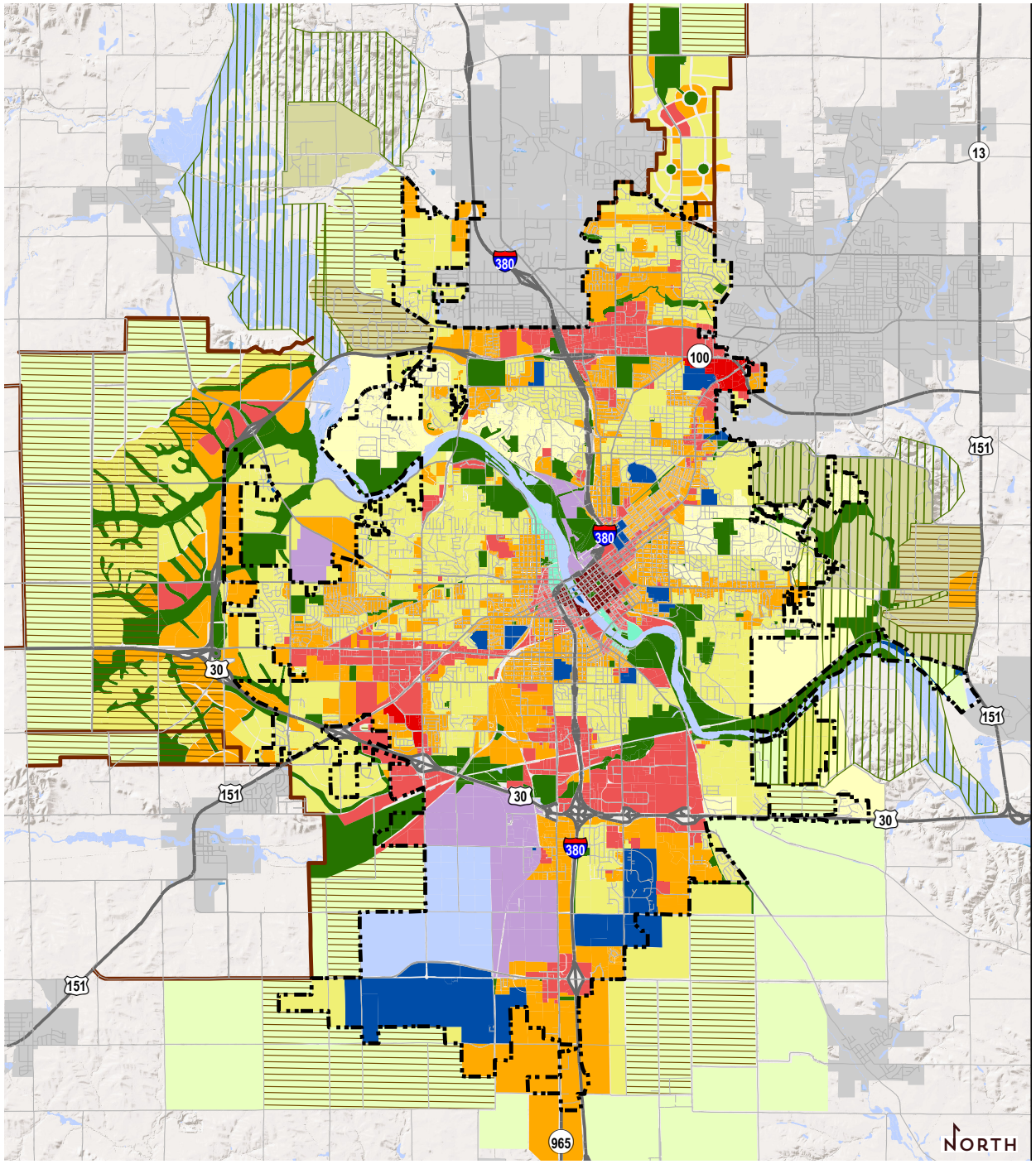
Table 3: Land Use Criteria and Descriptions

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

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

- Agriculture
- Open Space
- Rural
- Urban Large Lot
- Urban Low-Intensity
- Urban Medium-Intensity
- Urban High-Intensity
- Commercial
- Downtown
- Industrial
- Employment Reserve
- Public/Semi-Public
- Urban Reserve
- Environmental Conservation
- Flood Control Study Area

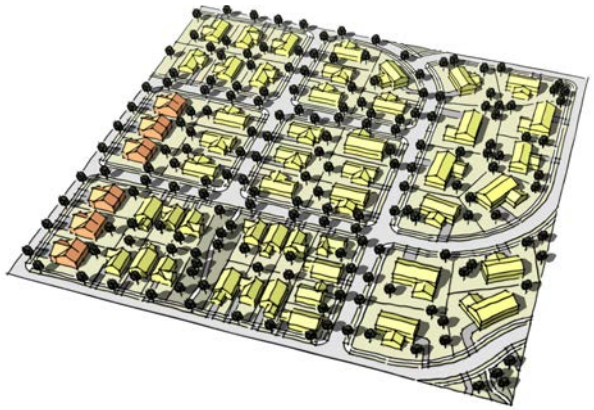


FIGURE 6: Urban-Low Intensity

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 are 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.

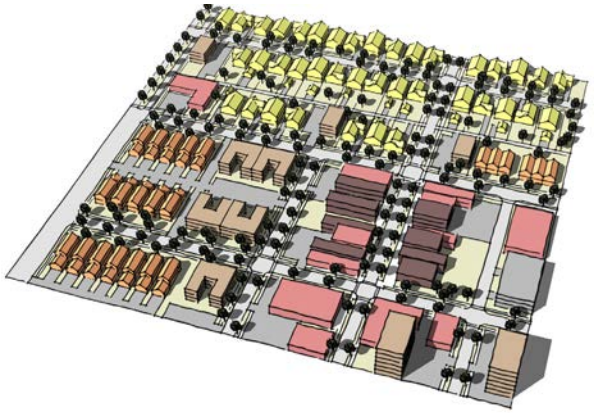


FIGURE 7: Urban-Medium Intensity

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.

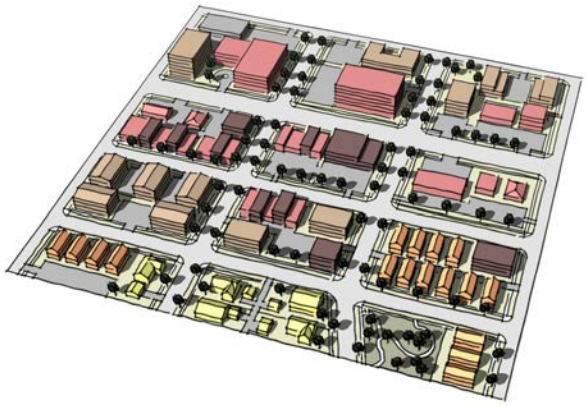


FIGURE 8: Urban - High Intensity

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.

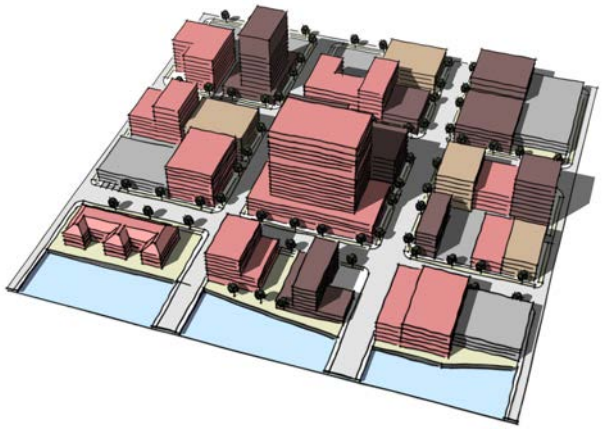


FIGURE 9: Downtown

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.

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.

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.

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.

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.

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

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.

Flood Control Study Area (FC)

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

Form, Uses, and Intensity

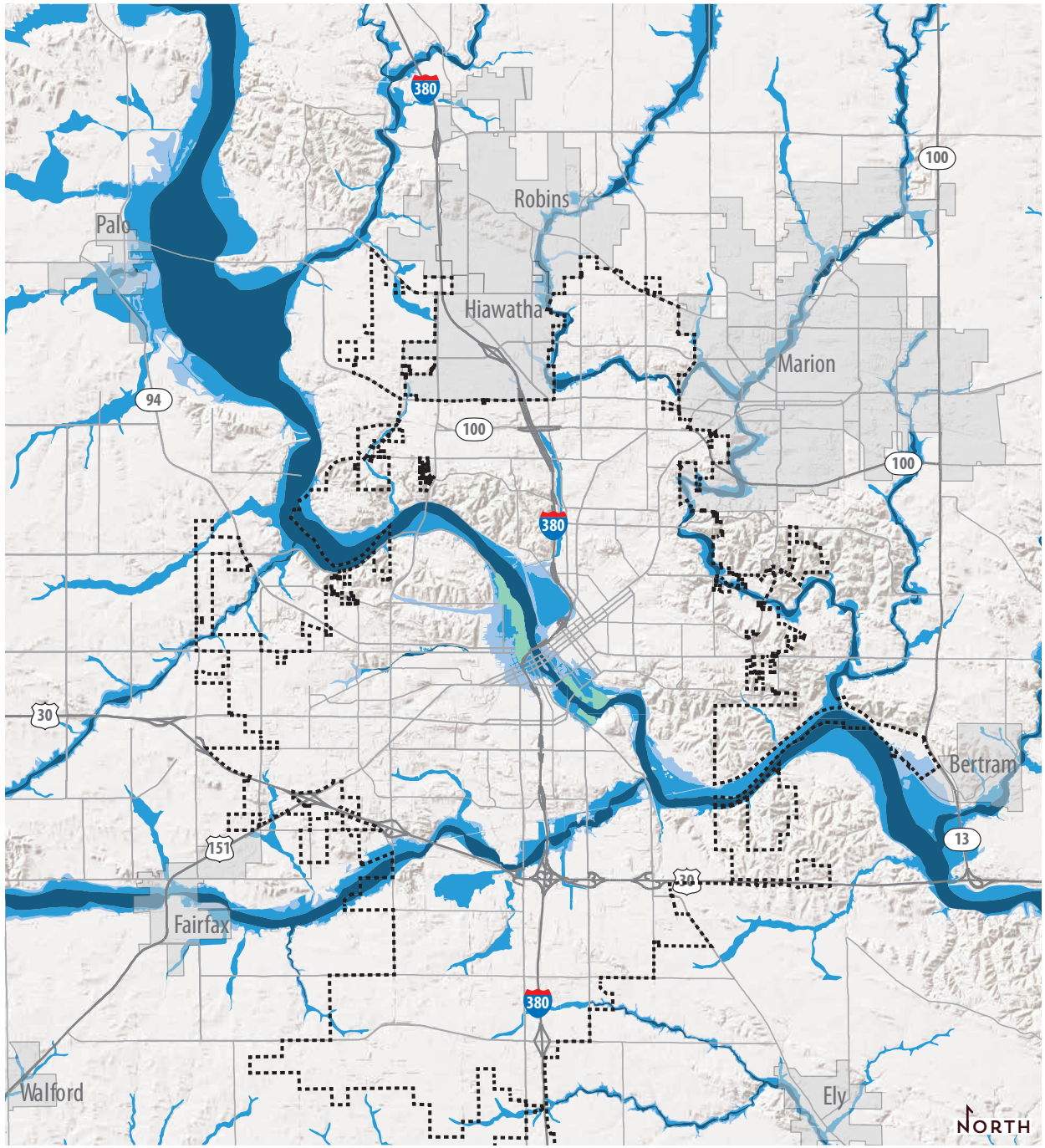
Development should be limited in nature prior to adoption of the Flood Control Project by the City Council, at which point the future land use map should be updated to reflect anticipated future development. Open space and maintenance of existing structures should be a priority while this LUTA is used.

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.

MAP 2: Flood Control Study Area Map



SOURCE: FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), CITY OF CEDAR RAPIDS GIS

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

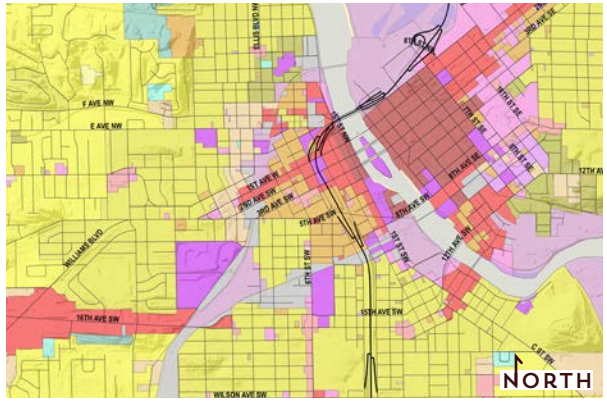
The EnvisionCR comprehensive planning process is moving toward a land use approach that makes greater use of intensity categories. The philosophical bases of this approach are that:

- 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 (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.

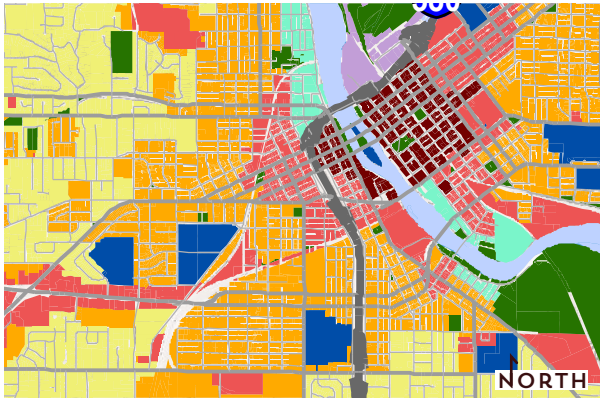
- The growing preference for walkable and bikeable projects and neighborhoods, clearly manifest in Cedar Rapids, leads to development proposals that mix uses together. This mixing of uses, if managed carefully, leads to more desirable projects and major efficiencies, including complementary use of parking and reduced dependence on automobiles.

MAP 3: Current Zoning, 2014



SOURCE: CITY OF CEDAR RAPIDS GIS

MAP 4: Future Land Use and Possible Zoning Pattern



SOURCE: CITY OF CEDAR RAPIDS GIS, RDG

The Cedar Rapids approach, then, is moving toward 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 though 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.

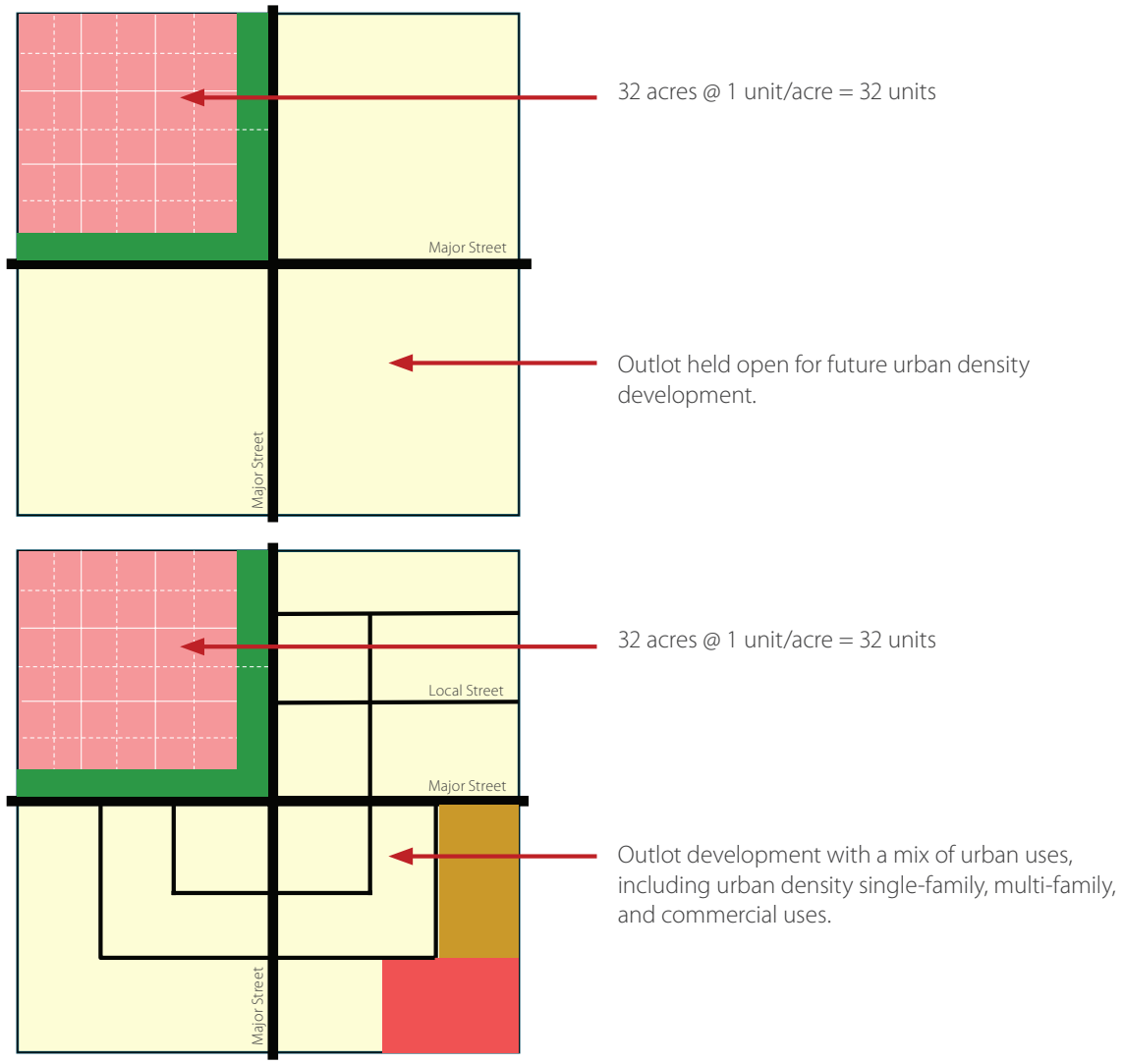
Build-Through Acreage Transition

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.

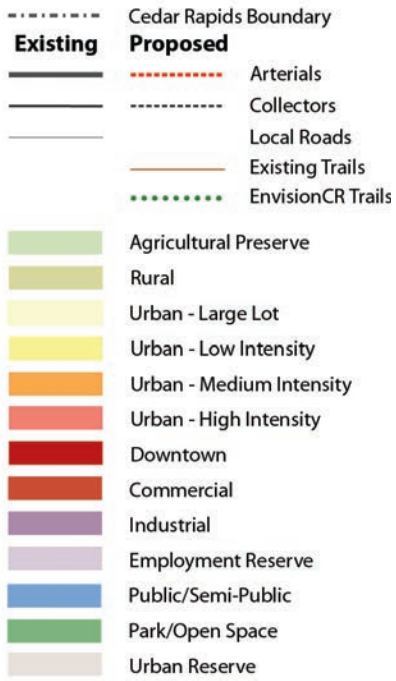
Table 4: Demonstration for Population Yield

	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

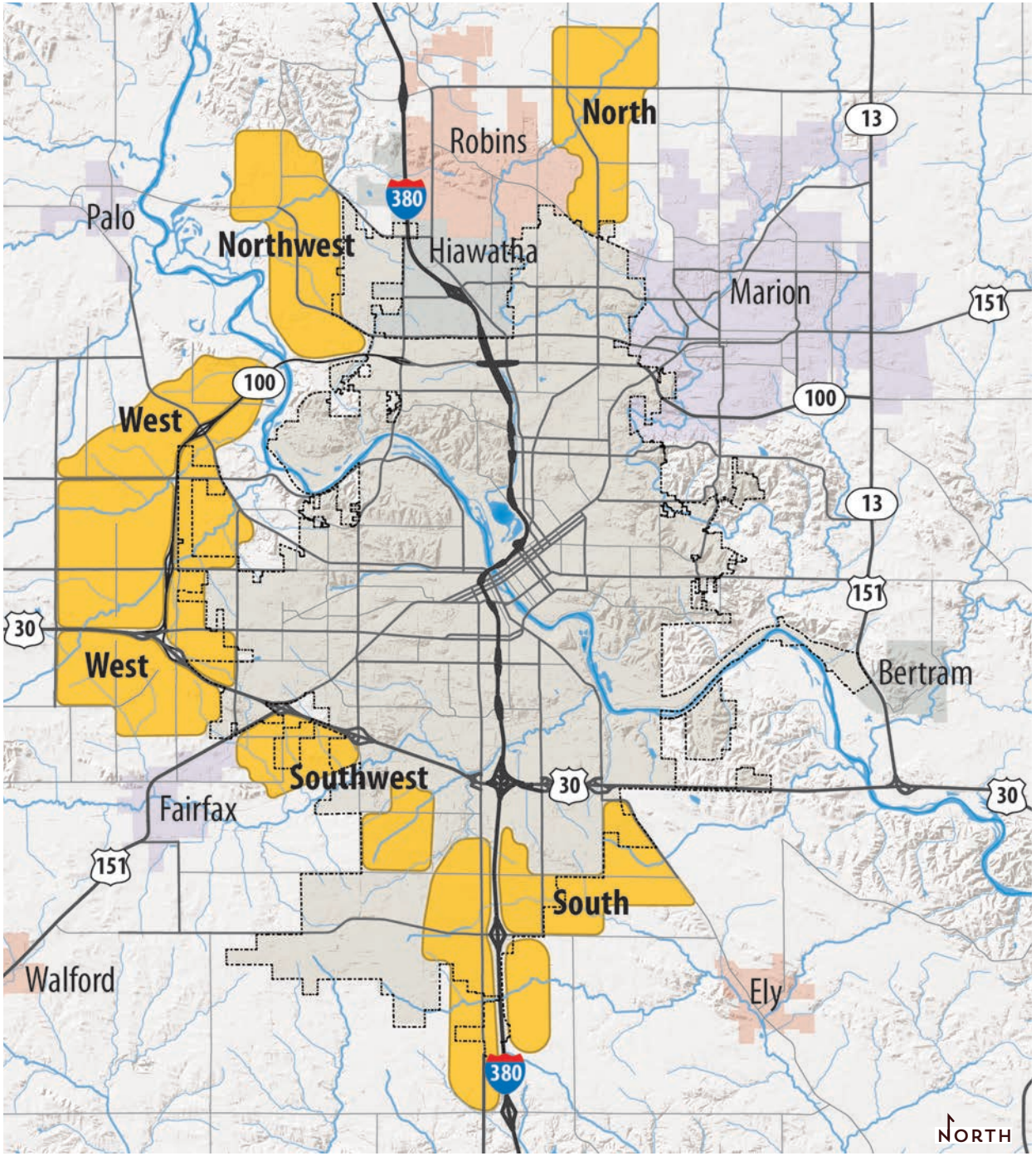
- * Calculating households per acre appropriate to the district in net acres.
- Applying an average household size of 2.2 people per household, results in population yield.

Master Legend

Map 6 to Map 10



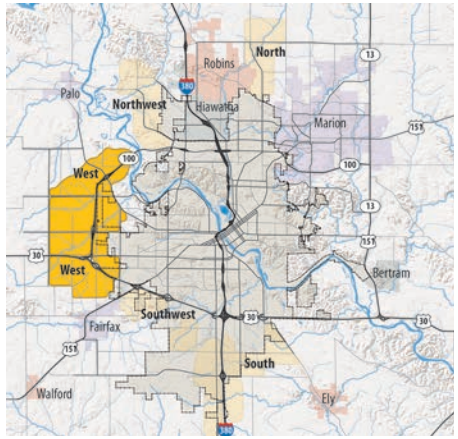
MAP 5: Potential Growth Areas



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

WEST AREA

projected housing:
~15,760 - 35,582
projected population:
~34,671 - 78,280



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

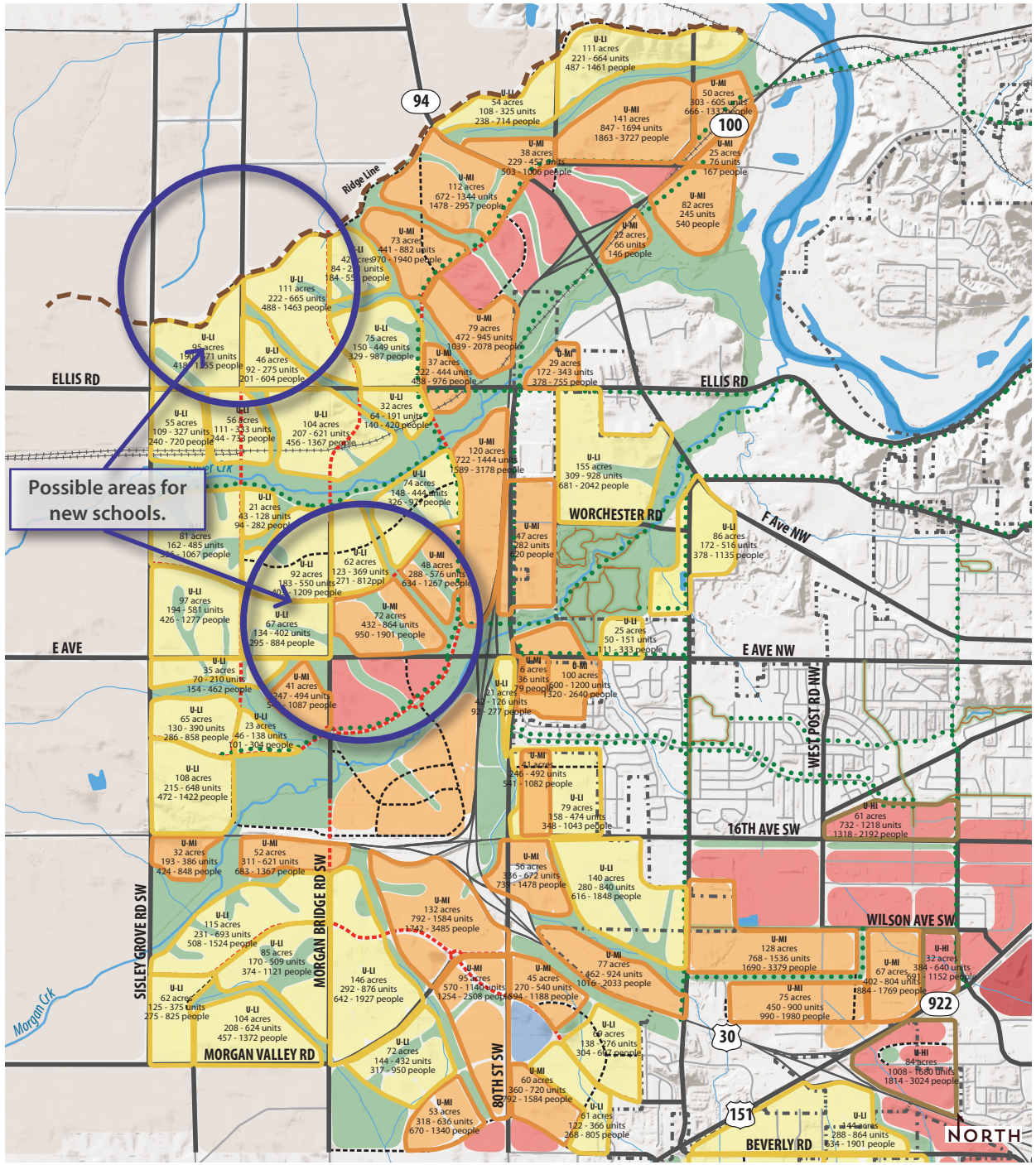
- Mix of development intensities.
- New commercial projects near major intersections, representing a likely demand for its development.
- New major commercial/office project near the crossroads of Highways 30 and 100.
- New community park that is connected by a greenway and trail to Morgan Creek.
- Limiting 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.

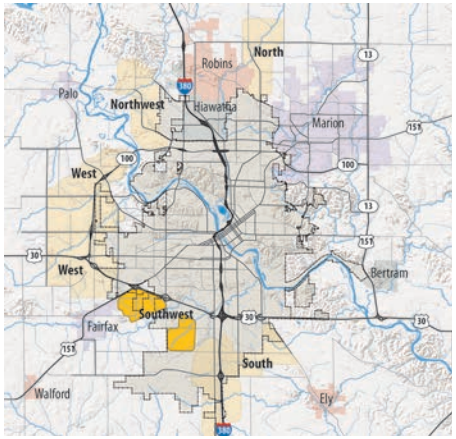
MAP 6: West Area



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

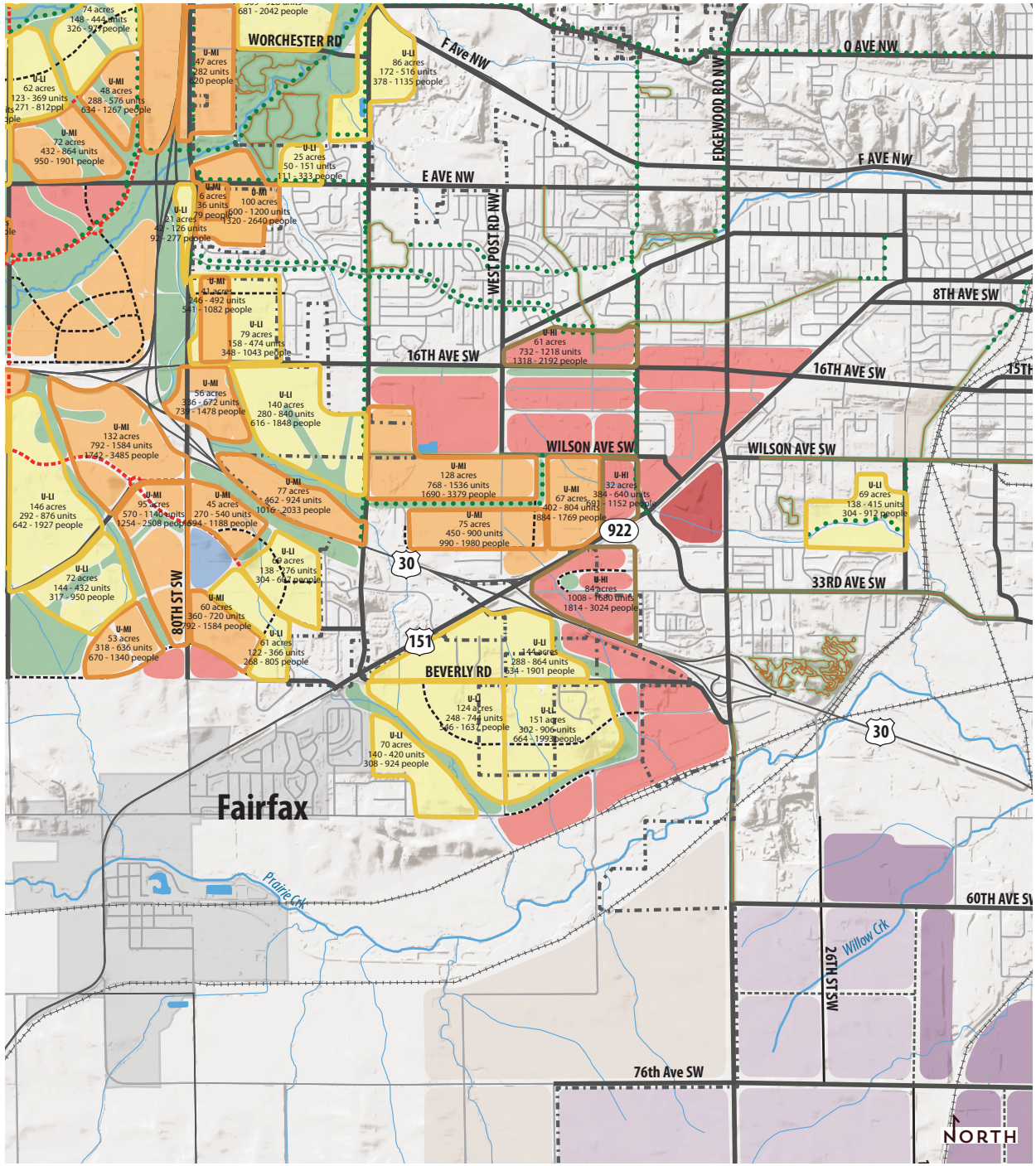
- Completing emerging neighborhoods.
- Increasing intensities north of Highway 30.
- Steering industrial uses to be near Highway 30 and along the railroad.
- Providing a mix of intensities west of Stoney Point Road SW.
- Establishing a system of green space and parks.
- Buffering between uses.

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.

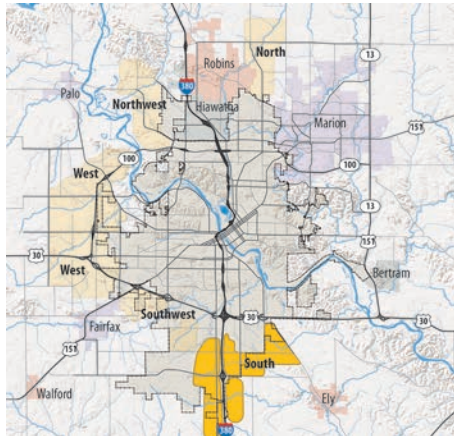
MAP 7: Southwest Area



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

SOUTH AREA

projected housing:
~5,524 - 12,838
projected population:
~12,153 - 28,244



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

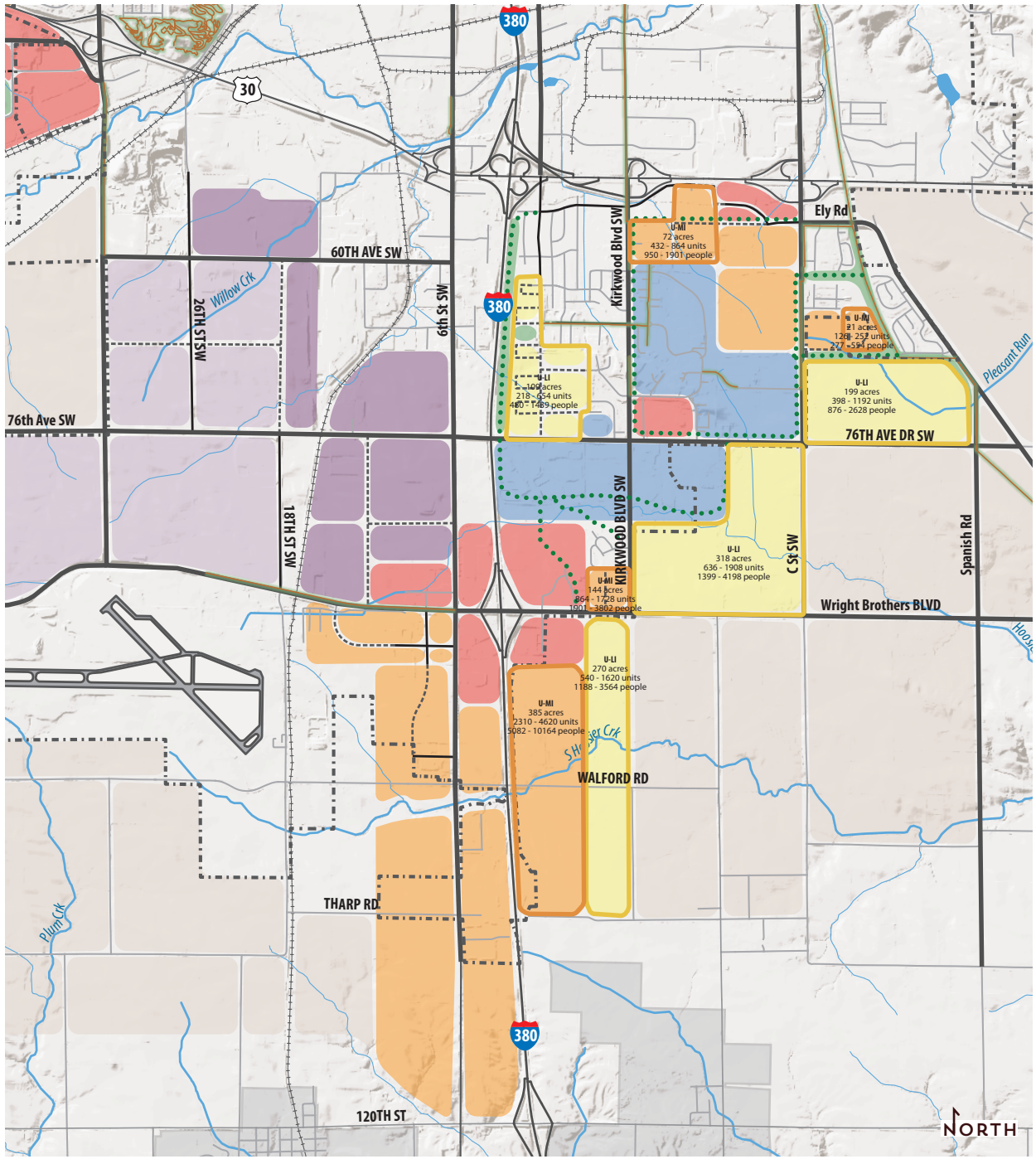
- Office uses near Kirkwood Community College.
- Area around airport reserved for future expansion.
- Employment Reserve near the airport, representing large land areas intended for new major employers.
- Industrial uses west of 6th Street SW.
- Continued development of Prairie View Technology Park.
- 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.

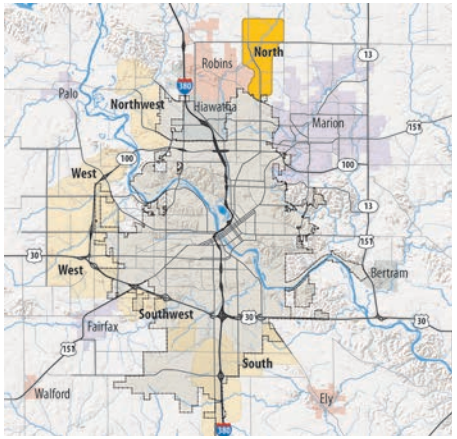
MAP 8: South Area



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

NORTH AREA

projected housing:
~4,028 - 9,254
projected population:
~8,862 - 20,359



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

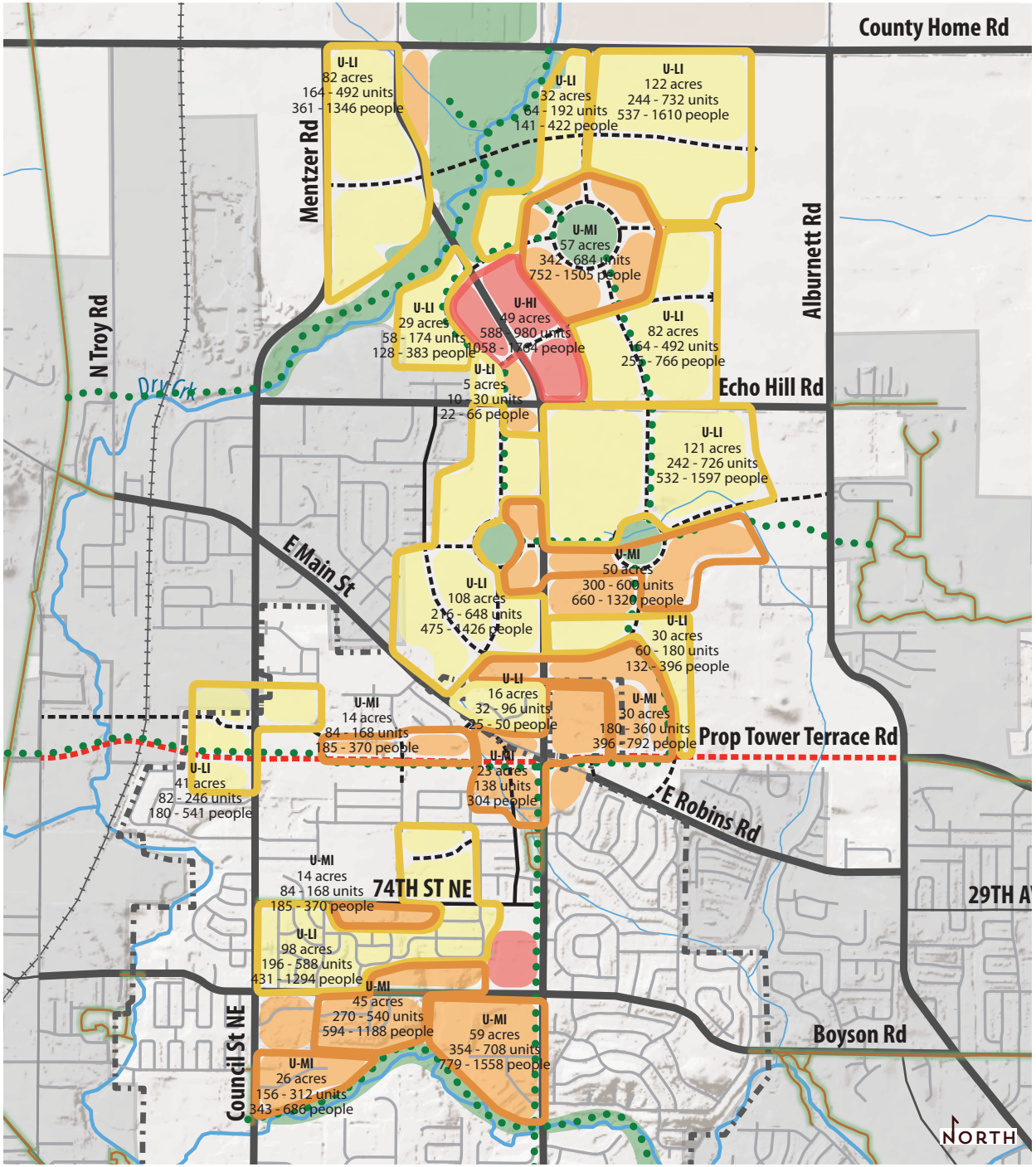
- Mixed-use commercial development at the intersection of Tower Terrace Road and C Avenue NE.
- Higher intensity uses near city limits, moving outward to lower intensity uses.
- Series of parks. Park spaces could be civic/public uses. Medium-intensity areas overlooking parks.
- Preserve greenways adjacent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

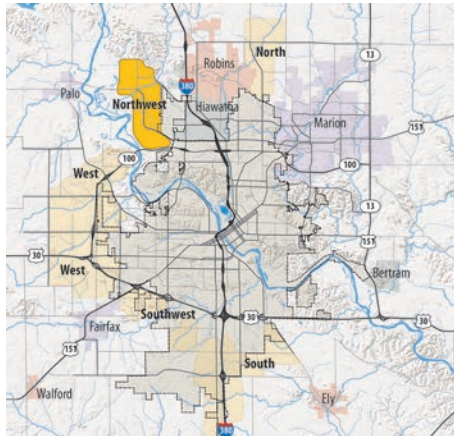
MAP 9: North Area



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

NORTHWEST AREA

projected housing:
~2,138 - 6,118
projected population:
~4,704 - 13,460



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

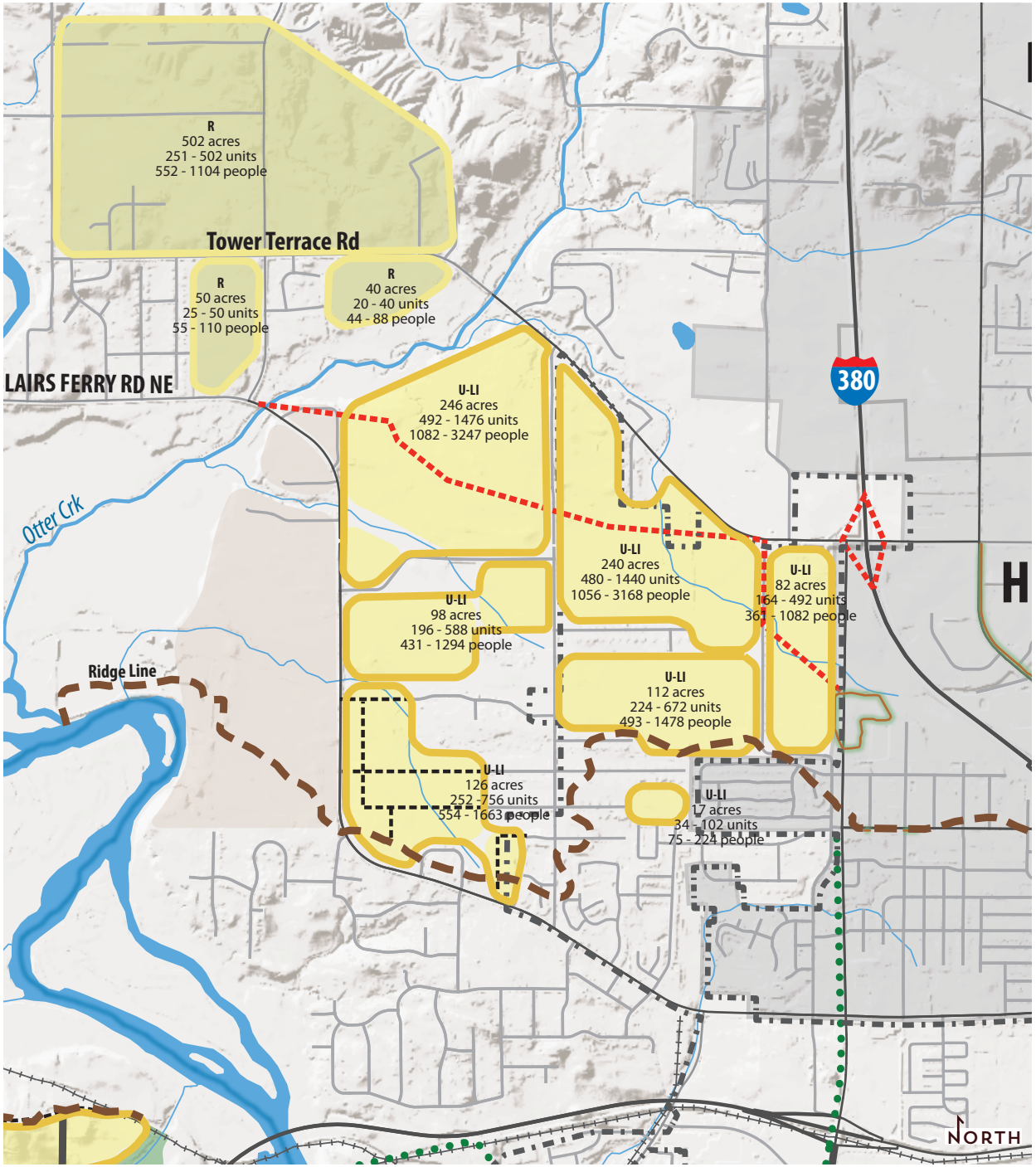
- Northwest Area is primarily Urban Reserve, indicating a need to limit development until other growth areas become built. Sanitary sewer service north of the ridge line, which is generally the alignment of Blairs Ferry Road, requires a lift station. This condition further limits constructability.
- 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

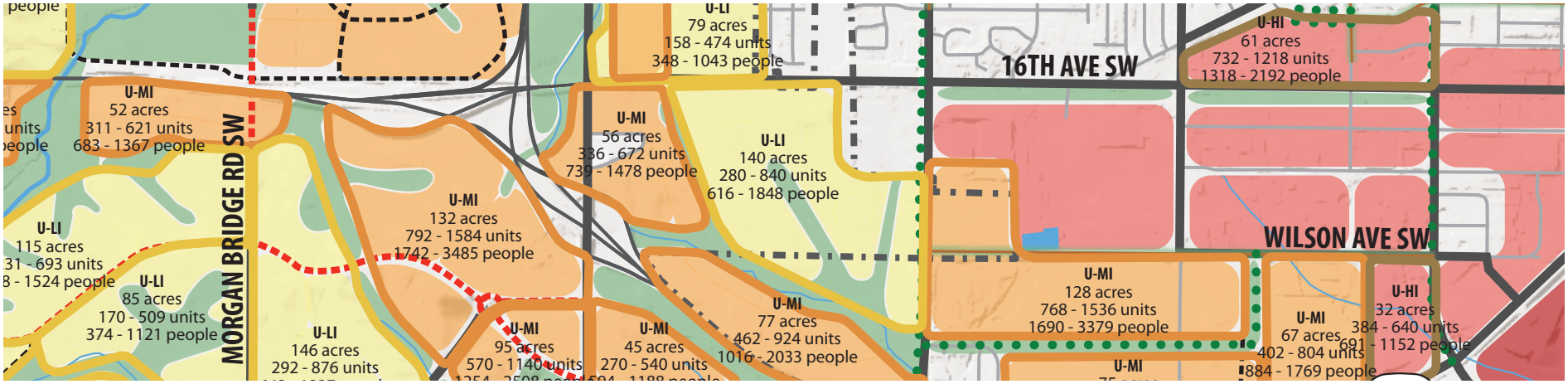
ConnectCR discusses strategies for an interconnected and multi-modal transportation system. Major transportation elements in the Northwest Area include:

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

MAP 10: Northwest Area



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



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:

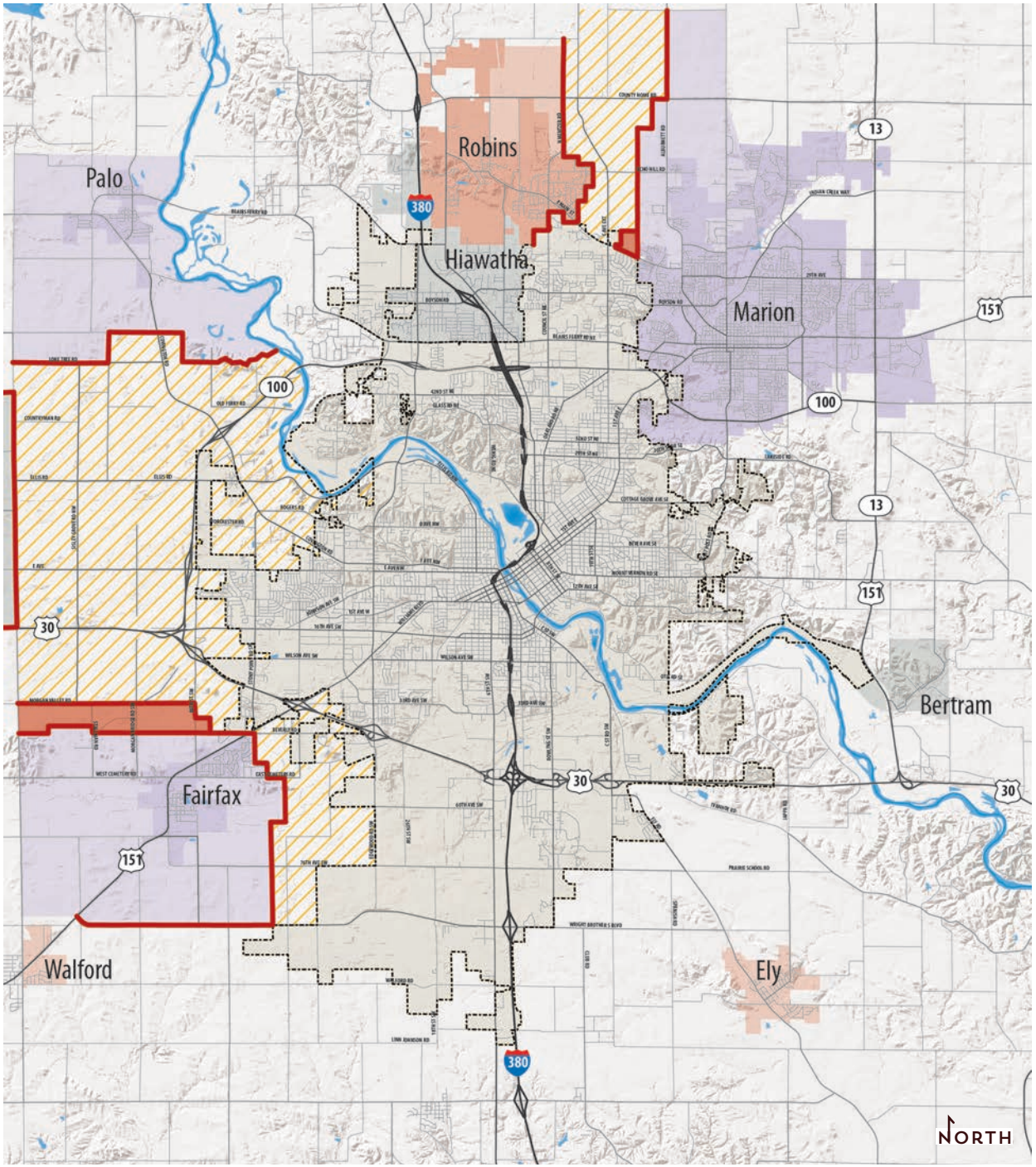
- Host annual open house. For example: Leawood, Kansas provides an annual open house for the community to learn about projects happening in their city. Departments have booths for people to approach managers to discuss projects that are adopted or being developed.
- Continue participation and coordination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

GREENCR

GREENCR

Farmland largely surrounds the City of Cedar Rapids. These working lands yield job opportunities and economic vitality through the growing bio-economy and the long-time staple of grain/food processing. These agricultural lands also present natural resource challenges, especially when coupled with under-planned urban development.

Past flooding and water quality issues leave Cedar Rapids leadership fully aware of these issues. To achieve goals for a community rooted in healthy water, air, and landscapes, the following are considered:

- Post-flood recovery work
- Plans for parks and trails
- Public and natural resources health data and initiatives
- Environment-related committee/task force reports
- Ongoing statewide work related to smart growth and low-impact design
- Tools for habitat protection, green infrastructure, and stormwater management
- Energy conservation and innovation strategies

Working with past and ongoing parks and trails planning efforts makes particular sense in Cedar Rapids as a means to speak to the city's leadership in natural resources. Cedar Rapids enjoys a high number of park acres per resident. When these park lands reflect sound natural resources management, life in Cedar Rapids receives numerous benefits:

- Improved stormwater management and water quality
- Diverse habitat for recreation and resource health
- Opportunities for the public to get outdoors frequently for personal and public health
- General overall "quality of life" improvements

Similarly, trails continue to put Iowa on the map as a regional/national attraction. Cedar Rapids' commitment to trails leaves the community poised for an ever-expanding role in cycling tourism and economic development, neighborhood connections, active living and again, public health.

GREENCR GOALS

1. Be stewards for the environment, promoting economic and social growth while restoring the relationship between the city and the natural environment.
2. Have the best parks, recreation, and trails system in the region.
3. Lead in energy conservation and innovation.

GOAL 1: Be stewards for the environment, promoting economic and social growth while restoring the relationship between the city and the natural environment.

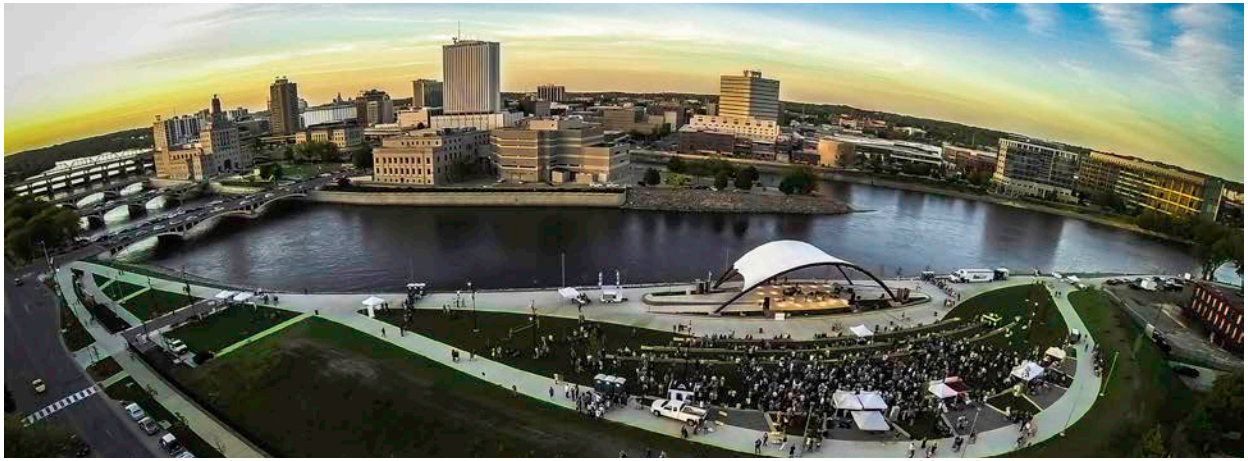
Throughout the EnvisionCR process, the importance of natural resources management was reinforced again and again. A comprehensive watershed approach coupled with an Iowa wildlife "gap analysis" is used to address habitat needs.

Through this approach, the following was analyzed:

- Water and drainage-related resources, including wetlands, floodplains, streams and other watercourses, lakes, and permanent small water bodies
- Parks and trails
- Steep slopes that can limit development or cause significant erosion and water quality impairment
- Water table depth
- Hydric (i.e. wet) soils
- Habitat/vegetation
- Species "richness," i.e., the likelihood of finding amphibian, reptile, and bird populations in particular locales

The highlights of the relationship between these environmental characteristics results in the following:

- **Identification of two prime areas that should receive special analysis prior to development.** The term "Critical Natural Resource Areas" is used to reflect compatibility with terms used in Linn County's planning process and to reflect the importance of these areas. These areas may be preserved by development permitting and site specific approvals on private property, easements, or public acquisition. Protection for these areas can be achieved through the Environmental Conservation Overlay (EC) discussed in GrowCR.



- **Assessment of areas likely suitable for green infrastructure.** Opportunities were identified where infiltration-based best practices can balance the demands of maximizing development yield and protecting critical resources. This analysis has identified areas that are especially appropriate for techniques that promote infiltration (i.e. "soaking up") of rainwater. But it is important to note that a suite of natural stormwater management practices (e.g. permeable paving, rain gardens/bioswales/bio-retention, stream buffers, wetland restoration, grassed waterways) are appropriate throughout Cedar Rapids.

- **Direction to build cohesive natural systems and support vibrant development.** This plan identifies methods to maintain and restore habitat continuity, link communities and features through trail and pathway corridors, and strives to manage stormwater where it falls to the greatest degree possible. The resulting benefits include enhanced recreation and habitat protection, flood/stormwater improvements and increased water quality.

How the Watershed and Habitat Approach Works

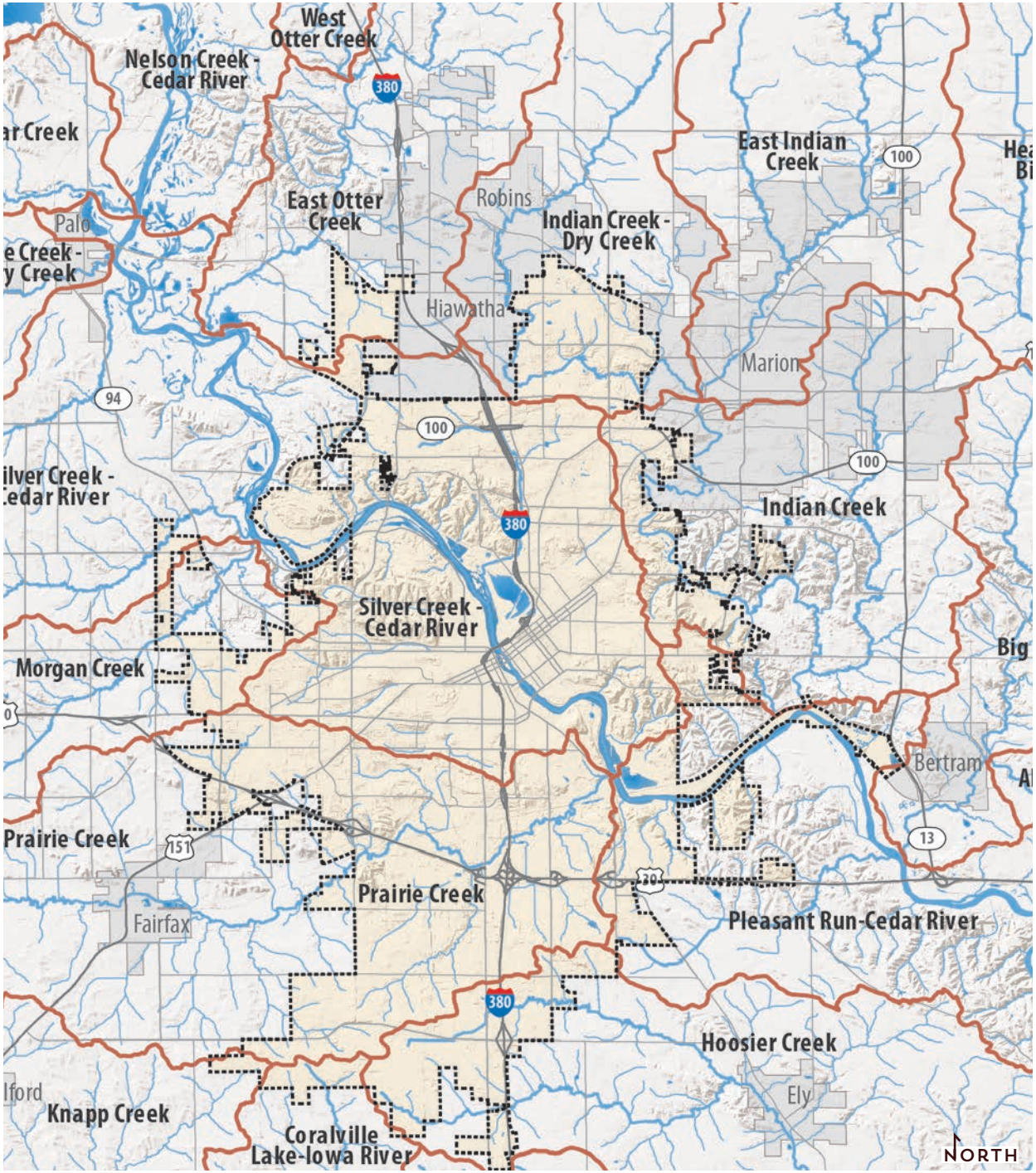
The watershed and habitat approach looks at a series of natural resource factors – described here – and then layers these factors to identify critical natural resource areas. The final product essentially produces a "green heat map." As layers are added on top of each other, intersections of valued green features are identified, making these lands prime for proactive attention.

Some of the individual maps tell important stories on their own. For example, infiltration (water soaking through the soil) can be seen from looking at sandy soils, and something as simple as topography (slopes) can tell about lands that must be protected to help prevent erosion. The mapping layers considered are on the following pages.

WHAT IS A WATERSHED?

A watershed is an area of land that drains to a common body of water, such as a creek, stream, river or lake. Think "drainage area." The water can flow by many means including over land, through drain tile, or via underground waterways. Due to Cedar Rapids' flood history, an understanding of watersheds is considerably more common in this community than elsewhere.

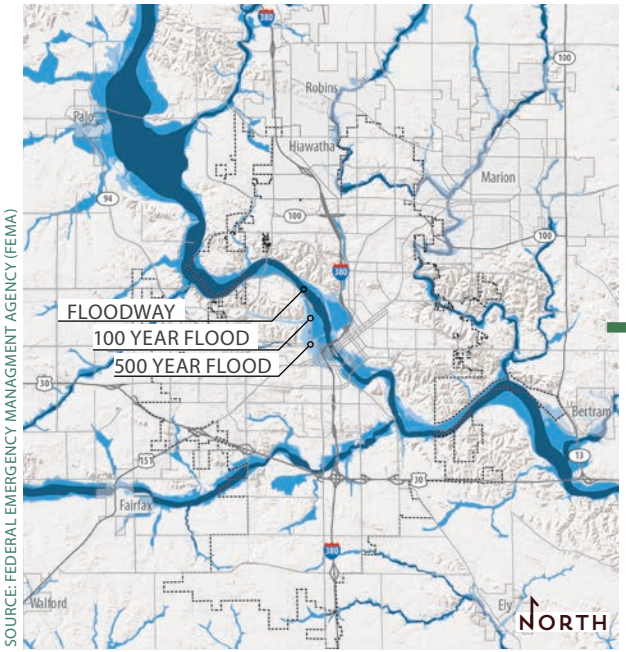
MAP 1: Watersheds



SOURCE: USGS

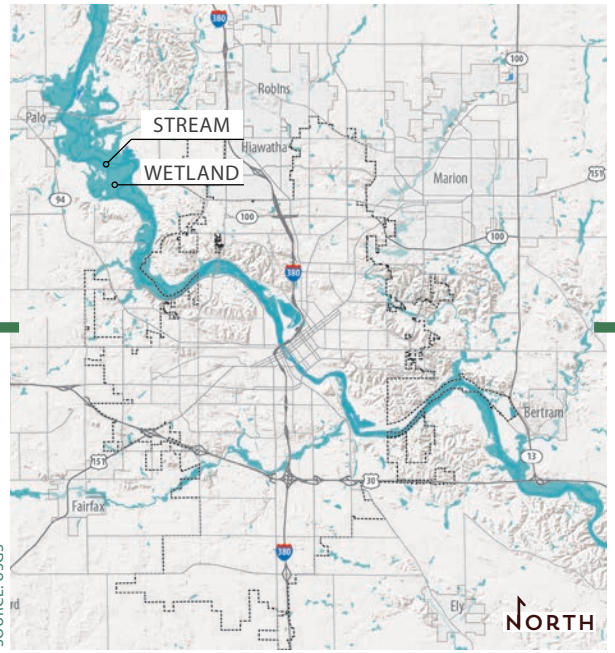
Watersheds
Rivers and Streams
Creeks

MAP 2: Floodplains



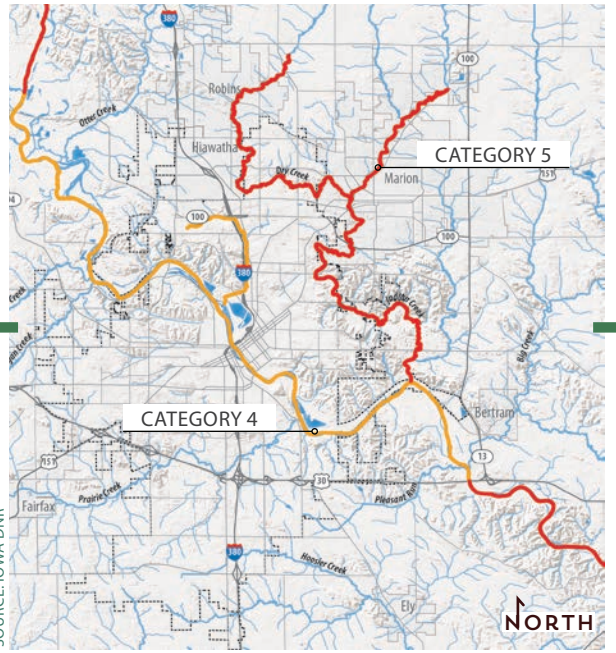
SOURCE: FEDERAL EMERGENCY MANAGMENT AGENCY (FEMA)

MAP 3: Wetlands and Streams



SOURCE: USGS

MAP 4: Impaired Stream Segments



SOURCE: IOWA DNR

Floodplains

Floodplains are fundamental to the watershed and habitat approach. The 100-year floodplain indicates a 1% chance of flooding in any given year, while the 500-year floodplain indicates a 0.2% chance of flooding in any given year.

Since the tragic floods of 2008, Cedar Rapids has been rebuilding, ever mindful of the impacts of volatile river systems and floodplains. The citizens of Cedar Rapids know all too well the importance of floodplains in terms of infrastructure protection, ecology, and water quality and quantity. The floodplain, when properly managed, can provide an important community asset. A minimal-development greenway approach can likely achieve important social, economic, and environmental goals. Cedar Rapids is already embarking on a strategy to establish a greenway corridor along the Cedar River. Current and potential regulation are also factors. Floodplain developments should be avoided wherever possible due to their potential costly impacts on development at times of intense storms/high water. The establishment of the greenway seems an excellent way to manage the floodplain throughout much of Cedar Rapids.

Wetlands and Streams

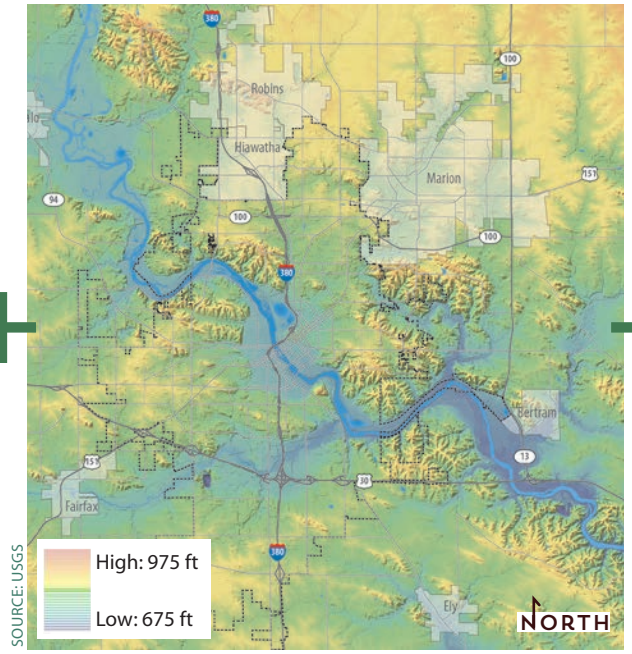
Wetland mapping is an important strategy to look at connecting the hydric (wet) soils and sensitive areas. Most of the wetlands are adjacent to streams or within the floodplain, but a number of small scale wetlands are scattered throughout the region. Wetlands are essential to the hydrologic ecosystem because of their water cleansing properties. The number of wetlands surfacing in the region indicates value in exploring the potential of a wetland mitigation bank to serve this region. When wetland mitigation occurs within the watershed of the original wetland, it's more effective at replicating the functions of the original wetland, assuming the mitigating wetland is well designed and managed.

Impaired Stream Segments

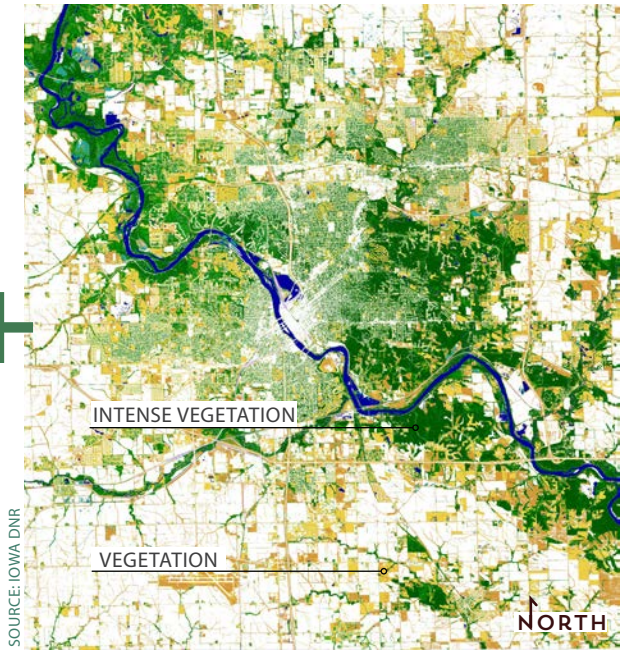
The Iowa Department of Natural Resources publishes impaired stream data every two years with the last data published in March of 2013 (2012 data). This plan is based on that 2012 data. When looking at stream impairment, it's important to recognize impaired waterways can range from slight to severe. This analysis focuses here primarily on Category 5 impairments – those stream segments requiring a Total Maximum Daily Load (TMDL). A TMDL is essentially a study of how much pollution (i.e. "load') a stream segment can withstand and still meet state water quality standards. The TMDL study provides a detailed look at that stream segment's impairment and often offers details that relate to potential corrective measures. Due to the number of impaired waters in Iowa, a significant time lapse often occurs between calling out the need for a TMDL and actually completing a TMDL study. At this "comprehensive plan" level, impaired stream segments reveal stream stretches that likely need buffers. When work on the impairment does occur, buffers will help that work reach its full potential.

MAP 5: Hydric Soils

MAP 6: Slopes and Topography



MAP 7: Vegetation



Hydric (Wet) Soils

The United States Department of Agriculture defines hydric soils as those soils that are sufficiently wet in the upper part to develop anaerobic conditions (saturation) during the growing season. Not surprisingly, Cedar Rapids area soils with a high potential for saturation follow drainage/water ways very closely and reinforce the need for buffering and connections of creeks, streams, and drainage ways.

Slopes and Topography

Slopes have a direct impact on flooding/erosion, development suitability, and habitat. Much of Cedar Rapids experiences flatter, low-lying topography. But even modest slopes in excess of 6% can have a significant impact on development, particularly in areas where the building footprint requiring flat terrain is large. Much of Cedar Rapids' steeper-sloped terrain is included in the proposed Critical Natural Resource Areas. Avoiding development in areas with steep slopes typically (greater than 8%) will help prevent excessive erosion – ultimately helping to stabilize stream corridors. When land cover is changed, unprotected or disturbed slopes are one of the primary contributors to "suspended solids loading" (i.e., water transporting solid, polluting materials – primarily dirt), leading to soil erosion and muddy waters.

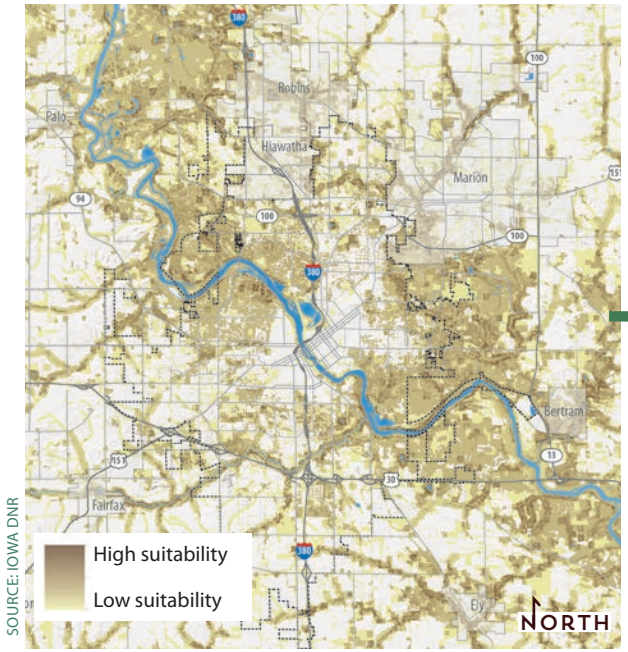
Vegetation

Vegetation and land cover are major resources that can help manage stormwater, prevent erosion, moderate microclimates, and provide more appealing physical environments. It might seem counter-intuitive that a well-developed area like Cedar Rapids would serve as an "oasis" for vegetation. When considering woodlands and grasslands, however, urban areas often offer some respite in a largely agricultural landscape. Cedar Rapids is no exception.

Restoring and/or preserving native vegetation helps protect habitat and provide opportunities for migratory birds and wildlife. Cedar Rapids has a high correlation between species richness (see maps 7 and 8) and some of the city's more wooded areas. Many of these areas have been difficult for development (due in some instances to wet conditions, in others to steep slopes) and therefore have left their vegetation largely intact.

It is recommended that steps are taken to minimize development within these areas and instead secure them to function for stormwater management, habitat, and appropriate recreation.

MAP 8: Species Richness



SOURCE: IOWA DNR

Species Richness

Using a gap analysis provided by Iowa State University and the Iowa Department of Natural Resources, one can understand Cedar Rapids' capacity for supporting amphibians, reptiles, and bird species. The zones of light to modest development in the region are largely reflected in the species richness maps because the least disturbed lands tend to better support wildlife than areas that have been plowed or paved. There may still be pockets, however, of environmentally sensitive areas and/or native vegetation throughout the region.

In addition to the Critical Natural Resources Area(s) identified here, it is recommended to follow the recommendations of the November 17, 2009 Environmentally Sensitive Areas Task Force's Final Report to the Cedar Rapids City Council and develop a process for mapping environmentally sensitive areas in the Cedar Rapids region.

MAP 9: Sandy Soils and Green Infrastructure

SOURCE: USGS

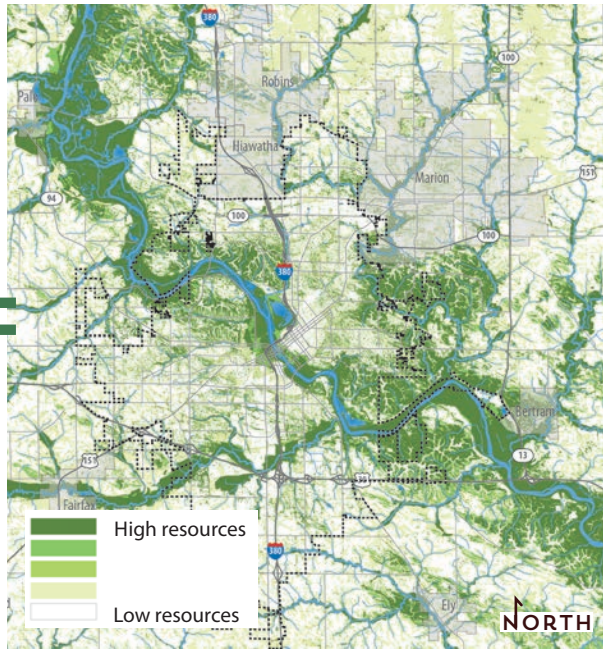
Sandy Soils and Green Infrastructure

"Green infrastructure" speaks to the use of a series of natural systems to replace or supplement pipe and concrete infrastructure that has traditionally been used to manage stormwater in modern times. Buffers, rain gardens, and other practices that promote slowing and soaking up water make up green infrastructure.

Systems that use infiltration (soaking) methods – rain gardens and bioswales– are best suited to sandier soils, particularly in areas with a lower water table. In Cedar Rapids, the sandier soils are concentrated north of downtown and east of the river as well as south of downtown and to the east. This does not mean infiltration practices cannot be employed elsewhere, but these are good locations, especially where the sandy soils are farther from the river channel.

Infiltration is not the whole of the green infrastructure story. Surface based water quality improvement practices (filter strips, buffers) help remove "suspended solids" and harmful pollutants (fertilizers, oils) while slowing water down before it reaches a creek or stream.

MAP 10: Critical Natural Resource Areas



SOURCE: RDG, USGS, FEMA

Critical Natural Resource Areas

The Critical Natural Resources Areas broadly identified via this composite map can be used to point the city in the direction of areas to be included in the Environmental Conservation Overlay (EC) introduced in GrowCR. The EC will help to maintain the natural resource functions of these lands. These functions include erosion prevention/ watershed protection, potentially some modest level of flood mitigation, wildlife/habitat protection, and potential recreation functions.

To repeat an important point made in the Species Richness section:

There may still be pockets of environmentally sensitive areas and/or native vegetation throughout the region that are beyond the loose "boundaries" of these Critical Natural Resource Areas. It is recommended the city develop a process for mapping environmentally sensitive areas in the Cedar Rapids region.

INITIATIVES

The following initiatives will help achieve Goal 1:

20. Coordinate with adjacent jurisdictions to identify environmentally sensitive areas in need of protection such as wetlands, habitats, and other areas of biological diversity for inclusion in the Environmental Conservation Overlay.

The overlay will identify environmentally sensitive areas in need of protection, based on the environmental maps created for this plan. The overlay will establish protections for these areas.

21. Create a green streets policy that encourages future development and repairs to improve the permeability of the paving system and/or buffering of run-off, as well as a stormwater best management practices cost-share program that elicits community involvement, and, thereby advancing "green infrastructure".

Creation of a policy will include best practice research to identify methods suitable to Cedar Rapids' environment.

22. Prepare a Strategic Plan for iGreenCR initiatives that includes staffing, resources, and priority programs and policies.

Development of the plan will involve most city departments in its creation.

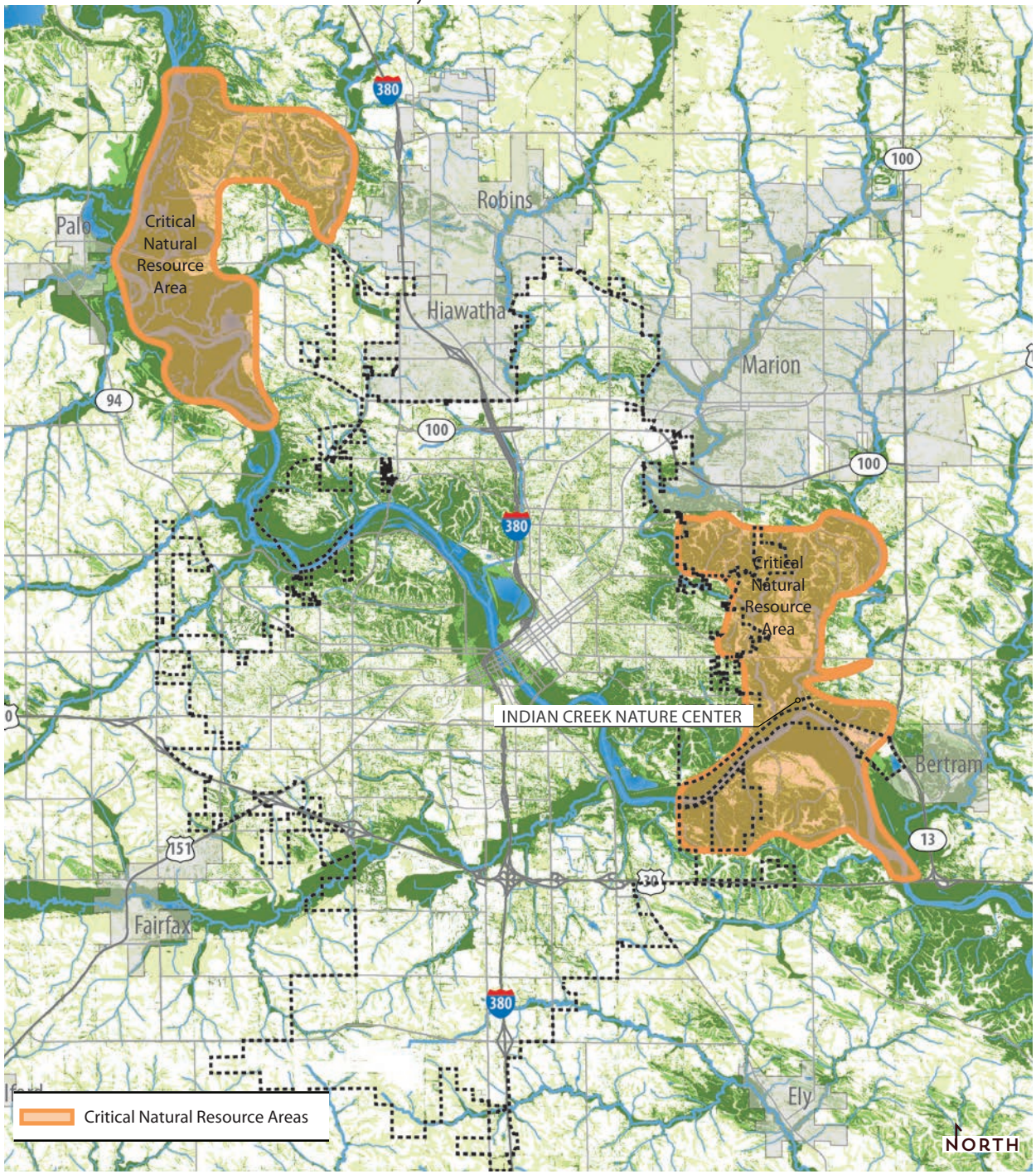
23. Explore the development of a water conservation ordinance.

This initiative will be a companion to the next one.

24. Build customer capacity to respond to drought conditions which may include a rebate program, educational campaign, and future updates to the municipal code as part of the green building program.

The educational campaign portion of this initiative will be helpful in the development of the water conservation ordinance listed above.

MAP 11: Critical Natural Resource Areas - Possible Policy Areas



SOURCE: RDG PLANNING & DESIGN

GOAL 2: Have the best parks, recreation, and trails system in the region.

The Parks and Recreation Master Plan (2010) and the Cedar Rapids Comprehensive Trails Plan (2012) identify a system of parks and trails for Cedar Rapids. EnvisionCR supports the continued implementation of these plans and recommends additions for future updates.

GreenCR also provides some additional detail related to the Parks and Recreation Master Plan's goal to:

> *"ensure that adequate and appropriate parks and open space is provided to new residential developments as the city grows."*
>
> *(City of Cedar Rapids Parks and Recreation Master Plan (PRMP), April 2010, p. 28)*

Future Parks and Trails

To maintain its high level of park service, Cedar Rapids must add parks and trails as its population grows. Map 13 highlights potential future park locations in growth areas. The trails network for the Cedar Rapids region is identified in Map 14. The trails planning included in this document reinforces the park master plan goal to develop a "connected recreational trail system" (PRMP, p. 36).

The following principles guide the new park locations:

- Establishing parks of multiple benefit, that is, parks that address habitat and water quality benefits as well as recreational/community service benefits.
- Providing a neighborhood or community park within ¼ to ½ mile walking distance of residential areas. (Note: 80% of respondents queried in a PRMP survey asked for a park within walking distance, p. 11)
    - Map 12 shows which areas of the city are currently within a quarter mile or half mile service area of a park. Most areas of town are covered by one or more of these park service areas.
- Using parks as a focal point for new neighborhoods, often providing a community gathering space.
- Using new parks and trails as a catalyst for encouraging development in desirable areas.

The Results

The potential new park sites in potential growth areas would add approximately 575 acres to the current park system. Specifically, EnvisionCR identifies the following approximate locations of significantly sized new park land:

1. 45 acres made up of three neighborhood-scale parks collected in the vicinity of C avenue and North of Echo Hills Road
2. 15 acres North of Echo Hills Road and Northwest of the river
3. 10 acres of two neighborhood-scale parks by Highway 30 and Interstate 380
4. 160 acres (regional in nature) North of Highway 30 and near Highway 100
5. Nearly 70 acres (regional in nature) North of Ellis Road by Covington Road and South of the new Highway 100
6. 155 acres (regional in nature) directly east of the new Highway 100
7. 120 acres (regional in nature) South east of Highway 30

These parks are identified in Map 13 on page 105.

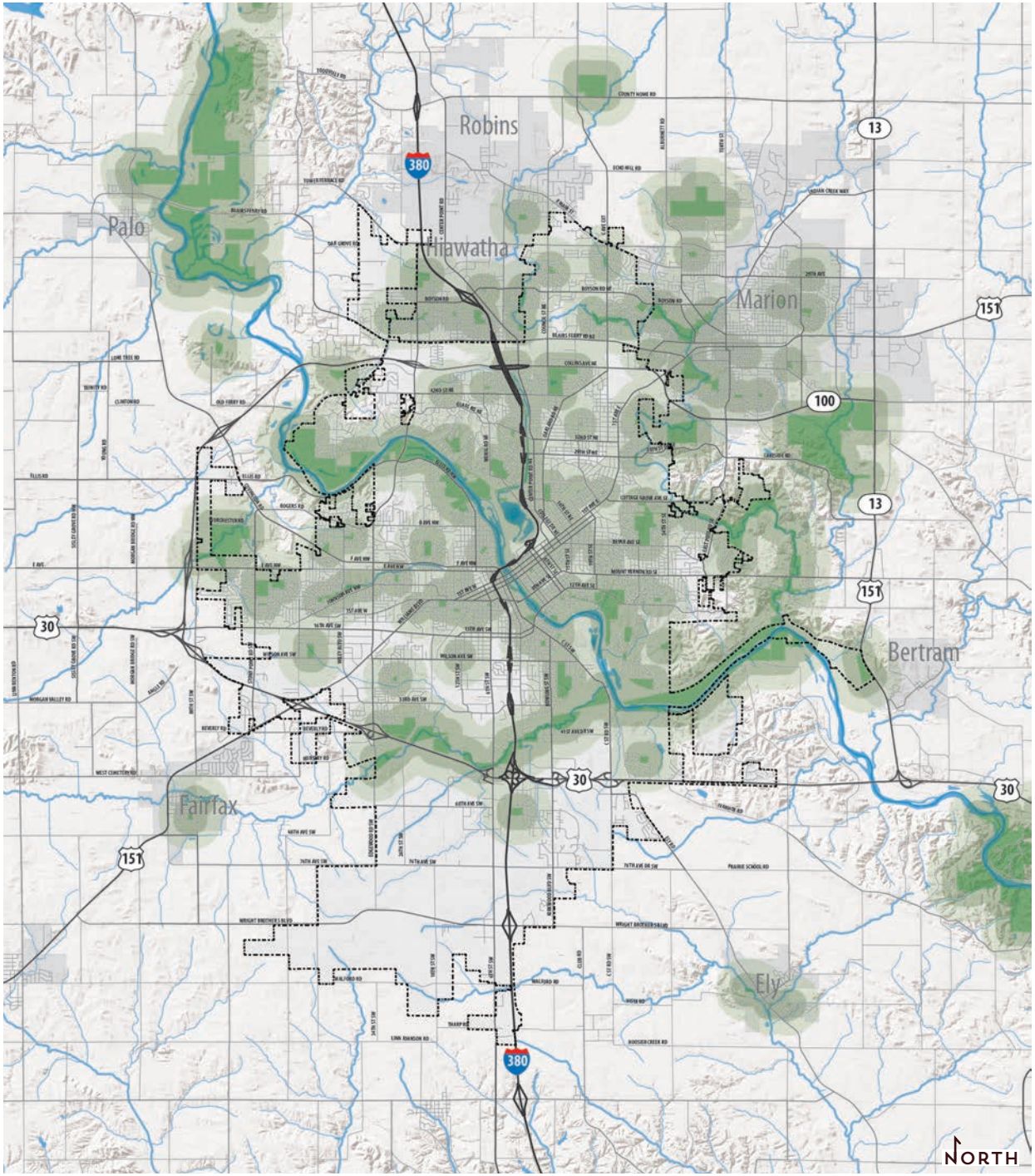
The map also shows the value of continuing to buffer and connect parks. As opportunities arise to buffer and link current facilities, opportunities are created for:

- Green infrastructure.
- Habitat corridors and/or an expanded greenway system.
- Creek/stream buffers for water quality protection and erosion control.
- An overall reduction (over time) of paved surfaces to prepare for current and future shifts in climate and storm extremes.

Finally, the potential exists for a significant watershed and wildlife protection zone north of the city within the Critical Natural Resource Areas designated on Map 11. It is also shown on the parks map.

Due to the steep slopes in this area and its proximity to the Cedar River upstream of the city, setting this land aside as a natural open space would serve the city well. While the city and county have established a number of corridors for water and wildlife protection, many species need a broader expanse of area to thrive (i.e., a system of corridors alone will not accommodate all the wildlife needing support). Those areas do exist within Cedar Rapids and Linn County, but this would provide an additional notable area of breadth for habitat protection. Generally speaking, across the state, Iowa needs additional aggregated areas for wildlife and immersive recreation experiences in "wild lands."

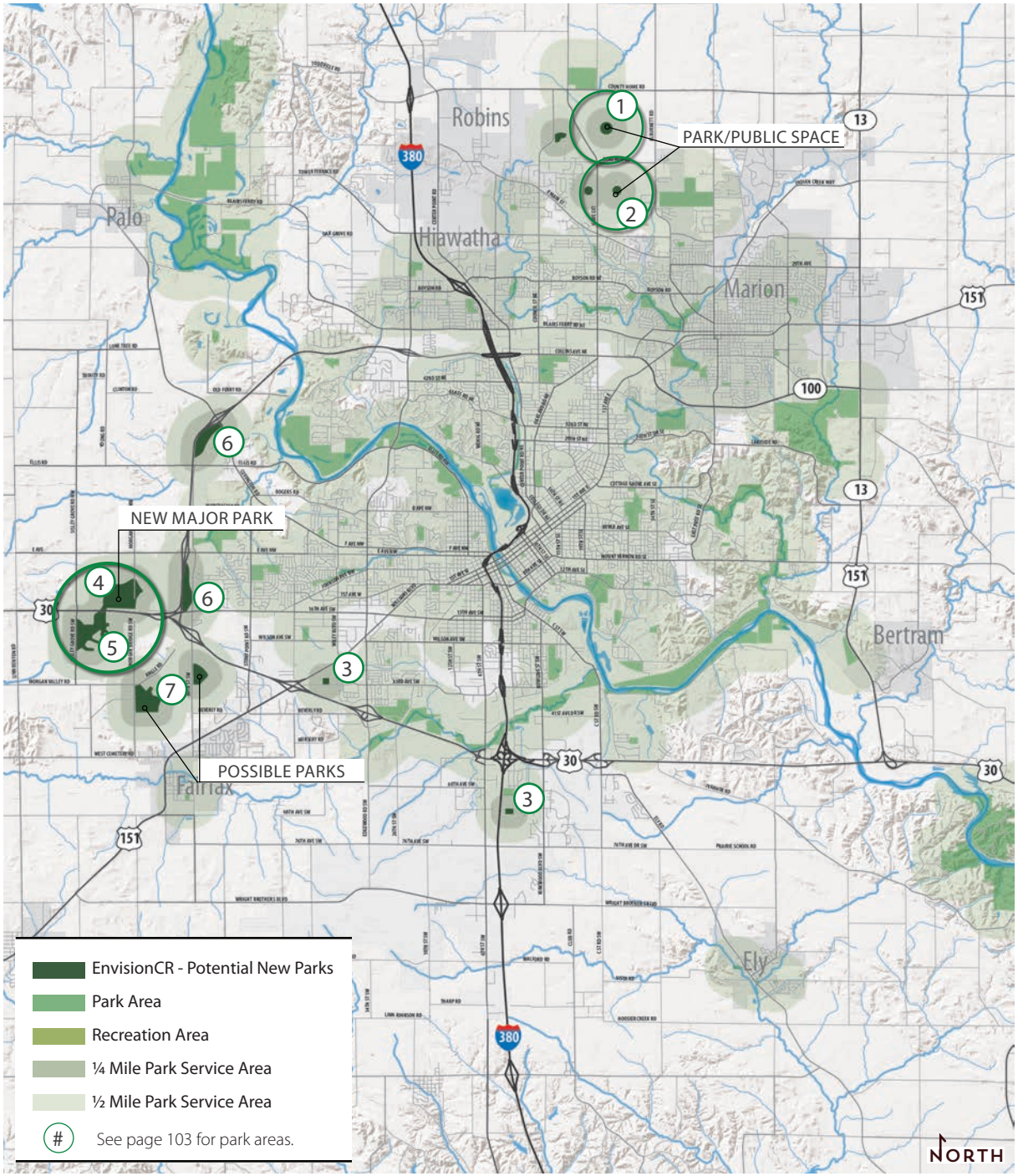
MAP 12: Current Park Service Areas



Park Area
Recreation Area
¼ Mile Park Service Area
½ Mile Park Service Area

SOURCE: CITY OF CEDAR RAPIDS, RDG PLANNING & DESIGN

MAP 13: Potential Park Additions



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

INITIATIVES

The ongoing implementation of the Parks and Recreation Master Plan should be a primary measure of success, with an emphasis placed on greenway development, park buffers, and trail connections. Longer term initiatives include:

25. Update the Parks and Recreation Master Plan to include a needs analysis, gap analysis, evaluation of existing facilities and programs, asset management strategies, and implementation actions.

The current parks and recreation master plan was completed in April 2010. The plan should be updated every 6-8 years.

26. Develop a city policy to require developers of large residential projects to develop new public areas.

This would require consultation with the adopted parks and recreation master plan.

27. Develop site master plans, prior to making improvements, for each of the following signature parks: Noelridge Park, Bever Park, Ellis Park, Jones Park, and Cherry Hill Park.

These plans are key to maintain these parks, and their unique identities, as destinations for the city and region.

28. Convert select areas of park turf grass to native prairie or woodland plantings to create wildlife habitat and reduce long-term maintenance costs.

The city continues to look for opportunities to reduce its costs while providing a benefit to the natural environment.

29. Track progress in identifying a funding strategy, ensuring CIP includes maintenance costs, and ensure coordination between CIP projects related to the Cedar Rapids Comprehensive Trails Plan.

Coordination can lead to improved efficiencies and opportunities to construct trail projects as part of other city infrastructure projects.

30. Develop a land acquisition strategy for new parks and expansion of existing parks.

Map 13 identifies locations for potential future parks.

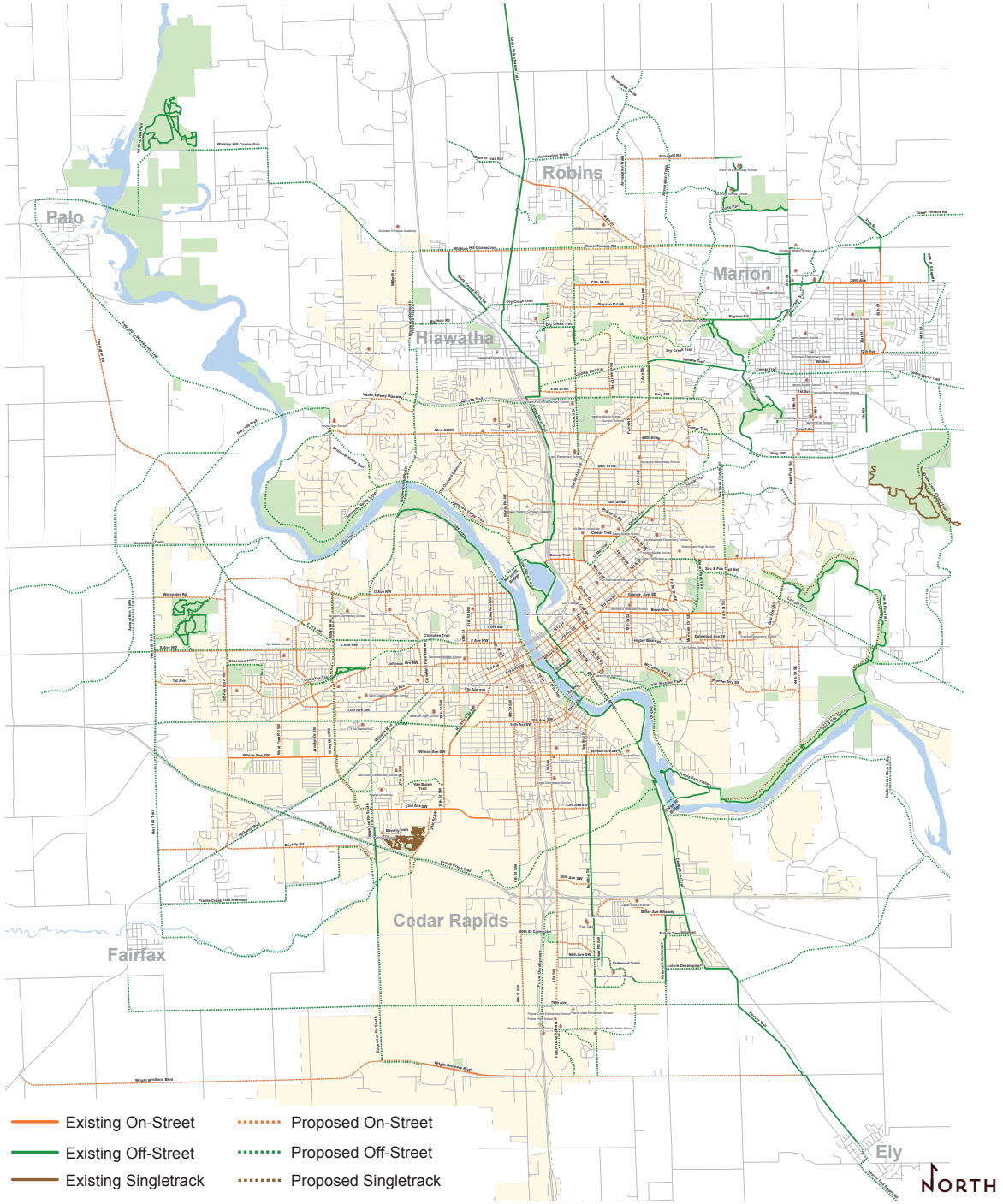
31. Identify ways to incorporate parks and open space into new subdivisions as part of the update to the subdivision code.

Many cities require dedication of park land by developers, typically as a function of the number of acres or dwelling units in the development. Some cities allow developers to provide a payment for parks, in lieu of land dedication, but the legal precedent for this in Iowa is complex - cities should consult with their attorney on this issue.

32. Complete infrastructure removal and track progress in completing short term projects of the Cedar Rapids Greenway Parks Plan.

In the aftermath of the 2008 flood, the city has committed to transforming the hardest hit neighborhoods into three sections of greenway totaling 130 acres.

MAP 14: Trail Network



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

GOAL 3: Lead in energy conservation and innovation.

To prepare for severe storms and floods of the future, a longer term effort is required to try to curb climate extremes and prepare for changes in our energy future. EnvisionCR reflects the public's desire for a sustainable city – one that will be vibrant, dynamic and stand the test of time.

Severe weather events have already caused Cedar Rapids great hardship. It makes sense for Cedar Rapids to lead in prevention – not just by armoring its stream banks and down-playing floodplain development, but by addressing root causes of these climate crises: greenhouse gases. To keep it simple, GreenCR focuses on carbon. As communities, corporations, and nations continue to reduce carbon-absorbing vegetation and burn fossil fuels (releasing carbon), climate problems are compounded. Cedar Rapids can serve as a model community by addressing energy consumption, alternative/distributed energy and natural resources restoration (outlined above) through this comprehensive plan.

Cedar Rapids can show leadership in the region through development of a Climate Action Plan (CAP). Much of what is discussed in this chapter and throughout this plan aligns with CAP content. At a minimum, such an effort would address the National Renewable Energy Laboratory's (NREL) Nine-Step Community Energy Planning Cycle:

1. Identify/convene stakeholders
2. Form a leadership team
3. Develop energy vision
4. Develop energy baseline
5. Develop specific goals
6. Evaluate and rank programs
7. Identify funding sources
8. Compile the plan
9. Measure and verify, plan alterations

Peer communities across the country have been benchmarking building use and setting energy budgets. They identify road maps for improving after benchmarks are known and make informed decisions using economic and environmental metrics. They look at a variety of energy/greenhouse gases and other resource conservation measures, including:

- Energy efficiency and renewable energy
- Vehicle fleet
- Employee commute
- Waste reduction and recycling
- Green building and environmentally preferable purchasing
- Light pollution reduction
- Value of water and its relationship to energy (looking for opportunities as a community to passively treat water and incorporating water audits to reduce building water use, catch leaks, and reduce hot water demand – i.e. flush and flow fixtures, appliances, etc.)

With current technology, incentives, and net metering laws, there has been a decrease on simple payback models with many existing buildings remodeled to achieve 50% less energy with a payback of less than 10 years. Iowa makes revolving loan funds available for this work.

Increasingly, CAPs address adaptation, prevention and mitigation. They may go beyond energy, buildings, and water to understand impacts on local species/habitat and monitor for impacts. They also afford opportunities to promote regional collaboration/planning efforts as well as engaging the public in taking personal responsibility for energy/water conservation and greenhouse gas emissions. Do-One-Thing campaigns (encouraging individuals to do one thing for the environment) have been popular in peer communities for this reason.

INITIATIVES

The recommended approach is for the city to complete a municipal climate action plan first to help start the conversation and provide an educational opportunity on the purpose and benefit of climate action plans. Development of a community-wide climate action plan would then follow.

33. Prepare a municipal Climate Action Plan that builds off of the Energy Management Plan and addresses emissions from land use, transportation, street lights, water consumption, waste generation, and building energy.

This plan would include developing a municipal greenhouse gas emissions inventory and associated reduction target. It would also identify measures for reducing emissions to reach the identified target and outline an approach for implementation and financing.

34. Prepare a community-wide Climate Action Plan that builds off of the Energy Management Plan and addresses emissions from land use, transportation, street lights, water consumption, waste generation, and building energy.

Similar to the municipal plan but focused on the community.

Climate Change

The Iowa climate information on these pages provides a sampling of the data that will drive climate action planning of the future.

Charts 1 and 2 show the current increases in rainfall and the projections for the future that show shifts in Iowa's rainfall amounts.

Climate changes in Iowa are already occurring, as reported in the Iowa Climate Change Impacts Committee's Report to the Governor and the Iowa General Assembly.

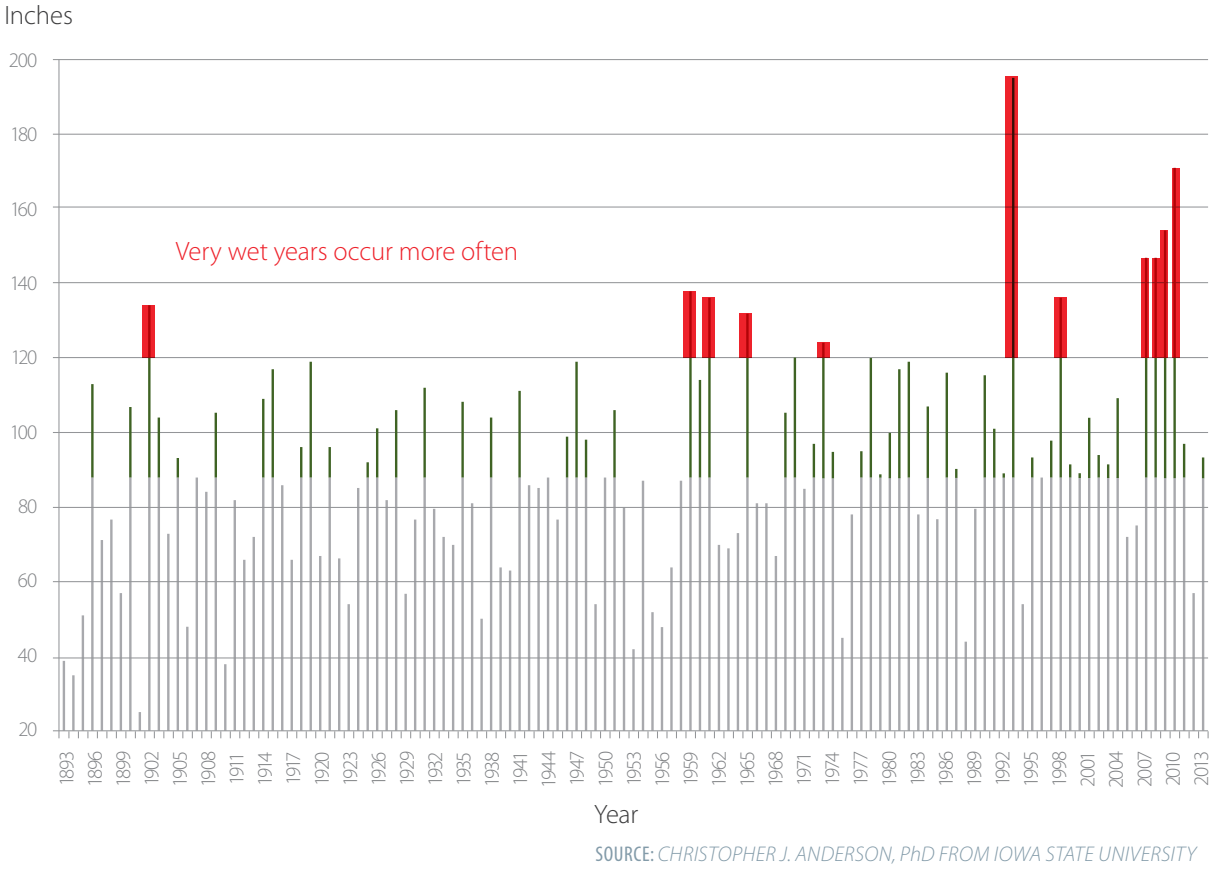
More Precipitation

- Increased frequency of precipitation extremes that lead to flooding.
- Increase of 8 percent more precipitation from 1873 to 2008.
- A larger increase in precipitation in eastern Iowa than in western Iowa.

Higher Temperatures

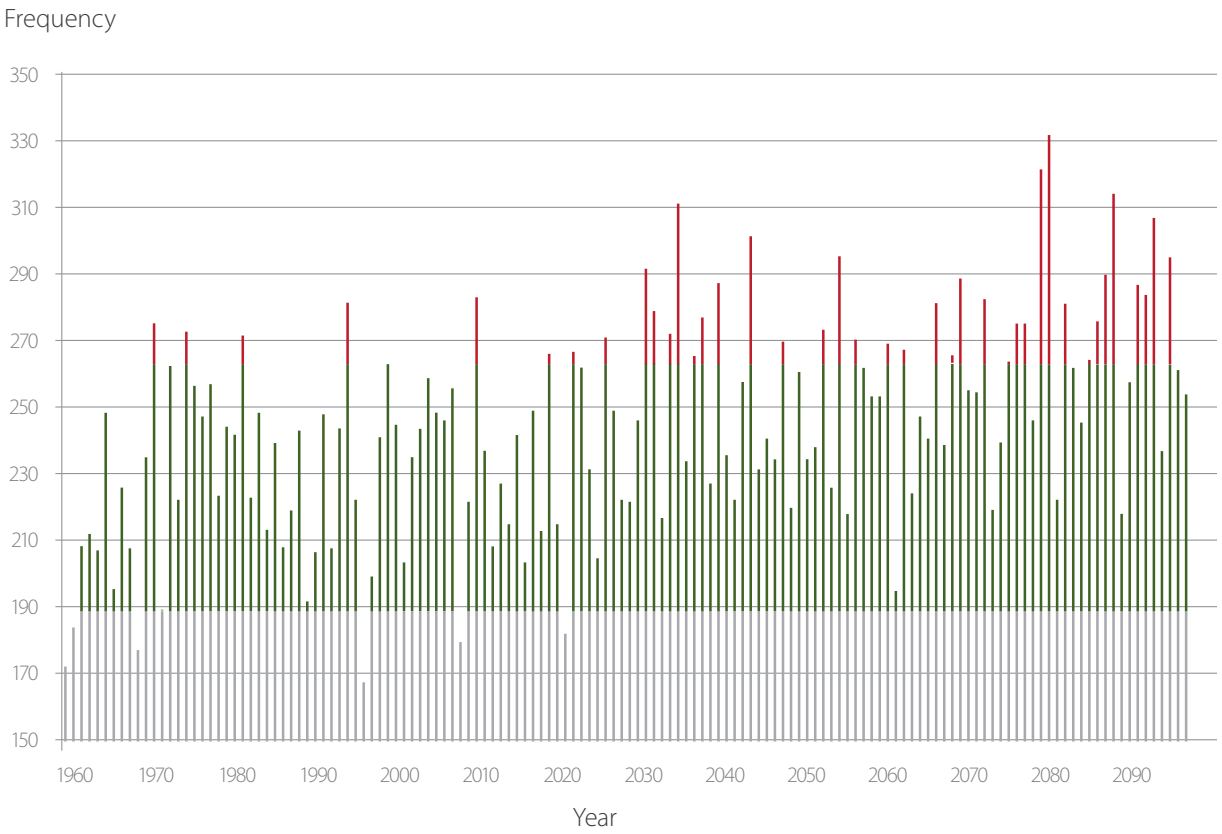
- Long-term winter temperatures have increased six times more than summer temperatures.
- Nighttime temperatures have increased more than daytime temperatures since 1970.
- Iowa's humidity has risen substantially, especially in summer, which now has 13 percent more atmospheric moisture than 35 years ago as indicated by a 3° to 5° F rise in dew-point temperature. This fuels convective thunderstorms that provide more summer precipitation.

CHART 1: Historical frequency of very wet days (exceeding 1.25" per day of rainfall) in Iowa from 1893-2013



SOURCE: *CHRISTOPHER J. ANDERSON, PhD FROM IOWA STATE UNIVERSITY*

CHART 2: Historical and projected frequency of "wet springs," based on May-June rainfall



SOURCE: *CHRISTOPHER J. ANDERSON, PhD FROM IOWA STATE UNIVERSITY*

The red bars show the threshold for unusually wet May-June periods during 1960-1999. Beyond 2020, these wet springs are projected to happen more frequently than in the historical period. Flooding often occurs during wet springs or saturated soils from wet springs lead to flooding later in the season.

Agricultural Challenges

- Climate extremes, not averages, have the greater impact on crop and livestock productivity.
- Increased soil erosion and water runoff.
- Increased challenges associated with manure applications.
- Favorable conditions for survival and spread of many unwanted pests and pathogens.

Habitat Changes

- Plants are leafing out and flowering sooner.
- Birds are arriving earlier in the spring.
- Particular animals are now being sighted farther north than in the past.

Public Health Effects

- Increases in heart and lung programs from increasing air pollutants of ozone and fine particles enhanced by higher temperatures.
- Increases in infectious diseases transmitted by insects that require a warmer, wetter climate.
- An increased prevalence of asthma and allergies.

The complete report is available on the Iowa Climate Change Advisory Council's website.

CONNECTCR

CONNECTCR

ConnectCR focuses on the interaction of transportation and land use and their influence on the quality of life in Cedar Rapids. In any community, the transportation system fills many functions - as a lifeline for business and industry and a tool for economic self-sufficiency, a form-giver to the city, and an amenity and vital service for residents.

Interestingly in America, it is mobility that dominates much of how people think about cities and towns. Outside of home and workplaces, much of city life is spent moving from one place to another, and the street has become the public space that citizens experience most. In our cities, we have become creatures of movement.

Transportation facilities, including sidewalks, trails, streets, Interstate 380, and the railroad corridor, make up a significant amount of Cedar Rapids' developed area. The dominance of streets in the cityscape makes their design and scale especially important. As streets become wider, their scale continues to change. The street width affects the nature of the experience and the visibility of people, signs, and buildings along the street.

Transportation arteries, including both the railroad and major roads, are also the corridors of commerce in Cedar Rapids and nearly every other community. They provide the access and visibility that retailers, service providers, and industry need to thrive. Therefore, urban corridors are closely tied to economic development, and improvements can stimulate the business environment.

Cedar Rapids voters approved a ten-year extension of a one-cent local option sales tax that will provide approximately $18 million annually for maintenance, repair, construction and reconstruction of public streets. Projects are prioritized and selected based on the city's Pavement Management Plan. These streets are public spaces that accommodate a variety of users in an attractive and functionally efficient way. Many communities such as Cedar Rapids find that the aesthetic upgrading of key community corridors and entrances creates significant economic benefits by encouraging better development standards.

CONNECTCR GOALS

1. Provide choices for all transportation users: inter- and intra-city.
2. Build a complete network of connected streets.
3. Establish a network of complete streets.
4. Improve the function and appearance of our key corridors.
5. Support the development of an effective, regional, multi-modal transportation system.

GOAL 1: Provide choices for all transportation users: inter- and intra-city.

The city's transportation system should encourage all modes for appropriate trips – short distances that do not require automobile travel, for example. Nearly half of all trips are within three miles. Therefore, street standards should include reasonable accommodations for all users. The concept of "complete streets," multi-modal facilities that serve automobiles, bicycles, and pedestrians in an attractive public environment, should be integrated into the transportation, park, and pathway networks of the city.

Cedar Rapids' neighborhoods, activity centers, civic districts, and major open spaces should be linked by a balanced transportation network that integrates motor vehicles, pedestrians, bicycles, motorized wheelchairs, and other low-speed "personal mobility vehicles." An active transportation network (including pedestrian, bicycle, and public transportation) connected to land use and development, increases mobility and helps create a sustainable and healthy city. Residents also identified trails and bicycle infrastructure as a community priority.

From a development perspective, a system that encourages multi-modal transportation includes:

- Public infrastructure that connects neighborhoods and destinations;
- Elimination of barriers that discourage or obstruct pedestrians, cyclists, and transit users;
- Project designs that provide safe and pleasant passage from the public to private realm.

The success of pedestrian and bicycle transportation systems can be measured by four key criteria:

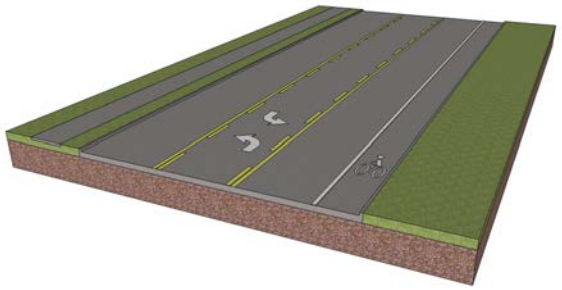
- **Directness.** The system should provide relatively direct routes to destinations without taking people far out of their way.
- **Integrity.** The system should connect to places and provide continuity, rather than leaving users in dead ends or uncomfortable places.
- **Safety.** The system should be physically safe to its users and not present hazardous conditions.
- **Comfort.** The system should understand the various capabilities and comfort levels of its users. For example, senior citizens may take a relatively long time to cross a street, and some bicyclists are not comfortable riding in mixed traffic.

PEDESTRIANS AND PEDALS

Cedar Rapids should maintain a continuous pedestrian network to complement the street system. A multi-use trail and walkway system can complement automobile trips by providing a good environment for non-motorized transportation. Cedar Rapids has created a substantial pathway system, in some cases oriented along street right-of-ways. A more comprehensive system can continue to enhance and expand these facilities, while adding a significant network of off-road trails that relate to major destinations and development opportunities. The details of trail development of the system are described in GreenCR and the Cedar Rapids Comprehensive Trails Plan (2012). From a transportation perspective, the system includes several levels of facilities:

- Off-Street Trails, providing exclusive paths separated from parallel streets.
- Roadside pathways or sidepaths, provide trail and pathway facilities parallel to streets. Generally, separated trails are preferred. Cautionary signage and visible striping or crosswalk designations should be used whenever a pathway or separated trail crosses intervening streets.
- Share-the-Road segments and sidewalks, including designated routes for pedestrian and bicycle use.

FIGURE 1: Typical 3-lane section with sidepath and bicycle lane.



These designated routes link the off-street trail system with major community features that are located off the network.

Share-the-Road. "Share-the-road" designation should not relegate bicycles to specific routes. However, they do help direct bicyclists to certain routes and notify motorists that bicycles are likely to be in the area. Providing a complete wayfinding system will help direct users to destinations.

Sidewalks. Sidewalks are a critical, although frequently under-recognized, part of any city's transportation system. Pedestrian facilities are increasingly a public utility and resource for promoting public health.

Transit. Transit service is currently more often used by transit dependent or limited mobility customers – seniors, people with disabilities, and children. The potential market in Cedar Rapids is even larger when demand from students and choice transit users are considered. Cedar Rapids should also analyze the results of the Iowa DOT's Iowa Commuter Transportation Study. The goal of the study is to identify ways to improve mobility along the I-380 corridor, which could improve the attractiveness for people who want to live in Cedar Rapids but have employment north or south of the city.

INITIATIVES

35. Update the city's Comprehensive Trails Plan.

Update the plan by reviewing the existing and planned network, identify completed projects, confirm planned projects, evaluate existing off- and on- street facilities. Map 1 shows the possible routes, which ultimately require additional study.

36. Identify and track construction of high priority sidewalk segments per the city's sidewalk master plan.

Cedar Rapids should continue to implement the phased, annual program of sidewalk repairs. The 2014 Sidewalk Master Plan recommends budgeting $600,000 annually to complete the sidewalk system, which is estimated to cost $30 million.

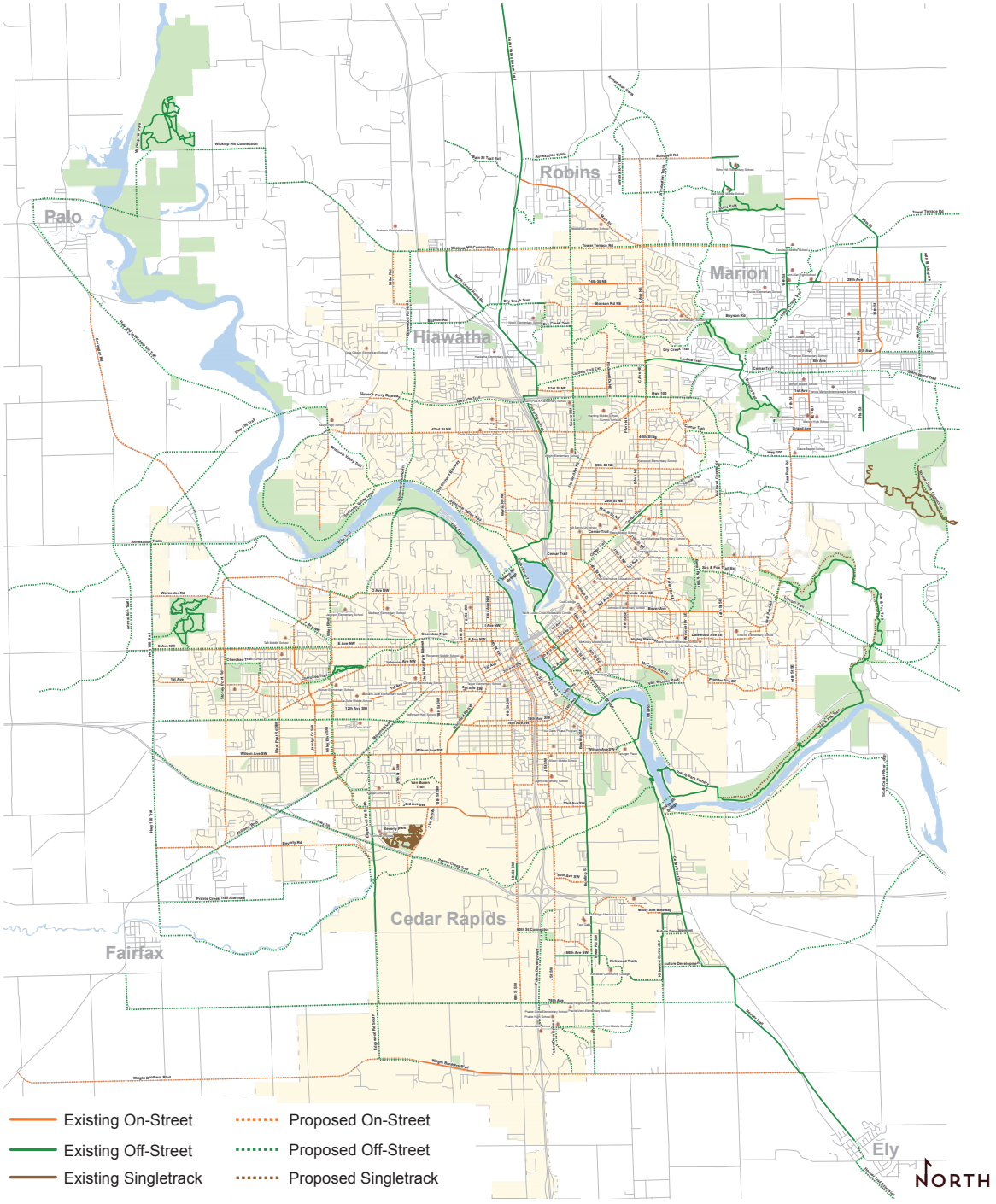
37. Continue to evaluate transit ridership and serviceability to identify opportunities for improvement.

Evaluation of transit ridership and exploring best practices in service will help identify opportunities to expand ridership to more than the transit dependent. Map 2 shows the existing transit system.

38. Perform a comprehensive transit study that includes an analysis of a mini-hub system at Lindale Mall and Westdale.

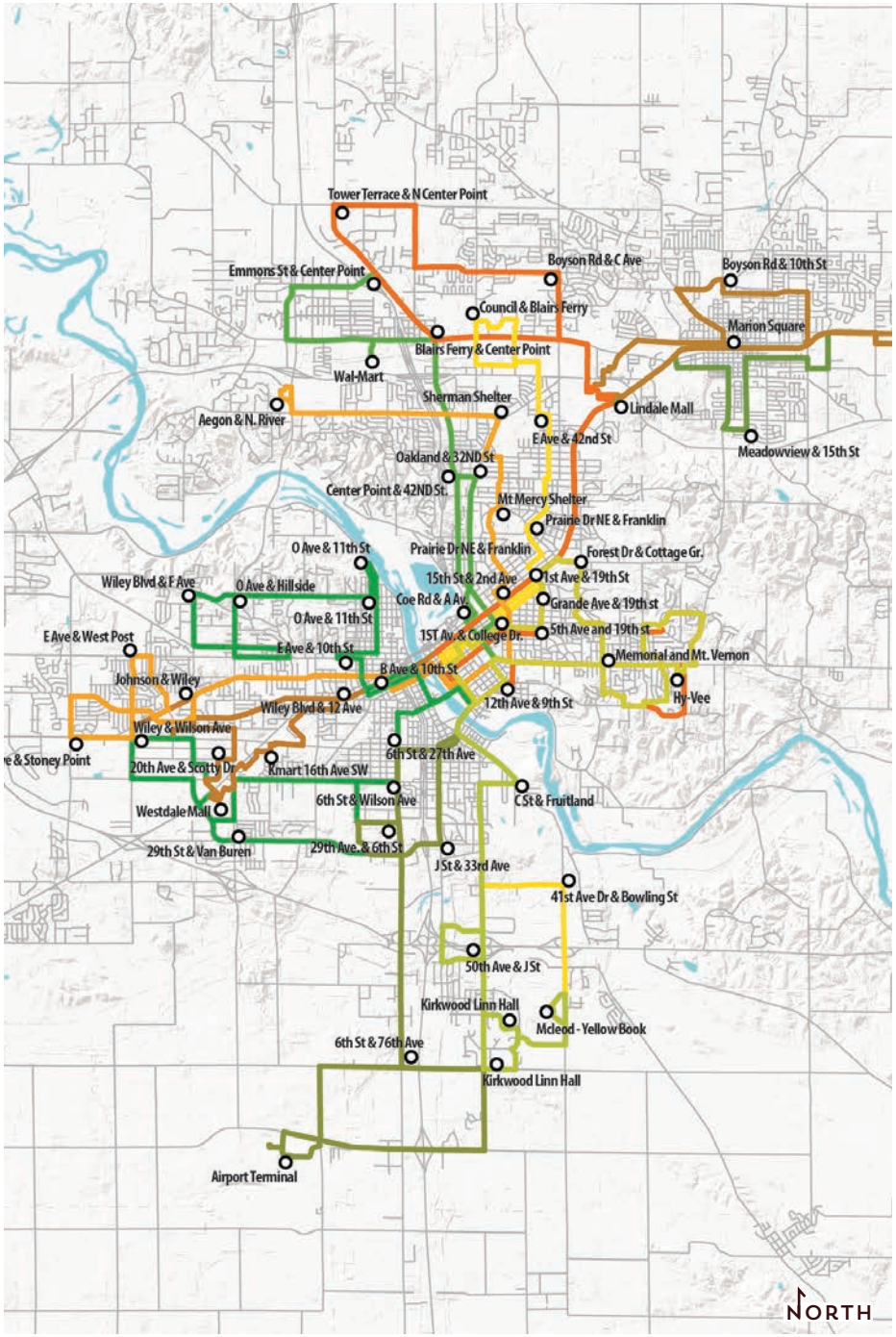
ConnectCR explores the possibility of creating a BRT-like (Bus Rapid Transit) crossroads that connects users from Lindale Mall to Westdale, and from Hiawatha to Kirkwood Community College.

MAP 1: Trail Network



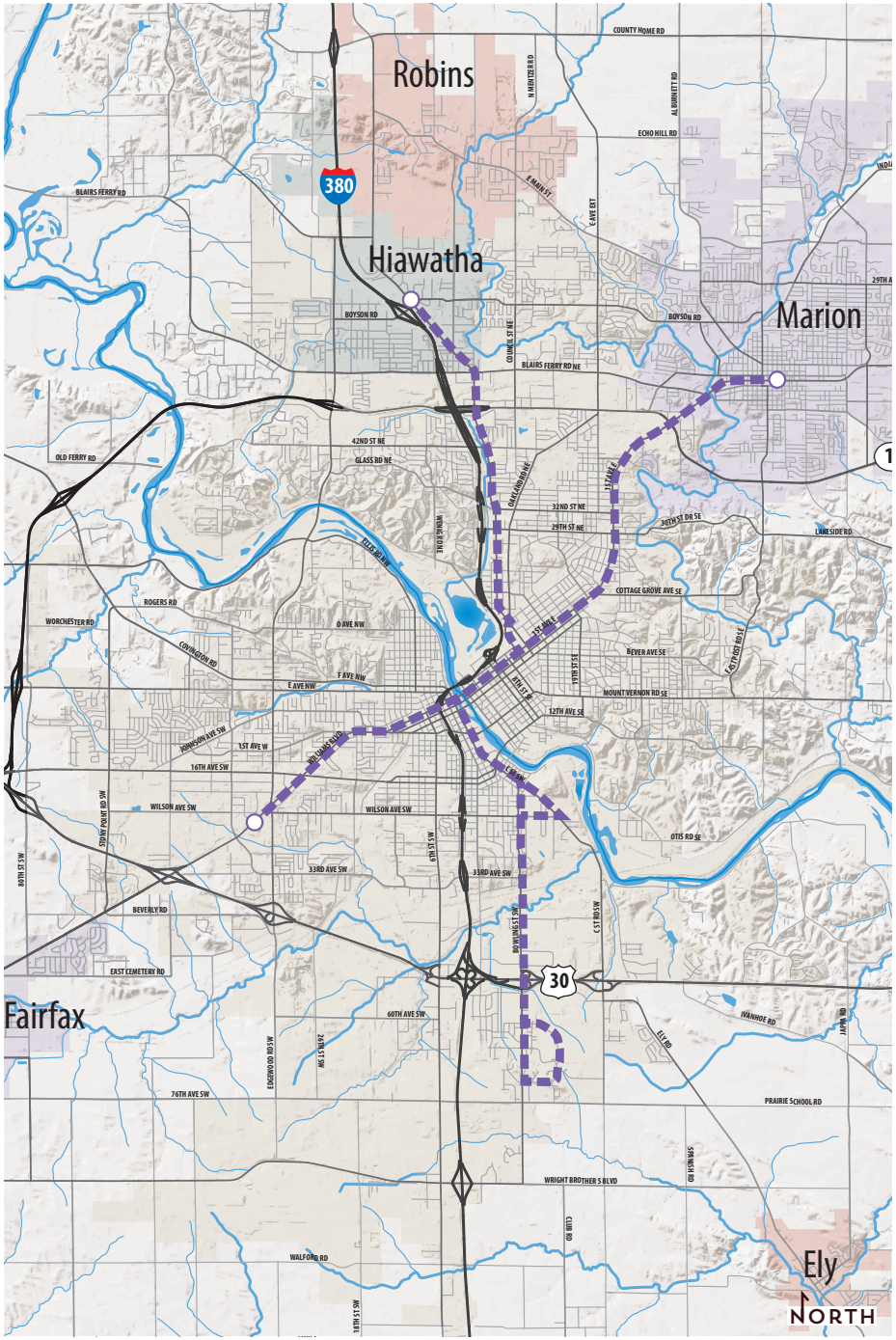
SOURCE: CITY OF CEDAR RAPIDS GIS, RDG PLANNING & DESIGN

MAP 2: 2014 Transit Route System



SOURCE: CITY OF CEDAR RAPIDS GIS, CR TRANSIT

MAP 3: Possible Bus Rapid Transit Routes



SOURCE: RDG PLANNING & DESIGN

GOAL 2: Build a complete network of connected streets.

As Cedar Rapids grows, it should maintain a connected street network, providing options for movement around the city and providing transportation options.

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

Within the framework of higher-order streets (arterials and collectors), local street systems will develop to serve individual developments. These systems should be designed with clear circulation patterns that preserve the quiet qualities of neighborhoods while providing access to residents, visitors, and public safety vehicles.

The following is a cursory review of Cedar Rapids transportation system that provides a base-level understanding of transportation needs that should continue to be evaluated annually. Map 5 shows areas where potential improvements can be made to address access management, connectivity, congestion, and safety.

Access Management

The Center Point Road corridor is an example of a location characterized by comparatively high traffic volumes, an array of land uses ranging from low-density residential to large commercial businesses, an existing trail system, and closely spaced access locations. These factors create access management problems and prompt the need for systemic improvements in access management. Once completed, overall intersection safety will be enhanced and future congestion issues around Collins Road/IA Highway 100 will be mitigated.

Connectivity Issues

The Seminole Valley Park area is an example of a location that has connectivity issues. More specifically, the residential area located north of Seminole Valley Park currently has one access point. This single point of access is located along Seminole Valley Road NE to 42nd Street NE. The lack of multiple roadway connections to an area can result in increased travel time, increased vehicle miles traveled, and potentially reduced public safety response as emergency vehicles do not have multiple route choices. Map 4 shows general vicinities that present opportunities for improved circulation. Some of the locations are individual streets that may need to be extended to provide an additional connection, while others are a group of streets that may need to be extended and connected. These areas include:

Congestion

Traffic congestion along roadway corridors is based on traffic volumes for a 2005 base year. Roadways identified as having existing congestion issues are those with a Level of Service (LOS) between D and F based on a volume-to-capacity ratio (0.8 or greater).

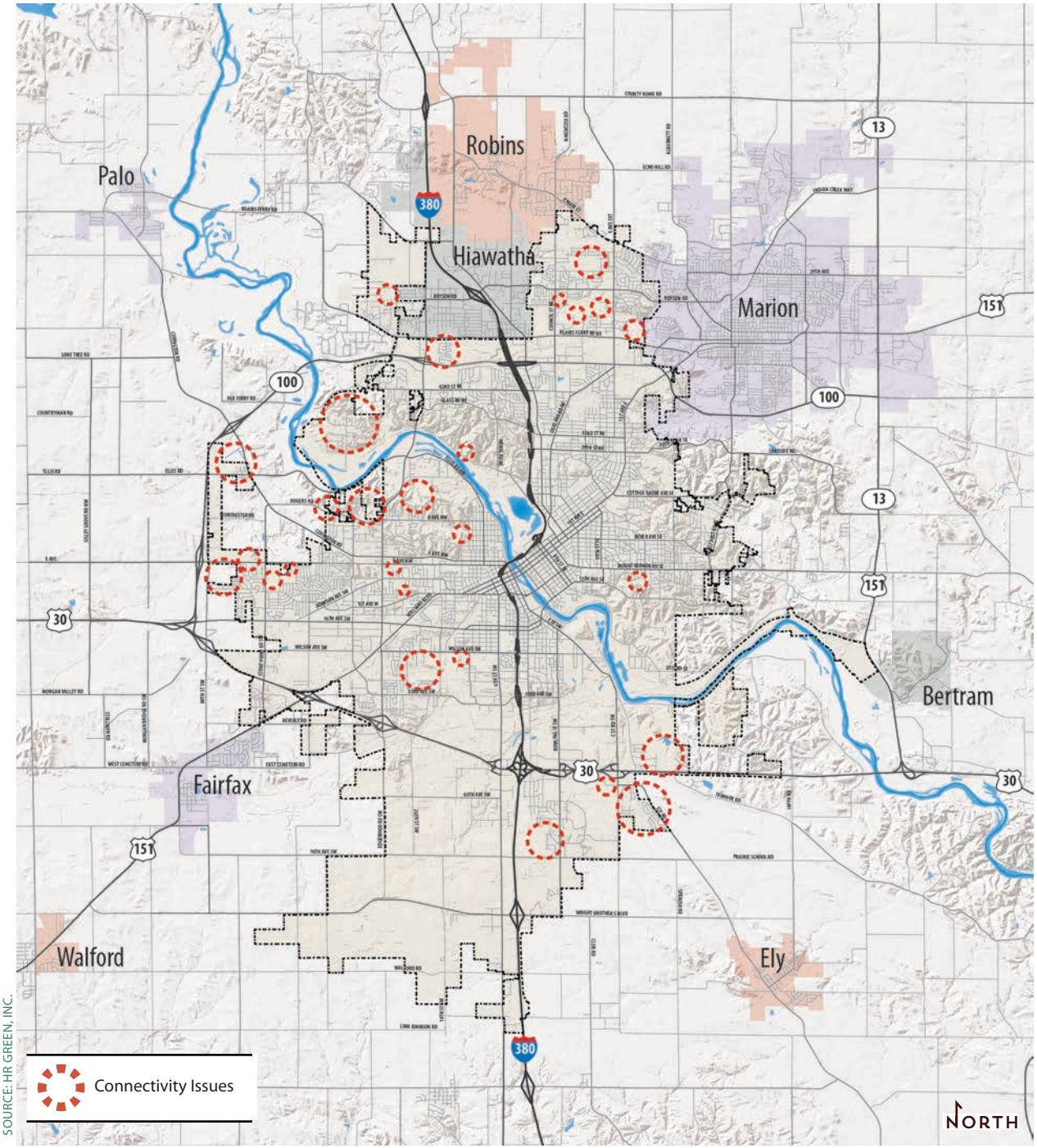
- **Existing.** The areas with existing congestion include:
  - Primarily exit and entrance ramps to I-380, Boyson Road, and
  - Wilson Avenue between Sixth Street and J Street.
- **Future Congestion.** Future traffic congestion along roadway corridors is based on traffic volume forecasts for the year 2040. Roadway segments that will likely have congestion issues in the future include:
  - I-380 south of US Highway 30
  - Collins Road/IA 100
  - 32nd Street NE between Oakland Road NE and Eastern Avenue NE
  - Blairs Ferry Road NE between C Avenue and US 151
  - Mount Vernon Road SE between 34th Street SE and Wilder Drive SE

Table 1: Connectivity Issues

Area	Area
Fountains Drive/N. Pine Drive NE/Pine Tree Drive NE	Cherry Park Drive NW
Gibson Drive NE/ Holly Circle NE	Bobcat Drive NW
Gray Fox Drive NE	Wolf River Lane NW/Aaron Drive NW
Thiher Drive	23rd Street NW/Q Avenue
Northwood Drive	L Avenue NW/M Avenue NW
Oak Street	D Avenue NW/ 28th-32nd Street(s) NW
Seminole Valley Road NE	Dennis Drive NW/Maple Drive NW
J Avenue NE	Shady Grove Road SW
Country Brook Drive NW	Lori Drive SW/Newport Drive SW/25th Street SW
Morgan Creek Lane NW	Colorado Drive SW/Lookout Drive SW/Gas Light Road SW
Blue Stone Street NW	Miller Ave Drive SW/Bell Drive SW
Stone Ridge Drive NW/Coble Stone Drive NW/ Fieldston Dr NW	Muirfield Drive SW/Wheatland Drive SW/Prairie Rose Drive SW
Sharon Lane NW	Shaman Ave SW/East Road SW/ Windmill Drive SW
20th Street SE/21st Street SE	

SOURCE: HR GREEN, INC.

MAP 4: Connectivity Issues



SOURCE: HR GREEN, INC.

FIGURE 2: Connectivity Demonstration

The diagram above shows the possible extension of streets that would create a network and provide circulation options for people living in the neighborhood. Also, the additional access improves serviceability for snow removal, trash collection, and emergency response.

Corridor Safety Issues

There were 10,229 reported crashes in the City of Cedar Rapids between 2008 and 2012. Roadway corridors with frequent crashes are identified as having safety issues. Nearly all the corridors with reported safety issues are classified as arterial roadways. As such, these roadways carry a large proportion of traffic throughout the city and often at higher speeds. Several roadways identified are existing truck routes, so heavy vehicles are inter-mixed with automobile traffic. The combination of higher speeds, increased traffic volumes, and heavy truck movement factors into the safety concerns associated with these roadways.

Table 2: Corridor Safety Issues

Corridor	Between
Blairs Ferry Road NE	Edgewood Road NE & City Limits
Collins Road NE	Council Street NE & 1st Avenue NE
1st Avenue NE	9th Street SW & Collins Road NE
8th Avenue SE	Diagonal Drive SW & 10th Street SE
Mount Vernon Road SE	10th Street SE & 19th Street SE
	26th Street SE & City Limits
42nd Street NE	Fallbrook Drive NE & Center Point Road NE
Edgewood Road NE	Ellis Road NW & North River Bend Boulevard NE
Edgewood Road NW	O Avenue NW & 1st Avenue SW
Edgewood Road SW	1st Avenue SW & Williams Boulevard SW
Williams Boulevard SW	Edgewood Road SW & 1st Avenue SW

SOURCE: HR GREEN, INC.

Intersection Safety Issues

The intersections identified as issues are locations of frequent crashes as reported during the five-year timeframe, 2008 to 2012. Those intersections with identified concerns are generally located where two arterial roadways intersect. Intersecting arterial roadways have been found to generate a high volume of turning movements and an increased likelihood of vehicle conflicts. These intersections are primarily located along corridors with safety and future congestion issues including Collins Road NE and First Avenue NE.

Table 3: Intersection Safety Issues

Intersections
Blairs Ferry Road NE/Center Point Road NE
Collins Road NE/Center Point Road NE
Collins Road NE/C Avenue NE
Collins Road NE/1st Avenue NE
42nd Street NE/Edgewood Road NE
42nd Street NE/Center Point Road NE
32nd Street NE/1st Avenue NE
29th Street NE/1st Avenue NE
Ellis Boulevard NW/Edgewood Road NW
Mount Vernon Road SE/34th Street SE
Johnson Avenue NW/Edgewood Road NW
16th Avenue SW/Wiley Boulevard SW
16th Avenue SW/Edgewood Road SW

SOURCE: HR GREEN, INC.

INITIATIVES

39. Prepare functional improvements for intersections and corridors experiencing low level of service, high crashes, and poor access across all modes.

Creating a complete network of connected streets begins with evaluating access and connectivity, while considering congestion and safety of streets and intersections.

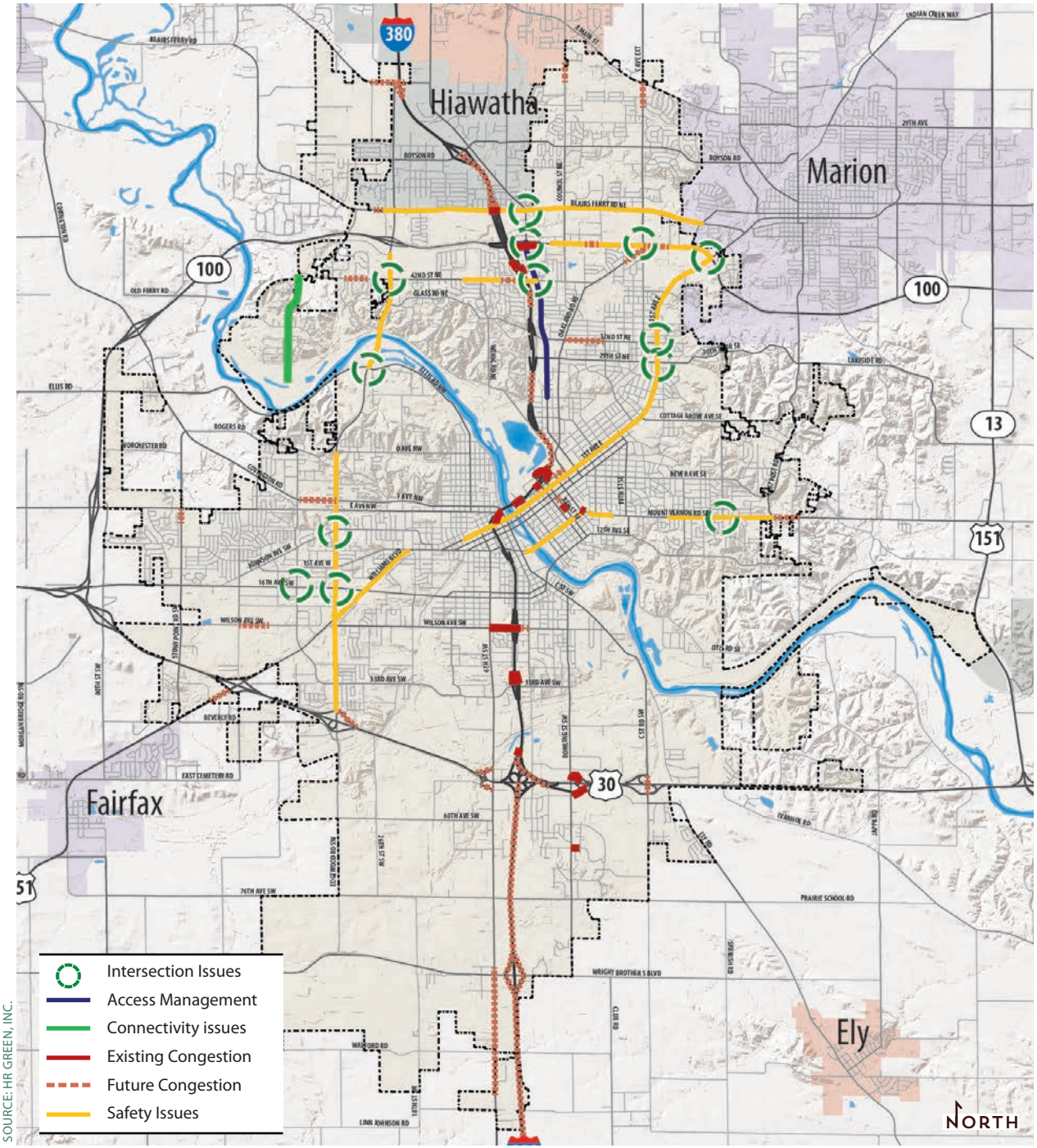
40. Complete the Cedar Rapids portion of Tower Terrace Road, and support completion of this multi-jurisdictional project.

The Tower Terrace Road project provides a new major arterial in northern Cedar Rapids between the cities of Hiawatha and Marion. Cedar Rapids should continue to support the completion of this project and manage development that may occur using methodology included in GrowCR.

41. Continue to support the Highway 100 Project.

The Highway 100 project provides a new high-speed corridor on the western edge of the City of Cedar Rapids. Highway 100 will extend from the existing termini at Edgewood Road NE, across the Cedar River, and south to Highway 30. Cedar Rapids should continue to support the development of this corridor and manage development that may occur using methodology included in GrowCR.

MAP 5: Transportation Review



SOURCE: HR GREEN, INC.

42. Prepare a one-way to two-way street conversion plan including implementation schedule.

The city currently has numerous one-way streets, primarily in the downtown, that should be studied for conversion to two-way with the goal of making a more efficient transportation system for automobiles, pedestrians, and bicyclists.

43. Develop standards for street connectivity as part of the update of Chapter 31 (Subdivisions) of the Municipal Code.

Standards will ensure that new subdivisions are constructed with connections to adjacent developments instead of cul-de-sacs or stub streets.

GOAL 3: Establish a network of complete streets.

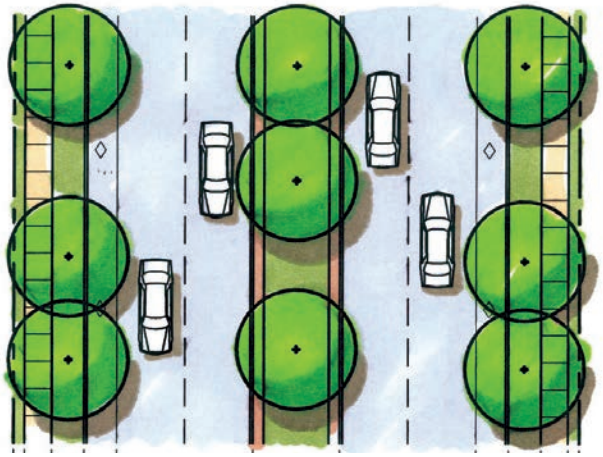
Streets make up one-of-the largest single category of public spaces in Cedar Rapids. Streets take up more land than all of the trails, schools, college campuses, public buildings and other facilities combined. For many residents, their primary contact with the outside public realm is on streets, as drivers and, to a lesser degree, as pedestrians and bicyclists. Streets are the real front doors to houses in neighborhoods, as well as paths to work. Streets as public spaces should be both efficient and attractive.

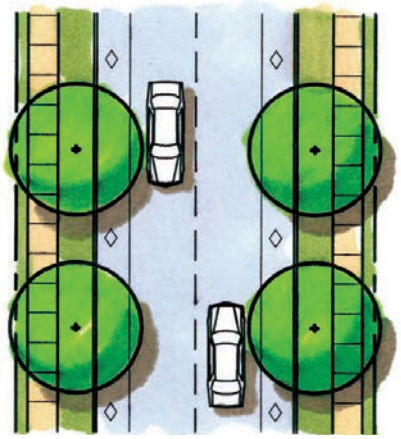
This concept of "complete streets" – streets that serve a variety of functions and potentials – should be applied to other principal corridors in Cedar Rapids. Complete streets may include all or some of the following features:

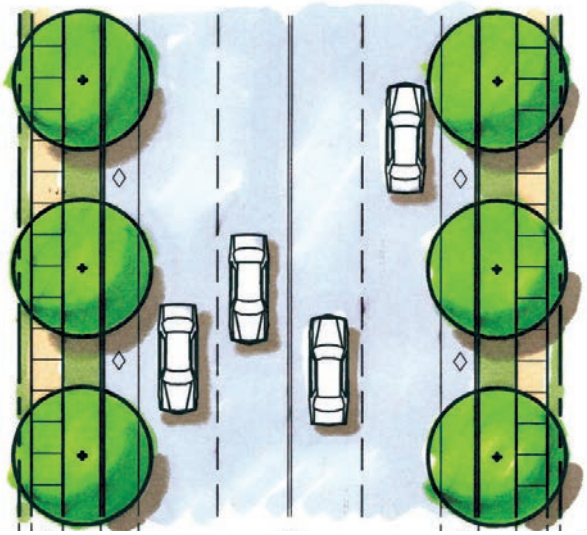
- A pedestrian/bicycle domain set back from the roadway by street landscaping and an adequate greenway setback from curb to walk; or designation of an on-street bike route, along with a continuous sidewalk.
- Special lighting and street graphics to promote a sense of security and well-being.
- Well-marked pedestrian crossings, sometimes with features such as crossing nodes that reduce the distance pedestrians must travel to cross the street.
- Street furniture that claims part of the street environment for people who are outside of vehicles. This provides and assists in preserving the character and traditions of neighborhoods.
- Attractive landscaping to promote community.
- Green infrastructure/stormwater management to promote mature landscaping, rain gardens, bioswales, and other features intended to improve the ability of streetscapes to infiltrate (soak up) water.

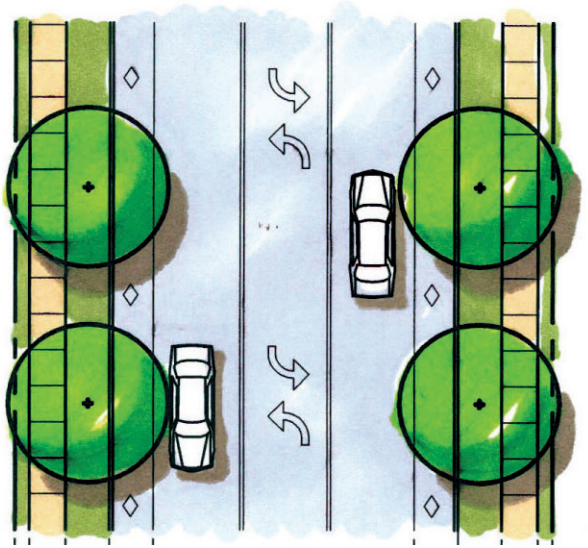
Complete streets will have different roles, ranging from neighborhood circulators and collectors to major arterials. As these streets are developed or upgraded, the design features that mark civic streets should be incorporated into their design.

Typical Sections with Bicycle Lanes









Demonstration from Chicago, Illinois

Top: Complete Street
Left: Bike Lane
Right: Sharrow

INITIATIVES

44. Identify and track Complete Streets elements incorporated into city utility and infrastructure projects.

The city adopted a Complete Streets Policy in 2014 that should be implemented with city projects.

45. Sign and mark streets for bicyclists per the Complete Streets Policy.

The city should continue to mark and sign streets for bicycle use as it has in the downtown.

46. Retrofit high priority corridors with sidewalks and pedestrian amenities ensuring ADA compliance.

The city should continue to implement its adopted Sidewalk Master Plan.

GOAL 4: Improve the function and appearance of our key corridors.

Cedar Rapids' streets should be designed as public spaces as well as conduits for travel.

Good streets have more than one purpose. In addition to moving people or goods, they are important public spaces and should be designed appropriately. The concept of streets as public spaces defines strategic streets as parkways that connect neighborhoods, parks, and activity centers while providing a strong and unified image for the community. These streets have special characteristics that serve to unify rather than divide neighborhoods, accommodate all forms of travel, and encourage adjacent development to be oriented toward the public right-of-way.

Cedar Rapids has demonstrated its awareness of the multiple purposes of streets with its increased investment across downtown, NewBo (3rd Street SE), and Czech Village (16th Avenue SW). Attractive landscaping, improved lighting, public art, and street furniture have made these districts a pleasure for people traveling through some of Cedar Rapids' most distinct and inviting public spaces.

Map 6 displays the city's existing federal functional classification system. Map 9 recommends additions to be considered during the eventual update of the regional Long-Range Transportation Plan (LRTP). The LRTP is called Connections 2040 and is developed and updated by the Corridor Metropolitan Planning Organization (MPO). The Corridor MPO is a regional entity comprised of the metropolitan communities and performs regional transportation planning for the Cedar Rapids metropolitan area. The LRTP is a guide for the investment of federal transportation funds in the metro area and Cedar Rapids should make sure its most important projects are included in the plan.

Cedar Rapids' gateways are a visitor's first interaction with the community, and convey a powerful first impression to visitors. The city's front doors should welcome and invite visitors, making a dramatic statement about the quality and character of the community. Cedar Rapids' primary gateways include its interchanges with Interstate 380, Highway 30, Highway 100 (Collins Road), and Highway 151 (Williams Boulevard and 1st Avenue).

But entrances and corridors are also important to residents who use the city every day. Major corridors like 1st Avenue are important places of commercial and civic activity. Applying enhancements along this corridor would make it more attractive and demonstrate the significance of design improvements along major transportation routes. Attractive residential streets also add value to their surroundings and provide avenues on which people travel at slower speeds.

Cedar Rapids should design and gradually install a wayfinding graphics system along its corridors that directs visitors to destinations in a clear and attractive way. Care should be given to being consistent with the existing wayfinding system in downtown.

INITIATIVES

Corridors that emerged from the planning process as a priority for improvement and requiring further study are listed below as candidates for Corridor Action Plans and shown on Map 7..

47. Prepare corridor action plan for 3rd Street SE.

The 3rd Street SE Corridor Action Plan will evaluate the functional and aesthetic enhancements of the street and surrounding area from 1st Avenue E to 14th Avenue SE for the purpose of unifying New Bohemia to downtown, Czech Village, and surrounding development investments. Initial concepts were explored in the Czech Village/New Bohemia Main Street District Plan prepared in 2013.

48. Prepare corridor action plan for 1st Avenue Corridor and Williams Boulevard.

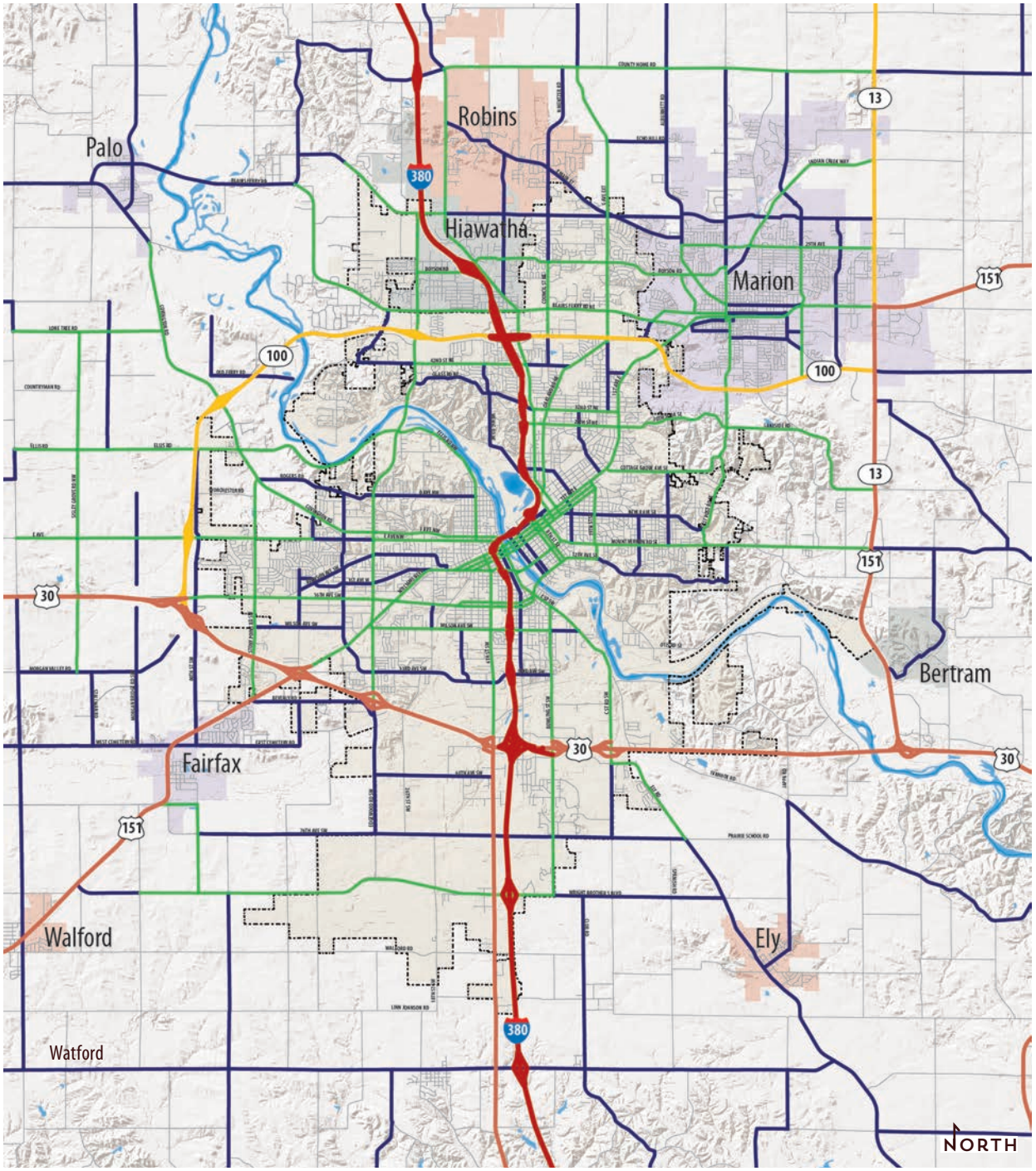
The First Avenue Corridor Action Plan will evaluate multi-modal connectivity and roadway improvements between Collins Road/IA Highway 100 and Williams Boulevard SW. The First Avenue Corridor is a major east-west thoroughfare in the city that transitions between a wide range of areas (e.g., commercial districts, residential areas, etc.). This mix of land uses can also support multi-modal transportation options. This corridor currently faces many issues, including safety, access management, and congestion. The First Avenue Corridor Action Plan will identify options to improve the function and appearance of the corridor.

The Williams Boulevard Corridor Action Plan will evaluate roadway improvement alternatives between 1st Avenue and Highway 30. The Williams Boulevard SW corridor currently faces many safety issues related to access control and traffic volumes. This corridor also provides an opportunity to expand the city's multi-modal transportation options. The alternatives identified in this plan will address existing issues and future congestion problems related to possible redevelopment along the corridor.

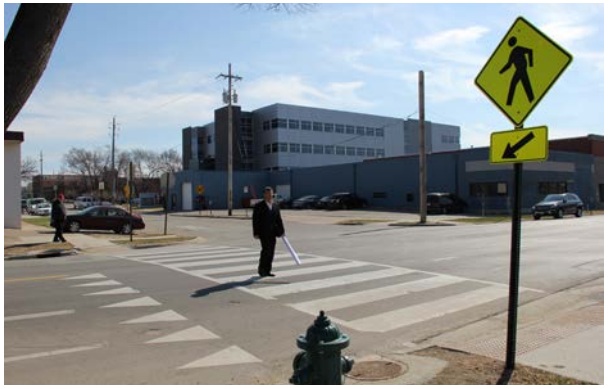
49. Prepare corridor action plan for 6th Street SW.

Two Sixth Street SW projects are identified in Connections 2040 (LRTP) as projects to be completed between 2016 and 2021. These projects will provide improvements to a primary commercial corridor that also leads to industrial land uses south of US Highway 30. Improvements to this corridor will improve traffic flow along the corridor and increase access for future industrial and commercial expansion. Connecting 6th Street NW to Ellis Boulevard NW was identified as an important connection during flood recovery planning.

MAP 6: Functional Classification



SOURCE: CITY OF CEDAR RAPIDS GIS, HR GREEN, INC.



- Interstate
- Federal Highway
- State Highway
- Arterials
- Collectors
- Local

50. Prepare corridor action plan for 16th Avenue SW.

The 16th Avenue SW Corridor Action Plan will evaluate roadway improvement alternatives between the future Highway 100 and the Cedar River. This corridor has been identified as an important freight route as several freight delivery companies are located along the corridor. As Highway 100 is completed to the west, the corridor will have a new connection that will be evaluated to determine the mobility of multi-modal traffic along the corridor. The existing corridor also features two intersections with safety issues and the potential for increased congestion. The alternatives identified in this corridor action plan will address the existing issues as well as increased congestion and multi-modal improvements along the corridor, with special attention paid to freight movement and mitigating adverse impacts on residential development north of 16th Avenue.

51. Update corridor action plan for Collins Road NE with focus on pedestrians and streetscapes.

The Collins Road NE Corridor Action Plan will evaluate roadway improvement alternatives between I-380 and First Avenue/US 151. Collins Road NE is a primary east-west arterial in northern Cedar Rapids and follows the Highway 100 alignment east of I-380. The study area is a major commercial corridor with some residential neighborhoods to the south. Improvements are planned along the corridor to address safety, congestion, and intersection issues. This corridor action plan will focus on streetscaping and multi-modal improvements, especially for pedestrians.

52. Prepare corridor action plan for Mt. Vernon Road SE.

The Mount Vernon Road SE Corridor Action Plan will evaluate roadway improvement alternatives between downtown Cedar Rapids and 44th Street SE. This corridor has a history of generating high volumes of truck traffic destined for downtown from US Highway 151. The comparatively high traffic volumes and limited access control results in frequent crashes. Mount Vernon Road will likely see increased congestion due to future traffic volumes as growth occurs further east. The plan will identify alternatives to address current safety issues, mitigate future congestion issues, and improve overall functionality of the corridor.

53. Prepare corridor action plan for Center Point Road NE.

The Center Point Road NE Corridor Action Plan will evaluate roadway improvement alternatives between downtown Cedar Rapids and Blairs Ferry Road NE. The corridor connects downtown to residential and commercial areas in the north and maintains high traffic volumes as it parallels I-380. The array of land uses, existing trail system, and access to public transportation also create opportunities as a multi-modal corridor. Existing issues identified along the corridor include access management, intersection safety, and future congestion issues around Collins Road/IA Highway 100. The action plan will identify alternatives to address the current access issues, intersection safety, and overall multi-modal functionality of the corridor.

54. Prepare corridor action plan for Edgewood Road.

Several Edgewood Road projects have been identified in Connections 2040.. These projects will improve Edgewood Road NE between Glass Road NE and Blairs Ferry Road NE. An extension of Edgewood Road would also be connected to Tower Terrace Road near Miller Road NE. These projects will improve connectivity in Northwest Cedar Rapids by providing a continuous corridor along Edgewood Road. Additionally, these projects will improve the overall safety of the corridor and address future congestion.

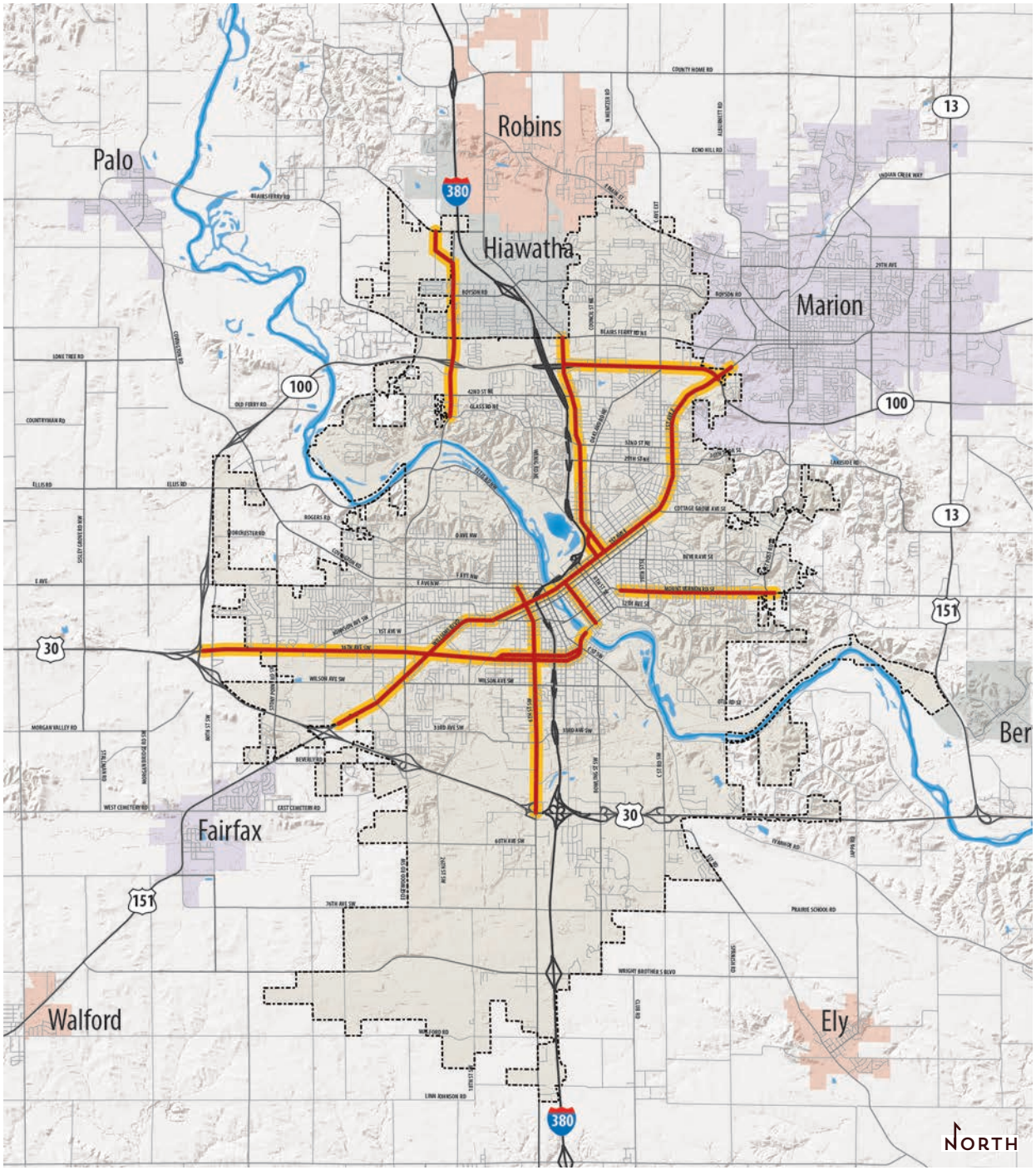
55. Establish Master Gateway Plan.

In 2014, the city installed a gateway sign south of Highway. 30 to greet motorists traveling north along I-380. A second sign is being installed south of Blairs Ferry Road NE to greet motorists traveling south on I-380. This plan should include Collins Road NE and the Eastern Iowa Airport.

56. Establish Wayfinding Program.

Cedar Rapids should work with the Iowa Department of Transportation to explore flexibility in its interpretation of the MUTCD and to develop a wayfinding system that is both acceptable to IDOT and attractive, economical, and clear to users.

MAP 7: EnvisionCR Corridor Action Plans



Candidate Corridors
Impact Zone

SOURCE: RDG PLANNING & DESIGN, HR GREEN, INC.

GOAL 5: Support the development of an effective, regional, multi-modal transportation system.

An effective multi-modal transportation system for Cedar Rapids takes advantage of existing systems and looks for ways to improve them.

Air Service. Opened in 1947, the Eastern Iowa Airport (EIA) is owned by the city and is considered a small hub primary airport by the Federal Aviation Administration's (FAA) National Plan of Integrated Airport Systems (NPIAS). The State of Iowa identifies the EIA as a Commercial Service airport as it meets the needs of the state aviation system and serves as one of its essential transportation and economic centers. The EIA continues to show growth in passenger traffic with 2014 posting record breaking numbers for the airport. The EIA completed an update to its master plan in May of 2014, which helps guide expansion and improvement plans for the airport. A Commercial Real Estate Assessment and Strategy was completed in June of 2013 and is referenced in InvestCR. Both of these plans should be implemented.

Freight. Freight, as shown on Map 8, is conducted through Cedar Rapids mainly by truck and rail. Truck traffic is primarily conducted along I-380, US Highway 151, US Highway 30, and Iowa Highway 13. Iowa Highway 100 will also serve this purpose when it opens for traffic. The city has identified truck routes for internal traffic that should be reviewed on an appropriate basis. Cedar Rapids has five railroad companies serving the city. The Union Pacific runs east/west and the CRANDIC (Cedar Rapids and Iowa City), the Canadian National, Iowa Northern, and Chicago, Central & Pacific run north/south.

Transportation Options. Automobile, bicycle, transit, and pedestrian networks are highly important to the region and should be constantly monitored to make sure they serve the needs of both the city and the region.

One way to do this is through the Corridor MPO's Long Range Transportation Plan (LRTP), called Connections 2040. Connections 2040 must be updated to ensure significant

Cedar Rapids projects (road, trail, pedestrian, and transit) are included. Ultimately, the regional transportation system should have stronger inter- and intra-city transit circulation.

The following are some key current or recommended activities:

- **Iowa Highway 100.** The Highway 100 project provides a new high-speed corridor on the western edge of the City of Cedar Rapids. This project extends the existing state highway from the terminus at Edgewood Road NE, across the Cedar River, and south to Highway 30. The new extension will relieve congestion along I-380, support the West Growth Area, and increase overall mobility for travelers. Project improvements include a limited access, four-lane divided highway with four grade-separated interchanges. Additional pedestrian trail improvements are also planned but are not part of the Iowa Highway 100 construction project.

  The Corridor MPO and Iowa DOT are also funding a project to develop a corridor management plan. This study will guide future land use decisions and infrastructure improvements for undeveloped areas adjacent to the Highway 100 corridor.

- **Tower Terrace Road.** The Tower Terrace Road project provides a new major arterial in northern Cedar Rapids between the cities of Hiawatha and Marion. Tower Terrace Road will improve connectivity between the City of Cedar Rapids and the cities of Hiawatha and Marion, provide congestion relief on arterials south of Tower Terrace, and support development of the North Growth Area.

- **Corridor Action Plans.** Corridor Action Plans are recommended to identify functional and aesthetic improvements. The following offers a schedule for completion, while the update to Connections 2040 is under consideration. See Connect CR Goal #4 for details.

  Short-Range (within 1 Year)

  - Collins Road NE
  - Mount Vernon Road SE

  Mid-Range (2-5 Years)

  - 3rd Street SE
  - First Avenue Corridor and Williams Boulevard

  Long-Range (beyond 5 Years)

  - Sixth Street SW
  - 16th Avenue SW
  - Center Point Road NE
  - Edgewood Road

MAP 8: Freight

Existing Truck Routes
Future Truck Routes
Rail Lines

SOURCE: HR GREEN, INC.

- **Possible Vision Projects.** Vision Projects are those included in the most recent LRTP (Connections 2040) that have been identified as long-term improvements to roadways and address access, traffic, safety, and/or multi-modal issues impacting the City of Cedar Rapids. These projects do not have a defined timeframe for completion but will continue to enhance the city's transportation network as improvements are completed.

    - E Avenue NW widening: West Post Road NW to 80th Street NW
    - Edgewood Road NW widening: Ellis Road NW to Glass Road NE
    - Edgewood Road NW widening: O Avenue NW to F Avenue NW
    - F Avenue NW widening: 13th Street SW to Edgewood Road NW
    - 16th Ave SW reconstruction & widening: 12th Street SW to Williams Boulevard SW
    - Edgewood Road SW reconstruction & widening: Iowa Highway 30 to 76th Avenue SW
    - C Street SW reconstruction & widening: Fruitland Boulevard SW to Iowa Highway 30
    - Cedar River Bridge Crossing: C Street SW to Otis Road SE
    - Cottage Grove Ave SE widening: 1st Avenue NE to Forrest Drive SE
    - C Avenue NE reconstruction & widening: Boyson Road NE to Collins Road NE
    - Blairs Ferry Raod NE widening: I-380 to C Avenue NE
    - Collins Road NE widening: Edgewood Road NE to I-380

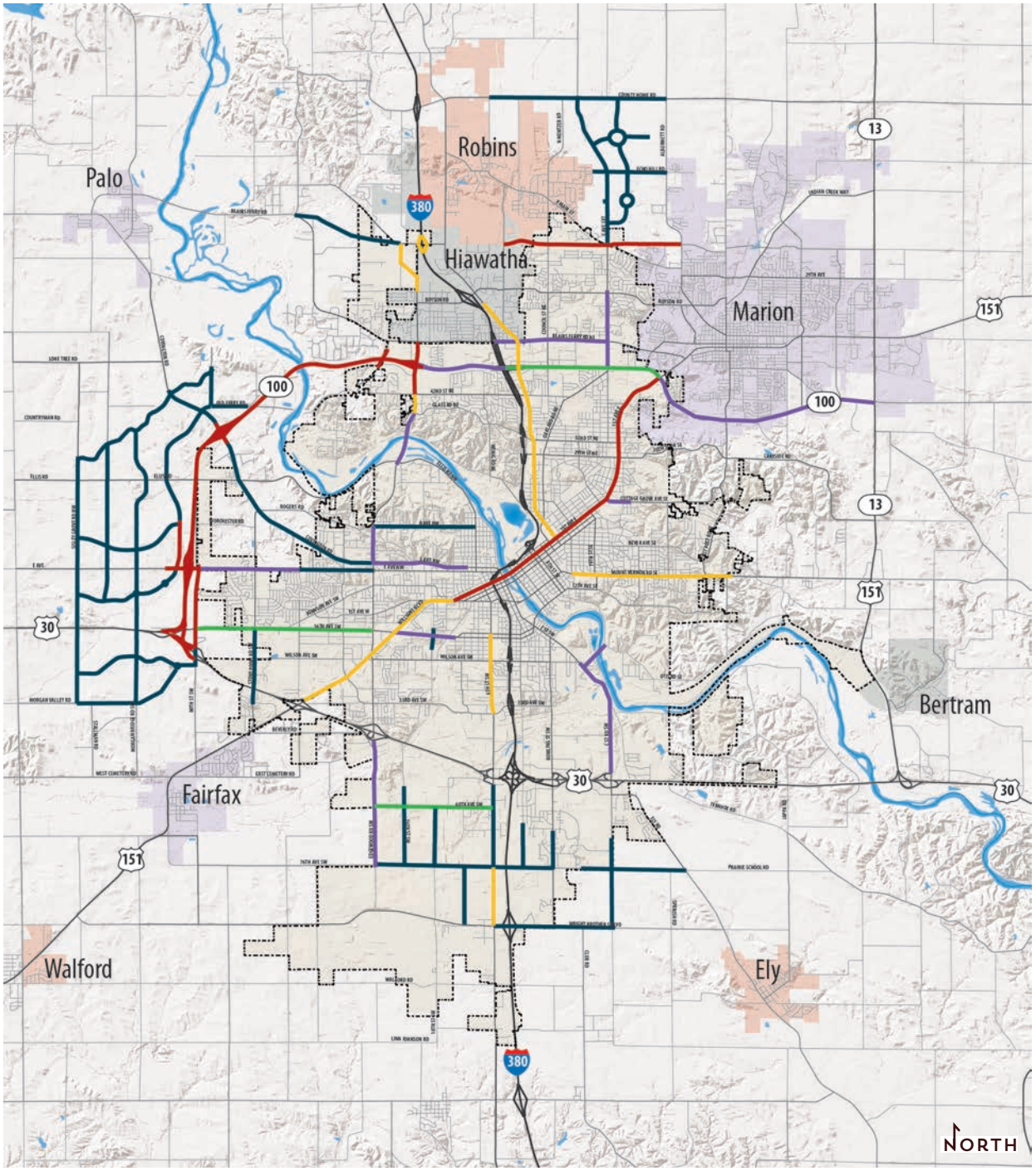
- **Possible Growth Area Projects.** These projects have been identified as potential improvements to support connectivity within Future Growth Areas identified in EnvisionCR. These projects have not been included in the LRTP (Connections 2040) but may be included as development occurs within the growth areas. Additionally, these projects do not have identified timeframes or funding sources, allowing improvements to be implemented in conjunction with development.

    - C Avenue NE widening: Sheffield Drive NE to County Home Road
    - County Home Road widening: Quass Road to 10th Street
    - Echo Hill Road widening & construction: C Avenue NE to 10th Street
    - Tower Terrace Road NE construction: Miller Road to Blairs Ferry Road
    - Unnamed Boulevard construction: Old Ferry Road to Morgan Bridge Road SW
    - O Avenue NW widening: 11th Street NW to Edgewood Road NW
    - F Avenue NW/Covington Road widening: Edgewood Road NW to Iowa Highway 100
    - E Avenue NW widening: Edgewood Road NW to West Post Road NW
    - Stoney Point Road SW widening: 16th Avenue SW to Dean Road SW
    - 18th Street SW construction: 16th Avenue SW to existing 18th Street SW
    - 76th Avenue SW reconstruction & widening: Edgewood Road SW to Kirkwood Boulevard SW
    - 76th Avenue SW reconstruction & widening: Kirkwood Boulevard SW to Ely Road SW
    - 26th Street SW reconsruction & widening: north of 60th Avenue SW to 76th Avenue SW

    - Unnamed Avenue construction: Edgewood Road SW to Unnamed Street
    - Unnamed Street construction: Unnamed Avenue to 76th Avenue SW
    - 6th Street SW widening: Waconia Avenue SW to 76th Avenue SW
    - Unnamed Street construction: 76th Avenue SW to Wright Brothers Boulevard West
    - Wright Brothers Boulevard E widening: I-380 to C Street SW
    - Kirkwood Boulevard SW widening: 76th Avenue SW to Kirkwood North Road SW

- **Tower Terrace Road and I-380 Interchange.** The Tower Terrace Road Interchange project has been identified in Connections 2040. This project will improve access to the Interstate System for northern Cedar Rapids as Tower Terrace Road is completed and development occurs to the north. This project will provide a safe, reliable connection to I-380 and will address future congestion issues that will arise as development occurs along Tower Terrace Road.

MAP 9: Proposed Long Range Transportation Plan Updates



SOURCE: CITY OF CEDAR RAPIDS GIS, HR GREEN, INC.

INITIATIVES

57. Support the update of the Corridor MPO Long Range Transportation Plan.

The update of Connections 2040 (LRTP) should consider emerging projects that could help support circulation in the region.

58. Adopt the Corridor MPO Long Range Transportation Plan.

The City of Cedar Rapids should adopt Connections 2040 to promote the goals of the plan and the city's role as leader of the region.

59. Develop the city's Transportation Plan consistent with the goals of the Corridor MPO's Long Range Transportation Plan.

The city's Transportation Plan should be developed consistent with the goals of Connections 2040 (LRTP) in order to enhance transportation to connect people to destinations in the community.

60. Develop an asset management policy and procedure that clarifies the accountability for the management of each of the assets under the stewardship of Public Works.

A unifying policy will aid in coordinating the management of city infrastructure.

- Short Term (Within 3 Years)
- Medium Term (3-5 Years)
- Long Term (Beyond 5 Years)
- Vision Projects
- Growth Area Projects

INVESTCR

INVESTCR

InvestCR focuses on how to foster a robust economic environment in Cedar Rapids. Many indicators point to an economy that is already strong. In 2013, Cedar Rapids had a $550 million net retail surplus, a 40% excess of local supply over demand, meaning the city attracts spending from outside its borders. In that same year, unemployment was 5.2%, significantly lower than the national average of 7.9% and consistent with the state rate. Median home values are higher than the state median and have risen over the past decade despite a large-scale disaster.

Yet, concerns surface over the economic trajectory of Cedar Rapids. According to a 2013 economic study, Cedar Rapids residents expressed three top issues:

- Lack of retention and ability to attract young professional workers in the 25 – 44 year age bracket. The Cedar Rapids population is aging. From 2000 to 2010, the proportion of residents in this age bracket dropped by about 3%, even while overall population rose by 4.6%.
- Development and attraction of a skilled workforce. Cedar Rapids has a lower proportion of residents with higher education degrees than the State of Iowa.
- Need to focus a wide array of economic development efforts and involvement with regional organizations through a well-devised city strategic plan.

The goals of InvestCR address these concerns and more. This element is driven primarily by the results of the recently completed Comprehensive Economic Development Strategy prepared in 2014 by Angelou Economics. Goals 1, 2 and 4 in particular draw most of their content directly from the "Cedar Rapids Strategic Action Plan." The reader is encouraged to refer to this outside report for more detail on the goals in InvestCR.

INVESTCR GOALS

1. Expand economic development efforts to support business and workforce growth, market Cedar Rapids, and engage regional partners.
2. Cultivate a skilled workforce by providing cutting-edge training and recruiting talented workers.
3. Reinvest in the city's business corridors and districts.
4. Grow a sustainable, diverse economy by supporting existing businesses, fostering entrepreneurism, and targeting industry specific growth.

A CITY FOR ALL AGES

To attract and retain residents of any age, the city needs to enhance quality of life, and create a culture that drives people to form an attachment to this community. The "Soul of the Community Study" by the Knight Foundation in 2010 found that the key drivers of community attachment are: social offerings, openness, and aesthetics. Public spaces and neighborhoods should reflect these principles. The NewBo Market area is a good example of a public space that embodies these three principles.

Downtown Cedar Rapids is an important component of a young professional-friendly environment, and the implementation of the 2012 Downtown Plan will help make this a stronger asset for Cedar Rapids.

In addition, other sections of EnvisionCR provide strategies to implement this initiative, by promoting place-making, alternative transportation and diverse neighborhoods. These strategies include:

1. Place-Making.
    - Have the best parks, recreation and trails system in the region (GreenCR)
    - Be stewards for the environment, promoting economic and social growth while restoring the relationship between the city and the natural environment (GreenCR)
2. Alternative Transportation
    - Provide choices for all transportation users: inter- and intra-city (ConnectCR)
3. Diverse Housing and Interesting Neighborhoods
    - Encourage mixed-use and infill development (GrowCR)
    - Support existing and new neighborhood associations through the development of Neighborhood Action Plans (StrengthenCR)
    - Improve the quality and identity of neighborhoods and key corridors (StrengthenCR)
    - Adopt policies that create choices in housing types and prices throughout the city (StrengthenCR)

GOAL 1: Expand economic development efforts to support business and workforce growth, market Cedar Rapids, and engage regional partners.

The public sector has a role to play in the private market, by making sure policies are business friendly, fostering connections, and aligning public investments with market trends that support collective economic goals. In an increasingly global marketplace, the city is strongest when working as part of a region to promote economic development. The city already has several regional economic organizations, including the Cedar Rapids Metro Economic Alliance and the Entrepreneurial Development Center, Inc.. The city will work with these organizations, neighboring municipalities and others to continue to identify and rally around common regional economic goals.

INITIATIVES

61. Develop a retail and services recruitment strategy.

This can help strengthen areas with opportunities for growth in Cedar Rapids.

62. Promote the city's unused fiber optic capacity to attract technology companies.

This unused fiber optic capacity can be used to attract businesses that value access to broadband.

63. Formalize economic development within the city's organizational structure. (Completed - 2015)

Increasing economic development for Cedar Rapids requires formalizing economic development within the organization structure of the city. This may include:

- Establish a business retention and expansion program.
- Identify city staff members who can specialize in economic development.
- Send staff to participate in professional training offered by local economic development and trade organizations.
- Join professional development organizations such as the International Economic Development Council (IEDC), the Industrial Assset Management Council (IAMC) and SelectUSA.

64. Create a business expansion and retention program.

This involves strategies that build relationships with existing business owners or managers and communicating regularly with them to identify challenges and opportunities related to expansion and retention.

65. Create an economic development brand (marketing and communications).

This can be used to attract the attention of site selectors and industry leaders by showcasing the benefits and opportunities that exist in Cedar Rapids. Attracting new businesses and promoting existing businesses can lead to a more diversified economy.

GOAL 2: Cultivate a skilled workforce by providing cutting-edge training and recruiting talented workers.

Cedar Rapids needs a workforce with skills employers need. The Cedar Rapids Target Industry Report notes that Cedar Rapids is "experiencing a switch in business growth from construction, manufacturing and information industries to service establishments that include financial, professional and health categories." Educational institutions and other training providers must keep pace with this change.

At the same time, the city needs to ensure this community attracts skilled workers, including young professionals. A talented and diverse pool of workers is often one of the top priorities in location decisions for companies. Cedar Rapids can retain and attract more firms if the city has a robust workforce.

INITIATIVES

66. Promote workforce development through city economic development programs and a variety of initiatives focused on enhancing quality of life to attract and retain a skilled workforce.

The Strategic Action Plan recommends a number of strategies to help recruit talented workers, especially young professionals:

- Support organizations targeted towards young professionals such as ImpactCR.
- Encourage development of live/work environments in downtown and Czech Village-New Bohemia District
- Provide recruitment assistance for companies to recruit executive level talent and recruit at career fairs in cities with workforces in the target industries.

67. Develop and implement a citywide Wi-Fi network to support entrepreneurship, job skills, educational opportunities, and innovation.

A citywide Wi-Fi network supports educational efforts at all levels and makes the city more attractive.

GOAL 3: Reinvest in the city's business corridors and districts.

MEDQUARTER MASTER DEVELOPMENT PLAN (THE LAKOTA GROUP)

Businesses receive direct benefits by close proximity and interaction with other businesses, a phenomenon often referred to as "economies of agglomeration." A concentration of businesses can use common suppliers and draw from a common customer base. Even competing businesses can benefit from each other's proximity, since a concentration of one type of business can serve to establish a niche market that attracts customers and/or workers. Business districts and corridors should make the most of these potential benefits by supporting connectivity between businesses and an active environment that attracts workers, customers, and other businesses.

Business corridors and districts also provide some of the city's most important public spaces. These types of vibrant urban spaces play a critical role in helping residents form an attachment to their community.

Strategies to achieve this goal are provided elsewhere in this document and in other plans. This goal will be achieved by implementing the recommendations of:

- Improve the quality and identity of neighborhoods and key corridors.
- Improve the function and appearance of our key corridors.
- Other planning initiatives such as: 2012 Downtown Plan, Czech Village-New Bohemia Revitalization Strategy, and the MedQuarter Master Plan.

INITIATIVES

68. Promote southwest industrial/ airport development.

City infrastructure investments in the southwest (south of Highway 30 and between I-380 and Edgewood Road SW) make this an attractive area for industrial businesses. Implementation of the Eastern Iowa Airport's Commercial Real Estate Strategy is recommended.

69. Promote core districts through façade program and other improvements.

This can lead to improved appearances and enhanced quality of life in these areas.

GOAL 4: Grow a sustainable, diverse economy by supporting existing businesses, fostering entrepreneurism, and targeting industry-specific growth.

The city, through an expanded economic development department, can take an active role in business creation, retention and expansion. The city can have the greatest effect by gathering information on business needs, coordinating access to funding or assets (such as large spaces for expansions and new development), and crafting city policies and incentives that match the needs of the local business community. In general, the public sector should be focused on activities which will act as a catalyst or support for private sector activity. Ultimately, the city should prioritize support for grassroots efforts by the local business community - efforts that will build social capital, particularly among entrepreneurs.

INITIATIVES

70. Establish guidelines for working with regional partners through Memorandums of Agreement (MOA). (Completed - 2015)

This can help lead to more productive collaborative efforts in economic development.

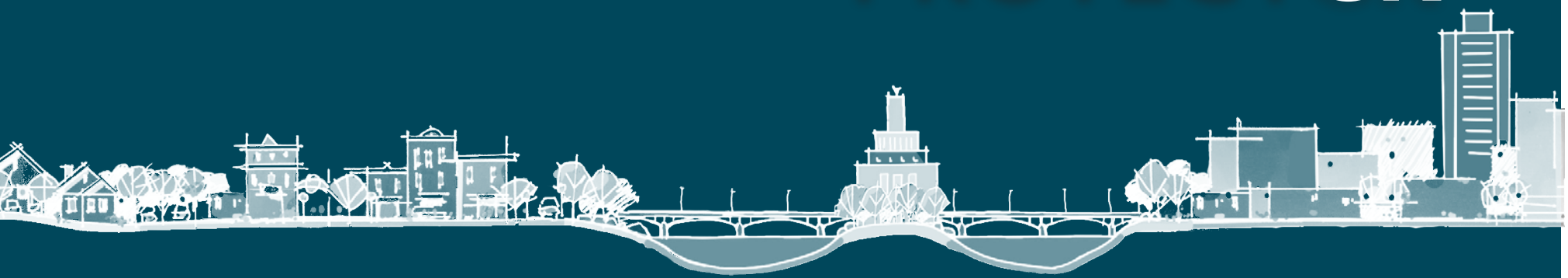
71. Form a regional alliance for marketing efforts.

This will help the city promote itself to a larger geographic area.

72. Create a business advisory board.

This board will be used to review the progress of city economic development efforts.

PROTECTCR



PROTECTCR

ProtectCR focuses on how to protect the city from hazards, and how to provide quality public facilities and infrastructure. In the aftermath of the 2008 floods, flood control is still a primary focus for the city. Cedar Rapids will continue to implement existing flood recovery and mitigation plans.

As Cedar Rapids grows, maintaining efficiency and quality of infrastructure and public services will be major priorities. Cedar Rapids will need to strike a balance between providing new services in growth areas, and maintaining older infrastructure in existing neighborhoods in the core of the city.

PROTECTCR GOALS

1. Protect Cedar Rapids from flooding and other hazards.
2. Manage growth and development to balance costs and serviceability to neighborhoods.
3. Maintain and provide quality services to the community.
4. Demonstrate best practices in building construction.

GOAL 1:
Protect Cedar Rapids from flooding and other hazards.

In 2008, Cedar Rapids experienced millions of dollars in damage due to flooding. The community has engaged in a multitude of planning processes and initiated countless infrastructure projects to reduce the incidence of flooding and ensure community residents and homes are protected against flood events. Cedar Rapids has taken a three part recovery approach:

1. Improve Flood Control
2. Reinvest in Housing, Businesses & Neighborhoods
3. Rebuild Public Facilities

Some of the most densely populated areas of the community, including the downtown, are in the floodplain. These areas need protection and Cedar Rapids is implementing a strategic approach to development to minimize flood risk.

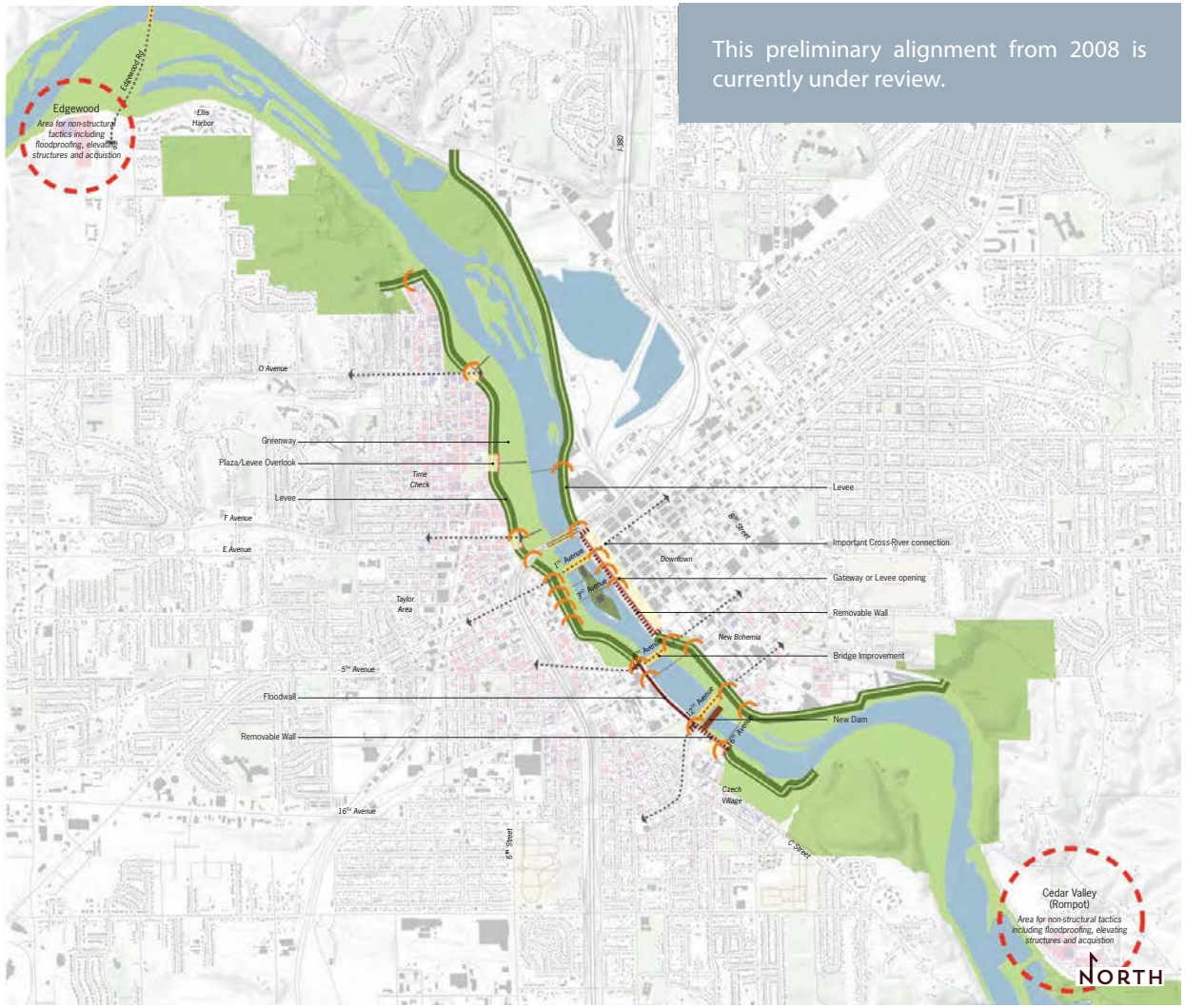
Flood Recovery Plan

Shortly after the floods of 2008, the City Council approved a flood control recovery plan to help with immediate recovery and future control of flood risk. This plan is summarized in Map 1.

Also in 2008, the Council adopted a set of goals that eventually developed into a full plan for flood recovery. The plan was based on four primary tenets including "Flood Management & Protection Strategies." This focused on "developing and implementing strategies to minimize and/or eliminate the threat of future flood events in Cedar Rapids."

A first step in achieving this goal was to perform a feasibility study of Cedar River Flood protection, in cooperation with the US Army Corps of Engineers (USACE). This was completed in 2011 and established where flood control measures and infrastructure should be constructed based on Federal rules. The study evaluated several alternatives, and recommended a flood control system that features

MAP 1 : Preliminary Flood Control Plan (2008)



SOURCE: RDRIVER CORRIDOR REDEVELOPMENT PLAN - CITY OF CEDAR RAPIDS AND SASAKI

concrete floodwalls, earthen levees, closure structures and pump stations. The system would protect up to a height of 32.4 feet, slightly higher than the flood crest in 2008. Figure 2 shows a map summarizing the system.

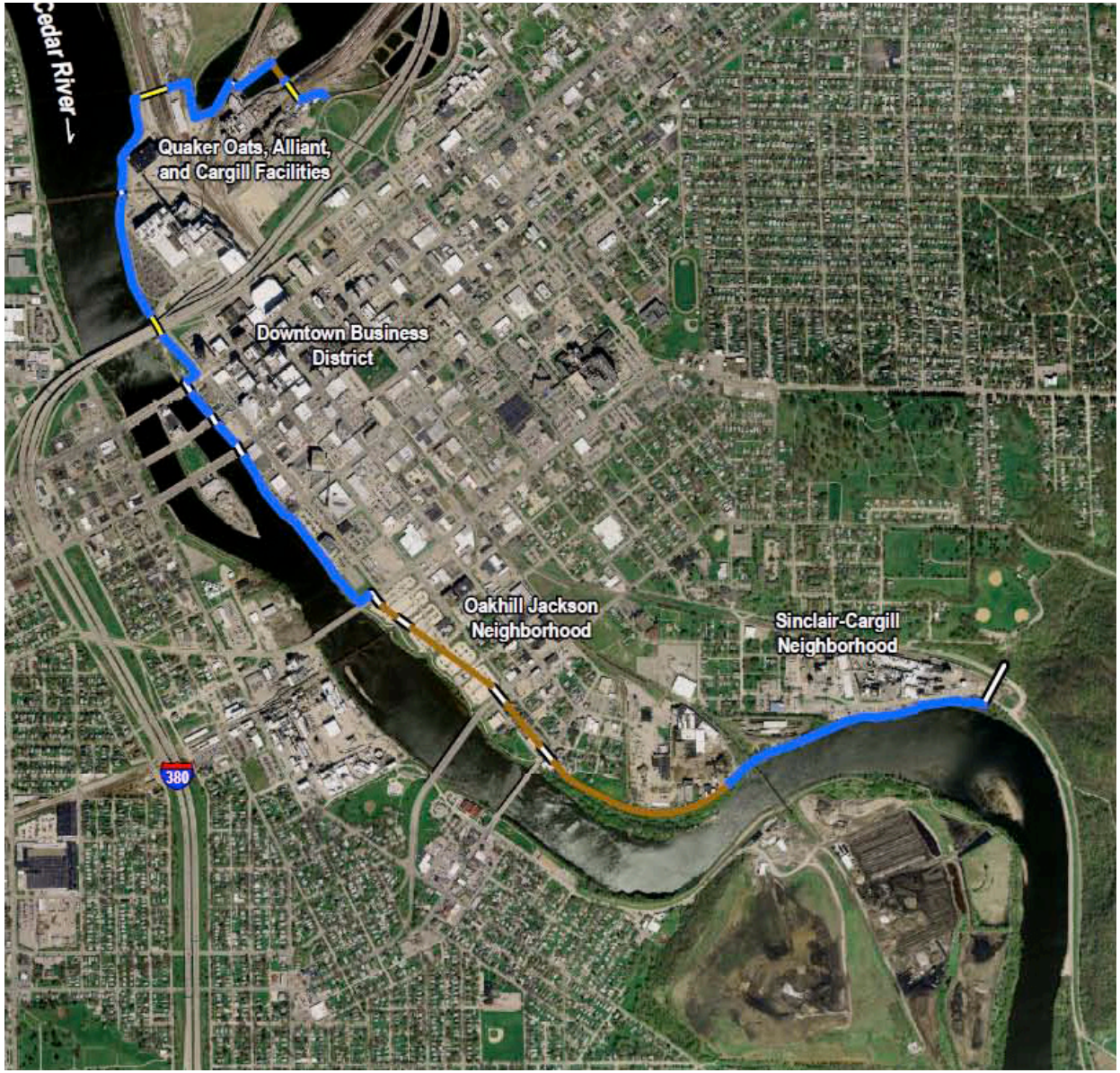
The recovery plan also recommended the following:

- Barrier Installation: Authorize purchase of materials and equipment necessary to install barriers that will protect the city up to a 20-foot flood stage.
- Community Rating System: Pursue a coordinated effort with the National Flood Insurance Program (part of FEMA) to qualify Cedar Rapids properties for flood insurance discounts, through implementation of elements of the flood management plan and coordination with existing city ordinances.
- Legacy Watershed Management and Watershed Study: Work with the United States Army Corps of Engineers to study the historic upstream and downstream watershed practices and management.
- Storm Water Management Plan: Update the storm water management plan on a regular basis to reflect flood management goals.

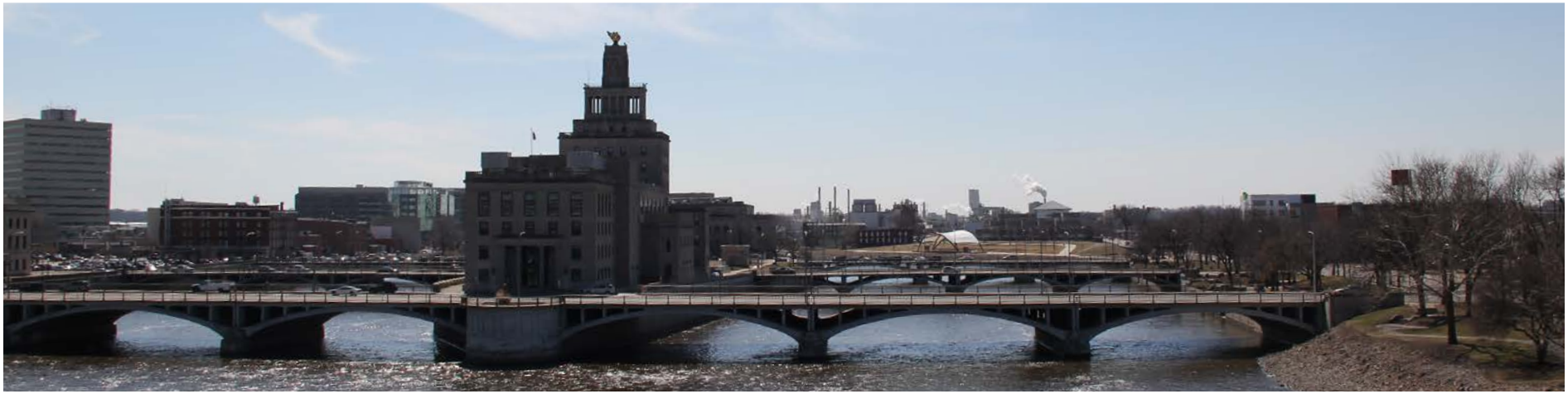
In 2014, Cedar Rapids received an award of $264 million to help carry out flood control plans. These include the construction of 6.24 miles of levee and floodwalls (permanent and removable),11 pump stations, 21 roadway and railroad gate closures, improvements to a flood prone bridge (elevation of approaches), and design on a second river crossing. The city is currently holding public meetings to aid in finalizing the alignment and design.

In summary, Cedar Rapids has completed extensive planning for flood control, and initiatives have been underway for years. The city will continue to support the implementation of recovery planning efforts.

MAP 2: USACE Preferred Scenario for Flood Protection, Cedar River



SOURCE: CITY OF CEDAR RAPIDS FEASIBILITY STUDY



Linn County Multi-Jurisdictional Hazard Mitigation Plan

In addition to flooding, the city is committed to protecting the community against other potential hazards. The Linn County Multi-Jurisdictional Hazard Mitigation Plan identifies hazards that the city should prepare for based on an assessment of hazards by probability of occurrence, severity and other factors. The plan rates the following as "high priority" hazards for Cedar Rapids: river flood, thunderstorm, lightning and hail, drought, severe winter storm, tornado and windstorm, and flash flooding.

The Linn County Multi-Jurisdictional Hazard Mitigation Plan provides additional guidance on protecting residents and their property from flooding and many other possible hazards. The goals of the plan are to:

- Minimize injuries and loss of life.
- Reduce or eliminate damages due to natural and technological hazards.
- Manage operations with or without county, state, and federal assistance.
- Return to pre-hazard event conditions in a timely and planned manner.

As the plan points out, many of the hazard threats are already addressed by ongoing city operations. For example, the city protects against infrastructure failure through the regular inspections and maintenance by the Public Works department.

However, the plan recommends a number of mitigation actions for Cedar Rapids, focusing on addressing its high priority hazards. These recommendations implement Goal 1, and include the following (list not comprehensive):

- Complete phases of the city's Permanent Flood Protection Project.
- Complete the addition of 21 gate closures and 11 pump stations.
- Implement Permanent Flood Protection Project through property acquisition and/or demolition.
- Install flood warning system on Indian Creek.
- Expand the city's warning siren system.
- Add detention basins to increase stormwater management capacity.
- Construct safe rooms in public facilities and recreation areas.
- Complete Edgewood bridge improvements.

The Linn County Multi-Jurisdictional Hazard Mitigation Plan and any future versions of the plan should be considered a part of EnvisionCR.

Cedar Rapids has undertaken extensive planning for hazard mitigation, with special focus on protection against floods. Implementation of these existing plans, paired with implementation of the natural stormwater management recommendations in "GreenCR," will help to achieve the city's goal of hazard protection.

INITIATIVES

73. Complete community outreach for the Flood Control Project. (Completed - 2015)

Shortly after the floods of 2008, the City Council approved a flood control recovery plan to help with immediate recovery and future control of flood risk. This plan is summarized in Map 1. The city is currently holding public meetings to aid in finalizing the alignment and design.

74. Adopt alignment for the Flood Control Project. (Completed - 2015)

The city will use the feedback from the community outreach process to help inform final alignment for flood control.

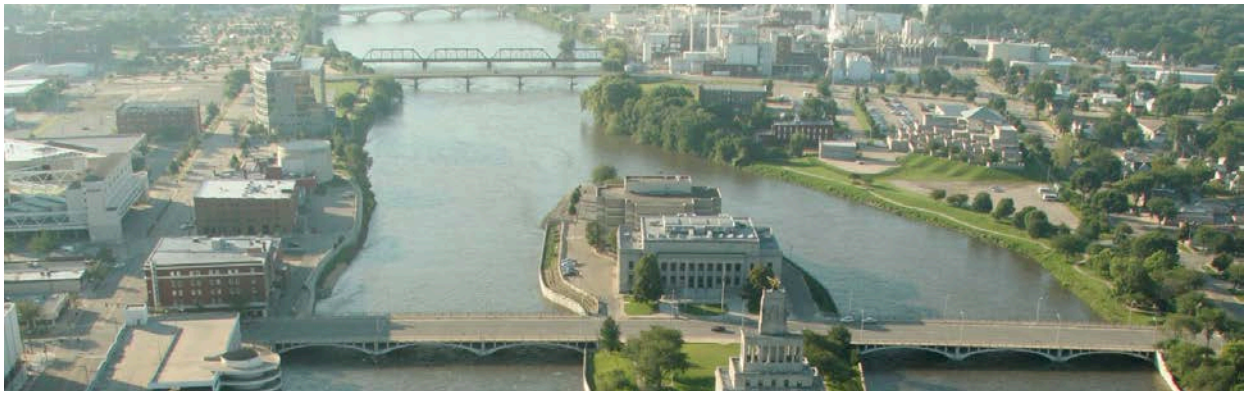
75. Develop a property acquisition program for the Flood Control Project. (Completed - 2015)

This will aid in acquiring property still needed for the Flood Control Project.

76. Coordinate the use of Flood Mitigation Program funds for the Flood Control Project.

The city received $264 million from the state Flood Mitigation Program that needs to be tracked to coordinate the completion of the Flood Control Project.

77. Amend the Future Land Use Map to reflect planned land use based on the adopted flood control alignment.



The Future Land Use Map will need to be updated to reflect the City Council adopted Flood Control Project alignment.

78. Identify and track completion of Priority One Level Cedar Rapids Mitigation Strategies from the Linn County Multi- Jurisdictional Hazard Mitigation Plan.

Tables in the Appendix show how hazards are addressed by operations, the city's hazard mitigation strategy, mitigation actions, completed mitigation actions, benefit cost criteria, mitigation action priority level, and the city's action plan.

79. Prepare Watershed Management Plans that provide improved aquatic habitats, recreational opportunities, and increased public access to natural resources, while maintaining necessary levels of flood control through coordination with appropriate stakeholders, including state and federal agencies, and other jurisdictions.

Refer to GreenCR for discussion of natural stormwater management through the use of "greenways." Preservation of floodplains, wetlands, stream buffers, and other critical natural areas will create a system of greenways that allow for natural water drainage and will help protect against flooding.

80. Develop a Wastewater Collection Master Plan.

Initiate a plan to measure, monitor, and manage wastewater collection for the city.

81. Develop Watershed Stormwater Drainage Master Plan.

Initiate a plan to measure, monitor, and manage stormwater drainage for the city's watersheds.

GOAL 2: Manage growth and development to balance costs and serviceability to neighborhoods.

As Cedar Rapids grows, so will the demands on city services such as water, sewer and stormwater. Although this growth will correspond with an increased tax base, funds are limited. Keeping growth and revenue in balance is essential to maintaining a high level of services in everything from libraries to fire response. The city wants to continue to provide the same high level of service as it grows. The building of new neighborhoods should not be at the cost of older neighborhoods.

The type of development experienced can have a tremendous impact on service costs. For example, lower density neighborhoods are typically more costly to serve than higher density areas, since households are spread out over larger areas – that means everything from garbage trucks to ambulances have more miles to cover.

In a similar way, location of development has a tremendous effect. Due to topography or geographic proximity, certain areas may be impractical to serve, while unconstrained areas have fewer challenges and cost less to serve.

The city must be strategic in infrastructure extension, encouraging development in areas that will be cost effective, and allowing continued high level of service.

Development that occurs in existing urban areas, rather than at the urban fringe, is called infill. Infill development is a way of "recycling" land, since many infill lots were previously used for another purpose. Infill makes use of existing infrastructure, such as streets and sewer connections. Although there are often costs uniquely associated with infill, such as site clean-up, this type of development can be more economical overall, due to the lesser need for infrastructure extension. The city should concentrate on upgrading facilities in urban areas and prioritizing the use of existing capacity over construction of new facilities.

StrengthenCR describes ways to encourage infill development. It describes how to strategically use the location and design of city infrastructure and civic facilities as a catalyst to leverage neighborhood revitalization and redevelopment. The provision of infrastructure and facilities can support revitalization efforts by signaling to property owners and prospective owners that the location is appropriate for investment and redevelopment.

The provision of city services, especially sewer and water, heavily influences where growth occurs. Service and infrastructure investments should be made in strategic areas. Strategic areas are those that meet three measures. First, the city wishes to grow there (according to the comprehensive plan and other plans), second, it is efficient to grow there, and third, the market can support growth in that area. Strategic growth areas can include revitalization areas and new development areas. Potential areas for growth are identified in GrowCR.

As development occurs, the city should ensure that services can support new development without diminishing service to existing neighborhoods. For example, the need to extend water to new development should not jeopardize the availability of fire suppression flow in existing neighborhoods.

Infrastructure Serviceability in Growth Areas

Due to topography and geographic proximity, infrastructure serviceability can vary widely. Map 3 summarizes the serviceability of sanitary sewer and water in potential growth areas. Maps 4 and 5 show the individual serviceability of sanitary sewer and water in potential growth areas. Map 6 shows the estimated drive time for the Cedar Rapids' Fire Department to serve the city.

Additional study is required to fully understand serviceability. The evaluation here is a snapshot based on information from Public Works, Utilities, Police Department, and Fire Department. Each offered opinions on serviceability based on known conditions. Geographic areas were scored using the criteria on the opposite page.

INITIATIVES

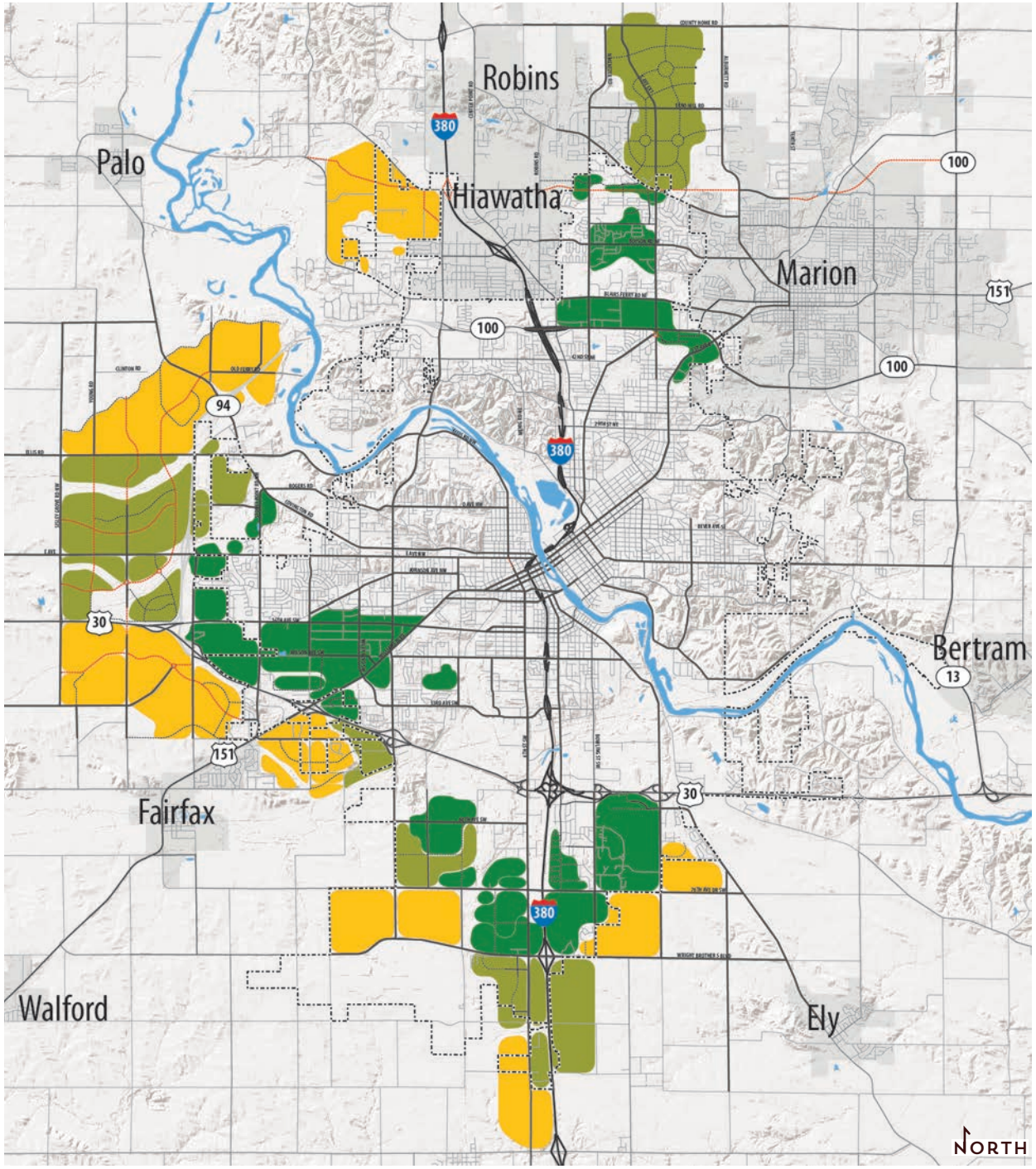
82. Prepare a capital improvement plan that addresses both the needs of existing core neighborhoods and the future infrastructure needs in areas where growth is planned.

The city's Capital Improvement Plan (CIP) should balance infrastrucutre investments between the needs of existing and new neighborhoods without negative impacts.

83. Enhance and expand the Capital Improvement Projects Development and Management Handbook, and include a publicly accessible digital copy of this on the Public Works Department's website.

This initiative will help improve the efficiency and coordination of projects in both growth and infill areas.

MAP 3: Aggregated Servicebility for Sanitary Sewer and Water.



Evaluation

Excellent serviceability. The area can be adequately served for proposed land uses by existing infrastructure.

Good serviceability. The area can be adequately served for proposed land uses by existing infrastructure. Affordable upgrades required.

Serviceable. The area can be adequately served for proposed land uses. For example, extension to the system is required and typical for conventional development. This is a typical rating for conventional development.

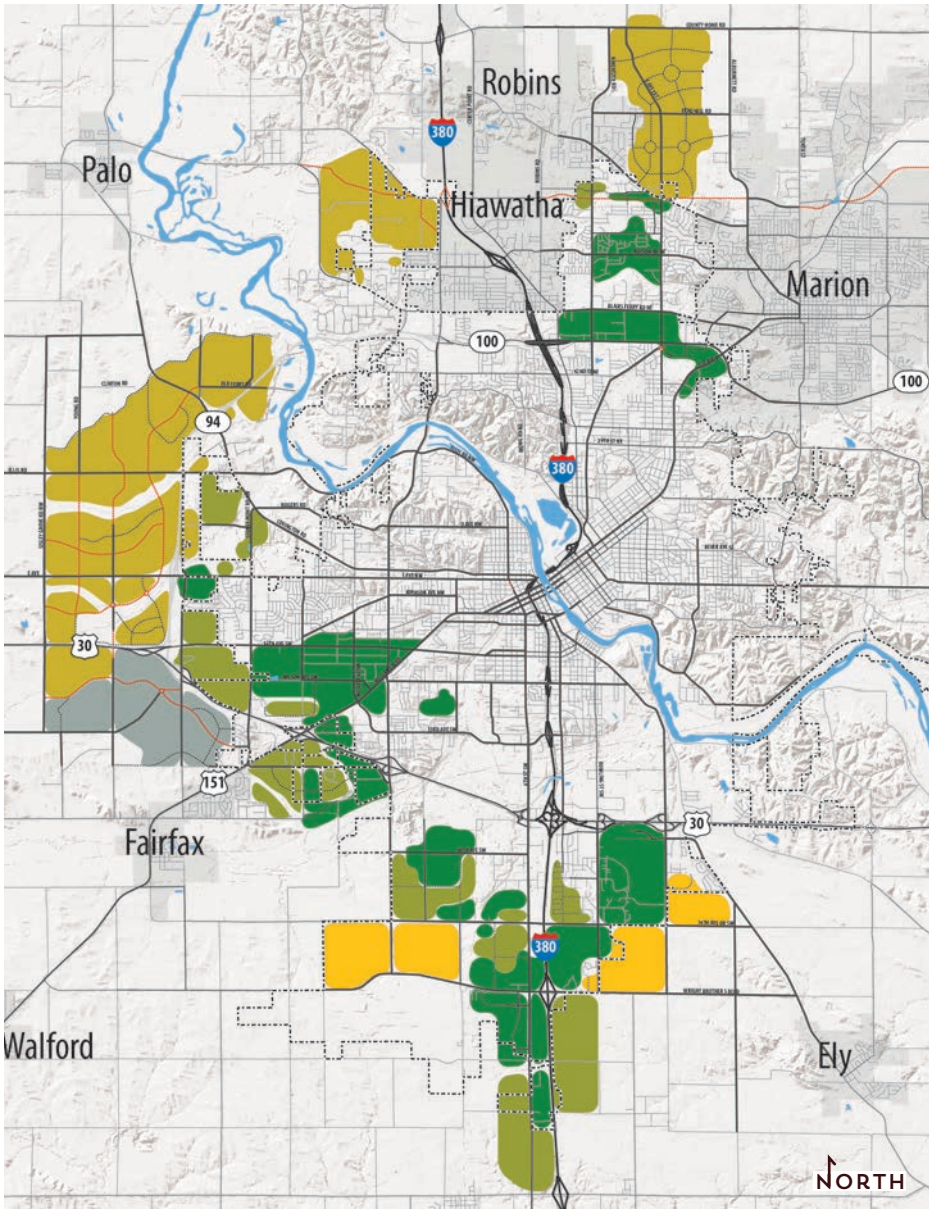
Serviceable, but requires improvements. The city has planned or is planning improvements for this area. For example, the city knows that we need a lift station or water tower is needed.

Serviceable, but requires study. The city assumes the area can be serviceable through improvements. For example, the city believes that a lift station or water tower is needed

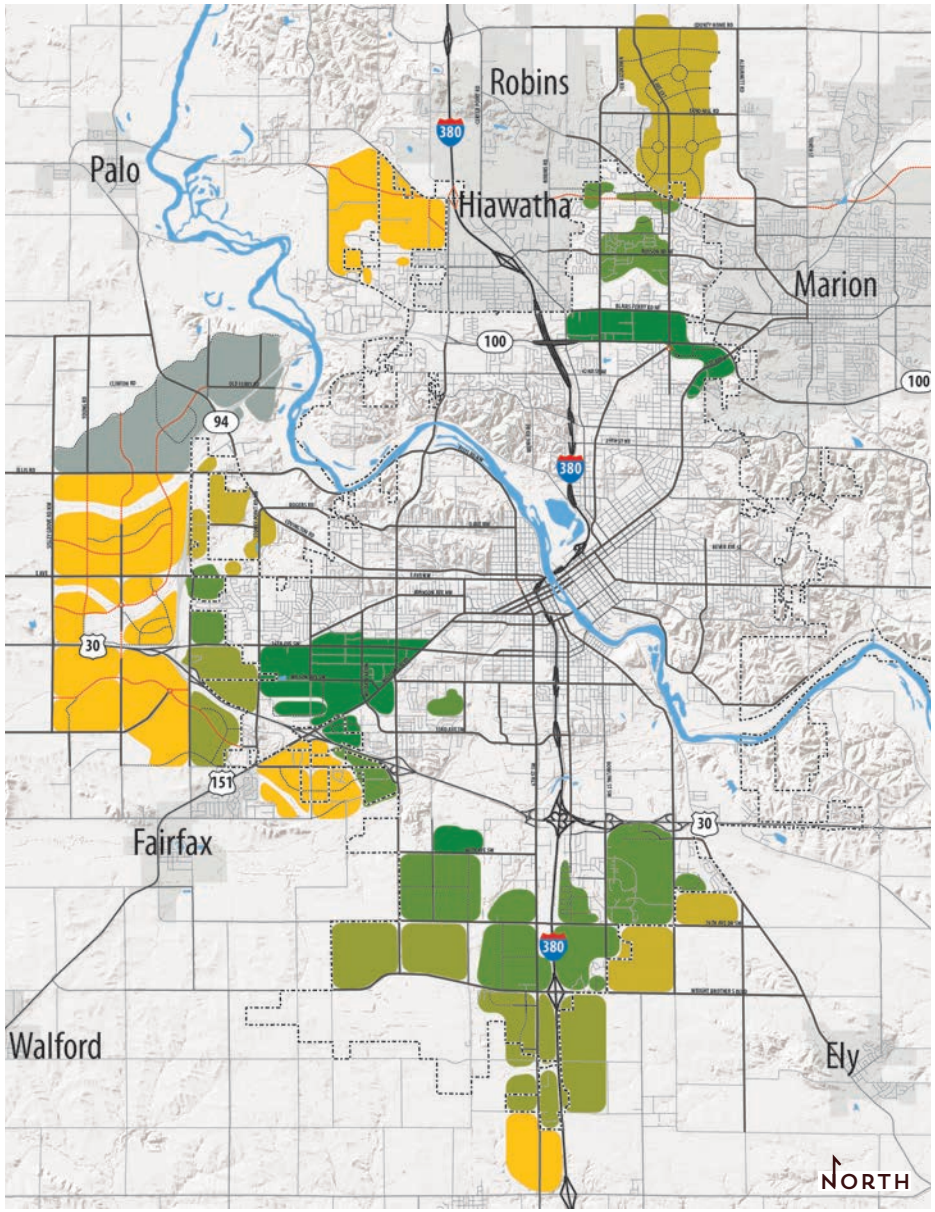
Unknown serviceability, requires study. The city has not planned for service to this area.

SOURCE: CITY OF CEDAR RAPIDS, RDG PLANNING & DESIGN

MAP 4: Sanitary Sewer Serviceability

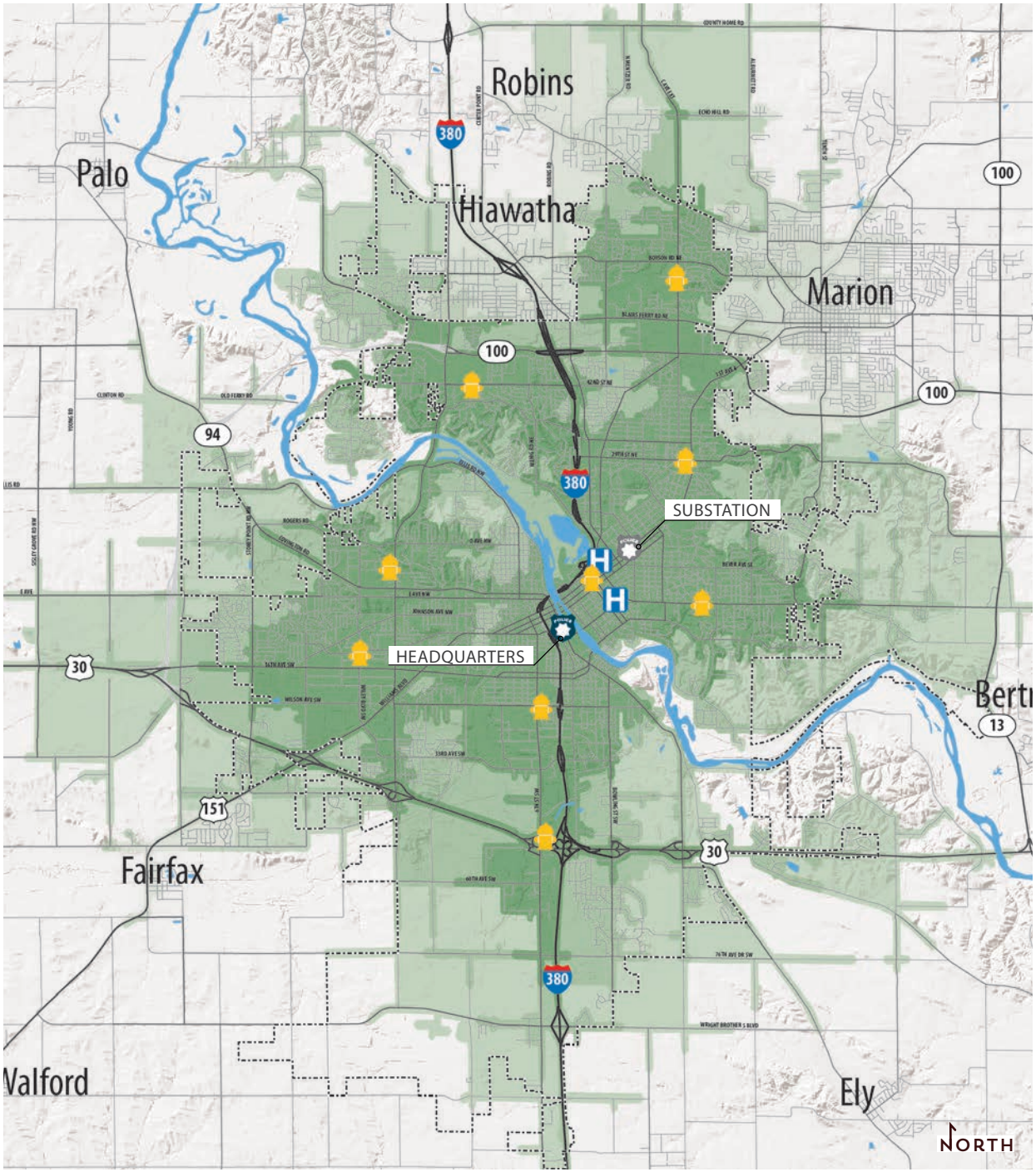


MAP 5: Water Serviceability



SOURCE: CITY OF CEDAR RAPIDS, RDG PLANNING & DESIGN

MAP 6: Fire Response Time



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

Estimated Drive Times

- 0-4 minutes
- 4-6 minutes
- 6-8 minutes

- Police Station
- Fire Station
- Hospital

GOAL 3:
Maintain and provide quality services to the community.

Community facilities such as recreation centers, municipal offices, and fire stations are an important facet of Cedar Rapids' quality of life and are critical to public safety. These public facilities represent large capital assets that must respond to the needs of current and future residents and future growth needs. Although these features sustain life in the community – they are often only noticed when they are absent or something goes wrong. Yet, they have a major impact on residents' satisfaction with the city and with the direction of future growth.

The city will continue its support of city facilities by reviewing their needs on an annual basis as part of the CIP process. As part of the EnvisionCR process, staff members were surveyed regarding the condition of city facilities, from fire stations to city pools. For the majority of facilities, the primary requirement is routine maintenance and minor upgrades and repairs. However, staff indicated a number of more significant needs and initiatives that are on the horizon for city facilities. These are summarized below:

- Replace Ambroz Recreation Center
- Update clubhouses at Twin Pines, Ellis, and Gardner Golf Courses
- Replace Bender Pool
- Replace Parks Maintenance Building

An overview of facility evaluations is provided in Table 1.

The city should also continue to implement the following plans or initiatives:

- Cedar Rapids' Fire Department Strategic Plan
- Cedar Rapids' Police Department Strategic Plan
- Eastern Iowa Airport Master Plan
- SafeCR (Secure and Friendly Environments in Cedar Rapids)

INITIATIVES

84. Refine existing stormwater management regulations to enhance clarity and adaptability.

Also helps achieve goals in GreenCR.

85. Replace outdated facilities (Ambroz Recreation Center, Bender Pool, Parks Maintenance, Twin Pines Clubhouse, Ellis Clubhouse, and Gardner Clubhouse) with modern and sustainable facilities.

Helps city provide updated services to current and future citizens.

Fire Department Strategic Plan:

The following six Fire Department Initiatives help the city maintain and increase its level of service to the city while also increasing the attractiveness of the community.

86. Adopt standards and practices across the department to maximize employee capabilities.

87. Evaluate high risk structures and target hazards for increased emergency response needs, fire prevention activities, fire protection systems and equipment per adopted codes, standards, regulations, and policies.

88. Identify, evaluate, and acquire technology, equipment, and facilities to improve infrastructure and service delivery.

89. Seek opportunities to create new and strengthen current partnerships with public and private organizations to enhance the department's capabilities, education, and response through collaboration.

90. Analyze and define its organizational structure to reflect best practices in areas of staffing, operations, and equipment.

91. Obtain Center for Public Safety Excellence (CPSE) certification.

Police Department's Strategic Plan:

The following five Police Department Initiatives help the city maintain and increase its level of service to the city while also increasing the attractiveness of the community.

92. Obtain the Commission on Accreditation for Law Enforcement Agencies (CALEA) certification.

93. Conduct targeted traffic enforcement to increase traffic safety.

94. Track progress towards increasing the solve rate of crimes.

95. Track progress of rabies and microchip clinics. (Completed - 2015)

96. Improve and enforce department policies and directives.

Table 1: Facility Evaluation

FACILITY		Year Built	Condition	Improvement Schedule			Needs
				Ongoing	Within 10 years	Beyond 10 Years	
1.	Transit Garage/Admin Facility (427 8th Street NW)	2013		●			(Ongoing) Routine Preventative Maintenance
2.	Ground Transportation Center (450 1st Street SE)	1983	Excellent		●		(Ongoing) Routine Preventative Maintenance (<10 Years) Facility expansion or relocation
3.	Eastern Iowa Airport Terminal (2121 Arthur Collins Parkway)	1986	Good	●	●		(<10) Airport Circular Road (<10) Renovate Parking Areas (<10) Construct Concourse B with 2 New Gates
4.	City Services Center (500 15th Avenue SW)	2013	Excellent	●			(<10) Renovate Parking Areas
5.	City Hall (101st Street SE)	1931	Good	●	●	●	(0) Routine Preventative Maintenance (<10) Tuckpointing and Front Door Renovations (10+) Roof, HVAC Improvements (2035)
6.	5 in 1 Dam (Under E & F Avenue Bridge)	1974	Good		●	●	(<10) Feasibility study of conversion of slide gates to tainter gates (10+) Remove hydroelectric power generation plant (2020-25)
7.	J Avenue Water Treatment Plant (761 J Avenue NE)	1929	Good		●		(<10) Complete a raw water source study to evaluate well system (<10) Replace lime softening process which is reaching end of useful life (10+) Construct a new maintenance building (<10) Design and construct surface water withdrawal system and pretreatment process for nitrate and emerging contaminant removal
8.	NW Water Treatment Plant (7807 Ellis Road)	1993	Good		●		(<10) Improve the existing lime softening process to correct flaws (<10) Design and construct surface water withdrawal system and pretreatment process for nitrate and emerging contaminant removal
9.	Water Division Administration Building (1111 Shaver Road)	1965	Moderate	●	●		(Ongoing) Routine Preventative Maintenance (<10) Improve/replace HVAC System
10.	Ambroz Recreation Center (2000 Mt. Vernan Road SE)	1908	Poor			●	(10+) Relocate services to an alternative location
11.	Jones Golf Course, Clubhouse, and Maintenance (2901 Fruitland Blvd SW)	-	Good		●		(<10 Years) Restore Fairways from 2014 Flooding (<10) Consider conversion to a 9 hole course and instruction academy

Table 1: Facility Evaluation

Facility		Year Built	Condition	Improvement Schedule			Needs
				Ongoing	Within 10 years	Beyond 10 Years	
12.	Twin Pines Golf Course, Clubhouse, and Maintenance (3800 42nd Street NE)	-	Good (course) Poor (clubhouse)		●		(<10) Construct a new clubhouse which will better support events, merchandise & food/beverage sales
13.	Ellis Golf Course, Clubhouse, and Maintenance (1401 Zika Avenue NW)	Varies	Excellent (Course) Poor (Clubhouse)	●	●		(Ongoing) Routine Preventative Maintenance (<10) Construct a new Clubhouse to support events, merchandise, and food/beverage sales
14.	Gardner Golf Course, Clubhouse, and Maintenance (5101 Golf Course Road, Marion)	Varies	Good Poor	●	●		(Ongoing) Routine Preventative Maintenance and Updates (Ongoing) Repair tree damage from storm event (<10) Construct a new Clubhouse to support events, merchandise, and sales.
15.	Bever Pool (2700 Bever Avenue SE)	-	Good		●		(<10) Update pump, mechanical & filtration system
16.	Ellis Pool (2000 Ellis Blvd NW)	-	Moderate		●		(Ongoing) Routine Preventative Maintenance (<10) Repair and upgrade concrete work
17.	Jones Pool (201 Wilson Avenue SW)	-	Excellent		●		(<10) Update pump, mechanical & filtration system
18.	Bender Pool (940 14th Avenue SE)	-	Poor			●	(Ongoing) Routine Preventative Maintenance (10+) Replace and close facility
19.	Noelridge Aquatic Center (1248 42nd Street NE)	2003	Good		●		(<10) Refurbish amenities and slides
20.	Cherry Hill Aquatic Center (341 Stoney Point Road NW)	2004	Good	●			(Ongoing) Routine Preventative Maintenance
21.	Tait Cummins Softball Complex & Concessions (3000 C Street SW)	-	Poor	●	●		(Ongoing) Routine Preventative Maintenance (<10) Reconstruct baseball diamonds and improve lighting system
22.	Tuma Sports Complex, Maintenance, and Concessions (3239 C Avenue Extension, Marion)	-	Good		●	●	(<10) Improve lighting system (10+) Construct indoor/outdoor athletic facilities
23.	Ellis Softball and Concessions (916 Ellis Blvd NW)	-	Poor		●		(<10) Improve field conditions
24.	Ellis Harbor (Ellis Boulevard NW)	-	Poor		●		(<10) Repair Sidewalks (<10) Dredge the harbor
25.	Ushers Ferry Historic Village & Ushers Ferry Lodge (5925 Seminole Valley Trail NE)	-	Excellent (lodge) Good (village)	●			(Ongoing) Maintain village buildings

Table 1: Facility Evaluation

Facility		Year Built	Condition	Improvement Schedule			Needs
				Ongoing	Within 10 years	Beyond 10 Years	
26.	Seminole Valley Farm (Seminole Valley Road NE)	-	Poor		●	●	(<10 Years) Demolish all non-historic registry property (<10) Study the barn for structural integrity and reuse (10+) If sufficient capital is not invested, de-list from historic registry
27.	Bever Park Zoo (2700 Bever Avenue SE)	-	Moderate	●	●		(Ongoing) Routine Preventative Maintenance
28.	Bever Park Maintenance Building (2700 Bever Avenue SE)	1926-1963	Poor		●		(<10) Replace the maintenance facility
29.	Noelridge Greenhouse and Gardens (4900 Council Street NE)	-	Good		●		(<10) Install climate control automation
30.	Noelridge Maintenance Shop (4900 Council Street NE)	1960-1990	Poor		●		(<10) Expand the maintenance facility
31.	Ellis Park Maintenance Shop (916 Ellis Blvd NW)	1969	Poor		●		(<10) Replace the maintenance facility
32.	Veterans Memorial Tennis Center (Rockford Road SW)	-	Moderate		●		(<10) Replace tennis courts and bathroom buildings
33.	Park Pavillions (Various Locations)	-	Varies	●			(Ongoing) Routine Preventative Maintenance (Ongoing) Replace facilities as needed
34.	Cedar Rapids Ice Arena (1100 Rockford Road SW)	1999	Moderate	●	●		(Ongoing) Routine Preventative Maintenance (<10) Level III Energy Audit and energy efficiency improvements
35.	Paramount Theatre (123 3rd Avenue)	1928 (2012 Updates)	Good	●			(Ongoing) Continued upgrades to technical equipment
36.	U.S. Cellular Center (370 1st Avenue NE)	1979 (2013 Updates)	Moderate	●	●		(Ongoing) Routine Preventative Maintenance (<10) Replace or improve restroom facilities (<10) Evaluate boiler/chiller system at regular intervals, replace when needed
37.	McGrath Amphitheatre Cedar Rapids (475 1st Street SW)	2013	Excellent	●			(<10) Disposition of adjacent Knutsa Building (<10) Construct permanent support facilities (<10) Construction of flood protection and pump house
38.	Harbor Construction Shop (2027 Ellis Road NW)	1940-2005	Good		●		(<10) Update building for fabrication and sign shop in 2015
39.	Recreation Maintenance Building (Ellis Park)	1960	Moderate			●	(10+) Improve building utilities
40.	Water Pollution Control Facility (7525 Bertram Road SE)	Late 1970s	Good			●	(10+) Meet nutrient reduction requirements of NPDES (10+) Replace or modify existing incinerator operations to handle solids generated during the treatment process.

Table 1: Facility Evaluation

Facility		Year Built	Condition	Improvement Schedule			Needs
				Ongoing	Within 10 years	Beyond 10 Years	
41.	Central Fire Station (713 1st Avenue SE)	2013	Excellent	●			(Ongoing) Routine Preventative Maintenance
42.	Fire Station #2 (442 50th Street Avenue)	1988	Moderate	●			(Ongoing) Routine Preventative Maintenance (<10 Years) Stabilize the ground
43.	Fire Station #3 (3520 Crestwood)	2013	Excellent	●			(Ongoing) Routine Preventative Maintenance
44.	Fire Station #4 (3600 42nd Street)	1986	Good	●	●		(Ongoing) Routine Preventative Maintenance (<10) Install a stop light for safer backing up into the station
45.	Fire Station #5 (50 Wilson Street)	1956	Good	●	●		(Ongoing) Routine Preventative Maintenance (<10) Install a stop light for safer backing up into the station
46.	Fire Station #6 (2416 Mt. Vernon Street)	1956	Good	●			(Ongoing) Routine Preventative Maintenance
47.	Fire Station #7 (206 29th Street NE)	1999	Good	●			(Ongoing) Routine Preventative Maintenance
48.	Fire Station #8 (100 Wiley)	1986	Good	●			(Ongoing) Routine Preventative Maintenance
49.	Fire Station #9 (415 Broderick)	1986	Good	●			(Ongoing) Routine Preventative Maintenance
50.	Cedar Rapids Animal Care and Control (900 76th Avenue Drive SW)	2013	Excellent	●	●		(Ongoing) Routine Preventative Maintenance (<10) Construct an additional facility within 10 years
51.	Cedar Rapids Police Shooting Range (2727 Old River Road SW)	1960	Requires Study	●	●		(<10) Update range facilities
52.	Cedar Rapids Police Sub-Station (1501 1st Avenue SE)	Unknown	Requires Study		●		(<10) Relocate in 2015
53.	Cedar Rapids Police Department (505 1st Street SW)	1997	Moderate	●	●		(Ongoing) Routine Preventative Maintenance (<10) Build an addition to create more space or potential growth

GOAL 4:
Demonstrate best practices in building construction.

All buildings in Cedar Rapids should use best practices in building construction, such as energy efficiency and on-site stormwater management. One of the most visible ways to encourage this to develop public facilities as demonstration pieces for exemplary design and construction practices.

The city also exercises influence over private buildings in the form of building codes.

To ensure community safety and recovery, city buildings and infrastructure should be built with emergency management in mind. Existing building codes are designed to limit threat from fire, wind and other dangers. Code enforcement should continue to be a priority, in order to ensure the safety of residents.

In the aftermath of the 2008 flood, many community facilities have recently been rebuilt. As a result, there are many examples of today's trends in best building practice. The new library, Central Fire Station, Educational Leadership and Support Center (Cedar Rapids Community School District), City Services Center, and the Ground Transportation Center are all examples of exceptional facilities. Cedar Rapids can highlight these facilities - through signage, tours, and other means - as examples of what the community would like to see replicated in the private sector.

Cedar Rapids Public Library Green Roof

INITIATIVES

97. Use sustainable practices for the maintenance, rehabilitation, and construction of public facilities prior to adoption of a green building program.

New public buildings should use sustainable design practices. While the city may not pursue LEED® certification, due to the cost, the principles of LEED® for Building Design and Construction can be a guide for building design. Examples of considerations for LEED® include:

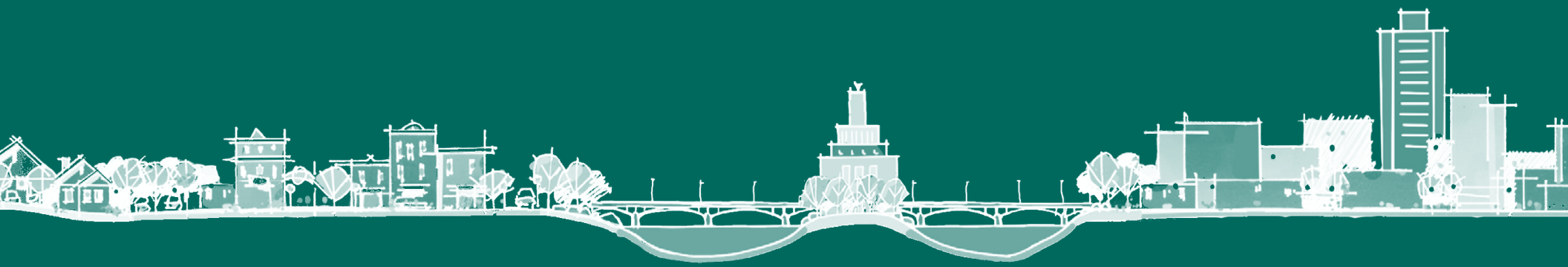
- Efficient Lighting and Light Pollution Reduction
- On-Site Rainwater Management
- Bicycle Facilities
- Water Use Reduction
- Energy Efficiency and Use of Renewable Energy Sources
- Recycling Facilities
- Indoor Air Quality
- Presence of Natural Light and Quality Views

When buildings are renovated or improved, these principles apply.

LEED®

Leadership in Energy & Environmental Design LEED®, an initiative of the United States Green Building Council (USGBC).

IMPLEMENTATION



IN MEMORY OF GARY KRANSE

1959 – 2014

Gary Kranse joined the City of Cedar Rapids in November 2013, as Director of Community Development and Planning. Co-workers and community members alike were immediately drawn to his positive attitude, friendly spirit, and generous nature.

A visionary and people-person, Gary dove whole-heartedly into spearheading the development of the city's new Comprehensive Plan – EnvisionCR. We owe much to his passion and commitment. His leadership set a precedent for strong community engagement which continues to inspire his staff to this day.

In his short time with us, Gary's tenacity and enthusiasm quickly united departments and helped form strong ties with the surrounding community. This collaborative spirit only served to enhance the depth of EnvisionCR's emerging themes and goals, shaped by those inspired to join the process. His leadership and foresight helped in crafting an inclusive and thoughtful plan shaped by as many participants as possible. We lost Gary far too early; his sudden passing in April of 2014 left a personal void that will be impossible to fill. But his work will continue; not in a binder on a shelf, but in a vision that can be found at the intersection of outreach and community participation. We are committed to seeing this plan used to the fullest, in all areas of City planning and development.

It is fitting that we open the next chapter of this plan – the implementation – with words we heard spoken by Gary many times.

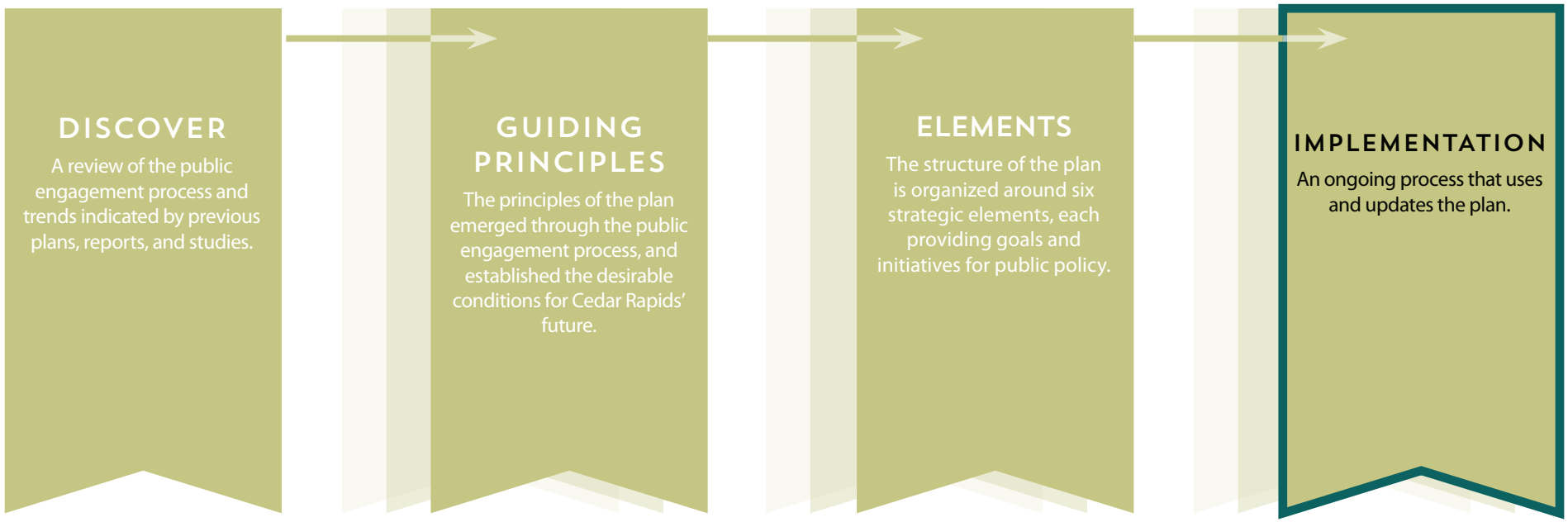
Let's pound it out.

STRUCTURE

THE ORGANIZATION OF THE PLAN

"The plan should be viewed as a dynamic changing document that is used actively by the city."

- Jennifer Pratt, Director of Community Development and Planning



DiscoverCR lays the conditions for future change in the community, forecasting a possible growth of 30,000 people between 2015 and 2035 to achieve a population over 160,000. This increase represents a demand for new housing and services within the city and on its fringe, more commercial services, and new jobs. In front of this growth are the city's **Guiding Principles**, which lay the groundwork of decision-making for the coming twenty years. EnvisionCR articulates the principles into goals and initiatives organized around six **Elements**, including StrengthenCR, GrowCR, GreenCR, ConnectCR, InvestCR, and ProtectCR. These six elements, with their narratives and maps, are the core of EnvisionCR.

This section focuses on **Initiatives** for implementation. These key areas include:

- **Roles**. This section summarizes the key players involved with achieving the goals of the plan.
- **Plan Update.** This section outlines a process for maintaining the plan and evaluating the EnvisionCR's progress in meeting its goals.
- **Goals and Initiatives**. This section summarizes the policies and actions proposed in EnvisionCR, and presents projected time frames for the implementation of these Initiatives.

ROLES

Responsibilities for the roles of decision-makers and staff are grounded in planning ethics established by the American Institute of Certified Planners.

The public, decision-makers, and staff must be concerned for the short- and long-range consequences of present actions on the public. EnvisionCR promotes excellence of design, while preserving the integrity of the natural and built environment.

Responsibilities: Elected/Appointed Officials

Decision-makers, along with staff, must be conscious of the rights of others. Decisions should expand choices and opportunities for all persons, including the disadvantaged, and promote racial and economic integration. Officials include the City Council and City Boards and Commissions.

Responsibilities: City Staff

City staff should continue to seek meaningful input from the public on the development of plans and programs. EnvisionCR is rooted in a public engagement process, and thereby the goals and initiatives represent the aspirations of the community. Recommendations from staff to decision-makers should provide accurate information on planning issues to all affected persons and to governmental decision makers.

Plan Evaluation and Review

The city should perform an evaluation and review of the Initiatives and at least two Elements of EnvisionCR annually. The review group should consist of department managers who will obtain feedback from a variety of sources including the City Planning Commission and other appropriate organizations.

Staff will also obtain input from youth. Youth can help Cedar Rapids to understand and respond to the needs and wants of the next generation. Through this input process, the city can:

- Provide students with a voice in city matters
- Provide students with the opportunity to see how cities prioritize and carry out projects
- Gain input on the needs of youth

City staff will provide City Council with proposed updates identified through the evaluation process. This updated information can then be utilized during the city's planning and budgeting process as described in the Plan Update section.

PLAN UPDATE

The scope of EnvisionCR is both ambitious and long-term. Each of the many actions and policies described in the plan can contribute to the betterment of the city. Yet, presenting a twenty-year development program at one time can appear daunting. So, the evaluation and review process, described in the previous section, will be done annually. This will provide flexibility to account for changing conditions.

Cedar Rapids should use the plan to define policies, actions, and capital investments for the upcoming year. This effort should be coordinated with Cedar Rapids' existing capital improvement planning and budgeting process, although many of the plan's recommendations are not capital items. This annual process should be completed before the beginning of each budget year.

GOALS AND INITIATIVES

The tables following in this chapter present a concise summary of the **Goals** and **Initiatives** of EnvisionCR. The Goals and Initiatives in Tables 1 - 6 are organized according to their Element.

Type

These Initiatives include various types of efforts:

- **Policy**, which indicate administratve or regulatory actions that support implementation of the plan.
- **Action**, which include specific efforts by the city.
- **Capital**, which include projects that require city funding.

TABLE 1: Plan Evaluation and Review Schedule

Section	4-Year Strategic Program			
	2016	2017	2018	2019
DiscoverCR (Population Change)				Review
StrengthenCR	Update			Review
InvestCR	Update			Review
GrowCR		Update		Review
ConnectCR		Update		Review
GreenCR			Update	Review
ProtectCR			Update	Review

Schedule

A schedule for implementing the Initiatives is shown in the tables. This schedule indicates when the Initiative would begin and is advisory in nature. Updating of the schedule will be part of the Plan Evaluation and Review process. Projects indicated within the first year are policy/action/capital considered to be high priority Initiatives and can be catalysts for other Initiatives.

Lead

Lead represents the leader for the **Initiative**, which is the city but may include coordination with public, private, or non-profit entities. Other city departments that may contribute to accomplishing these Initiatives are listed here as Partners.

References

References direct the user of this plan to review pages in this plan.

AMENDING THE PLAN

To keep EnvisionCR up to date it will be necessary to make amendments to the plan. However, as the foundational document that guides development, most amendments to EnvisionCR should happen annually and through a comprehensive effort to address changes to the community overtime.

- **Future Land Use Map Amendments.** The Future Land Use Map plays a key role in guiding the recommendations and decisions of the City Planning Commission, Board of Adjustment and the City Council. Amendments to the Future Land Use Map may be necessary to accommodate new development which meets the goals of the city but are not permitted by the adopted Future Land Use Map. Amendments should be carefully considered by the City Planning Commission and the City Council and should be based on findings that they support the Guiding Principles and Goals of EnvisionCR. The process to amend the Future Land Use Map is described in the city's Zoning Ordinance but should generally involve review by City Planning Commission and then a hearing and resolution by City Council.

  Public notification should be provided in a manner similar to rezoning applications. Amendments may be initiated by the city as a result of planning initiatives or a review of current development patterns. Amendments to the Future Land Use Map may also be required as part of proposed development.

- **Amendments to Initiatives.** Amendments to the Initiatives table shall be made by resolution of City Council after review and recommendation by the City Planning Commission as part of the Annual Evaluation Process.

- **Text Amendments.** Project-specific text amendments, such as proposed changes to the Guiding Principles, Goals, Elements and Land Use Typology Areas, are discouraged unless done as part of a comprehensive review process.

- **Other Plan Amendments.** Map and text amendments to EnvisionCR may be necessary as part of a city-led planning effort, such as the Neighborhood Action Plans, Master Greenway Plan, Transportation Plan and Comprehensive Trails Plan. If amendments to EnvisionCR are necessary, they shall happen concurrently with the adoption of the plan or plan update.

- **Administrative Changes.** Changes to the document to fix typos or update hyperlinks should be documented and changed administratively by staff but do not require action by City Council.

STRENGTHENCR		Schedule	Lead	Status	Comments
Support existing and new neighborhood associations through the development of Neighborhood Action Plans.					
1.	Track progress of Neighborhood Certification Program work plan projects.	2-3 Years	Lead: Community Development	On-schedule	Lead changed from City Manager's Office.
2.	Provide the neighborhood service delivery program to existing and newly formed neighborhood associations.	Within 1 Year	Lead: Community Development	Started	Lead changed from City Manager's Office. This is an ongoing activity.
3.	Work with existing and new neighborhood associations to develop Neighborhood Action Plans.	2-3 Years	Lead: Community Development Partners: Police, Public Works,Utilities, Parks & Recreation	Started	Northwest Neighborhood Action Plan to be completed by October 2016.
Improve the quality and identity of neighborhoods and key corridors.					
4.	Develop a Planning Program to identify areas in need of more specific planning initiatives, such as Neighborhood Action & Corridor/Area Action Plans; and Study areas. Future planning initiatives should engage a variety of stakeholders, analyze transportation needs and recommend improvements that promote a multi-modal transportation system, and identify utility needs and recommend improvements.	2-3 Years	Lead: Community Development Partners: Development Services, Utilities, Parks & Rec, Public Works, Police, Fire	Started	Under review.
5.	Comprehensive update to Chapter 32 (Zoning) of the city's municipal code to ensure consistency with EnvisionCR. As part of this update explore modifications to design, parking, use standards, and methods to address light pollution, and development regulations within the Environmental Conservation Overlay. Also, explore the promotion of mixed-use developments, the allowance of density bonuses for affordable housing, second units, and joint live/work units in certain zoning districts. This update will also include an analysis and update of the city's zoning map to ensure consistency with the Future Land Use Map.	Within 1 Year	Lead: Community Development, Development Services Partners: Utilities, Parks & Rec, Public Works	Started	Change Timeline to "Within 1 Year". RFP issued for consultant services. To be completed by January 2018.
6.	Modify Chapter 31 (Subdivisions) of the city's municipal code to ensure consistency with EnvisionCR and the city's Complete Streets Policy. Also, explore the adoption of conservation subdivision regulations.	2-3 Years	Lead: Community Development, Development Services Partners: Public Works	On-schedule	Will be started during or after completion of the Chapter 32 update.
7.	Create a green building program that facilitates projects that incorporate green building and low-impact development features.	4-5 Years	Lead: Community Development Partners: Public Works, Building Services	On-schedule	None at this time.
8.	Amend the requirements for urban agricultural to allow for more flexibility, such as gardens in the right-of-way and front yards; allow bee keeping in certain zoning districts.	Within 1 Year	Lead: Community Development	Started	Change Timeline to "Within 1 Year". RFP issued for consultant services. To be completed by January 2018.

STRENGTHENCR		Schedule	Lead	Status	Comments
Adopt policies that create choices in housing types and prices throughout the city.					
9.	Analyze the zoning and subdivision codes to ensure consistency with federal and state fair housing laws. The analysis will examine: 1. The definition of "Family" to ensure consistency with state and federal fair housing laws 2. Policies and procedures for persons with disabilities to request reasonable accommodation from land use and zoning requirements, when those requirements are a barrier to equal housing access 3. Any other policies that are inconsistent with state and federal fair housing laws	Within 1 Year	Lead: Community Development Partners: Civil Rights	Started	Change Timeline to "Within 1 Year". RFP issued for consultant services. Analysis of zoning code to be completed by January 2018.
Create a city that is affordable and accessible to all members of the community.					
10.	Identify and track progress towards addressing recommendations related to for-sale housing, market rate rental, affordable rental, and senior housing from the Comprehensive Housing Needs Analysis (Adopted October, 2014), or any future updates to the study.	Within 1 Year	Lead: Community Development	Started	Prior year study data used during development of new studies in order to track progress.
11.	Update housing study regularly, to be determined by volume of housing production, to measure absorption and continued demand (every 1-5 years).	4-5 Years	Lead: Community Development	Completed	Maxfield 2015 Study completed in December of 2015.
12.	Identify resources to create housing programs, such as an infill single-family new construction program and targeted neighborhood rehabilitation, to support a range of housing types and price points.	2-3 Years	Lead: Community Development	On-schedule	None at this time.

GrowCR Goals & Initiatives - February 23, 2016 Update

GROWCR		Schedule	Lead	Status	Comments
Encourage mixed-use and infill development.					
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.	Within 1 Year	Lead: Community Development	Started	Change Timeline to "Within 1 Year". RFP issued for consultant services. To be completed by January 2018.
Manage growth.					
14.	Coordinate with adjacent jurisdictions to preserve conservation areas identified in the Highway 100 Plan.	4-5 Years	Lead: Community Development Partners: Utilities, Public Works, Parks & Recreation	On-schedule	None at this time.
15.	Work with adjacent jurisdictions to identify conservation areas in future growth areas.	2-3 Years	Lead: Community Development Partners: Parks & Recreation	On-schedule	None at this time.
16.	Study serviceability of infrastructure to growth.	Within 1 Year	Lead: Utilities, Public Works	Started	Utilities performing a water pressure analysis, involved with Hwy 30 Area Study regarding impacts of growth on service. Public Works involved with Hwy 30 Area Study and Hwy 100 Corridor Management Plan regarding sanitary sewer service.
Connect growing areas to existing neighborhoods.					
17.	Identify ways to promote connectivity and accessibility as part of the comprehensive update to the zoning code.	Within 1 Year	Lead: Community Development	Started	Change Timeline to "Within 1 Year". RFP issued for consultant services. To be completed by January 2018.
Communicate and collaborate with regional partners.					
18.	Develop an annexation plan that incorporates infrastructure and service issues and costs, geographic features, environmental and other land use constraints, and market needs.	2-3 Years	Lead: Community Development Partners: Development Services, Public Works, Utilities	On-schedule	None at this time.
19.	Continue to support regional planning efforts through coordination with school districts, other local jurisdictions, and the Corridor Metropolitan Planning Organization (MPO).	Within 1 Year	Lead: Community Development Partners: Public Works, Utilities, Parks & Recreation, City Manager's Office	Started	Participated in development of Connections 2040 and the Hwy 30 Area Study.

GREENCR		Schedule	Lead	Status	Comments
Be stewards for the environment, promoting economic and social growth while restoring the relationship between the city and the natural environment.					
20.	Coordinate with adjacent jurisdictions to identify environmentally sensitive areas in need of protection such as wetlands, habitats, and other areas of biological diversity for inclusion in the Environmental Conservation Overlay.	2-3 Years	Lead: Community Development Partners: Parks & Recreation, Utilities, Public Works	On-schedule	None at this time.
21.	Create a green streets policy that encourages future development and repairs to improve the permeability of the paving system and/or buffering of run-off, as well as a stormwater best management practices cost-share program that elicits community involvement, and thereby advancing "green infrastructure".	2-3 Years	Lead: Community Development Partners: Public Works	On-schedule	None at this time.
22.	Prepare a Strategic Plan for iGreenCR initiatives that includes staffing, resources, and priority programs and policies.	Within 1 Year	Lead: Utilities Partners: Fleet, CR Transit, Facilities, Building Services, Parks & Rec, Community Development, City Manager's Office	Started	Sustainability Coordinator hired.
23.	Explore the development of a water conservation ordinance.	2-3 Years	Lead: Utilities Partners: Community Development	On-schedule	Drought conservation plan already exists. Note the conflict between conservation and revenue.
24.	Build customer capacity to respond to drought conditions through which may include a rebate program, educational campaign, and future updates to the municipal code as part of the green building program.	2-3 Years	Lead: Utilities Partners: Building Services, Facilities, Community Development	Started	Received REAP grant for rebate program for low flow toilets. Maintained educational relationship with lawn care professionals and Kirkwood Community College. Sought feedback from stakeholders on water contingency plan.
Have the best parks, recreation, and trails system in the region.					
25.	Update Parks and Recreation Master Plan to include a needs analysis, gap analysis, evaluation of existing facilities and programs, asset management strategies, and implementation actions.	Beyond 5 Years	Lead: Parks and Recreation	On-schedule	To be done every 10 years.
26.	Develop a city policy to require developers of large residential projects to develop new public parks.	2-3 Years	Lead: Parks and Recreation Partners: Public Works, Utilities, Community Development	On-schedule	None at this time.
27.	Develop Site Master Plans, prior to making improvements, for each of the following signature parks: Noelridge Park, Bever Park, Ellis Park, Jones Park, and Cherry Hill Park.	2-3 Years	Lead: Parks and Recreation	On-schedule	None at this time.
28.	Convert select areas of park turfgrass to native prairie or woodland plantings to create wildlife habitat and reduce long-term maintenance costs.	2-3 Years	Lead: Parks and Recreation	Started	Locations identified.
29.	Track progress in identifying a funding strategy, ensuring CIP includes maintenance costs, and ensure coordination between CIP projects related to the Cedar Rapids Comprehensive Trails Plan.	Within 1 Year	Lead: Public Works Partners: Parks and Recreation, Community Development	Started	None at this time.

GREENCR		Schedule	Lead	Status	Comments
Have the best parks, recreation, and trails system in the region (...continued).					
30.	Develop a land acquisition strategy for new parks and expansion of existing parks.	4-5 Years	Lead: Parks and Recreation Partners: Public Works, Utilities, Community Development	On-schedule	None at this time.
31.	Identify ways to incorporate parks and open space into new subdivisions as part of the update to the subdivision code.	2-3 Years	Lead: Community Development	On-schedule	Change schedule to align with Initiative #6 (Modify Chapter 31) from "Within 1 Year" to "2-3 Years".
32.	Complete infrastructure removal and track progress in completing short term projects of the Cedar Rapids Greenway Parks Plan.	Within 1 Year	Lead: Parks and Recreation Partners: Utilities, Public Works	Started	Infrastructure removal using CDBG grant completed in July of 2015. Potential FY17 budget ask for Roundhouse and Skate Park design.
Lead in energy conservation and innovation.					
33.	Prepare a municipal Climate Action Plan that builds off of the Energy Management Plan and addresses emissions from land use, transportation, street lights, water consumption, waste generation, and building energy: 1. Develop municipal greenhouse gas emissions inventory 2. Identify a greenhouse gas emissions reduction target 3. Identify measures for reducing emissions to reach the identified target and outline an approach for implementation and financing	2-3 Years	Lead: Community Development Partner: Public Works, Utilities	On-schedule	None at this time.
34.	Prepare a community-wide Climate Action Plan that builds off of the Energy Management Plan and addresses emissions from land use, transportation, street lights, water consumption, waste generation, and building energy: 1. Develop a community-wide greenhouse gas emissions inventory 2. Identify a greenhouse gas emissions reduction target 3. Identify measures for reducing emissions to reach the identified target and outline an approach for implementation and financing	4-5 Years	Lead: Community Development Partner: Public Works, Utilities	On-schedule	None at this time.

CONNECTCR		Schedule	Lead	Status	Comments
Provide choices for all transportation users: inter- and intra-city.					
35.	Update the city's Comprehensive Trails Plan to: 1. Review existing and planned network 2. Identify completed projects 3. Confirm planned projects 4. Evaluate existing off- and on-street facilities	2-3 Years	Lead: Public Works Partners: Community Development, Parks & Recreation	On-schedule	Update to the network map approved by City Council on May 26, 2015.
36.	Identify and track construction of High Priority Sidewalk Segments per the city's Sidewalk Master Plan.	Within 1 Year	Lead: Public Works Partners: Community Development	Started	When possible segments are constructed in conjunction with the Paving for Progress Program.
37.	Continue to evaluate transit ridership and serviceability to identify opportunities for improvement.	Within 1 Year	Lead: CR Transit Partners: Community Development	Started	Overall ridership is up 9%. Have increased frequency of routes between downtown and Lindale Mall.
38.	Perform a comprehensive transit study that includes an analysis of a mini-hub system at Lindale Mall and Westdale.	4-5 Years	Lead: CR Transit Partners: Community Development	Started	To be performed by the Corridor MPO and expected to be completed by Parsons Brinckerhof by July of 2016.
Build a complete network of connected streets.					
39.	Prepare functional improvements for intersections and corridors experiencing low level of service, high crashes, and poor access across all modes.	Within 1 Year	Lead: Public Works Partners: Utilities, Police	Started	These characteristics are the focus of improvements made with the Paving for Progress Program and implementation of the Complete Streets Policy. City-wide analysis of crash information to be completed by mid-2016. Traffic Operations Center to be completed by mid-2016.
40.	Complete the Cedar Rapids portion of Tower Terrace Road, and support completion of this multi-jurisdictional project.	Beyond 5 Years	Lead: Public Works Partners: Utilities	On-schedule	None at this time.
41.	Continue to support the Highway 100 Project.	Within 1 Year	Lead: Public Works Partners: Utilities, Community Development	Started	City Staff are part of the Project Management Team.
42.	Prepare a one-way to two-way street conversion plan including implementation schedule.	Within 1 Year	Lead: Public Works Partners: Community Development, Police	Started	Ongoing for plan design and funding options. 2nd and 3rd Avenues SE completed to downtown. Discussions with UP Railroad started.
43.	Develop standards for street connectivity as part of the update of Chapter 31 (Subdivisions) of the Municipal Code.	2-3 Years	Lead: Community Development, Public Works Partners: Development Services	On-schedule	Lead change from Development Services to Community Development and Public Works.
Establish a network of complete streets.					
44.	Identify and track Complete Streets elements incorporated into city utility and infrastructure projects.	Within 1 Year	Lead: Public Works Partners: Community Development, Utilities	Started	Complete Streets improvements are considered during the development of Paving for Progress projects. A Complete Streets Checklist is under development to help track and implement improvements.
45.	Sign and mark streets for bicyclists per the Complete Streets Policy.	Within 1 Year	Lead: Public Works	Started	Included as part of Paving for Progress and other CIP projects.
46.	Retrofit high priority corridors with sidewalks and pedestrian amenities ensuring ADA compliance.	Within 1 Year	Lead: Public Works	Started	Consultant under contract to identify and begin design of curb ramps to satisfy Department of Justice requirements. Segments are being constructed in conjunction with the Paving for Progress Program.

CONNECTCR		Schedule	Lead	Status	Comments
Improve the function and appearance of our key corridors.					
47.	Prepare a corridor action plan for 3rd Street SE.	2-3 Years	Lead: Community Development Partners: Public Works, Utilities, Parks & Recreation	On-schedule	None at this time.
48.	Prepare a corridor action plan for 1st Avenue Corridor and Williams Boulevard SW.	2-3 Years	Lead: Community Development Partners: Public Works, Utilities, Parks & Recreation	On-schedule	None at this time.
49.	Prepare a corridor action plan for 6th Street SW.	Beyond 5 Years	Lead: Community Development Partners: Public Works, Utilities, Parks & Recreation	On-schedule	None at this time.
50.	Prepare a corridor action plan for 16th Avenue SW.	Beyond 5 Years	Lead: Community Development Partners: Public Works, Utilities, Parks & Recreation	On-schedule	None at this time.
51.	Update corridor action plan for Collins Road NE with focus on pedestrians and streetscapes.	Within 1 Year	Lead: Community Development Partners: Public Works, Utilities, Parks & Recreation	Started	Streetscapes plan under development by HR Green as part of Hwy. 100 city contract. Overall plan to be completed by December 2016.
52.	Prepare a corridor action plan for Mt. Vernon Road SE.	Within 1 Year	Lead: Community Development Partners: Public Works, Utilities, Parks & Recreation	Started	RFP issued on December 1st for consultant services and proposals are due January 11, 2016. To be completed by October 2016.
53.	Prepare a corridor action plan for Center Point Road NE.	Beyond 5 Years	Lead: Community Development Partners: Public Works, Utilities, Parks & Recreation	On-schedule	None at this time.
54.	Prepare a corridor action plan for Edgewood Road.	Beyond 5 Years	Lead: Community Development Partners: Public Works, Utilities, Parks & Recreation	On-schedule	None at this time.
55.	Establish Master Gateway Plan.	2-3 Years	Lead: Community Development Partners: Public Works, Parks & Recreation	On-schedule	None at this time.
56.	Establish Wayfinding Program.	2-3 Years	Lead: Community Development Partners: Public Works	On-schedule	None at this time.
Support the development of an effective, regional, multi-modal transportation system.					
57.	Support the update of the Corridor MPO Long Range Transportation Plan.	Beyond 5 Years	Lead: Community Development Partners: Public Works	On-schedule	City Staff participated in the development of the 2015 update and will continue to do so.
58.	Adopt the Corridor MPO Long Range Transportation Plan.	2-3 Years	Lead: Public Works Partners: Community Development	On-schedule	None at this time.

CONNECTCR		Schedule	Lead	Status	Comments
59.	Develop the city's Transportation Plan consistent with the goals of the Corridor MPO's Long Range Transportation Plan.	2-3 Years	Lead: Community Development Partners: Public Works, CR Transit, Utilities	On-schedule	None at this time.
60.	Develop an asset management policy and procedure that clarifies the accountability for the management of each of the assets under the stewardship of Public Works.	2-3 Years	Lead: Public Works Partners: City Manager's Office	On-schedule	None at this time.

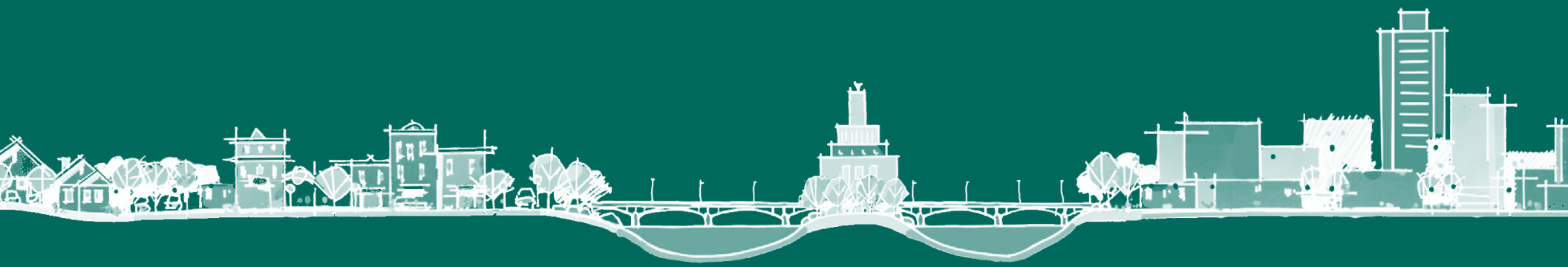
INVESTCR		Schedule	Lead	Status	Comments
Expand economic development efforts to support business and workforce growth, market Cedar Rapids, and engage regional partners.					
61.	Develop a retail and services recruitment strategy.	Within 1 Year	Lead: City Manager's Office	Started	Lead change from Development Services to City Manager's Office. Contract with Buxton to identify likely national retail matches. Working with realtors to share city information with national retailers. Using a system to identify market areas for new businesses.
62.	Promote the city's unused fiber optic capacity to attract technology companies.	4-5 Years	Lead: City Manager's Office Partners: Community Development	On-schedule	Lead change from Development Services to City Manager's Office.
63.	Formalize economic development within the city's organizational structure.	2-3 Years	Lead: City Manager's Office	Completed	Lead change from Development Services to City Manager's Office. Economic Development Liason moved from Development Services to the City Manager's Office. Iowa State University-Cedar Rapids Liaison on board. Economic Development Specialist hired.
64.	Create a business expansion and retention program.	2-3 Years	Lead: City Manager's Office Partners: Community Development	Started	Lead change from Development Services to City Manager's Office. Anticipated completion date of 2016.
65.	Create an economic development brand (marketing and communications).	Within 1 Year	Lead: City Manager's Office	Started	Lead change from Development Services to City Manager's Office. Scope of Work complete and beginning bid process.
Cultivate a skilled workforce by providing cutting-edge training and recruiting talented workers.					
66.	Promote workforce development through city economic development programs and a variety of initiatives focused on enhancing quality of life to attract and retain a skilled workforce.	Within 1 Year	Lead: City Manager's Office Partners: Community Development	Started	Lead change from Development Services to City Manager's Office.
67.	Develop and implement a citywide Wi-Fi network to support entrepreneurship, job skills, educational opportunities, and innovation.	Beyond 5 Years	Lead: Information Technology Partners: Community Development, Development Services	Started	Phase 1 (downtown) completed.
Reinvest in the city's business corridors and districts.					
68.	Promote southwest industrial/airport development.	2-3 Years	Lead: City Manager's Office Partners: Eastern Iowa Airport, Community Development	Started	Lead change from Development Services to City Manager's Office. Held property owner discussions. Super Park (596 acres) site certification received from the state.
69.	Promote core districts through façade program and other improvements.	Within 1 Year	Lead: City Manager's Office Partners: Community Development	Started	Lead change from Development Services to City Manager's Office. Downtown in place and MedQ being contemplated.

INVESTCR		Schedule	Lead	Status	Comments
Grow a sustainable, diverse economy by supporting existing businesses, fostering entrepreneurism, and targeting industry-specific growth.					
70.	Establish guidelines for working with regional partners through Memorandums of Agreement (MOA).	Within 1 Year	Lead: City Manager's Office Partners: Community Development	Completed	Lead change from Development Services to City Manager's Office. In place with Diversity Focus, Economic Development Center (EDC), Iowa Start Up Accelerator, Czech Village Main Street, Small Business Development Center, Cedar Rapids Area Metro Economic Alliance.
71.	Form a regional alliance for marketing efforts.	2-3 Years	Lead: City Manager's Office	On-schedule	Lead change from Development Services to City Manager's Office.
72.	Create a business advisory board.	2-3 Years	Lead: City Manager's Office	On-schedule	Lead change from Development Services to City Manager's Office.

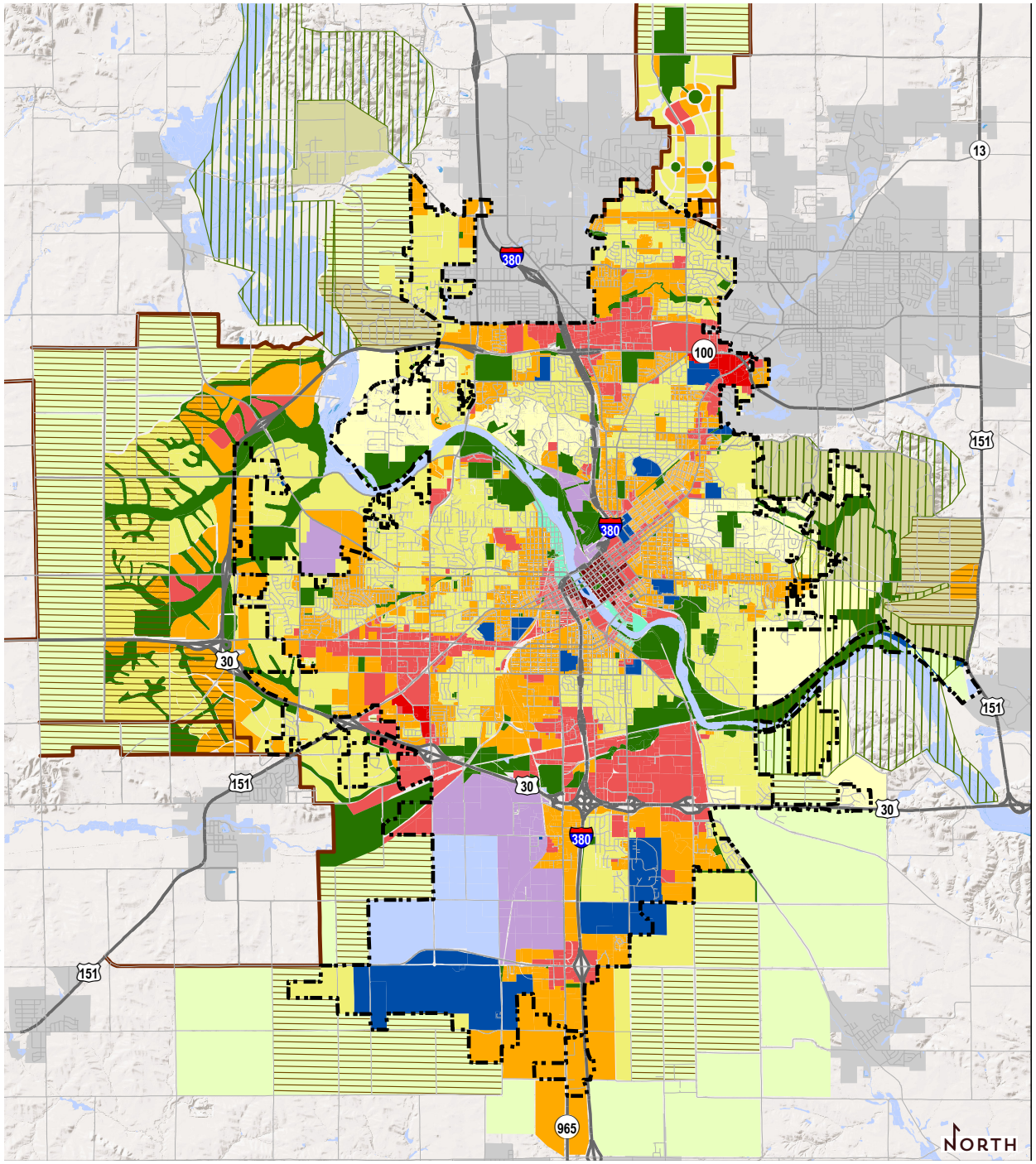
PROTECTCR		Schedule	Lead	Status	Comments
Protect Cedar Rapids from flooding and other hazards.					
73.	Complete community outreach for the Flood Control Project.	Within 1 Year	Lead: Public Works Partners: Community Development, Utilities, Parks & Recreation	Completed	Three open houses were held, with the last one on March 31, 2015.
74.	Adopt alignment for the Flood Control Project.	Within 1 Year	Lead: Public Works Partners: Community Development, Utilities, Parks & Recreation	Completed	City Council adopted on June 23, 2015.
75.	Develop a property acquisition program for the Flood Control Project.	Within 1 Year	Lead: Public Works Partners: Community Development, Utilities, Parks & Recreation	Completed	Approved as part of the Cedar River Flood Control System Master Plan on June 23, 2015.
76.	Coordinate the use of Flood Mitigation Program funds for the Flood Control Project.	Within 1 Year	Lead: Public Works Partners: Community Development, Finance	Started	This will be ongoing.
77.	Amend the Future Land Use Map to reflect planned land use based on the adopted flood control alignment.	Within 1 Year	Lead: Community Development Partners: Development Services	Started	To be completed by February 2016.
78.	Identify and track completion of Priority One Level Cedar Rapids Mitigation Strategies from the Linn County Multi-Jurisdictional Hazard Mitigation Plan.	Beyond 5 Years	Lead: As identified in the plan.	On-schedule	None at this time.
79.	Prepare Watershed Management Plans that provide improved aquatic habitats, recreational opportunities, increased public access to natural resources, while maintaining necessary levels of flood control through coordination with appropriate stakeholders, including state and federal agencies, and other local jurisdictions.	2-3 Years	Lead: Public Works Partners: Utilities, Parks & Recreation	Started	The City is member of the Indian Creek Watershed Authority and will be part of the Middle Cedar River Watershed Authority that is under development.
80.	Develop a Wastewater Collection Master Plan.	2-3 Years	Lead: Public Works Partners: Utilities	Started	Consultant under contract to develop the plan, which is anticpated to be completed by June of 2016. Plan will then be updated annually.
81.	Develop a Watershed Stormwater Drainage Master Plan.	2-3 Years	Lead: Public Works	Started	Consultant under contract to develop the plan, which is anticpated to be completed by June of 2016. Plan will then be updated annually.
Manage growth and development to balance costs and serviceability to neighborhoods.					
82.	Prepare a capital improvement plan that addresses both the needs of existing core neighborhoods and the future infrastructure needs in areas where growth is planned.	2-3 Years	Lead: Utilities, Public Works	Started	Utility Department continues to perform this task.
83.	Enhance and expand the Capital Improvement Projects Development and Management Handbook, and include a publicly accessible digital copy of this on the Department's website.	Within 1 Year	Lead: Public Works	Started	Ongoing as part of implementation of the "Operations Review of the Public Works Department" report recommendations.

PROTECTCR		Schedule	Lead	Status	Comments
Maintain and provide quality services to the community.					
84.	Refine existing stormwater management regulations to enhance clarity and adaptability.	2-3 Years	Lead: Public Works	Started	Some new policies under investigation/development: Top Layer Rule and ERU Stormwater Utility Rate revision.
85.	Replace outdated facilities (Ambroz Recreation Center, Bender Pool, Parks Maintenance, Twin Pines Clubhouse, Ellis Clubhouse, and Gardner Clubhouse) with modern and sustainable facilities.	4-5 Years	Lead: Parks & Recreation	Started	Planning financially.
86.	Adopt standards and practices across the department to maximize employee capabilities per the Cedar Rapids Fire Department Strategic Plan.	Within 1 Year	Lead: Fire	Started	On-track.
87.	Evaluate high risk structures and target hazards for increased emergency response needs, fire prevention activities, fire protection systems and equipment per adopted codes, standards, regulations, and policies per the Cedar Rapids Fire Department Strategic Plan.	Within 1 Year	Lead: Fire	Started	On-track.
88.	Identify, evaluate, and acquire technology, equipment, and facilities to improve infrastructure and service delivery per the Fire Department Strategic Plan.	Within 1 Year	Lead: Fire	Started	On-track.
89.	Seek opportunities to create new and strengthen current partnerships with public and private organizations to enhance the department's capabilities, education, and response through collaboration per the Cedar Rapids Fire Department Strategic Plan.	Within 1 Year	Lead: Fire	Started	On-track.
90.	Analyze and define its organizational structure to reflect best practices in areas of staffing, operations, and equipment per the Cedar Rapids Fire Department Strategic Plan.	Within 1 Year	Lead: Fire	Started	On-track.
91.	Obtain Center for Public Safety Excellence (CPSE) certification.	Within 1 Year	Lead: Fire	Started	85% - 90% complete. Will be 100% complete by early 2016.
92.	Obtain the Commission on Accreditation for Law Enforcement Agencies (CALEA) certification per the Cedar Rapids Police Department's Strategic Plan.	2-3 Years	Lead: Police	Started	Applying and purchasing the certification.
93.	Conduct targeted traffic enforcement to increase traffic safety per the Cedar Rapids Police Department's Strategic Plan.	Within 1 Year	Lead: Police	Started	Compared to last year: no change in fatalities, PDO up, OWI up, non-investigative up.
94.	Track progress towards increasing the solve rate of crimes per the Cedar Rapids Police Department's Strategic Plan.	Within 1 Year	Lead: Police	Started	Compared to last year: arrests down, warrants issued up, 89 guns confiscated since January, 10 arrests by Safe Streets Task Force (federal charges).
95.	Track progress of Rabies and Microchip clinics per the Cedar Rapids Police Department's Strategic Plan.	Within 1 Year	Lead: Police	Completed	4 microchip and rabies vaccination clinics held (214 vaccinations and 65 microchips).
96.	Improve and enforce department policies and directives per the Cedar Rapids Police Department's Strategic Plan.	Within 1 Year	Lead: Police	Started	97% complete. Will be 100% complete by January 2016.
Demonstrate best practices in building construction.					
97.	Use sustainable practices for the maintenance, rehabilitation, and construction of public facilities prior to adoption of a green building program.	2-3 Years	Lead: City Manager's Office, Finance	On-schedule	None at this time.

APPENDIX



GROWCR - MAP 1: Future Land Use Map



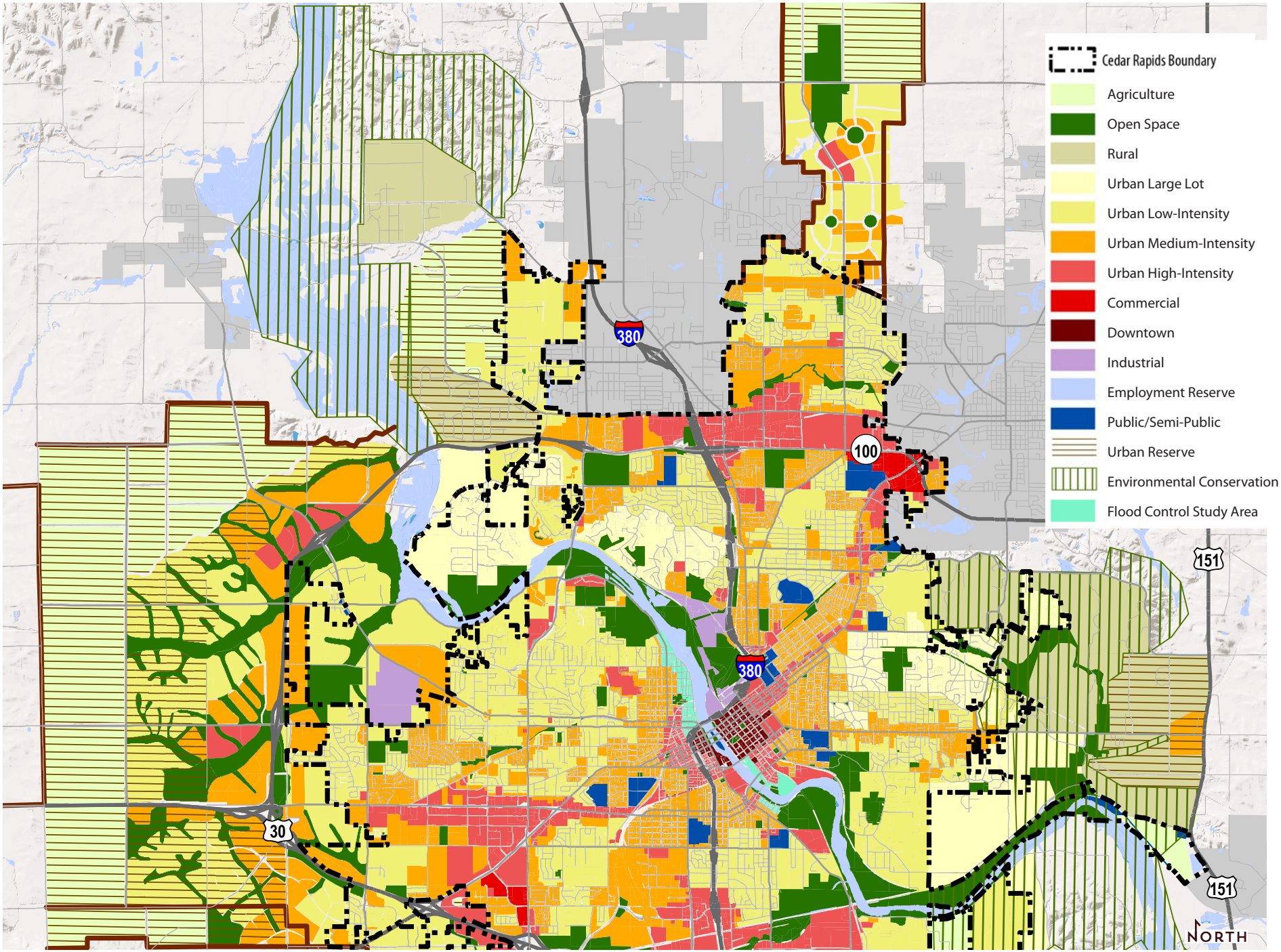
SOURCE: CITY OF CEDAR RAPIDS GIS, RDG PLANNING & DESIGN (JANUARY 2015)

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

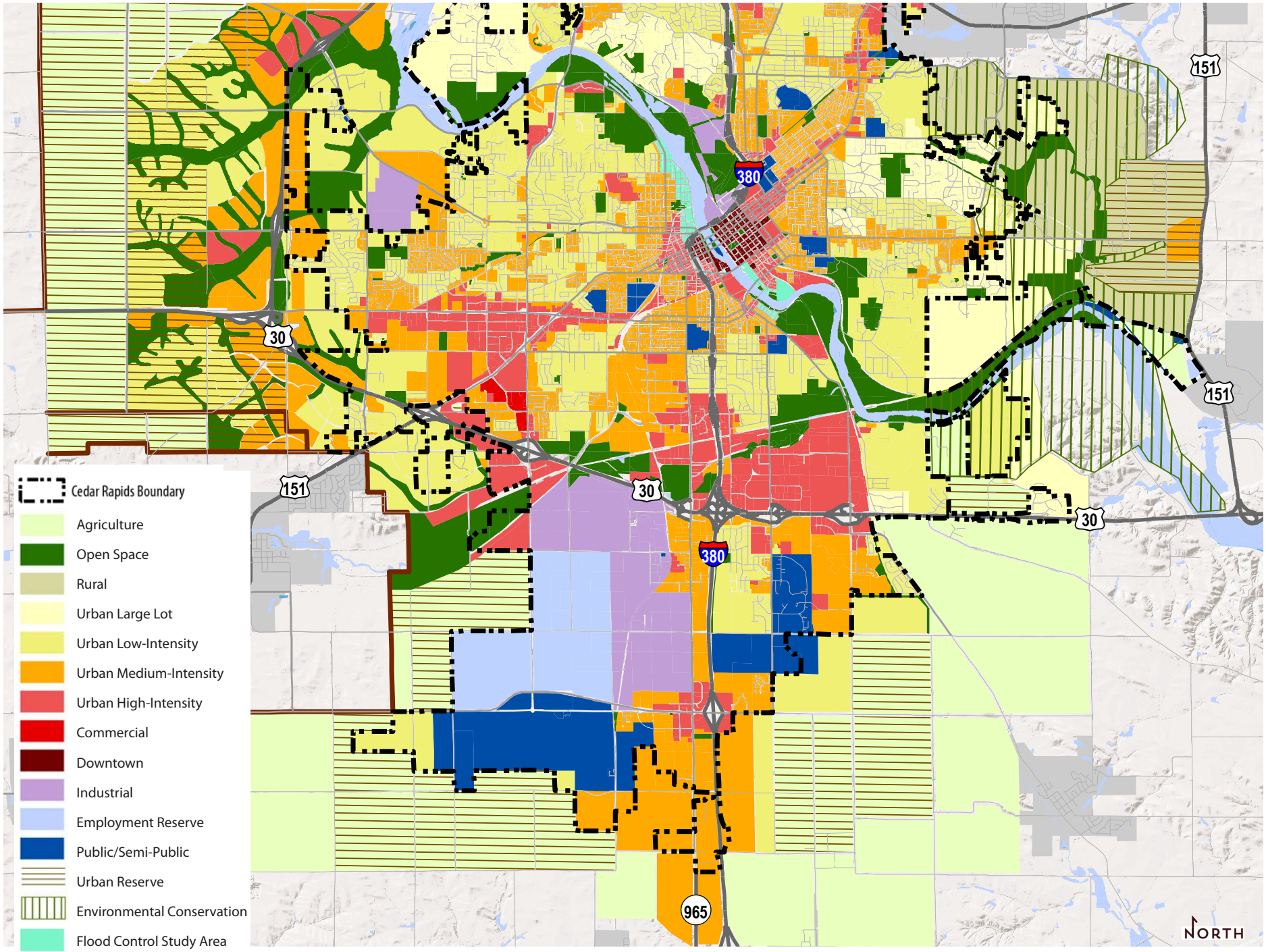
- Agriculture
- Open Space
- Rural
- Urban Large Lot
- Urban Low-Intensity
- Urban Medium-Intensity
- Urban High-Intensity
- Commercial
- Downtown
- Industrial
- Employment Reserve
- Public/Semi-Public
- Urban Reserve
- Environmental Conservation
- Flood Control Study Area

GROWCR - MAP 1: Future Land Use Map - North and Central



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

GROWCR - MAP 2: Future Land Use Map - South and Central



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

PROTECTCR - TABLE 1: Hazards Addressed by Cedar Rapids Operations (Table 10 of Linn County Multi-Jurisdictional Hazard Mitigation Plan)

Hazard	Justification
Infrastructure Failure	• Public Works regularly inspects, maintains, and improves infrastructure. For submerged infrastructure like the 5 in 1 Dam, diver inspections are completed regularly. • The city enforces buildings codes, and the fire and police departments are trained to respond to structural failure or fire. The Eastern Iowa Airport, which is owned by the city, has fire suppression equipment specific to aircraft and trained personnel. • In addition, the majority of the city's critical facilities have backup power generation.
Hazardous Materials Incident	• City employees are trained to properly handle hazardous materials, and the city maintains safety plans. • The fire and police departments are trained to immediately respond to hazard material incidents, and the Cedar Rapids Fire Department includes the hazardous materials response team for the area. In addition, Tier II hazard material listings are maintained for the area.
Terrorism	The fire and police departments are trained to response to terrorist events and complete training at local institutions such as schools.
Levee and Dam Failure	Public Works regularly inspects, maintains, and improves infrastructure. For submerged infrastructure like the 5 in 1 Dam, diver inspections are completed regularly. Flood protection failure may become a higher priority after the city constructs a comprehensive flood protection system.
Human Disease	The city maintains a clean secure water supply, wastewater treatment, and coordinates with Linn County Public Health.
Animal, Plant, Crop Disease	The city maintains vegetation in public areas. Due to the urban nature of the city, the risk of animal and crop disease directly impacting the city is minimal.
Earthquake	The risk of an earthquake severe enough to cause damage occurring in the area is minimal. Buildings codes are enforced and increase the likelihood structures can withstand a minor event.
Grass and Wildland Fire	The city maintains vegetation in public areas, and the fire and police departments are trained to respond to grass and wildland fire events.
Sinkholes	Geological hazards are mitigated in the infrastructure design and construction process.
Landslide	Geological hazards are mitigated in the infrastructure design and construction process.
Expansive Soils	Geological hazards are mitigated in the infrastructure design and construction process.

SOURCE: LINN COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN, JUNE 2014

PROTECTCR - TABLE 2A: Cedar Rapids Hazard Mitigation STRATEGY (Table 11 of Linn County Multi-Jurisdictional Hazard Mitigation Plan)

Proposed Mitigation Action	Hazard(s) Addressed	Goal(s) Addressed	Inclusion in Previous Plan	Notes
Install flood warning system on Indian Creek	Flood	1, 2, 3	X	Coordinating with the Army Corps of Engineers, adjacent cities, and the East Central Iowa Council of Governments was in the "Current Mitigation Activities" category in the previous plan. The Indian Creek Watershed Management Authority was created. The multi-jurisdictional and multi-disciplinary group is developing a watershed management plan and coordinating with the Silver Jackets to develop a warning system.
Develop and implement a response plan for Indian Creek flooding	Flood	1, 2, 3		
Construct berm at Ellis Boulevard	Flood	1, 2, 3	X	The previous plan included an alternative mitigation action to study the feasibility of constructing and maintaining flood protection structures.
Complete backflow protection project	Flood	1, 2, 3		
Add detention basins to increase stormwater management capability	Flood	1, 2, 3		This project may be a component of the Indian Creek Watershed Management Plan, which is currently in progress.
Install backup power sources for traffic lights	Flood	1, 2, 3		This project will increase public safety during a major power outage and during an evacuation.
Reconstruct Public Works facility above the 2008 flood level	Flood	2, 3, 4		This project is in progress.
Add additional sump pits and epoxy flooring at City Hall	Flood	2, 3, 4		This project is in progress.
Construct ring levee at the Water Pollution Control facility	Flood	2, 3, 4	X	The previous plan included an alternative mitigation action to study the feasibility of constructing and maintaining flood protection structures. This project is in progress.
Install berm at Q Avenue and 8th Street NW for interim flood protection	Flood	1, 2, 3, 4		The previous plan included an alternative mitigation action to study the feasibility of constructing and maintaining flood protection structures. This project is in the design phase.
Reroute sewer in the Sun Valley Neighborhood	Flood	2, 3, 4	X	The previous plan included an alternative mitigation action to continue the replacement of old sewer lines to prevent inflow and infiltration. This project is in progress.
Construct berm in the Sun Valley Neighborhood along Cottage Grove Parkway	Flood	1, 2, 3, 4	X	The previous plan included an alternative mitigation action to study the feasibility of constructing and maintaining flood protection structures. This project is in progress.
Install new pump and return sewer to protect wastewater infrastructure	Flood	2, 3, 4	X	The previous plan included an alternative mitigation action to continually review and modify plans to reduce sewer backups. This project is in progress.
Complete Cedar River Siphon Project	Flood	2, 3, 4		This project is in progress.
Replace damaged sections of the sanitary sewer with flood resilient materials	Flood	2, 3, 4		The previous plan included an alternative mitigation action to continue the replacement of old sewer lines to prevent inflow and infiltration and to continually review and modify plans to reduce sewer backups. This project is in progress.

PROTECTCR - TABLE 2B: Cedar Rapids Hazard Mitigation STRATEGY (...continued - Table 11 of Linn County Multi-Jurisdictional Hazard Mitigation Plan)

Proposed Mitigation Action	Hazard(s) Addressed	Goal(s) Addressed	Inclusion in Previous Plan	Notes
Mitigate Valley Brook Drive erosion	Flood	2, 3, 4		This project is in the design process.
Improve two major water detention basins	Flood	2, 3, 4	X	Maintaining detention basins was in the "Current Mitigation Activities" category in the previous plan. This project is in progress.
Complete Vinton ditch improvements	Flood	2, 3, 4	X	Maintaining drainage channels is an alternative mitigation action in the previous plan. This project is in progress.
Complete the city's Permanent Flood Protection Project which includes the following phases: • Cargill to I-380, which includes the existing Quaker Oats flood protection • I-380 to 8th Avenue SW • I-380 to 8th Avenue SE • I-380 to Ellis Park • 8th Avenue SE to Alliant Substation • 8th Avenue to the Cedar/Rapids Linn County Solid Waste Agency Site 1 • Alliant Substation to Cargill • 21 gate closures and 11 pump stations • Edgewood bridge improvements	Flood	1, 2, 3, 4	X	The previous plan included an alternative mitigation action to study the feasibility of constructing and maintaining flood protection structures.
Relocate the Sac and Fox Trail	Flood	2, 3, 4		
Property acquisition and relocation, elevation, and/or demolition in the special flood hazard area	Flood	1, 2, 3, 4	X	The previous plan includes an alternative mitigation action to study the feasibility of the acquisition of properties that are vulnerable to flood damage
Expand the city's warning siren system	Flood	1, 2, 3		
Construct safe rooms in public facilities and recreation areas	Flood	1, 2, 3, 4		
Harden public facilities to withstand wind and other severe weather damage	Flood	1, 2, 3, 4		
Install lightning rods on large critical facilities	Flood	1, 2, 3, 4		
Add additional shallow water wells to the city's water supply	Flood	2, 3, 4		

SOURCE: LINN COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN, JUNE 2014

PROTECTCR - TABLE 3A: Complete Mitigation ACTIONS (Table 12 of Linn County Multi-Jurisdictional Hazard Mitigation Plan)

Mitigation Action	Hazard(s) Addressed	Goal(s) Addressed	Inclusion in Previous Plan	Notes
Coordinate with the Army Corps of Engineers to complete the Flood Risk Management Feasibility Report and Environmental Assessment	Flood	1, 2, 3, 4	X	This mitigation action was included in the "Current Mitigation Activities" in the previous plan.
Complete planning process to determine a flood management system for the Cedar River	Flood	1, 2, 3, 4	X	This mitigation action encompasses several alternative mitigation actions in the previous plan.
Install gauges on Indian Creek	Flood	1, 2, 3	X	
The Central Fire Station was permanently relocated outside the floodplain	Flood	1, 2, 3, 4		
The Police Department's emergency generator, mechanical, and electrical systems were raised.	Flood	1, 2, 3, 4		
The Main Library was relocated and constructed above the 2008 flood level.	Flood	2, 3, 4		The facility includes a cistern to manage stormwater on the library site.
Animal Care and Control was relocated because the previous location had access points located in the special flood hazard area.	Flood	2, 3, 4		
Manhattan Park Pavilion was converted to open air facility.	Flood	2, 3, 4		
Check valves were installed to reduce backflow.	Flood	2, 3, 4	X	The previous plan included the alternative mitigation action "Continually review and modify plans to reduce sewer backups."
The city purchased HESCO barriers, tiger dams, and additional water pumps for flood protection	Flood	1, 2, 3, 4		
The city completed construction of the amphitheater and levee protection.	Flood	2, 3, 4		
Implement voluntary property acquisition program	Flood	1, 2, 3, 4	X	1,341 parcels were acquired, and 1,153 parcels were cleared of flood damaged structures.
Complete flood mitigation project at the Morgan Creek and May's Island lift stations	Flood	2, 3, 4		
Raise water collector well above the 2008 flood level	Flood	2, 3, 4		
Create a backwater valve reimbursement program	Flood	2	X	The previous plan included the alternative mitigation action "Continually review and modify plans to reduce sewer backups."

SOURCE: LINN COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN, JUNE 2014

PROTECTCR - TABLE 3B: Complete Mitigation ACTIONS (...continued - Table 12 of Linn Co. Multi-Jurisdictional Hazard Mitigation Plan)

Mitigation Action	Hazard(s) Addressed	Goal(s) Addressed	Inclusion in Previous Plan	Notes
Begin participation in the Community Rating System, update the city's Floodplain Management Ordinance, and adopt new insurance rate maps	Flood	1, 2, 3, 4	X	The city's floodplain management program was enhanced in 2010 to participate in the Community Rating System.
Install berm at Q Avenue and 8th Street NW for interim flood protection	Flood	2, 3, 4	X	The previous plan included an alternative mitigation action to study the feasibility of constructing and maintaining flood protection structures.
Relocate the Sac and Fox Trail	Flood	2, 3, 4		
The greenhouse at Noelridge Park was retrofitted to withstand severe weather.	Tornado and Windstorm, Thunderstorm, Lightning, and Hail, Sever Winter Storm	1, 2, 3, 4		
A lightning rod was installed on the City Services Building.	Thunderstorm, Lightning, and Hail	1, 2, 3, 4		
Added 3 wells to the water supply	Drought	3, 4		
Added flow channel in Mohawk Park to increase well field infiltration	Drought			
Secured offsite computer server storage facility	All hazards	2, 3, 4		
Fire Station #3 was added on Crestview Drive to decrease response time	All hazards	1, 2, 3		

SOURCE: LINN COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN, JUNE 2014

PROTECTCR - TABLE 4: Benefit vs. Cost Criteria (Table 13 of Linn Co. Multi-Jurisdictional Hazard Mitigation Plan)

Type	Benefit	Cost
High	Results are likely immediate and/or widespread reduction of risk from hazard(s) addressed; generally supported by the community; lead agency has capabilities.	Existing funding is not adequate to complete the project; funding may only be available through grants/assistance; anticipated to cost greater than $100,000.
Medium	Results are likely a long-term reduction of risk from hazard(s) addressed and/or results are not widespread; potential community opposition; lead agency has capabilities.	Requires amending the budget and/or requires a bond to complete the project; anticipated to cost between $10,000 and $100,000.
Low	Results are difficult to determine and/or may not result in long-term reduction of risk from hazard(s) addressed; definite community opposition; lead agency may encounter capability issues.	Existing funding is adequate or the project can be completed through volunteer and/or staff time; anticipated to cost less than $10,000.

SOURCE: LINN COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN, JUNE 2014

Benefit vs. Cost Criteria

"To determine how a mitigation strategy should be completed, an action plan and timeline for mitigation actions was determined through a prioritization process that considered local priorities, local operations, potential benefit, and estimated cost. Ultimately, mitigation actions were assigned a priority level, which determines the potential timeline for completion. Refer to Tables 13 and 14."

PROTECTCR - TABLE 5: Mitigation Action Priority Level (Table 14 of Linn Co. Multi-Jurisdictional Hazard Mitigation Plan)

Priority Level	Potential Timeline	
1	1-5 Years	The mitigation action will be addressed during the current plan period.
2	5-10 Years	The mitigation action may become a higher priority in the plan update.
3	10-15 Years	The mitigation action maybe become a higher priority in the plan update or will not be completed until higher priority mitigation actions are complete.

SOURCE: LINN COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN, JUNE 2014

Priority Level

"For most jurisdictions, not all mitigation actions considered in the prioritization process met exact criteria. The planning committee in Cedar Rapids developed the final action plan to ensure the priority level for each mitigation actions reflects local risks, priorities, and operations. See Table 15 for Cedar Rapid's action plan.

PROTECTCR - TABLE 6A: Cedar Rapids Action Plan (Table 15 of Linn Co. Multi-Jurisdictional Hazard Mitigation Plan)

Priority Level	Proposed Mitigation Action	Lead Party	Potential Partners	Benefit	Cost	Potential Funding
1	Complete the city's Permanent Flood Protection Project phase from Cargill to I-380 and includes the existing Quaker Oats flood protection	Army Corps of Engineers and Public Works	---	High	High	Army Corps of Engineers, CDBG, Iowa Flood Mitigation Award, City
1	Complete the city's Permanent Flood Protection Project phase from I-380 to 8th Avenue SW	Public Works	---	High	High	Iowa Flood Mitigation Award, City
1	Complete the city's Permanent Flood Protection Project phase from I-380 to 8th Avenue SE	Army Corps of Engineers and Public Works	---	High	High	Army Corps of Engineers, Iowa Flood Mitigation Award, City
1	Design and begin the construction of the city's Permanent Flood Protection Project phase from I-380 to Ellis Park	Public Works	---	High	High	Iowa Flood Mitigation Award, City
1	Design and begin the construction of the city's Permanent Flood Protection Project phase from 8th Avenue SE to Alliant Substation	Army Corps of Engineers and Public Works	---	High	High	Army Corps of Engineers, Iowa Flood Mitigation Award, City
1	Design and begin the city's Permanent Flood Protection Project phase from 8th Avenue to the Cedar/Rapids Linn County Solid Waste Agency Site 1	Public Works	---	High	High	Iowa Flood Mitigation Award, City
1	Complete the addition of 21 gate closures and 11 pump stations	Army Corps of Engineers and Public Works	---	High	High	Army Corps of Engineers, Iowa Flood Mitigation Award, City
1	Property acquisition and/or demolition for implementation of Permanent Flood Protection Project		---	High	High	City, Army Corps of Engineers, Iowa Flood Mitigation Award
1	Complete Levee/Floodwall construction at the Water Pollution Control facility	Utilities	IHSEMD, Iowa DNR	High	High	HMGP, PDM, City
1	Install new pump and return sewer to protect wastewater infrastructure	Utilities	FEMA	High	High	FEMA
1	Install flood warning system on Indian Creek	Army Corps of Engineers	Iowa DNR, Indian Creek Watershed Management Authority	High	Medium	Army Corps of Engineers
1	Develop and implement a response plan for Indian Creek flooding	Public Works	Indian Creek Watershed Management Authority	High	High	Stormwater Utility Enterprise Fund, HMGP, PDM
1	Complete backflow protection project	Public Works	---	High	Medium	City Sewer Utility
1	Add detention basins to increase stormwater management capability	Public Works	---	Medium	Medium-High	Stormwater Utility Enterprise Fund
1	Complete reconstruction of City Services Center facility above the 2008 flood level	Public Works	---	High	High	FEMA, I JOBS, Local Options Sales Tax, City, Sewer Utility, Solid Waste Utility
1	Add additional sump pits and epoxy flooring at City Hall	Facilities Maintenance	---	High	Medium	City

PROTECTCR - TABLE 6B: Cedar Rapids Action Plan (Table 15 of Linn Co. Multi-Jurisdictional Hazard Mitigation Plan)

Priority Level	Proposed Mitigation Action	Lead Party	Potential Partners	Benefit	Cost	Potential Funding
1	Construct berm at Ellis Boulevard	Public Works	---	High	Medium	Local Option Sales Tax
1	Reroute storm sewer in the Sun Valley Neighborhood	Public Works	---	High	High	Local Option Sales Tax
1	Construct berm in the Sun Valley Neighborhood along Cottage Grove Parkway	Public Works	---	High	High	Local Option Sales Tax
1	Complete Vinton ditch improvements	Army Corps of Engineers and Public Works	---	High	High	CDBG, Local Option Sales Tax
1	Complete Cedar River Siphon Project	Public Works	---	High	High	CDBG, City, Army Corps of Engineers
1	Replace damaged sections of the sanitary sewer with flood resilient materials	Public Works	---	High	High	FEMA, IHSEMD, City
1	Mitigate Valley Brook Drive erosion	Public Works	---	High	High	CDBG, City
1	Improve two major water detention basins		---	High	High	CDBG, City
1	Install backup power sources for traffic lights		Iowa DOT	High	Low-High	City, others to be identified
1	Expand the city's warning siren system	City Manager	Linn County EMA	High	Medium	City, HMGP, PDM
1	Construct safe rooms in public facilities and recreation areas	City Manager and Parks and Recreation	Linn County EMA	High	High	City, HMGP, PDM
1	Harden public facilities to withstand wind and other severe weather damage	City Manager and Public Works	---	High	Medium - High	City, HMGP, PDM
1	Develop and implement a residential fan program	Fire Department and Building Services	Hawkeye Area Community Action Program and other organizations that provide assistance	High	Low - Medium	City, others to be identified
1	Develop and implement a residential wellness check program	Fire Department and Police	Hawkeye Area Community Action Program and other organizations that provide assistance	High	Low - Medium	City, others to be identified
1	Add additional signage for emergency routes and evacuation routes	Public Works	Iowa DOT, adjacent cities, Linn County, and Linn County EMA	Medium	Medium	City, others to be identified
2	Install lightning rods on large critical facilities	Public Works	---	Medium	Low	City, others to be identified
2	Add salt storage facility in the northwest area of the city	Public Works	Iowa DOT	Low	Medium	City, others to be identified
3	Design and construct ring levee at Water Plant	Utilities	---			Iowa Flood Mitigation Award, City
3	Edgewood bridge improvements	Public Works	---	High	Medium - High	Iowa Flood Mitigation Award, City

SOURCE: LINN COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN, JUNE 2014

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