Northwest Missouri

Comprehensive Economic Development Strategy

2018-2023







Worth

GENTRY

Nodaway







Prepared by

Northwest Missouri Regional Council of Governments

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What is the Comprehensive Economic Development Strategy?

The Comprehensive Economic Development Strategy (CEDS) is designed to bring together public and private sectors in the creation of an economic roadmap to diversify and strengthen regional economies in northwest Missouri. It serves as a means to engage community leaders, leverage involvement of the private sector, and establish a strategic blueprint for regional collaboration. The CEDS integrates human and physical capital planning.



CEDS committee debating strategies

The CEDS process analyzes the regional economy and serves as a guide for establishing regional



CEDS committee brainstorming session

goals and objectives. A regional plan of action details strategies, partners and measures to implement the plan. The CEDS incorporates the concept of economic resilience as an important factor in the development of economic strategies.

This CEDS was compiled by Northwest Missouri Regional Council of Governments (NWMORCOG) staff and a diverse CEDS committee representing regional public and private entities (see Appendix A). An internet survey was conducted to ensure the opportunity for public input.

Executive Summary

The Comprehensive Economic Development
Strategy (CEDS) update for 2018-2023 was prepared
by the Northwest Missouri Regional Council of
Governments (NWMORCOG) for Atchison, Gentry,
Holt, Nodaway and Worth Counties in northwest
Missouri. The CEDS serves as a strategic compass to
guide regional economic growth and vitality,
diligently planned by public and private
stakeholders, the region's economic developers and
NWMORCOG staff.

The Northwest Missouri Regional Council of Governments located in Maryville, Missouri, is one of 19 regional planning organizations chartered by the state of Missouri. It administers transportation, economic development, homeland security, workforce development and solid waste management services to Atchison, Gentry, Holt, Nodaway and Worth Counties. The NWMORCOG Board is comprised of county leadership and regional stakeholders (see Appendix A). The CEDS serves not only as a regional plan, but as the NWMORCOG blueprint for unified goals and

service offerings. The Vision and Mission statements are the foundation for the CEDS and the goals and objectives lead to their fulfillment. As the region grows through the planning efforts put forth in this strategy, the NWMORCOG strengthens its support for economic development and resilience.

Successful regional planning initiatives involving economic development, transportation, have exceeded federal expectations and significantly enhanced effectiveness and development in these sectors. The results of all these activities are the creation of jobs, the stimulation of private investment, and the attraction of millions of dollars to support public projects. Over the last five years, NWMORCOG facilitated \$11,784,998 in state and federal grant funds for forty-six (46) projects generating \$26,138,465 in match or private investment for a total of \$37,923,463 of infrastructure improvements and other business development investment across the region (see Appendix A).



Atchison County Wind Farm

The CEDS update reflects the most current information available about the region. The update process is an opportunity to review current economic conditions and consider changes resulting from social and political shifts, major economic adjustments, and natural disasters. It began with gathering information about current conditions in the region. Numerous federal and state resources were consulted as part of this effort. It synthesizes data analysis with expert opinions from a diverse set of stakeholders from both the public and private sectors into an economic development strategy for the region.

NWMORCOG's designation as an Economic Development District (EDD) is an important component to economic development efforts in the region, and NWMORCOG is required to update the region's CEDS every five years to maintain this designation. The program allows access to EDA funds to carry out NWMORCOG's mission. A Planning Partnership Grant provides funds for consultation and development of projects with member organizations. The CEDS and EDD designation also enables public and private organizations in the region, working in collaboration with NWMORCOG, to meet eligibility requirements for EDA Public Works and Economic Adjustment Assistance funding.

The local knowledge brought to the table by the CEDS Committee (see Appendix A) in the planning process allowed for discussion of important regional economic development issues. Data analysis informed the discussions, but it was the local knowledge that participants shared with the group that shaped the CEDS. Historical data, population trends, transportation, agricultural, natural resources, industry specifics, local economic information, available human resources, infrastructure and quality of life were all topics considered through the process. The CEDS Committee will continue to review and oversee CEDS

implementation. NWMORCOG is responsible for reporting annual progress of the CEDS to the Economic Development Administration.

The CEDS planning process included conducting a SWOC analysis. This analysis was used to determine the region's Strengths, Weaknesses, Opportunities and Challenges. Then, Goals and Objectives were established from the SWOC analysis, to guide the regional strategy. The body of the report shows the strategies, partnerships and measures supporting each goal and objective. Some of the goals and objectives were created to strengthen the opportunities, while others were designed to limit or eliminate the challenges. Implementation of the strategies laid out in the CEDS over the next five years will allow the region to continue positioning itself as a dynamic place for business activity. Strategies for growth and the improvement of the quality of life will build prosperity in the region.

The Vision and Mission statements were rewritten to highlight specific planning areas identified by the committee. The CEDS Committee came to the conclusion that it was necessary to restate the Vision and Mission statements for the region to changing the focus of the strategy to align with current economic conditions. These statements are the foundation of the work completed by NWMORCOG in implementing the CEDS plan.



Scenic farm in Atchison County.

Beginning with Goals and Objectives from the 2013 plan, the CEDS Committee evaluated and updated Strategies, Partnerships and Measures to facilitate implementation and evaluation in the body of the plan. To carry the CEDS plan forward through 2023, NWMORCOG staff commits to providing technical assistance, as a liaison between regional communities, and state and federal programs. Over the next five years NWMORCOG will be directly involved with implementation of plan strategies in partnership with the economic development leadership of the region.

Economic opportunity for all through a coordinated effort to grow the Northwest Missouri Counties of Atchison, Gentry, Holt, Nodaway, and Worth.

Promote thriving communities through the development of growth opportunities related to Employment, Education, Healthcare, Leisure Activities, and Quality of Life. Our efforts will focus on improving the labor exchange system and enhancing the general well-being for all residents.

EmployMENT

Grow and diversify the region's economic base and workforce participation.

Education:

Align education, workforce development, and economic development to generate qualified workers.

HEALTHCARE:

Enhance health care options to allow residents to retain productive lives regardless of their lifecycle needs.

Leisure Activities:

Increase regional tourism by 10% in the next five years.

Infrastructure:

Maintain and improve infrastructure to provide sustainable communities and quality of life.

Geographical Description

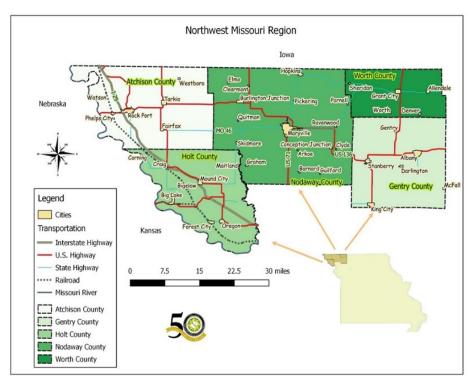
The region covers 2,657 square miles of land and comprises of five counties in the extreme northwest corner of Missouri: Atchison, Gentry, Holt, Nodaway, and Worth Counties. The region borders Iowa, Kansas, and Nebraska and serves as a crossroad for major transportation routes between Kansas City, Omaha, and Des Moines. Interstate 29 runs through Atchison and Holt counties, US Highway 71 passes though Nodaway County, US Highway 136 runs through Atchison, Nodaway, and Worth counties, and US Highway 169 serves Gentry and Worth counties. The City of Maryville is home to Northwest Missouri State University (NWMSU), a regional, 4-year University. The Region is considered rural. According to the 2010 US Census, there are 42,876 people living in the five-county area.

The topography of the region is characterized by moderately rolling plains. Ground elevations range from a low of 750 feet above sea level in the Grand River Basin to a high of 1,300 feet above sea level in the Missouri River bluffs. The soils present throughout the region are rich for agricultural

production. The region's mineral resources include sand, gravel, clay, limestone, shale, coal, and petroleum.

The northwest Missouri region is bordered by parts of two major river basins. The Missouri River basin on the west includes several minor river basins: Nishnabotna, Nodaway, One Hundred and Two, Platte, and Tarkio. The Grand River Basin on the east is the largest in the state north of the Missouri River. The Grand River begins in Southwest Iowa and flows southeasterly through northwest Missouri to its confluence with the Missouri River near Brunswick in the central part of Missouri.

Hot summers and cold winters characterize the climate of northwest Missouri. January is the coolest month, with temperatures reaching an average high of 33 degrees and an average low of 12 degrees. July is the warmest month with the average high reaching 83 degrees and an average low of 63 degrees. During the spring and early summer months, the area is prone to heavy rainfall, receiving an average of 36 inches a year.



The Midwest region is susceptible to severe thunderstorms and tornadoes. While tornadoes can pose a serious threat to the loss of life and property, they are neither a regular nor widespread occurrence. The main threat from thunderstorms in the summer time is hail. Moderately sized hail falling from a thunderstorm for only a short amount of time can significantly damage or destroy a crop in the field. A stormy season with a high incidence of widespread hail can have a drastic effect on the local agricultural economy, driving costs up and causing local farmers to experience significant losses.

Summary Background

Population: According to the 2017 Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2017, there are 40,882 individuals residing in the Northwest Missouri Economic Development District (EDD). Since the 2000 US Census, the Northwest Missouri Region has experienced a 4.8% population decline.

Within the northwest Missouri region, there has

been a population increase between cohorts age 65 and over and 18-24 years old in the last 18 years. The northwest Missouri region is home to many individuals for retirement.

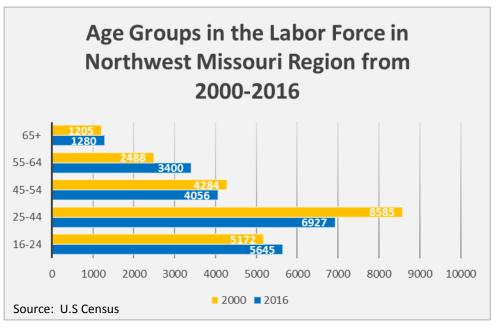
Northwest Missouri State
University has attracted many young adults to the region, thus attracting many young adults to the workforce. On the contrary, decreases in population have occurred between the 25-44 age group and minors 17 and under.

Labor Force: The Northwest

Missouri Region is largely made up of a younger labor force. Workers who are aged 16-24 make up 26.5% of the region's labor force, and workers aged 25-44 comprise 32.5% of the region's labor force. Since 2000, the 55-64 age group's participation in the labor force has increased 36.7%. Surprisingly, although the 25-44 age group comprises a majority of the labor force in the region, its participation in the labor force has decreased the most at 19.3% over the same time period. The page graph displays the age groups in the labor force within the northwest Missouri region.

Furthermore, according to the US Census, the industry with the highest number of employed

individuals across the region is Educational Services, Health Care and Social Assistance. This industry sector alone employs a total of 5,491 individuals, making up a total of 27.2% of the labor force in the region. The second leading employment industry is Manufacturing with 2,884 employed individuals. Agriculture is the economic driver of the economy in northwest Missouri and the 3rd largest employer with 1,351 employed workers.

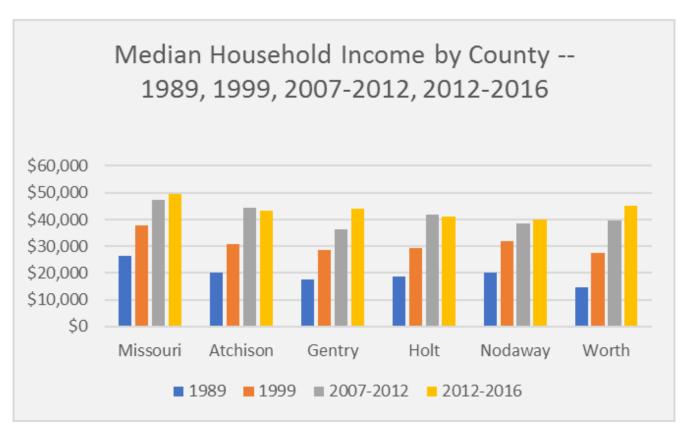


Average unemployment rates continue to decrease across the northwest Missouri EDD region. The 2016 annual average unemployment rate for the Northwest Missouri region is 4.7%. This is below the statewide unemployment rate of 6.6% and the nationwide unemployment rate of 7.4%. In the region, Gentry County has the highest unemployment rate at 5.5%, Atchison County has the lowest at 3.9%. The relatively low unemployment rate in the region, however, is not necessarily an indication of economic health. The available workforce in the region is barely adequate to meet the needs of existing businesses.

Comparing educational attainment between the Northwest Missouri EDD and the United States, the Northwest Missouri EDD falls behind the national percentages. For instance, 5.45% of the population 25 years and older in the region hold an Associate degree, whereas for the nation, the amount climbs to 8.18%. Additionally, 14.17% in the region hold a Bachelor's compared to 18.81% in the nation, and 8.34% in the region hold a Graduate or Professional Degree compared to 11.50% in the nation. The region exceeds the nationwide percentages regarding the population holding a High School Diploma or an equivalent. In the Northwest Missouri EDD, 42.14% of the population 25 years and older hold a high school diploma or equivalent, whereas the nationwide percentage falls behind at 27.53%.

According to the US Census, in regard to the percentage of all persons living below the poverty

level, the Northwest Missouri Region has a higher percentage than the statewide and nationwide values. In the United States, 15.1% of individuals are living below the poverty level, and in Missouri, 15.3% are below the poverty level. The average percentage of persons living below the poverty level in the 5-County area is 16.1%. Nodaway County has the highest percentage at 25.5%, whereas Atchison County has the lowest at 12.0%. The high poverty rate in Nodaway County is due to the fact that a substantial percentage of the county population consists of students at Northwest Missouri State University who are no longer claimed as dependents and reflect a very low level of personal income. Additionally, the average median household of the region is \$42,672, which is below the nationwide average of \$55,322 and the statewide average of \$49,593.



Source: US Census

SWOC Analysis Summary

A SWOC Analysis is used to compare internal and external **S**trengths, **W**eaknesses, **O**pportunities and **C**hallenges. On the regional level, a SWOC analysis provides information that is helpful in matching resources and capabilities to the competitive environment. The results of the SWOC analysis performed for the CEDS update is shown in the graphic below.

C E D S committee meetings were held to gather SWOC information. The Committee was made up of economic developers, stakeholders and NWMORCOG staff. An online survey was posted for public input. This varied analysis collection method helped the CEDS Committee increase reach and identify the NWMORCOG regional economic goals, objectives and strategies.

Internal Factors

STRENGTHS

Positive

- **◆** Entrepreneurial support
- ◆Quality of life for young families
- **◆** Agricultural production
- ◆ Transportation-I-29 and HWY 71 corridors
- ◆ Northwest Missouri State University
- **♦ Local School Districts**
- ♦ Taxes —low tax rates compared to neighboring states
- **♦ Productive Workforce**
- ♦ Nodaway County is a regional manufacturing hub
- **♦ Health Care Access**
- ◆ Ethanol facility, wind energy, and solar energy

Negative

WEAKNESSES

- ◆Poor entrepreneurial environment
- ◆Quality of life for young adults
- ♦ Declining population and changing demographics
- **◆Lack of a diversity of "good paying" jobs**
- ◆ Education not teaching skills sets to match jobs
- ◆ Lack of broadband coverage
- ◆ Deteriorating infrastructure
- Emergency water supply and reliable delivery
- ♦ Housing needs are not being met
- ◆Inadequate maintenance of paved roadways

OPPORTUNITIES

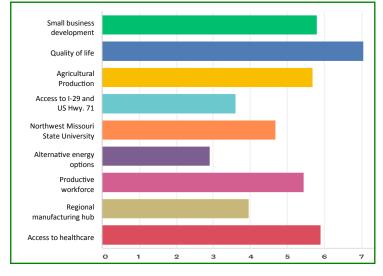
- ◆ Produce value added agriculture products
- ◆ Promote entrepreneurship with investment
- ◆ Develop water resources and distribution systems for business
- Bring higher technology options for businesses
- Expansion of commercial property development
- Develop amenities to keep aging residents here
- ◆ Maximize resources by sharing services
- ◆ Market the workforce to new employers
- ◆ Substantial capital investment available from local assets
- ◆ Expansion of alternative energy

CHALLENGES

- ◆Shrinking labor force lacking specialized skill
- Blighted housing, lack of entry level and executive homes
- Aging workforce challenges service providers and businesses
- ♦ Aging infrastructure needs constant repair
- ♦ Absentee land owners add to blighted properties and outflow of capital

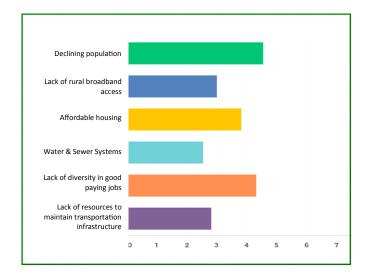
External Factors The graphs below show the results of the Public Survey for Strengths and Weaknesses; questions 3 and

4. The results were closely aligned with the committee findings.









The Word Clouds generated by SurveyMonkey show the results of the CEDS Public Survey for Opportunities and Challenges; questions five and six. The questions were open-ended so cannot be graphed. The link to the results of the entire Public Survey can be found in *Appendix B*.







business

Business jobs Schools housing Better

Better quality housing high Jobs broadband schools
Infrastructure

employers Jobs supports small businesses School housing

Grow and diversify the region's economic base and workforce participation.

Develop a culture of entrepreneurial innovation and growth.

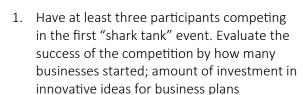


Rick's Kustom Designs, LLC, Grand Opening, Grant City

- 1. Create a shark tank type competition.
- 2. Create A Million Cups entrepreneurial group possibly piggy-backing on existing meetings.
- 3. Increase the amount of funding available through microenterprise loans.
- 4. Create a small business owner workshop series or conference.
- 5. Promote youth entrepreneurship summer workshops.



Casey's Hiring Event



Establish a local 1 Million Cups program for a monthly gathering for presentations by at least 40 fledgling entrepreneurs over the next five years.

- 3. Sustain a five-percent yearly increase in the microenterprise available loan balance and increase the number of microenterprise loans to new and existing businesses in the region by 15%.
- 4. Engage 10 small business owners across the region in workshops coordinated by NWMORCOG.
- 5. Have at least 20 youth in attendance at entrepreneurship summer workshops increasing youth participation in summer entrepreneurial activities by 10% in each of the next five years (2 more per year).



Lettuce Dream: Hydroponic Lettuce Production in Maryville

Local economic developers, local chambers of commerce, and libraries, Northwest Missouri Enterprise Facilitation, Mo-Kan Regional Council, MO Department of

Economic Development, MO Department of Agriculture, Small Business and Technology

Business Administration, US Department of

Development Center, Economic

Agriculture—Rural Development

Development Administration, US Small

Grow and diversify the region's economic base and workforce participation.

Take steps to retain and attract an educated workforce.



Governor Nixon presents Nodaway County
Work Ready Certification

- 1. Recruit individuals and families from outside of Northwest Missouri to work locally.
- 2. Create apprenticeship programs to meet the skill needs of employers.
- 3. Market work-based learning options to businesses to increase employment opportunities.
- 4. Revitalize the traditional job fair model to attract more participants.
- 5. Complete housing studies to inventory and assess the existing housing stock for all income levels.
- 6. Increase quality Child Care options in the region.
- 7. Increase public transportation options in the region.
- 8. Assist all five counties in maintaining their Work Ready Community designation.
- 9. Study youth employment trends and underemployment in the region.
- 10. Assist with the reopening of Tarkio College.

PARTNERS

Cities and counties, local economic developers and businesses, local higher education institutions, area school districts, Northwest Workforce Development Board, Heartland Foundation, MO Division of Workforce Development, MO Department of Economic Development, MO Department of Elementary and Secondary Education, MO Department of Higher Education, MO Department of Social Services-Family Support Division, US Department of Labor, US Department of Housing and Urban Development

- 1. Attract at least 50 individuals from outside of Northwest Missouri to work locally.
- 2. Research and apply for grants to support apprenticeship programs; increase apprenticeship program participation by five percent
- 3. Add at least five work base learning opportunities for students and unemployed workers.
- 4. Increase participation in job fairs by 10%.
- 5. Complete at least two housing studies over the next five years.
- 6. Increase the number of available quality Child Care slots in the region by 10%.
- 7. An Increase in public transportation options and a 10% increase in ridership across the region.
- 8. 100% of five counties receiving their Work Ready Community designation.
- **9.** Completion of a Youth Employment Study and Underemployment Study.
- **10.** Tarkio College opening within the next five years.

Grow and diversify the region's economic base and workforce participation.

Strive to become a value-added agriculture innovator for the Midwest.



Golden Triangle Energy, located in Craig, produces value-added agricultural products from corn

- Assist with securing funds for Agricultural Learning Center at Northwest Missouri State University.
- 2. Market agriculture opportunities for valueadded business expansion.
- 3. Recruit innovative value-added agriculture producers.
- 4. Support local business expansion in the value-added agriculture industry.
- 5. Promote agricultural related training and apprenticeships.



Dean L. Hubbard Center for Innovation at NWMSU



NWMSU trains future agricultural scientists

Cities and counties, local economic developers,

PARTNERS

area school districts, Northwest Missouri State University, Lettuce Dream, Farm Services Agency, University of Missouri–Extension, Northwest Workforce Development Board, MO Division of Workforce Development, MO Department of Economic Development, MO Department of Elementary and Secondary Education, MO Department of Higher Education, MO Department of Agriculture, US Department of Agriculture, US Small Business Administration

Track progress of funding opportunities for NWMSU Agricultural Learning Center proposal to completion.

2. Measure baseline for value-added agricultural business and track sector growth over the next five years.

- 3. Add at least one innovative agricultural producer in each county.
- 4. Increase the amount of private sector investment in the region.
- 5. Track number of programs and participants in agricultural training and apprenticeships.

Align education, workforce development, and economic development to generate qualified workers.

Facilitate multilevel connections between local K-12 institutions and area businesses.

- 1. Establish more work-based learning opportunities with area business for degree and certificate programs.
- 2. Educate teachers and counselors on job opportunities at various businesses through externships.
- 3. Participate in new statewide initiatives, Best in Midwest and Talent for Tomorrow.
- 4. Continue to assist each county with maintaining their Work Ready Community designations.
- 5. Recruit businesses to implement work-based learning opportunities.



Gentry County receives
Work Ready Community designation

PARTNERS

Local economic developers, local chambers of commerce, area school districts, Heartland Foundation,
Northwest Community Foundation,
Northwest Workforce Development
Board, MO Division of Workforce
Development, MO Department of
Elementary and Secondary Education, MO
Department of Higher Education, MO
Department of Economic Development



Atchison County countywide job shadow day.

- An additional 10 work-based learning opportunities with area business for degree and certificate programs will be realized.
- 2. Implement teacher and counselor externships in at least 20% of the region's school districts.
- 3. Utilize appropriate concepts from statewide initiatives, Best in Midwest and Talent for Tomorrow.
- 4. The five counties will maintain Work Ready Community designation.
- 5. Increase work-based learning opportunities in the region by five percent.

Align education, workforce development, and economic development to generate qualified workers.

Coordinate with higher educational institutions to expand and train the workforce.

- 1. Increase soft skill development opportunities for all segments of the workforce.
- 2. Expand the number of local businesses that host work-based learning opportunities.
- 3. Incentivize college students to remain in the area to fill job vacancies.
- 4. Establish more short-term industry recognized credential training at area higher education institutions.
- 5. Enhance internships, work study and workbased learning programs that will lead to retention of students in the local workforce.

PARTNERS

Local economic developers and businesses, local chambers of commerce, area higher education institutions, local school districts, Northwest Workforce Development Board, University of Missouri Extension, MO Department of Elementary and Secondary Education, MO Department of Higher Education

- 1. Create five new soft skill development opportunities in the region.
- Increase the number of local businesses that host work-based learning opportunities by five percent.
- 3. Implement retention plan to help keep students in the region.
- 4. Create 3 short-term industry recognized credential training opportunities at area higher education institutions.
- 5. Implement 15 more student learning opportunities with area industry and business.



Northwest Missouri State University's Fall Career Day gives students the opportunity to meet with businesses from across the region.

Enhance health care options to allow residents to retain productive lives regardless of their lifecycle needs.

Expand health care access.



Community Hospital participates in the annual Fairfax Fair parade.

- 1. Create additional options to help meet health care needs of residents.
- 2. Support local health care facilities' efforts to identify gaps in the rural health care system.
- 3. Increase the rural emergency health care infrastructure.
- 4. Increase the number of substance abuse treatment options in the region.
- 5. Increase transportation availability to take residents to health care appointments.





Northwest Medical Center, Albany, broke ground on renovations and improvements to expand the hospital's same day surgery, outpatient and emergency services.

Local hospitals, medical centers, nursing homes, health care providers, health agencies, and local economic developers

Establish at least two additional health

care options.2. Participate in five regional community

health care public engagement efforts.

- 3. Support planning efforts to establish greater access to emergency services.
- 4. Increase substance abuse treatment options in the region by 10%.
- 5. Completion of five-year update to Public Transit-Human Services Transportation Plan.

As one of SSM Health St. Francis Hospital and Medical Group 's newest service lines, the success of the Cancer Care Clinic and infusion center is only overshadowed by the patient-focused approach to cancer care that gives patients the time and support they need in their fight against cancer right here close to home.

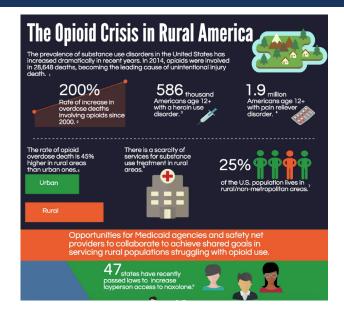
Enhance health care options to allow residents to retain productive lives regardless of their lifecycle needs.

Establish more access to substance abuse treatment and prevention options.



ANINER

Cities and counties Local law enforcement agencies, courts and prosecuting attorneys, area substance abuse treatment providers, area school districts, local economic developers and chambers of commerce, Drug Enforcement Agency



- 1. Support drug court with more funding and staff.
- 2. Host a five-county Substance Abuse Summit.
- 3. Continue to expand Drug Abuse Resistance Education (D.A.R.E.) throughout the five-county region.
- 4. Increase the number of prescription drug take-back programs.
- 5. Increase the number of in-patient substance abuse treatment programs available.
 - 1. Increase funding for the drug court program by five percent.
 - 2. Host local Substance Abuse Summit with 100 attendees.
 - 3. 100% participation by area schools in the D.A.R.E. program.
 - 4. Implementation of a prescription drug take-back program in each county.
 - Establish an in-patient substance abuse treatment facility.

TRATEGIES

Enhance health care options to allow residents to retain productive lives regardless of their lifecycle needs.



Northwest Medical Center staff ready to serve

Ensure that local healthcare facilities have an adequate supply of workforce professionals to meet the needs of residents.

1. Increase the number of seats available in RN and LPN classes at area schools.

- 2. Promote opportunities within the career path.
- 3. Create apprenticeships in the health care field.
- 4. Offer a competitive salary to keep RN's and LPN's working in the region.
- 5. Increase outreach to health care professionals targeting specialists to relocate to the region.

ARTNERS

Cities, local economic developers, health care providers, ambulance districts, hospitals and health agencies, Northwest Workforce Development Board, MO Division of Workforce Development, MO Department of Elementary and Secondary Education, MO Department of Higher Education, US Department of Labor, US Department of Education

1. A five percent increase in the number of seats available in area RN and LPN classes.

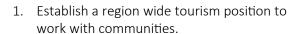
- 2. Create a campaign with local health care providers to promote health care jobs.
- 3. Establish two health care apprenticeship programs.
- 4. Increase salaries for RN and LPN in the region to be within two percent of the state's average.
- 5. Plan an outreach program to help area health care facilities with recruitment.

Increase regional tourism by 10% in the next five years.

Expand economic tourism via coordination and promotion of events throughout the region.



The park is full of visitors at Allendale's Fourth of July celebration.



- 2. Create a region wide tourism marketing plan with local communities.
- 3. Add permanent signage to promote annual events in the region.
- 4. Produce a regional brochure to be available at roadside rest areas and other tourist centers.
- 5. Improve the marketing of recreational facilities to attract events such as *Big Bam*, fishing tournaments, golf tournaments, marathons and other athletic events.



The Tarkio Rodeo and Parade draws big crowds to Northwest Missouri.

PARTNERS

Cities and counties, local tourism boards, economic developers, chambers of commerce, event planners, media outlets, MO Division of Tourism

1. Create a regional tourism position.

- 2. Implement a local tourism marketing plan.
- 3. Set up five permanent event signs in communities to promote annual events.
- 4. Have a regional brochure on display at rest areas and tourism centers.
- 5. Prepare outreach material to support event planning.

Add permaner events in the r Produce a reginat roadside resiters. Improve the matter tournaments, g

Increase regional tourism by 10% in the next five years.

Expand recreational tourism through the development of community facilities and multimodal transportation options.



Allendale Rodeo

- Assist local communities with building or renovation of community recreational facilities.
- 2. Assist local communities with establishing and connecting nature trails and bike paths.
- 3. Support the development of new tourism venues, attractions and destinations.



Albany Aquatic Center



Concerts at the Park in Maryville.

ARTNERS

Cities, counties, economic developers, progress associations, parks boards, chambers of commerce, MO Department of Economic Development-Community Development Block Grant, MO State Parks, MO Department of Transportation, MO Department of Conservation and Wildlife, US Department of Agriculture-Rural Development



Loess Bluffs National Wildlife Refuge, Mound City.

IEASURES

- 1. Assist with the development and maintenance for 10 recreational spaces in the region.
- 2. Participate in Rails-to-Trails, Transportation Alternative Program and other multimodal programs.
- 3. Measure the economic impact of visitors in the region thru the SIC codes by county.

Increase regional tourism by 10% in the next five years.

Utilize social and digital media to create brand identity and name recognition for the region.





NORTHWEST MISSOURI STATE UNIVERSITY

- 1. Create a regional brand to help promote events and the region.
- 2. Establish website and social media presence to promote amenities and events.
- 3. Communicate through use of barcode technology and distribute information throughout the region.
- 4. Create a smart phone app to connect tourists with information.
- 5. Support implementation of event promotion through individual websites and social media accounts.
- 6. Integrate digital media outreach and calendars with existing networks.



PARTNERS

Cities and counties, local economic developers, chambers of commerce, event planners, progress associations, media outlets, social media platforms, MO Division of Tourism

Conception Abbey

- Create a regional brand that is identifiable to the general public in Missouri.
- 2. Create a website to promote amenities and events for the region.
- 3. Track barcode scan use over the next five years.
- 4. Create app and track activity.
- 5. Host a seminar on using social media for event promotion.
- 6. Link existing community calendars to social media event pages to increase promotional opportunities.

STRATEGIES

Maintain and improve infrastructure to provide sustainable communities and quality of life.

Plan for and develop diverse and affordable housing options for all income levels and lifecycle needs.



Assisted living facility offers seniors quality of life.

PARTNERS

Cities and counties, local economic developers, chambers of commerce, progress associations, private investors and housing developers, MO Department of Economic Development, US Department of Housing and Urban Development, Federal Housing Administration, Economic Development Administration

- 1. Reduce blighted housing in the five-county area.
- 2. Create new mixed-use spaces from existing buildings.
- 3. Work with area housing developers to increase housing stock for all income levels.
- 4. Promote assisted living and other elder housing developments.
- Inventory and assess low-income housing options.



Single family housing construction.



Multi-family units being constructed.

2. (

- 1. Reduce blighted housing in the region by 10%.
- 2. Complete renovation of four properties for mix use.
- 3. Increase housing stock for all income levels by five percent.
- 4. See reduction of vacancies in current elder housing developments.
- 5. Complete report on low-income housing availability in the region.

Ensure that all communities have access to information and resources to maintain and improve existing water, stormwater and wastewater infrastructure.



CDBG funds at work

- 1. Conduct two regional water or wastewater feasibility studies.
- 2. Educate residents about regionalization of wastewater planning.
- 3. Increase the water availability and quality for area residents and businesses.
- 4. Provide resources for emergency interconnections in time of drought.
- 5. Facilitate accessibility to funds to improve infrastructure.

PARTNERS

Cities and counties, local economic developers, MO Department of Natural Resources, MO Department of Economic Development —Community Development Block Grants (CDBG), MO Rural Water Association, Economic Development Administration, US Department of Agriculture

- 1. Complete two water or wastewater feasibility studies.
- 2. Host three forums to discuss regionalization of wastewater planning.
- 3. Complete six water and wastewater projects.
- 4. Track emergency water interconnections.
- 5. Utilize MDNR, USDA and CDBG funds and other available resources for infrastructure improvements.



Typical wastewater lagoon

Enable broadband internet service for 100% of the five-county region.



Rural broadband is changing the way farmers manage their crops.

- 1. Create accurate regional maps of broadband access for the five-county region.
- 2. Support the efforts of the state Office of Broadband.
- Aid local communities and telecommunication companies to obtain state and federal funds to install broadband.
- 4. Host a Broadband 101 seminar for stakeholders.



Installing broadband cables in Maryville



Broadband Expansion: Connecting Rural Missouri topic at RCOG Annual Dinner presented by Janie Dunning, Missouri Farm Bureau.

Cities, counties, local broadband companies, economic developers and businesses, MO Office of Broadband, MO Spatial Data Information Service, Federal Communication Commission, Environmental Systems Research Institute

EXPANDING ACCESS TO BROADBAND IN MISSOURI WOULD:



- ✓ Improve quality of education
- ✓ Benefit Missouri farmers & ranchers
- Expand access to healthcare

1. Complete regional maps of broadband access based on local data for all five-counties.

- 2. Support the state Office of Broadband with planning, policy and securing funding to increase access to broadband in rural communities.
- 3. Increase broadband access by 20% over the next five years.
- 4. Hold two Broadband 101 seminars with attendance of 50 or more regional stakeholders.

Ensure that all communities have access to information and resources to explore alternative energy options and promote energy efficiency.

- 1. Provide information and resources about alternative energy options.
- 2. Inventory alternative energy usage in our region.
- 3. Seek funding for studies to determine feasibility or effectiveness of alternative energy.
- 4. Research energy conservation grant opportunities.
- 5. Promote energy audits to improve efficiency and reduce energy costs.



Solar panel provides energy to local farm.

ARTNERS

Cities and counties, local economic developers, alternative energy companies, public utilities, MO Farm Bureau, MO Department of Natural Resources, National Resources Conservation Service, Environment Protection Agency, US Department of Energy



Clean energy provides economic opportunities across the northwest Missouri region.

- Set up a resource page on RCOG website and feature stories in newsletter about alternative energy.
 - 2. Complete alternative energy inventory.
 - 3. Support grant funding options for alternative energy projects.
 - 4. Create list of energy conservation grant opportunities.
 - 5. Track potential energy savings from energy audits performed per year by partner agencies.

Provide access to information and resources to maintain and improve roadway safety and existing transportation systems.



Northwest Missouri Docudrama portrays the potential outcome of a drunk or distracted driving accident.

- 1. Improve the safety of deficient bridges.
- 2. Improve the infrastructure in area industrial parks to attract new or expanding businesses.
- 3. Revitalize primary traffic corridors in the region to promote economic vitality.
- 4. Evaluate unsafe roadways using MoDOT criteria.
- 5. Educate individuals to encourage positive roadway safety habits.
- 6. Improve multimodal transportation by linking community trail systems.



Mound City bridge replacement.

Cities, counties, local economic developers, school districts, Northwest Missouri Coalition for Roadway Safety, NWMSU, MO Department of Natural Resources, MO Department of Transportation, MO Department of Economic Development —Community Development Block Grants, US Department of Transportation, Economic Development Administration, US Department of Agriculture —Rural Development, Federal Transit Administration

- 1. Complete five bridge replacement projects in the region.
- 2. Increase infrastructure in area industrial parks by 25%.
- 3. Track progress of Maryville's South Main Street Corridor project and other major infrastructure projects.
- 4. Conduct at least one Road Safety Assessment per year.
- 5. Educate through MoDOT initiatives, local docudramas and the Northwest Missouri Coalition for Roadway Safety (Blueprint) program.
- 6. Secure five Transportation Alternatives Program (TAP) grants or other resources for linking multimodal systems.

Disaster and Economic Resilience

Economic resilience as defined by the US Economic Development Administration is "the ability to

recover quickly from a shock, the ability to withstand a shock, and the ability to avoid the shock altogether." As the northwest Missouri economy relies largely on agriculture, vulnerabilities affecting crop ground and livestock are particularly impactful. Weather-related events that could have high impact on the region include flooding, drought, winter storms, hail, and tornados. With many miles of Missouri River in the northwest Missouri region and multiple monitored and unmonitored levees, breakage could be physically and economically catastrophic.

The following efforts ensure that proper procedures and funding opportunities are available should disaster strike:



Emergency Management Cycle

- Coordination of regional emergency managers through the Region A—Rural Homeland Security Oversite Committee, set forth by following Threat and Hazard Identification and Risk Assessment guidelines
- County-wide planning efforts such as Hazard Mitigation, which lists past occurrences and rates county vulnerability by disaster type.
- City and school preparedness planning efforts

In addition to a shock resulting from weather-related events, large-employer displacement would have a significant impact on the region. For example, the 2013 closure of Energizer which employed 300 individuals not only impacted the local economy but also changed the community.

To help mitigate the loss of employment opportunities, city and county officials worked with the local Job Center and the Division of Workforce Development (DWD) to deploy the State's Employment Transition Team. Trade Act benefits were secured and gave affected workers additional benefits to assist with training costs, relocation expenses, and/or pay health insurance premiums. In addition, the local Job Center to help with costs the Trade Act program could not cover related to training, the filing of unemployment insurance claims, and hosting a weekly job club.

To focus on growing local opportunities, four of the five NWMORCOG counties have designated economic developers, which play a vital role in attracting and retaining businesses to their local communities. For example, Nodaway County Economic Development is working with local manufacturers to make sure the technical school and community college offers training that meets the needs of industry. In addition, the group is working on ways to attract potential employees to the region to fill jobs opening for those companies that are interested in expanding product lines.

By focusing on strategies that link economic and workforce development with education, the region will benefit from a skilled workforce that meets the needs of local employers today and in the future and be able to proactive to their changing needs in a global economy.

Evaluation Framework

As shown earlier in this plan, strategies were devised to meet the goals and objectives put forth by the CEDS committee. Measures were included to help evaluate the success of each of those strategies. However, to measure the broad trends of the regional economy, the Distressed Communities Index will be used to get a snapshot of the current situation and will be available for comparison at the end of this plan's term.

No high school degree

- •There are 2,303 individuals with less than a high school or equivalent education within the 25-years-and-over population of 25,946. This is **8.9%**.
- •Missouri rate: 11.2% United States rate: 13.0%

Housing vacancy

- •With 2,713 housing vacancies and 18,670 housing units available in the region, this calculates to a **14.5%** rate.
- •Missouri rate: 10.0% United States rate: 8.2%

Adults not working

- •For July 2018 there were 775 unemployed individuals out of a regional labor force of 20,001 for an unemployment rate of 3.9%.
- •Missouri rate: 3.4% United States rate: 3.9%

Poverty

- •The poverty rate ranged from 12% to 25.5% across the region's five counties with **20.3%** of the region's population living below the poverty line.
- Missouri rate: 15.3% United States rate: 15.1%

Median income relative to state

- •Atchison: \$43,438/\$49,593=**87.6%**
- •Gentry: \$44,024/\$49,593=88.8%
- •Holt: \$41,017/\$49,593=**82.7%**
- •Nodaway: \$39,908/\$49,593=**80.5%**
- •Worth: \$44,974/\$49,593=**90.7%**

Change in employment

- •From January 2013 to December of 2017 the region lost 1,016 employed individuals, a change of (-4.9%).
- •Missouri change: 4.1% United States change: 7.5%

Change in business establishments

- •The number of businesses in the region fell by 16 across the region with one county increasing by 3.8% and another decreasing by 5%. The overage change was (-1.5%).
- •Missouri change: 9.8% United States change: 4.4%

Another metric that will be used to evaluate the state of the local economy and the success of this plan will be the Innovation 2.0 Index, a quantitative measure of innovation capacity. This evaluation index and the region's baseline index scores are presented in *Appendix F*.

APPENDIX A

Northwest MO Regional Council of Governments Board

Name	Affiliation	Represents		
Livengood, Curtis	Atchison County, Presiding Commissioner	Atchison County		
Stanton, Adam	City of Tarkio, Police Department	Tarkio		
Kingery, Ryan	City of Fairfax, Mayor	Fairfax		
Brown, Derek	City of Albany, City Administrator	Albany		
Carlson, Gary	King City, Business Sector	Gentry County		
Carlson, Lorie	City of King City, Mayor	King City		
Martin Weatherd	City of Stanberry, Council Member	Stanberry		
Greg Book	City of Forest City, Mayor	Forest City		
Nauman, Duane	City of Mound City	Mound City		
Sitherwood, Mark	Holt County, Presiding Commissioner	Holt County		
Baldwin, Jack City of Hopkins, City Maintenance		Hopkins		
Lipiec, Ben City of Maryville, Council Member		Maryville		
Walter, Pat	United Electric Cooperative	Nodaway County Stakeholder		
Stiens, Robert A.	Nodaway County, Commissioner	Nodaway County		
Sutton, Doug	NWMSU, Board of Regents Member	University Stakeholder		
Tyler Paxson	Sheridan, Business Sector	Sheridan		
Ted Findley	Worth County, Presiding Commissioner	Worth County		
Abplanalp, Ben	Grant City, Business Sector	Grant City		
Regan Nonneman	gan Nonneman Allendale, Business Sector Allendale			
VACANT		Atchison County		
VACANT		Holt County		
VACANT		Nodaway County		

CEDS Committee Members

Name	Sector Represented	County		
Ann Schulter	Health Care	Atchison		
Monica Bailey	Economic Development	Atchison		
Keaton Dyche	Broadband	Atchison		
Deb Simmerly	City Government	Gentry		
Lori Carlson	City Government	Gentry		
Gary Carlson	County Government	Gentry		
David Cooper	Agriculture	Gentry		
Kat Morgan	Economic Development	Gentry		
Diane Higdon	Manufacturing Stakeholder, GHS Tube and Paper	Gentry		
Patsy VanDeventer	Manufacturing Stakeholder, Exide Technologies	Holt		
Will Johnson	Private Business Stakeholder, Mound City News	Holt		
Arnie Kreek	Private Citizen	Holt		
Adam Johnson	Private Business Stakeholder, Mound City News	Holt		
Jeremy Ingraham	Education -Northwest Technical School	Nodaway		
Dr. John Jasinski	Education-Northwest Missouri State University	Nodaway		
Dr. Jaime Hooyman	Education-Northwest Missouri State University	Nodaway		
Maddie Forney	Private Citizen-Higher Education Representative	Nodaway		
Brock Pfost	Private Business Stakeholder, White Cloud Engineering	Nodaway		
Lisa Macali	Economic Development	Nodaway		
Josh McKim	Economic Development	Nodaway		
Anita Coulter	Manufacturing Stakeholder, Kawasaki	Nodaway		
Chad McCollough	Private Business Stakeholder, FCS Financial	Nodaway		
Keli Morris	Small Business Development	Region		
Stan Wolfe	USDA Representative	Region		
Linda Laderoute	Northwest Missouri Regional Council of Governments	Region		
Amy Dowis	Northwest Missouri Regional Council of Governments	Region		
Kim Mildward	Northwest Missouri Regional Council of Governments	Region		
Todd Spencer	Northwest Missouri Regional Council of Governments	Region		
Becky Flaherty	Aging Population, Northwest Missouri Area Agency on Aging	Region		
Allen Andrews	Manufacturing Stakeholder, The Wool Shop	Worth		
Gene Auten	Economic Development/Emergency Management	Worth		

Grant Funded Projects Fiscal Years 2013-2017

FY	Project Name	Grant Amount	Total Project
2013	Guilford Sanitary Sewer System	\$245,000	\$1,123,500
2013	Nodaway County Bridge Replacement - #55	\$174,800	\$258,100
2013	Nodaway County Disaster Planning/5-County Region	\$91,930	\$91,930
2013	Flood 2011 Project: Holt Levee District #10 - USACOE	\$484,571	\$2,400,865
2013	Flood 2011 Project: Holt Canon Drainage District - USACOE	\$414,907	\$2,185,664
2013	Flood 2011 Project: Atchison North Nishnabotna Drainage District	\$137,112	\$523,362
2013	Atchison County Memorial Building Foundation	\$280,000	\$400,000
2013	General Administration: Polk Township - Road Improvement	\$300,000	\$300,000
2014	Maitland New Fire Station	\$300,000	\$363,333
2014	Atchison County Memorial Building Foundation - Renovations	\$400,000	\$663,822
2014	Atchison County Wholesale Water Commission Labor	\$0	\$1,412
2014	Nodaway County/Polk Townships - Road Improvements	\$0	\$1,000
2014	Village of Big Lake - Flood Repairs	\$17,744	\$17,744
2014	City of Craig - Flood Repairs	\$110,654	\$110,654
2014	Holt County Levee District #9 - Repairs	\$143,376	\$1,111,942
2014	Holt County Big Tarkio Levee District - Repairs	\$576,310	\$597,093
2014	Holt County Union Township Levee District - Repairs	\$159,957	\$825,336
2014	Holt County Corning Levee District - Repairs	\$1,251,734	\$1,350,354
2014	Holt County Levee District #10 - Repairs	\$271,214	\$346,724
2014	Holt County Canon Drainage District	\$329,523	\$1,721,290
2014	Atchison County - North Nishnabotna Drainage District - Repairs	\$136,612	\$738,128
2014	Atchison County - Phelps City Dyke & Drainage District - Repairs	\$85,081	\$324,779
2014	Atchison County - Phelps City Special Road District - Road Repairs	\$157,220	\$585,378
2014	Atchison County Special Road District - Road Repairs	\$15,274	\$156,030
2014	Environmental Review - Nodaway County Bridge #55 - Replacement	\$0	\$3,000
2014	Environmental Review - Nodaway PWSD#1 - Emergency Interconnect	\$0	\$3,000
2015	Environmental Review - Nodaway County Bridge Replacement	\$0	\$3,500
2015	Environmental Review - Sheridan Water Improvements	\$0	\$4,500
2015	Environmental Review - Albany Wastewater Treatment	\$0	\$4,500
2015	Skidmore Water Tower/Connection to Nodaway Co PWSD #1	\$499,250	\$1,210,391
2015	Holt County Levee District #15	\$137,541	\$403,332
2016	Guilford Sanity Sewer System	\$367,000	\$1,315,967
2016	Nodaway County Bridge Replacement #1027	\$33,314	\$103,700
2016	Holt County Levee District #15	\$302,074	\$679,291
2016	Environmental Review - Barnard New Sanitary Sewer	\$0	\$4,500
2017	Barnard/Graham/Sheridan Emergency Interconnectors	\$362,800	\$477,991
2017	Mound City Housing - Environmental Review	\$0	\$3,500
2017	Tarkio Housing - Environmental Review	\$0	\$3,500
2017	Lettuce Dream	\$500,000	\$669,390
2017	Stanberry Wastewater Treatment Facility	\$500,000	\$5,000,170
2017	Albany Wastewater Treatment Facility	\$500,000	\$5,691,052
2017	SSM Health - City of Maryville New Childcare Center	\$1,000,000	\$2,500,000
2017	Sheridan Water Distribution & Storage Tank Improvements	\$500,000	\$1,338,900
2017	Village of Big Lake Drainage Improvements & Dredging	\$500,000	\$505,629
2017	City of Barnard New Wastewater Treatment System	\$500,000	\$1,799,210
	GRAND TOTAL:	\$11,784,998	\$37,923,463

APPENDIX B

2018 CEDS Planning Timeline

Date	Event	Topic			
November 28, 2017	CEDS Committee Meeting	CEDS Process and Filling CEDS Committee			
December 5, 2017	CEDS Committee Meeting	Approve CEDS Committee Participants			
December 15, 2017	CEDS Committee Meeting	Develop Mission and Vision			
January 8, 2018	CEDS Committee Meeting	Review Mission/Vision. Start SWOC-Strengths and Weaknesses.			
January 26, 2018	CEDS Committee Meeting	Review Strength/Weaknesses, Start Opportunities and Challenges.			
March 26, 2018	CEDS Committee Meeting	Reviewed Opportunities and Challenges. Created Objectives.			
August 27, 2018	CEDS Committee Meeting	Finalize Measures & Partners; Revise timeline			
September 17, 2018	CEDS Committee Meeting	Final review & CEDS Committee acceptance			
September 17, 2018	Public Comment	CEDS Posted for 30 day Public Comment			
October 17, 2018	Public Comment	Final Day for Public Comment			
October 25, 2018	NWMORCOG Board Meeting	Board Adopts 2018 CEDS			
October 31, 2018	CEDS Due	CEDS Due to EDA			

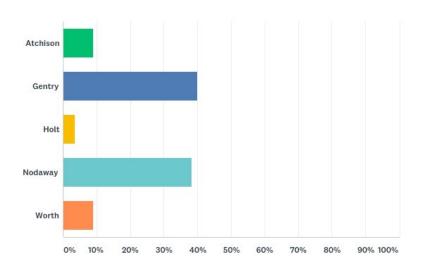
2018 CEDS Community Survey Results



What is the CEDS

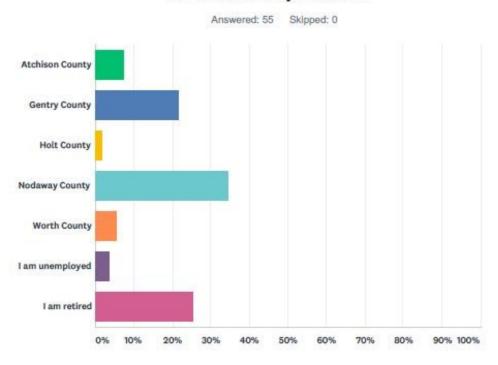
Every five years, the Regional Council works with community stakeholders to develop a Comprehensive Economic Development Strategies (CEDS) document. The CEDS process engages public and private stakeholders in the Regional Council's economic development region (Atchison, Gentry, Holt, Nodaway and Worth counties) to create an economic road map for the area. The CEDS identifies strengths, weaknesses, opportunities and challenges along with strategic planning for regional resilience.

Q1 What county do you live in?



CEDS Community Survey

Q2 Where do you work?

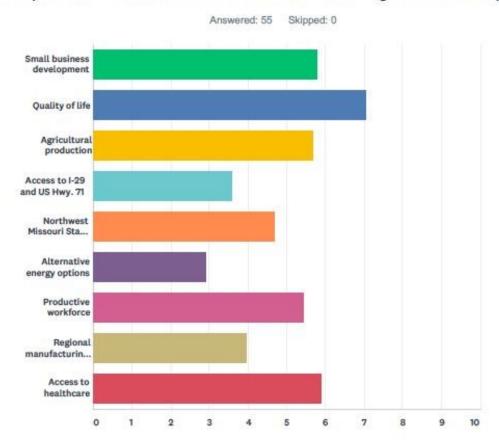


ANSWER CHOICES	RESPONSES	
Atchison County	7.27%	4
Gentry County	21.82%	12
Holt County	1.82%	1
Nodaway County	34.55%	19
Worth County	5.45%	3
am unemployed	3.64%	2
am retired	25.45%	14
TOTAL		55

#	OTHER (PLEASE SPECIFY)	DATE
1	plus some part time farming	8/10/2018 10:40 PM
2	Stay at home mom	7/29/2018 11:02 AM

CEDS Community Survey

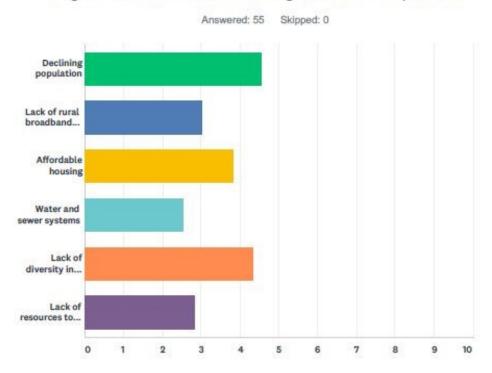
Q3 The regional strengths listed below all contribute to economic development. Please rank from 1-9 with 1 being the most important.



	1	2	3	4	5	6	7	8	9	TOTAL	SCORE
Small business development	9.62% 5	17.31% 9	17.31% 9	11.54% 6	9.62% 5	17.31% 9	13.46% 7	1.92% 1	1.92%	52	5.79
Quality of life	43.40% 23	13.21% 7	13.21% 7	5.66% 3	5.66% 3	5.66% 3	7.55% 4	3.77%	1.89% 1	53	7.06
Agricultural production	11.11% 6	12.96% 7	16.67% 9	11.11% 6	18.52% 10	11.11% 6	11.11% 6	5.56% 3	1.85% 1	54	5.70
Access to I-29 and US Hwy. 71	0.00%	7.41% 4	9.26% 5	9.26% 5	7.41% 4	14.81% 8	7.41% 4	16.67% 9	27.78% 15	54	3.59
Northwest Missouri State University and local school districts	3.70% 2	11.11%	7.41% 4	18.52% 10	16.67% 9	7.41%	9.26% 5	16.67%	9.26% 5	54	4.69
Alternative energy options	3.70% 2	3.70%	0.00%	1.85% 1	9.26% 5	9.26% 5	22.22% 12	16.67%	33.33% 18	54	2.91
Productive workforce	10.91% 6	12.73% 7	7.27%	16.36% 9	16.36% 9	16.36% 9	9.09% 5	9.09%	1.82%	55	5.44

Regional manufacturing hub	7.27% 4	5.45%	7.27%	5.45%	9.09% 5	12.73%	14.55%	23.64%	14.55% 8	55	3.95
Access to	10.91%	16.36%	20.00%	18.18%	9.09%	7.27%	5.45%	7.27%	5.45%		
healthcare	6	9	11	10	5	4	3	4	3	55	5.89

Q4 Rank these weaknesses hindering economic development in the region from 1-6 with 1 being the most important.



	1	2	3	4	5	6	TOTAL	SCORE
Declining population	40.00% 22	21.82% 12	16.36% 9	7.27%	5.45% 3	9.09% 5	55	4.56
Lack of rural broadband access	10.91% 6	10.91% 6	10.91% 6	20.00%	30.91% 17	16.36% 9	55	3.02
Affordable housing	5.66% 3	35.85% 19	26.42% 14	11.32% 6	9.43% 5	11.32% 6	53	3.83
Water and sewer systems	1.82% 1	0.00%	23.64% 13	27.27% 15	21.82% 12	25.45% 14	55	2.56
Lack of diversity in good paying jobs	37.04% 20	16.67% 9	16.67% 9	11.11%	9.26% 5	9.26% 5	54	4.33
Lack of resources to maintain transportation infrastructure	5.45% 3	16.36% 9	7.27%	23.64%	20.00%	27.27% 15	55	2.82

28	obamacare, get rid of it, even if just regionally	7/27/2018 4:14 PM
29	People don't want to work anymore.	7/27/2018 3:53 PM
30	Money	7/27/2018 3:03 PM
31	No new businesses	7/27/2018 2:51 PM
32	Better paying jobs	7/27/2018 2:38 PM
33	Support for small businesses	7/27/2018 2:28 PM
34	Reliable communications networks (cellular and internet)	7/27/2018 2:28 PM
35	Lack of jobs	7/27/2018 2:27 PM
36	Need for more workers to fill job openings	7/27/2018 2:22 PM
37	Individuals not staying in the area (population decline)	7/27/2018 10:11 AM
38	Quality of Life	7/26/2018 4:42 PM
39	Tariffs hurting farm exports	7/26/2018 1:51 PM
40	Poor/cheap housing = attractive to bad/undesirable/drug-using people. Killing smaller communities	7/26/2018 11:43 AM
41	rural broadband	7/26/2018 10:56 AM
42	Bringing youth home to a good paying job	7/26/2018 8:46 AM
43	Grant Funding	7/25/2018 6:05 PM
44	The population is so small	7/25/2018 4:58 PM
45	Declining population has negative impact	7/25/2018 4:53 PM
46	Funding	7/25/2018 4:51 PM
47	availability of housing at all income levels	7/25/2018 4:39 PM
48	Lack of broadband throughout the region	7/25/2018 4:15 PM
49	Lack of rural broadband access	7/25/2018 4:04 PM
#	В.	DATE
1	Houses in small towns rundown	8/15/2018 3:24 PM
2	Transportation Resources	8/13/2018 9:06 AM
3	Need to provide a safe and direct road going west Maryville to Interstate 29	8/10/2018 10:40 PM
4	Rent is so high in Maryville.	8/10/2018 4:08 PM
5	No manufacturing	8/10/2018 1:11 PM
6	Connecting employess and potential employers	8/9/2018 3:36 PM
7	lack of good paying jobs	8/8/2018 12:31 PM
8	Lack of support for new business	8/8/2018 8:56 AM
9	Lack of financial resources for agencies	8/7/2018 11:23 PM
10	Support of agriculture, especially family farms	8/6/2018 7:05 PM
11	Transportation to job locations.	8/3/2018 3:34 PM
12	Drug abuse	8/2/2018 10:16 PM
13	Things to do in the community - rec center for kids, adults	8/1/2018 9:26 AM
14	Housing	7/30/2018 10:28 PM
15	lack of qualified workforce due (drug use, housing issues, lack of soft skills, transportation)	7/30/2018 10:37 AM
16	Lack of local high paying jobs	7/29/2018 11:02 AM
17	Poor roads	7/28/2018 4:56 PM
18	Nepotism and cronyism	7/28/2018 11:26 AM

19	limited rehab options	7/28/2018 10:27 AM
20	Pay scale is lower than average	7/27/2018 9:13 PM
21	Poor quality of streets	7/27/2018 8:02 PM
22	More afforable housing to bring more people	7/27/2018 5:50 PM
23	Local community communications	7/27/2018 3:03 PM
24	No incentives to open new businesses	7/27/2018 2:51 PM
25	Shopping variety	7/27/2018 2:28 PM
26	Daycare	7/27/2018 2:27 PM
27	need wi-fi access everywhere including on the farm	7/27/2018 2:22 PM
28	Small businesses not attracting enough customers	7/27/2018 10:11 AM
29	Affordable housing	7/26/2018 4:42 PM
30	Lack of Dependable workers for factories	7/26/2018 1:51 PM
31	Lack of vo-tech education diversity/availability (hvac, construction trades, etc)	7/26/2018 11:43 AM
32	affordable housing	7/26/2018 10:56 AM
33	Lack of reasonable places to eat out	7/26/2018 8:46 AM
34	Lack of diversity	7/25/2018 4:58 PM
35	High housing cost has negative impact	7/25/2018 4:53 PM
36	small business development	7/25/2018 4:39 PM
37	Lack of workers to fill jobs	7/25/2018 4:15 PM
38	Need for improved roads and bridges	7/25/2018 4:04 PM
#	c.	DATE
1	School administrators not wanting to consider consolidation of schools	8/15/2018 3:24 PM
2	Small Business Development	8/13/2018 9:06 AM
3	Continue to avoid government interference such as zoning that stifles new development in other communities.	8/10/2018 10:40 PM
4	There are few affordable senior housing options here.	8/10/2018 4:08 PM
5	Education in trades	8/10/2018 1:11 PM
6	Connecting producers and consumers	8/9/2018 3:36 PM
7	Lack of financial resources for business	8/7/2018 11:23 PM
В	Affordable housing	8/6/2018 7:05 PM
9	Crime and drugs	8/3/2018 3:34 PM
10	Competition from nearby communities	8/2/2018 10:16 PM
11:	Diverse economic base - ag, manufacture, small bus.	8/1/2018 9:26 AM
12	We need more assisted living/nursing home care for the elderly	7/30/2018 10:28 PM
13	online retail	7/30/2018 10:37 AM
14	Failing school systems	7/29/2018 11:02 AM
15	Willing workers	7/28/2018 4:56 PM
16	Stagnation	7/28/2018 11:26 AM
17	limited vocational education	7/28/2018 10:27 AM
18	No incentives for small business start ups	7/27/2018 9:13 PM
	III DANIE CONTROL	The Secretary and the Secretary Control of the

20	Jobs	7/27/2018 5:50 PM
21	Apathy	7/27/2018 3:03 PM
22	Updated utilities	7/27/2018 2:28 PM
23	need better roads to get crops planted, harvested, sold	7/27/2018 2:22 PM
24	NWMSU students leaving the area over the summer, so businesses close	7/27/2018 10:11 AM
25	Available workforce	7/26/2018 4:42 PM
26	Competition from online merchants	7/26/2018 1:51 PM
27	Substance abuse among working poor	7/26/2018 11:43 AM
28	good paying jobs	7/26/2018 10:56 AM
29	People don't have the money to spend	7/25/2018 4:58 PM
30	Low number of jobs for college graduates hinders growth	7/25/2018 4:53 PM
31	agricultural market development	7/25/2018 4:39 PM
32	Aging infrastructure	7/25/2018 4:15 PM
33	Career and technical training emphasis	7/25/2018 4:04 PM
#	D.	DATE
1	aging population	8/15/2018 3:24 PM
2	Collaboration in the Region	8/13/2018 9:06 AM
3	We need more affordable family restaurants here.	8/10/2018 4:08 PM
4	Recreational	8/10/2018 1:11 PM
5	Information on emerging industries that help provide a sustainable environment	8/9/2018 3:36 PM
6	Declining populations	8/7/2018 11:23 PM
7	Narrow vision	8/2/2018 10:16 PM
В	Good paying jobs	8/1/2018 9:26 AM
9	Job opportunities	7/30/2018 10:28 PM
10	Safe places to live(drugs,ect)	7/28/2018 4:56 PM
11	Isolation	7/28/2018 11:26 AM
12	limited recycling options	7/28/2018 10:27 AM
13	No incentive for redevelopment of existing homes/business	7/27/2018 9:13 PM
14	Poor quality of education	7/27/2018 8:02 PM
15	Daycare	7/27/2018 5:50 PM
16	Good job opportunities	7/27/2018 3:03 PM
17	need skills training for non-college youth	7/27/2018 2:22 PM
18	Desirable employment	7/26/2018 4:42 PM
19	lack of a transit system (way for folks without vehicles to get to work)	7/26/2018 10:56 AM
20	Good environment for families positively impacts growth	7/25/2018 4:53 PM
21	business retainage	7/25/2018 4:39 PM
22	Lack of housing for all income levels	7/25/2018 4:15 PM
#	E.	DATE
1	not enough good paying jobs	8/15/2018 3:24 PM
2	Coordinated Education	8/13/2018 9:06 AM
3	Offer incentives and some help to small businesses.	8/10/2018 4:08 PM

8/10/2018 1:11 PM 8/9/2018 3:36 PM
8/9/2018 3:36 PM
8/7/2018 11:23 PM
8/1/2018 9:26 AM
7/28/2018 4:56 PM
7/28/2018 11:26 AM
7/28/2018 10:27 AM
7/27/2018 9:13 PM
7/27/2018 8:02 PM
7/27/2018 5:50 PM
7/27/2018 3:03 PM
7/27/2018 2:22 PM
7/26/2018 4:42 PM
7/26/2018 10:56 AM
7/25/2018 4:39 PM
7/25/2018 4:15 PM

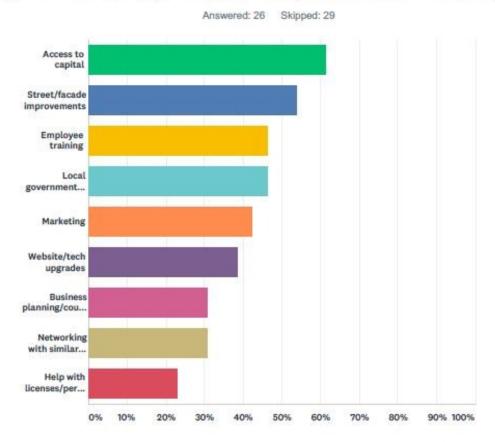
28	see above	7/27/2018 4:14 PM
29	Better Schooling	7/27/2018 3:03 PM
30	More jobs	7/27/2018 2:51 PM
31	Good affordable housing.	7/27/2018 2:38 PM
32	Small business development	7/27/2018 2:28 PM
33	Jobs	7/27/2018 2:27 PM
34	support efforts to bring broadband to entire region	7/27/2018 2:22 PM
35	Increase usage of social media	7/27/2018 10:11 AM
36	Quality of life	7/26/2018 4:42 PM
37	Productive farm land	7/26/2018 1:51 PM
38	Housing demolition grants	7/26/2018 11:43 AM
39	decent affordable housing	7/26/2018 10:56 AM
40	push for more at interstate. That seems to be the busiest hub in the county	7/26/2018 8:46 AM
41	Infrastructure	7/25/2018 6:05 PM
42	More diversity	7/25/2018 4:58 PM
43	Bringing in more high tech jobs	7/25/2018 4:53 PM
44	Higher Wages	7/25/2018 4:51 PM
45	better communication systems	7/25/2018 4:39 PM
46	Quality infrastructure i.e. utility, roads, broadband	7/25/2018 4:15 PM
47	Career and technical education training emphasis	7/25/2018 4:04 PM
#	В.	DATE
1	Schools consolidate so students are more ready for college or jobs	8/15/2018 3:24 PM
2	Business development	8/13/2018 11:26 AM
3	More collaboration between schools, regionally	8/13/2018 9:06 AM
4	Try to attract family restaurants here. We need family places that serve breakfasts all day and are open late or all night for the college students.	8/10/2018 4:08 PM
5	trade school	8/10/2018 1:11 PM
6	Communication and cooperation among many sectors, such as schools, churches, businesses, law enforcement and local government	8/9/2018 3:36 PM
7	good paying jobs	8/8/2018 12:31 PM
В	Additional funding for local agencies and schools	8/7/2018 11:23 PM
9	Agriculture	8/6/2018 7:57 PM
10	Retaining our young population	8/6/2018 7:05 PM
11	Drain the swamp	8/2/2018 10:16 PM
12	Drug Enforcement	8/1/2018 9:26 AM
13	Manufacturing	7/30/2018 10:28 PM
14	ride share (transportation)	7/30/2018 10:37 AM
15	Strengthen schools	7/29/2018 11:02 AM
16	Good health care available 24-7	7/28/2018 4:56 PM
17	Development	7/28/2018 11:26 AM
18	facilitation of wide range recycling	7/28/2018 10:27 AM

19	Incentives to work rather than draw welfare	7/27/2018 9:13 PM
20	More affordable housing	7/27/2018 5:50 PM
21	More community spirit	7/27/2018 3:03 PM
22	Control drugs in area.	7/27/2018 2:38 PM
23	support small businesses, financially & educationally	7/27/2018 2:22 PM
24	Business continuity techniques	7/27/2018 10:11 AM
25	Affordable housing	7/26/2018 4:42 PM
26	Northwest Missouri State University	7/26/2018 1:51 PM
27	Rural broadband	7/26/2018 11:43 AM
28	more fun things to do	7/26/2018 10:56 AM
29	Transportation	7/25/2018 6:05 PM
30	Promote locally grown ag items in restaurants	7/25/2018 4:53 PM
31	Better Jobs	7/25/2018 4:51 PM
32	broadband	7/25/2018 4:39 PM
33	Increased housing options	7/25/2018 4:15 PM
#	c.	DATE
1	Money to tear down old buildings and houses in towns.	8/15/2018 3:24 PM
2	More education on small business development	8/13/2018 9:06 AM
3	I don't know how more affordable housing would be helped.	8/10/2018 4:08 PM
4	Recreational area {lake at Tarkio Prairie}	8/10/2018 1:11 PM
5	Supporting a wide range of industries	8/9/2018 3:36 PM
6	Craig R-III School	8/8/2018 12:31 PM
7	Financing available for small businesses to help with startups and rehabilitation of old buildings	8/7/2018 11:23 PM
В	Opportunities for family farmers	8/6/2018 7:05 PM
9	Develop a realistic vision	8/2/2018 10:16 PM
10	Community Activities/ Structures to support healthy choices	8/1/2018 9:26 AM
11	Hospital	7/30/2018 10:28 PM
12	new larger businesses in counties other than Nodaway	7/30/2018 10:37 AM
13	Try to attract employers to area	7/29/2018 11:02 AM
14	School systems	7/28/2018 4:56 PM
15	Influx of new ideas	7/28/2018 11:26 AM
16	implementation of health and economic education.	7/28/2018 10:27 AM
17	Provide incentives to employers	7/27/2018 9:13 PM
18	Jobs	7/27/2018 5:50 PM
19	More community activities	7/27/2018 3:03 PM
20	More jobs	7/27/2018 2:38 PM
21	keep educational institutions strong	7/27/2018 2:22 PM
22	Increase awareness of job openings	7/27/2018 10:11 AM
23	Attract desirable employers	7/26/2018 4:42 PM
24	Increased tourism	7/26/2018 1:51 PM
25	Developing local agriculture/bio energy hubs	7/26/2018 11:43 AM

26	retaining population	7/26/2018 10:56 AM
27	Workforce	7/25/2018 6:05 PM
28	Encourage more trade occupation courses is local schools	7/25/2018 4:53 PM
29	More housing	7/25/2018 4:51 PM
30	updating of deteriorating infrastructure	7/25/2018 4:39 PM
31	More supports for small businesses	7/25/2018 4:15 PM
#	D.	DATE
1	Investment in infrastructure, specifically transportation	8/13/2018 9:06 AM
2	Any factory that expresses interest in this area should be encouraged to come here.	8/10/2018 4:08 PM
3	Supporting artistic and other cultural activities	8/9/2018 3:36 PM
4	Demolition funds for derillict buildings	8/7/2018 11:23 PM
5	Global/ Diverse Businesses - Internet based, physical structures	8/1/2018 9:26 AM
6	Nursing Home Care locally	7/30/2018 10:28 PM
7	affordable, decent, housing	7/30/2018 10:37 AM
В	Help local businesses so they can afford to employ more and offer better employee benefits	7/29/2018 11:02 AM
9	Better internet	7/28/2018 4:56 PM
10	Education	7/28/2018 11:26 AM
11	scholastic planning toward professional return of students	7/28/2018 10:27 AM
12	Incentives for new business start ups	7/27/2018 9:13 PM
13	Daycare	7/27/2018 5:50 PM
14	Bring in new business	7/27/2018 3:03 PM
15	Daycare	7/27/2018 2:38 PM
16	invest in old buildings to keep our downtowns going	7/27/2018 2:22 PM
17	Supportive business environment	7/26/2018 4:42 PM
18	maintaining strong schools and safe communities	7/26/2018 10:56 AM
19	planning for disaster response	7/25/2018 4:39 PM
20	Retaining our youth in the region	7/25/2018 4:15 PM
#	E.	DATE
1	Housing	8/13/2018 9:06 AM
2	We need more activities for kids such as roller skating rink.	8/10/2018 4:08 PM
3	Supporting schools, teachers and students	8/9/2018 3:36 PM
4	Improved community development utilizing the additional funds for local agencies	8/7/2018 11:23 PM
5	Increase internet speed capabilities for all citizens	8/1/2018 9:26 AM
6	small business development	7/30/2018 10:37 AM
7	More jobs	7/28/2018 4:56 PM
8	use of parks for non competitive fresh air activities	7/28/2018 10:27 AM
9	Improve school facilities	7/27/2018 9:13 PM
10	Entertainment	7/27/2018 5:50 PM
11	Better community awareness	7/27/2018 3:03 PM
12	Fiber internet access	7/26/2018 4:42 PM
13	expand rural broadband	7/26/2018 10:56 AM

14	maintaining transportation infrastructure	7/25/2018 4:39 PM
15	Better roads	7/25/2018 4:15 PM

Q7 If you are a business owner or entrepreneur, what do you need to expand or develop your business? (Please check all that apply)



ANSWE	R CHOICES	RESPONSES	
Access to	o capital	61.54%	16
Street/fac	cade improvements	53.85%	14
Employe	e training	46.15%	1:
Local gov	vernment business retention/expansion programs	46.15%	1:
Marketing		42.31%	1
Website/tech upgrades		38.46%	10
Business	s planning/counseling	30.77%	1
Networki	ing with similar business and industry associates	30.77%	1
Help with licenses/permits/regulations		23.08%	(
Total Res	spondents: 26		
#	OTHER (PLEASE EXPLAIN)	DATE	

8/10/2018 1:28 PM

1

N/A

2	individuals wanting to work and to do a good job	8/9/2018 4:07 PM
3	I am not a business owner, but worked with many businesses for many years as a CPA	8/9/2018 3:36 PM
4	I'm doing fine, thank you!	8/2/2018 10:16 PM
5	Not a business owner	8/1/2018 9:26 AM
6	I am not a business owner.	7/27/2018 3:03 PM
7	N/a	7/27/2018 2:27 PM
8	N/A	7/27/2018 10:11 AM
9	Access to high speed internet	7/25/2018 4:04 PM

APPENDIX C

Current (2013-2017) Regional Plans and Studies

Atchison County Emergency Operations Plan	Maryville Comprehensive Plan
Atchison County Multi-Jurisdictional Hazard Mitigation Plan	Maryville Critical Facilities Inventory
Atchison County Nuclear Emergency Response Plan	Maryville Emergency Operations Plan
Atchison County Transportation Plan	Maryville Mitigation Plan
Craig Capital Improvement Plan	Mound City Capital Improvement Plan
Craig Debris Management Plan	Mound City Emergency Operations Plan
Craig Firewise Mitigation Plan	Nodaway County Economic Development Plan
Craig Flood Mitigation Assistance Plan	Nodaway County Emergency Operations Plan
Denver Emergency Operations Plan	Nodaway County Multi-Jurisdictional Hazard Mitigation Plan
Elmo Local Emergency Operations Plan	Nodaway County Transportation Plan
Flood Risk Report: Upper Grand Watershed, HUC 08 #	Ravenwood Critical Facilities Inventory
Gentry County Emergency Operations Plan	Ravenwood Vulnerable Population Inventory
Gentry County Multi-Jurisdictional Hazard Mitigation Plan	Worth County Critical Facilities Inventory
Gentry County Transportation Plan	Worth County Debris Management Plan
Holt County Emergency Operations Plan	Worth County Economic Development Plan
Holt County Multi-Jurisdictional Hazard Mitigation Plan	Worth County Emergency Operations Plan
Holt County Transportation Plan	Worth County Multi-Jurisdictional Hazard Mitigation Plan
Hopkins Emergency Operations Plan	Worth County Transportation Plan
Maitland Emergency Operations Plan	Worth County Vulnerable Population Inventory
Maryville Capital Improvement Plan	Worth County Watershed Plan

APPENDIX D

Partner Acronym Index

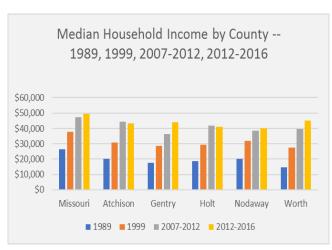
Acronym	Program	Administering Program	
ACWWC	Atchison County Wholesale Water Commission	County entity	
CDBG	Community Development Block Grant	US Department of Housing and Urban Dev.	
DEA	Drug Enforcement Administration	US Department of Justice	
DED	Department of Economic Development	State of Missouri	
DESE	Department of Elementary and Secondary Education	State of Missouri	
DHE	Department of Higher Education	State of Missouri	
DNR	Department of Natural Resources	State of Missouri	
DSS	Department of Social Services - Family Support Division	State of Missouri	
MDT	Division of Tourism	Department of Economic Development	
DWD	Division of Workforce Development	Department of Economic Development	
EDA	Economic Development Administration	US Government	
EPA	Environmental Protection Agency	US Government	
FCC	Federal Communications Commission	US Government	
FEMA	Federal Emergency Management Agency	Department of Homeland Security	
FHA	Federal Housing Administration	US Government	
FSA	Farm Service Agency	US Department of Agriculture	
FTA	Federal Transit Administration	US Department of Transportation	
HUD	US Department of Housing and Urban Development	US Government	
MoDOT	Missouri Department of Transportation	State of Missouri	
MRWA	Missouri Rural Water Association	Statewide Nonprofit Organization	
NRCS	National Resources Conservation Service	US Department of Agriculture	
NWMCHS	Northwest Missouri Coalition for Highway Safety	MoDOT	
NWMSU	Northwest Missouri State University	Public University	
NWMEF	Northwest Missouri Enterprise Facilitation	Non-Profit	
NWWDB	Northwest Workforce Development Board	Division of Workforce Development	
OATS	Rural Public Transportation Provider	Statewide Nonprofit Organization	
SBA	Small Business Administration	US Government	
SBTDC	Small Business and Technology Development Centers	Small Business Admin. & MU Extension et al.	
SEMA	State Emergency Management Agency	Missouri Department of Public Safety	
TAC	Transportation Advisory Committee	MoDOT	
USDA	US Department of Agriculture	US Government	
USDOL	US Department of Labor	US Government	
USDOT	US Department of Transportation	US Government	

APPENDIX E

Additional Demographic Data

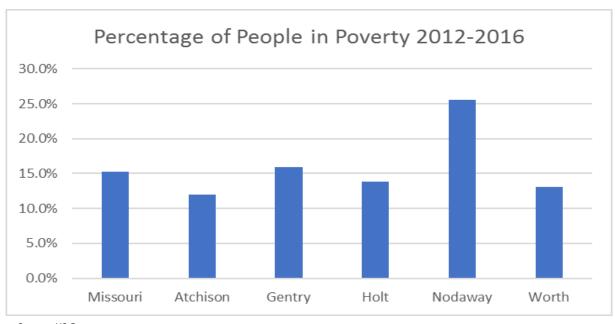
Median Household Income and Poverty Level

The graph to the right shows the median household income levels from the five counites in 1989, 1999. 2007 to 2012 and 2012 to 2016. The robust economy of the region from 1989 to 2012 lead to sharp increases in median income for all five counties despite the intervening years of economic downturn. However, from 2012 to 2016, only Gentry and Worth Counties saw median household income grow at or above the rate for the State of Missouri. Atchison, Holt and Nodaway Counties have experienced only slight increases or had negative growth in median household income. Median household income does not paint the whole picture. The graph below shows the poverty rates in all five counites. All were over 11 percent for 2012-2016. Nodaway County poverty maintained its overall 25.5% poverty rate, while Gentry exceeds the Missouri average poverty rate of 15.3%. The high poverty rate in Nodaway County is attributable, in



Source: US Census

part, to the fact that a substantial percentage of the county population consists of students at Northwest Missouri State University. No longer claimed as dependents, as individuals, they have low levels of personal income contributing to the high local poverty rate.



Source: US Census

Unemployment Rates

Unemployment rates in the region have typically ranged from approximately five percent down to below three percent (See Table below.) The last spike in unemployment rates was during the Great Recession. As shown in all five counties have enjoyed the benefit of an improved national and state economy. Unemployment rates have fallen over the past five years covered by the previous CEDS.

The relatively low unemployment rate in the region is not necessarily an indication of economic health. The available workforce in the region is barely adequate to meet the needs of existing business. The poverty figures noted on the previous page, indicate that existing jobs may not provide a sufficient income to quality as family-supporting jobs.

Another level of the job market that is extremely hard to measure is underemployment. According to the United State Bureau of Labor Statistics, underemployment (underutilization) pertains to the economic characteristic underlying the following

three broader measure of labor underutilization which include:

- 1) Discouraged workers, not presently in the labor force, want and are available for work, sought employment sometime in the prior 12 months, but did not search for work in the prior 4 weeks, are not counted as unemployed. This group of workers believe that no jobs are available for them.
- 2) Marginally attached workers are a group that includes discouraged workers for whom any reason could have been cited for the lack of job search in the prior 4 weeks; and
- 3) Workers employed part-time, working less than 35 hours per week, are available and want to work full-time, gave an economic reason (their hours had been cut back or they were unable to find a full-time job) for working part-time. These individuals are sometimes referred to as involuntary part-time workers.

Unemployment Rate by County, 2000-2018							
	United States	Missouri	Atchison	Gentry	Holt	Nodaway	Worth
2000	4.0%	3.6%	2.7%	3.3%	3.2%	2.4%	3.8%
2005	5.1%	5.4%	4.7%	4.4%	4.5%	3.7%	4.0%
2010	9.6%	9.6%	8.6%	7.9%	8.0%	7.0%	6.8%
2015	5.3%	5.0%	4.5%	4.2%	3.6%	4.9%	3.3%
2017 (May)	4.1%	3.7%	3.4%	2.8%	3.1%	3.7%	2.7%
2018 (May)	3.6%	3.3%	2.4%	2.7%	2.6%	3.5%	3.1%

Demographic Data Tables

Northwest Missouri Region—2016 Social & Economic Summary

Includes: Atchison County, MO; Gentry County, MO; Holt County, MO; Nodaway County, MO; Worth County

POPULATION	NW Missouri Region	Percent of Total	US	Percent. of Total
Total	41,749	100%	318,558,162	100%
Preschool (0 to 4)	2,141	5.13%	19,866,960	6.24%
School Age (5 to 19)	8,110	19.43%	62,429,445	19.60%
College Age (20 to 24)	5,552	13.30%	22,612,610	7.10%
Young Adult (25 to 44)	8,466	20.28%	83,946,307	26.35%
Adult (45 to 64)	10,065	24.10%	83,522,208	26.22%
Older Adult (65 plus)	7,415	17.76%	46,180,652	14.49%
Median Age*	42.8		37.7	

Source: US Census Bureau, American Community Survey, latest 5-Year Estimates

*Median Age is averaged for combined areas

POPULATION BY RACE AND ORIGIN	NW Missouri Region	Percent of Total	US	Percent of Total
Total	41,749	100%	318,558,162	100%
American Ind. or Alaskan Native Alone	140	0.34%	2,084,326	0.65%
Asian Alone	380	0.91%	16,425,317	5.16%
Black Alone	735	1.76%	39,098,319	12.27%
Native Hawaiian and Other Pac. Isl. Alone	84	0.20%	508,924	0.16%
White Alone	39,504	94.62%	197,362,672	61.96%
Some Other Race Alone	3	0.01%	676,003	0.21%
Two or More Race Groups	373	0.89%	7,203,494	2.26%
Hispanic or Latino				
Total Hispanic or Latino	530	1.27%	55,199,107	17.33%
Mexican	374	0.90%	35,110,480	11.02%
Cuban	18	0.04%	2,077,828	0.65%
Puerto Rican	54	0.13%	5,275,008	1.66%
Other	84	0.20%	12,735,791	4.00%

Source: US Census Bureau, American Community Survey, latest 5-Year Estimates

EDUCATIONAL ATTAINMENT	NW Missouri Region	Percent of Total	US	Percent of Total
Total Population 25 and Older	25,946	100.00%	213,649,147	100.00%
Less Than 9th Grade	890	3.43%	11,913,913	5.58%
9th to 12th, No Diploma	1,413	5.45%	15,904,467	7.44%
High School Graduate (incl. equiv.)	10,933	42.14%%	58,820,411	27.53%
Some College, No Degree	5,454	21.02%	44,772,845	20.96%
Associate Degree	1,413	5.45%	17,469,724	8.18%
Bachelor's Degree	3,679	14.17%	40,189,920	18.81%
Graduate or Professional Degree	2,164	8.34%	24,577,867	11.50%

Source: US Census Bureau, American Community Survey, latest 5-Year Estimates

Households, 2016

Northwest Missouri Region—2016 Social & Economic Summary (continued)

HOUSEHOLDS	NW Missouri Region	Percent of Total	US	Percent. of Total
Total Households	16,66	100.00%	117,716,237	100.00%
Family Households	10,234	61.42%	77,608,829	65.93%
Married with Children Under 18 Years	2,885	17.32%	22,632,647	19.23%
Married without Children Under 18 Years	5,545	33.28%	34,148,758	29.01%
Single Parents with Children Under 18 Years	1,137	6.82%	10,934,829	9.29%
Non-family Households	6,428	38.58%	40,107,408	34.07%
Living Alone	4,991	29.95%	32,595,486	27.69%
Average Household Size	2.2		2.6	
Average Family Household Size	2.7		3.2	

Source: US Census Bureau, American Community Survey, latest 5-Year Estimates

Social Characteristics, 2016

HOUSING TYPES	NW Missouri Region	Percent of Total	US	Percent. of Total
Total Housing Units	19,833	100.00%	134,054,899	100.00%
Owner Occupied	10,559	53.24%	74,881,068	55.86%
Renter Occupied	6,103	30.77%	42,835,169	31.95%
Vacant For Seasonal or Recreational Use	3,171	15.99%	16,338,662	12.19%
1-Unit (Attached or Detached)	15,377	77.53%	90,444,476	67.47%
2 - 9 Units	2,509	12.65%	17,307,018	12.91%
10 - 19 Units	384	1.94%	6,027,469	4.50%
20 or more Units	303	1.53%	11,712,558	8.74%
Built prior to 1940	5,584	28.16%	17,458,151	13.02%

Source: US Census Bureau, American Community Survey, latest 5-Year Estimates

Housing Characteristics, 2016

COMMUTING TO WORK	NW Missouri Region	Percent of Total	US	Percent of Total
Workers 16 years and over	19,790	100.00%	145,861,221	100.00%
Car, truck, or van drove alone	15,256	77.09%	111,448,640	76.41%
Car, truck, or van carpooled	2,479	12.53%	13,588,601	9.32%
Public transportation (including taxicab)	60	0.30%	7,476,312	5.13%
Walked	998	5.04%	4,030,730	2.76%
Other means	292	1.48%	2,655,046	1.81%
Worked at home	705	3.56%	6,661,892	4.57%
Mean travel time to work (minutes)	20.7		26.1	

Source: US Census Bureau, American Community Survey, latest 5-Year Estimates

Economic Characteristics, 2016

APPENDIX F

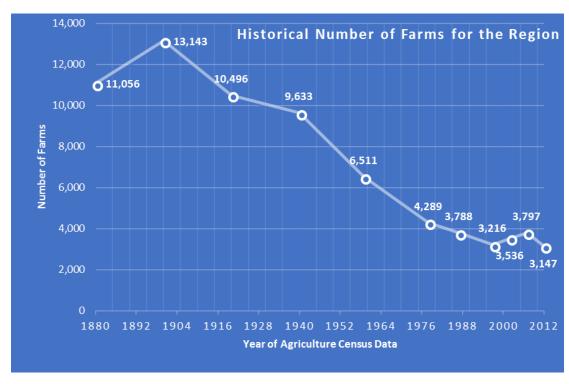
About the Region

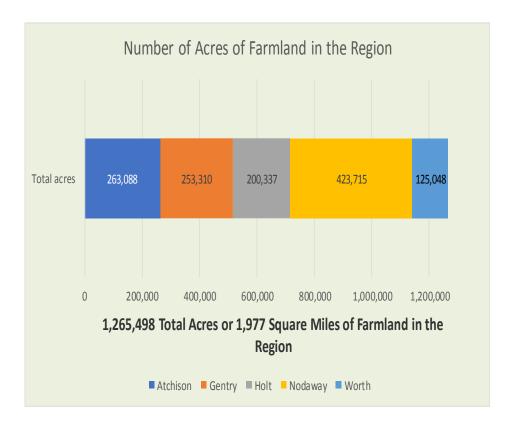
Agriculture in Northwest Missouri

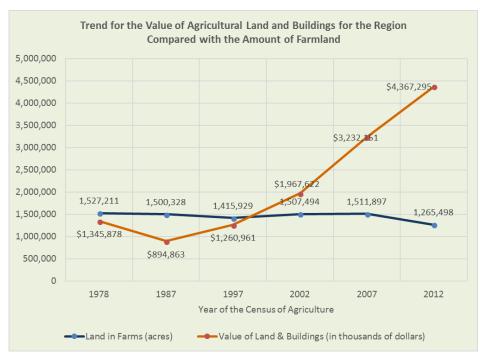
Northwest Missouri has abundant productive farmland. Agriculture has long been the lifeblood of the area's economy beginning with the early settlers. Nationwide, crop and livestock prices fell dramatically in the mid 1980s, and many farms in northwest Missouri were lost in bankruptcy courts or land was converted to the Conservation Reserve Program (CRP), where it lies idle. During the farm crisis of the 1980s, thousands left the agriculture industry. After losing their farms, many families were forced by their financial circumstances to move out of the region, which contributed to a four percent decline in population from 1980 to 2000. More than twenty-five years after this turning point, the long-term effects are still impacting the fivecounty region. Those that did stay in the area have found employment in the area's industrial sector that developed during the last twenty years. A result of the farm crisis is that the percent of the

population that receives income directly from farming has dropped substantially.

Although the total farm population statewide and in the region fell over the last twenty years, the number of farms in the state and in northwest Missouri increased from 1992 to 2007 before falling again in 2012. The US Census of Agriculture is broad in its definition of a farm. For Census purposes, a "farm" is any rural place that sells, or has the potential to sell, at least \$1,000 worth of agricultural commodities in the year preceding the Census. Agricultural commodities include traditional products such as corn, soybeans, wheat, hogs, beef cattle, poultry, dairy products, but can also include timber and/or horticultural products. According to the 2012 Census of Agriculture, the number of farms in the region has fallen to a historic low of 3,147.



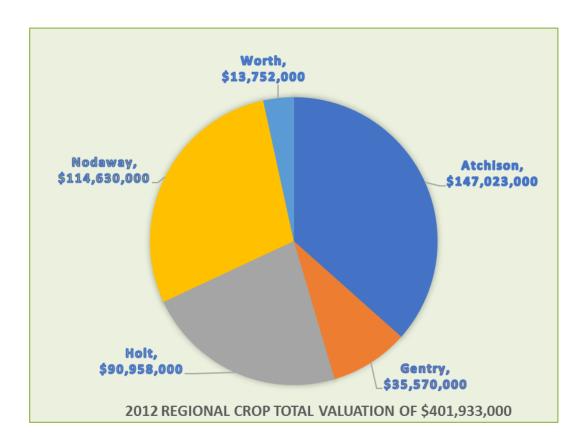




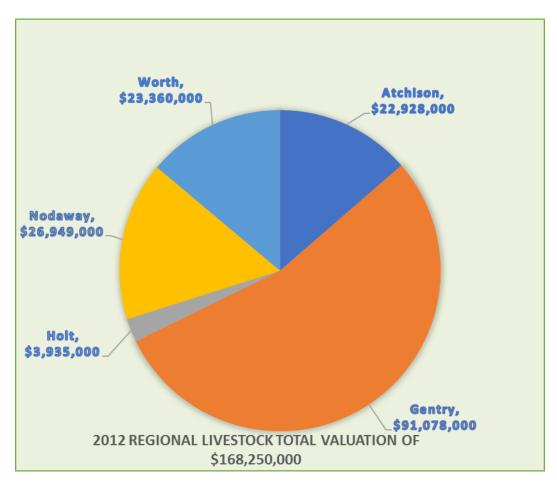
Almost 75% of the total land area of the Five-County Region is used directly for agricultural purposes. The breakdown of this area is shown in the adjacent figure.

Agriculture serves as a strong foundation for the Region's economic stability. This is reflected in value of the farmland and the buildings on the farms throughout the area. The amount of land committed to farming has remained constant until a significant decline was shown in the latest Census of Agriculture.

The value of the land and buildings bottomed out in 1980s crisis at under \$1 billion and has since increased steadily to over \$3.2 billion in 2012. These trends are pictured in the figure to the left.



The Region has 3.2% of Missouri's farms, yet produces over \$570 million or 6.2% of the state's market value of crops and livestock. The contributions of each county's farmers to the Region's total valuation of crops and livestock are shown in the two graphs on this page.



Workforce Development Programs

NWMORCOG operates and staffs the Missouri Job Center in Maryville, operating an employment resource room for the public. NWMORCOG staff members work with customer through a variety of workforce development programs including: Workforce Innovation and Opportunity Act Adult (Ages 18 and over), Dislocated Worker, Youth (Ages 14-24), Missouri Reemployment Services and Eligibility Assessments (RESEA) and SkillUP (Food Stamp) program.



An appropriately trained and skilled workforce is the key ingredient for job retention and new business attraction. NWMORCOG focuses on partnerships between educators and workforce development personnel working together to anticipate and meet

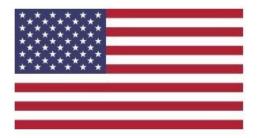
the need for skilled employees for employers. The intent is to supply good-paying jobs to northwest Missouri residents by ensuring that a well trained workforce is available as new positions develop.



Since 2015, the NWMORCOG workforce development staff has partnered with the Division of Workforce Development to designate each county in the region as a Work Ready Community. This designation requires individuals of current, transitioning, and emerging workforce demographics to earn a National Career Readiness Certificate (NCRC) from ACT WorkKeys Assessments. The NCRC is based on three WorkKeys assessments: Applied Math, Workplace Documents and Graphic Literacy. Based on an individual's scores, a report is provided stating they have proficient skills in these key areas, skills required for 80 percent of the jobs in the economy today. Local employers must sign-on to the program and recognize the certificate.

Political Representation

Two state congressional districts represent the fivecounty region. Missouri House District #1 includes Atchison, Holt, Nodaway, and Worth Counties while District #2 includes Gentry County. The 12th District in the Missouri Senate represents the entire fivecounty area. Nationally, all five counties belong to the 6th District of the US House of Representatives.





Healthcare

The five-county area has several options to access health care. From regional hospitals to residential care facilities to mental health clinics, the area has an assortment of providers to care for the sick and aged. The Community Hospital in Fairfax provides Atchison County and western regional residents with a variety of medical services, outpatient clinics, general surgery and diagnostics, and is recognized as one of the leading rural hospitals in Missouri. This is a new, private, not-for-profit, 25-bed, Critical Access Hospital providing acute care and rehabilitative services. They have satellite family medicine clinics located in Mound City, Tarkio, Fairfax, Rock Port, Oregon, and Burlington Junction.

Northwest Medical Center is a non-profit, comprehensive healthcare system associated with Mosaic Life Care that includes: acute and swing bed services, multiple physician clinics, a broad range of specialty and outpatient clinics, telehealth programs, and 24/7 Emergency Room services. Northwest Medical Center, located in Albany, opened in 1957 and has kept pace with medical advances through several renovations and expansions. The hospital exists thanks to tremendous community support, which raised more than a quarter of a million dollars to match federal funding and build the original facility. Generous community backing has played a crucial role in the hospital's ability to provide the latest healthcare services and to complete necessary expansion projects. All of the projects were possible because of contributions from individual estates and

local fundraisers, including one of the projects, a \$1.3 million outpatient pavilion. In 2017 a \$7.5 million renovation project commenced with expansion of same-day surgery, outpatient and emergencies services areas. Mosaic Life Care has clinics at Stanberry, Grant City and Albany.

SSM Health-St. Francis Hospital and Health Services are in Maryville and are owned and operated by the Franciscan Sisters of Mary, based in St. Louis, Missouri. St. Francis Hospital is a licensed 81-bed, not-for-profit facility which provides primary and acute care of patients with medical, surgical, rehabilitation, mental health, obstetrics, and 24hour emergency care. St. Francis' expansion project in 1998 was completed with the addition and/or renovation of emergency, rehabilitation, laboratory, and imaging services. The project added 14,000 square feet of new construction and remodeled 24,000 square feet. This was followed by a major, \$5.4 million renovation in 2001 which added a new fixed base MRI, relocation of the mammography service, redecoration of the cafeteria, addition of a third operating room and endoscopy suite, relocation of the pharmacy, and relocation of the quality assurance staff. A \$2.7 million preschool childcare center is under construction on the hospital campus with a capacity of 136 plus space for early Head Start and other programs. St. Francis is the primary healthcare facility in the five-county region; however, there are other health care facilities in nearby St. Joseph. Other more distant regional hospitals are found in Kansas City, Missouri, Kansas City, Kansas, Des Moines, Iowa, and Omaha, Nebraska.



Community Hospital in Fairfax, Missouri

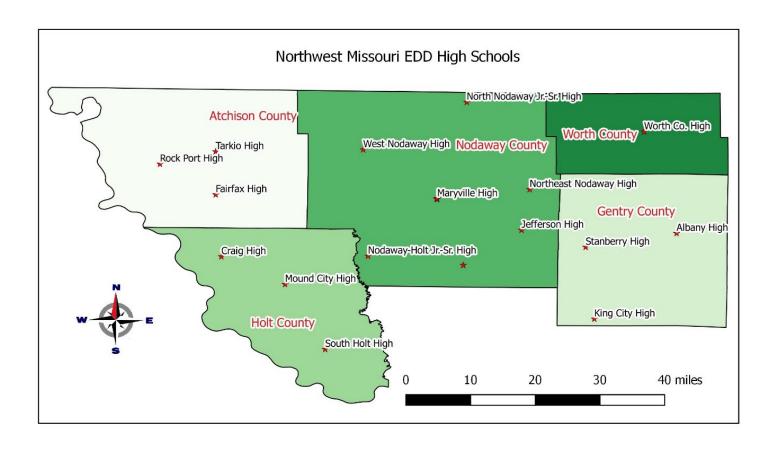
Education

The EDD's five-county region is home to several elementary schools, 17 high schools, several private schools, and a regional university. As has been noted, the region to lose population, with fewer children enrolled in public schools in the area. This sometimes encourages plans for the consolidation of school districts. While this has been less of a factor in the last decade, it remains a concern for several of the smaller communities where the school serves as a means of identification. The high schools in the area have an excellent reputation for academics. Over the last five years, the state Missouri Assessment Program (MAP) test scores have been higher than the state average and the region has averaged a graduation rate above the State's average.

The Maryville is home to Northwest Missouri State University (NWMSU), a regional, 4-year University. NWMSU is a moderately selective, learner-centric

regional university, offering a focused-range of undergraduate and graduate programs. Historically, the University serves nineteen northwest Missouri counties, emphasizing programs relating to agriculture, business, and education. NWMSU has an enrollment of 5,628 undergraduate and 902 graduate students instructed by 252 full-time faculty members. Students attending the university originate from 46 states and 31 countries.

In addition to Northwest Missouri State University, the region is served by Missouri Western State University in St. Joseph, Missouri. Missouri Western is a four-year, state-supported institution that provides a blend of traditional liberal arts and career -oriented degree programs. Other options for post-secondary education include several community colleges, universities and vocational schools in Trenton, Missouri, Kansas City, Missouri, Creston, Iowa, and Lincoln, Nebraska and Omaha, Nebraska.



Alternative Energy

Northwest Missourians have long used the area's fertile soil and favorable climate to produce agricultural products for human use and for livestock feed. More recently, some of this biomass has been used to produce ethanol and electrical power. Each year, Golden Triangle Energy in Holt County uses over 7 million bushels of locally grown corn to manufacture over 20 million gallons of ethanol for use in fuel, beverages, and industry. Northwest Missouri State University has been an innovator in the use of biomass sources such as warm season grasses, animal waste, wood chips and recycled paper products to manufacture high density fuel pellets. Using these pellets at the University's power plant has produced an energy savings of over \$12 million over the past two decades.

Taking advantage of the more than 200 sunny days each year, Northwest Missouri residents have been embracing the use of solar energy over the last decade. Data available for the five-county region for the years 2013 through 2016 indicate that 46 commercial sites have installed photovoltaic panels capable of generating 985 kilowatts of electricity. During the same time frame, 51 individual residences have been equipped with solar panels producing 928 kilowatts of power. Most of these installations were subsidized with rebate and tax credit programs.

The third part of the alternative energy assets of the region utilize the nearly 10 mile per hour average winds that are present. Wind turbine farms have been popping up across the region since 2007 when the first operation, Bluegrass Ridge in Gentry County commenced generation. Rock Port became the first US city to operate solely on energy from the wind in 2008. More than ten wind farms are either in operation or planned for the region which will have a combined generating capacity of over 1,700 megawatts.



Elementary students learn how recycled paper is made into high-density fuel pellets at Northwest Missouri State University.

Innovation in Northwest Missouri

Some of the most promising innovation within the EDD has come in the agricultural sector. Individuals have sought to increase revenues to their family farms

in creative ways.

Horticulturalists in the region have received support from local boards and business chambers by their help in providing space and advertisement of Farmer's Market events. Value has been added to the products by further processing into foods

Comparison of Bordering EDDs' Innovation Index Headline Scores			
Economic Development District	Overall Innovation Index		
NWMORCOG	98.0		
MO-KAN Regional Council	91.2		
Southeast Nebraska Regional Development District	103.6		
Green Hills Regional Planning Commission	76.4		
Southern Iowa Council of Governments	102.7		
Southwest Iowa Planning Council	101.2		
Source: http://www.statsamerica.org/ii2/map.aspx			

like jams, clean and bagged popcorn, tomato sauces and other products. Local beekeepers are selling their honey products under their own label to local customers and supermarkets. Some meat producers are marketing their USDA inspected products in frozen form directly to consumers. One enterprising producer of grass-fed beef has secured a storefront business in Kansas City to market their products and those of other producers directly to urban customers.

Other agricultural entrepreneurs have opened their businesses to agritourism opportunities with harvest-themed events, pick-your-own pumpkin or other produce and refurnished barns for weddings or other events. Some farmers have become guides for wild game hunting or have leased their land to hunters during the various hunting seasons.

to 200, with 100 signifying the middle of the normal distribution of values. Data is available on a county basis as well as by economic development district at StatsAmerica.org.

measures of innovation capacity. This instrument is

called *Innovation Index 2.0* and consists of five index

categories constructed from publicly available data.

Scores values can range on a continuous scale from 0

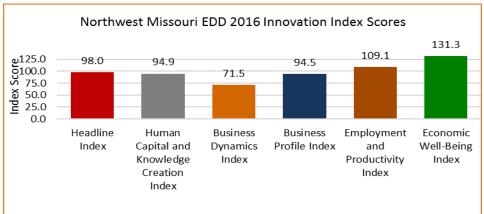
The Headline Index gives the overall innovation score by combining these five indexes: Human Capital & Knowledge Creation, Business Dynamics, Business Profile, Employment & Productivity and Economic Well-Being. The Northwest Missouri EDD score of 98 is just below the middle of the normal distribution of scores for 384 economic development districts across the United States included in the study. The median value for this index was 96.7. Northwest Missouri was ranked 178th on the Headline Index.

The lowest index score for the Northwest Missouri

EDD was for Business Dynamics. The sub-categories in for this index measure the extent that outdated ideas and industry practices are being replaced by new and potentially revolutionary innovations. The median value for this index was 65.9.

The highest score was earned on the Economic Well-Being Index. The EDD scored 131.3, besting the median value of 108.1 on this index. Sub-categories that the EDD ranked

in the top ten nationally were for High School Diploma Attainment (5th), Low Change in Proprietorship Rate (6th), Per Capita Income Growth (7th) and Net Migration (3th). The data for the Northwest Missouri EDD is summarized in the graph.



Innovation and entrepreneurship are key components in developing and maintaining competitiveness in economic performance. The Kelley School of Business at Indiana University in partnership with the Economic Development Administration has created quantitative

Water Resources

The northwest Missouri region is bordered by parts of two major river basins. The Missouri River basin on the west includes several minor river basins: Nishnabotna, Nodaway, One Hundred and Two, Platte, and Tarkio. The Grand River Basin on the east is the largest in the state north of the Missouri River. The Grand River begins in Southwest Iowa and flows southeasterly through northwest Missouri to its confluence with the Missouri River near Brunswick in the central part of Missouri.

Water resources in the northwest Missouri region include the rivers mentioned above and their associated watersheds. There are no sole source aquifers in the region. The Missouri River alluvium serves as the primary water source for the counties and communities along the Missouri River, including the Atchison County Wholesale Water Commission (ACWWC). NWMORCOG has worked to support ACWWC as they conceived a county-wide water system that would enable the replacement of several aging water treatment plants in the county. Construction is now underway on this project and

there is the potential for ACWWC to become a water supplier for customers outside their own county boundaries. Mozingo Lake in Nodaway County and Middle Fork Lake in Gentry County serve as major water sources for the counties located farther away from the Missouri River basin. NWMORCOG maintains an ongoing relationship with the city governmental bodies to assure that they are aware of possible problem areas and to assist them with the development of projects to address these issues. NWMORCOG is currently assisting cities or rural water districts in all five counties with current or proposed water treatment or distribution projects.

The treatment and disposition of wastewater are of major concern in the region. NWMORCOG works closely with its member cities to help them identify problem areas and to develop wastewater projects to address those problem areas. Potential or active projects in all five counties are indicative of the continuing need for focus on this critical piece of infrastructure.

Natural Resources

The topography of the region is characterized by moderately rolling plains. Ground elevations range from a low of 750 feet above sea level in the Grand River Basin to a high of 1,300 feet above sea level in the Missouri River bluffs. The soils present throughout the region are rich and productive for agricultural production. The land is generally undulating to rolling with the larger stream valleys featuring a few narrow strips of hilly land. The gentle slopes do not pose serious obstacles to development within the region. The entire region tends to increase in elevation from the west at the Missouri River towards the east.

The region's mineral resources include sand, gravel, clay, limestone, shale, coal, and petroleum. Limestone remains the only rock quarried in the region while sand is obtained by dredging the Missouri, Platte, and One Hundred and Two Rivers. Gravel is mined from ancient glacial deposits in the area and clay and shale constitute a majority of the region's bedrock. While coal and oil deposits do exist in the area, the difficulty in extracting them severely limits the value of the resource.

Nature Resources

Northwest Missouri is home to many state recreation, wildlife, and conservation areas. Holt County is home to Big Lake State Park and Loess Bluffs National Wildlife Refuge (formerly called Squaw Creek) which provides safe haven for a wide variety of plant and animal species. The refuge includes 7,440 acres of wetlands, grasslands, and forests along the eastern edge of the Missouri River floodplain. Located on a well-established flyway for migratory birds, it hosts large numbers of ducks, geese, bald eagles, pelicans, and other species during their migratory seasons.

Loess Bluffs attracts many tourists and school groups

each year to see the millions of migratory birds that visit the refuge. Eagle Days, held in December each year, brings more that 6,000 weekend visitors to see the eagles' nesting sites and special presentation about re-establishing the threatened bald eagle populations in Missouri.

The Lewis and Clark Trail borders the western edge of the region while several communities sponsor local trails, some of which were built with the assistance of NWMORCOG and the MoDOT Safe Routes to School and Transportation Enhancement programs, and the MoDNR Land and Water Conservation Fund.

Highway Transportation

The NWMORCOG service area is approximately 2,657 square miles. Much of this land is farmed and accessible by automobile; therefore, Federal, State, and County maintained roads are the predominant means of transportation. There is very limited public transportation available in the region. Local taxi service is only available in the city of Maryville. Region-wide, but limited service is provided by OATS, Inc., an independent transit provider. According to the Missouri Department of Transportation (MoDOT), there are 1,277 miles of state maintained highway in the five-county area. In addition to this, the counties maintain over

3,100 miles of hard-surfaced and graveled roads and over 1,000 bridges. Major highways serving the region include Interstate 29, US 59, 71, 136, 159, 169, and 275.

The NWMORCOG Transportation Advisory Committee (TAC) annually implements a planning process to identify and prioritize regional transportation needs. Needs are identified by TAC members based on local public input, and then categorized based on average daily traffic (ADT), regional significance, safety, and other factors. The identified needs are prioritized regionally by the TAC and then submitted to MoDOT.

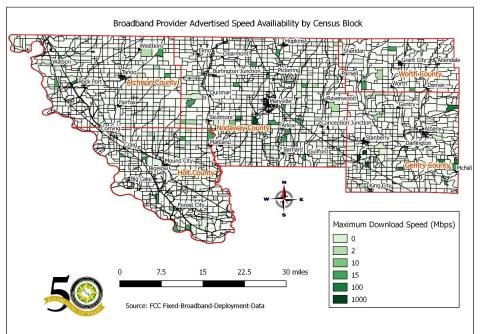
Other Transportation

The communities of Albany in Gentry County, Tarkio in Atchison County, and Maryville in Nodaway County are served by either private- or publicly-owned airports. Albany's airport has one 3,300 x 50-foot, hard-surfaced, lighted runway. The Gould Peterson Airport, located in Tarkio, has one 3,564 x 60-foot, hard-surfaced, lighted runway. Maryville is the only community in the region to have two airports; Maryville Municipal Airport and Rankin Airport. Both facilities have lighted, hard-surface runways; however, the latter has a 3,050 x 25-foot landing strip, while the former has a 4,600 x 75-foot runway. The most common users of these facilities are private planes;

however, the Maryville Municipal Airport does occasionally receive commercial flights. Kansas City International Airport (KCI), the closest commercial airport, is located approximately 80 miles from the NWMORCOG service area. KCI has three runways and can accommodate up to 139 aircraft operations per hour.

The Missouri River provides a conduit for commercial transportation but access to this resource is restricted due to variable water levels and the limited number of ports available. Kansas City receives barge traffic. Union Pacific Railway and Burlington Northern-Santa Fe Railway serve the St. Joseph Regional Port Authority.

Broadband



Access to broadband internet services is critical to the local economy. Most businesses need it to handle transactions, schools need it to ensure student access to education opportunities, healthcare providers use it to ensure quality service. For the nation, the state and the region, rural areas have lagged in access to high speed internet service. Several federal and state initiatives have been established to close the gap between urban and

rural broadband service. The Northern Missouri Ultra-High Capacity Middle Mile Project is a partnership between public and private service providers and regional electric cooperatives to connect as many as 350 community anchor institutions with speeds of between 50 Mbps and 10 Gbps. When completed this will bring increased broadband speeds to schools, public safety entities, healthcare facilities, residences and businesses. The latest FCC data shows that 75% of Nodaway County residents have access to download speeds of 25 Mbps or higher. The accessibility of these speeds for the rest of the counties in the region are as follows: Atchison, 7%; Gentry, 61%; Holt, 1%; and Worth, 58%. The following map shows data from the FCC which illustrates

information form broadband providers on the availability of service in each census block of the region. The speeds shown are the provider's advertised speed and service is not guaranteed in all areas of the census block. The cities in the region have been more successful in attracting providers of high-speed internet than the rural areas.

The following table details the information regarding the percentage of each city's residents that have access to broadband and the average download speeds reported by FCC. The state of Missouri has created a new

Broadband Development Office in the Missouri Department of Economic Development. The region looks forward to working with its director to improve the accessibility of high-speed internet service to the businesses and residents of the area. Complete details about the MoBroadbandNow initiative can be seen by going to the official website:

www.mobroadbandnow.com.

Broadband Service in Communities with Populations over 500

Populations over 500				
Community	Fixed Wire Service Availability	Average Download Speed (Mbps)		
Albany	87%	2		
Burlington Junction	78%	33		
Fairfax	78%	2		
Grant City	63%	8		
Hopkins	77%	1		
King City	72%	5		
Maryville	90%	42		
Mound City	99%	8		
Oregon	93%	4		
Rock Port	73%	7		
Stanberry	71%	6		
Tarkio	94%	10		

APPENDIX G

Disaster and Economic Recovery and Resilience Strategy

The strategy detailed below is a product of the local recovery efforts by the Northwest Missouri Regional Council of Governments (NWMRCOG) and the needs expressed by local community leaders. The Regional Implementation Strategy is intended to serve as a framework for ongoing recovery and mitigation activities in the events of a natural, technological or intentional disaster that may occur in Atchison, Gentry, Holt, Nodaway, and Worth counties. Economic resilience is divided into two categories static economic resilience, the ability to maintain function when shocked, and dynamic economic resilience, the speed at which a business or system recovers from severe shock to achieve their desired state. Our strategies will focus on the microeconomic level of resilience, in regional businesses and entities.

Our resilience begins with a threat analysis of the most common man-made and natural disaster scenarios in our region. This section will cover the many problems each disaster can place on small businesses and local government within our regional economy. Following will be the section that outlines what strategies businesses and entities should take to mitigate the problems outlined in the first section. We will end with the goals that are to be met by every small business and local entity within, the five-county region, accomplished through the strategy outlined in the previous sections.

Natural Disasters

Natural disasters are the most common amongst the three disaster categories in the United States with Missouri having 59 federal major disaster declarations since 1953. Unlike the other two categories of accidental and intentional disasters, natural disasters usually allow us some warning to prepare for an incoming weather event. Despite this warning, according to NOAA, natural disasters caused \$306.2 billion in damages across the country in 2017,

the highest US annual record cost since 2005. With the continued increase of natural disasters and the severity of those events the only way to maintain economic resilience is to continue expanding our mitigation plans and exercises.

Severe Thunderstorms

Severe weather in the northwest region can amount to many different weather events. In our area severe weather is a mixture of thunderstorms, high wind situations, hail, and tornados; with hail being the most common damage causing event, followed by tornados and high winds associated with thunderstorms. In our region it is common to experience heavy rains, hail, high winds and the occasional tornado. These events can lead to substantial damage to a business's property, as well as systems that connect customers with suppliers; power outages, and road closings. Our region's most recent federally declared disaster due to severe thunderstorms was in 2015, impacting Atchison, Gentry, Holt and Worth Counties, reminding us of the potential threats we are faced with every year and confirming the seriousness of severe thunderstorms in our region.

Flood

Flash floods can occur within a few minutes or hours of excessive rainfall, a dam or levee failure, or a sudden release of water held by an ice jam. Flash floods often have a dangerous wall of roaring water carrying rocks, mud and other debris. Overland flooding, the most common type of flooding event typically occurs when waterways such as rivers or streams overflow their banks as a result of rainwater or a possible levee breach and cause flooding in surrounding areas. It can also occur when rainfall or snowmelt exceeds the capacity of underground pipes, or the capacity of streets and drains designed to carry flood water away from urban areas.

According to the National Flood Insurance Program (NFIP), one-third of flood damage occurs outside of designated flood plains. Many areas in the region fall within flood zones. Understandably our region has been afflicted by many floods over the last ten years, with five of these events in the years of 2008, 2010, 2011, 2014, and 2015 reaching the status of a federal disaster. Strong flooding can result in washed out bridges and roads leaving access routes for businesses impassable, causing a decrease or halt in the flow of customers. Flood waters that enter a business establishment have the ability to destroy electrical systems that may result in the loss of critical data essential to the prosperity of the company. Over the last ten years we have seen an increase in flooding and its destructive ability that has undoubtedly moved it to the top priority in our region due to the ever increasing costs of recovery.

Severe Winter Weather

Winter storms can range from a moderate snow over a few hours to a blizzard with blinding, long-lasting, wind-driven snow. Many winter storms are accompanied by dangerously low temperatures and sometimes by strong winds, icing, sleet and freezing rain. Northwest Missouri is not immune to harsh winters with extreme cold and severe winter storms. Ice and snow cause less than ideal or impossible driving conditions, power outages, and the risk of cold weather injuries from exposure. One of these problems alone can cause a business trouble with profit margins, but in a severe winter storm the possibility of multiple problems is almost certain. The ice storm of 2007 notably displayed the intense strength winter weather can have on our region and restructured emergency management techniques for future disasters. This storm became a federally declared disaster under FEMA-1736-DR. Affecting the area for nine days, our region was granted \$106,207 by the federal government, still costing our region over \$17,000 in damage costs. In the past ten years, the only federally declared disaster for the region regarding severe winter weather transpired in

2011 under FEMA-1961-DR.

Droughts

Droughts are periods of reduced rainfall that occur in nearly every part of our country and are can be accompanied by deadly extreme heat. In extreme heat and high humidity, evaporation is slowed and the body must work extra hard to maintain a normal temperature. Conditions that can induce heatrelated illnesses include stagnant atmospheric conditions and poor air quality. Consequently, people living in urban areas may be at greater risk from the effects of a prolonged heat wave than those living in rural areas The amount of rainfall received annually is tied directly to the resilience of our economy, due to the vast amount of farmland in the region. In a period of insufficient rainfall, extreme heat temperatures are more likely to occur. Extreme heat and droughts are not the most common of the threats to our region, but our extensive farmland and elderly population makes the damages of either disaster a serious concern.

Earthquakes

An earthquake is the sudden, rapid shaking of the earth, caused by the breaking and shifting of subterranean rock as it releases strain that has accumulated over a long time.

Our region's earthquake threat lies greatest in the Nemaha Uplift located just 50 miles west in Nebraska, and the New Madrid Fault that is located in Southeastern corner of Missouri. A moderate to severe earthquake could cause damage to our region's critical infrastructure to include water and gas lines, power lines, roads and bridges leaving our region crippled in the essential areas needed for a business to function. An earthquake also has the ability to cause extensive property damage compromising the structural integrity of a place of business. The Nemaha fault's last large event was registered as a 7 in 1952, New Madrid's last event was a 4.5 in 1991.

The New Madrid fault is only a serious concern to our region if the magnitude of the event is substantial, leaving the Nemaha fault line our most likely cause of earthquake damage. Since the last large event, only a few minor earthquakes have been recorded but the threat is there leaving earthquakes a real concern for the resilience of our region's economy.

Pandemic/Disease

Northwest Missouri, like any other populated area, is at risk of infectious diseases and pandemics. Our greatest threat lies in the Flu virus. In 1918-19 a Flu pandemic killed an estimated 50 million people around the world. In 2009 the Flu strain H1N1 was declared a pandemic killing an estimated 18,500 people. The Flu virus is a continuous and evolving threat to our region, with children and the elderly most directly affected. With our region's constant population influx due to Northwest Missouri State University to include the foreign students, and our large elderly population the threat of a pandemic/ disease should be a constant concern.

Technological & Accidental Hazards

Technological & Accidental Hazards include technological hazards such as nuclear power plant failures and hazardous materials incidents. Usually, little or no warning precedes these disasters. Unfortunately, with the ever increasing number of new substances, we see a related increase in the opportunities of human error when using these materials, making the potential of accidental disasters consistently rise.

Nuclear Power Plant

Nuclear power plants use the heat generated from nuclear fission in a contained environment to convert water to steam to powers generators and produce electricity. Although the construction and operation of these facilities are closely monitored and regulated by the Nuclear Regulatory

Commission (NRC), accidents are possible. An accident could result in dangerous levels of radiation that could affect the health and safety of the public living near the nuclear power plant. This exposure could come from the release of radioactive material from the plant into the environment, usually characterized by a plume (cloud-like formation) of radioactive gases and particles. The major hazards to people in the vicinity of the plume are radiation exposure to the body from the cloud and particles deposited on the ground, inhalation of radioactive materials and ingestion of radioactive materials.

In our region our Nuclear Power Plant threat is located in Brownville, Nebraska at the Cooper Nuclear Station. Although there has never been an emergency in the plant's history, the dangers that are associated with these emergencies are of great concern to our region. Cooper Nuclear has emergency plans in place for the population within a 10-mile radius or the Emergency Planning Zone (EPZ) that will be implemented in the case of a radiation leak. A breakdown at the Cooper Nuclear plant resulting in the release of radioactive material would have many negative effects on our region's economy. Nearly half of the designated 10 mile radius (EPZ) extends into our region, threatening crops and livestock that are essential for the economic stability of the area. If an emergency would require evacuations, it could bring five cities in the region to a complete stop and their residents would relocate to Lamkin Gymnasium located at Northwest Missouri State University. The relocation of possibly more than 3,000 people within the region and the contamination of farmland and livestock would be extremely strenuous on our region's economy in the short term. In the long term, having a nuclear emergency that has contaminated property within our region is going to make the region less appealing, making the Cooper Nuclear plant a low probability but high risk scenario.

Hazardous Materials Incidents

Hazardous materials can cause death, serious injury, long-lasting health effects and damage to buildings, homes, and other property. Many products containing hazardous chemicals are used and stored in homes routinely. These products are also shipped daily on the nation's highways, railroads, waterways and pipelines. Hazardous materials come in the form of explosives, flammable and combustible substances, poisons and radioactive materials. These substances are most often released as a result of transportation accidents or because of chemical accidents in plants. Our region's most likely threat of a hazardous chemical spill would derive from farmers who utilize pesticides for their crops, but our most economically damaging threat presides in our manufacturing plants. If a plant was to be shut down due to a hazardous chemical spill it would put hundreds of employees out of work, along with the health and environmental risks that accompany a hazardous chemical spill. With the amount of jobs that are created in our region due to large manufacturing companies a hazardous material incident should be a serious concern for our region's economic resilience.

Intentional Disasters

An intentional disaster is any surprise attack using deliberate violence against civilians, with the idea of attaining political or religious goals or simply to create fear amongst a population to disrupt the everyday life of the civilians. The dangers associated with an intentional disaster have multiple capabilities to harm our economy. The physical damage is the first thing associated to an intentional attack, but the fear and distrust that follows these events can be much harder to recover from in an affected community. Even though these events can be the most damaging, they are also disasters that can be prevented from occurring.

Cyber Attack

Unlike physical threats that prompt immediate

action cyber threats are often difficult to identify and comprehend. Among these dangers are viruses erasing entire systems, intruders breaking into systems and altering files, intruders using computers or devices to attack others, or intruders stealing confidential information. The spectrum of cyber risks is limitless; threats, some more serious and sophisticated than others, can have wide-ranging effects on the individual, community, organizational, and national level.

The critical infrastructure and key resources in northwest Missouri are connected through networks that are vulnerable to cyber-attacks. Identity theft, fraud, extortion, viruses, stolen hardware, breach of access, website defacement, and intellectual property theft are possible results with a cyber-attack. With online banking and shopping becoming a social norm, cyber-crimes will continue to be more prevalent in our region, making them a serious threat for our future economic resilience.

High Explosives

Terrorists have frequently used explosive devices and use them to damage and destroy financial, political, social, and religious institutions. Attacks have occurred in public places and on city streets with thousands of people around the world injured and killed. An attack on our country's power grid could cause a shutdown of everything electrical in our region that did not have a backup generator. If an attack were to occur in our region, the loss of lives could be substantial, and the economy would suffer from the fear of the residents to carry out their daily lives wondering when the next attack will occur. The physical damages to businesses, and roads could cause an establishment to shut their doors, and neighboring businesses would suffer from less customers due to poor access to the company. A high explosive attack is a serious concern in our region, with the physical damages causing shortterm damage, and the fear of another incident shaping the resilience of the economy in the future.

Active Shooter

An active shooter is defined by the US Department of Homeland Security as an individual actively engaged in killing or attempting to kill people in a confined and populated area; in most cases, active shooters use firearm[s] and there is no pattern or method to their selection of victims.

Over the last ten years there has been a concerning increase in active shooter scenarios across the country, especially among public places. In our region, likely targets include all of our K-12 schools, any large public gathering place, and Northwest Missouri State University. An active shooter threat is one that is rarely preventable, and extremely difficult to prepare for because it is usually one person and there are no guidelines on how it is done. The possibility of casualties in this scenario is high and will largely impact the region's economy because of the places that will most likely be targeted. If an active shooter were to attack the college campus, a large drop in enrollment is a good possibility, which has the potential to cost our economy thousands of potential customers, due to the lack of belief in the security of our region's public facilities. This feeling amongst our region's population could cause many to consider moving, again affecting our economic resilience across the region, making the threat of an active shooter a serious concern to the resilience of our economy.

Biological Threats

Biological agents are organisms or toxins that can kill or incapacitate people, livestock and crops. A biological attack is the deliberate release of germs or other biological substances that can cause illness or death. The three basic groups of biological agents that would likely be used as weapons are bacteria, viruses and toxins. Biological agents can be dispersed by spraying them into the air, by infecting animals that carry the disease to humans, and by contaminating food and water.

An intentional biological threat is of a low concern to our region because of our rural settings, but the dangers that are associated with such an attack are serious. Soon after the 9/11 attacks the United States saw the worst biological attack in our history when letters laced with anthrax appeared in our postal system. This attack was a threat to the entire nation as all post offices were a potential holder of these contaminated letters. Five people were killed and seventeen injured. Biological attacks such as this are not common because of the difficulty of the biological agents to affect a large number of people. In our region our largest concern of a biological threat most likely will be based on the wind direction that would carry the biological agent, from the populated area where the attack was carried out.

Chemical Threats

Chemical agents are poisonous vapors, aerosols, liquids and solids that have toxic effects on people, animals or plants. They can be released by bombs or sprayed from aircraft, boats and vehicles. They can be used as a liquid to create a hazard to people and the environment. Some chemical agents may be odorless and tasteless. They can have an immediate effect (a few seconds to a few minutes) or a delayed effect (2 to 48 hours).

Our region faces little threat of an intentional chemical attack based on the fact that one has never been carried out on United States soil. The affects that are involved with a chemical attack are extremely dangerous, as we have seen in the 2013 Syrian military's gassing of civilians killing nearly 1,500 people. In our region the biggest threat would be an attack on livestock and crops causing a large portion of our population to become contaminated through close contact or consumption. This would have the potential to put many farmers out of business, which in turn would create a large drop in revenue from these individuals into our regional economy.

Resilience Strategies

Static Economic Resilience can be defined as our region's ability to use our existing resources to maintain a functioning as a business, entity, and overall an economic system.

Dynamic Economic Resilience can be defined as our region's speedy recovery abilities through repair and reconstruction after a disaster to achieve our desired state. Together the static and dynamic resilience strategies listed below will allow our economy a much greater chance of recovery in a post disaster scenario.

Static Resilience Strategies

Conservation

Businesses and entities need to have a plan for maintaining their production, directly after a disaster, with fewer inputs. A plan should include how a business will be maintained with fewer employees in a post disaster setting, as well as how costs can be cut for the recovery process to allow for less capital to sustain a business's needed productivity. This can be done with overtime or extra shifts to make up for the lost production.

Input Substitution

Businesses and entities need to plan for alternative methods of utilizing and acquiring labor, as well as secondary and tertiary strategies to utilize other sources of capital goods to maintain a business or entity's functionality necessary to recover. This can be done by acquiring resources from other regions, to include new contractual agreements, as well as through research of surrounding areas to insure the resources you need are easily attainable, and possibly making prior relations with potential suppliers.

Inventories

Inventories for a business or entity in a post disaster

scenario will include all working supplies and emergency stockpiles required for production. Therefore, maintaining the resources needed in a place of business to run without suppliers for at least a three month period will allot for the resources needed to maintain the businesses functionality through the recovery process.

Excess Capacity

Businesses and entities need to, if applicable, have "backup" equipment, this could be an idle plant or required supplies kept in a separate location. Also plans for the compensation for damaged resources, such as electricity by having a generator that is set up to keep the essential infrastructure of a business or entity functioning.

Relocation

Businesses and entities need to plan for the scenario when their current site of activity is unworkable due to disaster damages. This can be done by having a secondary site that can be utilized for temporary business activity, also having the necessary funds set aside to attain a temporary site if necessary.

Export Substitution

Businesses and entities need a plan for the need of an alternative customer base, in the case where your goods are not relevant to be sold locally. This can be done through research of the surrounding areas to target a similar customer base that will meet an establishments production needs.

Technological Change

Businesses and entities need to plan for how they will stay in contact with their customers during a recovery process. This can be done nowadays through social media; having a social media site already established will allow for a better chance of contact with the consumers.

Delivery Logistics

Businesses and entities need to plan for secondary ways to deliver their goods and services to their customers in a post disaster scenario. This could be done by going door to door if applicable, relocated to a more accessible location for the population, or opening up multiple satellite locations that allow a wide area to have easy access to a business or entity's services.

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Dynamic Resilience Strategies

Removing Operating Impediments

Businesses and entities need to plan for debris removal and related complications, as well as streamlining paperwork for insurance claims. This can be accomplished by having a set aside budget for local cleanup crews to do immediate work, and having prior relations with local governmental agencies that will be filing the insurance claims necessary to continue a business or entity.

Management Effectiveness

Businesses and entities need a plan to insure that the correct mindset and skill level needed in a reconstruction process is shared amongst the managerial or decision makers of a business or entity. This can be done by assessing the individual's skills and abilities and making the necessary replacements to best promote the restoration and growth of the business or entity.

Speeding Restoration

Businesses and entities need to plan for alternative means of reconstruction labor, due to the high demand. This can be done with the use of incentive contracts to attain the local labor force over other businesses or entities, or having prior relations with reconstruction companies in the surrounding areas.

Business Insurance

Businesses and entities need to plan for the severe damages a disaster can inflict, both physically and economically. This can be accomplished through acquiring the needed building insurance for physical damages, and business interruption insurance that will provide the help needed, to a business or entity, for negative economic impacts in the aftermath of a disaster.

Regional Goals

Businesses will develop and maintain safety measures that train key employees, if not all, to build an understanding amongst the workforce of what needs to be done during and post event, as well as how the plan will be carried out. This will be done by promoting or mandating that employees attend local safety classes that are offered in the community's region. Examples include Community Emergency Response Team (CERT) or local small business workshops that are hosted by local government bodies. Businesses will have standard business insurance policies to cover loss or damage to tangible items. With a disaster scenario, a business is most likely to be affected in their profits margins from outside entities including power outages, the closing of an interstate or access to a business, and downed phone lines.

<u>Business interruption insurance</u> is an asset that businesses can use to mitigate the potential threats of profits lost due to situations brought on by a natural disaster. Here are some situations that are typically covered under a business interruption insurance policy:

<u>Profits</u>- Profits that would have been earned (based on prior months' financial statements)

<u>Fixed Costs</u>- Operating expenses and other costs still being incurred by the property (based on historical costs)

<u>Temporary Location</u>- Some policies cover the extra expenses for moving to, and operating from, a temporary location

<u>Extra Expenses</u>- Reimbursement for reasonable expenses (beyond the fixed costs) that allow the business to continue operation while the property is being repaired

<u>Civil Authority Ingress / Egress</u>- Governmentmandated closure of business premises that directly causes loss of revenue. Businesses will develop and maintain a strategy to continue communication between employees and customers during the recovery and rebuilding stage of the event.

Communication with employees will focus on the assurance of their continuing job with the business and what needs there are to get the business up and running better than pre-event. Communication with customers will focus on ensuring them that the business will be back in business, give a timeline, trying to maintain or increase your customer base through post-disaster situations.

Social media is the best possible mode of communication that a business can utilize to accomplish the tasks at hand in a post-disaster environment. Twitter, Facebook, and TextCaster are just a few social media sites that can be used by businesses to maintain their lines of communication whether it is with a customer base or the actual employees that make up the workforce for a business. Businesses will develop agreements of mutual aid from neighboring and like establishments to help in the recovery and rebuilding of the economic stature that was held prior to the disaster.

Mutual aid can be found through regional, county, and local help; from legal contracts with large companies and governmental entities to informal agreements amongst neighboring businesses. Mutual aid will build a strong self-sufficient local economy that will allow businesses to recover and grow in the aftermath of a natural or manmade disaster.

Businesses will have critical data backed up in a three tier format that will allow the company to recover and reopen in a post disaster scenario, because a business and their data can be affected in multiple instances. Whether it be a server crash, tornado, flood, fire, cyber-attack, power outage, whatever the case, having three different modes of data backup and encryption for a business will help to ensure their continuing place in our economy.

<u>Paper copies</u> of a business's critical information that is kept in a safe area inside the place of business in a container that is fire and flood proof is going to be a business's first plan of action to safely backup their data.

An external hard drive is a business's secondary plan of action to securely backup their critical information. If kept at a different secure location other than the place of business a hard drive allows a company to maintain all critical information if complete destruction of the physical building occurred as well as a server crash at the business. Encryption can be put on these devices to further secure information, they are also fairly reasonable in price when you are protecting the future of a company.

<u>Cloud services</u> have recently taken over as the best way to ensure that a copy of a company's most critical data will remain sheltered from any cataclysmic event that may befall a business. A business must do their research when deciding on a cloud storage provider, companies must look for a good track record in reliability, as well as the maturity of the provider, and always scramble data

with robust encryption prior to entrusting it to an external organization for safekeeping.

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