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. Maintain and provide quality services to the community.
3. 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. Council also adopted a set of goals that eventually developed into a full plan for flood recovery.

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 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.

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.

**Flood Control System Master Plan**

In 2015, the City of Cedar Rapids adopted the Flood Control System (FCS) Master Plan. The mission of this plan is to "reduce flood risk through the heart of Cedar Rapids on both the west and east sides of the river, and incorporate aesthetic elements that reflect our community's culture, history, and vision." Goals in this plan mirror several of the goals of Envision CR.

The Master Plan includes the alignment for the FCS, as shown in Map 1, along with an anticipated timeline for design and construction. The Master Plan also addresses funding for the Flood Control System, including local, State, and Federal sources.

The Flood Control Master Plan, along with materials from open houses, can be found at: [http://www.cityofcr.com/floodcontrol](http://www.cityofcr.com/floodcontrol)
Linn County Multi-Jurisdictional Hazard Mitigation Plan

In addition to flooding, the city is committed to protecting the community against other potential hazards through the implementation of the Linn County Multi-Jurisdictional Hazard Mitigation Plan. This plan is developed by the East Central Iowa Council of Governments (ECICOG), in partnership with Linn County, the City of Cedar Rapids, the City of Marion, and the Iowa Homeland Security and Emergency Management Department. This plan is updated every five years, with the most recent plan adopted in 2019 to cover 2019-2024.

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, flash flood, drought, thunderstorm, lightning and hail, severe winter storm, tornado and windstorm, and transportation incident.

The Linn County Multi-Jurisdictional Hazard Mitigation Plan provides guidance on minimizing the negative impacts of natural, technological, and human-caused hazards. The goals of the plan are to:

- Protect the health and safety of residents (or students), visitors, staff, and emergency personnel (paid or volunteer) during and after hazard events.
- Minimize losses to existing and future structures in hazard areas. Critical facilities are priority structures.
- Maintain local services and infrastructure in order to reduce community, economic, and environmental disruption during an after hazard events.
- Educate residents (or students) and visitors about local hazards and the resources available in the community.
- Use public funds in a cost effective and fair manner.

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

To address hazards not covered by ongoing operations, the plan includes an action plan for Cedar Rapids, with high priority actions that are expected to be addressed during the life of this plan. Some key actions are listed below, with the complete Action Plan included in the appendix.

- Complete phases of the city’s Flood Control System
- Acquire, relocate, elevate, and/or demolish structures in flood hazard areas or structures subject to repetitive damage.
- Install flood warning system on Indian Creek.
- Develop and implement a City response plan for Indian Creek flooding.
- Participate in the Community Resilience Roundtable Program and implement supporting projects.
- Expand the city’s outdoor warning siren system.
- Add detention basins and other stormwater infrastructure to increase stormwater management capacity and reduce flood risk.
- Construct safe rooms in public facilities and recreation areas.

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 the Flood Control System. 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.
ONGOING TASKS

The city will continue to coordinate the use of Flood Mitigation Program funds for the Flood Control Project. The city received $264 million from the state Flood Mitigation Program.

The City continuously reviews the stormwater infrastructure, identifying needed upgrades and prioritizing CIP projects. Assessments are being done on a sub-basin scale. Eight basins have been modeled as of 2019, with 2 more planned to be reviewed in 2021. A new five-year plan will be developed after 2021.

The City identifies and tracks completion of Priority One Level Cedar Rapids Mitigation Strategies from the Linn County Multi-Jurisdictional Hazard Mitigation Plan.

INITIATIVES

1. Determine a funding strategy to complete the Flood Control System, as quickly as possible, including Federal funding, City debt capacity, and County support.

2018 City Council Priority

2. 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.

3. Review the potential for regional flooding and water quality improvements and work with partners in planning and implementation.

Stormwater and water quality improvement can help improve aquatic habitats, provide recreational opportunities, and increase public access to natural resources, while maintaining necessary levels of flood control. This will require 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.

The City is an active member of the Indian Creek Watershed Management Authority (ICWMA), the Middle Cedar Watershed Management Authority (MCWMA), and the Lower Cedar Watershed Management Authority. The ICWMA Watershed Masterplan was published in 2015 and has received a technical assistance grant for 2018-2022. The MCWMA formed in 2016, has hired a coordinator, and is in the process of developing a watershed masterplan, funded by a HUD Resilience grant. The LCWMA has just formed and is in the process of setting goals.
GOAL 2: Maintain and provide quality services to the community.

The City of Cedar Rapids strives to provide the highest quality services to the community. A large portion of services provided to the community come from Police, Fire, Utilities and Public Works. The Police Department and the Fire Department are committed to the community they serve when responding the calls for service and interacting with citizens. Police Officers and firefighters respond to approximately 159,000 calls for service to the community each year.

In addition to the Police and Fire Departments, utility services provided to citizens play a crucial role in the safety and security of citizens in the City of Cedar Rapids. Utility services include drinking water, sanitary and storm sewer, garbage recycling and yard waste collection, and wastewater treatment. All of these services provided by the Utilities Department are vital to the safety of citizens. Today, the network of mains that is used to provide drinking water to citizens is 660-plus miles in length and distributes municipal water to more than 130 thousand residents and industrial users at up to 60 million gallons per day.

The quality of these services is a priority, as these services have a major impact on quality of life in Cedar Rapids and help protect life, safety, and property in our 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 the safety of citizens. 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)

The Fire Department will adopt standards and practices across the department to maximize employee capabilities through the implementation of the Cedar Rapids Fire Department Strategic Plan.

The Fire Department’s Operations Division oversees Emergency Medical Services, Fire Suppression, HazMat, Special Operations, and training. They also sponsor IA-1-USAR. Within these disciplines, they will evaluate, plan, and
implement best practice programs to mitigate hazards and evaluate long term success to improve on overall service delivery.

**Police Department:**
The Police Department will continue to conduct targeted traffic enforcement to increase traffic safety.

Continue use and increase number of video camera surveillance systems on City-owned property and explore options that would allow police to obtain video footage from traffic cameras not utilized by the Automated Traffic Enforcement Program.

The Police Department will also continually track progress towards increasing the solve rate of crimes.

Improve and enforce department policies and directives per the Cedar Rapids Police Department's Strategic Plan.

Develop and implement strategies to reduce gun violence.

The Cedar Rapids Police Department obtained accreditation through the Commission on Accreditation for Law Enforcement Agencies, Inc. (CALEA) in 2019. All accredited agencies are reviewed annually by CALEA. The Cedar Rapids Police Department will continue to meet CALEA standards to maintain the certification.

**INITIATIVES**

   New initiative 2019

5. Replace or update outdated facilities (Bender Pool, Parks Maintenance, Twin Pines Clubhouse, Ellis Clubhouse, and Gardner Clubhouse) to create modern and sustainable facilities.
   Helps city provide updated services to current and future citizens.

6. 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.

7. Identify, evaluate, and acquire technology, equipment, and facilities to improve infrastructure and service delivery per the Cedar Rapids Fire Department Strategic Plan.

8. Evaluate the standard of cover and current operational model

The Cedar Rapids Command Staff, along with Facilities and Maintenance Services staff, will evaluate the standard of cover and current operational model, including the City’s Master Plan, for current station locations and apparatus deployment models, given the current and anticipated incident volume and city growth. They will develop a plan to relocate and/or add stations to ensure adequate coverage for both timely first unit response and full alarm assignments.
9. Prepare a fire station assessment and relocation plan based on the current and future needs of the city, firefighter health, and facility design best practices.
New Initiative 2019

10. Acquisition of a new off-site facility that would provide space for dispatchers, evidence storage and personnel, and Crime Scene Unit.

11. Review options and most successful way to implement a new records management system.

12. Review Municipal Code sections utilized by the Police Department to determine areas of improvement.
New Initiative 2019

13. Review workload and duties associated with specialty assignments assigned to Criminal Investigation Division to determine areas of improvement and efficiency.
New Initiative 2019

14. Review digital evidence procedures and research areas of opportunity to streamline and improve Public Information Requests and requests for the County Attorney.
New Initiative 2019

15. Review diversion programs offered in all schools Cedar Rapids Police Officers are located in to ensure programs offered are beneficial to youth and the community.
New Initiative 2019. This effort will include determining if diversion programs can be offered to youth in the community when Police Officers encounter them committing simple misdemeanor crimes.

Refine existing stormwater management regulations to enhance clarity and adaptability.
Complete 2019

Obtain the Commission on Accreditation for Law Enforcement Agencies (CALEA) certification.
Complete 2019.

Prepare a workforce study as part of the redeployment reorganization of the Police Department.
Complete 2017

Acquisition and implementation of departmental body camera system.
Complete 2019
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.

INITIATIVES

16. 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.