RPA 10 Long-Range Transportation Plan 2022-2050

A Plan for Benton, Cedar, Iowa, Johnson, Jones, Linn and Washington Counties

Adopted July 13, 2022

ECICOG
EAST CENTRAL IOWA
COUNCIL OF GOVERNMENTS

RPA 10 Long Range Transportation Plan 2050

Submitted to the
Iowa Department of Transportation
800 Lincoln Way
Ames, Iowa 50010
July 15, 2022

By
East Central Iowa Council of Governments
700 16th Street NE
Cedar Rapids, Iowa 52402

The RPA 10 Long Range Transportation Plan 2050 was prepared on behalf of member counties, and with the assistance of the Policy Committee, Transportation Technical Advisory Committee, Regional Trails Advisory Committee, and Passenger Transportation Advisory Committee. The Federal Highway Administration, Federal Transit Administration, and Iowa Department of Transportation provided a portion of the funding and technical assistance required to complete this document. The document, however, is the responsibility of RPA 10. The US government and its agencies assume no liability for the contents of this report or the use of its contents.

As a recipient of Federal financial assistance, ECICOG has instituted a Title VI program to address nondiscrimination laws that impact transportation investment decision making. Title VI of the Civil Rights Act of 1964, related statutes and policies prohibit discrimination on the basis of race, color, national origin, gender, age, and disability in the Agency's programs, activities, and services.

Adopting Resolution

Region 10 Regional Planning Affiliation
Resolution No. 2022-_____

ADOPTION OF THE LONG RANGE TRANSPORTATION PLAN – "RPA 10 Long Range Transportation Plan 2050"

WHEREAS, the Iowa Department of Transportation has requested that counties join together for the purposes of transportation planning; and

WHEREAS, the counties of Benton, Cedar, Iowa, Johnson, Jones, Linn, and Washington have joined together as the Region 10 Regional Planning Affiliation (RPA); and

WHEREAS, the Policy Committee is the policy board which governs the RPA; and

WHEREAS, the RPA has prepared a Long Range Transportation Plan, "RPA 10 Long Range Transportation Plan 2050"; and

WHEREAS, the preparation of the RPA 10 Long Range Transportation Plan 2050 has involved extensive public participation and outreach efforts; and

WHEREAS, the RPA 10 Long Range Transportation Plan 2050 plan encourages the development and utilization of a variety of travel modes, including roadways, public transit, and pedestrian and bicycle routes; and

WHEREAS, the RPA 10 Long Range Transportation Plan 2050 plan has been available for public comment, and significant comments have been incorporated into the final draft; and

BE IT RESOLVED, that the Region 10 Policy Committee adopts the Long Range Transportation Plan, "RPA 10 Long Range Transportation Plan 2050".

Adopted this 13th day of July, 2022, and signed this 13th day of July, 2022 by the Policy Committee chairperson.

DocuSigned by:
Rod Sullivan
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Rod Sullivan, Chairperson

DocuSigned by:
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Attested

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RPA 10 Long-Range Transportation Plan 2022-2050

1. Introduction

ECICOG
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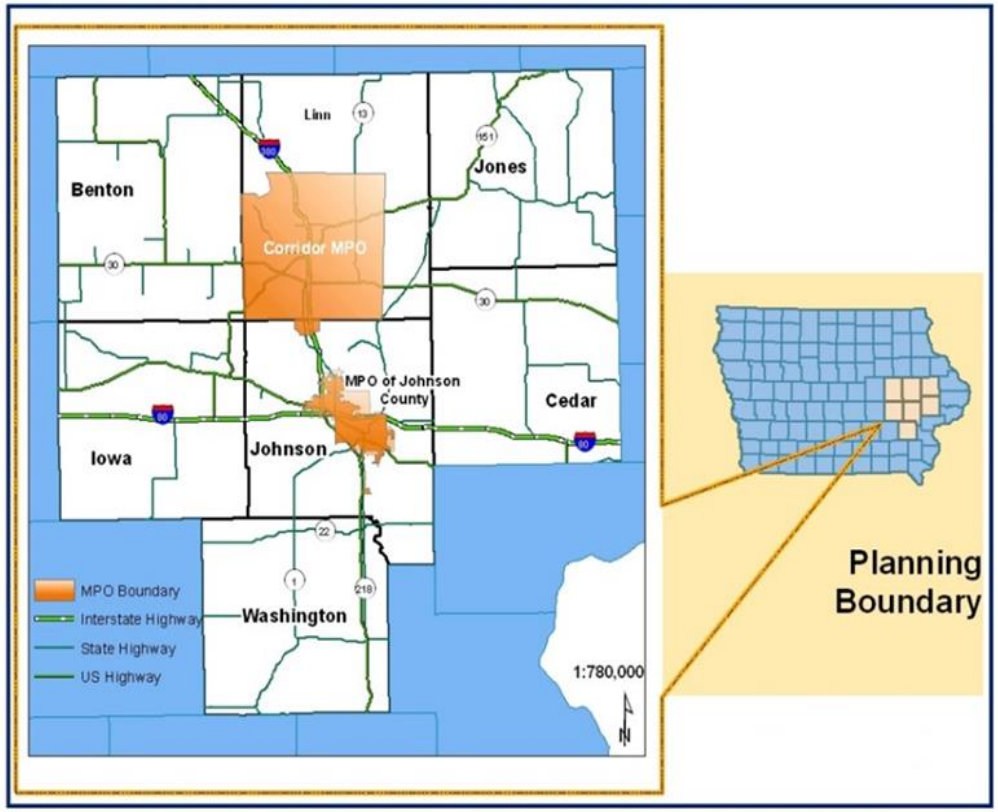
Overview

The *RPA 10 Long Range Transportation Plan 2050 (LRTP)* is a long range (20+ years) strategy and capital improvement program developed to guide the effective investment of public funds in multi-modal transportation facilities within the context of the regional vision. The region's Transportation Improvement Program (TIP), a short-range capital improvement program for implementing transportation projects, also draws context from the LRTP. The regional plan is updated every five years in consultation with interested parties. The document is prepared in accordance with the federal Fixing America's Surface Transportation Act (FAST Act) Section 23 C.F.R. Parts 450.324 and covers the period from 2022-2050.



Federal law and regulations require that state officials include local elected officials in the transportation planning and programming process. Iowa Department of Transportation (Iowa DOT) established 18 RPAs to allow for this local participation. The RPAs are complemented by nine Metropolitan Planning Organizations (MPOs) that conduct transportation planning activities in urban areas with populations more than 50,000. This LRTP is for RPA 10, which includes Benton, Cedar, Iowa, Johnson, Jones, Linn, and Washington Counties. Three agencies are responsible for transportation planning within RPA 10 - the East Central Iowa Council of Governments (ECICOG), Corridor MPO and the MPO of Johnson County (MPOJC). Corridor MPO is the designated MPO for the Cedar Rapids Urbanized Area, which includes the Cities of Cedar Rapids, Marion, Ely, Fairfax, Hiawatha, and Robins. MPOJC provides transportation planning services for the University of Iowa and the cities of Coralville, Iowa City, University Heights, North Liberty, and Tiffin. ECICOG is responsible for transportation planning for the seven-county area outside of the designated MPOs.

Organizational Structure of RPA 10

RPA 10 is governed by a Policy Committee consisting of 14 officials from member jurisdictions. The Policy Committee is responsible for establishing overall policy, making transportation planning-related decisions, prioritizing programming, and monitoring regional transportation conditions. Policy Committee representatives are appointed by the affiliated county boards of supervisors. The Policy Committee has established three advisory committees to assist in the planning process – the Transportation Technical Advisory Committee (TTAC), the Regional Trails Advisory Committee (RTAC), and the Passenger Transportation Advisory Committee (PTAC). Committee members are appointed by the Board of Supervisors from each affiliated county.

Policy Committee – governing body, comprised of two representatives from each county, meet the last Thursday of the month

Transportation Technical Advisory Committee (TTAC) – comprised of three reps from each county, meet quarterly

Regional Trails Advisory Committee (RTAC) – comprised of two reps from each county, meet quarterly

Passenger Transportation Advisory Committee (PTAC) – comprised of two reps from each county, meet as necessary

Committee Membership

Policy Committee

- Tracy Seeman, Benton County
- Mitch McDonough, Benton County
- Brad Gaul, Cedar County
- Rob Fangmann, Cedar County
- Kevin Heitshusen, Iowa County
- Vicki Pope, Iowa County
- Rod Sullivan, Johnson County
- Tom Brase, Johnson County
- Jon Zirkelbach, Jones County
- Adam Griggs, Linn County
- Darrin Gage, Linn County
- Bob Yoder, Washington County
- Jaron Rosien, Washington County

Transportation Tecnical Advisory Committee (TTAC)

- Myron Parizek, Benton County
- Ben Vierling, Benton County
- Rick Erickson, Benton County
- Rob Fangmann, Cedar County
- Brian Meinsma, Cedar County
- Steve Nash, Cedar County
- Kevin Heitshusen, Iowa County
- Nick Amelon, Iowa County
- Matt Amelon, Iowa County
- Greg Parker, Johnson County
- Rob Winstead, Johnson County
- Rod Sullivan, Johnson County
- Brad Ketels, Linn County
- Jon Resler, Linn County
- Randy Burke, Linn County
- Jacob Thorius, Washington County
- Jeremy McLaughlin, Washington County
- Dennis Murray, Washington County

Regional Trails Advisory Committee (RTAC)

- Randy Scheel, Benton County
- Mark Pingenot, Benton County
- Mike Dauber, Cedar County
- Rob Fangmann, Cedar County
- Nick Amelon, Iowa County
- Matt Amelon, Iowa Cuounty
- Brad Freidhof, Johnson County
- Becky Soglin, Johnson County
- Brad Mormann, Jones County
- Lisa McQuillen, Jones County
- Randy Burke, Linn County
- Red Doscher, Linn County
- Zach Rozmus, Washington County
- Richard Young, Washingtn County

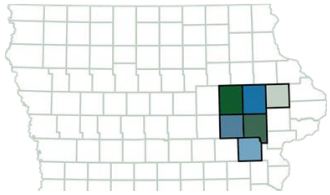
Passenger Transportation Advisory Committeee (PTAC)

- Dean Vrba, Benton County
- Terri Andorf, Benton County
- Jon Bell, Cedar County
- Julie Tschuk, Cedar County
- Becky Fry, Iowa County
- Marilyn Austin, Iowa County
- Tom Brase, Johnson County
- Kelly Schneider, Johnson County
- Tom Hardecopf, Linn County
- Terry Bergen, Linn County
- Cris Gaugin, Washington County
- Bobbi Wulf, Washington County

ECICOG and its Role in RPA 10

The East Central Iowa Council of Governments (ECICOG) is an intergovernmental council established in 1973 under Chapter 28E and provided for under Chapter 28H of the Code of Iowa. ECICOG was created to promote regional cooperation and to provide professional planning services to local governments in Benton, Iowa, Johnson, Jones, Linn, and Washington Counties and is governed by a board of directors comprised of elected officials and private citizens

Since 1994, ECICOG has also served as staff for RPA 10, which includes ECICOG's traditional member counties and Cedar County. On behalf of RPA 10, the role of ECICOG is to staff transportation committee meetings; coordinate transportation planning activities for the region; prepare plans and studies, including a Long Range Transportation Plan (LRTP); support the application and programming process for projects that use federal transportation funds; and assist cities and counties with grant applications.



Prior Planning

In 2017, RPA 10 completed *CRDS 2040*, the regional long range transportation plan. Based on a previous successful effort, the RPA intended to develop a joint document with the comprehensive economic development strategy (CEDS), meeting the requirements of both. The planning process was tentatively known as Regional Vision Rising and began in November 2015. Market Street consultants were tasked with completing stakeholder input, developing a regional assessment, completing a regional economic analysis, identifying a regional vision, and compiling a regional report. Market Street completed the first two tasks. After regional economic development leaders changed course, local consultant Steve Kappler, was contracted to complete the remaining steps. The Regional Vision Rising's timeline was extended and became incompatible with completing the five-year long range transportation plan update, so the joint process split. *CRDS 2040* was completed in May 2017 as only the LRTP. The CEDS update, later titled the *Regional Vision Strategy* was completed in August 2018.

Both the LRTP and CEDS are being updated on a similar timeline. For the purposes of this update, a joint document will not be completed. However, the LRTP will incorporate data developed by the current update process known as Envision East Central Iowa. This will include stakeholder input, scenario development, and regional assessment data.

Progress Since the Last Plan

CRDS 2040 identified a number of action items to fulfill the identified goals. The table below notes the regional progress on these items.

Action Item	No progress	Delayed	Ongoing	Complete
Continue work to implement the recommendations outlined in the Iowa Commuter Transportation Study, including express bus service between Cedar Rapids and Iowa City				x
Maintain and market existing modal services, including public transit, carpool, and vanpool.			x	x
Promote corridorrides.com to inform residents and visitors about transportation options.			x	
Complete construction of the trail connection between Cedar Rapids and Iowa City			x	
Coordinate with Jones County to designate and complete regional segments of the Grant Wood Loop Trail.			x	
Coordinate with adjacent counties to complete a plan for the American Discovery Trail Eastern Iowa Parkway Plan			x	
Work with partners to maintain and enhance the Cedar Valley Nature Trail			x	
Work with regional partners to update the regional trails plan and assist with implementation of local trails plans.		x		
Assist in the maintenance and enhancement of commercial air service at the Eastern Iowa Airport			x	
Work with regional airports to assist with implementation of master plans.			x	
Continue to assist with rebranding of regional transportation services				x
Develop annual Passenger Transportation Plan to identify regional transit needs and opportunities for collaboration/efficiencies				x
Coordinate with Iowa DOT and area partners on passenger rail opportunities			x	
Re-invigorate the Multi-Disciplinary Safety Team	x			
Participate in Iowa City Traffic Incident Management meetings to ensure effective coordination during Interstate 80/380 construction projects			x	
Identify and secure funding sources to implement needed safety improvements			x	
Participate in statewide traffic safety workshops and forums			x	
Coordinate with Iowa DOT on development and construction of new Intermodal Hub in the region transportation			x	
Coordinate with Iowa DOT to ensure the timely completion of Highway 30 4-lane project in Benton County				x
Coordinate with Iowa DOT on the completion of Interstate 80/380 interchange reconstruction			x	
Coordinate with Iowa DOT on the completion of Highway 100 from Edgewood Rd. to Highway 30 in Linn County				x
Coordinate with Iowa DOT on the completion of Forevergreen Road interchange in Johnson County				x
Coordinate with Iowa DOT on possible 6-lane expansion of I-80 in Johnson and Cedar Counties			x	
Coordinate with Iowa DOT on possible 4-lane expansion of Highway 30 in Linn and Cedar Counties			x	
Assist Iowa DOT with the associated mapping or other support needed for future autonomous vehicle efforts			x	
Educate regional partners on current best practices for transportation preservation			x	
Create plan for bridges that are fundamentally obsolete or structurally deficient Identify and secure funding sources to implement preservation projects	x			
Encourage regional partners to preserve, replace or upgrade existing infrastructure before building new infrastructure			x	
Prioritize regional funding applications for preservation/maintenance projects			x	

Work with local governments and agencies to pursue eligible federal, state, and local funding sources as well as new funding sources that arise			x	
Maintain a regional process that ensures geographic equity in the programming of STBG funding			x	
Work with state and federal legislators to increase existing or establish alternative funding mechanisms for all transportation infrastructure and services			x	
Work with state and federal legislators to pass a stable, long range transportation bill that will provide adequate programs and funding for rural areas			x	
Educate regional agencies on all transportation funding opportunities that are currently available			x	

Recent Developments

In the time between the CRDS 2040's approval in 2017 and the creation of this document, there are developments that have impacted progress on the prior plan or will impact the development of the current plan. These issues are cited below.

COVID-19

The most significant development since *CRDS 2040* was adopted is the COVID-19 pandemic. Since March 2020, we have experienced large numbers of loss of life and illness. In addition, there have been significant economic losses, business closures, and job losses. Disruptions to education, employment, cultural and social activities have been widespread. Initially, the pandemic also resulted in decreased travel by ground, air, and water transportation. RPA 10 primarily had a reduction in air travel, a reduction in commuters, and a decline in transit ridership. Freight transportation, while temporarily impacted, has rebounded to normal or slightly above normal levels. As vaccines became available, air travel and commuting have rebounded. Regional transit ridership has also improved, but not to the levels seen pre-pandemic.

However, one of the most visible impacts of COVID-19 is the impact to supply chains. Early in the pandemic, as businesses shut down and people stayed home, the strain on global supply chains resulted in some goods being harder to find at local stores. As pandemic-related shutdowns eased, pent-up demand for products – including food, cars, gasoline, wood products, and homes – resulted in increased costs across the board. Although there are few historical parallels due to pandemics' rarity, local economists predict that these supply chain issues, and increased costs will be temporary (one to three years).

The other most noticeable impact resulting from the pandemic was/is the need to social distance. Typical in-person meetings were replaced with online meetings. While in-person meetings are still necessary, RPA 10 experienced better meeting participation when online opportunities were available. As a result, RPA 10 will continue to offer both online and in-person opportunities for public engagement and committee meetings. An update to the *Public Involvement Plan (PIP)* is planned to note this change.

Derecho 2020

On August 10, 2020, parts of RPA 10 were devastated by a high-speed windstorm called a derecho. Record wind speeds of up to 140 miles per hour were recorded in some areas. The derecho swept across the Midwest, including Nebraska, Iowa, Illinois, and Indiana. It caused high winds, numerous weak tornados, and large hail. Damage was moderate across much of the affected area, but severe damage occurred in eastern Iowa. In Cedar Rapids and the surrounding areas of RPA10, residents experienced widespread property damage and lost power for several days. Thousands of homes, trees, powerlines, and millions of crop acres were damaged or destroyed during the storm.

In the immediate aftermath, recovery focused on restoring lost power and utilities, securing housing for those in need, and removing debris. Longer-term recovery will focus on rebuilding low-income housing, replacing the tree canopy devastated by the storm, and developing resiliency plans for future natural disasters.

From a transportation perspective, the damage from the storm limited mobility due to downed power lines, fallen trees, damaged vehicles, and widely distributed debris. Initial cleanup focused on clearing priority routes previously identified in hazard mitigation plans. These routes aided in renewed mobility between neighborhoods and towns and was vital to debris removal efforts. Ongoing storm recovery included inspections and necessary repairs to ensure the safety and integrity of all transportation infrastructure. Long term recovery includes reviewing the region's response and renewing efforts to address resilience in our transportation plans and programs.

Infrastructure Investment and Jobs Act (IIJA)/Bipartisan Infrastructure Law (BIL)

In November 2021, the IIJA/BIL which serves as the reauthorization of the FAST Act was signed into law. Although planning and programming requirements may change under IIJA/BIL, this plan was developed in accordance with FAST Act requirements, since the specifics of the new authorization will not be realized before this plan is approved.

Economy and Workforce

As the last plan was being prepared, an organization known as *ICR Iowa* was established to advance regional economic and workforce development. In the past year, *ICR Iowa* dissolved, but the work of the organization shifted to the parent organizations: Cedar Rapids Metro Economic Alliance and Iowa City Area Development group. Challenges in housing and childcare continue to impact regional workforce efforts, and the region is attempting to mitigate their impacts and coordinating local and state efforts.

2020 U.S. Census

The Census Bureau has experienced significant delays in releasing 2020 data due to COVID-19 and necessary data security measures. In August 2021, the Census Bureau released data that would be required for state-level and federal-level redistricting. This data included population counts, race, Hispanic origin, housing occupancy status, and group quarters population by Census block. Since that time, however, there have been no confirmed dates for the release of additional data. Where possible, 2020 data has been incorporated into this plan. A plan amendment may be necessary to accommodate additional Census data releases.

RPA 10 Long-Range Transportation Plan 2022-2050

2. Regional Vision and Strategies

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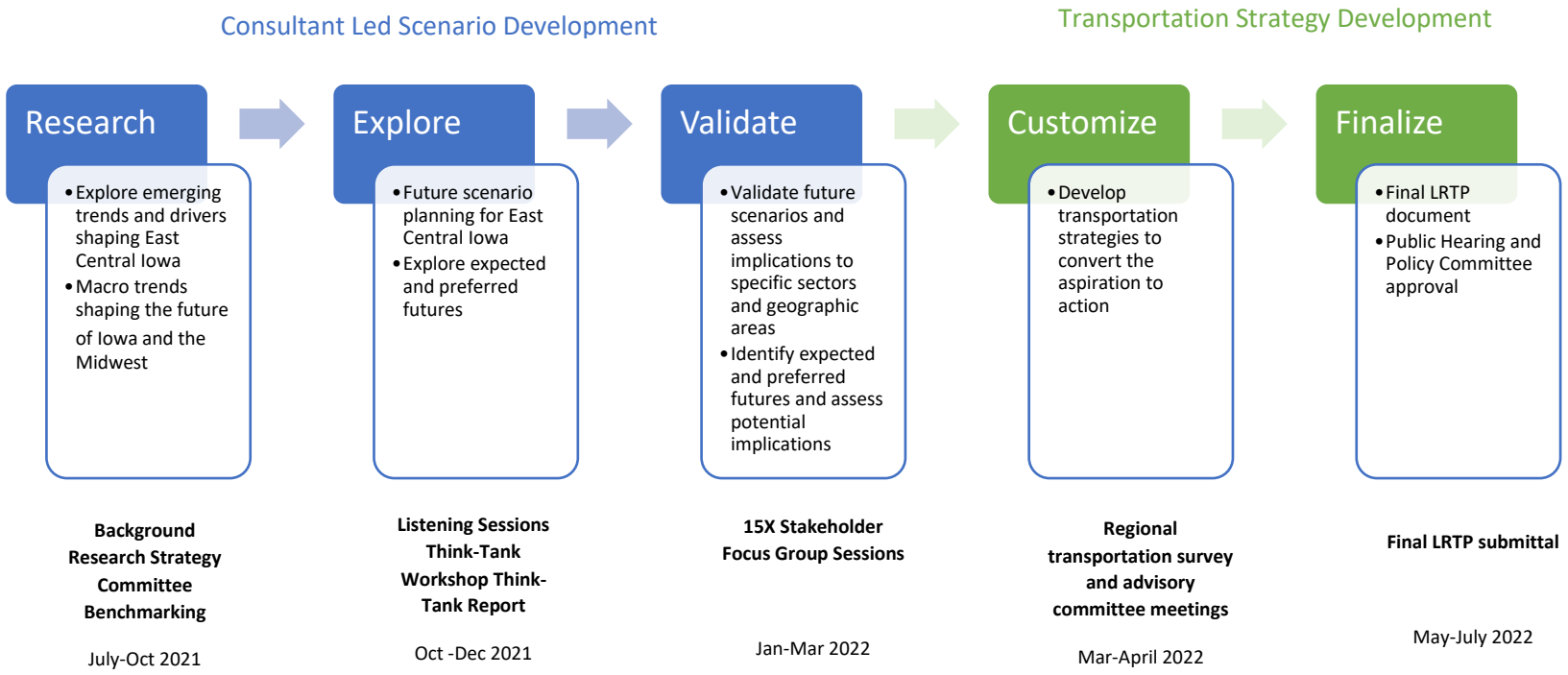
The prior long-range transportation plan for RPA 10 was a joint document incorporating the requirements of the region's transportation and economic development plans. For this update, separate documents have been prepared. Stakeholder input, scenario development, and strategic actions from *Envision East Central Iowa*, the region's Comprehensive Economic Development Strategy (CEDS), have been incorporated into the transportation plan.

Input

Throughout the summer and fall of 2021 and early 2022, consultants followed a scenario-based planning process to gather, explore, and validate data through a variety of input opportunities. Their work and the identified, preferred scenario served as the basis for the development of RPA 10's transportation strategies.



Key Drivers Shaping the Future of RPA 10

Nearly 500 stakeholders responded to a survey to begin the shared visioning process for RPA 10. Stakeholders identified 21 key drivers impacting RPA 10. These drivers are trends, events, or changes that shape the future.

- **Evolution of agriculture:** New technology; changes in land ownership; new plant-based products (e.g., bio-plastics).
- **Changing macro-economic landscape:** larger corporations; new business and models (shift to online); trade tensions; macro-economic disparities.
- **Challenging local business environment:** Competition with other regions; variable innovation and entrepreneurship levels; skills and supply chain issues.
- **Technology and automation**: High-tech driven; impacts of AI and process automation; displacement of traditional technologies.
- **Quality of regional Infrastructure:** Aging roads and bridges, power, capacity issues, broadband access.
- **Transformation of energy systems:** Rapid shift to renewables, and displacement of traditional energy systems.
- **Quality of natural resources:** Changes to water and environmental quality; soil health and quality; mitigating nutrient run-off.
- **Impacts of climate change:** Impacts of changing weather patterns; extreme events; implications for flood frequency.
- **Suitability of housing supply:** Availability, affordability, and suitability of existing housing; regional proximity to employment bases and concentrations.
- **Surge in funding sources:** Short-to medium-term boost in government funding; (Includes all forms of government stimulus and payments, such as trade support).
- **Impacts of pandemic:** Medium-to long-term impacts of disruption; acceleration of trends such as automation; shift to remote and flexible work models.
- **Changing consumer demands:** Longer-term changes in consumer demands and sensitivities; increased environmental awareness and sensitivity.
- **Collaborative regional decision-making**: Challenges with political divisions and tensions; ability to collaborate on major regional decisions; inclusivity of decision-making process.
- **Skills and talent gaps**: Challenges with skills and talent gaps; ability for region to attract workers; adapting to new workplace models and systems.
- **Ability to access childcare**: Changing patterns of childcare availability and affordability; and uneven distribution across the region.
- **Changing regional demographics:** Aging rural populations; diversifying urban populations; concentration of population into regional centers.
- **Suitability of educational offerings**: Overall quality, availability, and affordability of education. Distribution and concentration of educational offering within region.
- **Overall health and wellness:** Increasing importance and focus on mental health; potential service shortage and provider burnout.
- **Shifts in rural vitality:** Rural population trajectory – static or declining; challenge to retain viability of local main streets.
- **Challenge to address equity**: Challenge from government and society to address systemic inequity, especially with minority groups.
- **Increasing importance in place:** Emerging focus on social amenities; importance of placemaking and public spaces; shifts in recreation desires and opportunities.

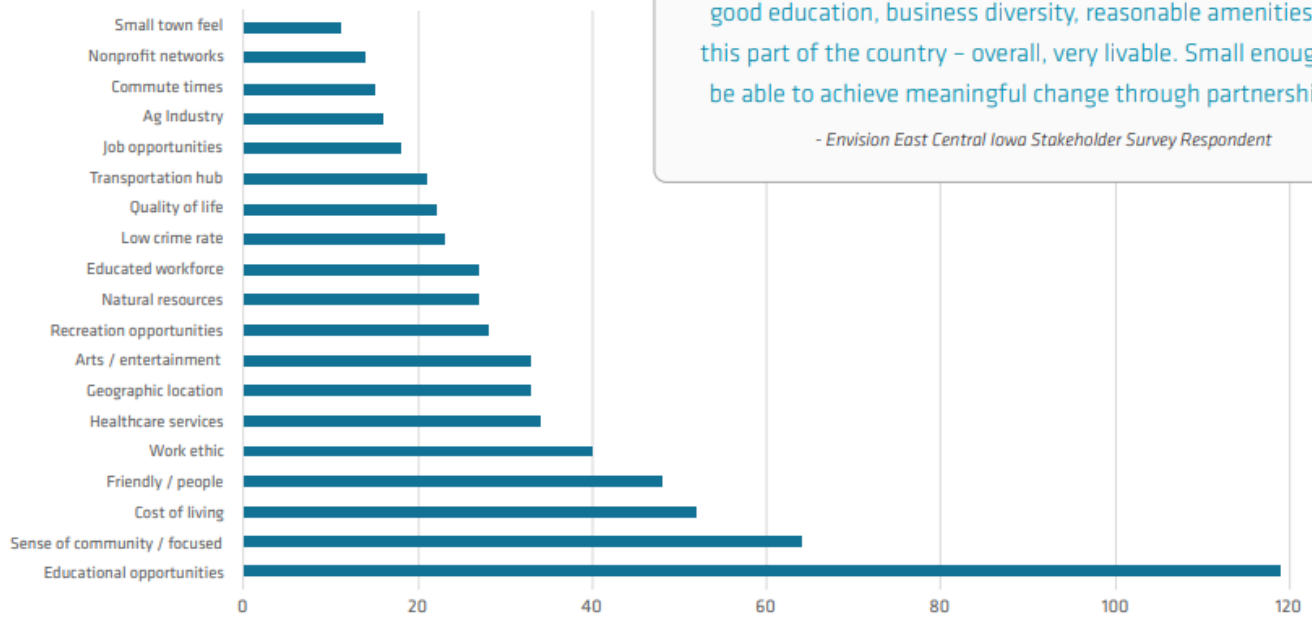
Strengths, Weaknesses, Opportunities, and Threats (SWOT) Analysis

A SWOT Analysis is a strategic planning tool to identify both the region's competitive advantages and the factors inhibiting its potential. The input process concluded the following about RPA 10.

Strengths

As a measure of what regional stakeholders consider East Central Iowa's strengths, survey respondents were asked to identify the region's strengths in narrative form. More than anything else, respondents considered the region's educational opportunities its greatest strength.

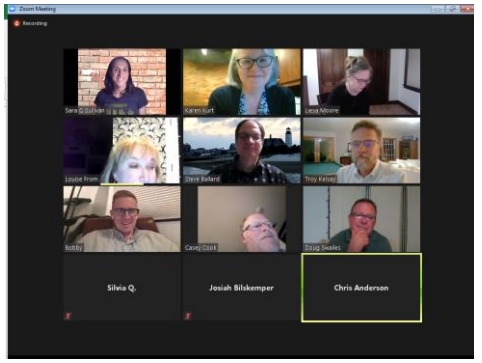
What are East Central Iowa's strengths? (n=265)



'East Central Iowa is a good place to live; a combination of good education, business diversity, reasonable amenities for this part of the country – overall, very livable. Small enough to be able to achieve meaningful change through partnerships.'

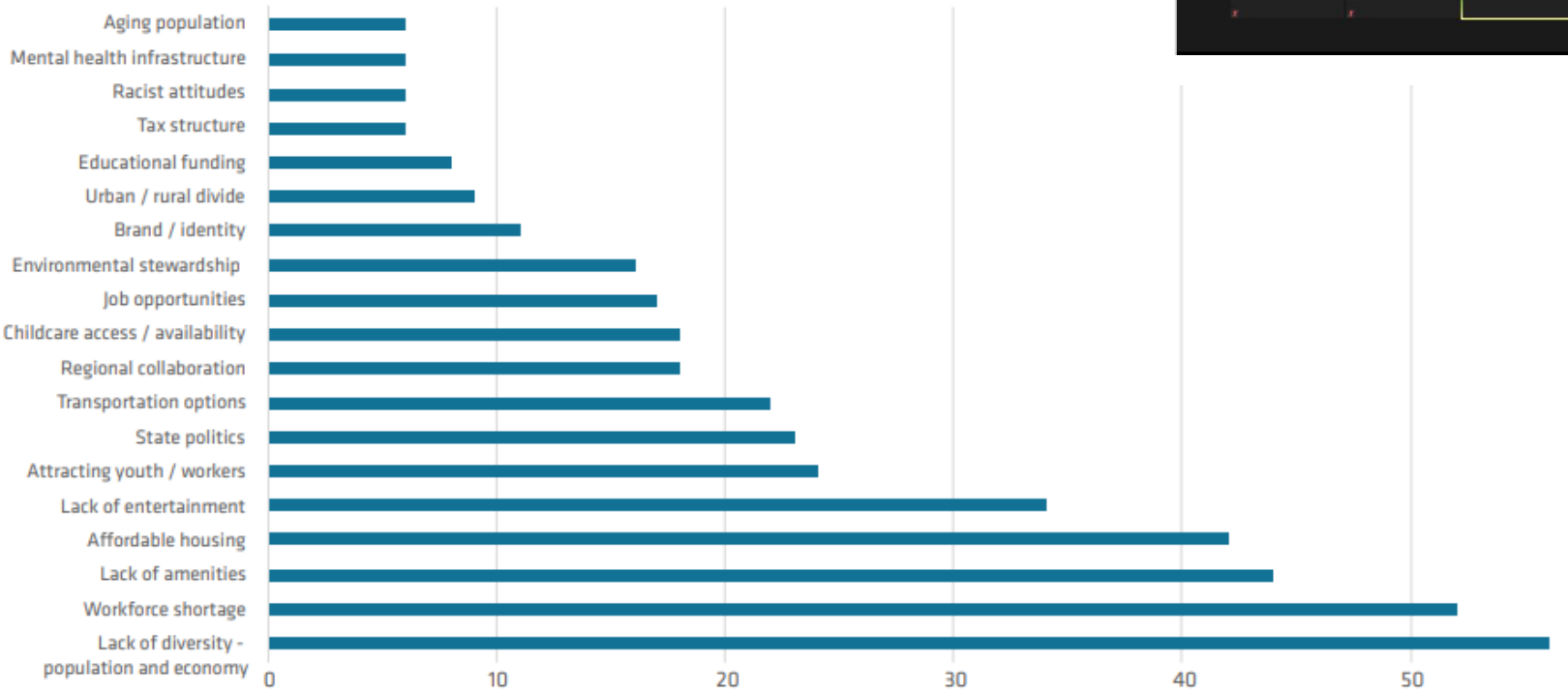
- Envision East Central Iowa Stakeholder Survey Respondent

Weaknesses



As a measure of what regional stakeholders consider East Central Iowa's weaknesses, survey respondents were asked to identify the region's weaknesses in narrative form.

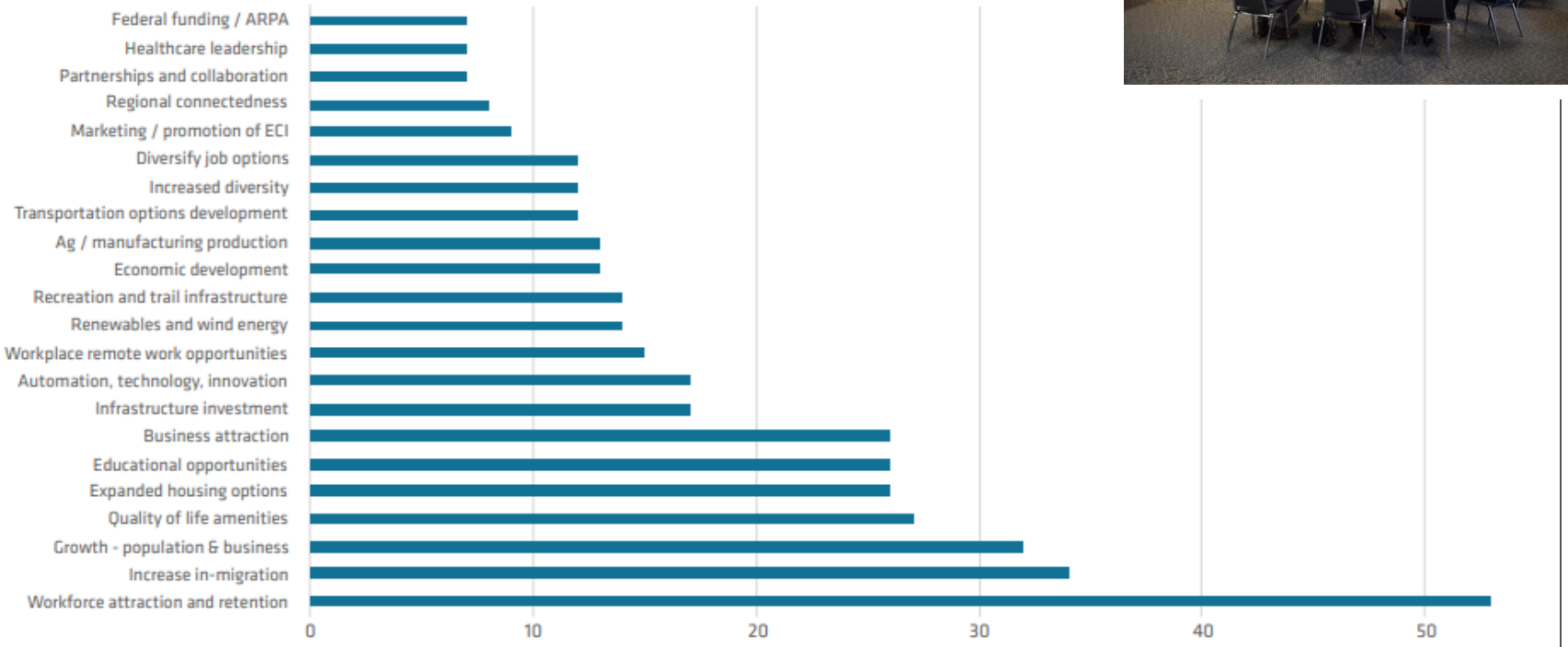
What are East Central Iowa's weaknesses?



Opportunities

Survey respondents were asked to describe in narrative form what they believed were the greatest opportunities for the region in the next 5 years. Workforce attraction and retention was identified as the greatest opportunity, followed by increasing in-migration to support workforce demands.

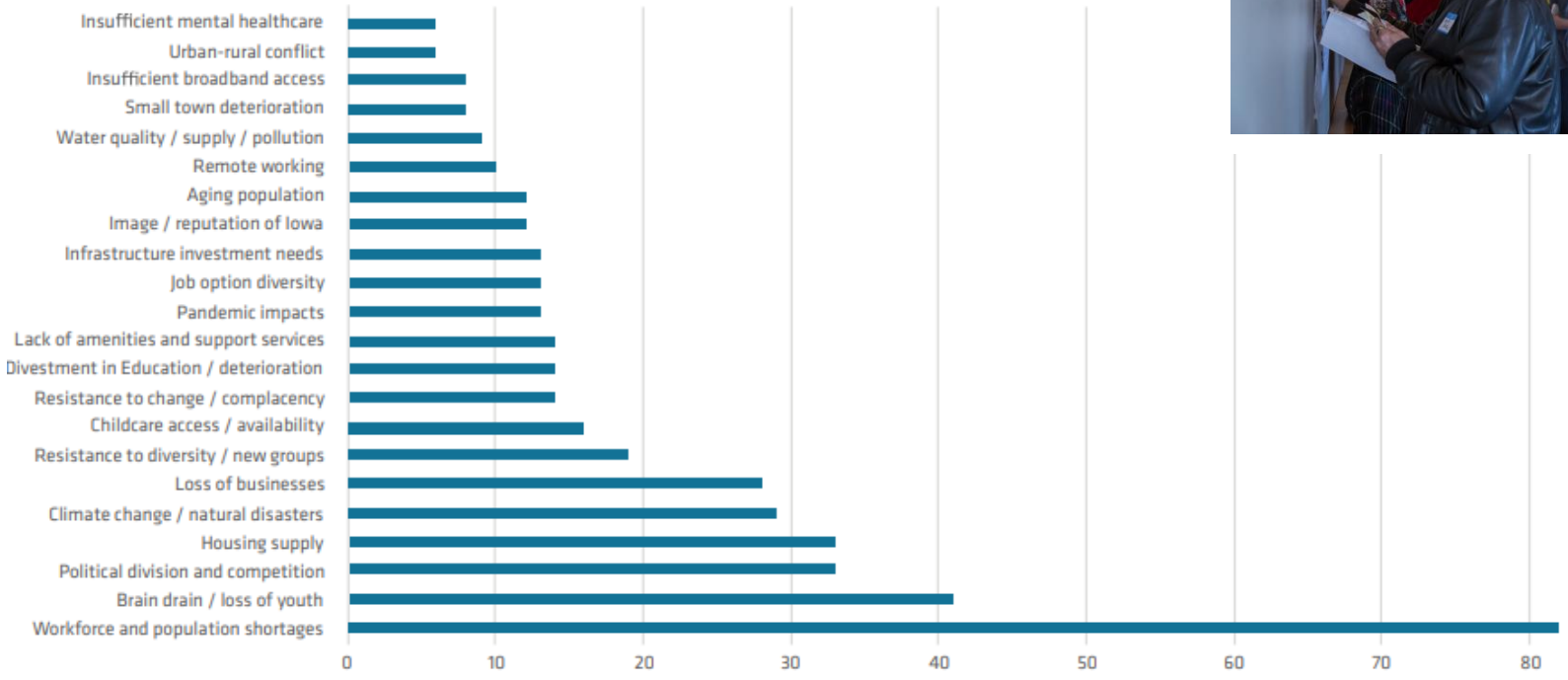
What are the biggest opportunities facing East Central Iowa in the next 5 years?



Threats

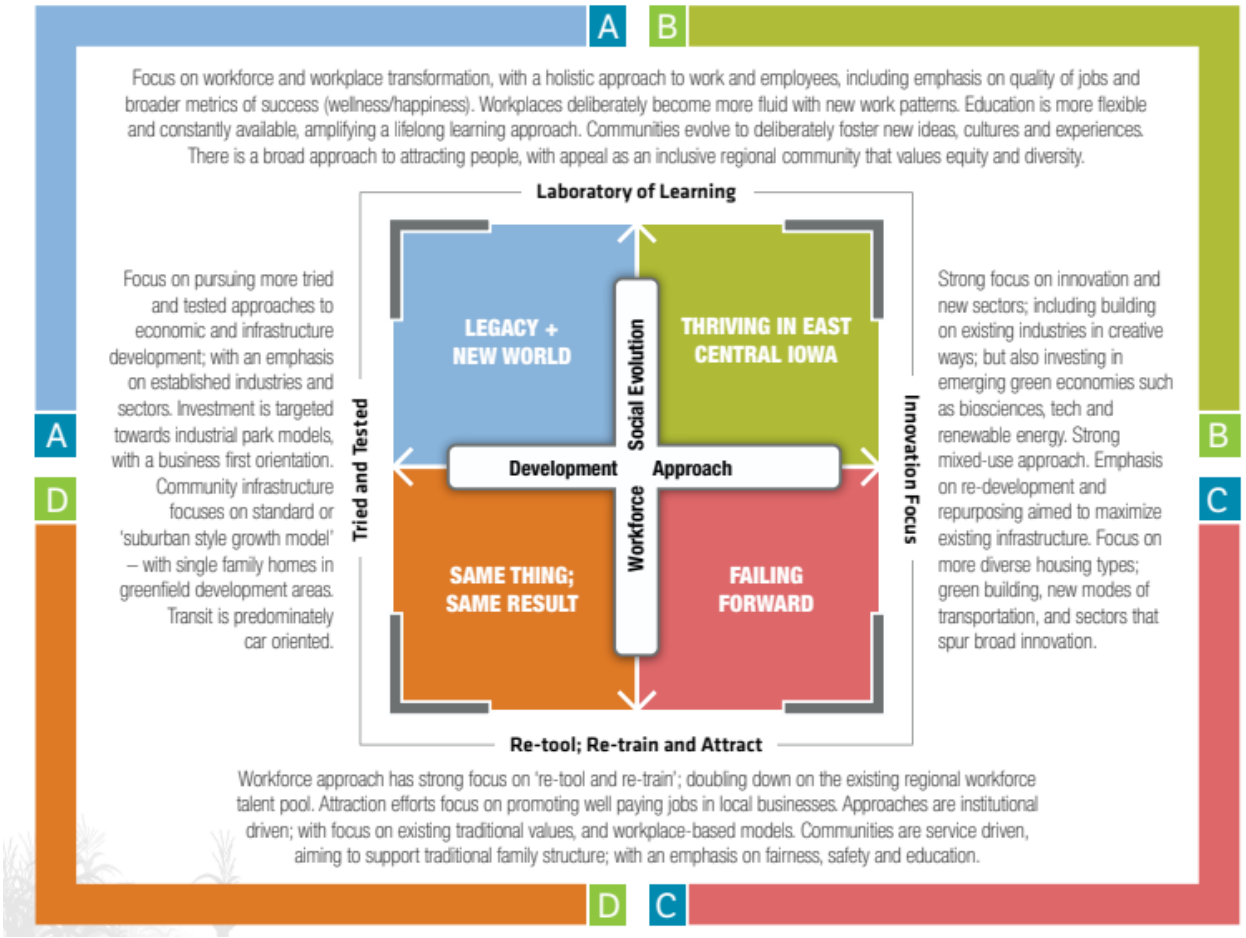
As a measure of where community stakeholders considered the East Central Iowa region unprepared or threatened by future impacts, survey respondents were asked to cite in narrative form what they believe are the biggest threats the region in the next 5 years. Survey results show significant concern with workforce and population shortages caused in part by a brain drain and loss in part by youth leaving the region

What are the biggest threats or challenges facing East Central Iowa in the next 5 years?



Scenario Framework and Preferred Scenario

Approximately 120 people participated in a virtual, scenario-based Think-Tank to explore plausible futures and their implications for the region. The five-hour Think-Tank event guided participants through a process that involved the exploration of local trends and forces of change, developed four plausible scenarios, and developed descriptive narratives for each scenario. Think Tank participants expressed a clear preference for Scenario B: "Thriving in East Central Iowa" as a preferred direction for the region.



Scenario B: Thriving in East Central Iowa paints a future where the strengths of urban and rural lifestyles are celebrated and promoted.

Economic Characteristics

Strong focus on innovation, new industry sectors, and mixed-use approach.

- New and unique industries are supported such as hemp, clean energy, etc.
- Electrification of technologies occurs, and high-speed broadband is considered a public utility; access for all.
- More public-private partnerships emerge to support growth.

Workforce and Social Characteristics

Workplace, education, and communities evolve to become laboratories of learning.

- State and local policies reflect a welcoming tone to all populations.
- Workplace is transformed to allow lifelong learning, flexible work schedules, and remote work.
- Transportation nodes and modes are redefined for efficiency and connectivity.

Environmental Characteristics

Green building, new transportation modes, and innovation are emphasized.

- Net-zero waste and net-zero homes are the standard.
- Innovation in construction materials and processes leads to greener and more efficient developments.
- Waterways are cleaner and water resources are protected.

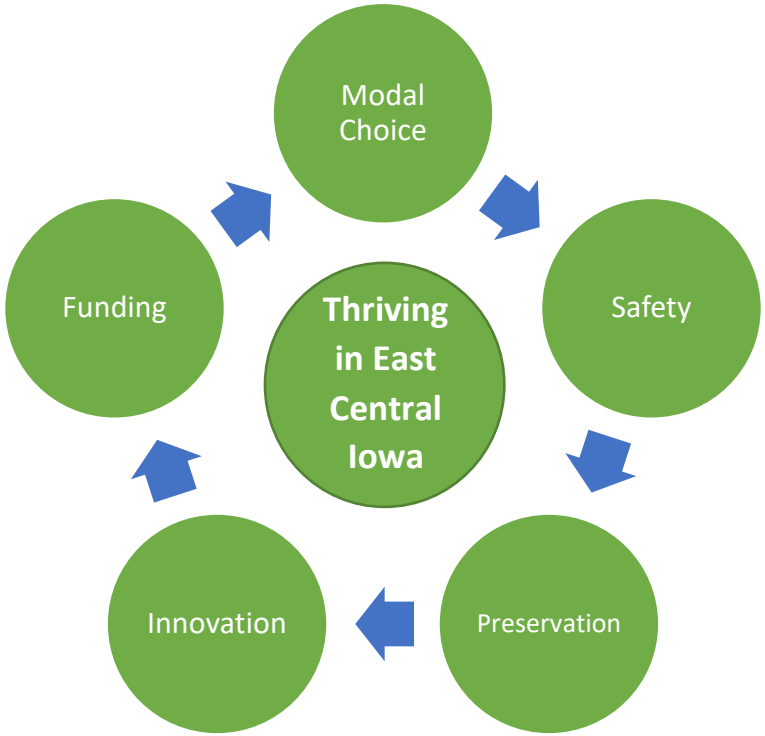
Vision and Transportation Strategies

The preferred scenario has been translated into a regional vision for transportation and overarching strategies have been developed, as well as specific goals and action steps. The broad vision for transportation for RPA 10 is:

"Thriving in East Central Iowa."

Accordingly, East Central Iowa is envisioned as a "laboratory of learning" with innovative thinking and solutions. The transportation network will enrich the regional quality of life by offering multiple transportation choices, making the system safe for all users, preserving the existing transportation system, protecting, and sustaining the region's natural resources, embracing innovation to enhance the network, and maximizing available financial resources.

The intent of the vision statement is to steer the overall development of transportation strategies, goals, and actions steps for RPA 10.



Summary of Transportation Strategies and Goals

The following is a summary of the transportation strategies and goals resulting from the input process. Specific recommendations and actions to achieve these goals are outlined in the modal section.

Mode	Goal	Strategy				
		Modal Choice	Safety	Preservation	Innovation	Funding
Roadways	Enhance *connectivity* of the roadway and bridge network.	X				
	Invest in the *preservation and maintenance* of the existing transportation infrastructure system.	X		X		X
	Improve *safety* for all users of the networks.	X	X		X	
	Develop *improvements and upgrades* that contribute to the efficient movement of goods and service.	X			X	
	Encourage *maximization of available financial resources* for roadway and bridge projects.	X			X	X
Active Transportation	Enhance *connectivity* of the regional and local trail system.	X				
	Increase *funding* for trails and other recreational resources.	X		X		X
	Consider *diversity* of users in natural and recreational planning.	X				
	Improve v*isibility* of trails and other recreational amenities is necessary to attract and retain an appropriate regional workforce.	X			X	
Public Transit	Continue e*xpansion* of transit services.	X				
	Encourage c*ollaboration* among providers and agencies	X			X	X
	Pursue *enhancement* of current services and pursuit of new innovations.	X	X		X	X
Freight	Ensure s*afety, security and resilience* of the freight network.	X	X			X
	Continue m*aintenance* of the freight network to ensure reliability.	X	X	X		
	Encourage i*nnovation and expansion* using advanced technologies, competition, and accountability to ensure the effective operation of the freight network.	X	X		X	
	Ensure reduction in environmental and community impacts of the freight system.	X	X		X	

RPA 10 Long-Range Transportation Plan 2022-2050

3. Regional Context

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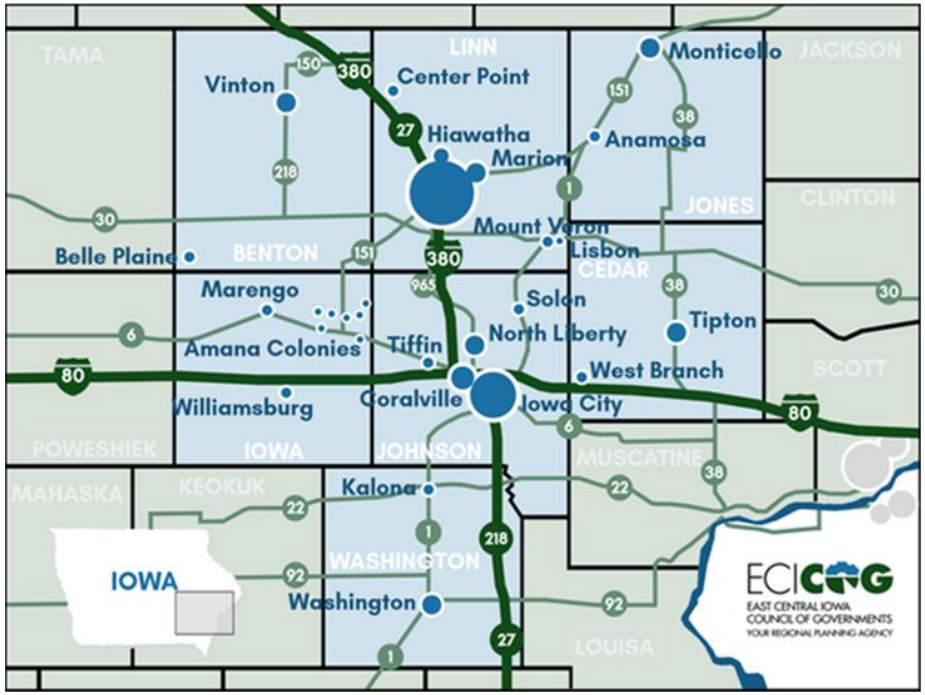
RPA 10 covers 4,400 square miles in Eastern Iowa, including the seven counties of Benton, Cedar, Iowa, Johnson, Jones, Linn, and Washington, and is home to a half million residents. The region is in close proximity (less than 300 miles) to Chicago, Milwaukee, Minneapolis, Omaha, and St. Louis. A primary artery linking these areas is Interstate 380 / US Highway 218, which runs north and south through the central part of the region. Interstate 80 is a major east-west route through the southern part of the region, with US Highway 30 serving as another east-west route through the northern part of the region. US Highway 151 bisects the region running north-south. Access to markets is provided by the highway system and an extensive system of secondary roads; multiple freight rail carriers; and one commercial airport and eight additional airports of varied federal classifications. The region is characterized by two urban areas, numerous small towns, and rural countryside. Within the seven counties are 72 municipalities and 30 public school districts. The largest municipalities are Cedar Rapids and Iowa City, located in central Linn County and Johnson County respectively.

Figure 3.1: Map of RPA 10

Source: ECICOG



Population

According to the 2020 U.S. Census, the total population of RPA 10 is 487,106. Half (47%) of the population resides in Linn County, and nearly a third (31%) of the population resides in Johnson County. As noted in Figure 3.2, from 2000 to 2020 RPA 10 is growing, much of which is occurring in urban areas. The region is projected for continued growth, with indications that by 2050 the population will be over 570,000.

In addition, the region is becoming more diverse. The Non-White population has grown more than 10 % - 6.1% in 2000 to 17.0% in 2020. At the same time, the population of the region has continued to age. From 2000 to 2020, the median age of RPA 10 has increased by over two years (34.1 years in 2000 to 36.5 years in 2020).

Figure 3.2: RPA Demographic Summary

Source: 2020 U.S. Census, 2010 U.S. Census, 2000 U.S. Census, 2019 American Community Survey, State Library of Iowa, Iowa State Data Center

	Year 2000	Year 2010	Year 2020
Total Population	402,764	445,380	487,601
Rural %	31.8%	18.7%	17.0%
Urban %	68.2%	81.3%	83.0%
White %	93.9%	91.0%	83.0%
Non-White %	6.1%	9.0%	17.0%
Projected Population	517,058 **(2030)**	545,629 **(2040)**	572,784 **(2050)**
Median Age	34.1 years	35.6 years	36.5 years

Figure 3.3: Population Change by County, 2000-2020

Source: Iowa State Data Center

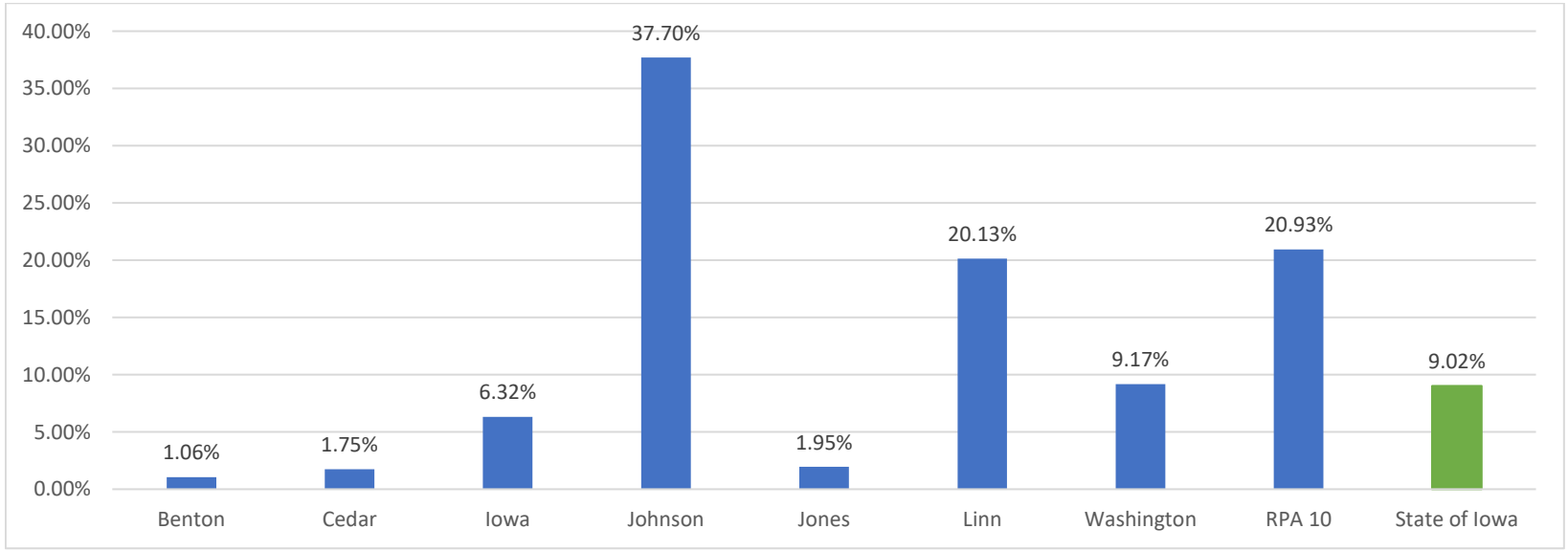
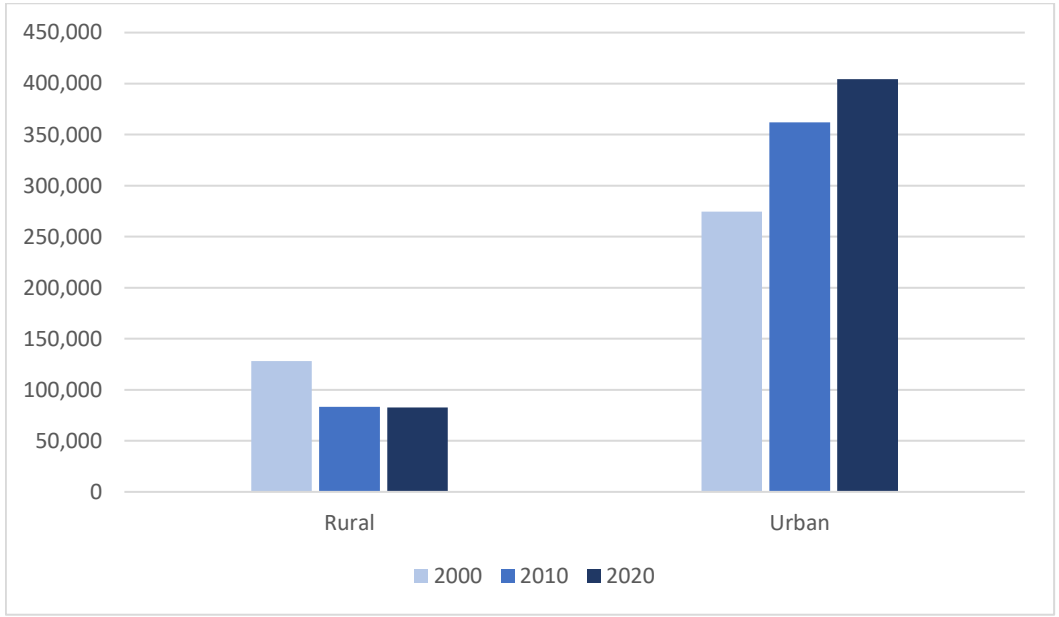


Figure 3.4: Change in Rural and Urban Living in RPA 10

Source: Iowa State Data Center



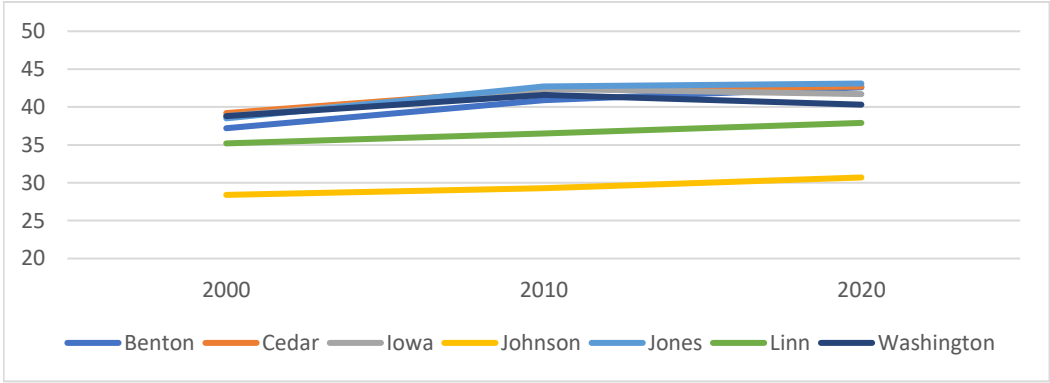
Age

The median age of the population in RPA 10 is increasing. As noted in the Figure 3.2, the median age has increased from 34.1 to 36.5 years over the past twenty years. This trend will require attention from transportation planners as the number of senior drivers increases.

Of note, the median age in Johnson County, shown in Figure 3.5, is significantly lower than the rest of the region, shown in the chart to the right. This is due primarily to the significant student population at the University of Iowa.

Figure 3.5: Median Age of Population in RPA 10

Source: Iowa State Data Center

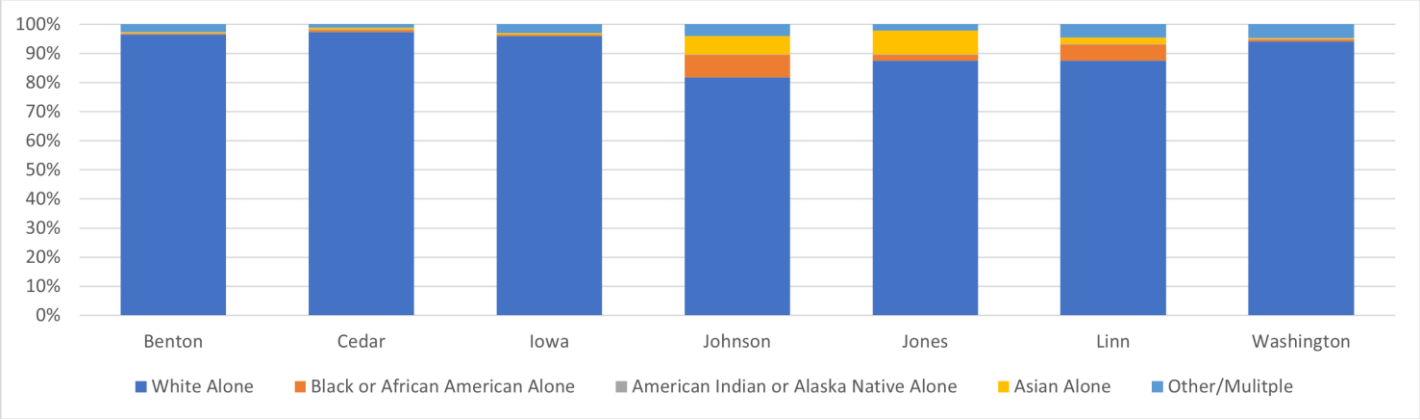


Diversity

RPA 10 is slowly becoming more diverse, but it is still predominantly White, Non-Hispanic, as noted in Figure 3.6. In addition, some newcomers

Figure 3.6: Race Distribution in RPA 10

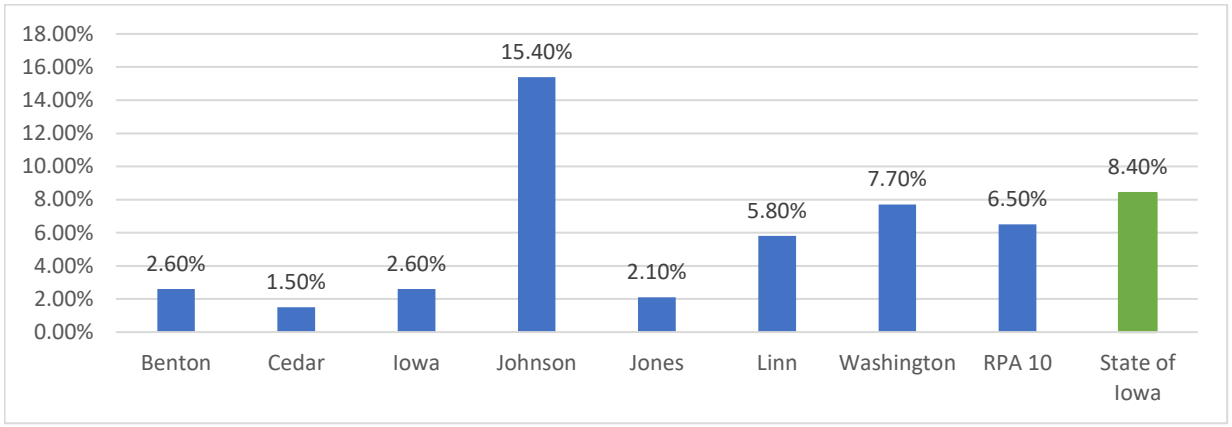
Source: Iowa State Data Center



do not speak fluent English. Figure 3.7 depicts the number of households where a language other than English is spoken in the home. The higher percentage in Johnson County is most likely influenced by the number of international students attending the University of Iowa. These populations may present special challenges and opportunities for public transportation planning, including the difficulty of communicating programs to people who may not speak English fluently.

Figure 3.7: Percent of Households Where a Language Other Than English is Spoken at Home

Source: American Community Survey



Income

The median household income in the state of Iowa is $67,284. The median household income in much of RPA 10 is greater, except in Jones and Washington Counties, where the median household income is $61,736 and $65,061, respectively. The region has relatively low poverty rates. A notable exception is Johnson County, where over 14% of the population falls below the poverty level. This figure is impacted by university student population in Johnson County. According to the FHWA Livability Initiative, transportation is the second largest expense for most households after housing. Households living in vehicle-dependent locations spend 25 percent of their income on transportation costs. Housing that is affordable and located closer to employment, shopping, restaurants, and other destinations can reduce household transportation costs to nine percent of household income.

Figure 3.8: Median Household Income (2020)

Source: Iowa State Data Center

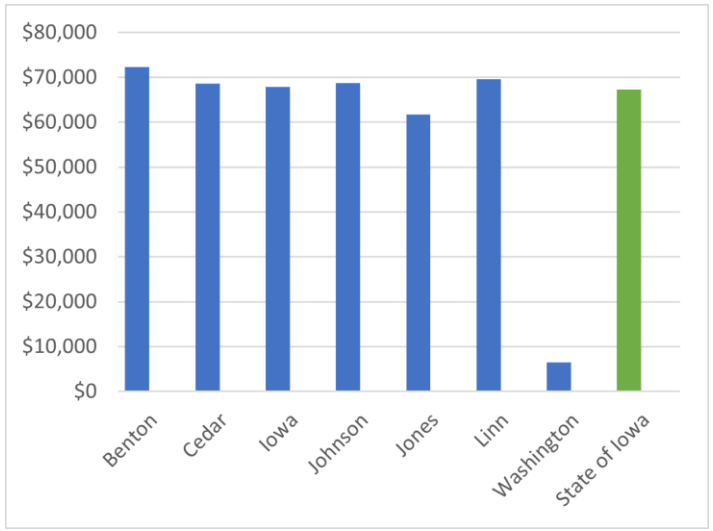
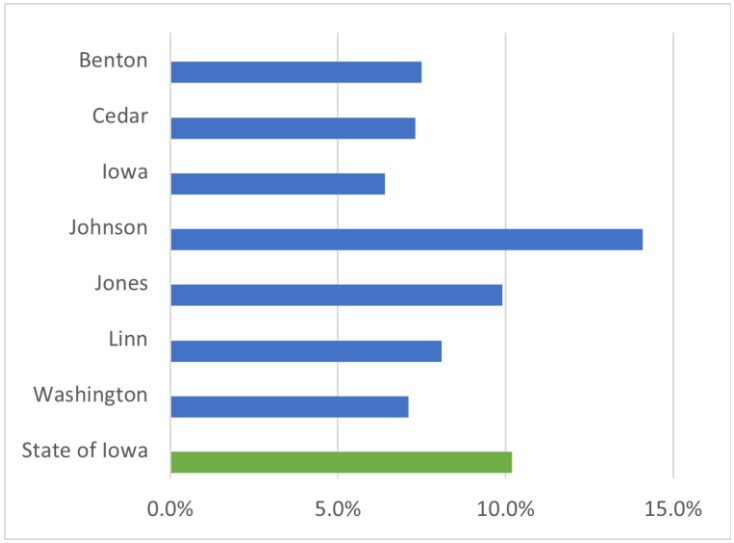


Figure 3.9: Poverty Rates (2020)

Source: Iowa State Data Center



Economy

The economy in RPA 10 has experienced solid and consistent growth. The Gross Domestic Product (GDP) for the region, commonly used to measure economic activity, has outpaced the State of Iowa and the nation over the past 20 years. The growth is the result of changes and evolution within industry clusters. In recent years, there has been strong growth in the Insurance and Finance sector and the Education Technology Services sector, but a decline in the Manufacturing sector. The graphics below summarize these changes.

Figure 3.10: GDP Index, 2001-2020

Source: Bureau of Economic Analysis

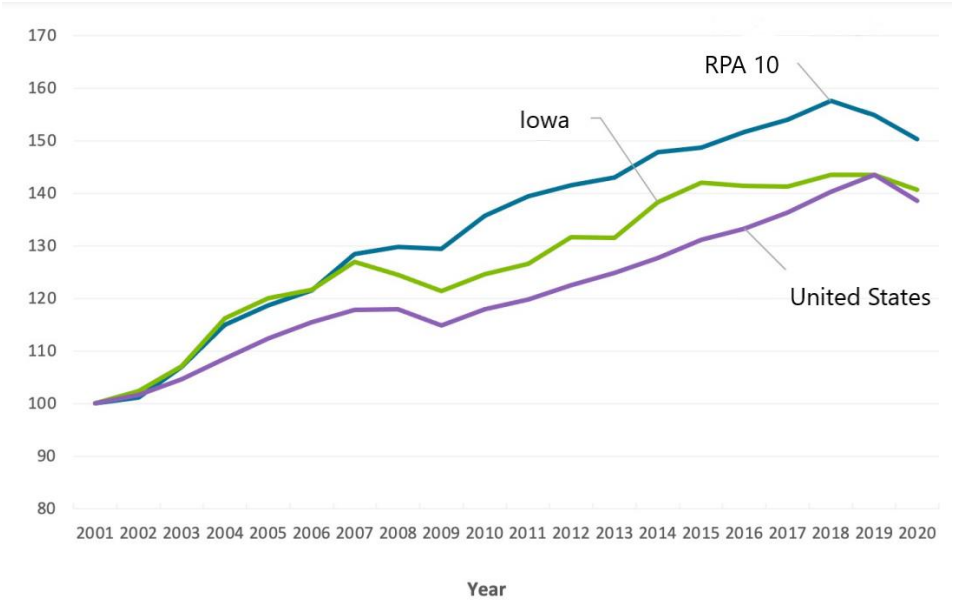
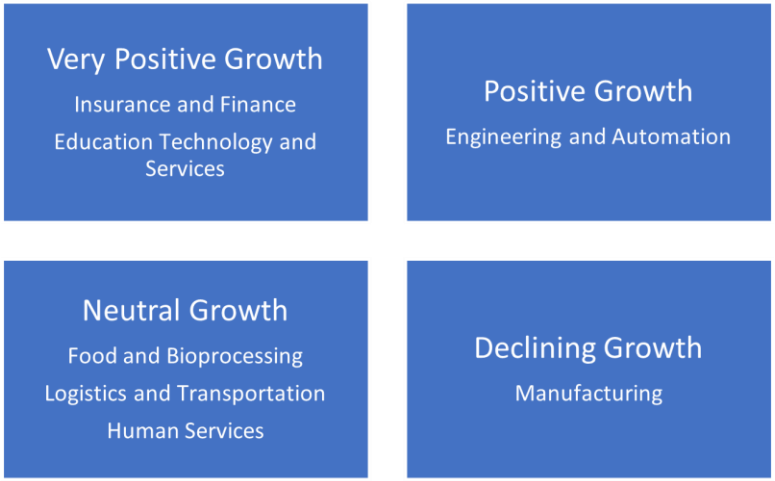


Figure 3.11: Strong Industry Clusters in RPA 10

Source: *Envision East Central Iowa*, ECICOG



Employment

RPA 10 is home to a variety of industries and employers. The 50 largest employers are primarily located in Linn and Johnson Counties, drawing their workforce from all of the surrounding counties. Commuter travel patterns in the RPA vary by county and are affected primarily by employment opportunities.

Figure 3.12 Map of Largest Employers in RPA 10

Source: Iowa DOT

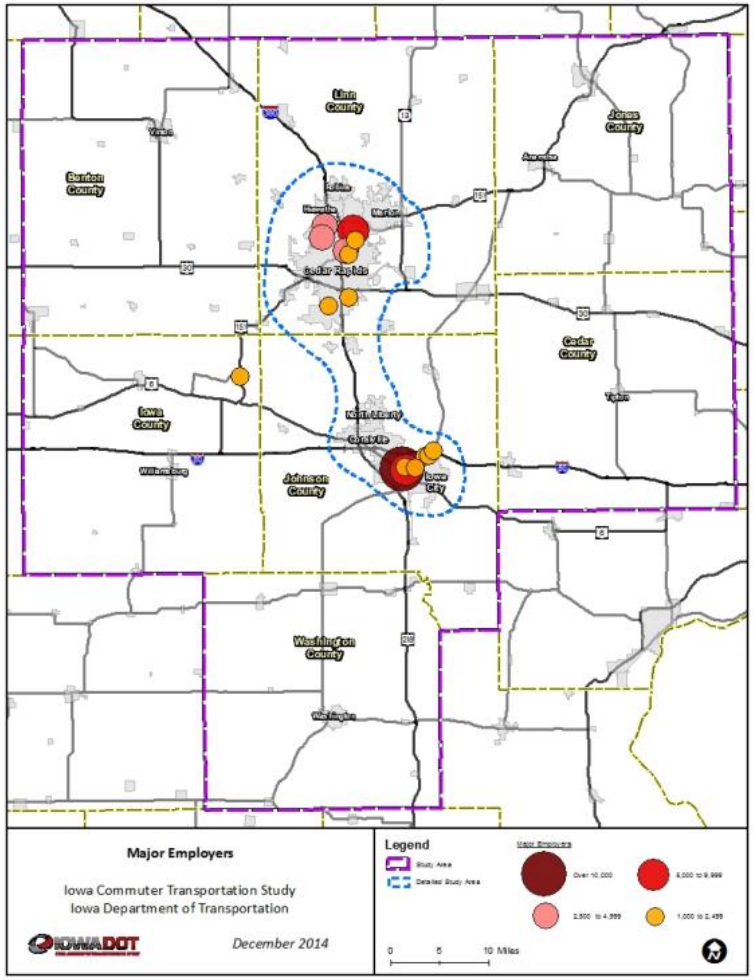


Figure 3.13: Largest Employers in RPA 10

Source: Cedar Rapids Metro Economic Alliance

Name	Employees	City
The University of Iowa	30,012	Iowa City
UI Health Care	10,288	Iowa City
Collins Aerospace	8,200	Cedar Rapids
Whirlpool	3,430	Amana
UnityPoint Health - St. Luke's Hospital	2,979	Cedar Rapids
Cedar Rapids Community School District	2,879	Cedar Rapids
Transamerica	2,500	Cedar Rapids
Hy-Vee	2,326	Cedar Rapids
Nordstrom Direct	2,150	Cedar Rapids
Mercy Medical Center	2,140	Cedar Rapids
Veterans Administration Medical Center	2,115	Iowa City
ACT Inc	1,350	Iowa City
City of Cedar Rapids	1,326	Cedar Rapids
Cedar Rapids City Hall	1,267	Cedar Rapids
UFG Insurance	1,200	Cedar Rapids
Iowa State University - CIRAS	1,000	Cedar Rapids
Linn-Mar Community School District	987	Marion
Quaker Foods & Snacks	975	Cedar Rapids
Pearson - Iowa City	930	Iowa City
Tata Consultancy Services	925	Cedar Rapids
Mercy Hospital Iowa City	900	Iowa City
College Community School District	850	Cedar Rapids
Alliant Energy	845	Cedar Rapids
Four Oaks	800	Cedar Rapids
West Side Transport	765	Cedar Rapids
General Dynamics	700	Coralville
Toyota/Lexus Financial Services	690	Cedar Rapids
Linn County Board of Supervisors	670	
MediRevv	650	Iowa City
General Mills	650	Cedar Rapids
PAETEC	647	Hiawatha
Proctor & Gamble	600	Iowa City
Hibu	600	Cedar Rapids
GreatAmerica Financial Services Corporation	600	Cedar Rapids
GoDaddy	600	Hiawatha
Oral B Laboratories	590	Iowa City
CRST International, Inc.	575	Cedar Rapids
Folience	572	Cedar Rapids
Wells Fargo Vendor Financial Services	560	Cedar Rapids
Frontier Co-Op	540	Norway
Riverside Casino & Golf Resort	534	Riverside
Van Meter	503	Cedar Rapids
Kinze	500	Williamsburg
Centro Inc.	500	North Liberty
ADM-Corn Processing Division	496	Cedar Rapids
GreenState Credit Union - North Liberty	492	North Liberty
PMX Industries Inc.	450	Cedar Rapids
HR Green Inc.	443	Cedar Rapids
Windstream	420	Hiawatha
NextEra Energy Duane Arnold Energy Center	420	Palo

Commuting

Transportation to employment is an important consideration when planning for and providing transportation services. As noted below, most commuters in RPA 10 travel alone to work by truck, car, or van. Also detailed below, the two urban counties (Johnson and Linn) display similarities. The four rural counties show differing trends. In Johnson County, 87% of workers live and work in the county. This number is slightly higher in Linn County, at 90%. In rural counties, the trend was that fewer residents work in the county in which they live. This suggests that those living in rural counties more often travel between counties for employment, likely due to more employment opportunities in the urban counties.

Note - This data does not reflect pandemic-related changes in commuting patterns, when working from became the norm. Many have returned to work in recent months, but the number of people working from home remains higher than reflected in currently-available data.

Figure 3.14: RPA 10 Means of Travel to Work

Source: American Community Survey

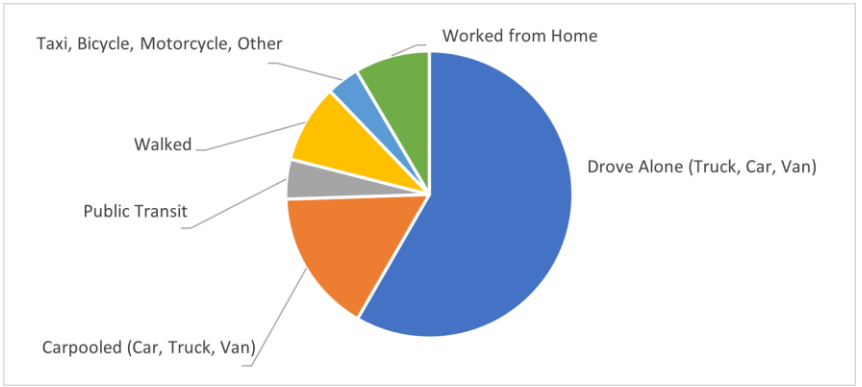
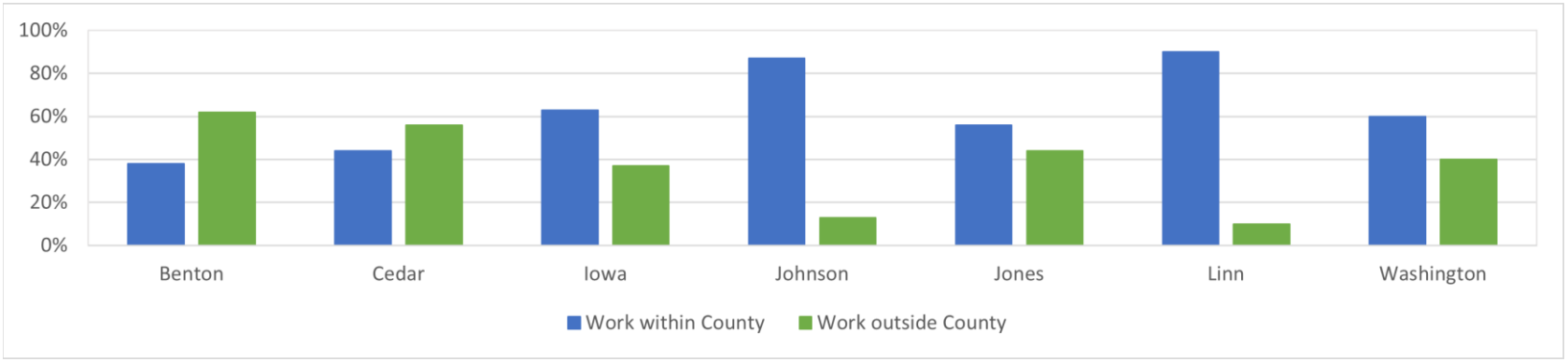


Figure 3.15: Employment Travel Patterns by County

Source: American Community Survey

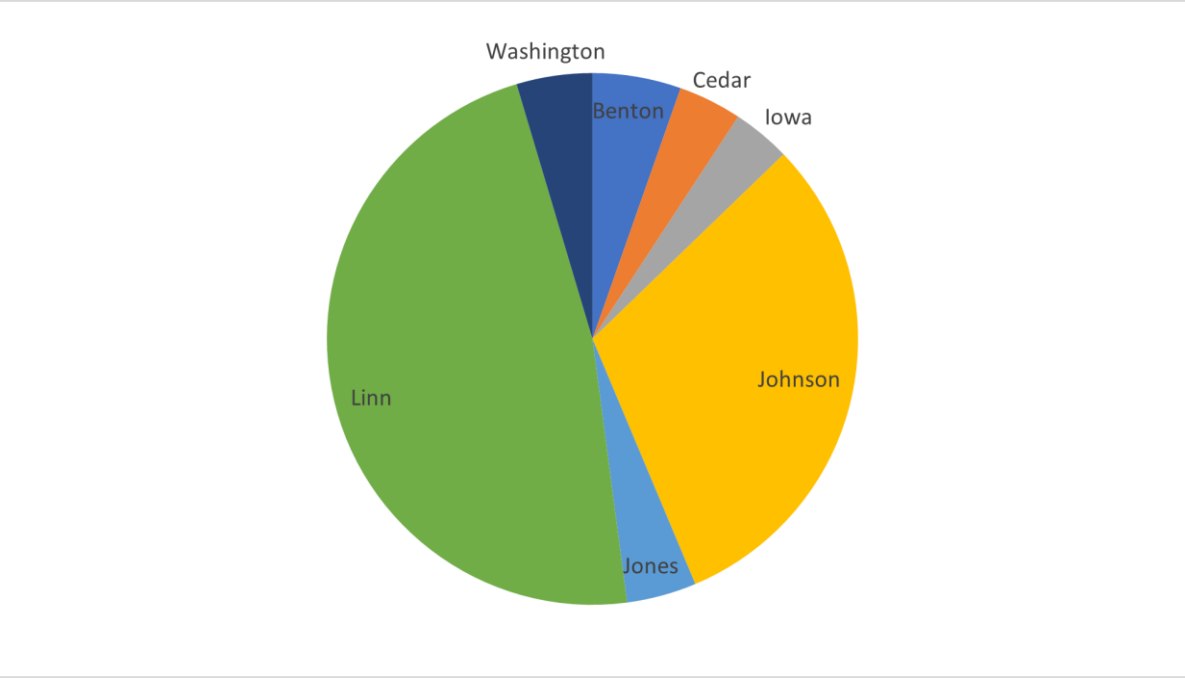


Housing

The cost of housing and the cost of transportation are two large factors in determining where people choose to live. Metropolitan area workers may be more likely to live elsewhere in the region if the trade-off between decreased housing costs and increased transportation costs is still

Figure 3.16: Total Housing Units in RPA 10

Source: American Community Survey



Note - Housing units in RPA 10 were significantly impacted by the derecho in August 2020. Linn and Benton Counties were hit especially hard. The total number of housing units impacted in RPA 10 hasn't been calculated, however, the Governor's office estimated that over 8,000 homes in Iowa were severely damaged or destroyed. It should be noted that current housing data does not reflect the impact of the storm.

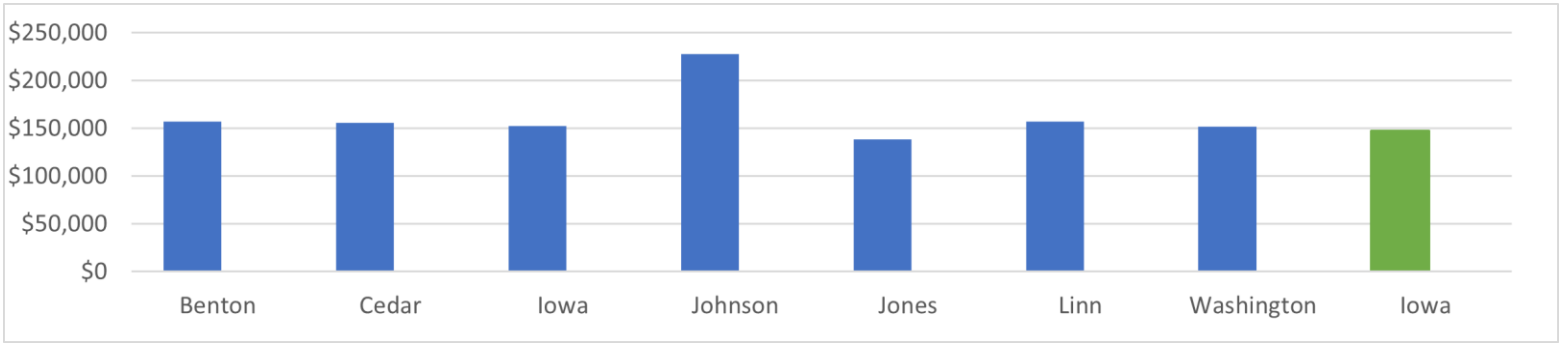
positive. The total number of housing units in the region is 191,450. Of this number, approximately 73.4% are owner-occupied units, just slightly lower than the statewide average of 73.9%. The region's vacancy rate is 7.8% compared to 14.6% for the State.

If effort hasn't been made to make improvements to older homes, the age housing stock can indicate general housing conditions. Age also indicates how much new construction is occurring, which can in turn be an indication of growth. Homes in Johnson and Linn Counties are newer than those in the rest of the State, but housing units in other counties in the region are slightly older. As noted in Figure 3.17, the median value

of housing units throughout the region varies, with a low of $138,400 in Jones County and a high of $227,000 in Johnson County. With the exception of Jones County, the median value of housing units in RPA 10 is higher than the State median value of $147,800.

Figure 3.17: Median Value of Owner-Occupied Units

Source: American Community Survey



Land Use

Land use and transportation are interdependent. Creating or expanding transportation options often increases the attractiveness of the land they pass through, promoting residential and commercial growth. When areas are growing slowly, it's easy for land use and transportation planning to keep pace. In areas of high growth, development of transportation facilities may be unable to keep up, resulting in heavy congestion and other transportation problems. Effective land use planning helps to plan for future growth.

Land use regulations vary substantially across RPA 10. In general, the largest jurisdictions within the region have the most specific land use regulations. In Iowa, a jurisdiction must first have a land use plan in order to implement zoning. The level of detail on land use plans varies substantially with the region. Some counties having only a map (Jones), while other counties have designated land use planning districts (Linn and Johnson), and still others have plans but no map (Benton).

Within the seven-county ECICOG region, Linn and Johnson Counties have long-standing zoning ordinances and detailed land use plans. These provide targeted areas of residential growth, farmland protection, and natural resources conservation for their respective metro areas. Washington and Jones Counties developed zoning ordinances that primarily address farmland conservation; Washington County's was rescinded in 2010. Benton and Iowa Counties do not have zoning. Regulations regarding land use are often related to the natural features of the

jurisdiction in question. Some areas, such as Benton County, tend to be flat with high corn suitability ratings (CSR), leading toward regulations that heavily favor protection of agricultural land. Other areas have woodlands and floodplain protected by planning designations and zoning.

Environment

Transportation facilities can have negative impacts on the environment, including degradation of air quality, greenhouse gas emissions, increased threat of global climate change, and degradation of water resources. Accordingly, understanding the existing environment and related environmental planning efforts should be considered in the transportation planning process.

Landscape

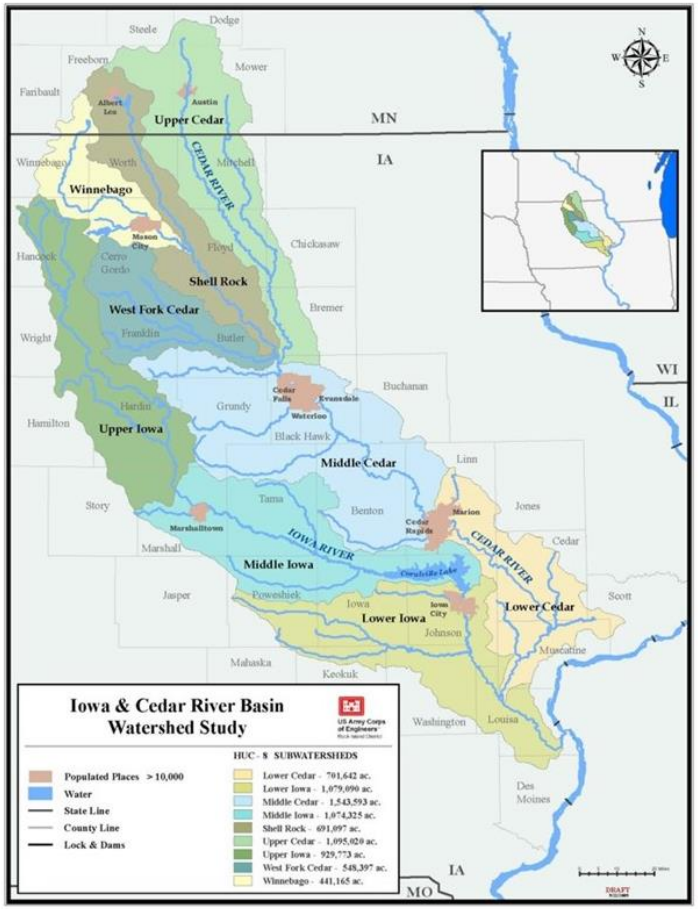
The region is typically characterized by generally rolling land, with some hills and river valleys. The original vegetation consisted of forests and prairies. One of the region's most valuable resources is its prime farmland. Cedar County, for example, has one of the highest CSRs in the entire state. The region contains a limited number of nonrenewable natural resources such as clay, coal, gypsum, sand, gravel, and limestone.

Water

Water quality is a serious physical constraint to development within the region. Groundwater is readily available but is either shallow (100-400 feet) or very deep (over 2,000 feet). Shallow wells are susceptible to surface pollution from fertilizers, manure, and pesticides. Many supplies of ground and surface water contain large quantities of materials like calcium carbonate, iron compounds, manganese, and salts. In recent years, the region has taken crucial steps to protecting water quality. New watershed management authorities have been formed and are

Figure 3.18: Watersheds in Eastern Iowa

Source: U.S. Army Corp of Engineers



performing watershed planning. This includes implementing numerous local projects to improve water quality and reduce flood risk using the Iowa Watershed approach.

Air

The region is currently in full attainment for air quality. According to the Department of Natural Resources statewide air monitoring data, there are currently no areas of concern in the region. There are, however, areas of near-nonattainment. The region will continue to monitor federal air quality standards for changes that could affect the current status.

Conclusions

An understanding of the characteristics of the region is necessary to properly maintain the existing transportation system and plan for future needs, challenges, and opportunities. It is important to review existing conditions and anticipated trends of demographic and economic characteristics, as these elements directly affect the volume and type of transportation taking place and the infrastructure required to meet its demand.

Overall, RPA 10 is growing, albeit unevenly. From 2000 to 2020, much of the growth has been in the urban areas, and the region is projected for continued growth. Indications are that by 2050, the population of RPA 10 will be over 570,000. In addition, the region's population is both becoming more diverse and continuing to age. The economy in RPA 10 has experienced solid and consistent growth. The region's GDP, commonly used to measure economic activity, has outpaced the State of Iowa and the nation over the past 20 years. The growth is the result of changes and evolution within industry clusters.

All of these characteristics have been considered as RPA 10 prepared the remaining chapters of this plan, including an assessment of each transportation mode, the identification of modal goals and strategies, the development of a financial analysis, and a discussion of future planning activities.

RPA 10 Long-Range Transportation Plan 2022-2050

4. Road and Bridge Network

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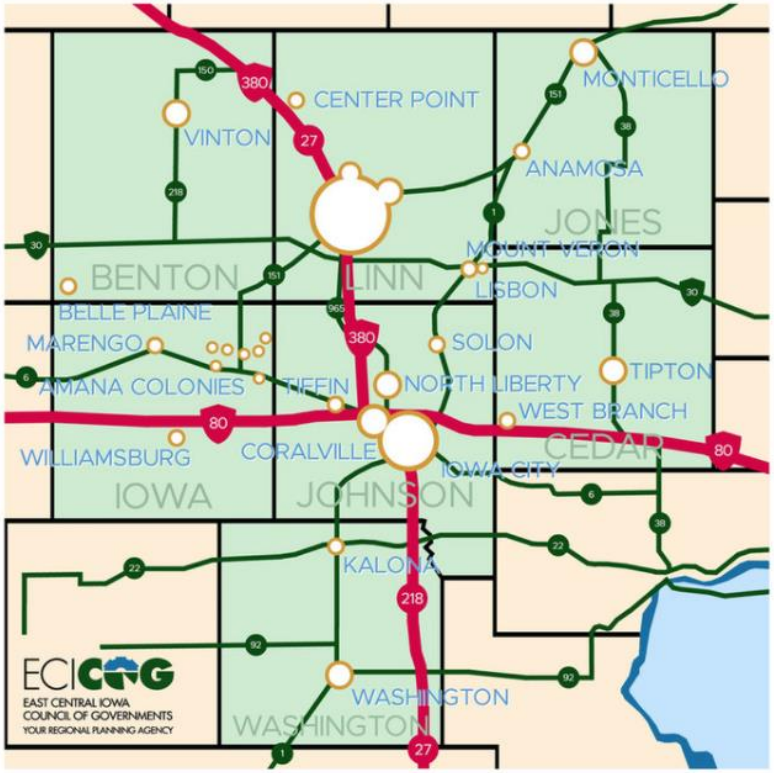
The transportation system allows people and goods to move within and outside RPA 10, which is extremely important to the region's economy and its citizens' quality of life. The RPA 10 transportation system contains multiple modes, including: basic automobile transportation, semitruck and rail freight, public transit, active transportation infrastructure, airports, and pipelines. The background and analysis of RPA 10's system will focus on its basic components and discuss current conditions, priorities, and future strategies.

Roadways

The regional road network, comprised of a system of state highways, county roads, and city streets, serves as the backbone of the transportation network. While it primarily serves the movement of cars, the region's public transit and freight system are also dependent on the road network. Accordingly, the roadway system plays a significant role in supporting the region's quality of life and economy.

Figure 4.1: Map of RPA 10
Source: ECICOG



State Highways

A highway system connects RPA 10 to other areas of the State and beyond. These roads include Interstate 380 and US Highway 218, which runs north and south through the central part of the region. Interstate 80 is a major east-west route through the southern part of the region, and US Highway 30 serves as another east-west route through the northern part of the region. US Highway 151 is a north-south corridor bisecting the region. These major roads are the primary routes used by private individuals and semi-trucks traveling within and through the region.

Federal Functional Classification

Highways and roads are categorized according to the Federal Functional Classification (FFC) to describe the level and type of use on the road. The FFC system serves as a basis for how some state and federal transportation dollars are allocated. A description of the FFC categories and a map of the FFC routes in RPA 10 are noted in the following pages.

Federal Functional Classifications

Interstate: *These roads are divided facilities with at least 4 lanes. They have full-controlled access and are designated by the Federal Highway Administration as part of the Interstate System.*

Other principal arterial or minor arterials: *Arterials provide the highest level of mobility at the greatest vehicular speeds for the longest uninterrupted distances. Generally, these roadways have higher design standards and feature multiple lanes with some degree of access control. The rural arterial network provides connections between cities, metropolitan areas, and bordering states. Arterials are defined as principal or minor. Principal arterials maintain the highest speeds and uninterrupted distances.*

Major collector or minor rural collector: *Collectors provide an intraregional mixture of mobility and land access by connecting the arterial network to local roadways. Rural collectors are subdivided into major and minor categories.*

Local: *The local roadways represent the largest element of the road network in terms of mileage. Local streets provide the lowest level of mobility by accessing adjacent land use, serving local trip purposes, and connecting to higher order roadways. Vehicular speeds are slower than on arterial or collector streets.*

Figure 4.2: RPA 10 Federal Functional Classification Map

Source: Iowa DOT

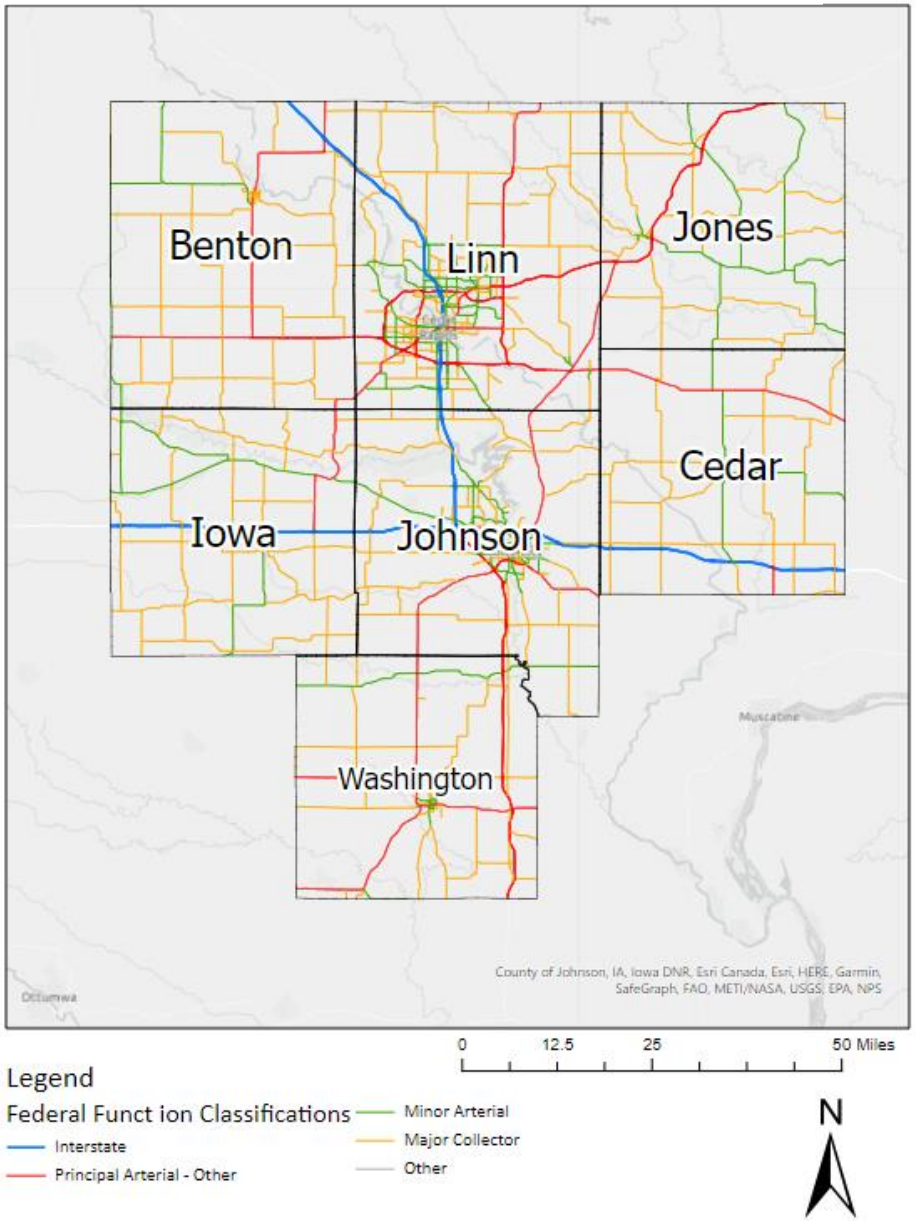


Table 4.3 summarizes the regional roadways by classification. Roadways classified as major collectors and above are eligible for federal funding.

Figure 4.3: Mileage of Roadway in RPA 10 by Classification

Classification	Number of Miles	Percent of Miles
Interstate	87.35	1%
Other Principal Arterial	275.64	4%
Minor Arterial	255.30	3%
Major Collector	1,130.05	15%
Minor Collector	1,199.36	16%
Local	4,664.20	61%
Total	7,611.90	100%

Source: Iowa DOT

Performance and Condition of Roadway Network

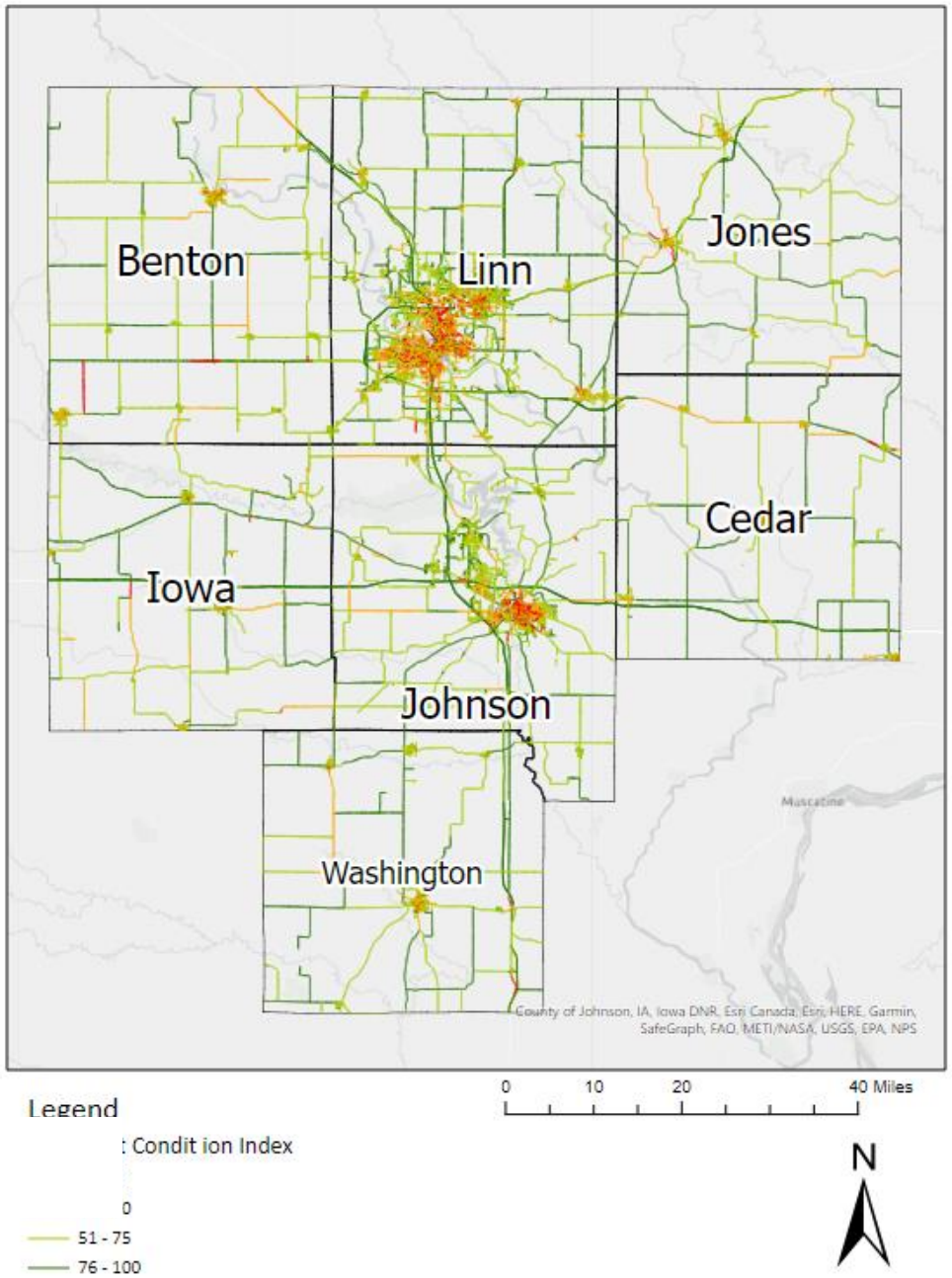
Pavement Condition Index (PCI)

The condition of pavement is important to consider. A low condition means the road cannot fully serve its intended purpose and traffic level. The PCI is a 0-100 ranking that measures the condition of interstate and state highway systems. This system helps the State identify pavement improvement needs. On the following page is a map showing PCI ratings in the area according to 2019 data. The Iowa Pavement Management Program (IPMP) is housed at the Institute for Transportation at Iowa State University, provides detailed pavement data, including interactive maps. Additional information can be found at https://ctre.iastate.edu/ipmp/. Roads on the map below are under state jurisdiction for maintenance and repair.

The current pavement condition in the region is generally good for roads under state jurisdiction. The average PCI in RPA 10 in 2019 is 36.0. A few areas in the region that are in worse condition include: V40 in Benton County from US 30 to E66, V56 in Iowa County from I-80 to V48, and W64 in Washington County from G6W to US 218 and from IA 92 to IA 27.

Figure 4.4: RPA 10 PCI Ratings, 2019

Source: Institute for Transportation/Iowa DOT



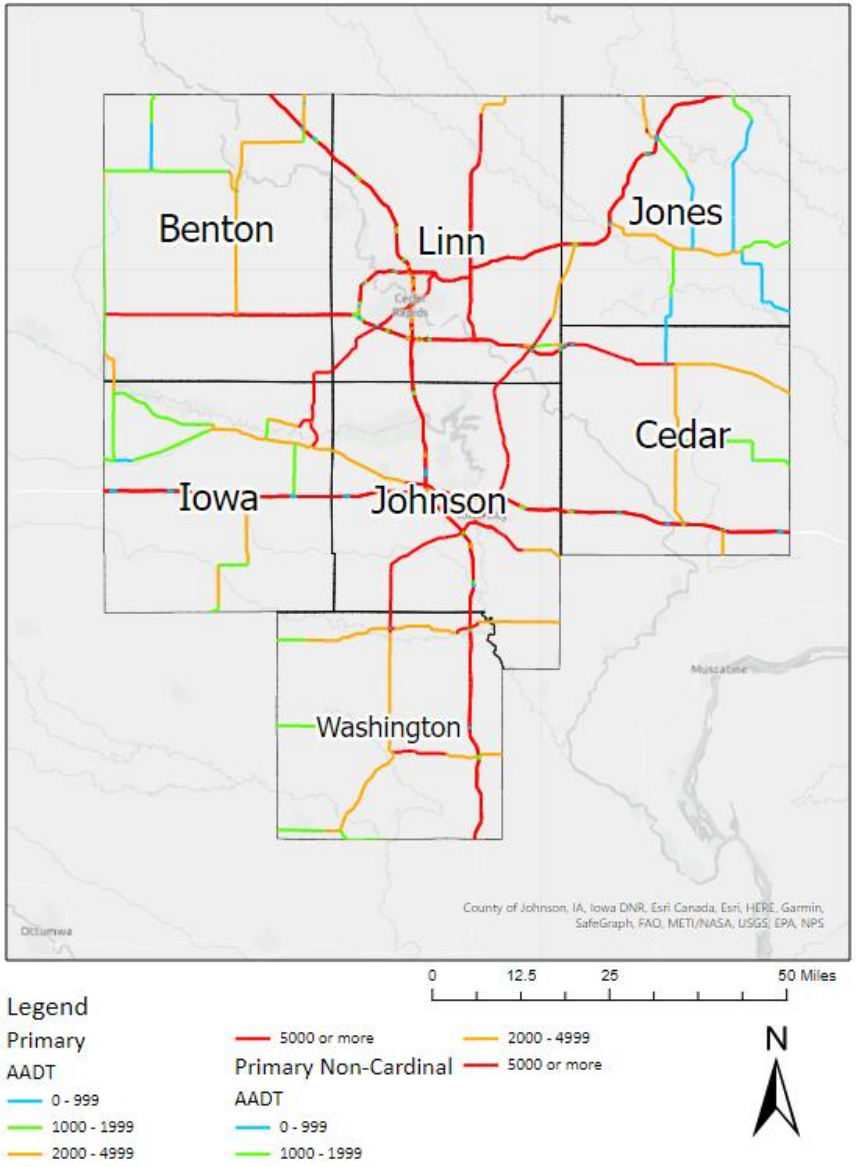
Average Annual Daily Traffic (AADT)

AADT is an indicator of the actual use of the road. High traffic areas in the region according to measured AADT include:

- Interstate 80 through Iowa, Johnson, and Cedar Counties
- Interstate 380 from Interstate 80 and north through Johnson, Linn, and Benton Counties
- US 30 through Benton, Linn, and portions of Cedar Counties
- US 218 from Interstate 380 and south through Johnson and Washington Counties
- IA 1 from south of US 151 in Jones County, through Johnson County, to Kalona
- US 151 through Jones and Linn Counties and south to IA 6 in Iowa County
- IA 6 from US 218 to east of IA 1 in Johnson County
- IA 100 in Linn County
- IA 13 from US 30 north to the City of Coggon
- IA 92 from IA 1 to west of US 218

Figure 4.5: RPA 10 Average Annual Daily Traffic (AADT), 2018

Source: Iowa DOT



Bridges

There are nearly 2,200 bridges in RPA 10. A good network of bridges is essential to allow access to activities, goods, and services. Ongoing preservation, improvement, and expansion of bridges will bolster both the region's economic development potential and residents' mobility.

As with pavements, bridge conditions are regularly assessed to determine the network's need for reconstruction or rehabilitation. The Bridge Condition Index (BCI) is based on data collected as part of the Nation Bridge Inventory (NBI) inspections. BCI combines a bridge's condition and ability to provide adequate service with how essential the bridge facility is to the traveling public (see the map on the following page).

Bridge Condition Definitions

Good: *All elements of the bridge are sound. No maintenance is needed.*

Fair: *All elements are sound. Some preventative maintenance would prolong the life of the bridge.*

Poor: *One or more elements are deteriorating. Repairs or replacement will be needed in the near future.*

Structurally Deficient: *A classification given to a bridge which has any components (deck, superstructure, substructure, or culvert) in Poor or worse condition.*

Of the nearly 2,200 bridges located throughout the seven-county region, 1,927 or approximately 87% of those are defined as "not structurally deficient." There are restrictions on 171 bridges including lower speed limits, number of vehicles, or weight limits. Most of these restricted bridges are on secondary roads in unincorporated parts of the region, where traffic is light.

Figure 4.6: Structural Deficiency
Source: Iowa DOT

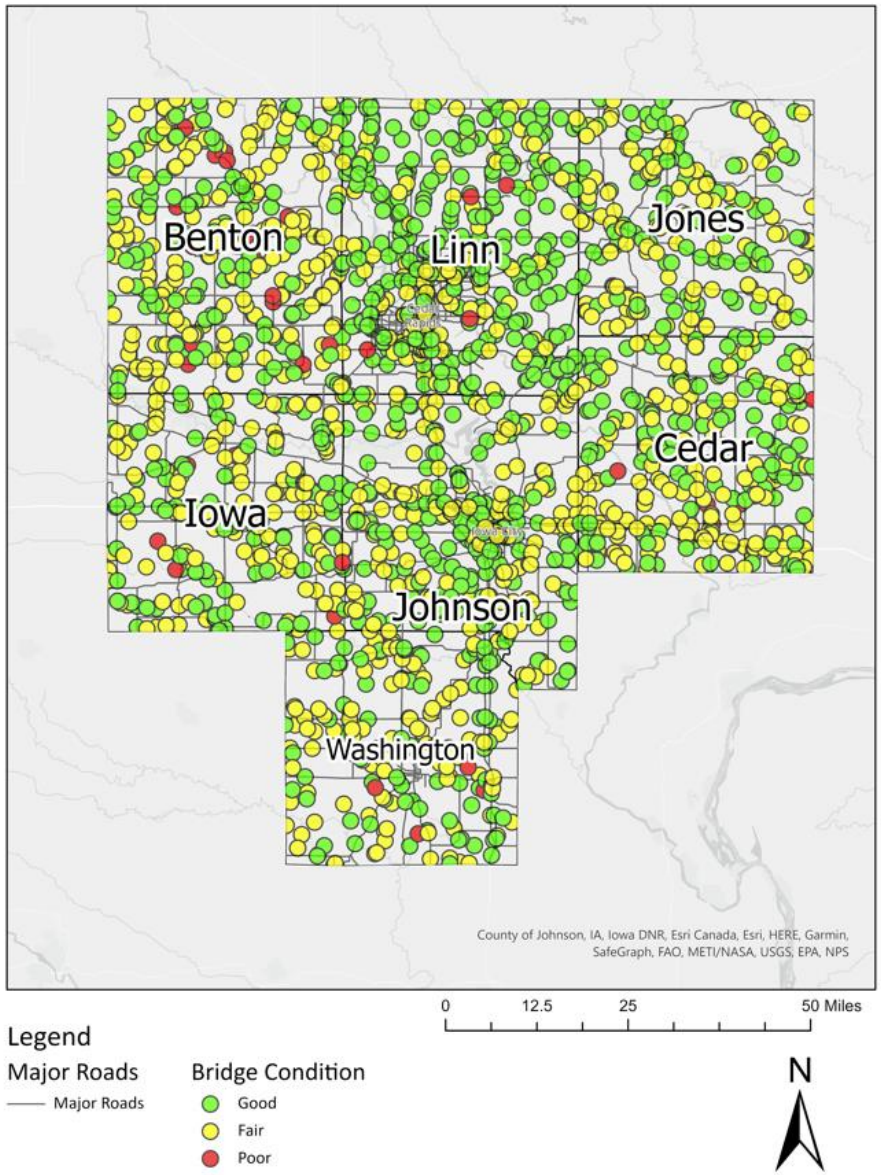
County	Not Structurally Deficient	Structurally Deficient
Benton	286	76
Cedar	237	62
Iowa	200	42
Johnson	320	29
Jones	223	10
Linn	481	16
Washington	180	32
RPA 10 Total	1,927	267

Figure 4.7: Weight Restrictions
Source: Iowa DOT

County	Unrestricted	Restricted	Closed
Benton	314	47	1
Cedar	225	67	7
Iowa	171	67	4
Johnson	314	34	1
Jones	206	25	2
Linn	476	19	2
Washington	191	19	2
RPA 10 Total	1897	278	19

Figure 4.8: Map of RPA 10 Bridge Conditions

Source: Iowa DOT



Safety, Security, Resilience

Traffic Safety

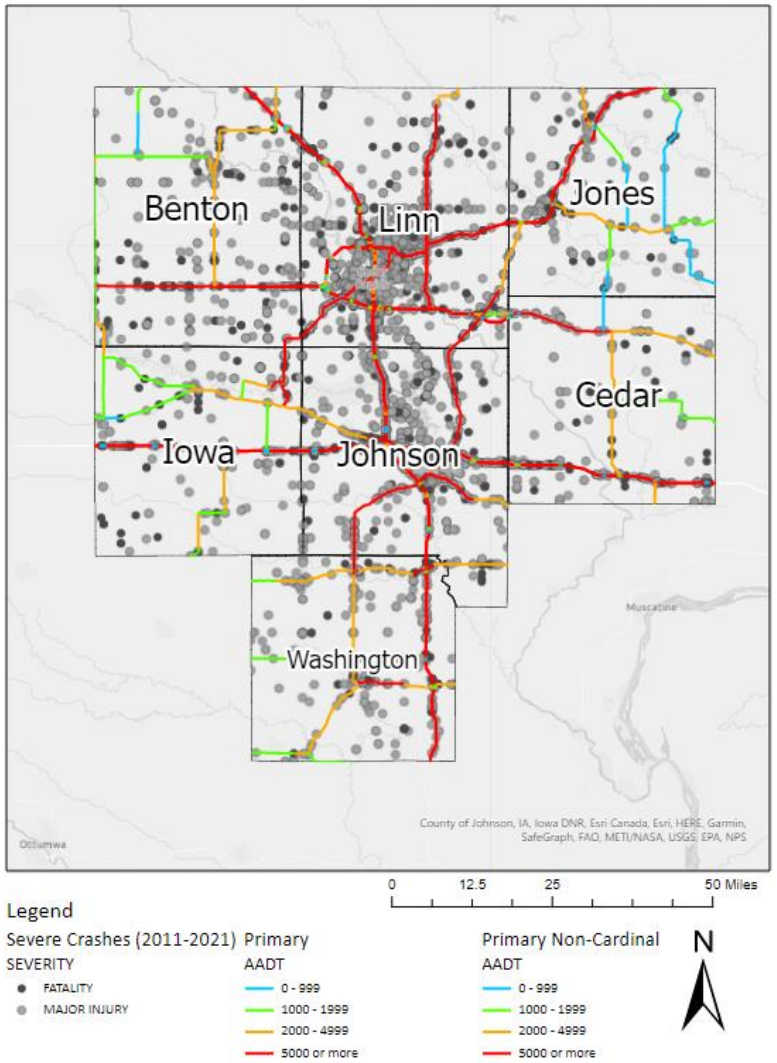
Crashes in the region are widely distributed. There are concentrations around population centers and along routes with high traffic on average. According to analysis completed by the Institute for Transportation, from 2011 to 2021, there have been 51,321 reported crashes within the seven-county region. Of particular concern are crashes that result in fatalities or major injuries. The map to the right provides a summary of these accidents in RPA 10. Of the reported crashes, 133 involved at least one fatality, resulting in 161 total fatalities. There were 762 accidents involving major injuries. Iowa DOT prepares a State Highway Safety Plan (SHSP) to develop a comprehensive framework to reduce highway fatalities and serious injuries on all public roads.

Security

Since the September 11, 2001, terrorist attacks in the United States, the safety of the transportation system has been an important issue. Immediate response to transportation-related incidents is the responsibility of public safety agencies. RPA 10 can play a role in coordinating opportunities for planning and ongoing communication among operating agencies. In 2009, RPA 10 established a regional Multi-Discipline Safety Team (MDST) that included elected officials, engineers, law enforcement, state officials, and area planners. Although the group has since dissolved, many of the participants continue to attend Johnson County Traffic Management Team meetings, organized to address issues arising from the reconstruction of the I80-I380

Figure 4.9: Fatal and Severe Injury Crashes in RPA 10, 2011-2021

Source: Iowa DOT



Interchange. Once the Interchange project is complete, the region will consider re-formation of the regional MDST.

Resilience

A resilient transportation system is one in which critical assets are not exposed to hazards or, if they are, there is sufficient capacity to mitigate the impact of the hazard.

Natural Disasters

In the past twenty years, RPA 10 has experienced several natural disasters including tornados, flooding, and a derecho. While the these have been devastating, the region has been relatively quick to rebound due to prior planning. Each county in RPA 10 has an approved Hazard Mitigation Plan to assist with preparedness, response, and coordination.

Climate Change

General scientific consensus is that the earth's long-term warming trend is, at least partially, due to human-induced increases in green house gas emissions. Cars and trucks account for the majority of these transportation-related emissions. Opportunities to reduce greenhouse gas emissions include:

Emerging Technologies

Electric Vehicle (EV)

EV technology and deployment have advanced dramatically in recent years. Nearly every major passenger car manufacturer in the United States has an electric model. EV technology creates an opportunity to directly reduce transportation-related emissions. An increasing number of communities are focused on providing charging infrastructure to enable this technology. RPA 10 wasn't directly involved in the recent development of the *Eastern Iowa Electric Vehicle Readiness Plan*, but it will serve as a model for defining strategies the region's EV readiness.

Alternative Fuels

More than a dozen alternative fuels are in production or under development. Government and private sector vehicle fleets are the primary users for most of these fuels, but individual consumers are becoming increasingly interested. Using these alternative fuels rather than conventional fuels helps to conserve fuel and reduce emissions. There are 932 fueling stations in Iowa that offer alternative fuels. Locations in RPA 10 are depicted below.

Figure 4.10: Alternative Fueling Stations in RPA 10

Source: US Department of Energy, Alternative Fuels Data Center

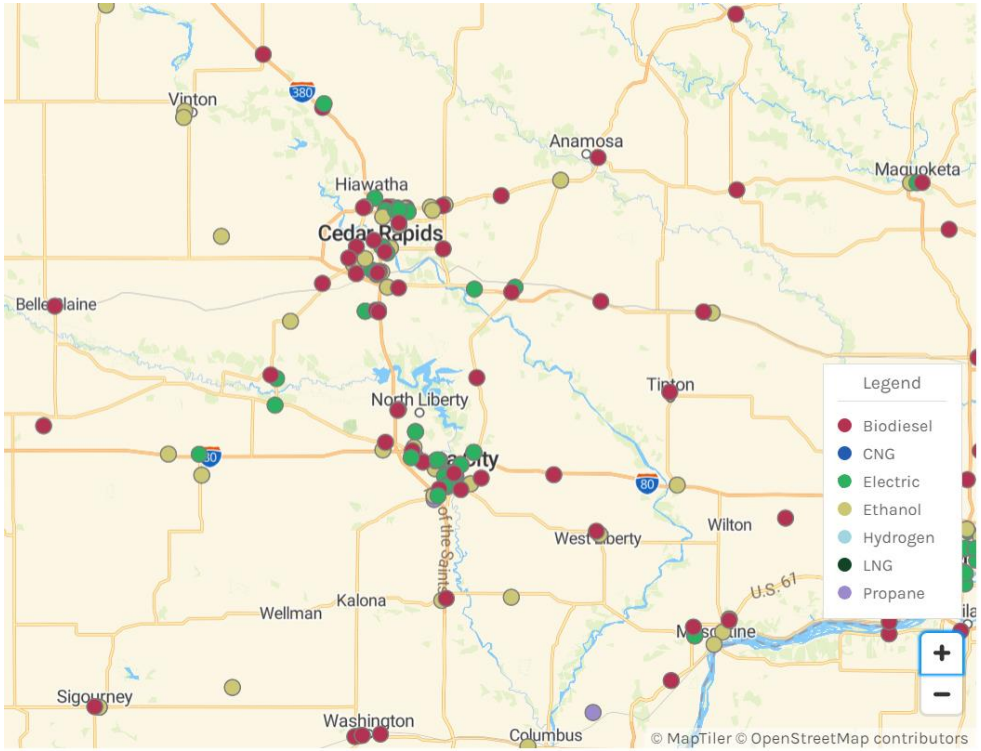


Figure 4.11: Number of Alternative Fueling Stations in RPA 10

Source: US Department of Energy, Alternative Fuels Data Center

Type of Fuel	Number of Stations
Biodiesel	35
CNG	0
Electric	39
Ethanol	42
Hydrogen	0
LNG	0
Propane	2

Automated Vehicles (AV)

AV technology takes some or all of the responsibility of driving out of the hands of a human driver. It operates by gathering data about the world around the vehicle. AVs rely on technologies such as light detection and ranging (LIDAR), global positioning system (GPS), and high-definition maps to understand the world. AVs are not yet fully developed, but are rapidly maturing.

Iowa has taken some initiative in studying AV technologies. In 2016, the Iowa DOT agreed to transform the I380 corridor between Cedar Rapids and Iowa City into a test site for AV technologies. The National Advanced Driving Simulator (NADS), located at the University of Iowa Oakdale campus, is also involved in researching driver responses to these technologies.

Connected Vehicles

CV technology functions by allowing vehicles (and buses, pedestrians, and other modes of transportation) to send and receive information between each other. A CV does not directly intervene in the transportation environment, instead providing information to entities involved and enabling those entities to act on the information. This is an important distinction from automation. AVs automate some or all of the driving tasks; CVs provide information to the automated systems in each vehicle.

The largest potential safety benefit of automated vehicle (AV) and connected vehicle (CV) technology will come from reducing the impact of human error.

Source: Iowa DOT *2019-2023 Iowa Strategic Highway Safety Plan*

Road and Bridge Goals

Public input identified the following road and bridge goals:

- Enhance ***connectivity*** of the roadway and bridge network.
- Invest in the ***preservation and maintenance*** of the existing transportation infrastructure system.
- Improve ***safety*** for all users of the networks.
- Develop ***improvements and upgrades*** that contribute to the efficient movement of goods and service.
- Encourage ***maximization of available financial resources*** for roadway and bridge projects.

Recommendations and Projects

Based on these goals, the following roadway and bridge recommendations and actions were developed:

Connectivity

- Support system improvements that enhance and create linkages between transportation modes.
- Increase transportation options, including vanpools, rideshares, and trails.
- Improve the resiliency and reliability of the network.
- Encourage development policies that ensure connectivity and equitable access to transportation options, including Complete Streets policies.

Preservation

- Educate regional partners on current best practices for transportation infrastructure preservation.
- Create a plan for bridges that are identified as fundamentally obsolete and structurally deficient.
- Identify and secure funding sources to implement preservation projects.
- Encourage regional partners to preserve, replace, or upgrade existing infrastructure before building new infrastructure.
- Prioritize regional funding applications for preservation/maintenance projects.

Safety

- Participate in Iowa City Traffic Incident Management meetings to ensure effective coordination during Interstate 80/380 construction projects.
- Participate in statewide traffic safety workshops and forums.
- Investigate the role of new technologies to enhance the safety of traveling public.

Improvements and Upgrades

- Coordinate with Iowa DOT on:
  - Development and construction of a new intermodal hub in the region.
  - The possible expansion of Interstate 380 in Linn and Johnson Counties.
  - Possible Highway 30 improvements in Linn County.
- Coordinate with local governments to complete the Tower Terrace Road project in Linn County.
- Develop regional plan for alternative fuel opportunities, including electric vehicle charging.

Maximization of Resources

- Work with local governments and agencies to pursue eligible federal, state, and local funding sources.
- Maintain a regional application process that ensures geographic equity in the programming of STBG funding.
- Investigate the role of new technologies that reduce environmental impacts, including green design features and sustainable construction methods.
- Keep infrastructure in a good state of repair.

COVID Impacts

The pandemic impacted regional travel patterns and mode choices. Beginning in March 2020, as businesses closed and commuters worked from home, fewer cars were traveling on all types of roads. By May 2021, as vaccinations became more broadly available and commuters returned to work, these travel patterns began to normalize. Reduced passenger vehicle travel resulted in lower state Road Use Tax Fund (RUTF) revenues, but the impact of this reduction was less than anticipated. In December 2020, the Coronavirus Response and Relief Supplemental Appropriates Act of 2021 (CRRSAA) provided $121.9 million of federal highway COVID relief funds to Iowa. This funding was allocated to all cities and counties in Iowa using the RUTF formula. Counties and communities in RPA 10 received a total of approximately $4.2 million in CRRSAA funds.

Conclusion

The roadway and bridge network provides the connections that allow for the efficient and effective movement of people and goods throughout the region. Ongoing maintenance and expansion of the existing system is vital to RPA 10's economic future and livability.

RPA 10 Long-Range Transportation Plan 2022-2050

5. Active Transportation Network

EAST CENTRAL IOWA
COUNCIL OF GOVERNMENTS

According to the 2009 National Household Transportation Survey, biking and walking account for 11.4% of all trips (biking 1.0%; walking 10.4%). If facilities were more widely available for safe travel, surveys nationwide consistently indicate that non-motorized transportation modes (active transportation) would be used more frequently for commuting and other trip purposes. Active transportation provides an alternative to single occupancy vehicle (SOV) trips, in addition to:

- *Reducing emissions – this type of travel helps reduce congestion, fuel consumption and vehicle emissions especially valuable for replacing short distance auto trips, which have the highest rate of emissions.*
- *Connecting with transit.*
- *Contributing to health and quality of life.*

Components of an Active Transportation System

There are three primary components of an active transportation (AT) system infrastructure: sidewalks, trails, or bikeways (on- and off-street), and public transportation facilities (roads, buses, stops, and other transit amenities). A well-planned system establishes these facilities in ways that provide users safe and continuous routes to and from the destinations of their choice. The following is a summary of these components in RPA 10.

Trails

National Trails Network

American Discovery Trail (ADT)

The ADT is the nation's first coast-to-coast non-motorized recreational trail. The trail has two routes through the central portion of the country, with the northern segment passing through the ECICOG region. At the time this plan was completed, the trail was in various stages of planning and construction. Some segments are fully completed, while land for other segments of the trail has yet to be secured. According to the ADT's trail directory, the trail enters Iowa in Davenport and moves westerly into RPA 10. It links to the Hoover Nature Trail, which then links to the President Herbert Hoover Birthplace National Monument in West Brach, in Cedar County. The trail is planned to head into Johnson County, passing near the unincorporated villages of Oasis and Morse, before

Figure 5.1: Planned ADT Route in Iowa

Source: American Discovery Trail

heading toward Solon. From Solon, the trail connects northward into Linn County, where it joins the Corridor MPO's trail system. Through the central portions of Cedar Rapids, the trail runs along the riverfront before heading northward and connecting to the Cedar Valley Nature Trail near Hiawatha. The trail follows the Cedar River and passes through a restored rail depot in Center Point and then north to Waterloo. From there, the trail continues westward toward Marshalltown and then on to Des Moines, Atlantic and finally Council Bluffs.

Mississippi River Trail (MRT)

The MRT is another nationally significant trail near the region. Although the MRT does not pass through RPA 10, planned segments of the MRT are within driving or cycling distance from the region. Various local trails committees identified benefit in connections to the MRT to RPA 10's growing trails system.

The MRT is primarily a bicycling route. Beginning at the headwaters of the Mississippi River at Lake Itasca, Minnesota, it runs south along the Mississippi to the delta of the Gulf of Mexico in Louisiana. The 3,000-mile route is a combination of bicycle-friendly roads and fully separated multi-use paths.

The MRT connects to the ADT in the Quad Cities, facilitating some connectivity between RPA 10 and the MRT. By coordinating planning efforts with Regions 8 and 9, additional connectivity between the MRT and the region is possible. Dubuque, Jackson, Clinton, Scott, and Muscatine Counties would need to be involved.

Figure 5.2: Map of Proposed Mississippi River Trail

Source: MRT Organization

Regionally Significant Separated Trails

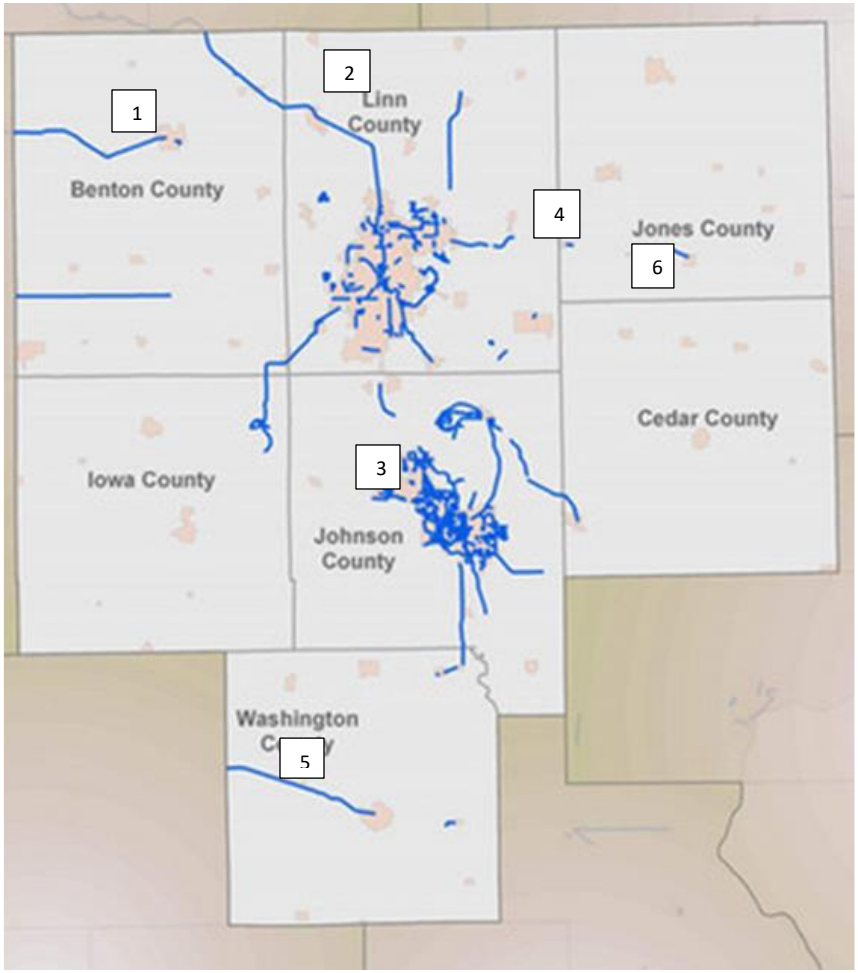
Most trails in the region are off-road facilities connecting parks and other outdoor recreation destinations. Several trails use former railroad right-of-way as their alignment, such as the Cedar Valley Nature Trail and Old Creamery Nature Trail. Some trails are hard surfaced with concrete or asphalt, but many are granular limestone. Because granular trails are less user-friendly and can't be used for some recreational activities, such as inline skating, the region supports hard-surfacing granular trails when funding is available. Many communities in the region, and state and local parks, offer short trail segments the serve a local interest. To the right is a map of regionally significant separated trails. Descriptions of those trails are noted below.

<u>Old Creamery Nature Trail</u>

The Old Creamery Nature Trail was made from a converted rail bed running 14.5 miles from Vinton to Dysart and passing through the small town of Garrison. The trail surface is crushed limestone.

Figure 5.3: Regional Trail Map

Source: ECICOG



1. Old Creamery Nature Trail 2. Cedar Valley Nature Trail 3. Clear Creek Trail
4. Grant Wood Nature Trail 5. Kewash Nature Trail 6. Wapsipinicon Trail

Cedar Valley Nature Trail

The Cedar Valley Nature Trail was designated part of the American Discovery Trail in the 1990s. The trail represents the first rail to trail conversion in the state of Iowa. Opened in 1982, the 52-mile trail traverses predominately agricultural areas of Benton and Linn Counties. This portion in Benton County is owned and operated by the Linn County Conservation Board. The trail is primarily paved, except 5.8 miles of crushed limestone on the northern end. In recent years, regional partners have worked to extend the trail through southern Linn County, Johnson County, and connect to the Iowa City metropolitan area.

Clear Creek Trail

Portions of the Clear Creek trail are complete, with plans to connect the University of Iowa Campus in Iowa City to Johnson's County's F.W. Kent Park to the west. Future plans include extending the trail beyond Johnson County to the Amana Colonies in Iowa County.

Grant Wood Trail

The Grant Wood Trail runs through Jones and Linn Counties. The Jones County portion is granular and runs 3.5 miles along a converted rail bed from the City of Olin into the rolling countryside. The Linn County portion of the trail is being paved and was gifted to the Linn County Conservation Board. It also runs along a former rail bed, 3.25 miles from Marion to Squaw Creek Park. When complete, the two trail segments will meet at Martelle, with plans to eventually link to the Mississippi River.

Hoover Nature Trail

The Hoover Nature Trail is a developing rail-trail in southeastern Iowa, built on a former Chicago, Rock Island and Pacific Railroad right-of-way, which was abandoned in 1980 after the railroad declared bankruptcy. One of the first segments of the Hoover Nature Trail, and one of the first rail to trail conversion projects in Iowa, was the segment running from Oasis to West Branch. The Oasis to West Branch segment in 3.7miles long and connects two counties – Johnson and Cedar, and two towns – Oasis and West Branch. The trail is a shared-use trail for bicycling, hiking, jogging, walking, cross-country skiing, and nature study. Much of the route is tree-canopied, which provides a shady ride/walk along the crushed-stone trail. Along the trail, users can enjoy the surrounding agricultural landscape.

Kewash Nature Trail

Kewash Nature Trail in Washington County is 13.8-miles. It passes through a variety of landscapes, including restored prairies between Keota and West Chester, and woodland between West Chester and Washington. The trail surface varies.

Wapsipinicon Trail

Construction of the Wapsipinicon Trail is underway. When complete, the trail will connect Wapsipinicon State Park and the historic Hale Bridge to the City of Anamosa. Long term plans focus on connecting this trail to the Grant Wood Trail and other communities in the County, including Monticello and beyond.

Complete Streets

After World War II, many communities in the United States were designed to facilitate easy and fast access to destinations via automobile. In rural and suburban communities, people often rely on the automobile as their sole means of transportation. Even in areas with public transportation and safe places to walk or bicycle, there is a state of automobile dependence. Automobiles are the central focus of transportation, infrastructure, and land use policies, to the extent that modes of transportation like walking, cycling, and mass transit have become impractical.

In 2010, the U.S. Department of Transportation (DOT) declared its support for including bicycle and pedestrian accommodation in federal-aid transportation projects. The DOT encouraged community organizations, public transportation agencies, and state and local governments to adopt similar policies.

Complete Streets are designed to create safe and convenient access for all users, including bicyclists, pedestrians, motorists, and transit riders, of all ages and abilities. Complete Streets policies and designs improve safety, lower transportation costs, provide transportation alternatives, encourage health through walking and biking, stimulate local economies, create a sense of place, improve social interaction, and generally improve adjacent property values.

While many metropolitan areas in RPA 10, including Cedar Rapids, Iowa City, Marion, and area MPOs, have adopted Complete Streets policies, rural communities in the region have been slower to do so. A few communities have included Complete Streets language in their comprehensive planning efforts, including Coralville, Hiawatha, Lisbon, North Liberty, and Washington. ECICOG continues to collaborate with communities in RPA 10, discussing the value of Complete Streets and suggesting policies during the comprehensive planning process.

Safe Routes to School (SRTS)

SRTS is an approach that promotes walking and bicycling to school through infrastructure improvements, enforcement, incentive, tools, and safety education. SRTS initiatives improve safety increase students' physical activity levels. These programs can be implemented by a department of transportation, metropolitan planning organization, local government, school district, or even a school. Some local school districts have capitalized on SRTS resources and funding opportunities. For example, ECICOG assisted the Mid-Prairie and Center Point-Urbana School Districts constructed sidewalks and completed an SRTS education and promotion program. These encouraged more students to utilize active transportation such as walking and bicycling. In addition, the Cities of Urbana and Riverside have received regional TAP funds to provide additional pedestrian accommodations for students.

Active Transportation Goals

Public input identified the following trail goals:

- Enhance ***connectivity*** of the regional and local trail system.
- Increase ***funding*** for trails and other recreational resources.
- Consider ***diversity*** of users in natural and recreational planning.
- Improve ***visibility*** of trails and other recreational amenities is necessary to attract and retain an appropriate regional workforce.

Recommendations and Projects

Based on these goals, the following active transportation recommendations and actions were developed:

Connectivity

- Formalize the opportunity for joint planning among Corridor MPO, MPO of Johnson County, and RPA 10.
- Increase transportation options, including vanpools, rideshare, trails, and other modes.
- Encourage compliance with Complete Streets policies for all new and reconstructed road projects.

Funding

- Advocate for funding for the Natural Resources and Outdoor Recreation Trust Funds.
- Minimize intra-regional competition for state and federal resources by developing a regional pitch and prioritization process.

Diversity

- Encourage partnerships between county conservation boards, human service agencies, and public transit providers to increase access to and utilization of natural and recreational resources and facilities for education, improved health, and acclimation of new community members.

Visibility

- Conduct a study to determine the regional economic impact of recreational resources.
- Coordinate with organizations to understand what amenities are necessary to attract and retain residents.
- Develop resource materials describing regional trails and amenities.

COVID Impacts

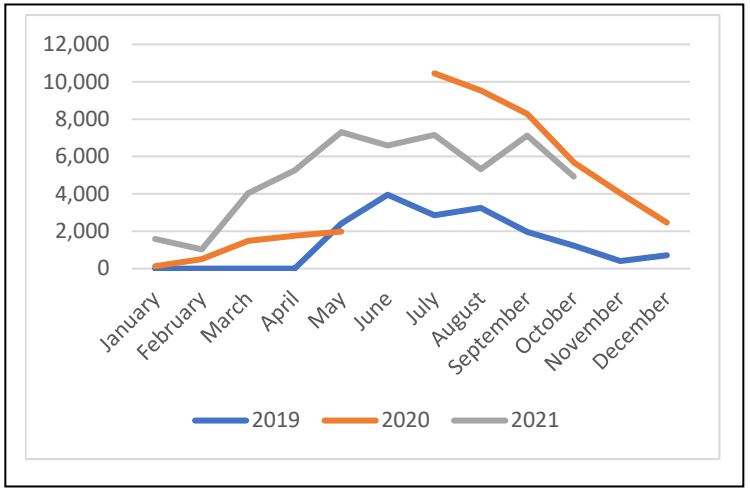
At the height of the pandemic, residents took to the outdoors for recreation, fitness, and social interaction. During this time, trail counts were completed for the Hoover Trail in Johnson County and denoted an increase in trail usage. Specific trail counts are not available for the entire existing network but conservation departments around RPA 10 have cited increased usage of parks, campgrounds, and canoe rentals. As a result, continued maintenance and possible expansion of the trail network is necessary.

Conclusion

Due to the significant regional interest in active transportation, the region is updating the Regional Trails Plan, which was approved in 2011. The plan update will address the priorities and recommendations identified above, in order for RPA 10 to continue improving and expanding the active transportation system over the next 20 years.

Figure 5.4: Hoover Trail Counts

Source: MPOJC



RPA 10 Long-Range Transportation Plan 2022-2050

6. Passenger Transportation Network

ECICOG
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Public transit is an important component of the region's transportation network. In addition to providing an alternative to automobiles, public transit provides the only means of transportation for youth, elderly, disabled, or economically-challenged residents and visitors. Transit provides economic and social links and improving riders' independence and quality of life. Transit services are generally described as follows:

Transit Service Descriptions

Fixed Route Service: *Transit vehicles that operate on a pre-determined route according to a pre-determined schedule. Fixed route services have printed or posted timetables and designated stops where riders are picked up or dropped off.*

Demand Response/Dial-a-Ride: *Small- or medium-sized vehicles that operate on flexible schedules and depend on passenger requests.*

Ride Share: *A service that generally occurs when a driver is planning a trip and seeks out passengers willing to share the ride.*

Fixed Route Service in RPA 10

Urban Fixed Route Service

The ECICOG region includes two urbanized areas surrounding the cities of Iowa City and Cedar Rapids. The Iowa City Metropolitan area is served by three fixed route transit systems: Coralville Transit, Iowa City Transit, and the University of Iowa CAMBUS. The Cedar Rapids Metropolitan Area is serviced by Cedar Rapids Transit, which provides ADA-accessible fixed-route service within the cities of Cedar Rapids, Marion, and Hiawatha. Because MPO of Johnson County and Corridor MPO plan for these urbanized services, their data is not included in this document.

CorridorRides 380 Express

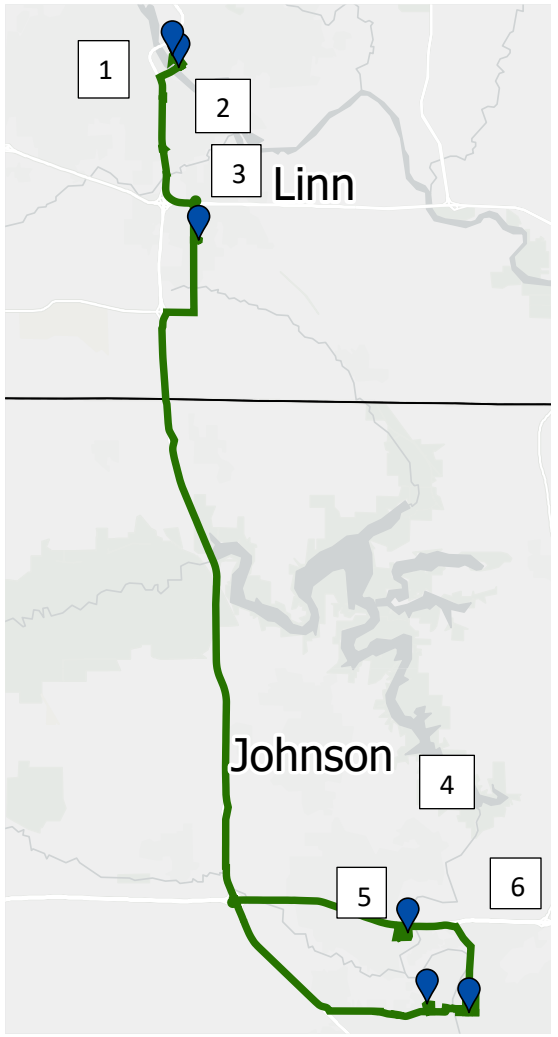
The 380 Express was launched in 2018 as a joint effort between the Iowa DOT and ECICOG as a commuter mitigation effort for the I-380 Corridor between Cedar Rapids and Iowa City. Funding for the fixed-route service was provided by the Iowa DOT as part of the of the I-80/I380 Interchange reconstruction which is anticipated to last until 2023. Windstar Lines, Inc. was selected as the operator of the service. As the

operator, they provide the buses, drivers, day- to-day operation and customer support. Five ADA-accessible motorcoaches are utilized for the service, which operates Monday through Friday from 5:00 a.m. to 9:00 p.m. There are three stops in the Cedar Rapids area, and three stops in Coralville/Iowa City.

380 Express Stops

1. Cedar Rapids Ground Transportation Center
2. Cedar Rapids Lot 44 Park and Ride
3. Kirkwood Community College Park and Ride
4. Coralville Transit Intermodal Facility
5. UIHC West Campus Transportation Center (WCTC)
6. Court Street Transportation Center, Iowa City

Figure 6.1: 380 Express Route and Stops
Source: ECICOG

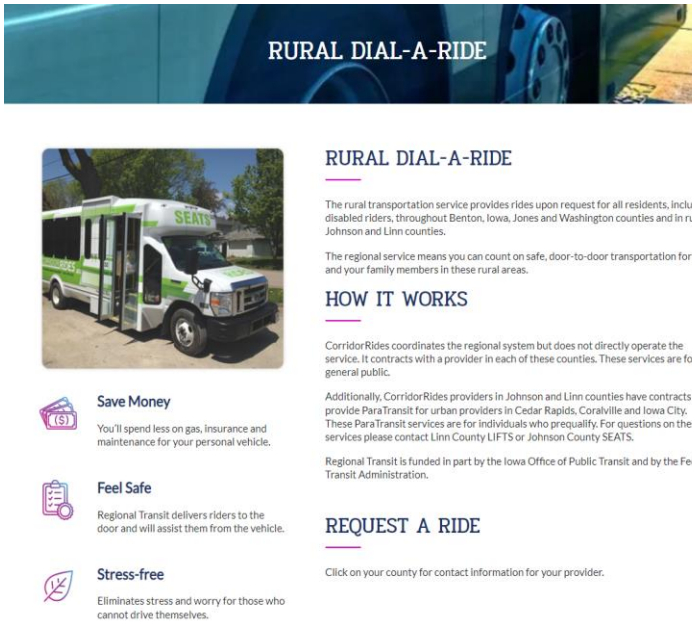


Demand Response/Dial a Ride Service in RPA 10

CorridorRides Rural Dial-a-Ride Providers

ECICOG contracts with transit providers in six of the counties within RPA 10 to provide public transit service on behalf of CorridorRides. The providers are:

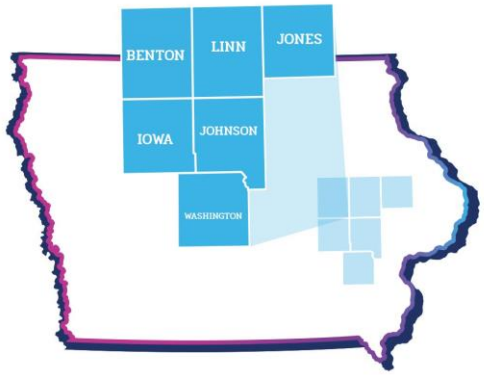
- Benton County Transportation
- Iowa County Transportation; Johnson County Seats
- Jones County JETS
- Linn County LIFTS
- Washington County MiniBus
- CorridorRides vanpool operated by Commute by Enterprise
- 380Express operated by Windstar Inc.



The six rural transit providers, as well as the vanpool and 380Express, operate independently yet comprise the regional transit system known as CorridorRides. Providers typically operate within their respective county, but out-of-county trips are offered to provide access to essential services, which are often located in the metropolitan areas of Cedar Rapids and Iowa City.

Benton County Transportation

Benton County Transportation (BCT) is operated by the County and governed by the Benton County Board of Supervisors. Located in Vinton, Iowa, Benton County Transportation provides demand-response transit services to residents throughout the county Monday through Friday from 6:30 a.m. to 4:30 p.m. In fiscal year 2020, BCT provided 18,767 general public trips and 151,756 revenue miles of service. BCT operates 12 ADA-accessible vehicles. BCT recently moved to a new building in Vinton. This location offers on-site covered parking for vehicles, administration space, a wash-bay, and an area for light maintenance. BCT parks and operate two vehicles in Belle Plaine to minimize costs. BCT staff is composed of three full-time and 12 parttime employees.



Iowa County Transportation

Iowa County Transportation (ICT) is a department of Iowa County. ICT's facility, including its administrative office, is located in Marengo, Iowa. Most of ICT's vehicles are parked inside on this property - three are parked in Williamsburg. ICT provides demand-response public transit service Monday through Friday from 6:00 a.m. to 5:00 p.m. Rates are dependent on mileage and destination. In fiscal year 2020, ICT provided 26,045 rides and 104,151 revenue miles with the 11 ADA-accessible vehicles in their fleet. ICT employs two full-time and 10 part-time staff.

Johnson County Seats

Johnson County SEATS, operated by Johnson County, provided 13,035 demand-response trips and 69,907 revenue miles of service to rural residents of Johnson County in fiscal year 2020. SEATS, whose drivers are unionized, employ 29 full-time and 27 part-time employees. SEATS operates 10 region-wide vehicles from 8:30 a.m. to 4:30 p.m., Monday through Friday, servicing each rural community in the county three days a week SEATS also offers complementary paratransit service to the metropolitan areas of Iowa City, Coralville, North Liberty, and University Heights, providing 83,523 rides and 333,617 revenue miles in FY2020. SEATS operates 12 urban accessible vehicles from 6:00 a.m. to 10:30 p.m., Monday through Saturday. Eligibility for the complementary paratransit service is determined by each transit system's ADA eligibility. SEATS operates in a building shared with Johnson County Secondary Roads. The facility, located in Iowa City, has spacious administrative and meeting areas in addition to an enclosed parking area for vehicles.

Jones County JETS

Jones County JETS is a department of Jones County and is governed by the Jones County Board of Supervisors. Located in Monticello, Iowa, Jones County JETS offers demand-response public transit services, Monday through Friday, 7:00 a.m. to 5:00 p.m. JETS rates are dependent on distance traveled. In fiscal year 2020, JETS provided 20,264 general public rides and completed 213,917 revenue miles. Jones County JETS operates 12 accessible vehicles and employs two full-time and 13 part-time staff. A 2018 building in Monticello houses the JETS administrative office, bus storage, and spaces for a wash bay and light maintenance.

Linn County LIFTS

Linn County LIFTS provided 17,721 demand-response trips and 105,217 revenue miles of service to rural residents of Linn County in fiscal year 2020. In addition, LIFTS provided 41,542 rides and 225,677 revenue miles of complementary paratransit service to metropolitan areas of Linn County. LIFTS employs 22 full-time and two part-time staff, and LIFTS' drivers are unionized. LIFTS operates 11 regional vehicles with daily routes

to rural Linn County Monday through Friday. LIFTS also operates 13 urban vehicles from 6:00 a.m. to 7:00 p.m. Monday through Friday and 8:00 a.m. to 5:00 p.m. on Saturday. All of LIFTS' vehicles are accessible. The LIFTS facility, located in Cedar Rapids, includes administrative offices, a driver break room, office space for the Linn County mobility coordinator, conference space, a maintenance facility, and indoor and outdoor parking for buses. LIFTS provides complementary paratransit service on behalf of Cedar Rapids Transit in Cedar Rapids, Marion, and Hiawatha. In Cedar Rapids, Marion, and Hiawatha, eligibility is determined by Cedar Rapids Transit's ADA eligibility process.

Washington County MiniBus

Washington County MiniBus provided 48,385 rides and 196,223 revenue miles to residents of Washington County in FY2020. MiniBus is the only regional service provider that maintains nonprofit status. The Washington County MiniBus organization is governed by a Board of Directors that includes representatives of area service organizations, elected officials, and local citizens. The MiniBus Board oversees the operation, which includes 15 accessible vehicles and 22 employees (one full time and 21 part-time). The MiniBus facility includes administrative offices, maintenance bays, and indoor parking for vehicles. MiniBus offers demand-responsive service, Monday through Friday, 7:00 a.m. to 5:00 p.m. Thursday 5:00 p.m. to 9:00 p.m. and Sunday 8:00 a.m. to 12:00 p.m. Fares are $2.50 one-way for in-town rates; other rates are based on distance traveled. MiniBus successfully pursued a one-cent local option sales tax to benefit transit service and receives 25 percent of the tax revenue received by the City of Washington. MiniBus also receives annual contributions from Washington County and the City of Kalona.

River Bend Transit

In addition to Benton, Iowa, Johnson, Jones, Linn and Washington Counties, Cedar County is within ECICOG's planning area. River Bend Transit (RBT) provides the public transportation service for Cedar County and demand-response transit services to Cedar, Clinton, Muscatine, and Scott Counties. In fiscal year 2019, RBT provided 3,307 demand-response trips and 18,889 revenue miles of service to Cedar County residents. There are eight full-time and 73 part-time staff. Two of RBT's vehicles operate and remain in Cedar County remain to minimize costs. The River Bend Transit facility has six maintenance bays, administrative offices, and centralized dispatching. They have 74 revenue vehicles in their fleet of vehicles, all of which are ADA-accessible. RBT serves all of rural Cedar County, operating in a different portion of the County on a designated day, Monday through Friday. This process of providing service has been in place for several years. The cost of a round-trip ride is $1.50 in town, $3 for county service, and $6.50 for out of county service. The $6.50 fare pays for as many stops within that city that the rider needs to make. River Bend Transit has had and maintains a variety of contracts with schools and human services agencies.

Ridesharing Services in RPA 10

CorridorRides Vanpool

Launched in October 2017, the CorridorRides vanpool program is available to anyone. The program is operated by Commute by Enterprise, providing users with a vehicle and coordination to find passengers with similar origins and destinations. In fiscal year 2020 the vanpool program had fourteen vanpool groups and provided 18,275 rides and 159,661 revenue miles. Vanpools can operate to and from any destination but can only receive a $400/month subsidy from CorridorRides if the origin and destination are within their six-county transit region. As of 2021, the vanpool program operated 14 vehicles (Minivans and SUV's). All existing vanpool groups had a destination of Johnson County, but originated in Linn, Washington, and Scott County.

CorridorRides Carpool

ECICOG has coordinated with Iowa DOT to offer an online carpool matching service. Hosted by Ride Shark, the online service allows commuters heading to the same destination to share a ride. Access to the program is found at CorridorRides.com.

University of Iowa Employee Vanpool

The employee vanpool program, managed by the University of Iowa's Parking and Transportation Department was established in 1978 due to rising fuel prices and shortages. Planning for the program is the responsibility of MPO of Johnson County, so their figures are not included in this document

Current Regional Service Levels

Public transit service is generally described in terms of rides and revenue miles of service provided. Figure 6.2 summarizes these statistics in FY 2020 and 2021 for the rural services in RPA 10. While revenue miles of service remained relatively the same from 2020 to 2021, ridership declined by approximately 18%, primarily due to reduced ridership during the pandemic.

Figure 6.2: CorridorRides Operating Statistics, FY 2020 - 2021

Source: ECICOG

Provider	2020		2021	
	Rides	Revenue Miles	Rides	Revenue Miles
Benton County Transportation	18,767	151,756	18,065	145,776
Iowa County Transportation	26,045	104,151	23,486	105,538
Johnson County SEATS*	13,035	69,097	4,990	40,548
Jones County JETS	20,264	213,917	10,096	154,963
Linn County LIFTS*	17,721	105,217	9,536	124,379
Washington County MiniBus	48,385	196,223	42,415	174,717
River Bend Transit*	3,108	18,746	3,307	18,889
CorridorRides VanPool	18,275	159,679	29,716	261,223
380 Express	59,390	360,298	44,072	386,240
Total	224,990	1,379,084	185,683	1,393,384

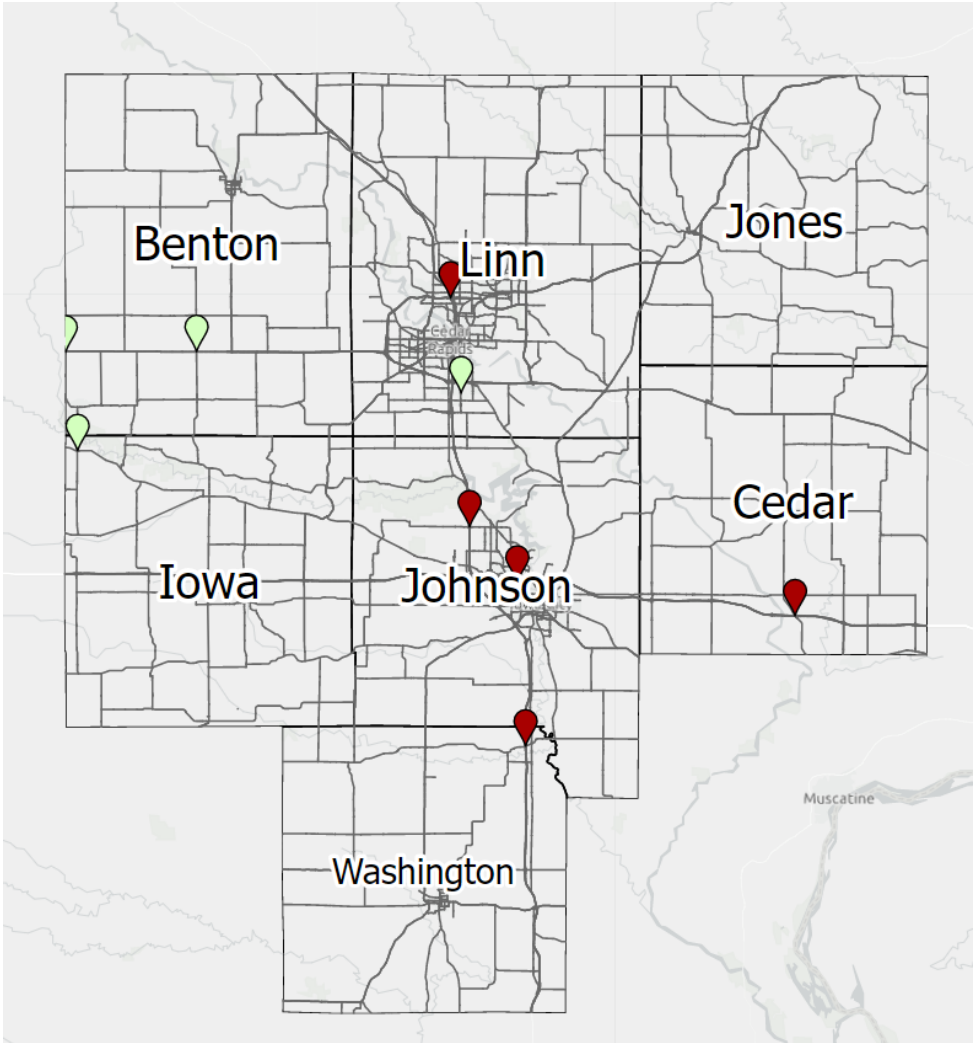
*These providers generate additional service statistics under contract to other local governments.

Park and Ride System

Park and ride lots can be used as places to park your car when connecting with carpools, vanpools, and public transit. Iowa DOT provides many state-operated park and ride lots throughout the state that are open to the public and free of charge. The map below details the park and ride lots in RPA 10.

Figure 6.3: Map of Park and Ride Locations in RPA 10

Source: Iowa DOT



Passenger Transportation Goals

Public input identified the following passenger transportation goals:

- Continue ***expansion*** of transit services.
- Encourage ***collaboration*** among providers and agencies
- Pursue ***enhancement*** of current services and pursuit of new innovations.

Recommendations and Projects

Based on these goals, the following passenger transportation recommendations and actions were developed:

Expansion

- Consider expansion of services to small communities surrounding metro areas.
- Continue to support public vanpool service.
- Continue to support the 380 Express bus service and consider funding options for continued service after Iowa DOT support lapses.
- Coordinate with Iowa DOT and seek locations for land that would serve park and ride options.
- Continue provision of iowarideshare.org and local subsites to allow the public to find carpool options.

Collaboration

- Schedule recurring meetings between mental health delivery districts and transit providers.
- Establish regular meetings between bordering planning agencies and transit systems.
- Study the feasibility of a regional call center or website to allow consumers to make one phone call to inquire about service options or schedule a trip.
- Complete a marketing and operations study for transit providers.

Enhancement

- Procure replacement vehicles that have surpassed their federal useful life and procure new vehicles to expand regional public transit services, including zero emission vehicles when feasible.
- Provide regular maintenance of transit vehicles to improve vehicle condition and longevity.
- Implement technological transit improvements that bolster the provision and availability of service.
- Explore and procure transit vehicles (including infrastructure) that utilize alternative fuel source and produce zero emissions, such as electric/battery. Explore innovative partnerships and funding sources for such procurement.
- Coordinate with Iowa DOT and local partners to assess and possibly implement passenger rail options, including both service in the corridor between North Liberty and Iowa City along the CRANDIC line and expanded Amtrak service into Iowa City from Chicago.

COVID Impacts

COVID-19 had a significant impact on transit ridership. With the exception of the ridesharing services, all regional public transit programs experienced a decline in ridership. Ridership on most public transit systems in RPA 10 fell around 70% in April 2020 and has yet returned to pre-pandemic levels. The drastic decline in ridership resulted in a decline in passenger revenue and a decline in available transit staff. Maintaining public transit service is vital to maintaining the economic health of the community as many people, including essential workers, rely on these services. Accordingly, the federal government responded by providing several rounds of operating assistance to sustain services during the pandemic.

Conclusion

Public transit provides RPA 10 residents and visitors with access to employment, education, medical care, and recreation, all vital to maintaining the regional economy and quality of life. Over the next 20 years, RPA 10 will continue to improve and expand the passenger transportation system with the goal of providing the best possible service to riders.

RPA 10 Long-Range Transportation Plan 2022-2050

7. Freight Network

EAST CENTRAL IOWA
COUNCIL OF GOVERNMENTS

RPA 10 is a major link in America's freight transportation network due to its central location and available transportation options. The transport of goods and services is the backbone of the economy. Investments in basic infrastructure components such as airports, highways, pipelines, and railroads secure and strengthen the economic vitality of the region. A safe, efficient, and convenient freight transportation system is a necessity for the region.

Truck Freight

Given the terrain and the quality of the surface transportation system, truck freight is the primary mode of freight movement in the State of Iowa. According to the *Iowa State Freight Plan* drafted in 2022, large truck traffic has increased significantly in the past 30 years. The highest truck activity on Interstate 80 in eastern Iowa, and with the growth in e-commerce, this is expected to continue to increase.

State-designated truck freight routes in RPA 10 include I-380; US Highways 30, 218, and 151; and IA 100, 92, 64, 38, and 1. The map on the following page shows the location of the freight routes in Iowa and RPA 10.

Primary Highway System Classifications

Interstate: *provides connections to the national transportation network and major metropolitan areas. Iowa is uniquely positioned at the crossroads of two major interstates: I-35 and I-80.*

Commercial and Industrial Network (CIN): *provides connections for Iowa cities with populations of more than 20,000 to major metropolitan areas.*

Area development: *Provide connections for cities with populations of more than 5,000 to the CIN and major commercial or industrial centers.*

Access routes: *Provide connections for cities with populations of more than 1,000 to employment, shopping, health care, and education facilities.*

Local Service: *Provide connections for cities with populations of fewer than 1,000 to local commercial and public services.*

Figure 7.1: Map of Primary Highways in Iowa

Source: Iowa DOT

Airports

Air cargo service plays a key role by providing fast and reliable movement of time-sensitive freight to regional, national, and international destinations. Nearly all air freight to and from RPA 10 is moved by scheduled commercial air passenger carriers and dedicated air cargo carriers. Although most airports in RPA 10 will handle some air cargo shipments, The Eastern Iowa Airport (CID) in Cedar Rapids accounts for the majority of these shipments. Two of the largest national air freight carriers, UPS Inc., and FedEx, maintain operations at CID.

An airport's role in the aviation system depends on the type of facilities and services provided, as well as the aviation demand. As such, airports are categorized by one of five roles defined by a set of related criteria. Facility and service targets have been determined for each airport role that will ensure the system meets the needs of users.

Airport Classifications

Commercial service: *Airports that provide regularly scheduled commercial airline service and have the infrastructure and services to support a full range of general aviation activity.*

Enhanced service: *Airports with a 5,000-foot or greater paved runway that have facilities and services to support most general aviation aircraft, including business jets, and have weather observation equipment. Enhanced service airports serve business aviation and are regional transportation centers.*

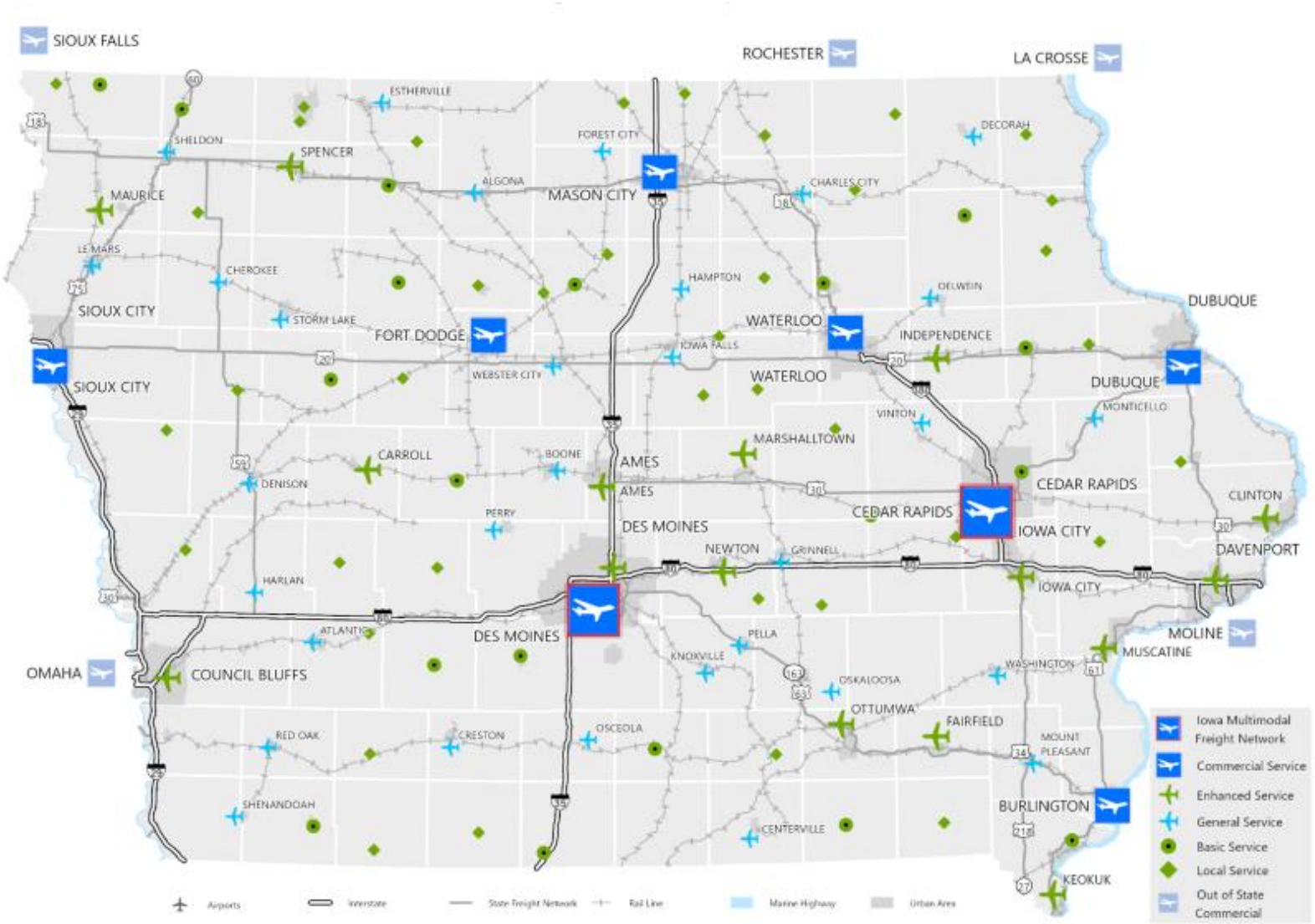
General service: *Airports with a 4,000-foot or greater paved runway that have facilities and services to support twin- and single-engine general aviation aircraft, as well as some business jets.*

Basic service: *Airports with a 3,000-foot or greater paved runway that have facilities and services to support single-engine aircraft, as well as some smaller twin-engine aircraft, and provide fuel.*

Local service: *Airports with runways less than 3,000 feet, many of which are turf runways, and have little or no airport services.*

Figure 7.2: Map of Airports in Iowa by Service Type

Source: Iowa DOT

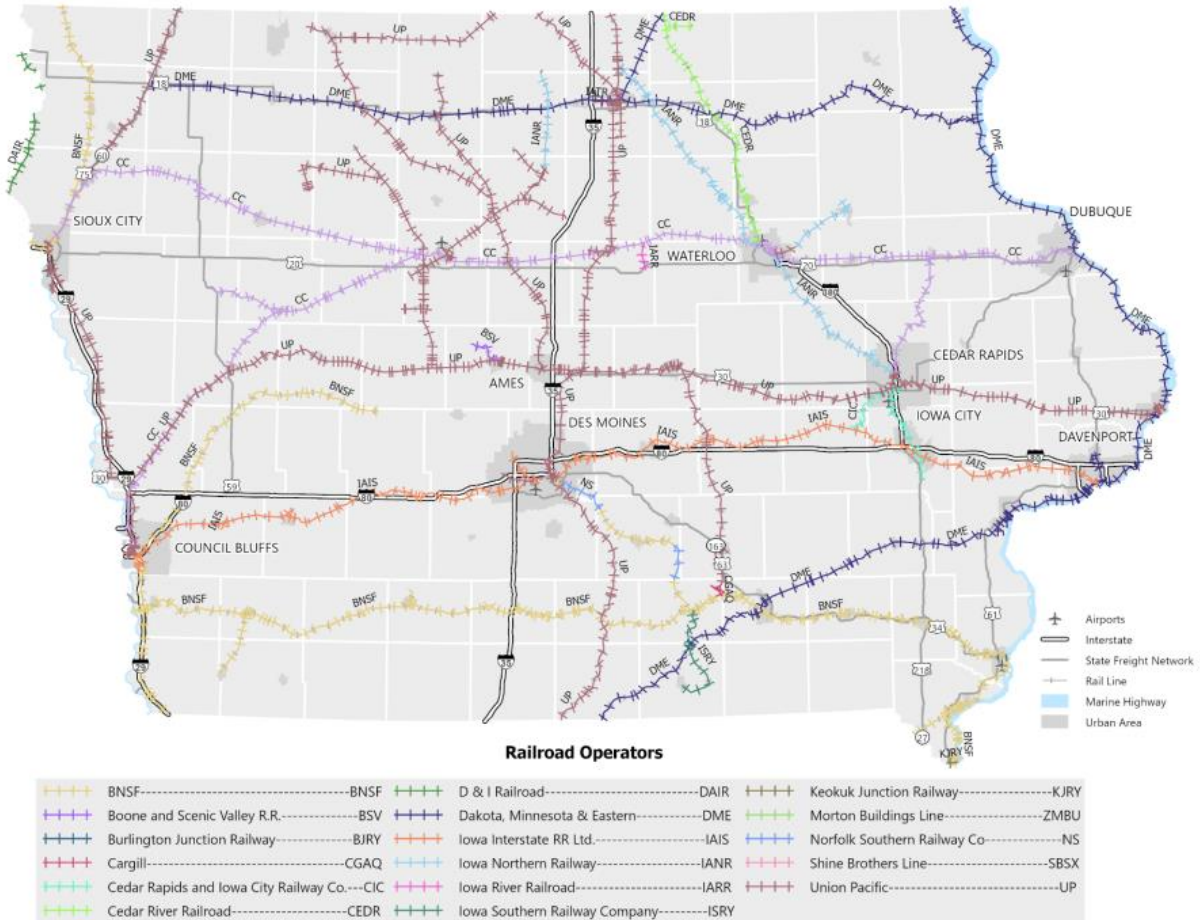


Rail

RPA 10 is served by six rail operators. Railroads are classified based on their annual operating revenues. The Iowa Department of Transportation (Iowa DOT) has used the following classifications to describe rail operations in the state.

Figure 7.3: Map of Iowa Railroads

Source: Iowa DOT



Railroad Classifications

***Class I railroads** are large, primarily long-haul national rail systems.*

***Class II railroads** are medium-sized railroads that operate regional rail systems.*

***Class III railroads** are commonly referred to as short line and switching or terminal railroads, which operate at the local level.*

Pipelines

There are several pipelines that passthrough RPA 10. As depicted in the map below, multiple commodities are shipped via the pipelines including anhydrous ammonia, crude oil, and natural gas. These pipelines are privately owned, so pipeline owners are responsible for the identification and rectification of needed pipeline system maintenance and repairs.

RPA 10 will assist, as necessary, to coordinate construction projects to maintain the integrity of the service provided by the pipelines.

Figure 7.4: Map of Pipelines in Iowa

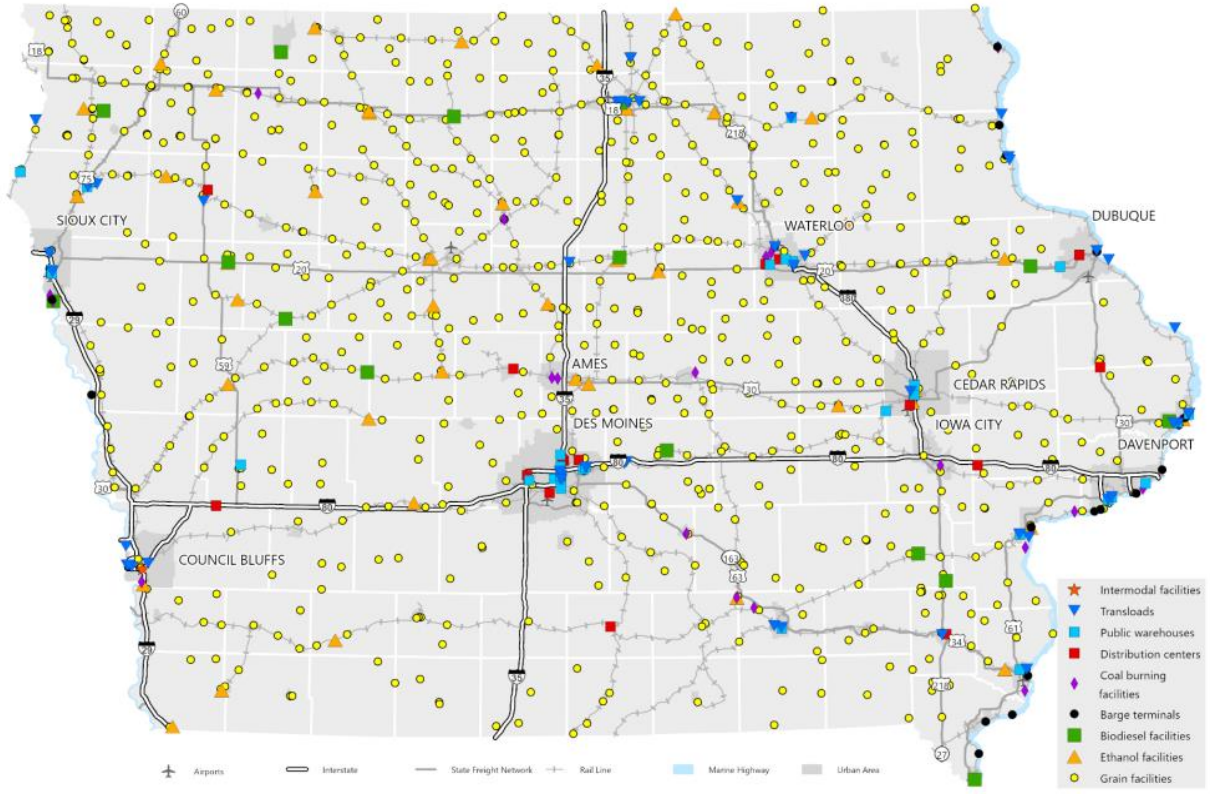
Source: Iowa DOT

Freight Generating Facilities

The freight system also includes a number of facilities that enable the transfer of goods from one mode to another. These types of facilities allow shippers to take advantage of the cost, speed, and capabilities of more than one mode. Freight generating facilities can be described as "intermodal" or "multimodal." Intermodal focuses on how two or more of these modes can connect at what typically amounts to a transfer point, such as an intermodal container facility or transload location. Multimodal focuses on the different modal options that could be utilized to move goods from one place to another.

Figure 7.5: Map of Freight Generating Facilities in Iowa

Source: Iowa DOT



Types of Intermodal Facilities

Container transfer facilities
Transload facilities
Coal burning facilities
Barge terminals
Biodiesel/ethanol plants
Grain Elevators

Types of Multimodal Facilities

Warehouses
Distribution centers

This map is not a comprehensive representation of all of Iowa's freight-generating facilities Some existing facilities may not be operational and new facilities may not be represented.

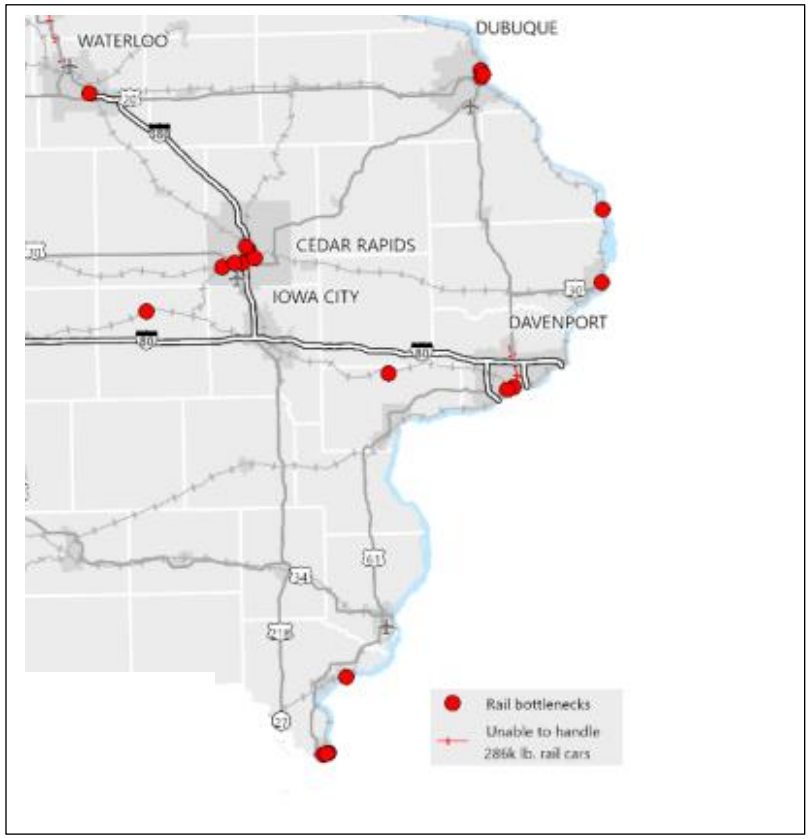
Freight Bottlenecks

In conjunction with the Iowa State Freight Plan, Iowa DOT identified a number of freight bottlenecks. Below are the following within RPA 10:

- I-80, through Iowa, Johnson, and Cedar Counties
- I-380, from I-80 exit six to I-380 exit 239
- US 151 at IA in Linn County
- US 151/IA 13 at IA 100 in Linn County
- US 151/IA 13 at Mt. Vernon Road in Linn County
- Rail bridge 268 near Marengo
- Numerous rail segments in the metropolitan Cedar Rapids area

Figure 7.6: Map of Highway Freight Bottlenecks in RPA 10
Source: Iowa DOT

Figure 7.7: Map of Rail Bottlenecks in RPA 10
Source: Iowa DOT



Freight Goals

Public input identified the following freight goals:

- Ensure ***safety, security and resilience*** of the freight network.
- Continue ***maintenance*** of the freight network to ensure reliability.
- Encourage ***innovation and expansion*** using advanced technologies, competition, and accountability to ensure the effective operation of the freight network.
- Ensure ***reduction in environmental and community impacts*** of the freight system.

Recommendations and Projects

Based on these goals, the following active transportation recommendations and actions were developed:

Safety, Security and Resilience

- Monitor travel conditions and support improvements to maintain reliable travel times for trucks within the region.
- Support local flood control efforts to reduce risk of travel disruptions on local rail and road systems.
- Encourage consideration of the freight network in the development of local hazard mitigation plans.

Maintenance

- Coordinate with railroads, freight companies, and industry leaders to consider projects of mutual benefit.
- Monitor identified regional freight bottlenecks and coordinate where possible.

Innovation and Expansion

- Monitor potential funding programs and the progress of recent technologies related to freight transportation.
- Support exploration and development of a logistics park in the Cedar Rapids region.

Reduction in Environmental and Community Impacts

- Monitor the progress of the CP and Kansas City Railway merger and its implications for the region.
- Coordinate with Iowa DOT Modal Division to develop relationships with freight providers and serve as a liaison to regional communities.
- Assist communities with the evaluation of potential quiet zones.

COVID Impacts

COVID created a health and humanization crisis, but it also resulted in economic upheaval. Early in the pandemic, flights and shipments were cancelled, leading to delays and shortages in the freight movement. At the same time, e-ecommerce demand skyrocketed as people isolated and stayed home. Although freight transportation services have rebounded from supply chain issues, the demand for truck drivers and other laborers, increased transportation costs, and product shortages have continued.

Conclusion

RPA 10 plays a critical role in the movement of freight through and within the State of Iowa, in part because the region's major industries and agricultural producers generate considerable demand for highway and rail freight transportation. Freight movement is also the key to the economic growth and prosperity of RPA 10.

RPA 10 Long-Range Transportation Plan 2022-2050

8. Transportation Funding

EAST CENTRAL IOWA
COUNCIL OF GOVERNMENTS

An important element in the implementation of this plan is making sure funding is in place to support transportation projects. A financial analysis examines reasonably available transportation resources and compares them to the cost of projected needs. "Reasonably available" transportation resources include funds authorized at the local, state, and federal levels which are likely to be available for the duration of the plan. A variety of funding sources are utilized for transportation improvements, as described in this chapter.

Local jurisdictions receive transportation revenue from multiple sources including the Federal Highway Administration (FHWA), Federal Transit Administration (FTA), Iowa Department of Transportation (DOT), and local funds. RPA 10 has two pools of funds to program towards projects: Surface Transportation Block Grant (STBG) Program, and Iowa's Transportation Alternatives Program (TAP). Other transportation-related funding sources discussed in this chapter are primarily programmed by the Iowa Transportation Commission or individual jurisdictions. Iowa DOT has also compiled a Funding Guide to help local governments, organizations, and individuals with preliminary searches for funding assistance for multiple types of transportation projects. The most current version can be found at www.iowadot.gov/pol_leg_services/Funding-Guide.pdf .

Federal Sources

Federal programs that could fund projects in RPA 10 include the following:

- ***Surface Transportation Block Grant (STBG) Program*** – This program is designed to address specific issues identified by Congress and provides flexible funding for projects to preserve or improve the condition and performance of several transportation facilities including any federal-aid highway or public road bridge. The Iowa DOT provides programming authority for allotments of STBG funds to MPOs and RPAs. A summary of RPA 10's STBG program is provided near the end of this chapter. The flexible nature of STBG funds allows them to be used for all types of transportation projects including roadway projects on federal-aid routes, bridge projects on any public road, transit capital improvements, Transportation Alternatives Program eligible activities, and planning activities. Iowa has implemented a swap program that allows MPOs and RPAs, at their discretion, to swap targeted federal STBG funding for state Primary Road Fund dollars. A portion of Iowa's STBG funding is targeted directly to counties for use on county bridge projects. These funds can be used for on- or off-system bridges, however off-system bridge investments must be continued to maintain the ability to transfer the federal STBG set-aside for off-system bridges.
- ***Transportation Alternatives Set-aside Program (TAP)*** – This program is a set-aside from the STBG program. TAP provides funding to expand travel choices and improve the transportation experience. Transportation Alternatives Program projects improve the cultural, historic, aesthetic, and environmental aspects of transportation infrastructure. Projects can include the creation of bicycle and pedestrian facilities, and the restoration of historic transportation facilities, among others. Some types of projects eligible under the SAFETEA-LU program Transportation Enhancements are no longer eligible, or have modified eligibility, under the TAP. A summary of RPA 10's TAP program is provided near the end of this chapter.
- ***Congestion Mitigation and Air Quality Improvement Program (CMAQ)*** – CMAQ provides flexible funding for transportation projects and programs tasked with helping to meet the requirements of the Clean Air Act. These projects can include those that reduce congestion and improve air quality.

- ***Demonstration Funding (DEMO)*** – Demonstration funding is a combination of different programs and sources. The FHWA administers discretionary programs through various offices representing special funding categories. An appropriation bill provides money to a discretionary program, through special congressionally directed appropriations or through legislative acts, such as the American Recovery and Reinvestment Act of 2009 (ARRA).
- ***Highway Safety Improvement Program (HSIP)*** – This is a core federal-aid program that funds projects with the goal of achieving a significant reduction in traffic fatalities and serious injuries on public roads. A portion of this funding is targeted for use on local high-risk rural roads and railway-highway crossings.
- ***National Highway Performance Program (NHPP)*** – NHPP funds are available to be used on projects that improve the condition and performance of the National Highway System (NHS), including some state and U.S. highways and interstates.
- ***National Highway Freight Program (NHFP)*** – NHFP funds are distributed to states via a formula process and are targeted towards transportation projects that benefit freight movements. Ten percent of NHFP funds are targeted towards non-DOT sponsored projects.
- ***State Planning and Research (SPR)*** – SPR funds are available to fund statewide planning and research activities. A portion of SPR funds are provided to RPAs to support transportation planning efforts.

The Iowa DOT administers several grant programs utilizing federal funding. Projects awarded grant funding must be documented in the region's Transportation Improvement Program (TIP). These grant awards are distributed through a competitive process. State administered grant programs include the following:

- ***City Bridge Program*** – A portion of STBG funding dedicated to local bridge projects is set aside for the funding of bridge projects within cities. STBG funding is swapped for Primary Road Fund dollars. Eligible projects need to be classified as structurally deficient or functionally obsolete. Projects are rated and prioritized by the Iowa DOT Local Systems Bureau with awards based upon criteria identified in the application process. Projects can receive up to $1 million.
- ***Highway Safety Improvement Program*** – Secondary (HSIP-Secondary) – This program is funded using a portion of Iowa's HSIP apportionment and funds safety projects on rural roadways. Federal HSIP funding targeted towards these local projects is swapped for Primary Road Fund dollars.
- ***Iowa Clean Air Attainment Program (ICAAP)*** – ICAAP funds projects that maximize emission reductions through traffic flow improvements, reduced vehicle-miles of travel, and reduced single occupancy vehicle trips. This program uses $4 million of Iowa's CMAQ apportionment. Funding targeted towards local road or bridge construction projects is eligible to be swapped.
- ***Federal Recreational Trails Program*** – This program provides federal funding for both motorized and non-motorized trail projects and is funded through a takedown from Iowa's TAP funding. The decision to participate in this program is made annually by the Iowa Transportation Commission.
- ***Iowa's Transportation Alternatives Program*** – This program targets STBG funding to MPOs and RPAs to award to locally sponsored projects that expand travel choices and improve the motorized and nonmotorized transportation experience.

There are also several federal transit programs that provide funding. The largest amount of funding is distributed, by formula, to state and large metropolitan areas. Other program funds are discretionary, and some are earmarked for specific projects. Program funds include the following:

- ***Statewide Transportation Planning Program (Section 5304 and 5305)*** – These funds come to the state based on population and are used to support transportation planning projects in non-urbanized areas. They are combined with Section 5311 funds and allocated among Iowa's RPAs.
- ***Bus and Bus Facilities Program (Section 5339)*** – This formula program provides federal assistance for major capital needs, such as fleet replacement and construction of transit facilities. All transit systems in the state are eligible for his program.
- ***Enhanced Mobility of Seniors and Individuals with Disabilities Program (Section 5310)*** – Funding is provided through this program to increase mobility for the elderly and persons with disabilities. Part of the funding is administered along with the non-urbanized funding with the remaining funds allocated among urbanized transit systems in areas with a population of less than 200,000. Urbanized areas with more than 200,000 in population receive a direct allocation.
- ***Non-urbanized Area Formula Assistance Program (Section 5311)*** – This program provides capital and operating assistance for rural and small urban transit systems. Fifteen percent of these funds are allocated to intercity bus projects. A portion of the funding is also allocated to support rural transit planning. The remaining funds are combined with the rural portion (30 percent) of Section 5310 funds and allocated among regional and small urban transit systems based on their relative performance in the prior year.
- ***Rural Transit Assistance Program (Section 5311(b)(3))*** – This funding is used for statewide training events and to support transit funding fellowships for regional and small urban transit staff or planners.

State Sources

The largest state transportation programs are funded through Road Use Tax Fund (RUTF) which includes revenue from several sources, the largest being the state gas tax and new vehicle registration fees. Programs funded through the RUTF include the following:

- ***Municipal Funds*** – These funds are apportioned to and programmed by each city. The funding comes from RUTF and comprises about 20 percent of its total statewide.
- ***Secondary Road Fund*** – These funds are distributed from the RUTF to each county for programming. Funds may be spent on construction, maintenance, salaries, equipment, etc. The secondary road network is defined as all public roads under a county's jurisdiction that are not primary roads. The Secondary Road Fund has historically accounted for 25 percent of the RUTF.
- ***Farm to Market (FM)*** – FM funds are distributed monthly to each county by the State. FM funds may only be used for construction on the FM network which includes trunk and trunk collector roads outside of metropolitan area boundaries. FM has accounted for eight percent of the total RUTF.
- ***Primary Road Fund (PRF)*** – These funds are programmed by the Iowa Transportation Commission for use on any federal functionally classified primary road.
- ***Traffic Safety Improvement Program (TSIP)*** – TSIP is funded by one half of one percent of the RUTF. Cities, counties, and the Iowa DOT can apply for three types of projects. Site specific projects account for $5-6 million per year, and a maximum of $500,000 can be awarded to a project. The other two project types are traffic control devices and traffic safety studies; both programs have $500,000 to distribute per year. Additional state funding sources for transportation projects include the following:

- ***State Recreational Trails Program*** – These funds are programmed by the Iowa Transportation Commission based on applications from state and local government agencies and non-profit organizations.
- ***Revitalize Iowa's Sound Economy (RISE)*** – RISE is designed to help Iowa's cities and counties compete economically. Projects often involve new construction to attract businesses to an area (Immediate Opportunity) or improve an industrial park (Local Development). State RISE projects are programmed by the Iowa Transportation Commission. Cities and counties can apply to the Iowa DOT for the designated funds.
- ***Traffic Engineering Assistance Program (TEAP)*** – Traffic engineering consultants are retained by the Iowa DOT and are available to local governments as requested for candidate projects on a first-come/first-served basis. The purpose is to identify cost effective traffic safety and operational improvements as well as potential funding sources to implement the recommendations. Typical studies include high-crash locations, unique lane configurations, obsolete traffic control devices, school pedestrians, truck routes, parking issues, and other traffic studies.
- ***Community Attraction and Tourism (CAT)*** – CAT was created to assist projects that will provide recreational, cultural, entertainment, and educational attractions. Administered through the Iowa Economic Development Authority (IEDA), this program is intended to help position a community to take advantage of economic development opportunities in tourism and strengthen a community's competitiveness as a place to work and live. Eligible projects include the construction of recreational trails with substantial regional or statewide economic impact.
- ***Resource Enhancement and Protection (REAP)*** – Administered through the Iowa Department of Natural Resources (DNR), this statewide program invests in the enhancement and protection of the state's natural and cultural resources.

Funding is available annually to cities through statewide competitive grants. Recreational trails are eligible, though they are typically funded as part of a larger project with environmental or park enhancement benefits. There are also state funds for transit which include the following:

- ***State Transit Assistance (STA)*** – All public transit systems are eligible for this funding. These funds can be used by the public transit system for operating, capital, or planning expenses related to the provision of open-to-the-public passenger transportation. Most of the funds received in a fiscal year are distributed to individual transit systems based on a formula using performance statistics from the most recent available year.
- ***STA Coordination Special Projects*** – These funds aid the startup of new services that have been identified as needs by health, employment, or human services agencies participating in the passenger transportation planning process.
- ***Public Transit Infrastructure Grant Fund*** – This program can fund transit facility projects that involve new construction, reconstruction, or remodeling. To qualify, projects must include a vertical component.

Local Sources

Locally programmed transportation funds vary from jurisdiction to jurisdiction. Local funding sources for transportation projects include the following:

- ***Property Tax*** – Although tax levies vary from city to city, a sizable portion of local transportation revenues comes from property tax assessments (general funds).

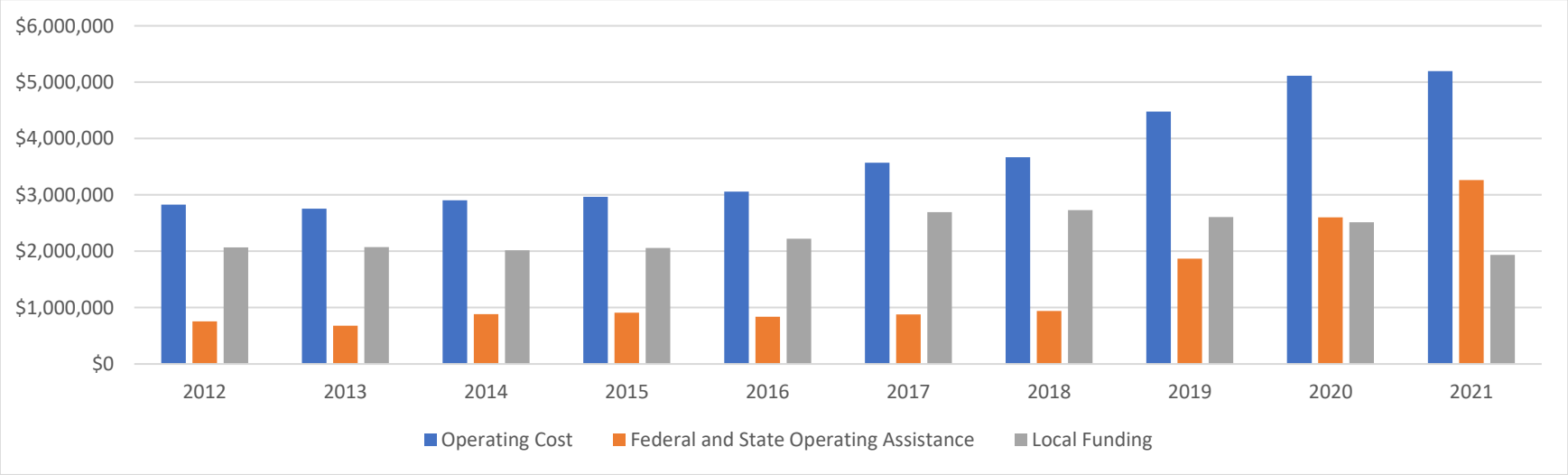
- ***General Obligation Bonds*** – General obligation bonds are debts incurred by cities or counties that are repaid through property tax revenues. These bonds can be issued for essential purposes including roads and bridges.
- ***Local Option Sales Tax (LOST)*** – Iowa Code provides that each County and City can vote to adopt up to a one percent local option sales tax. Revenues may be partially or completely dedicated to local street construction and reconstruction.
- ***Tax Increment Finance Funding (TIFF) –*** TIFF is a method of reallocating property tax revenues which are produced because of an increase in taxable valuations above the base valuation figure within a tax increment area. Both cities and counties may create tax increment financing areas.

Transit Funding Analysis

To determine average revenues and expenditures for CorridorRides historical funding sources and operating costs were analyzed. The chart below, Figure 8.1, identifies the historical funding and operating costs for the regional system from FY 2012 to 2021. To project funding and operating costs to 2050, noted on the following page, the 380 Express figures have been excluded and noted in a separate table. Based on this analysis, CorridorRides can anticipate a total balance from 2023-2050 of $1,287,927. However, the 380 Express can anticipate a total balance of $59,249,323 from 2023-2050. It's important to note that for years 2019-2024, the 380 Express service is fully funded by a grant from Iowa DOT. Beyond 2025, new funding sources will need to be identified, local funding will be needed to fully fund the service, or the service will need to be restructured.

Figure 8.1: CorridorRides Historic Funding and Operating Cost

Source: ECICOG



Capital expenditures related to buses have been calculated separately. Due to the complexity of the bus procurement process and the variability in funding from one year to the next, it is difficult to predict how many buses will be replaced in any year. Therefore, this document assumes an average of three new light-duty buses, one minivan, and one medium-duty bus will be replaced each year over the life of the plan. The current costs to replace a light-duty bus, minivan, and medium-duty bus are $100,000, $60,000, and $225,000 respectively, for a total of $585,000. Inflating the total cost at a constant rate of four percent every years results in a total cost for vehicle replacements of $1.4 million. Funding from the FTA (Section 5339) is anticipated to cover 85 percent of the total costs. The remaining 15 percent comes from local funding. STBG funding could also be utilized for bus and minivan replacements. To date, CorridorRides has purchased three buses using STBG funds.

Figure 8.2: CorridorRides 2023-2050 Estimated Operating Costs and Revenues
Source: ECICOG

Forecasted Operating Revenues and Expenses 2023-2050 for Dial-a-Ride and VanPool Services

Operating Revenues (FTA, STA, Passenger Revenue, Contract Revenue, Local Tax, Other)	$142,777,084
Operating Costs (Direct System, Indirect System)	$141,489,157
Balance	$1,287,927

Forecasted Operating Revenues and Expenses 2023-2050 for 380 Express Service

Operating Revenues (FTA, STA, Passenger Revenue, Contract Revenue, Local Tax, Other)	$4,596,727
Operating Costs (Direct System, Indirect System)	$63,846,050
Balance	-$59,249,323

Forecasted Capital Costs and Funding Sources 2023-2050

Expenditures (five vehicles every)	$26,644,068
Federal Share (Section 5339)	$22,647,458
Local Share	$3,996,610

RPA 10 Funding Analysis

To forecast future state and federal dollars available for RPA 10 projects and programs, a 10-year historic average of funding programs was established, and a 4% inflation rate was applied as recommended by the FHWA for each fiscal year covered by this plan. (2023- 2050)

Funding Estimates

Historical funding amounts were used to forecast state and federal dollars anticipated to be reasonably available during the life of this plan (2023-2050). Federal and state funding sources analyzed include the Surface Transportation Block Grant (STBG) Program, Iowa's Transportation Alternatives Program (TAP), and City and County Bridge Program. Revenue forecasts for STBG and TAP were projected using the current annual targets provided by Iowa DOT for 2022. City bridge funds were projected using the average annual award amounts from 2013 to 2022, which is $920,000 per year. County Bridge funds were projected using the average annual programmed amount between the seven counties from 2013 to 2022, which is $3,575,300 per year. Figure 8.3 provides historical funding and revenue forecasts.

Figure 8.3: RPA 10 History and 2023-2050 Projection of Funds

Source: ECICOG

Fiscal Year	STBG	TAP	County Bridge	City Bridge
2013	$3,812,911	$300,619	$3,850,000	-
2014	$3,530,467	$204,584	$4,044,000	-
2015	$3,598,129	$205,963	$3,167,000	-
2016	$3,583,126	$204,801	$5,137,000	-
2017	$3,662,971	$210,421	$495,000	$1,200,000
2018	$3,685,432	$205,635	$6,107,000	-
2019	$3,971,526	$208,246	$3,650,000	$3,000,000
2020	$4,089,778	$204,808	$3,425,000	$1,000,000
2021	$3,973,417	$206,507	$3,025,000	$1,000,000
2022	$3,869,365	$202,662	$2,853,000	$3,000,000
Total 2023-2050	**$201,076,529**	**$10,531,592**	**$185,795,063**	**$47,808,983**

Before constructing or reconstructing new infrastructure, the operation and maintenance of the existing system and available revenues must be considered. To determine a baseline of local revenues and expenditures for transportation, the City Street Financial Report was used for cities; and County Farm to Market Receipts, Secondary Road Fund Receipts, and County Secondary Road Operations and Maintenance Data were used for the counties. These reports are submitted to the Iowa DOT each fiscal year. To calculate this, operations and maintenance reports from the Iowa DOT were analyzed, which are derived from the County Engineer Annual Reports and City Street Finance Reports. The table below shows projections for local non-federal aid revenues and operation and maintenance expenditures. The most recent fiscal year available – 2021, was used for the analysis. Revenue was projected to increase by two percent annually, and operation and maintenance costs were projected to increase by four percent annually. These projections are consistent with the FY 2023-2026 Transportation Improvement Program (TIP) for the region. Using these percentages, and as noted in Figure 8.5 below, a negative balance is projected starting in FY 2034. Balances in prior years can be allocated towards other local projects, debt payments, and local matches for state and federal funding.

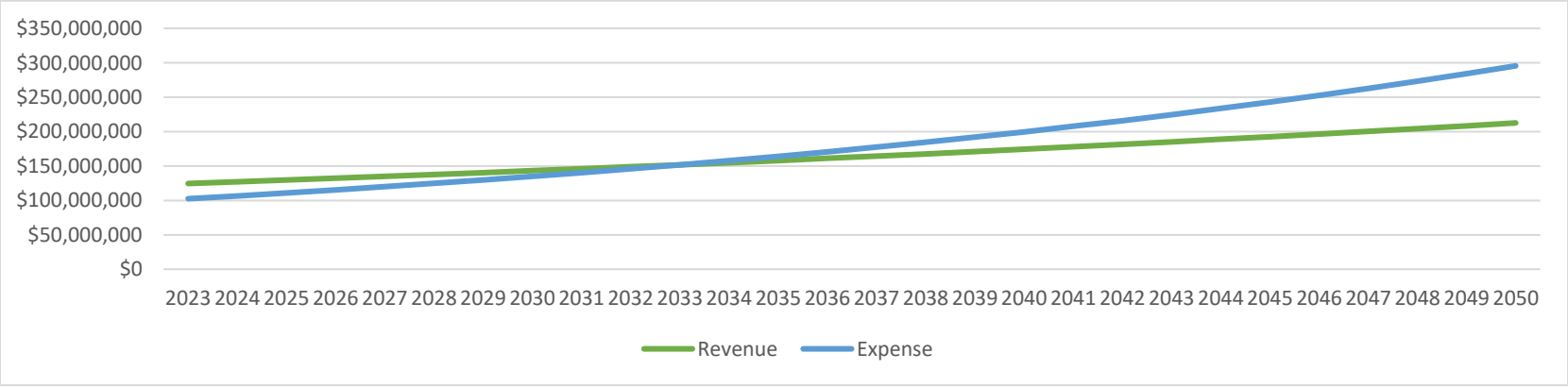
Figure 8.4: Local Non-Federal Aid Revenue and Expense Projections

Source: Iowa DOT

Fiscal Year	Non-Federal Aid Revenues	Operations and Maintenance Costs on Total Roadway System	Balance
2021	$119,741,743	$84,759,893	$24,981,850
2023-2050 Total	**$4,615,814,193**	**$5,121,292,518**	**-$505,478,325**

Figure 8.5: Trend of Local Non-Federal Aid Revenue and Expense Projections

Source: Iowa DOT



Funding Deficiencies

As detailed in Chapters 2 and 4, maintaining the existing transportation network is a regional priority. As the funding assessment shows, additional funding will be necessary to operate the 380 Express service after 2024 and to maintain the existing roadway system beyond 2034. Unless additional funding sources are identified, the region will continue to face an uphill battle to successfully maintain transit service and the road and bridge network at a level that is both safe and does not significantly impede economic development. Without additional funds, some transit services may be reduced, and counties will be faced with closing low-volume roads and bridges that fall into disrepair. Other regional priorities include the expansion of transit service, enhancement of the active transportation network, investment in new and innovative technologies, and upgrading of the roadway network. New funding or increase local support will be necessary to pursue these initiatives.

Short Term Projects

Figure 8.6 provides a list of fiscally constrained TAP projects from FY 2023-2026. Figure 8.7 provides a list of fiscally constrained STBG projects from FY 2023-2026. These projects are included in the fiscally constrained FY 2023-2026 Transportation Improvement Program (TIP).

Figure 8.6: 2023-2026 Fiscally Constrained TAP Projects

Source: ECICOG

Sponsor	Project Description	Local Funding	Federal Aid	Total Cost
Johnson County Conservation	Clear Creek Trail from Half Moon Ave. to FW Kent Park	62,500	$375,000	437,500
Linn County Conservation	Grant Wood Trail from Parking Lot to Paralta Road	469,107	211,893	681,000
Johnson County Conservation	Clear Creek Trail	162,750	587,250	750,000
Project Totals		$756,857	$961,893	$1,868,500
Estimated TAP Funding			$1,711,030	
TAP Carryover Balance from Prior Years			$109,153	
Anticipated Regional TAP Balance			$646,030	

Figure 8.7: FY 2023-2026 Fiscally Constrained STBG Projects
Source: ECICOG

Sponsor	Project Description	Local Funding	Federal Aid	Total Cost
ECICOG	Planning	94,250	377,000	471,250
Iowa County	V66, from 240th Ave to 200th St	1,000,000	1,000,000	2,000,000
Linn County	Walker Road, from Betty Groves Rd to Troy Mills Rd	441,600	1,766,400	2,208,000
Jones County	E34, from 230th Ave to Anamosa corporate limits	750,000	1,000,000	1,750,000
Vinton	W 1st St, from K Ave to R Ave	691,168	1,054,310	1,745,478
Cedar County	X54, from Muscatine county line to I-80	355,000	1,145,000	1,500,000
Johnson County	F67, from county line to Calkins Ave	481,250	1,925,000	2,406,250
Benton County	E22, from Hwy 218 to near Garrison	400,000	1,600,000	2,000,000
Jones County	E28, from X28 to Buffalo Creek Bridge	500,000	2,000,000	2,500,000
Linn County	Burnett Station Rd, from Alburnett to Hwy 13	335,000	1,040,000	1,375,000
Shellsburg	Sells Street over Bear Creek	1,460,000	600,000	2,060,000
Washington County	Ginko Ave, from 170th St to Wellman	375,000	1,400,000	1,775,000
Project Totals			$14,907,710	
Estimated STBG Funding			$15,740,000	
STBG Carryover Balance from Prior Years			$5,413,010	
Anticipated Regional STBG Balance			$6,245,300	

RPA 10 Project Selection Process

RPA 10 has two pools of funds to program towards projects: Surface Transportation Block Grant (STBG) Program, and Iowa's Transportation Alternatives Program (TAP). The following sections outline how RPA 10 selects TAP and STBG projects as part of the annual programming process for the Transportation Improvement Program.

RPA 10's project selection process for these funds is described in Appendix A.

RPA 10 Long-Range Transportation Plan 2022-2050

9. Future Planning Activities

ECICOG
EAST CENTRAL IOWA
COUNCIL OF GOVERNMENTS

Activities

The RPA 10 Long Range Transportation Plan will be updated every five years and will be reviewed annually to implement revisions as needed to reflect changes in priorities. Amendments to the Long Range Transportation Plan will require a public hearing with a notice published no more than twenty days and no fewer than five days prior to the scheduled meeting.

Other transportation planning activities may occur throughout the five-year time frame and will supplement the LRTP. These activities include, but are not limited to the following:

- Passenger Transportation Plan (PTP)
- Transportation Improvement Program (TIP)
- Transportation Planning Work Program (TPWP)
- Regional trail plan
- Public Participation Plan (PPP)
- Feasibility studies

The five-year update and annual review will be completed by ECICOG through the guidance of the RPA Policy Committee and technical advisory committees. Public participation will be included in all planning activities as outlined in RPA 10's Public Participation Plan.

RPA 10 Long-Range Transportation Plan 2022-2050

10. Supporting Documents

EAST CENTRAL IOWA
COUNCIL OF GOVERNMENTS

APPENDIX A: RPA 10 Project Selection Process

The following summarizes RPA 10's project selection process for Iowa's Transportation Alternative (TAP) and Surface Transportation Block Grant (STBG) funds.

Iowa's Transportation Alternative Program (TAP)

The FAST Act requires that projects funded through ITAP be selected using a competitive project selection process. The goal is to increase transparency, openness, objectivity, and to improve overall project quality. RPA 10 uses a project ranking process. Applicants are notified of the project ranking and selection process when projects are solicited for each TIP cycle. Candidate projects for Iowa's TAP funding must meet the following requirements.

Project Qualifications

All projects are subject to all applicable federal requirements and FHWA approval. To be eligible for TAP funds, the following qualifications must be met:

- Federal funding requires that TAP projects fit into one or more specific funding categories. The following link provides a complete listing of the funding categories: https://www.iowadot.gov/systems_planning/pdf/Statewide%20Transportation%20Alternatives%20Guidance.pdf. **Note, however, that the RPA prioritizes capital projects specified in the *Additional RPA Requirements* section**.
- Project sponsors must be a state, county, or municipal governmental entity.
- Project sponsors must assure they will operate and maintain the property and facility for the useful life (minimum of twenty years) of the improvement and not change the use of any right-of-way acquired without prior approval from the Iowa Department of Transportation.
- Project sponsors must assure ability to let or have the project under construction within two years of when programmed.
- The Iowa Department of Transportation will let all project bids.
- Projects must demonstrate a direct relationship to existing or planned surface transportation facilities.
- TAP funding may not be used for engineering or architectural related services during design or project construction.

Additional RPA Requirements

RPA 10 TAP projects should be limited to capital improvements in the following specific areas, and must fit into one of the following categories:

a. Multi-use, non-motorized trails and essential support facilities and on-road improvements to enhance bicycle/pedestrian use.
b. Bicycle and pedestrian accommodations associated with a federal aid roadway project.
c. Construction of turnouts, overlooks, and viewing areas along designated scenic byways.
d. Historic preservation of transportation structures with preference given to their functional use.
e. Aesthetic and environmental enhancements to public roadways
f. Pedestrian improvements related to routes to school or safety issues.

Projects that do not meet these guidelines but are eligible under the FAST Act are allowed to be submitted, but there would need to be a significant extenuating circumstance for them to be considered for funding. This determination will be at the discretion of the RPA.

Funding Requirements

The region has established the following additional funding requirements:

- Safe Routes to Schools (SRTS) and eligible scenic byway projects*:
    - Projects must have a minimum total project cost of $75,000.
    - Projects must have a minimum 20% local match.
    - Projects must have a minimum federal aid participation level of 50%.

  **Note: Iowa DOT may have matching funds available for SRTS or eligible scenic byway projects to ensure 80% federal participation.*

- All other trail projects:
    - Projects must have a minimum total project cost of $75,000.
    - Projects must have a minimum 20% local match.
    - Projects must have a minimum federal aid participation level of 50%, however, the minimum federal participation level of 50% may be waived for projects with a total cost great than $250,000.

Application Requirements

Applicants must attend a Preapplication Workshop and submit a short preapplication prior to submittal of a full application. The TAP application form was developed by Iowa DOT and is used statewide by all RPAs. In addition to this statewide form, projects sponsors are asked to complete the following additional information, on a separate piece of paper, at the request of the RPA:

- Project sponsors are asked to identify how their project relates to the criteria noted below and provide a brief (one to two sentences) description of the relationship.
- Project sponsors are also asked to identify the project timeline, and any additional planned phases of the project.

Application Review Process

Applications will be reviewed and ranked by the Regional Trails Advisory Committee (RTAC) to prepare a tentative recommendation for the Transportation Policy Committee. Projects are ranked using a comparison process. All projects are directly compared to each other, with a priority being chosen from each pair. Each time a project is chosen as the priority, it receives a point. Once all projects are compared, points are totaled, which enables the creation of a ranked priority list for funding.

Projects are ranked by entities present at the RTAC meeting. Entities shall vote on rankings as follows:

- Each county shall have up to two votes
- ECICOG and the Iowa DOT do not vote but can provide staff recommendations, if requested.

Projects are recommended for funding based upon the rankings and funding constraints. The RTAC has the discretion to determine the share of federal funds for each recommended project. The draft ITAP program is then recommended to the Policy Committee for inclusion in the TIP which is submitted to Iowa DOT by July 15.

Application Review Criteria

Projects will be ranked and recommended for funding based on the following criteria:

- Jurisdiction's Ability to Complete Project
  - Ability to meet federal requirements
  - Ability to meet programming timelines
- Project Readiness
  - Status of matching funds
  - Public acceptance of project
  - Right of way constraints
- Relationship to Transportation System
  - Ability to enhance safety
  - Connectivity to existing facilities
  - Enhancement to existing transportation system

- Inclusion in state, regional, and local plans

• Associated Benefits
  - Environmental and social impacts
  - Regional economic development impact
  - Regional tourism impact
  - Sustainability elements of project
• Other
  - Cost in relation to public benefit
  - Involvement of multiple jurisdictions and other local partners (i.e., chambers of commerce, tourism & visitors bureau)
  - Predicted usage relative to population

Surface Transportation Block Grant (STBG) Program

Under the FAST Act, the RPA has the ability to distribute federal STBG dollars. STBG funds can be used for road and bridge projects and can include trails/sidewalks along transportation facilities. Additionally, the region has access to a category of funds identified as "TAP Flex" funds that are available to fund either Transportation Alternatives Set-Aside or STBG eligible projects. In the RPA, these flexible funds are used for STBG-eligible projects.

Iowa Federal-Aid Swap

In 2017, the State of Iowa gave Iowa DOT the ability to exchange federal STBG funds for state funding from motor vehicle fees and fuel taxes. The exchange is considered dollar for dollar and must be noted as swapped funds in the Transportation Improvement Program (TIP). All regions in the State are assumed to participate unless a region opts out of the program. The RPA Policy Committee participates in the Iowa Federal-Aid Swap Policy program. All Iowa STBG funds under the programming responsibility of RPA Policy Committee will be swapped from federal to state dollars. Swap funds are subject to all the requirements under this State policy.

Project Eligibility

STBG Applications submitted to the RPA must meet the following requirements:

- For construction projects, a minimum total project cost of $100,000 ($80,000 federal) with a minimum 20 percent match.
- Eligible activities include:
  - Major new construction, reconstruction, or resurfacing of roadways or bridges

- Regional planning and planning studies
- Transit capital purchases
- ADA-compliant ramp reconstruction in conjunction with an adjacent road reconstruction or resurfacing project
- Minor utility adjustments and incidental utility work necessary to complete a roadway project

• Ineligible activities include: - Design engineering and construction related services - Sidewalk maintenance
• Roadway projects must be on federally classified routes that are Minor Collectors or above, or a Farm-to-Market route.
• Applicants must attend a regional Preapplication Workshop, submit a short preapplication, and complete a regional STBG Application. Incomplete applications will not be considered for funding.
• Project sponsors will participate in the Iowa DOT's federal-aid swap for all eligible road and bridge projects.

Eligible Applicants and Projects Sponsors

All public agencies and local governments with jurisdiction over public rights-of-way for transportation, public transit responsibilities, or transportation planning responsibilities within the RPA boundaries, excluding metropolitan Cedar Rapids and metropolitan Iowa City, are eligible to apply for STBG funds.

Non-eligible project sponsors may partner with an eligible sponsor in applying for funds if the eligible sponsor is the lead on the project.

Geographic Equity

Since 1995, the counties of Benton, Cedar, Iowa, Johnson, Jones, Linn, and Washington having been working together as the Region 10 Regional Planning Affiliation (RPA) to address regional transportation issues. The RPA is intent on ensuring funding equity between the participating jurisdictions.

Targets

In the early years of the RPA, as relationships were forming, the region chose to identify STBG (formerly known as STP) funding "targets" to remove perceived competition that strained the formation of new and necessary governmental relationships. The RPA provided targets to the seven counties and three cities with a population greater than 5,000, based upon pre-ISTEA funding allocation formulas. Over time, the basis for the targets has been adjusted, but jurisdictional partners have maintained their intent for the targets to be geographically equitable, as the equity in programming has enable a level of trust that has resulted in number of regional transportation planning success stories, including the completion of a regional trails plan, the construction of at least five multi-jurisdictional road projects, the formation of a regional multi-disciplinary safety team, and the recent implementation of a regional vanpool program. The current basis for these targets is as followings:

- Targets for cities with a population > 5,000: population based, if the city has 5% of the regional population, their annual target is 5% of the available regional STBG funds.
- Targets for counties: their annual target is based on the same formula used to distribute Road Use Tax Funds (RUTF) to the counties. The RUTF formula considers changes in population, mileage, lineal feet of bridges, and traffic levels as they occur over time. The formula was developed by a committee comprised of county engineers, county supervisors, and DOT representatives, and approved by the legislature.

Clarification of Targets

These targets are intended to be stable, recognize that transportation needs are distributed throughout the region, and be sensitive to the diverse nature of the participating counties and cities. In the past, the RPA has referred to these targets as suballocations, but has come to realize that the term is not appropriate for a variety of reasons:

- The county targets are not allocated solely for county projects; they are targets for projects from throughout the county, including those from cities within the respective county.
- All applications received from throughout the region are reviewed and considered.
- Programming is based on readiness and need, and it is possible for applicants to "borrow ahead" for these needed projects.

Borrowing Ahead on Target Amounts

Cities or counties with significant regional projects that exceed their four-year funding target may borrow ahead, provided a balance of regional STBG funds is available. The city or county may borrow no more than 3 times their annual target, resulting in a target deficit. The city or county may not borrow ahead again until target deficit is eliminated.

Application Review Process

Each year, new applications are submitted to ECICOG. ECICOG has the responsibility to review each application to ensure that:

- The application submitted is for new construction or reconstruction.
- The work proposed is federal aid eligible.
- The funds requested are within the RPAs funding limitations.
-

On behalf of the RPA, ECICOG forwards **all** applications from within each county to their respective county board of supervisors (BOS). The boards of supervisors (BOS) are asked to prioritize all applications received from within their county. While the BOS can establish their own

criteria, the RPA provides the following criteria for consideration, based on the goals and objectives outlined in the Comprehensive Regional Development Strategy (the region's long range transportation plan):

- Maintenance of the existing system
- Service to traffic (volumes for program year and forecast year)
- Capacity improvement levels
- Reduction in system deficiencies
- Multi-jurisdictional nature of the projects
- Safety improvements
- Enhancement or maintenance of regional economic vitality

County priorities are then forwarded to the Transportation Technical Advisory Committee (TTAC) for consideration. The TTAC will prepare a recommendation for funding to the Policy Committee based on the above noted criteria and county priorities (although, the TTAC's recommendation may vary from the identified county priorities). All applications are shared, reviewed, and discussed by these committees. The Policy Committee will have final approval. The Policy Committee has the discretion to determine the share of federal funding for each recommended project. Their determinations will consider the TTAC's recommendation and funding constraints. Projects approved by the Policy Committee will be included in the TIP which is submitted to Iowa DOT by July 15.

APPENDIX B: Public Input Resources

Stakeholder input, scenario development, and strategic actions from *Envision East Central Iowa (EECI)*, the region's Comprehensive Economic Development Strategy (CEDS), have been incorporated into the transportation plan. All EECI reports are available online. Links to these reports are as follows:

Talk to ECICOG Main Page: https://www.talkto.ecicog.org/

Envision East Central Iowa (EECI) Main Site: Envision East Central Iowa | East Central Iowa Council of Governments (ecicog.org)

EECI Executive Summary: https://www.talkto.ecicog.org/12773/widgets/37958/documents/32448

EECI Strategy Report: https://www.talkto.ecicog.org/12773/widgets/37958/documents/32447

EECI Benchmark Report: https://www.talkto.ecicog.org/12773/widgets/37958/documents/32449

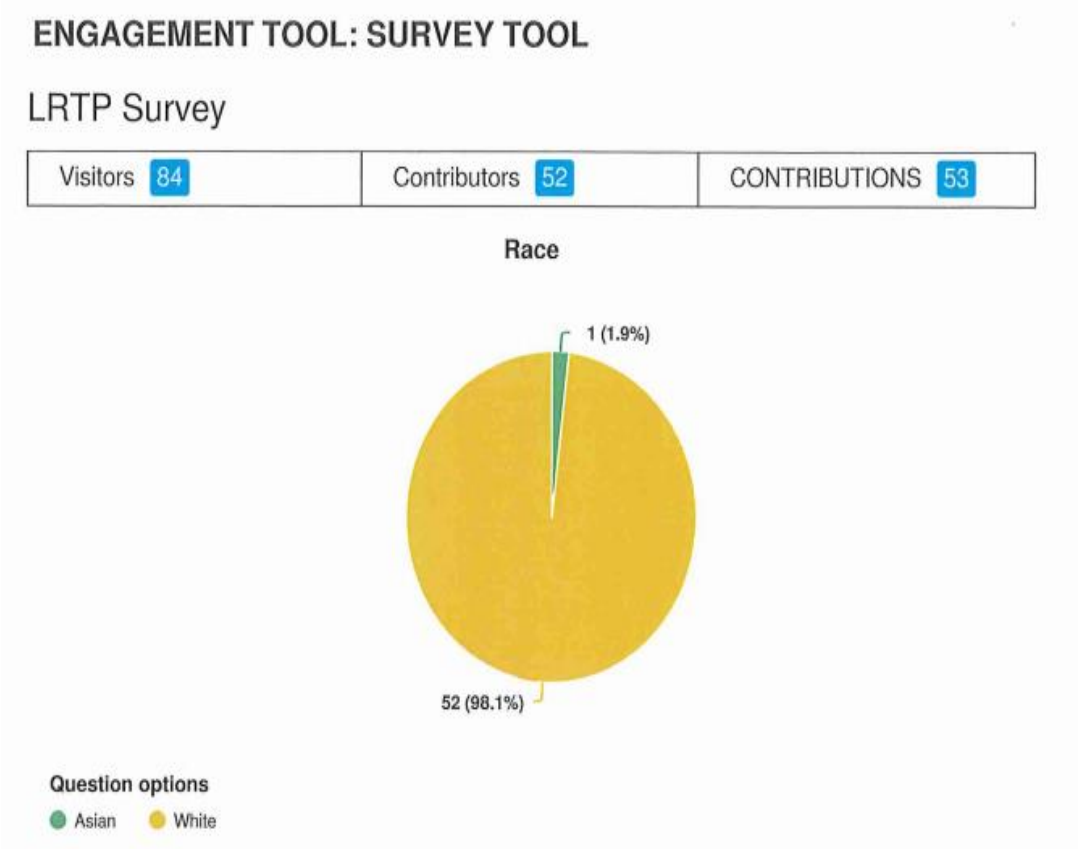
EECI Future Summit Power Point: https://www.talkto.ecicog.org/12773/widgets/37958/documents/28611

EECI Focus Group Power Point: https://www.talkto.ecicog.org/12773/widgets/37958/documents/25009

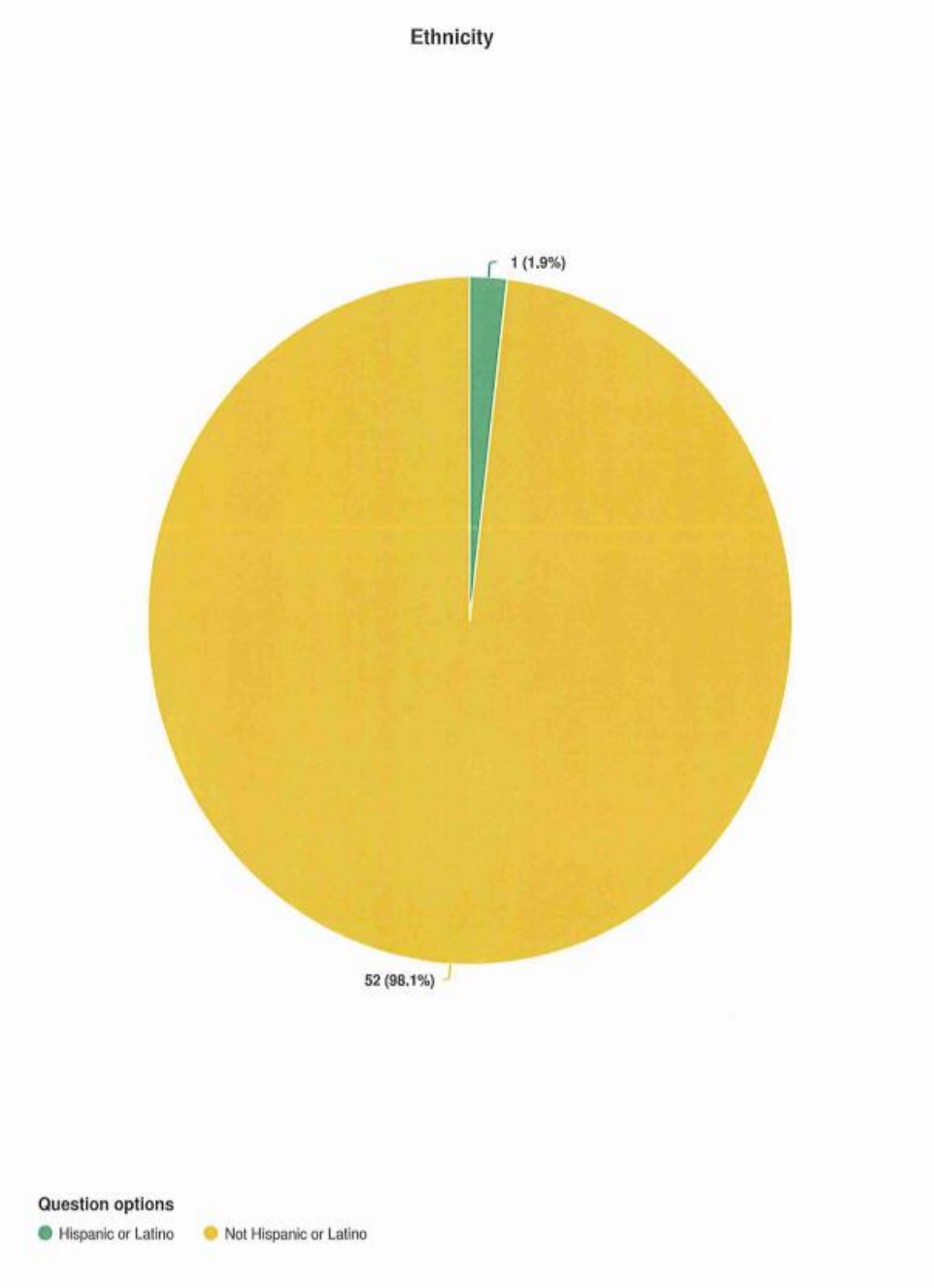
EECI Think Tank Report: https://www.talkto.ecicog.org/12773/widgets/37958/documents/25300

APPENDIX C: Transportation Survey Responses

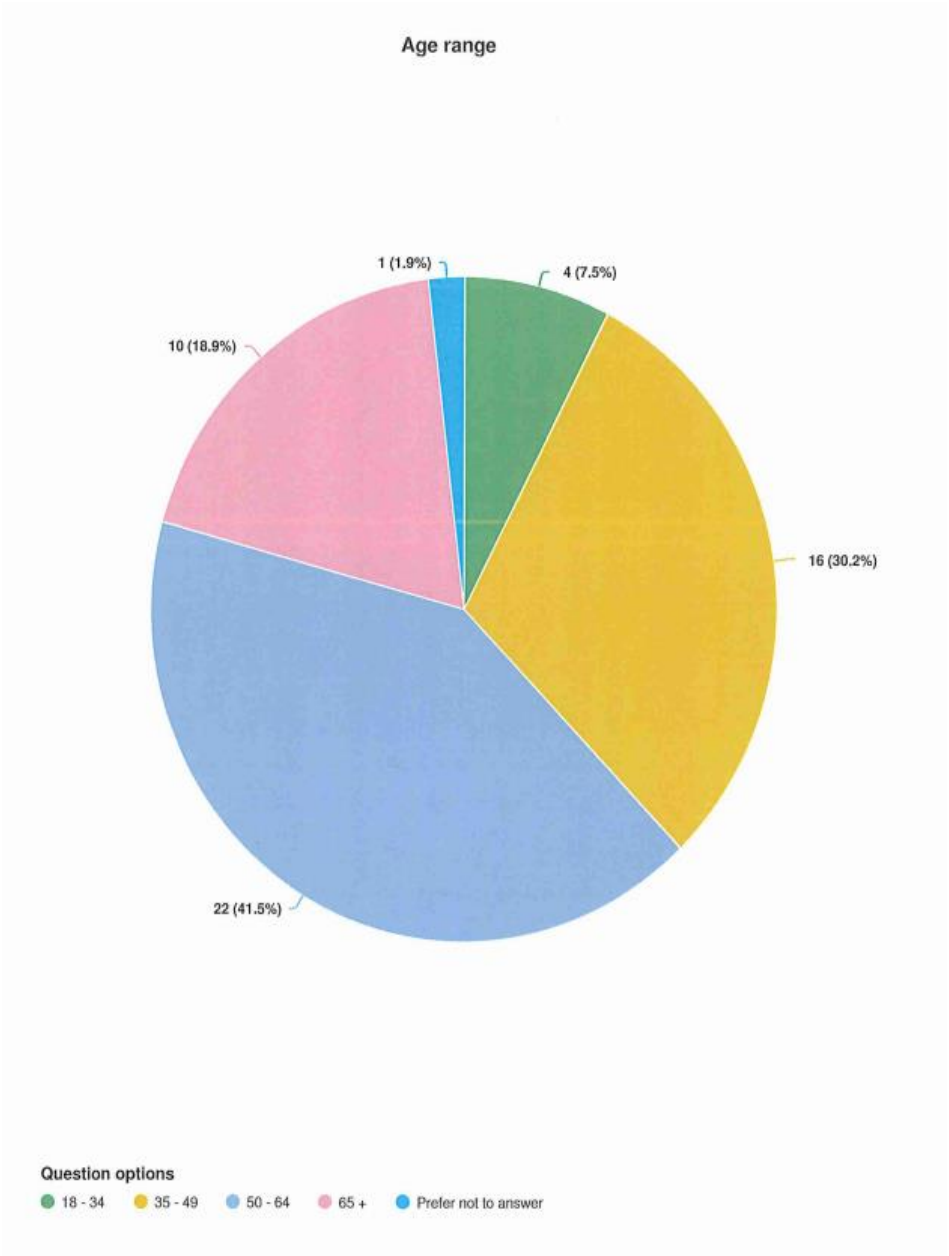
The following pages summarize the results of a transportation survey conducted in March/April 2022 via Talk to ECICOG, the RPA's public engagement website.



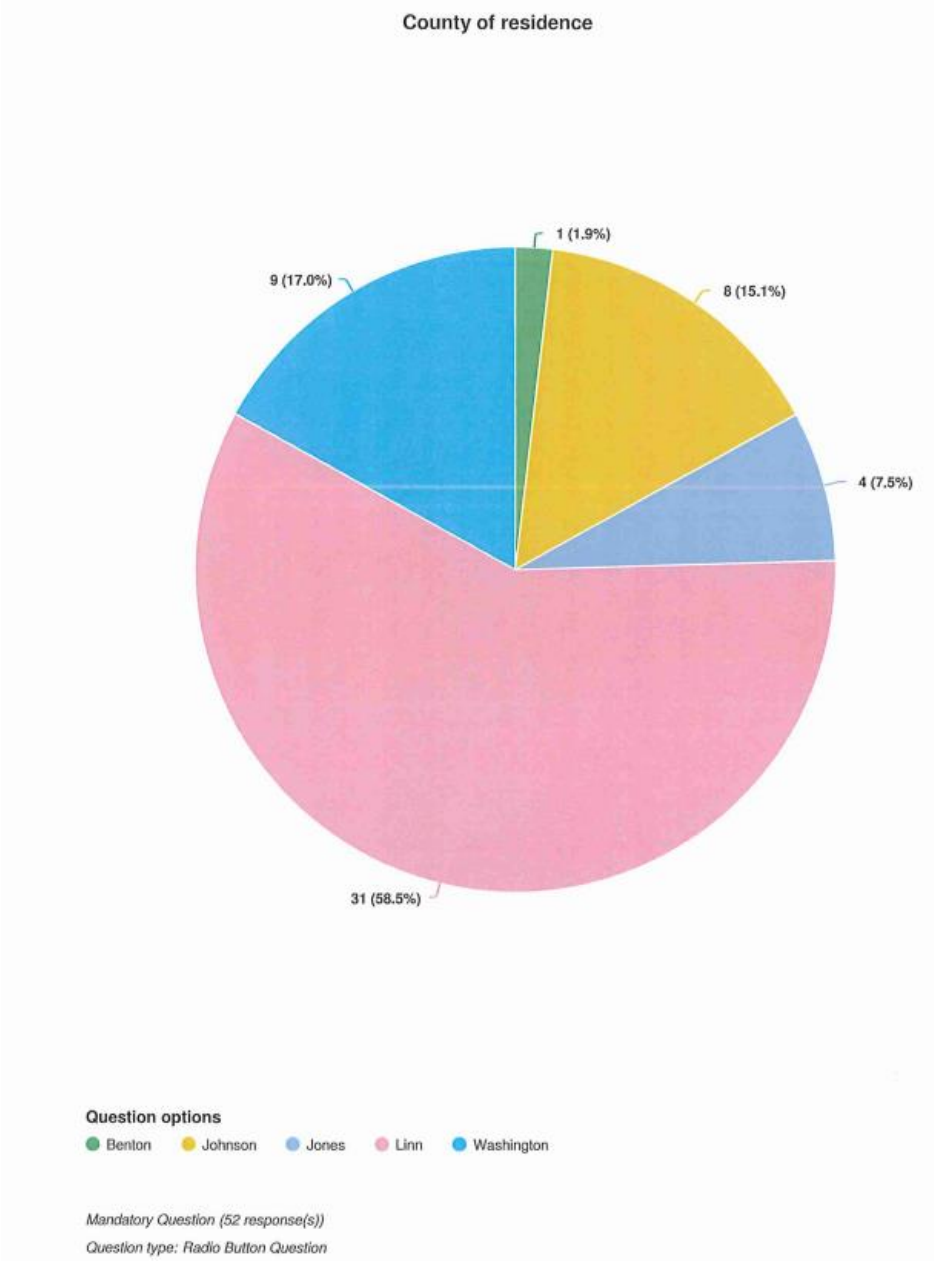
Question 1


Ethnicity
1 (1.9%)
52 (98.1%)
Question options
Hispanic or Latino
Not Hispanic or Latino

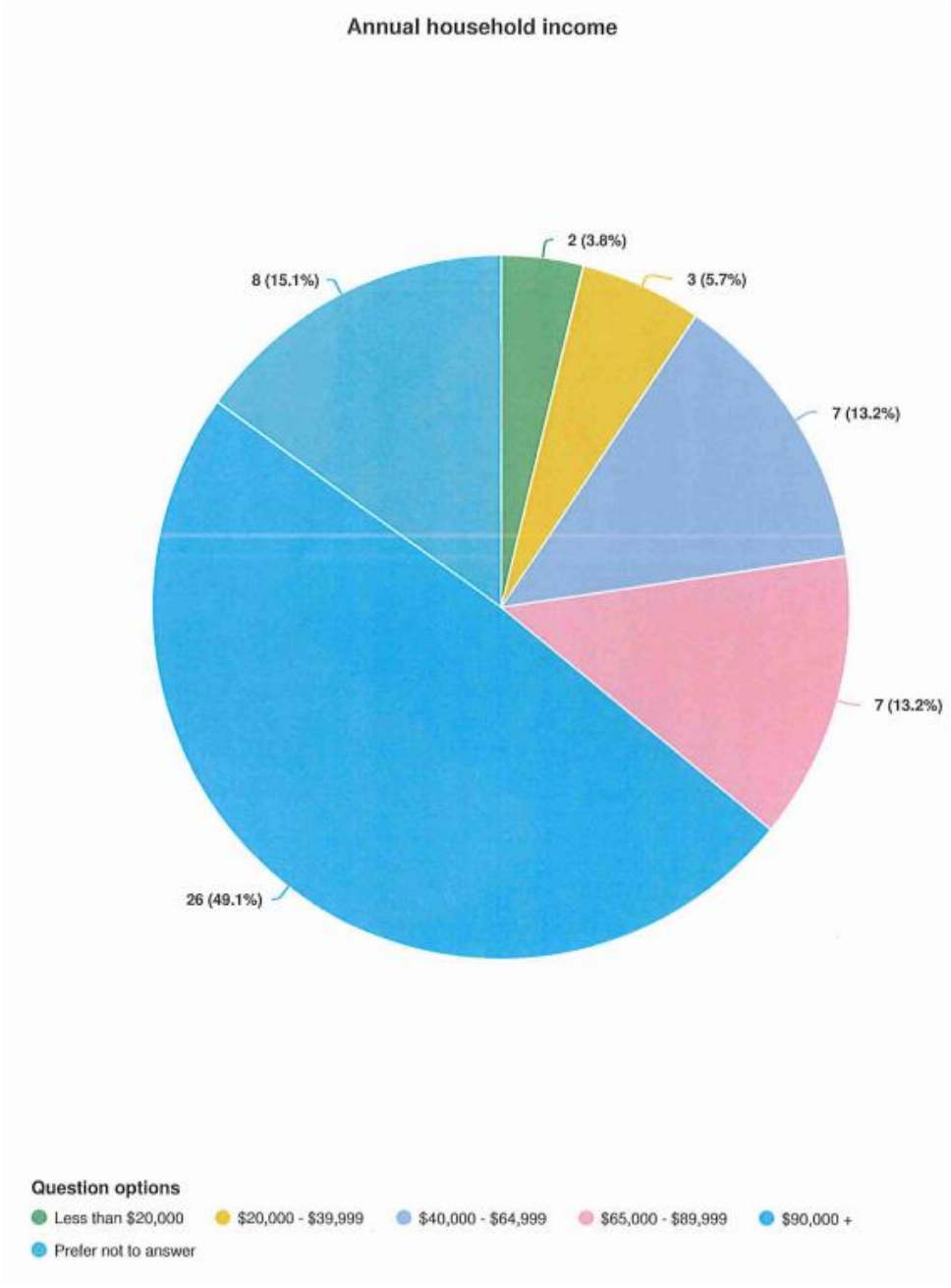
Question 2


Age range
1 (1.9%)
4 (7.5%)
10 (18.9%)
16 (30.2%)
22 (41.5%)
Question options
18 - 34
35 - 49
50 - 64
65 +
Prefer not to answer

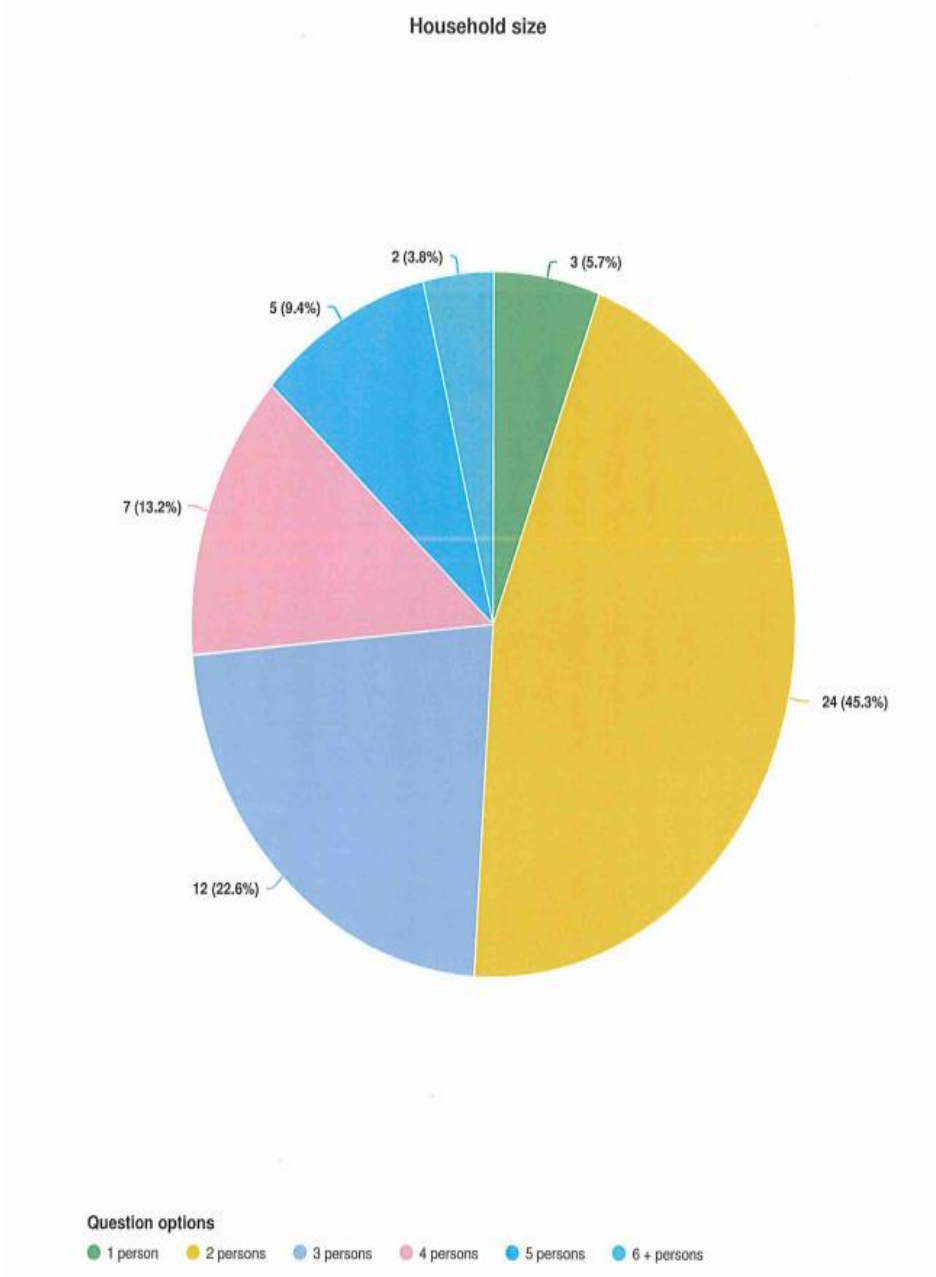
Question 3


County of residence
1 (1.9%)
8 (15.1%)
4 (7.5%)
31 (58.5%)
9 (17.0%)
Question options
Benton
Johnson
Jones
Linn
Washington
Mandatory Question (52 response(s))
Question type: Radio Button Question

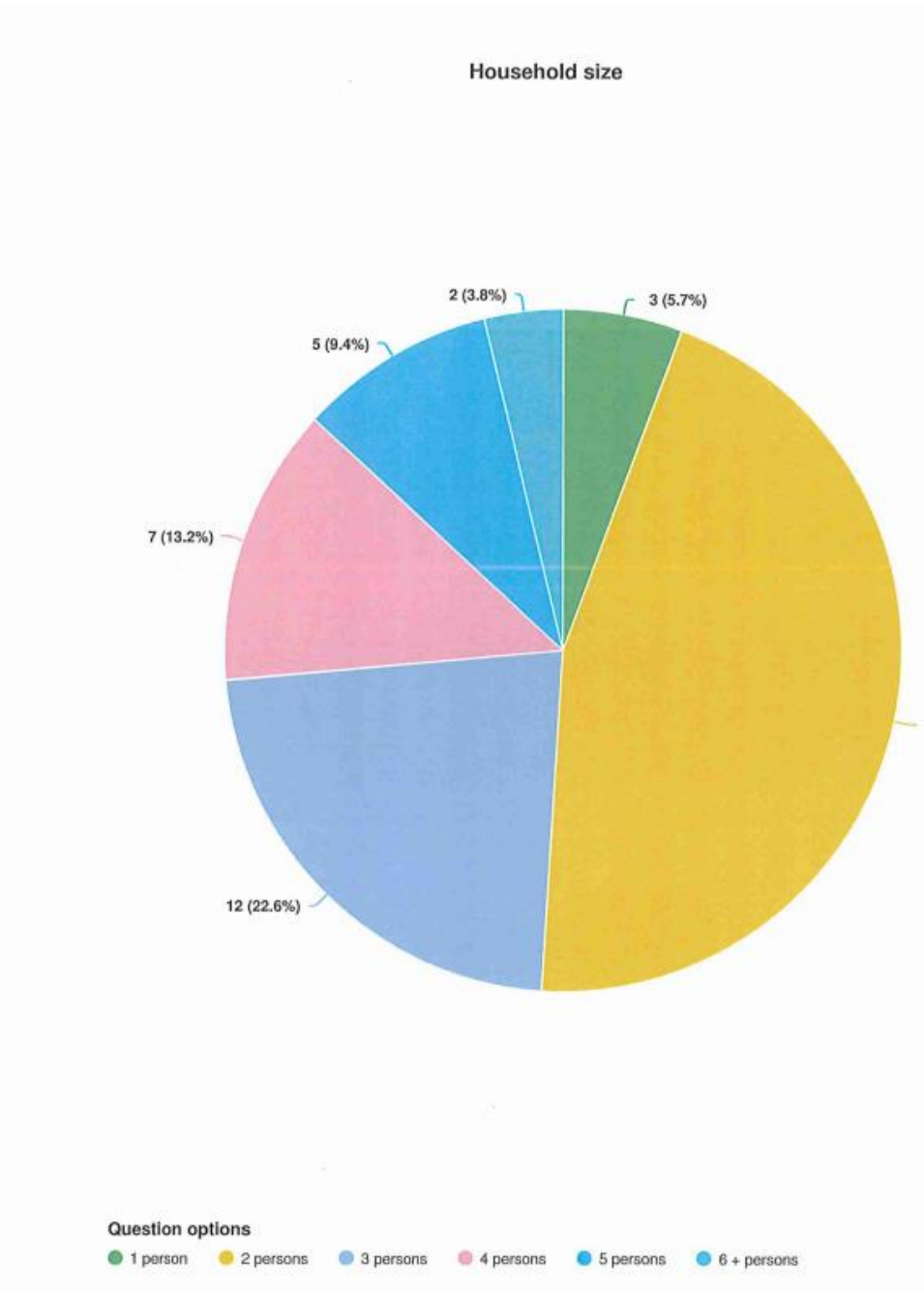
Question 4


Annual household income
2 (3.8%)
3 (5.7%)
8 (15.1%)
7 (13.2%)
7 (13.2%)
26 (49.1%)
Question options
Less than $20,000
$20,000 - $39,999
$40,000 - $64,999
$65,000 - $89,999
$90,000 +
Prefer not to answer

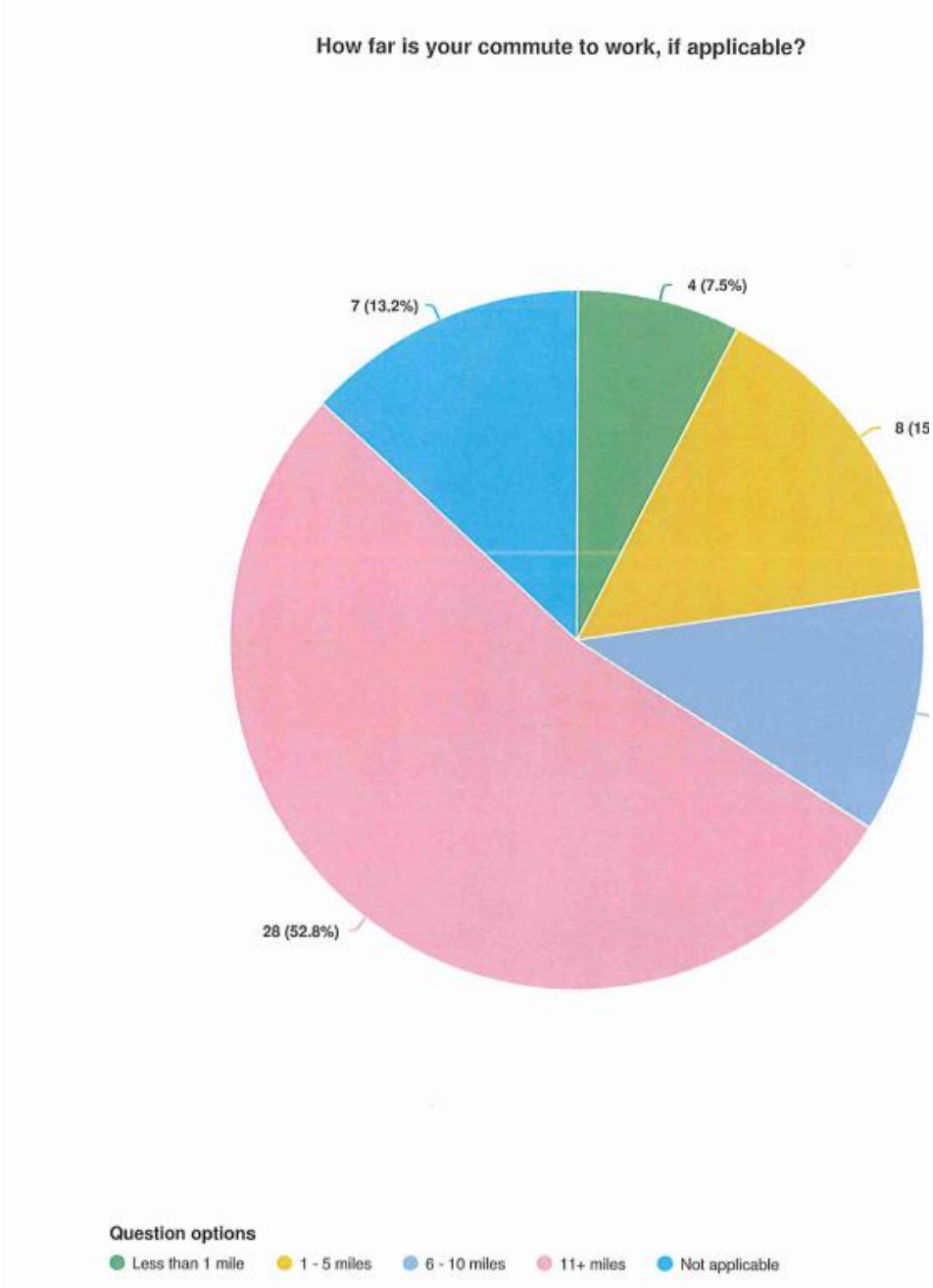
Question 5


Household size
2 (3.8%)
3 (5.7%)
5 (9.4%)
7 (13.2%)
24 (45.3%)
12 (22.6%)
Question options
1 person
2 persons
3 persons
4 persons
5 persons
6 + persons

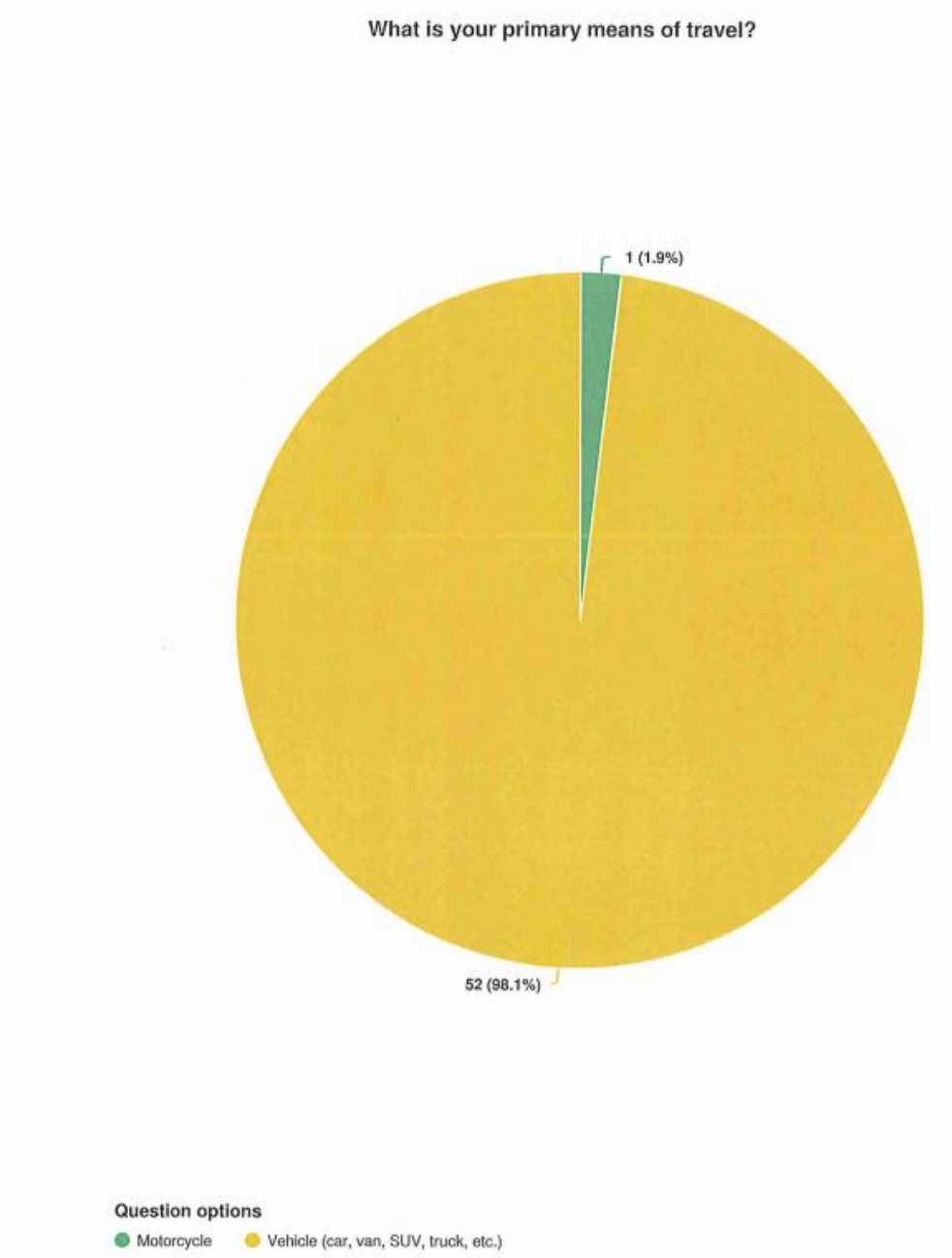
Question 6


Household size
2 (3.8%)
3 (5.7%)
5 (9.4%)
7 (13.2%)
12 (22.6%)
Question options
1 person
2 persons
3 persons
4 persons
5 persons
6 + persons

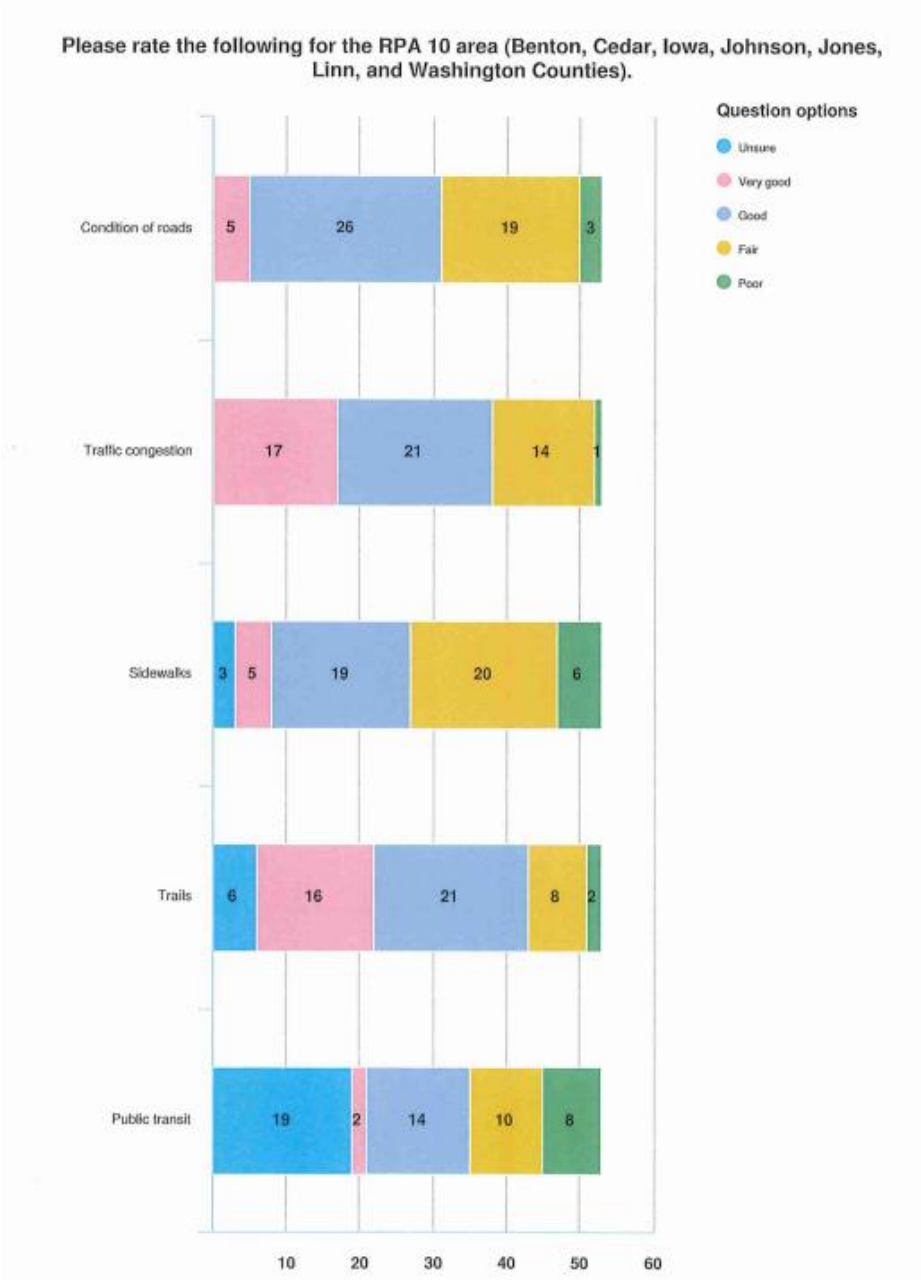
Question 7


How far is your commute to work, if applicable?
4 (7.5%)
7 (13.2%)
8 (15
28 (52.8%)
Question options
Less than 1 mile
1 - 5 miles
6 - 10 miles
11+ miles
Not applicable

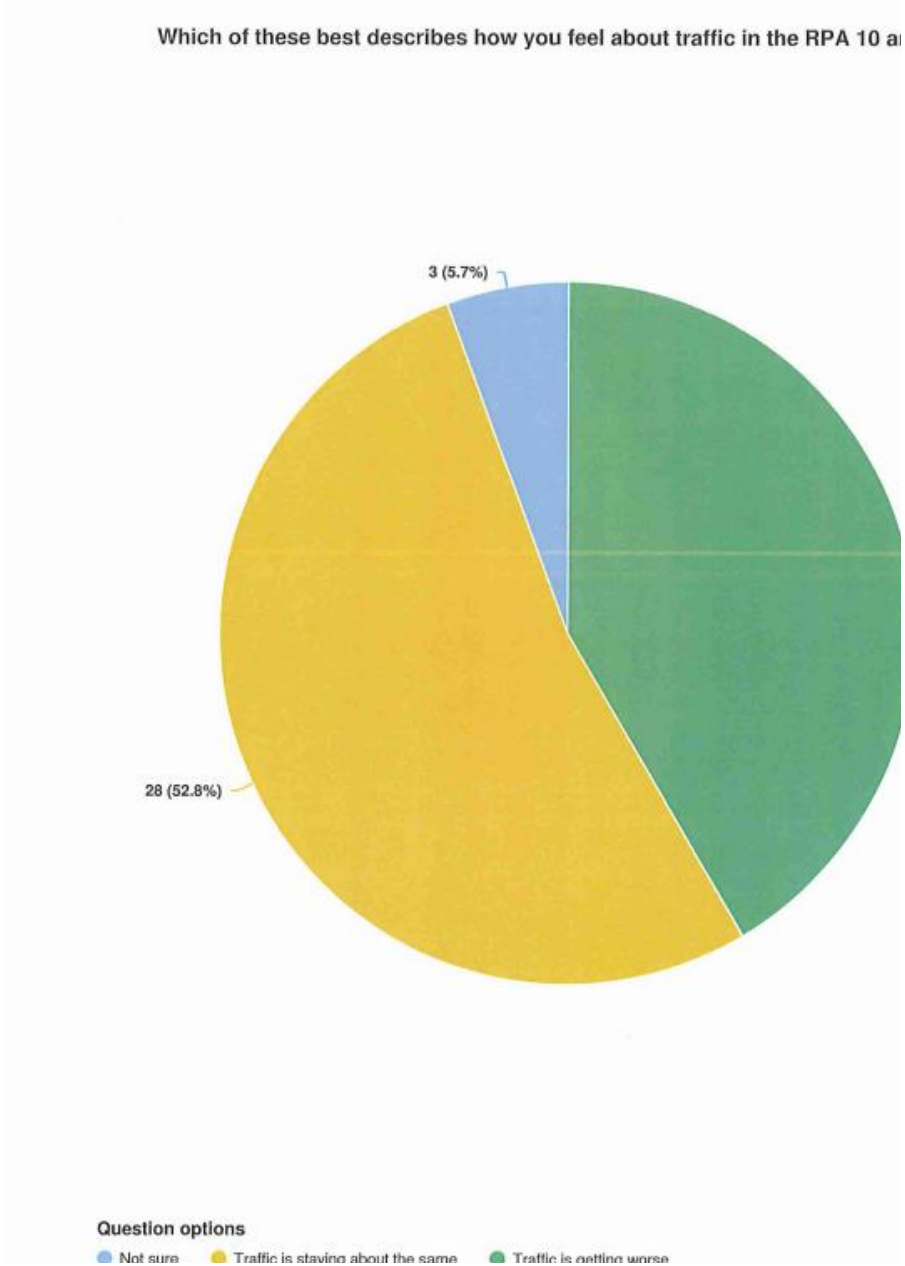
Question 8


What is your primary means of travel?
1 (1.9%)
52 (98.1%)
Question options
Motorcycle
Vehicle (car, van, SUV, truck, etc.)

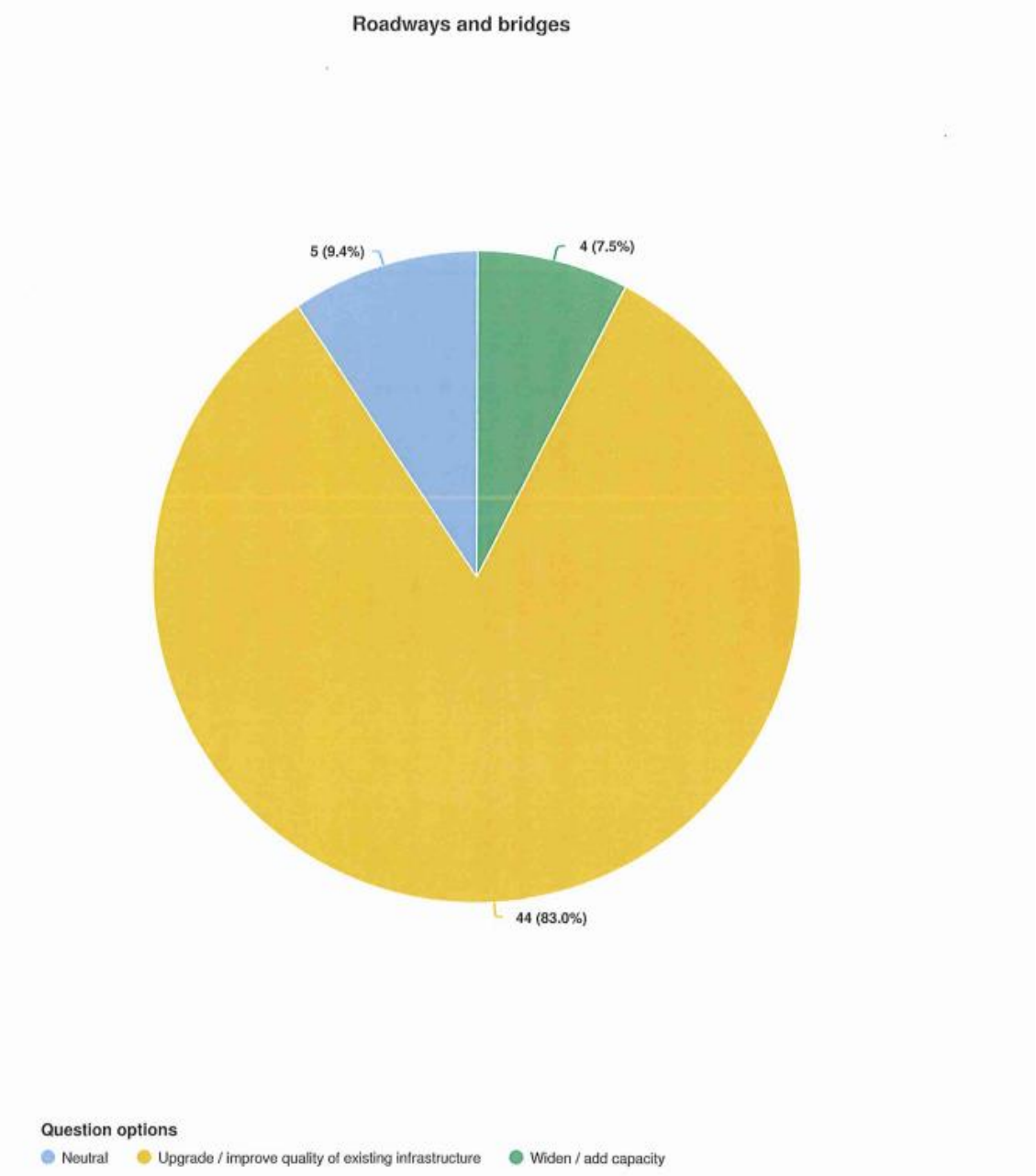
Question 9


Please rate the following for the RPA 10 area (Benton, Cedar, Iowa, Johnson, Jones, Linn, and Washington Counties).
Question options
Unsure
Very good
Good
Fair
Poor
Condition of roads
5
26
19
3
Traffic congestion
17
21
14
1
Sidewalks
3
5
19
20
6
Trails
6
16
21
8
2
Public transit
19
2
14
10
8
10
20
30
40
50
60

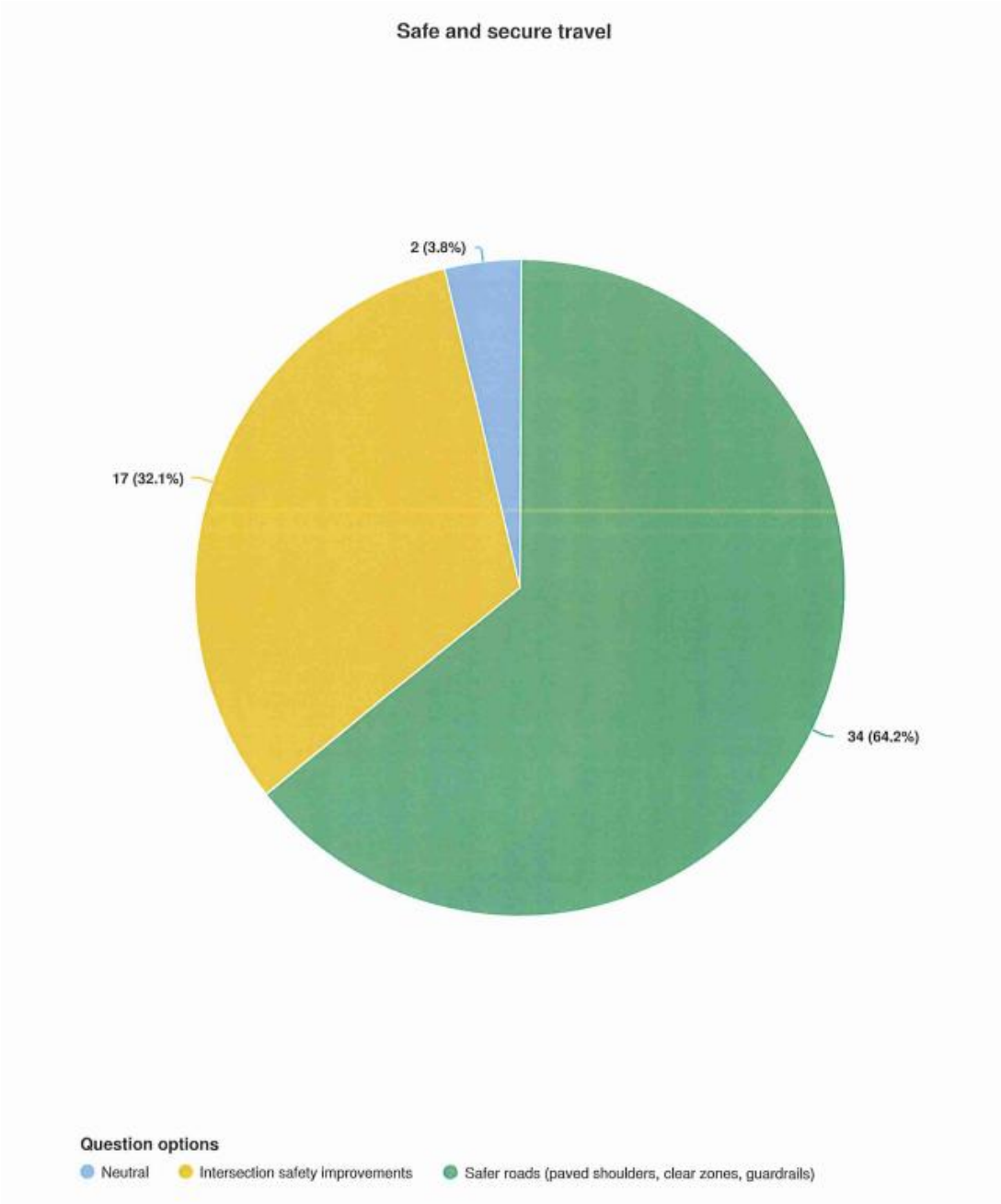
Question 10


Which of these best describes how you feel about traffic in the RPA 10 a
3 (5.7%)
28 (52.8%)
Question options
Not sure
Traffic is staying about the same
Traffic is getting worse

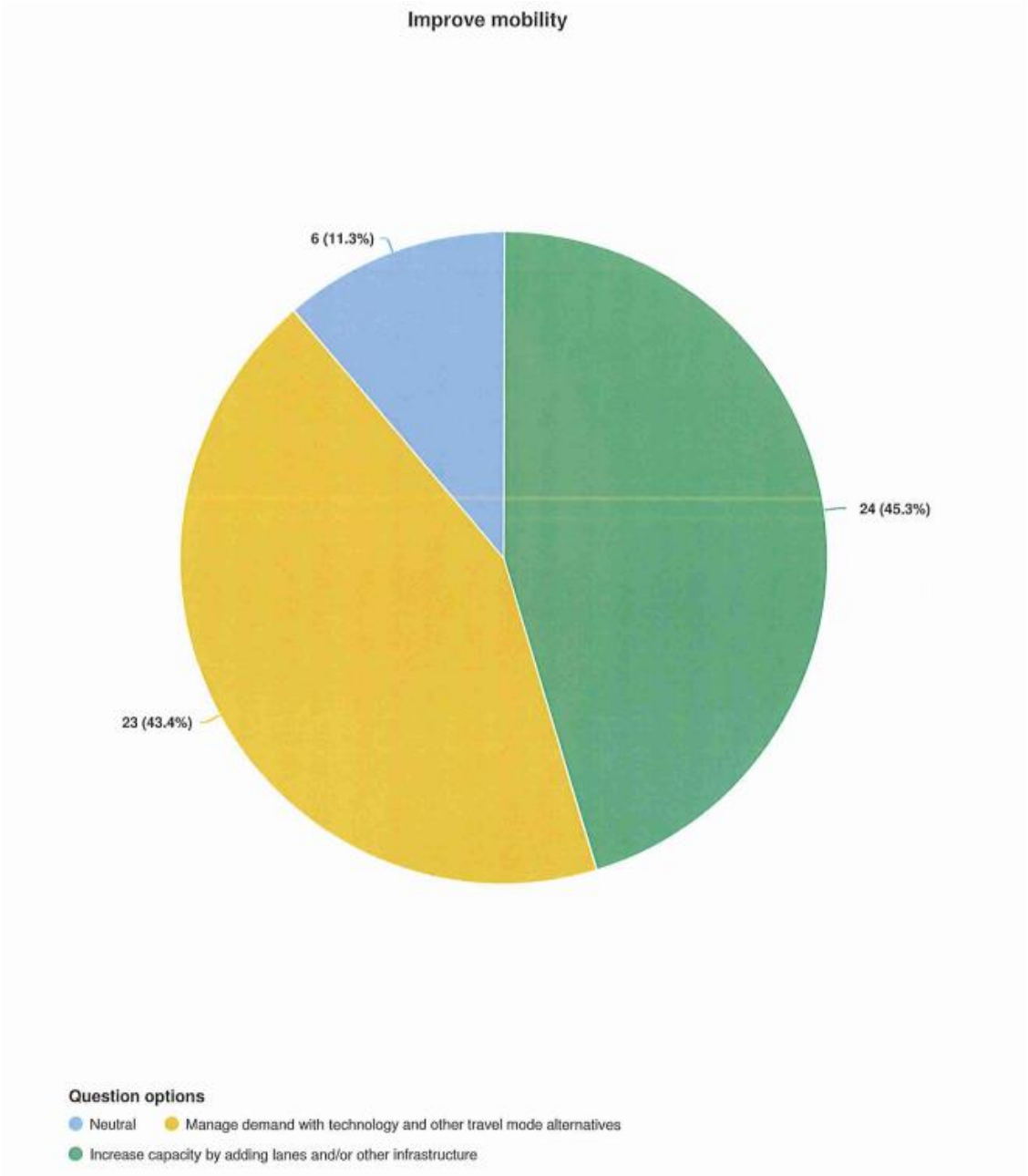
Question 11


Roadways and bridges
5 (9.4%)
4 (7.5%)
44 (83.0%)
Question options
Neutral
Upgrade / improve quality of existing infrastructure
Widen / add capacity

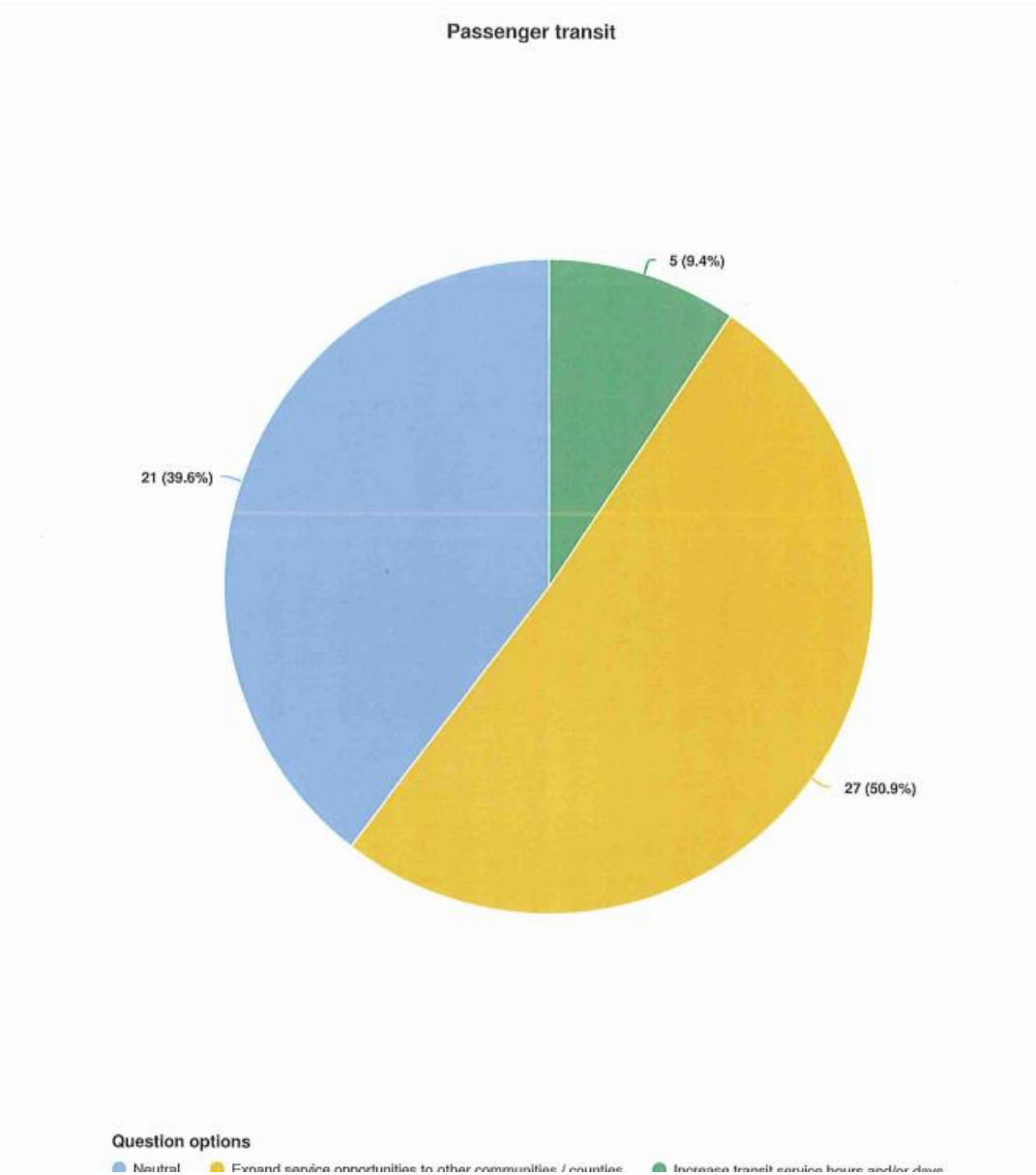
Question 12


Safe and secure travel
2 (3.8%)
17 (32.1%)
34 (64.2%)
Question options
Neutral
Intersection safety improvements
Safer roads (paved shoulders, clear zones, guardrails)

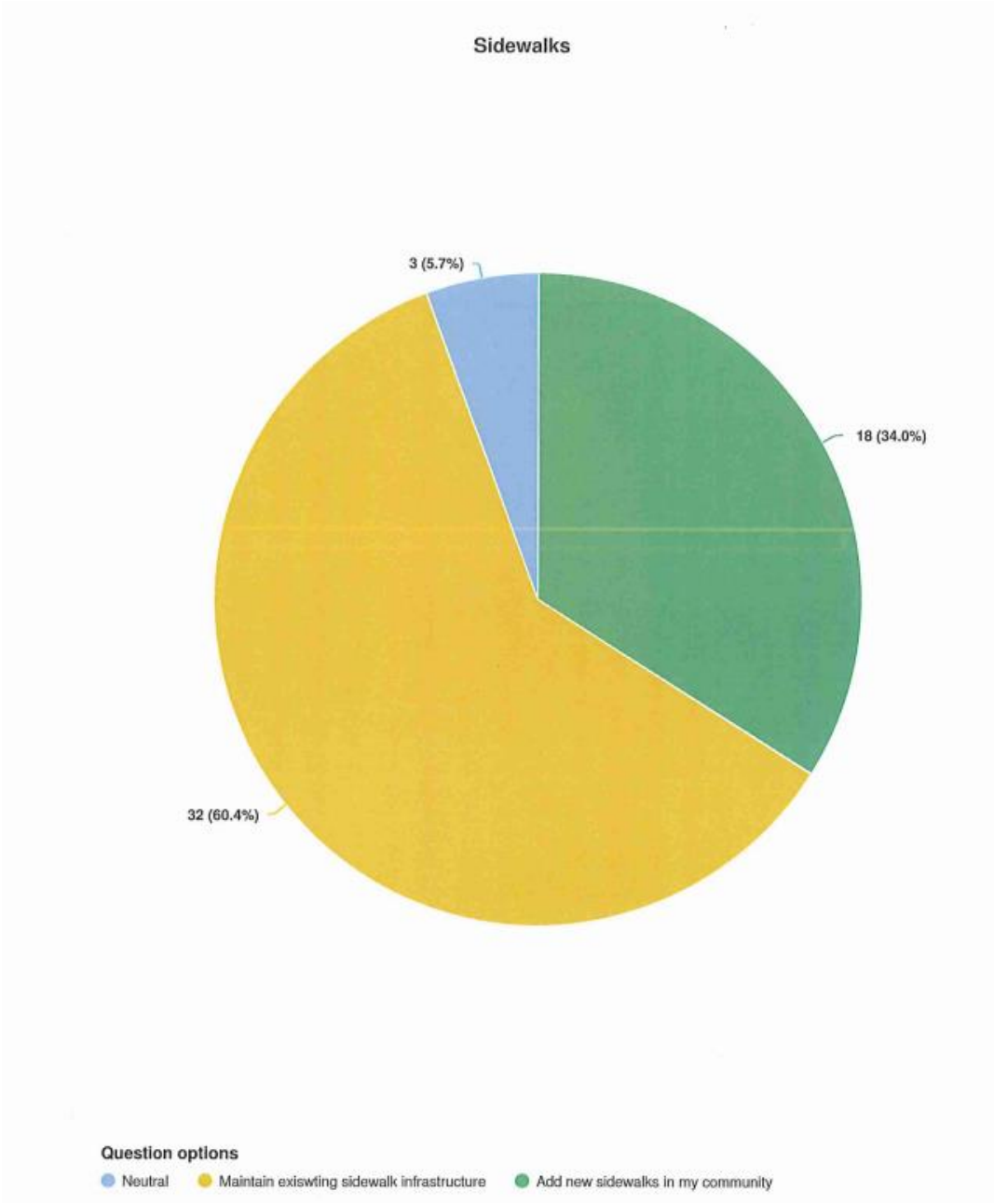
Question 13


Improve mobility
6 (11.3%)
24 (45.3%)
23 (43.4%)
Question options
Neutral
Manage demand with technology and other travel mode alternatives
Increase capacity by adding lanes and/or other infrastructure

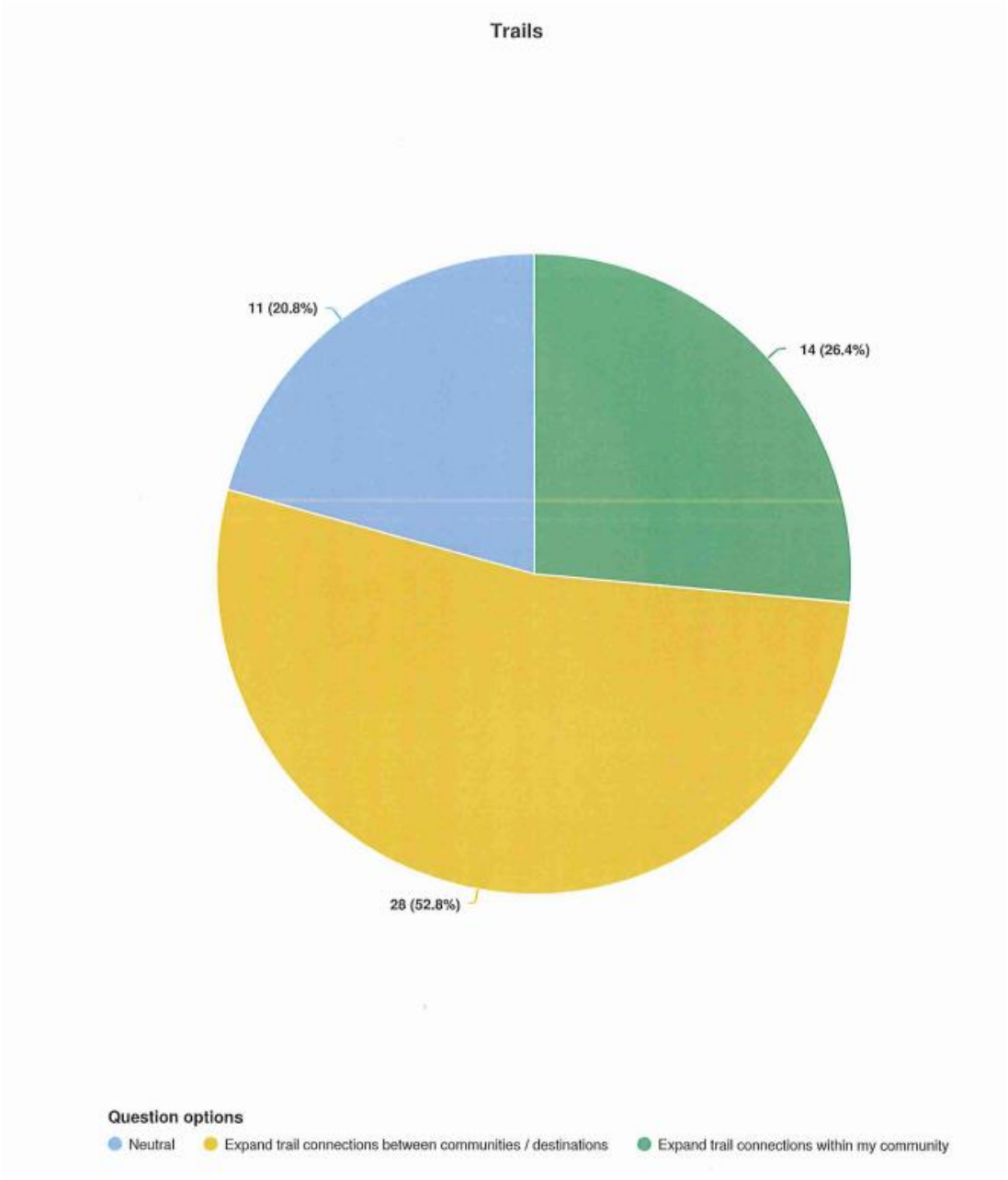
Question 14


Passenger transit
5 (9.4%)
21 (39.6%)
27 (50.9%)
Question options
Neutral
Expand service opportunities to other communities / counties
Increase transit service hours and/or days

Question 15


Sidewalks
3 (5.7%)
18 (34.0%)
32 (60.4%)
Question options
Neutral
Maintain exiswting sidewalk infrastructure
Add new sidewalks in my community

Question 16


Trails
11 (20.8%)
14 (26.4%)
28 (52.8%)
Question options
Neutral
Expand trail connections between communities / destinations
Expand trail connections within my community

Question 17


Rate the issues below on how high of a priority they are to you, with 1 being highest priority and 8 lowest.
Question options
8
7
6
5
4
3
2
1
Pavement repairs and preservation
5 5 4 1 4 6 6 22
New highway lanes
5 4 5 7 12 10 5 5
Bridge repairs and preservation
6 3 3 2 7 10 7 15
Safety and security
5 4 4 2 2 10 11 15
Bicycle and pedestrian infrastructure
8 7 1 8 5 9 5 10
Transit and bus service
9 5 11 8 4 4 6 6
Autonomous vehicles (self-driving technology)
21 4 8 1 3 3 6 7
Electrice vehicle charging stations and alter...
13 7 4 5 5 7 3 9
10 20 30 40 50 60

Question 18