
Technical Advisory Committee

Monday, December 12, 2022

Regular Session

Item H1

Approval Recommendation of Draft Final Transit Development Plan

Staff Contact: Allan Zafft, MPO Program Manager

TAC Agenda Report
December 12, 2022

Agenda Item No. H1

ISSUE

VOTE: Draft Transit Development Plan

BACKGROUND

The City of Grand Island (GI) is leading the development of the GI Transit Development Plan (TDP) initiative, known as GO GI Transit, in coordination with GIAMPO. This study will help the City of Grand Island plan for the future of public transit in the Grand Island area. The TDP process began in October 2021 and is scheduled to be completed in February 2023.

The TDP process began first with data collection on Grand Island's transit system, CRANE, to evaluate the existing system and establish the baseline conditions for use in later portions of the TDP. The data collected was used to establish a variety of scenarios for potential future use. The scenarios were compared to the baseline scenario to evaluate their potential effectiveness. The final step in the TDP process was development of an implementation plan for the preferred scenario and a financial analysis of this scenario to capture both funded and unmet needs. Throughout the TDP planning process, three phases of public and stakeholder outreach were conducted to collect stakeholder and public feedback and guide the TDP vision. Each phase of engagement targeted different segments including existing riders, potential riders, and key area stakeholders.

In early December 2022, the consultant for GO GI Transit (HDR Inc.) completed a Draft Transit Development Plan. This document is a planning and development guidance document encompassing the years 2023 through 2045. The year 2045 is used to align the goals of this TDP with the goals and objectives presented in the GIAMPO 2045 Long Range Transportation Plan (LRTP). The TDP addresses transit and mobility needs, cost and revenue projections, community transit goals and objectives, and potential future scenarios. The plan develops 10-year and 20-year elements that fall within that 2045-time horizon.

The Draft Transit Development Plan is enclosed in the December 12 Technical Advisory Committee meeting packet.

POLICY CONSIDERATIONS/DISCUSSION

The GIAMPO Public Participation Plan specifies that other reports/documents will have a public comment period of least 15 days prior to approval by the Policy Board. The Draft Transit Development Plan will be made available for a 30-day public comment period.

After GIAMPO has approved the Transit Development Plan, the 2045 Long Range Transportation Plan may need to be amended to reflect the TDP recommendations.

BUDGET CONSIDERATIONS

None.

COMMITTEE ACTION

None.

RECOMMENDATION

Approve Draft Transit Development Plan and release this document for public review and comment.

STAFF CONTACT

Allan Zafft



2045

Transit Development Plan

GO Grand Island Transit
Draft Final Report
December 2022



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Chapter 1 – Introduction

The Transit Development Plan (TDP) is a planning and development guidance document encompassing the years 2023 through 2045. The year 2045 is used to align the goals of this TDP with the goals and objectives presented in the Grand Island Area Metropolitan Planning Organization (GIAMPO) 2045 Long Range Transportation Plan (LRTP). The TDP addresses transit and mobility needs, cost and revenue projections, community transit goals and objectives, and potential future scenarios. The plan will develop 10-year and 20-year elements that fall within that 2045-time horizon. The TDP will be adopted by the City of Grand Island.

Grand Island GO Transit

The City of Grand Island (GI) is leading the development of the GI TDP initiative, known as GO GI Transit. The GO GI Transit initiative launched in October 2021 and was completed in early 2023.

Data was first collected on Grand Island's transit system, CRANE, to evaluate the existing system and establish the baseline conditions for use in later portions of the TDP. The data collected was used to establish a variety of scenarios for potential future use. The scenarios were compared to the baseline scenario to evaluate their potential effectiveness. The final step in the TDP process was development of an implementation plan for the preferred scenario and a financial analysis of this scenario to capture both funded and unmet needs. Throughout the TDP planning process, three phases of public and stakeholder outreach were conducted to collect stakeholder and public feedback and guide the TDP vision. Each phase of engagement targeted different segments including existing riders, potential riders, and key area stakeholders.

Public transit is crucial to the future of our community. A transit system is important for the community because thousands of individuals use CRANE every year to get to and from work, school, health care appointments, and more. This improves overall quality of life and leads to a stronger, more vibrant community for all.

GO GI Transit Webpage

Background and History

In 2013, the City of Grand Island became a provider of transit services for the Urbanized Area of Grand Island, allowing the service to receive urban transportation funds (Federal Transit Administration Section 5307 funding). Prior to 2013, public transportation was administered by Hall County.

A rebranding of the Hall County Public Transportation service was completed in February of 2019 when the service was renamed Central Ride Agency of Nebraska (CRANE) in an effort to promote transit service improvements. The name change was initiated as part of the 2017 needs analysis conducted through coordinated efforts between the City, Hall County and the Grand Island Area Metropolitan Planning Organization (GIAMPO). Today, CRANE provides demand-response service within the Grand Island city limits and to other areas of Hall County, including Alda, Wood River, Cairo, and Doniphan.

Report Organization

The TDP final report is organized into nine chapters. A brief description of these chapters can be found in **Table 1**.

Table 1: Report Organization

CHAPTER 1 | INTRODUCTION

- Introduction provides background on the TDP process and brief history on CRANE service.

CHAPTER 2 | BASELINE CONDITIONS

- Baseline Conditions discusses local physical, economic, and demographic conditions related to CRANE's existing transit service.

CHAPTER 3 | EXISTING TRANSIT SERVICE

- Existing Transit Service includes the span of service, service description, and an assessment of current performance of the system.

CHAPTER 4 | PEER REVIEW

- Peer Review provides a comparison of CRANE with peer transit agencies.

CHAPTER 5 | SITUATIONAL APPRAISAL

- Situational Appraisal reviews the existing Federal, state, and local policies, procedures, and studies relevant to the Transit Development Plan.

CHAPTER 6 | GOALS AND OBJECTIVES

- Goals and Objectives presents the community vision that was identified and vetted by CRANE partners and the general public.

CHAPTER 7 | PUBLIC INVOLVEMENT

- Public Involvement provides a summary of the public engagement activities and results and summarizes public outreach events and surveys conducted.

CHAPTER 8 | SCENARIO EVALUATION

- Scenario Evaluation describes the process used to conduct a thorough and objective evaluation of the range of alternatives, and a comparison of each scenario's performance relative to the baseline scenario.

CHAPTER 9 | FINANCIAL AND IMPLEMENTATION PLAN

- Financial and Implementation Plan discusses historic revenue trends and the process used to forecast future revenues which forms the basis of the implementation plan that provides guidance for implementing future transit improvements.

Chapter 2 – Baseline Conditions

This chapter of the TDP, outlines the physical, economic, and demographic setting in which CRANE is currently operating. The Baseline Conditions provide context for the assessment of existing services and sets the groundwork for the scenarios presented in later chapters of this report. These baseline conditions, serve as a starting point for gauging the potential effectiveness of these scenarios.

Study Area

The City of Grand Island is in central Nebraska, accessible to Interstate 80, US Highways 281, 30, and 34, and Nebraska Highway 2, as well as the Central Nebraska Regional Airport. Access to these major highways has allowed Grand Island to become a hub for Central Nebraska. The area offers extensive commercial, entertainment, and recreational spaces for residents and provides critical services, such as health and other medical services, to the 30-plus rural communities within a 90-mile surrounding area.

For this TDP, the study area includes the City of Grand Island boundaries to align with the CRANE service area for urban service. The Urbanized Area, based on the 2010 Census, and the City Boundaries are presented in **Figure 1**.

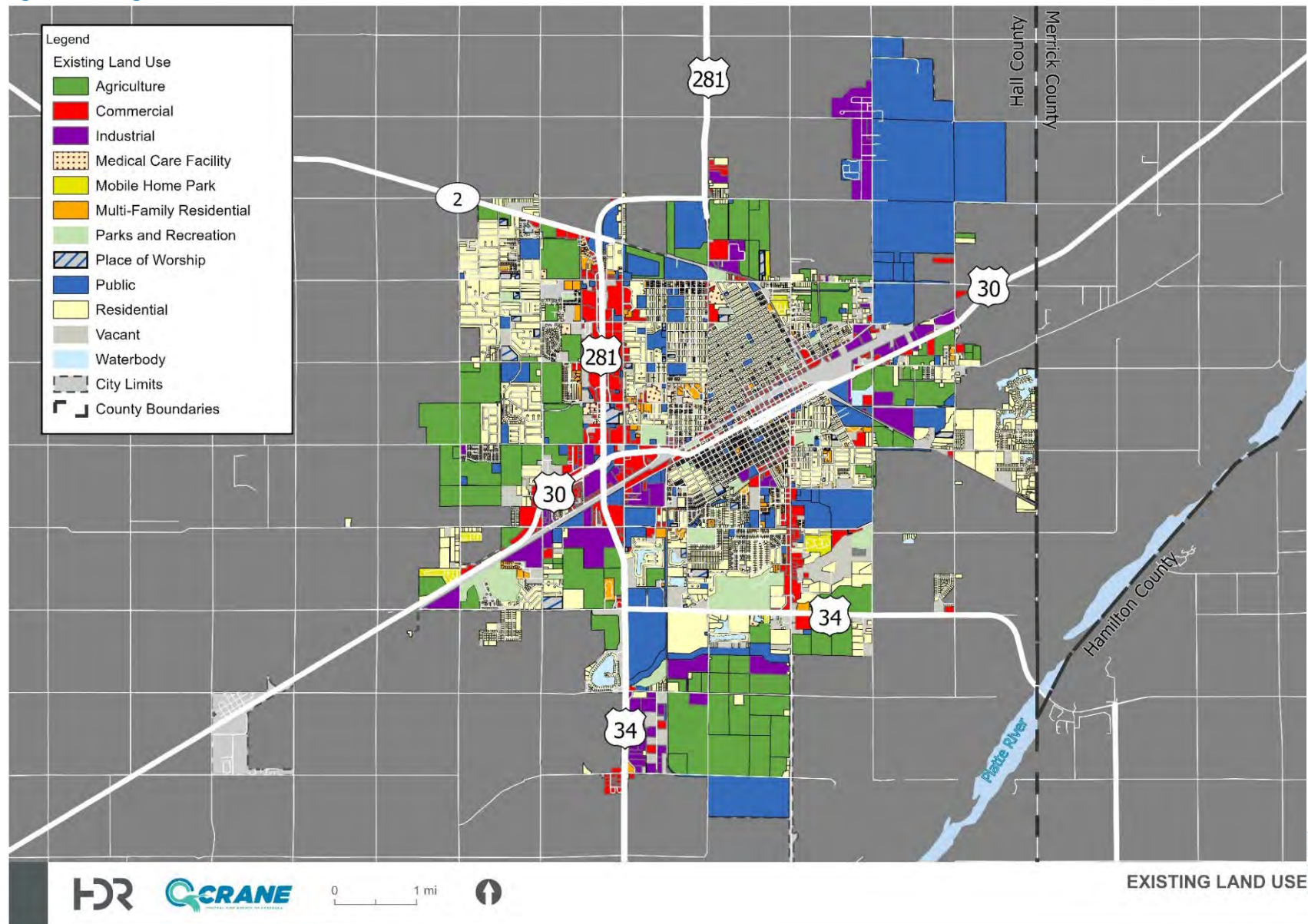
Existing and Future Land Use

Analysis of current land uses and trends in public transportation indicate that the two are interconnected and should be considered in the development of future transportation networks. The greater the density of compatible land uses, the greater the propensity of non-auto modes like transit, walking, and biking. An adequate mix of residential, retail, mixed-use, commercial/office, and recreational land uses, creates a synergy of places where people originate from and go to.

Figure 2 shows the existing land uses (ELUs) in the study area. A large portion of land is public or agricultural. The Grand Island Central Regional Airport is located on over 1,800 acres of public land in the northeast portion of the service area. Agricultural uses are also prominent in Grand Island. Commercial land use is highly concentrated along Highway 281 and along south Locust Street.

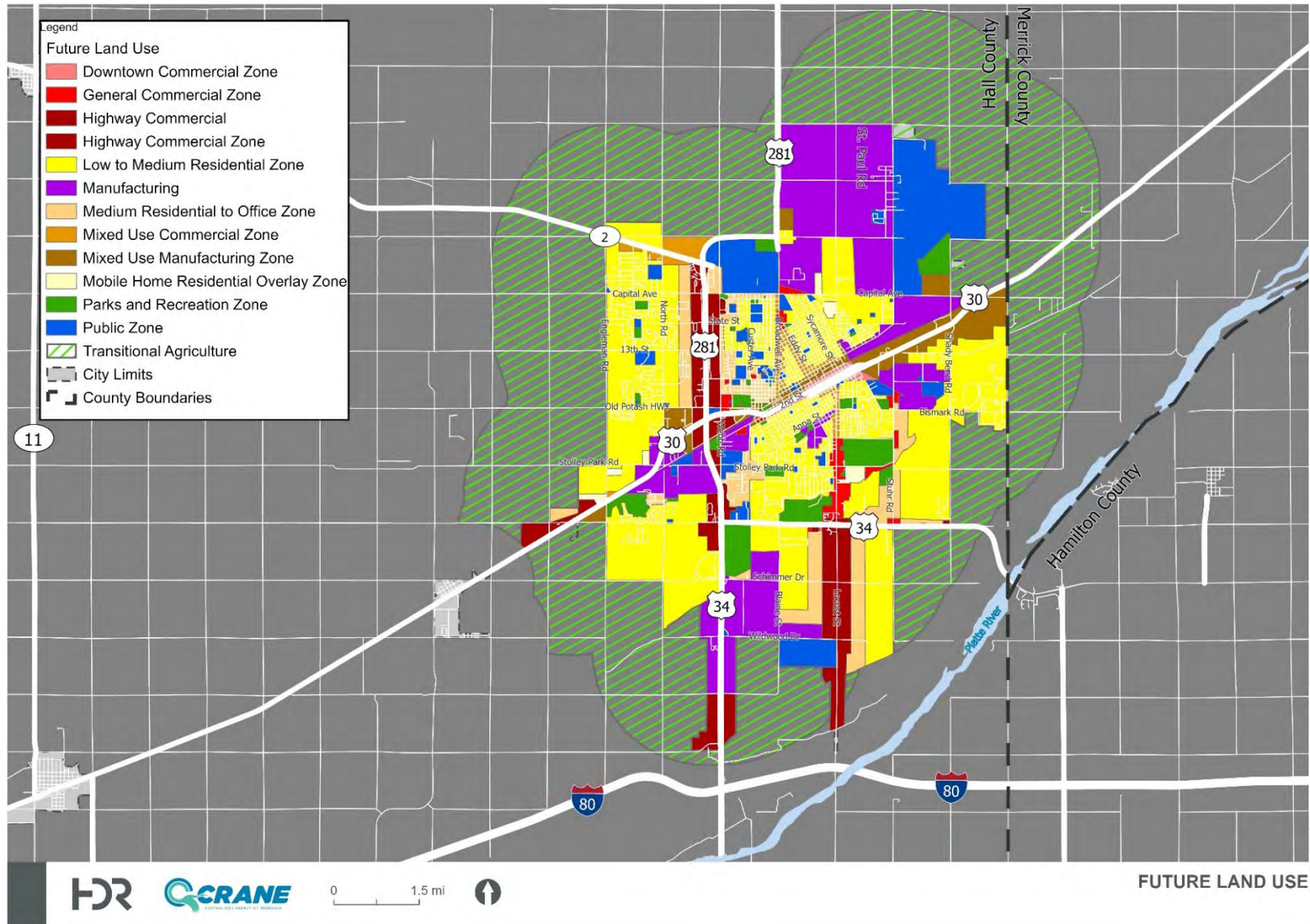
Figure 3 presents the future land uses (FLUs) for the study area. The FLUs building on existing uses, with the land uses being predominantly agricultural and recreational/public with clusters of commercial and residential. However, the future land use does indicate increased residential, commercial, and manufacturing areas throughout Grand Island. This indicates an anticipation in population and job growth as new businesses move into the area while inducing the construction of dwelling units.

Figure 2: Existing Land Use



Source: City of Grand Island

Figure 3: Future Land Use



Source: City of Grand Island

GO GI Transit

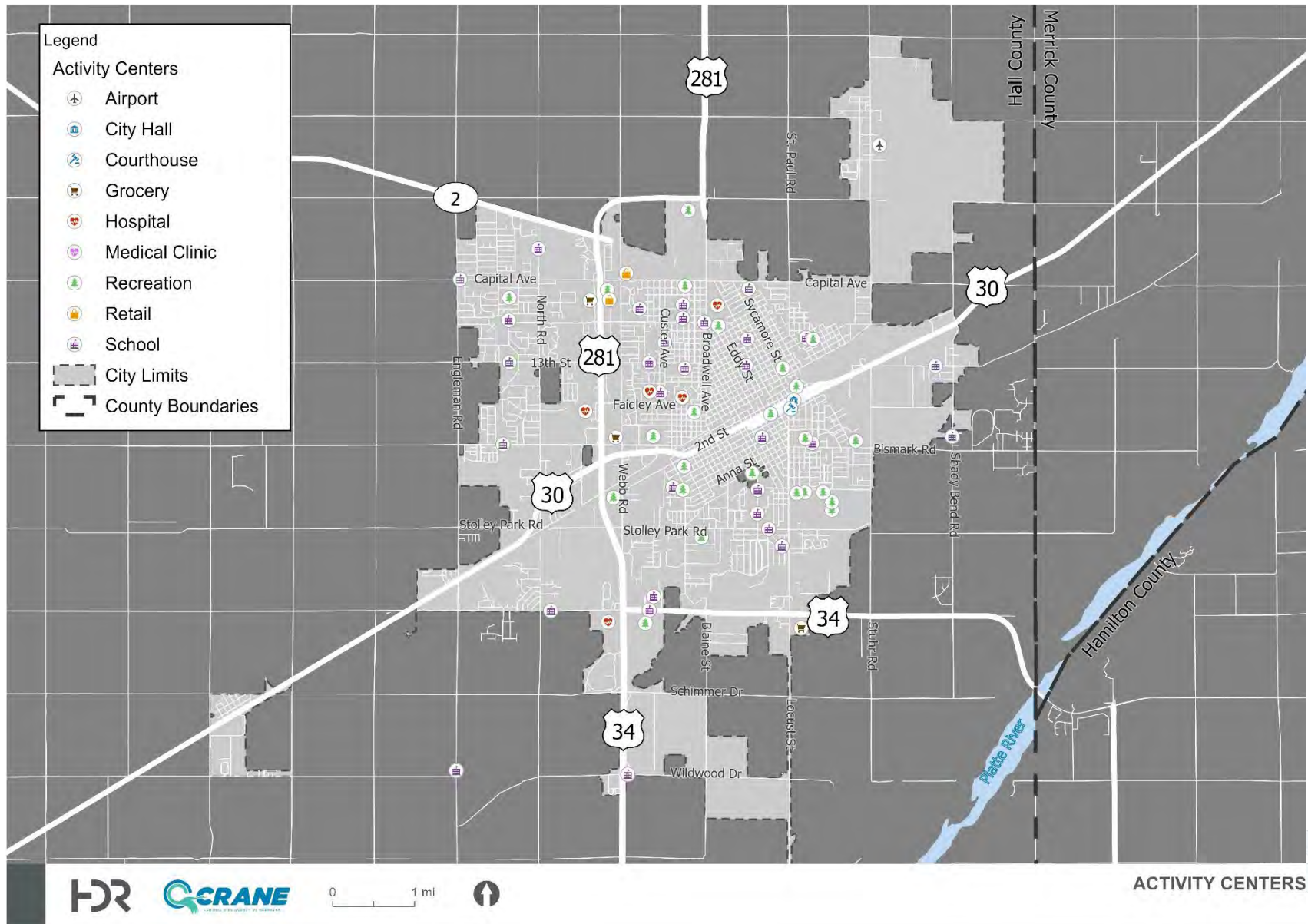
Major Activity Centers

Major travel attractors and generators in Grand Island include activity centers that act as common origins and destinations for transportation and transit trips. In addition to work places and residences, Activity centers are some of the highest transit trip generators in Grand Island. These include medical centers, recreation, shopping, or government facilities. **Table 2** presents examples of each of these major Activity Centers by type within the City of Grand Island. The location of these and other activity centers within the City Limits are presented in **Figure 4**. As seen in the figure, these activity centers are distributed throughout the city limits, but many are clustered in central and southeastern Grand Island.

Table 2: Example Major Activity Centers

| Activity Center Type | Activity Centers |
|---------------------------------|--|
| Airport | <ul style="list-style-type: none"> Central Nebraska Regional Airport |
| Government Facilities | <ul style="list-style-type: none"> Hall County Courthouse City Hall |
| Recreation | <ul style="list-style-type: none"> Island Oasis Water Park Fonner Park Stuhr Museum Ryder Park Eagle Scout Park George Park Lions Park Stolley Park Pier Park Hall County Park |
| Medical Centers/Hospital | <ul style="list-style-type: none"> VA Nebraska Hospital St. Francis Medical Center St. Francis Memorial Health Center Grand Island Surgery Center Grand Island Regional Medical Center |
| Grocery | <ul style="list-style-type: none"> Sam's Club Walmart Supercenter Hy-Vee Grocery Super Saver |
| Retail | <ul style="list-style-type: none"> Conestoga Mall Northwest Commons Downtown Grand Island |
| Education | <ul style="list-style-type: none"> Career Pathways Institute Central Community College Grand Island Public Schools |

Figure 4: Activity Centers



Source: City of Grand Island

Affordable Housing

Affordable housing allows for families to incur a reasonable cost of living while still having money left over for other activities. The U.S. Department of Housing and Urban Development defines housing as affordable when it consumes no more than 30 percent of a household's income. For this analysis, affordable housing refers to housing units that are affordable by those populations whose income is below the median household income. When considering the transportation network and future connections, populations below the median household income and who reside in low-income neighborhoods are more likely to need public transportation than those who do not.

Figure 5 presents the affordable housing locations for the service area, which were identified through interviews with city staff during the development of the 2045 LRTP. The service area has four subdivisions meeting this criterion. The Orchard, Lassonde, and Fifth St. subdivisions are in the Northeast region of Grand Island near the airport while Copper Creek is an affordable housing subdivision located on the western portion of the city. While not necessarily open to the public, the Veterans Home Liberty Campus also offers affordable housing through the Veterans Legacy Program.

Hall County Housing Authority

[Hall County Housing Authority](#) (HCHA) manages and operates federally subsidized public housing programs. HCHA currently manages 394 one-, two-, and three-bedroom apartments and site homes throughout the County; rent is generally based upon 30 percent of the family's adjusted income (restrictions apply).¹

Liberty Campus

Liberty Campus, which is the site of the former Grand Island Veterans Home that relocated to Kearney, Nebraska in 2018, is currently being redeveloped to serve as senior and low-income housing, as well as rental properties. Plans for the site's redevelopment also include space for office, commercial, educational, and medical uses.²

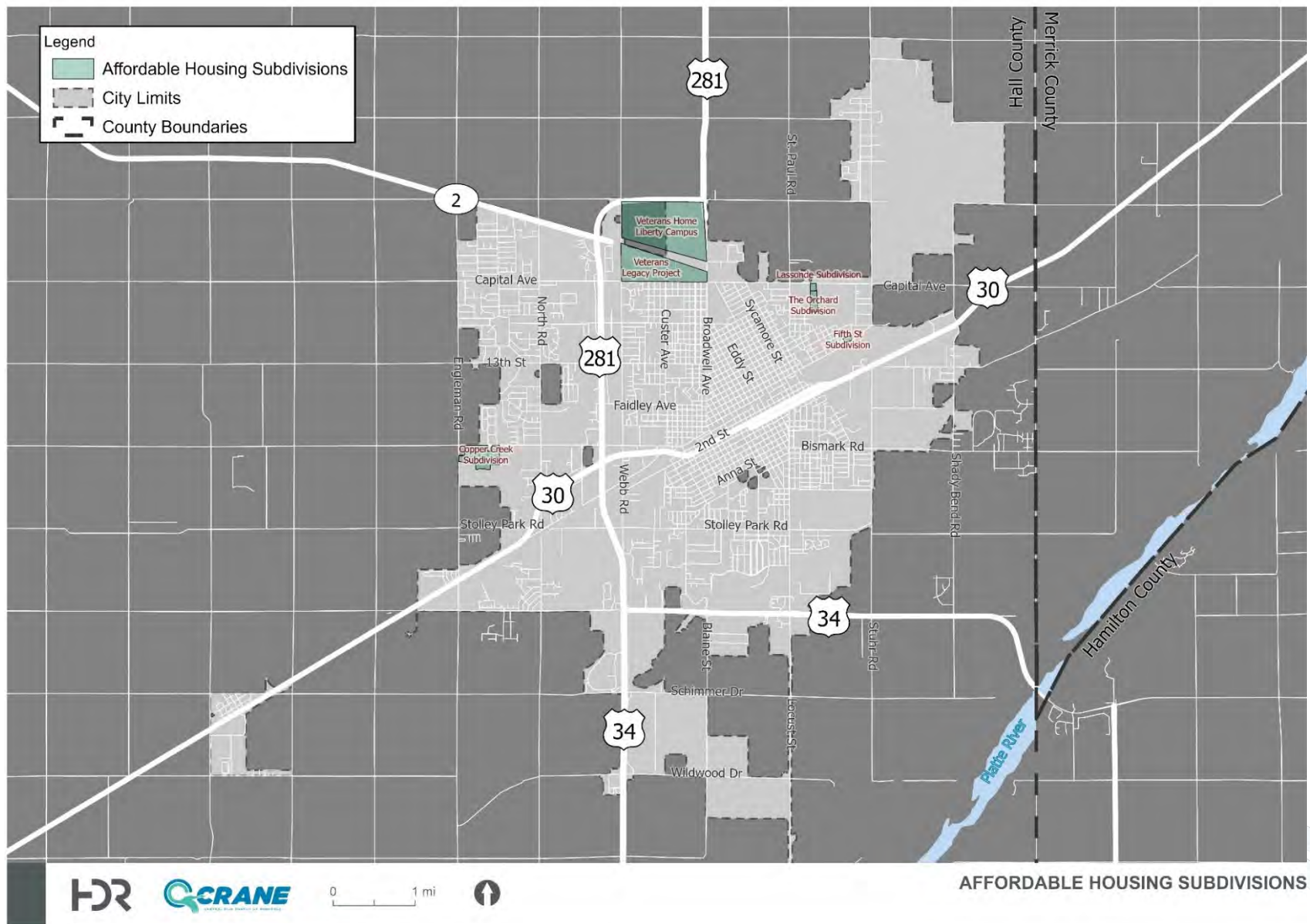


Source: KHGI

¹ Hall County Housing Authority, [About](#)

² Help Foundation of Omaha, [Grand Island Liberty Campus](#)

Figure 5: Affordable Housing Subdivisions



Source: City of Grand Island

Population and Employment Growth

Population and employment densities are an important indicator of potential transit demand. High density neighborhoods are often characterized by multi-family housing or single-family housing on small lots with less parking and smaller setbacks than lower density neighborhoods. This combination of walkable design and a mix of land uses contribute to a greater viability for people choosing to bike, walk, or use transit in these higher density areas. In addition, higher density areas will have more people living within walking distance of a given transit stop than in lower density areas, thereby increasing the potential demand for public transit.

Population Profile

The Hall County and City of Grand Island populations have shown steady growth since 1990. Based on historic population data gathered from the United States Census, the estimated population growth was held constant at an annual growth rate of approximately 0.73% for Hall County and an approximate annual growth rate of 0.84% for the City of Grand Island. According to 2019 American Community Survey (ACS) 5-Year Estimates, the population of the City of Grand Island was 51,147. This base year population was used in combination with Census data and Woods and Poole projections for Hall County to anticipate future growth. **Table 3** presents the projections for horizon year 2045.

Table 3: Population Projects for Grand Island and Hall County

| Area | Population Estimate | | Percent Change |
|--------------|---------------------|--------|----------------|
| | 2020 | 2045 | 2020- 2045 |
| Grand Island | 51,576 | 63,561 | 23% |
| Hall County | 61,709 | 73,923 | 20% |

Source: United States Census, Grand Island Area MPO 2045 LRTP, Woods & Poole Economics

Figure 6 presents the existing population density by block group while **Figure 7** shows the forecasted population density, also by block group, for the year 2045 based on the growth rate used in the 2045 LRTP; in addition to the growth rates, forecasted growth was allocated to the block groups identified as growth areas in the 2045 LRTP.

In addition to the continued growth on the fringes of the city identified in the LRTP, an increase in population density is anticipated immediately north of downtown. One contributing factor for population growth in this area is the community development initiative to revitalize areas around 4th and 5th Street. Community Development Block Grant (CDBG) funding was used to improve sidewalks, curbs, and support ADA accessibility³. CDBG funding was also used to renovate Lion's Club Park.

³ City of Grand Island, [June 24, 2014, City Council Session](#)

Figure 6: Existing Population Density

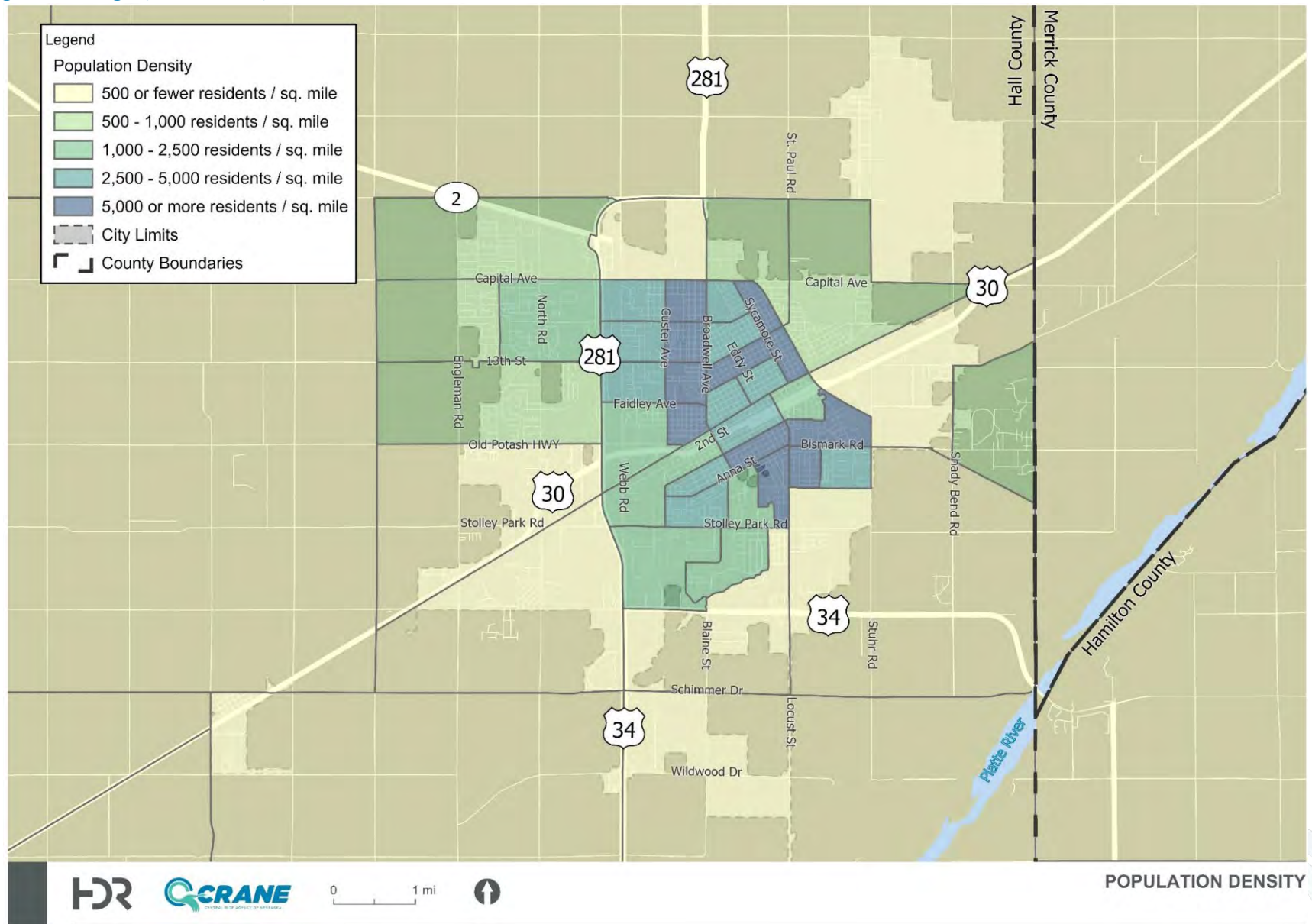
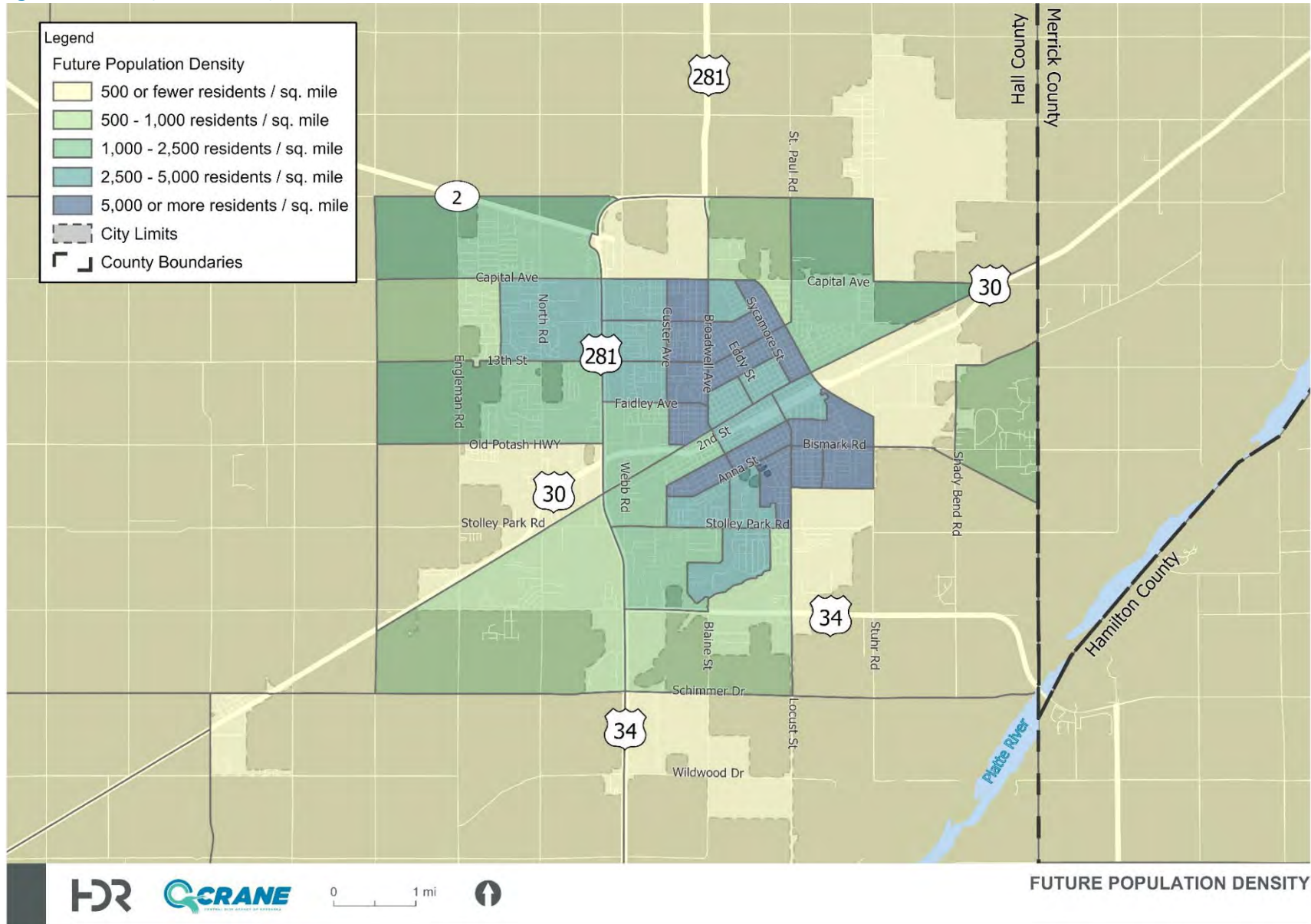


Figure 7: Future Population Density



Source: ACS 2019 5-year Estimates, Grand Island Area MPO 2045 LRTP

Employment Profile

The most common trip type for transit users is their commute to work. This trip is especially important for those transit dependent populations with no other means of completing their commute. Areas with major employers and high employment densities contribute to higher transit usage, especially in densely populated block groups. The existence of major employment centers is an indicator of potential transit demand due to the high number of trips destined for work. These areas tend to have more traffic congestion, which could incentivize public transit use to get to and from work.

The economy of Grand Island, NE employs 26,000 people with the largest industries in Grand Island being Manufacturing, Health Care & Social Assistance, and Retail Trade. The top employers in Grand Island are summarized in **Table 4** and can be found in **Figure 8**. JBS, a food processing plant, is the largest employer in the service area⁴.

Table 4: Major Employers in Grand Island

| ID | Employer | Population |
|----|---------------------------------------|------------|
| 1 | JBS | 3,400 |
| 2 | Grand Island Public Schools | 1,500 |
| 3 | CHI Health St. Francis | 1,300 |
| 4 | Hornady Manufacturing | 751 |
| 5 | CHN Industrial America (GI locations) | 687 |
| 6 | Walmart (GI locations) | 662 |
| 7 | Chief Industries (GI locations) | 650 |
| 8 | McCain Foods (GI locations) | 550 |
| 9 | City of Grand Island | 535 |

Source: Grand Island Area Economic Development Corporation

According to the U.S. Bureau of Labor Statistics, the unemployment rate of the City of Grand Island Nebraska was approximately 3.4% in 2019, which was slightly higher than the statewide unemployment rate of 2.9% for the same year.

Table 5: Employment Projections for Grand Island and Hall County

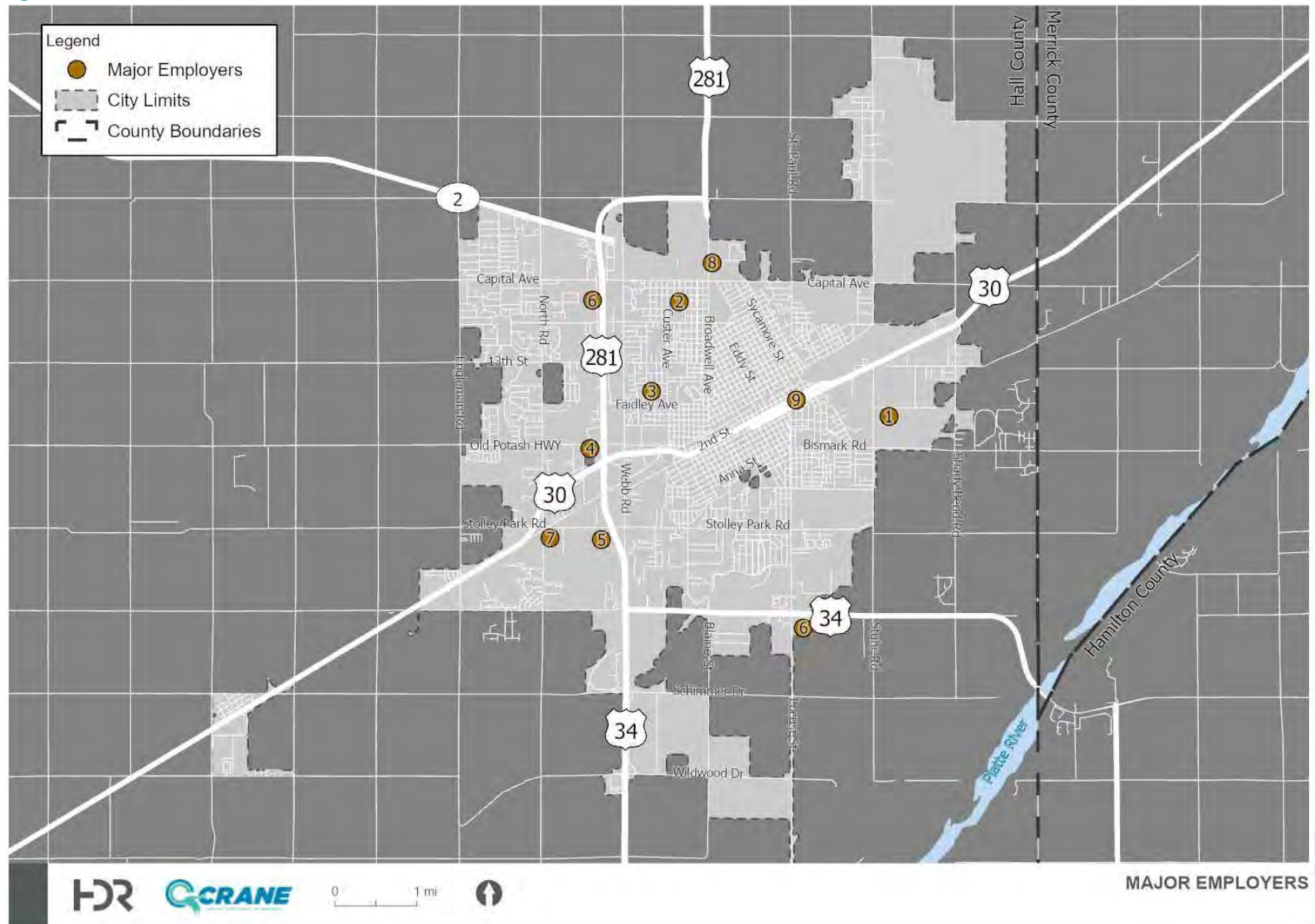
| Area | Employment Estimate | | Percent Change |
|--------------|---------------------|--------|----------------|
| | 2020 | 2045 | 2020- 2045 |
| Grand Island | 33,443 | 41,590 | 24% |
| Hall County | 45,702 | 55,776 | 22% |

Source: United States Census, Grand Island Area MPO 2045 LRTP, Woods & Poole Economics

Figure 9 presents the existing employment density with **Figure 10** presenting the forecasted employment density for the year 2045. Most of the job growth is concentrated at the retail-heavy businesses along the Highway 281 corridor, the retail located downtown, and industrial concentrations at the intersection of Highway 30 and Highway 281, as well as east of the city. Similar to forecasted population density, employment growth was allocated based on growth areas identified in the 2045 LRTP.

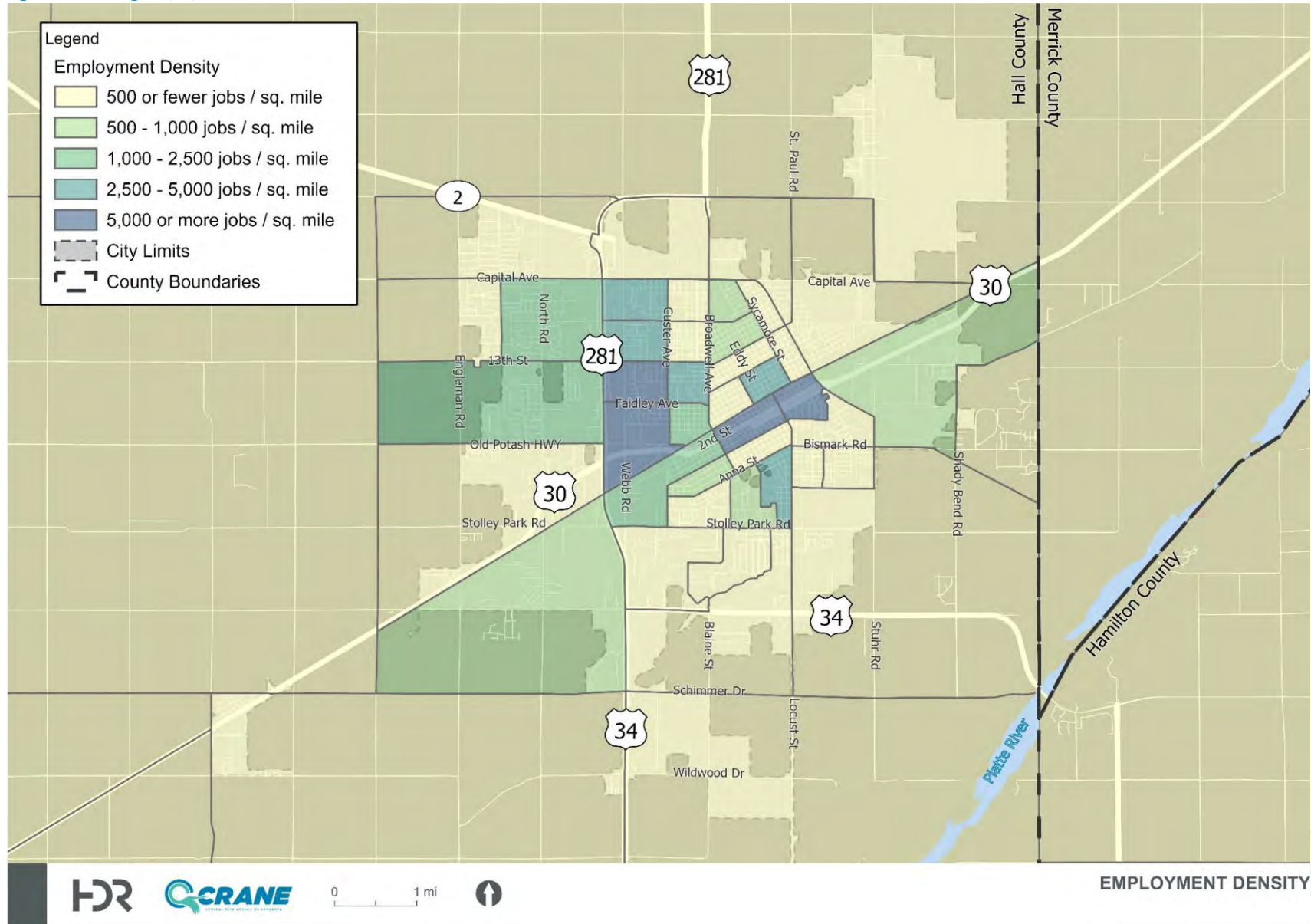
⁴ <https://www.grandisland.org/relocate-expand/workforce/top-employers.html>

Figure 8: Major Employers



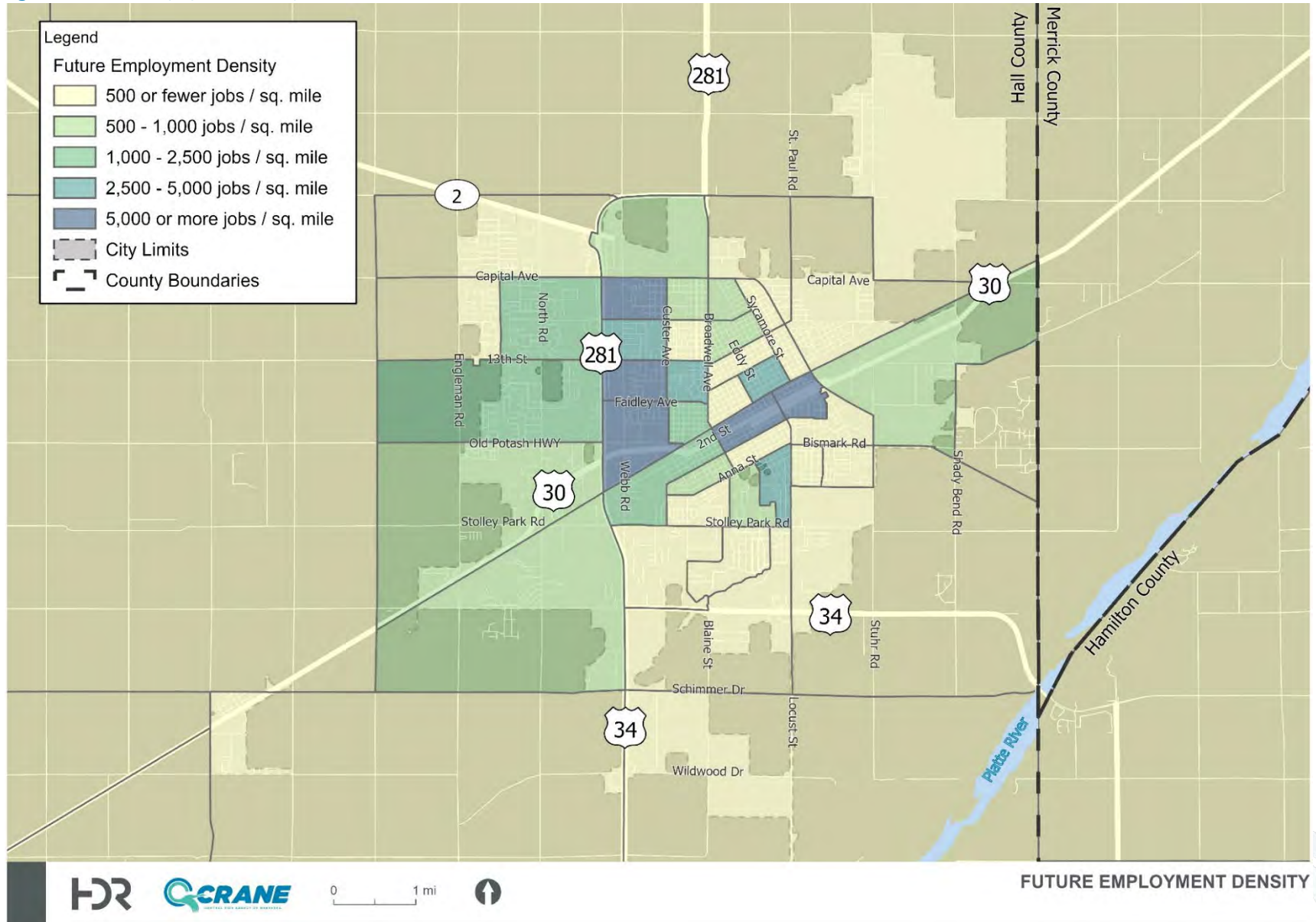
Source: Grand Island Area Economic Development Corporation

Figure 9: Existing Employment Density



Source: Woods and Poole Economics, Inc.

Figure 10: Future Employment Density



Source: Woods and Poole Economics, Inc.

Travel and Mobility Characteristics

To identify areas where service is needed, it is important to determine traffic patterns and what users need from public transportation to consider it a realistic option.

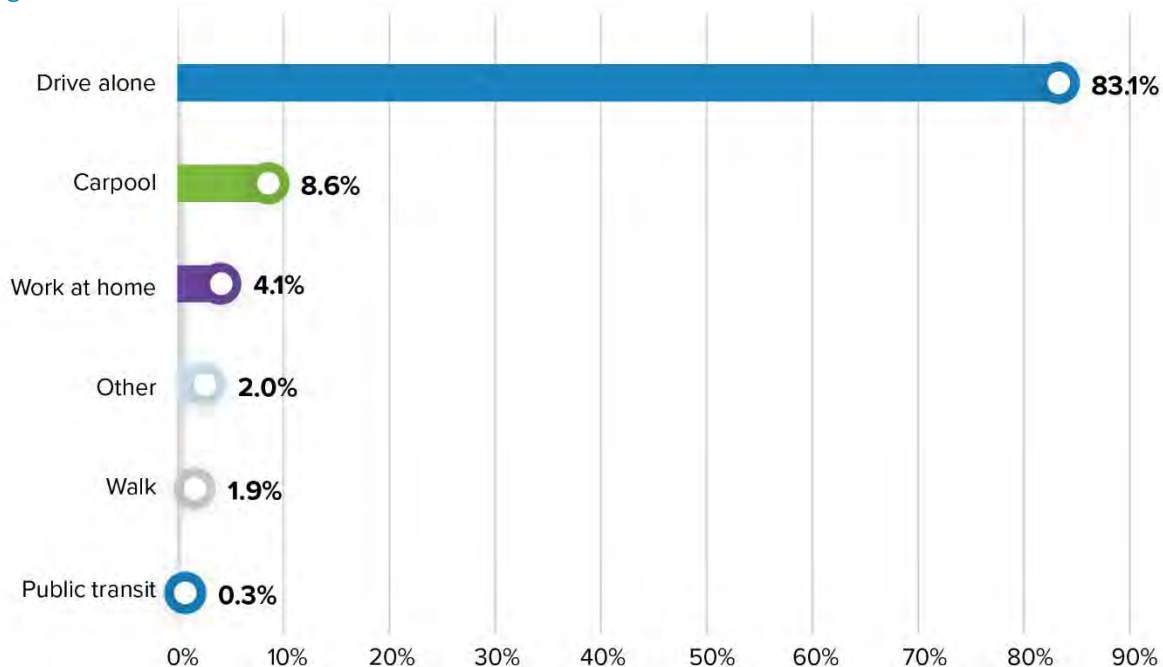
Journey-to-Work Characteristics

Understanding how and when workers travel to their workplace and utilize transportation amenities and infrastructure can help inform decisions about transportation and mobility needs for the region.

Figure 11 through **Figure 13** summarize journey-to-work characteristics for Grand Island workers.

The average commute to work time is 17.4 minutes. As shown in **Figure 11**, most Grand Island residents drive alone to work in a private vehicle (83.1%), with carpooling being the next largest share of commutes (8.6%). Walking (1.9%) and public transit (0.3%) are the least used mode for commutes in Grand Island.

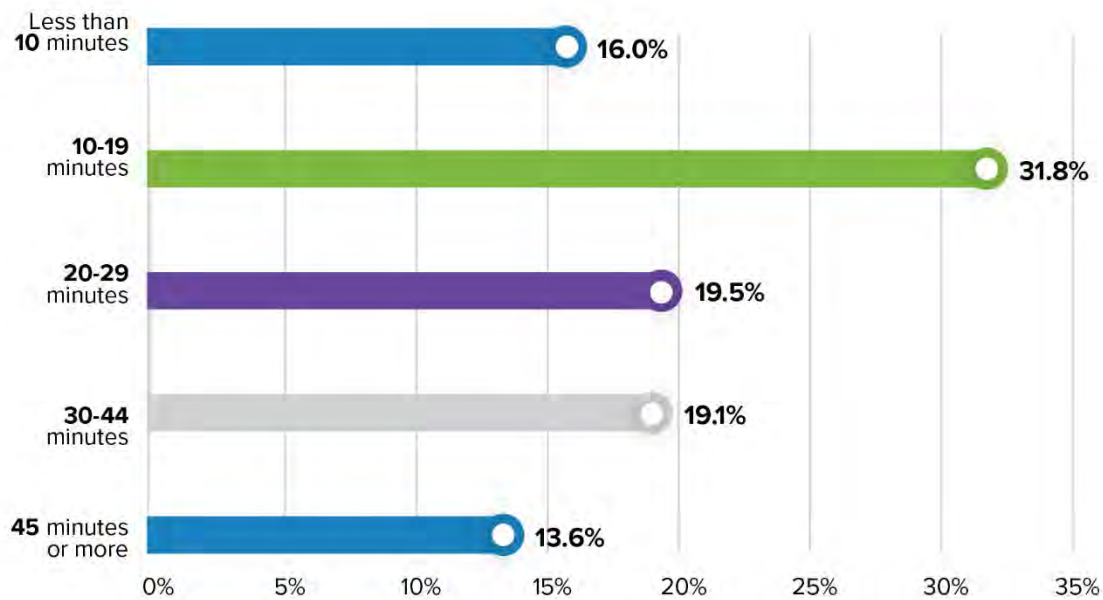
Figure 11: Commute Mode Share for Grand Island Workers



Source: ACS 2019 5-year Estimates

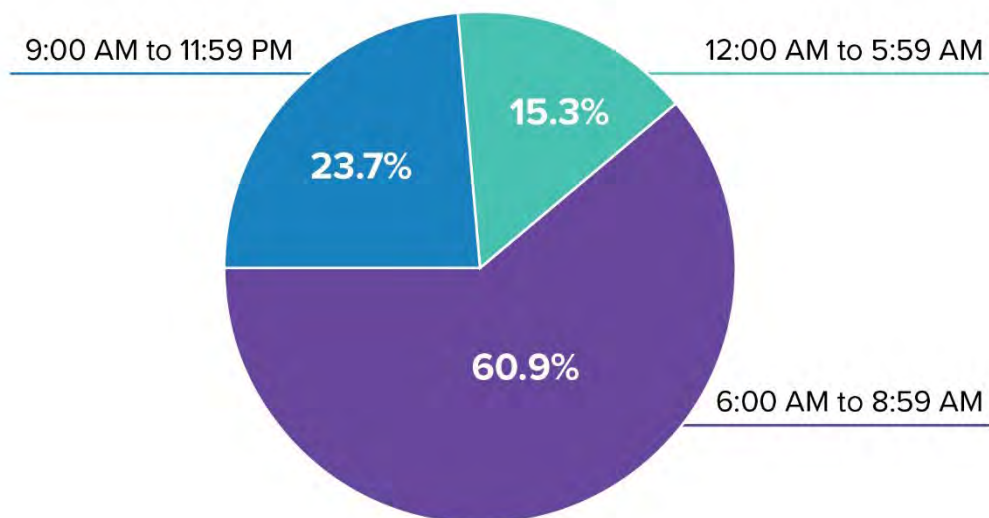
Nearly half of Grand Island's workers have a daily commute of 20 minutes or less while roughly 70 percent of workers have a daily commute of 30 minutes or less, as seen in **Figure 12**. Based on ACS data for the year 2019, approximately 60 percent of Grand Island's workers begin their commute trip between 6 AM and 8 AM while nearly 25 percent of commuters leave for work between 9 AM and 12 PM. **Figure 13** summarizes this breakdown of departure times for Grand Island workers.

Figure 12: Length of Commute for Grand Island Workers



Source: ACS 2019 5-year Estimates

Figure 13: Time of Commute Departure for Grand Island Workers



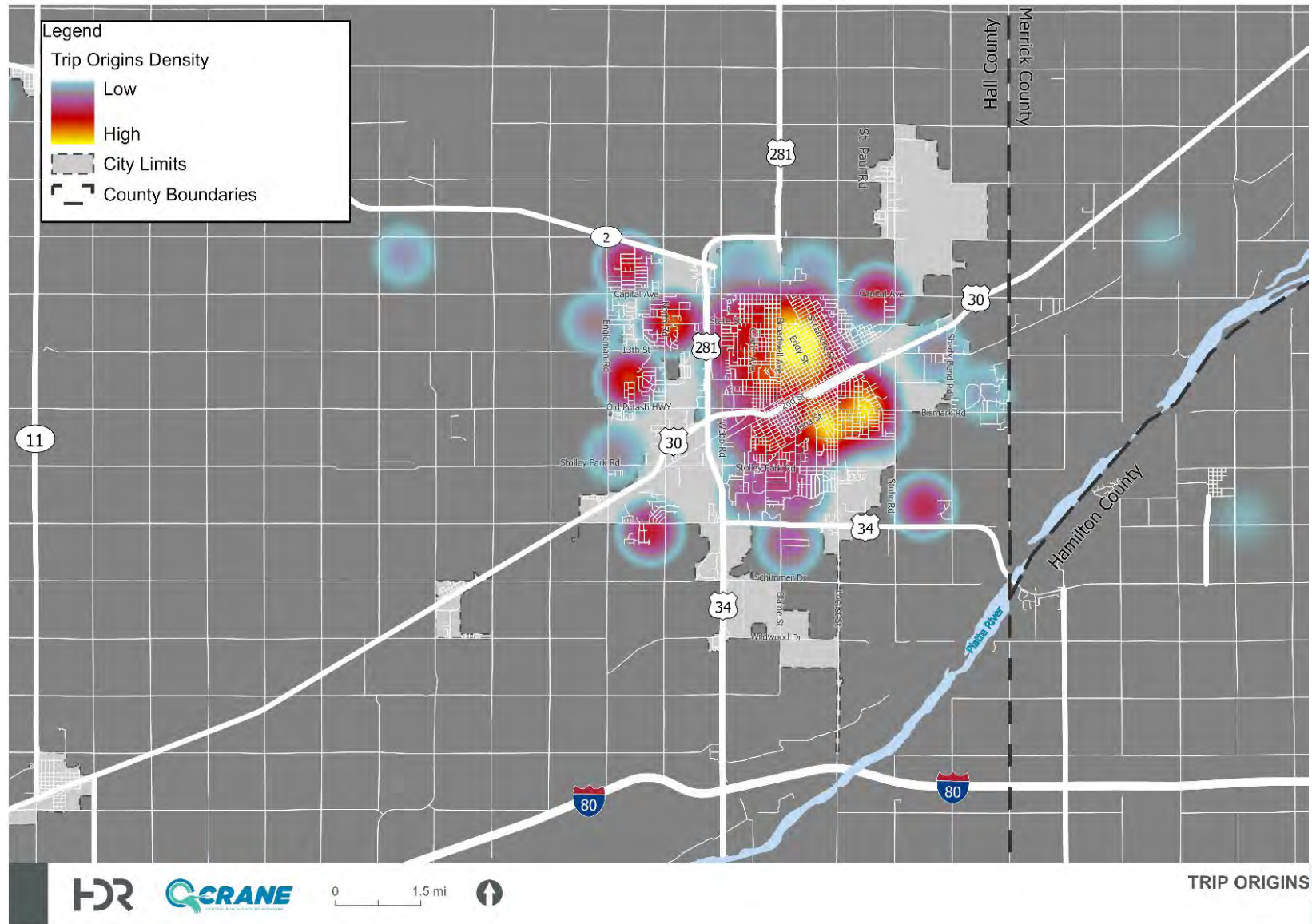
Source: ACS 2019 5-year Estimates

Origin/Destination

Origin-Destination (OD) data provides insight into travel patterns by highlighting where people begin their trips and where they end their trips. OD data is used to identify potential destinations that attract high numbers of trips, as well as potential locations where higher numbers of trips begin. Based on the pairings of these origins and destinations associated with higher travel demand, strategies that improve mobility and accessibility to these locations can be identified.

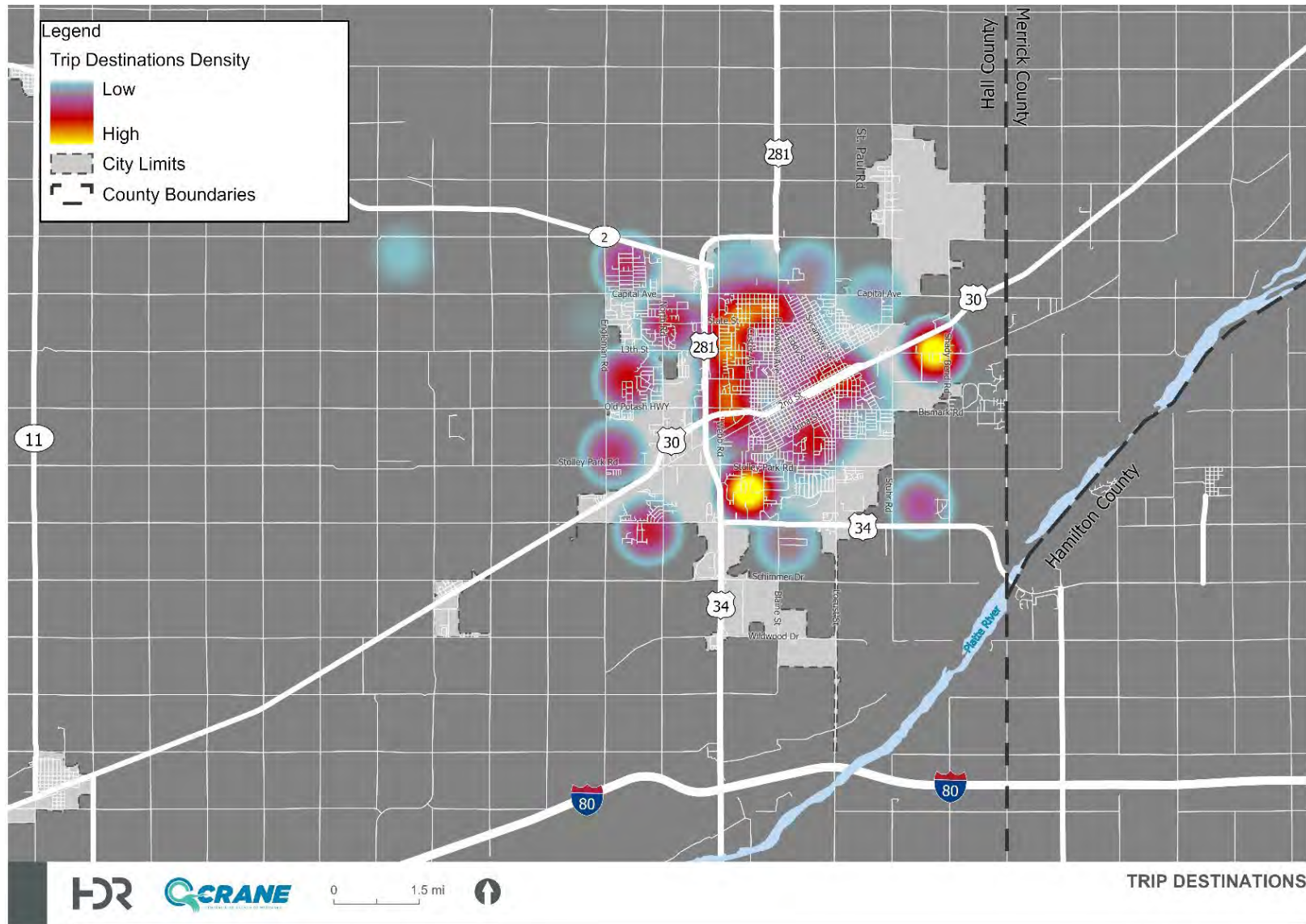
Replica is a big data platform that provides OD data used to determine travel patterns in an area of interest. **Figure 14** presents a heatmap of the trip origin for all trips within the city limits, showing that many trips originate in the highly residential areas in the east side of the city. **Figure 15** presents a heatmap of the destinations for all trips, indicating high trip densities around Hiland Dairy Foods company, Central Community College, and the retail areas downtown.

Figure 14: Trip Origins Density



Source: Replica, 2020-2021

Figure 15: Trip Destinations Density



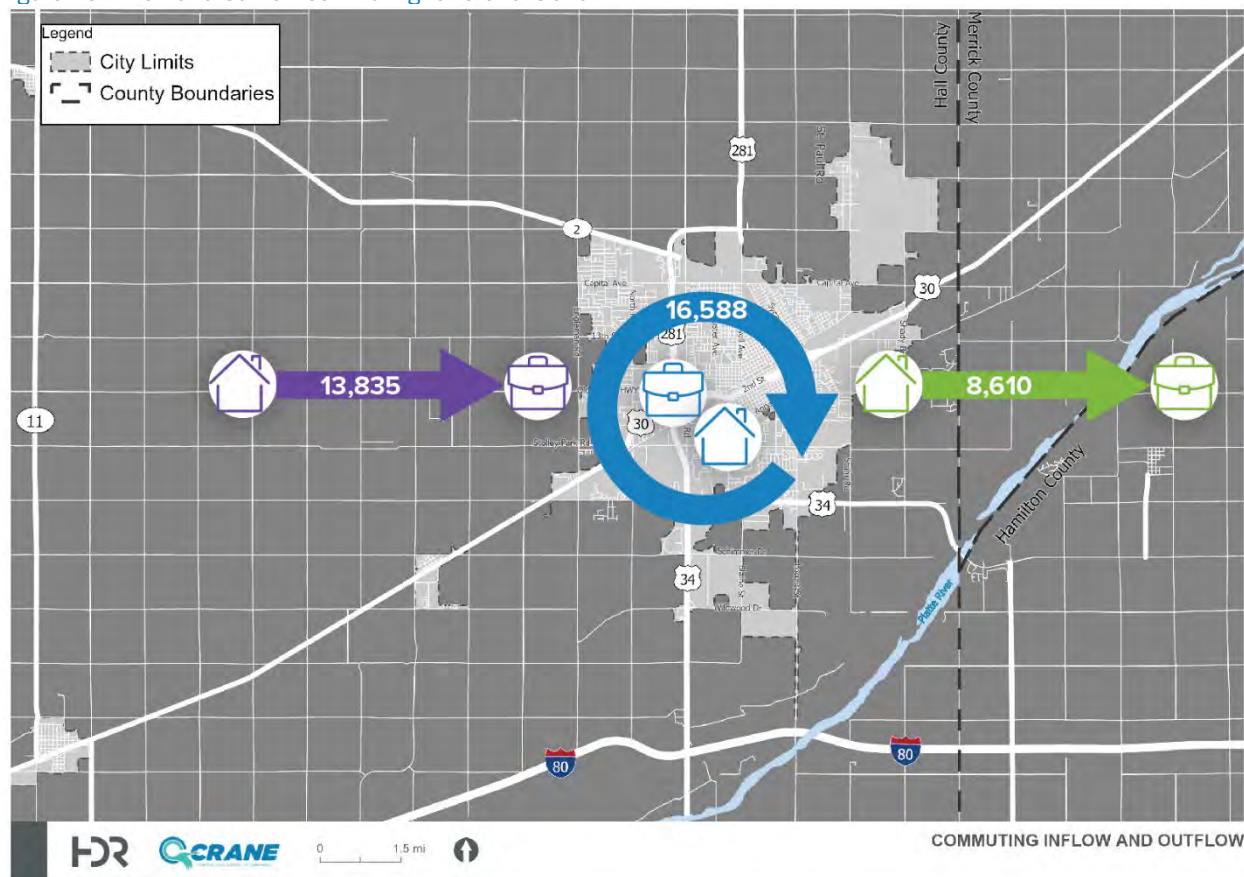
Source: Replica, 2020-2021

On The Map Analysis

To understand the commuting travel patterns within the study area, an assessment using On-The-Map was conducted. On-The-Map was developed through a partnership between the United States Census Bureau and all 50 states through the Longitudinal Employer-Household Dynamics (LEHD) program. The LEHD program combines employment data from payroll tax information maintained by states and data from censuses and surveys. From this data, the program creates statistics on employment and job flows at detailed levels of geography and industry and for different demographic groups.

Figure 16 presents worker flow dynamics for Grand Island in year 2019 symbolized by arrows. Over 16,000 workers live and work in Grand Island, as represented by the circular arrow. Over 13,000 workers are employed in Grand Island but live outside the County, while about 8,000 workers are employed outside of the city but reside in Grand Island.

Figure 16: Inflow and Outflow Commuting for Grand Island



Source: U.S. Census Bureau LEHD Program

Area Demographics

It is important to understand the make-up and demographics of the community that transit intends to serve. This includes understanding the makeup and location of underserved populations, minorities, elderly and younger groups, and income levels.

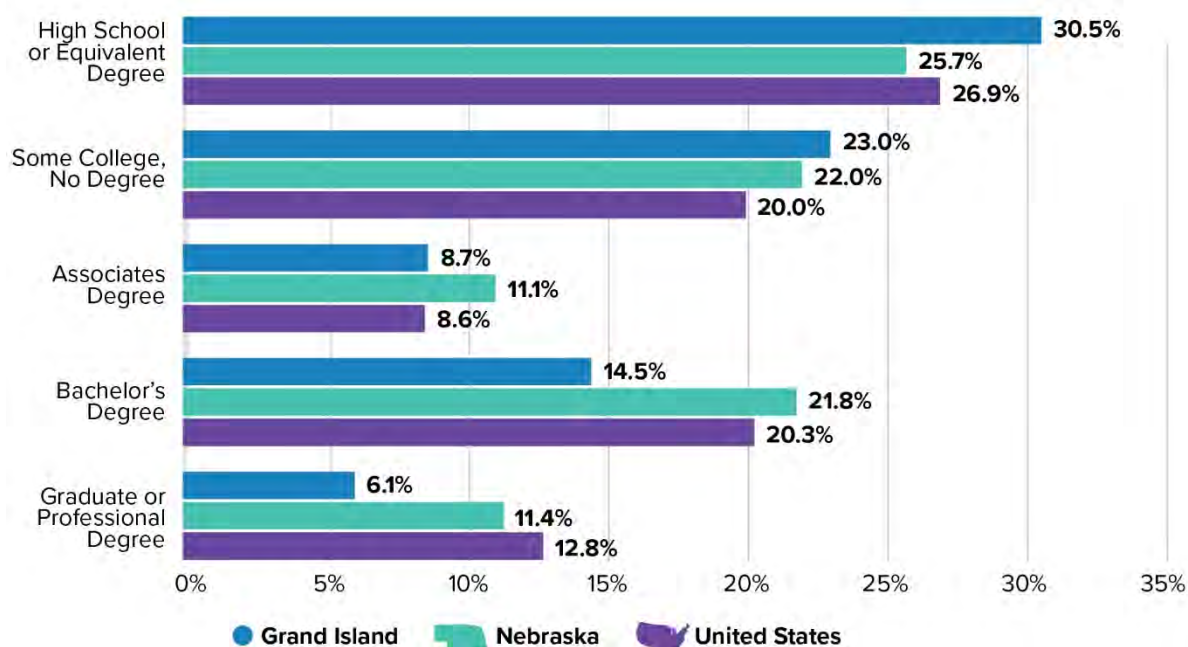
Median Household Income

The median household income in the City of Grand Island is \$54,965 (ACS 2019 5-year Estimates). This is lower than both the state median household income of \$61,439 and the national median household income of \$65,712. When compared to 2018 data, Grand Island households demonstrate growth in median household income, with a 4% increase from the 2018 median household income level.

Educational attainment

Approximately 83% of Grand Island residents over the age of 25 have graduated with a high school diploma or higher as shown in **Figure 17**. A higher percentage of the population in Grand Island has attended college but did not receive a degree when compared to the rest of the state and the nation. However, a lower percent of the population has obtained a bachelor's degree or higher.

Figure 17: Educational Attainment for Grand Island, the State of Nebraska, and the United States



Source: ACS 2019 5-year Estimates

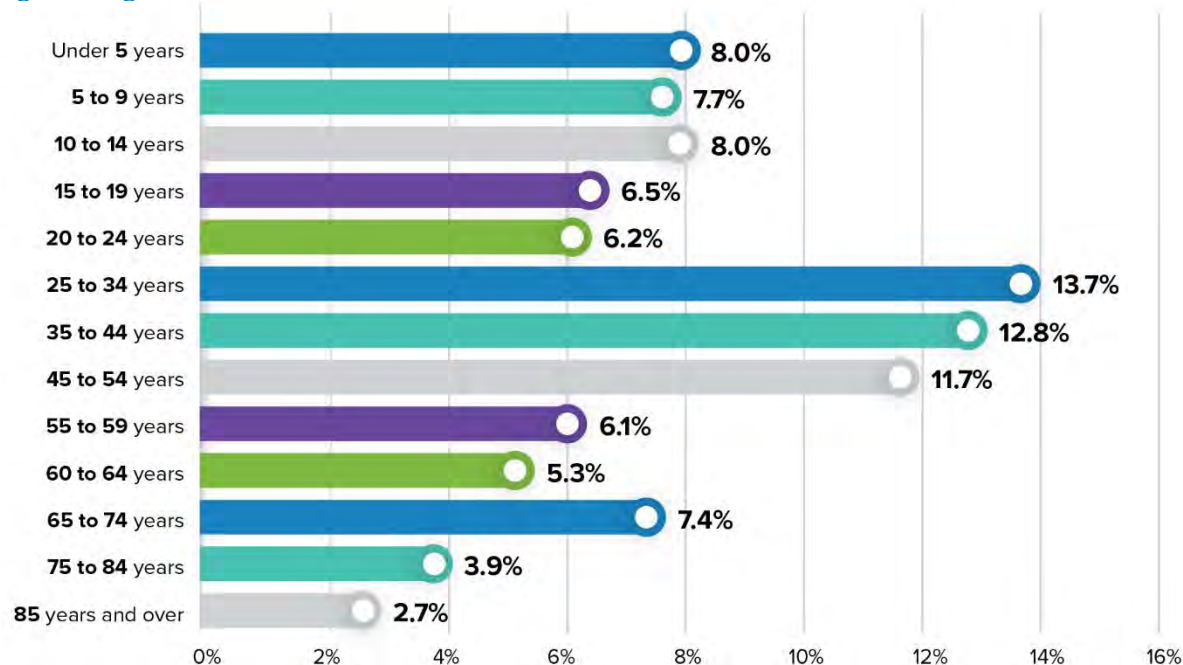
Age and Gender Distribution

The average age for Grand Island residents in 2019, according to 5-year ACS estimates, was just under 35 years. This is slightly lower than the average age for Nebraska residents, at 36 years, and significantly lower than the national average of just over 38 years. The highest proportion, 13.7 percent, of Grand Island's residents are in the 25 to 34 years of age range while the second highest proportion of residents fall in the 35 to 44 years of age range. Roughly 6.6 percent of Grand Island

residents are above the age of 75 while 15.7 percent are 9 years of age or younger. The age distribution is presented in **Figure 18**.

The gender distribution of Grand Island's residents is 50.4 percent male and 49.6 percent female based on ACS 2019 5-year estimates data.

Figure 18: Age Distribution for Grand Island



Source: ACS 2019 5-year Estimates

Underserved Populations

Underserved populations have a higher potential for public transit use. Classifying areas as underserved is based on several factors that are typical indicators of disadvantaged groups. These factors include population under the age of 18 and over the age of 65, disabled persons, minority populations, those living below the poverty line, and zero-vehicle households.

Elderly and Youth Populations

Populations under the age of 18 are more likely to use public transportation as they often have limited access to personal vehicles or do not have a valid driver's license. Areas with high youth populations require additional consideration as one component of underserved populations. **Figure 19** shows clusters of youth populations east of Fonner Park and near Northwest High School. Additional youth population clusters are found east of Broadwell Avenue, west of Sycamore Street, north of 7th Street and south of 10th Street.

Elderly populations (over the age of 65) generally use public transportation for medical visits and shopping. This population is also considerably more likely to become disabled, especially with illnesses and disabilities that are brought on by aging such as impaired vision, hearing loss, and injuries that may limit their ability to operate a personal vehicle. **Figure 20** shows high elderly populations located

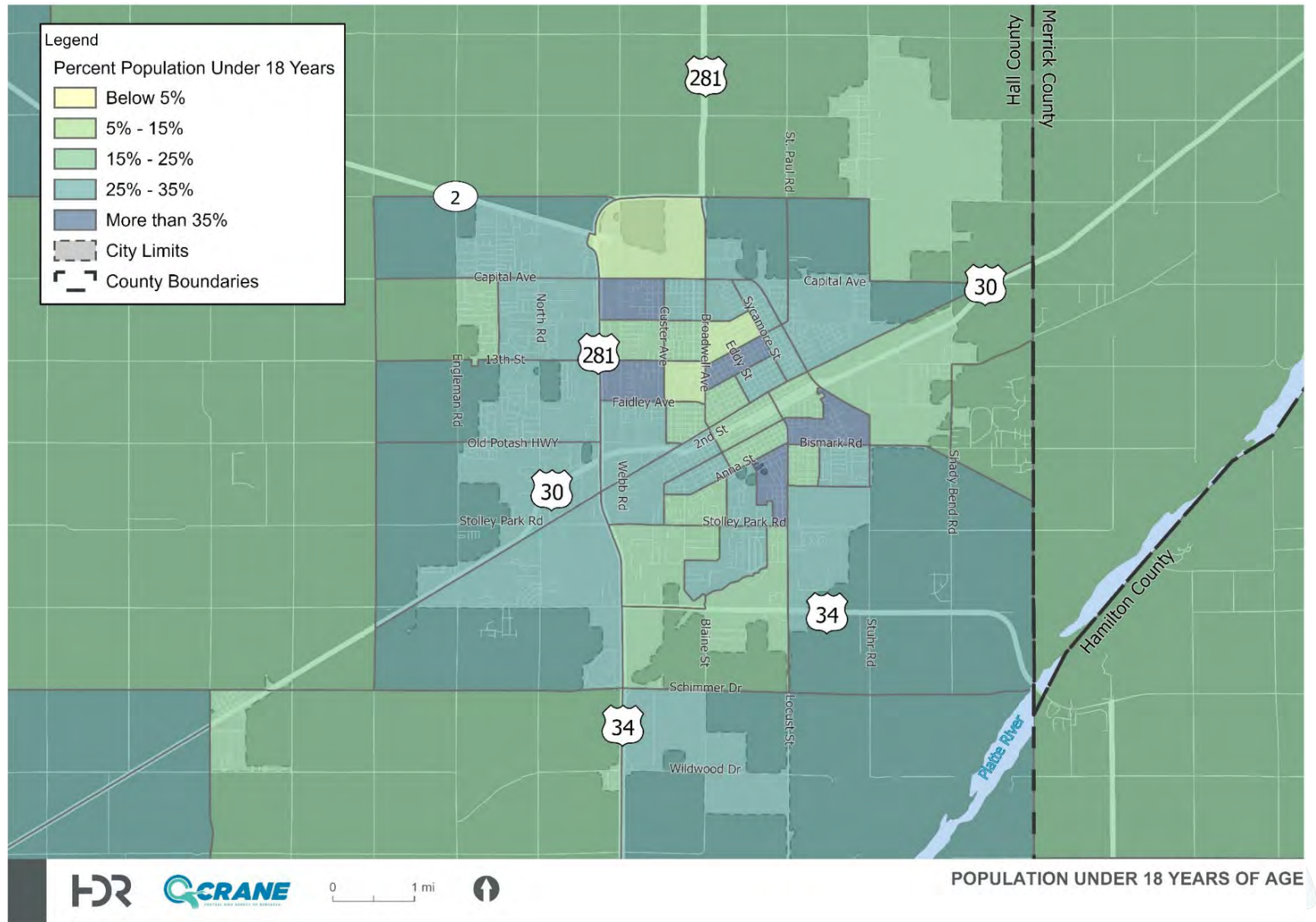
North of West Capital Avenue near Eagle Scout Park, along North Sycamore Street, and near Emerald Nursing and Rehab Lakeview.

Disabled Population

The Americans with Disabilities Act (ADA) defines a person with a disability as a person who has a physical or mental impairment that substantially limits one or more major life activity. Often, this limitation may hinder the person's ability to drive a personal vehicle, creating a dependence on public transportation as a means of mobility.

According to ACS 2019 5-year Estimates, 12.4% of the population of Grand Island have a disability. Like the elderly population distribution, **Figure 21** indicates that there is a high disabled population located in central Grand Island which serves as an opportunity to leverage transit service to address populations with limited mobility. Due to data availability limitations, disability data in **Figure 21** is shown at the census tract level.

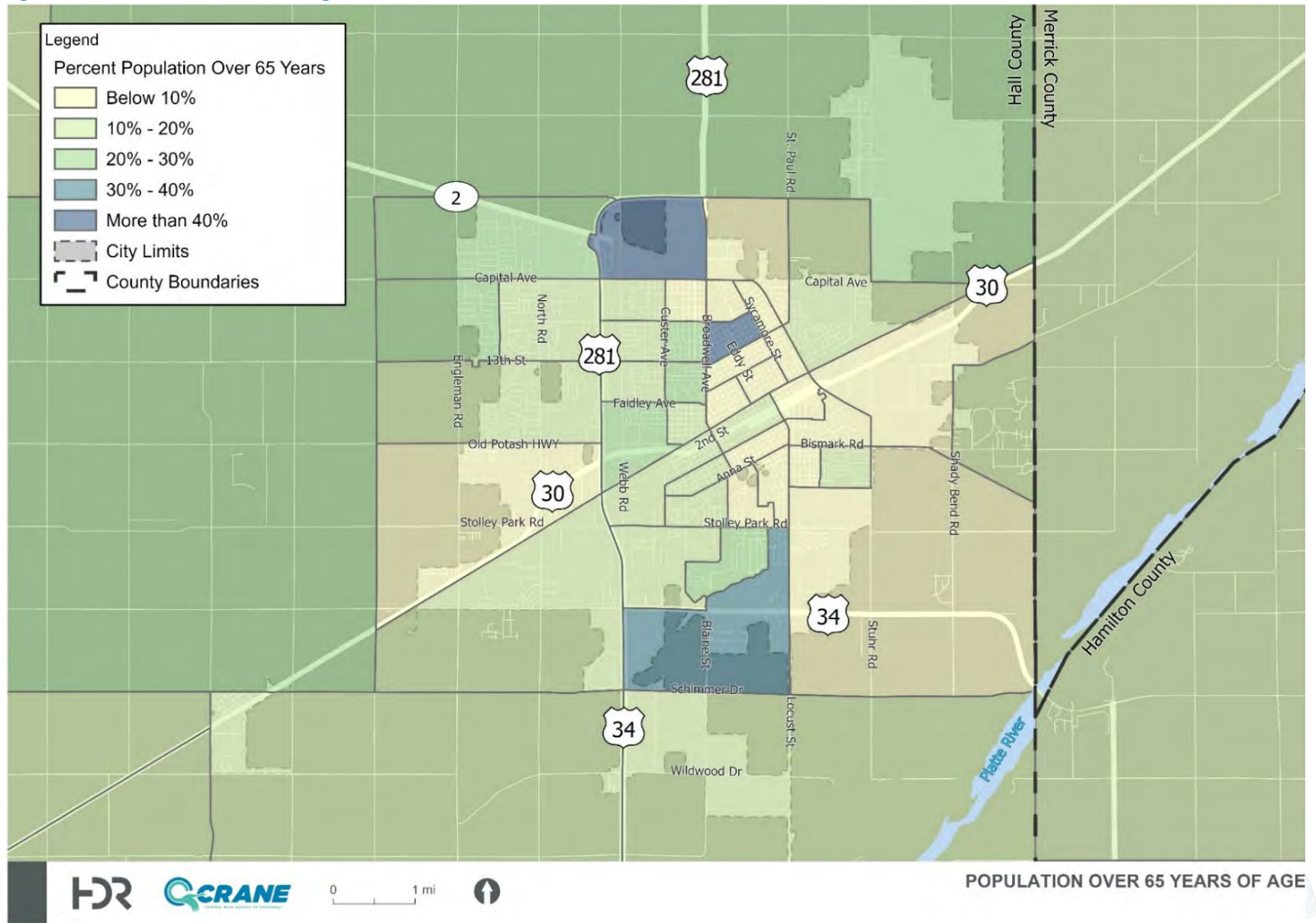
Figure 19: Population Under 18 Years of Age



Source: ACS 2019 5-year Estimates

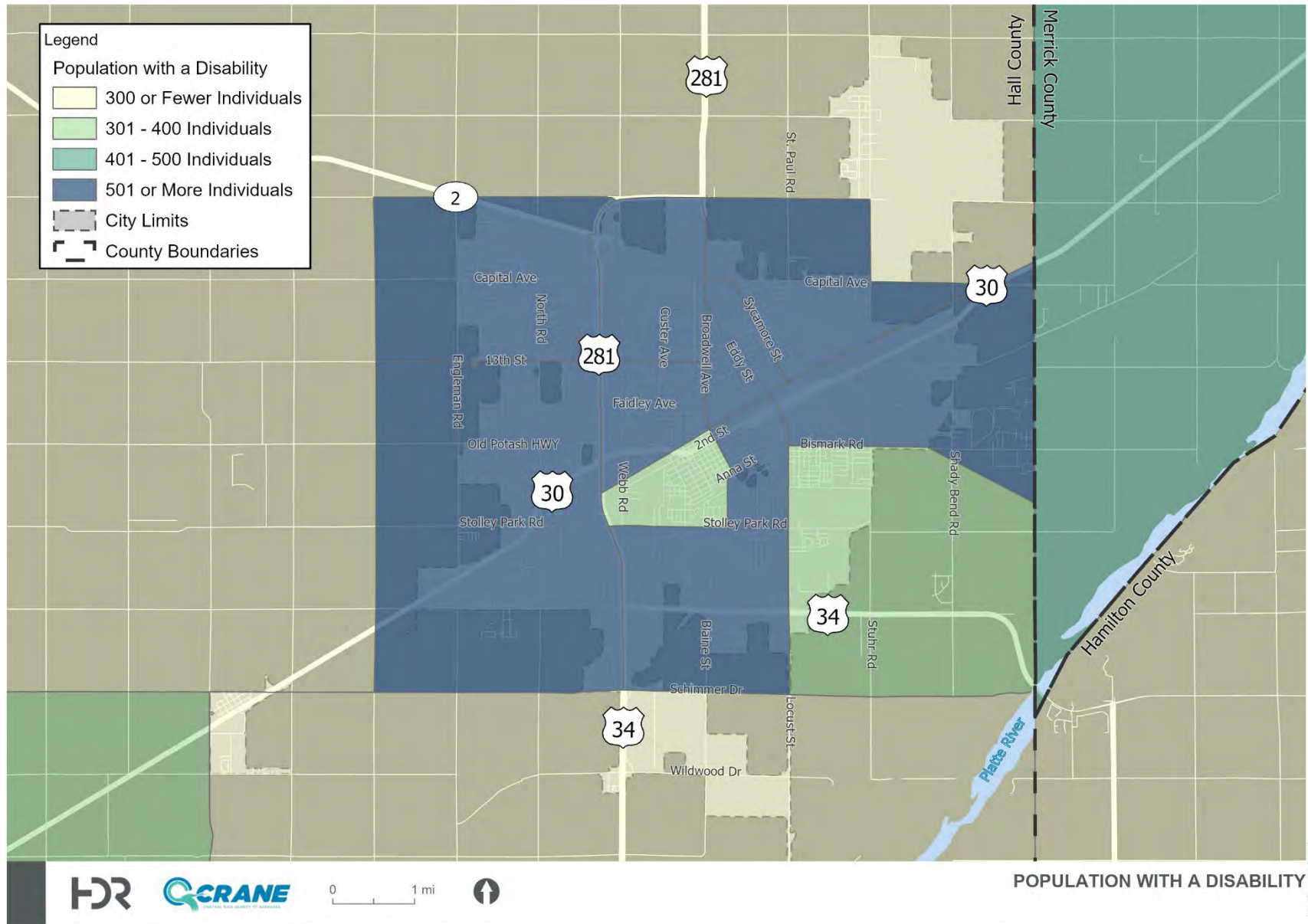
GO GI Transit

Figure 20: Population Over 65 Years of Age



Source: ACS 2019 5-year Estimates

Figure 21: Population with a Disability



Source: ACS 2019 5-year Estimates

GO GI Transit

Minority Population

Minority populations are more transit dependent than some other populations based on a variety of characteristics. Minority populations are more likely to live in densely populated inner-city communities, less likely to have access to a vehicle, and more likely to live farther from their places of employment when compared to non-minority populations.

The City of Grand Island is predominately White as presented in **Table 6**. The service also has a high Hispanic or Latino population at 31.6% according to 2014-2019 ACS 5-Year Estimates.

Table 6: Minority Populations in Grand Island

| Race | Grand Island | Percent of Population |
|--|--------------|-----------------------|
| White Alone, Non-Hispanic | 31,715 | 62.0% |
| Black or African American | 1,498 | 2.9% |
| American Indian and Alaska Native | 243 | 0.5% |
| Asian | 640 | 1.3% |
| Hispanic or Latino | 16,174 | 31.6% |
| Native Hawaiian and Other Pacific Islander | 380 | 0.8% |
| Some other race | 77 | 0.2% |
| Two or more races | 663 | 1.4% |
| Two races excluding some other races | 489 | 0.9% |

Source: ACS 2019 5-year Estimates

Figure 22 presents the minority population within the service area. The data indicates that minority populations are densely concentrated on the eastern side of the service area, especially near McCain Foods, the 8th largest employer for the area.

Population Below Poverty Line

The poverty line is the income threshold below which a person would be living in poverty. If a family's total income is less than the family's threshold, then every individual in it is considered in poverty. Population below the poverty line is one of the primary components in determining underserved populations.

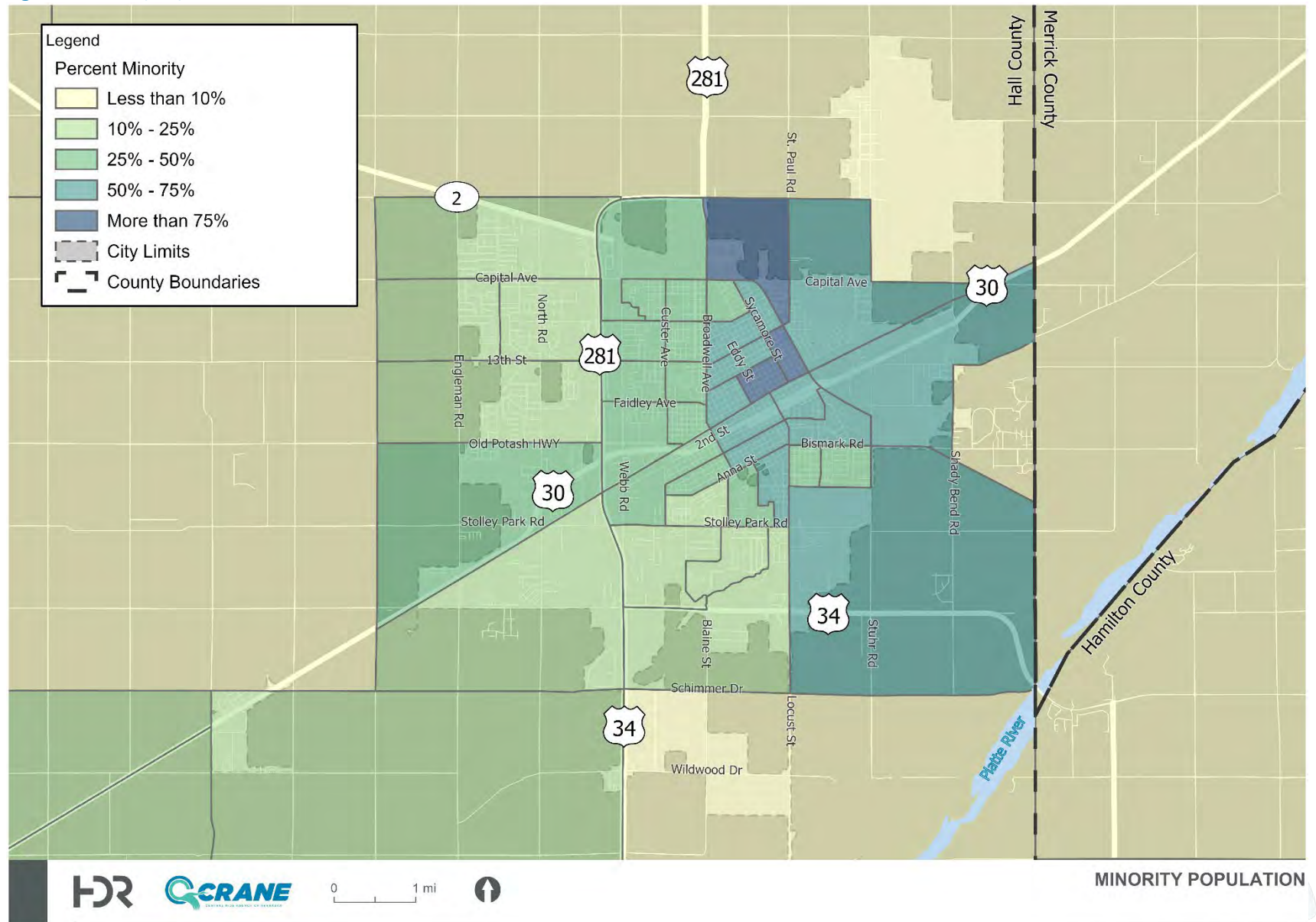
According to ACS 2019 5-year estimates 12.8% of Grand Island residents are below the poverty line. **Figure 23** presents areas with populations with 15% or higher below the poverty line. These populations are concentrated in two areas, the first cluster is located between Ryder Park and Capital Avenue in the north and the second is on the northeastern part of the city, beginning downtown and extending toward Merrick County.

Zero-Vehicle Population

Historically, the rate of households with zero vehicles available has decreased over time as the affordability and availability of motor vehicles has increased. Those households that continue to exist as zero-vehicle households either by choice or out of necessity, are heavily dependent on public transportation.

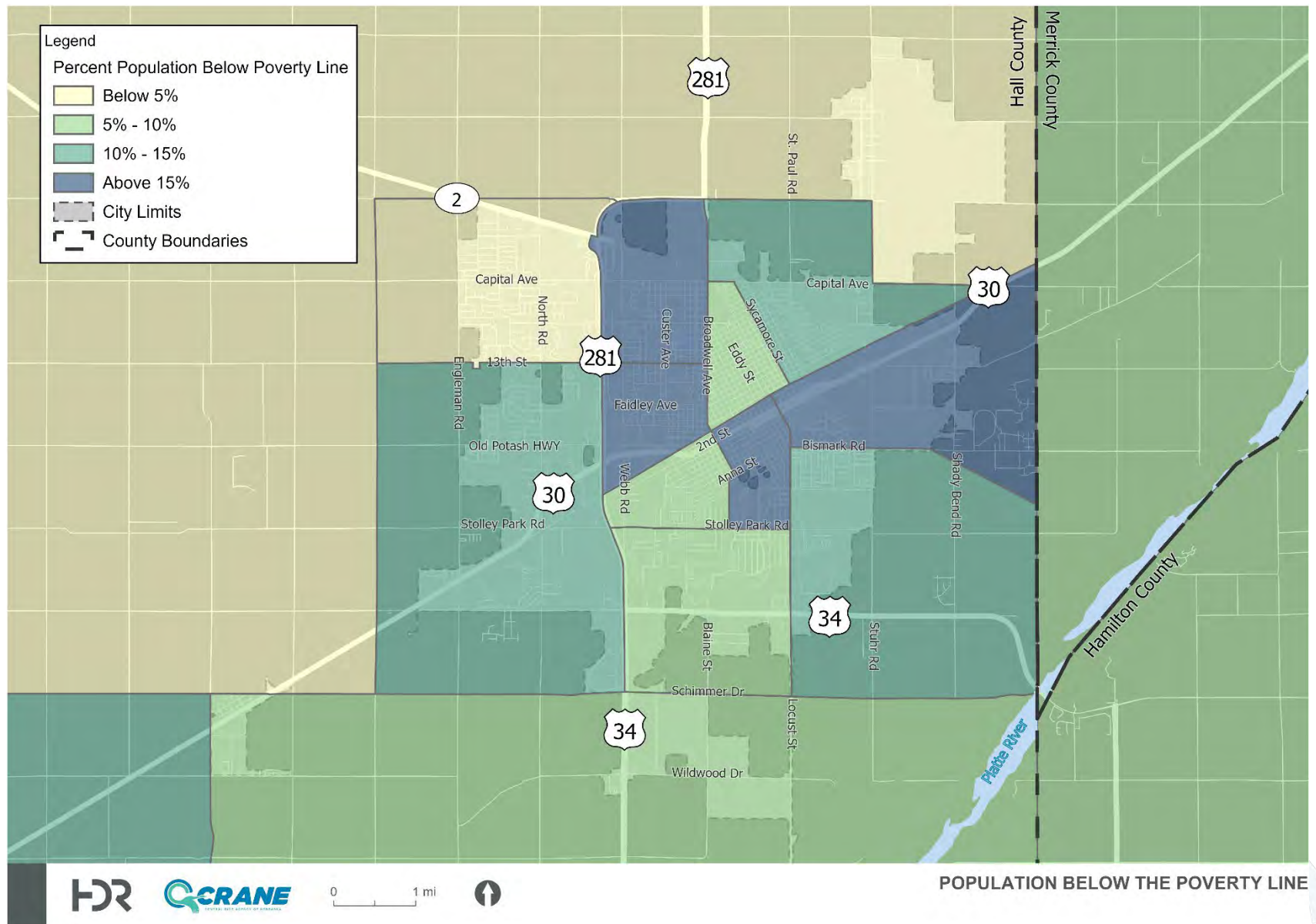
Figure 24 shows those households that do not have access to a personal vehicle. These populations are concentrated between North Broadwell Avenue and St. Paul Road. A second cluster of zero-vehicle households is found west of Sycamore Street between 4th and 7th Streets. Due to data availability limitations, zero-vehicle household data is shown at the census tract level.

Figure 22: Minority Population



Source: ACS 2019 5-year Estimates

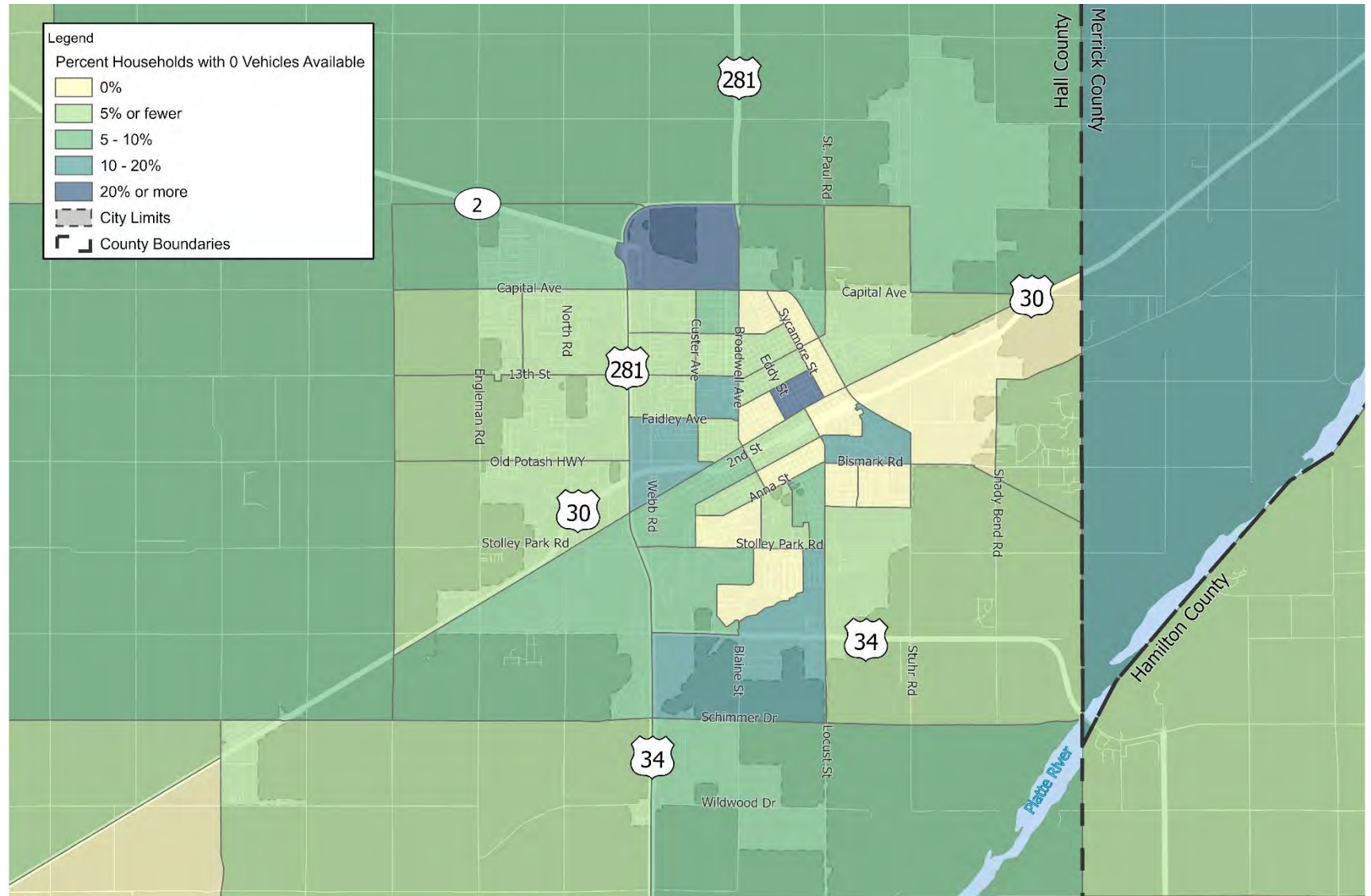
Figure 23: Population Living Below the Poverty Line



Source: ACS 2019 5-year Estimates

GO GI Transit

Figure 24: Zero Car Households



Source: ACS 2019 5-year Estimates

0 CAR HOUSEHOLDS

GO GI Transit

Transit Propensity

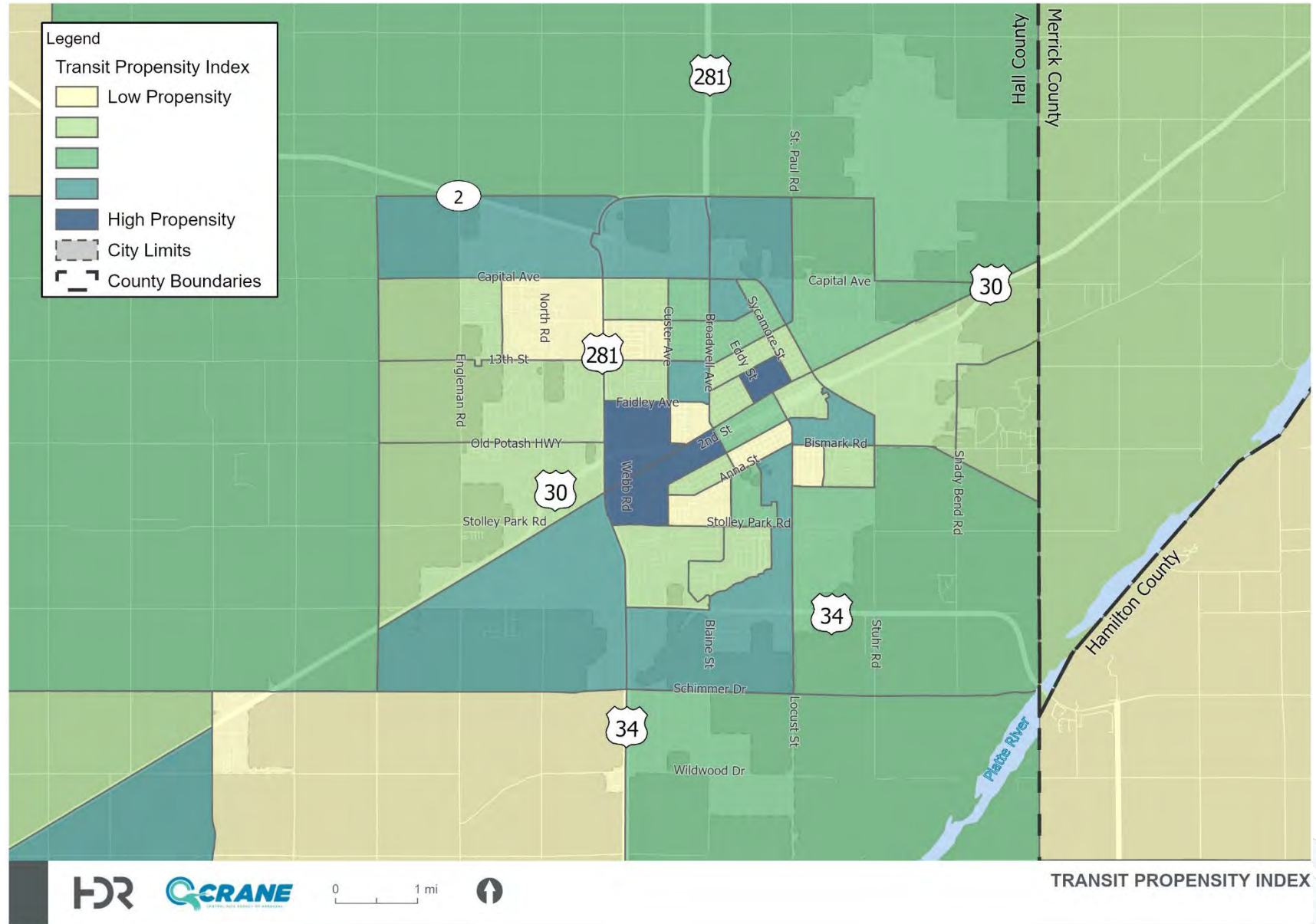
The transit propensity index, as presented in **Figure 25**, included an evaluation of six socio-economic indicators. To help define under-served populations, the following Census block group level population and household data from the 2019 American Community Survey (ACS) 5-year estimates were used:

- **Population Under 18:** Percentage of population 18 or below;
- **Population Over 65:** Percentage of population age 65 or above;
- **Population with a Disability:** Percentage of population with a cognitive or physical disability;
- **Minority Population:** Percentage of minority population;
- **Population Below Poverty Level:** Percentage of population below poverty level;
- **Households with zero vehicles:** Percentage of households with no access to a personal vehicle.

The analysis used a threshold for each of the above indicators, so that those census block groups that had a greater value than the mean value for any given indicator was given a score of one (1). The scores for the individual categories were then totaled across the six socio-economic indicators to generate a composite transit propensity score. For example, if a census block group had an above average number of people below poverty level and an above average number of households with no access to a personal vehicle, the census block group was given a score of two (2). The Propensity Score range has a maximum possible high score of six (6), indicating above average values for each of the six socio-economic indicators, and a minimum possible low propensity score of zero (0), which would indicate no above average values.

The resulting index highlights potentially high demand for public transit throughout much of the City of Grand Island. Block groups located along Capital Avenue, in downtown Grand Island, and south of Highway 34 demonstrated some of the highest propensity for transit use while block groups in the western part of urban area illustrated a lower propensity for transit usage. The block groups exhibiting higher propensity for transit use will be considered as priority areas for focusing system improvements.

Figure 25: Transit Propensity Index



Source: ACS 2019 5-year Estimates

Chapter 3 – Existing Transit Service

The existing transit service is an assessment of the service that is currently being provided and conditions in which they operate. This service analysis is done to develop a no-build base scenario as a starting point for future scenario recommendations.

Service Overview

CRANE is a public transit service that provides approximately 29,000 trips per year within the service area. Passengers are required to book a trip a minimum of 24 hours in advance with same day trips only when space is available. Weekday trips, for Monday through Friday, can be scheduled as early as 6:00 AM with the latest available pick-up time being 5:30 PM while Saturday rides are available beginning at 9:00 AM through 3:00 PM.

Fare Structure

Fare structure is the system set up to determine how much is to be paid by various passengers using a transit vehicle at any given time. The CRANE fare structure is presented in **Table 7**.

Table 7: CRANE Fare Structure

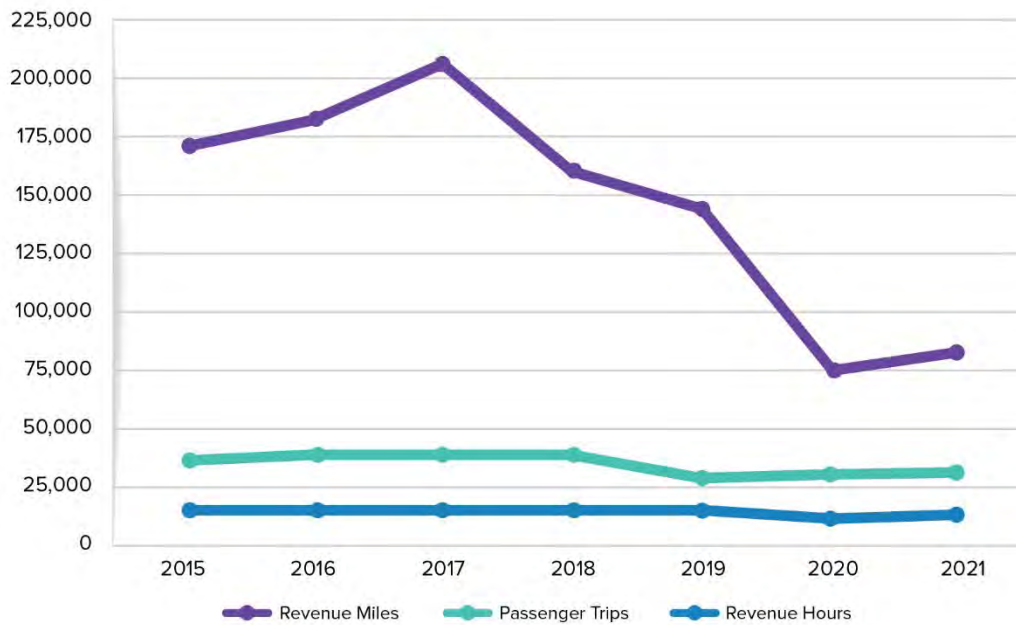
| Fare Type | Fee |
|--|---------|
| Regular Fare | \$2.00 |
| First Child The first child accompanying a Regular Fare | \$2.00 |
| Additional Child All children after the first child accompanying a Regular Fare | Free |
| Youth Rider Any unaccompanied youth age 12-18 | \$2.00 |
| Personal Care Attendant (PCA) An attendant accompanying and assisting an ADA eligible rider | Free |
| Card Type | Fee |
| 10 Trip Card | \$20.00 |
| 20 Trip Card | \$40.00 |

Source: CRANE

Annual Ridership

Total annual passenger ridership for the service area, based on trip data from CRANE, was 31,666 in 2021. Despite impacts stemming from the COVID-19 public health pandemic, 2020 ridership was slightly higher than ridership in 2019 of 28,171, with an approximately 4 percent increase in passenger trips. This trend in increasing ridership persisted into 2021 as ridership increased by 7.6 percent over 2020 levels. **Figure 26** presents the total number of Passenger Trips between 2015 and 2021 as well as revenue miles and revenue hours for the service.

Figure 26: CRANE Annual Ridership, 2015-2021



Source: CRANE

Chapter 4 – Peer Review

A peer review analysis was conducted to compare the performance of the City of Grand Island's transit system with similar systems operating in the United States. The aim of a peer review is to guide transit agencies in identifying and prioritizing problem areas. Selected performance indicators, effectiveness measures, and efficiency measures are provided in table and graphic form to demonstrate the performance of Grand Island compared to peer agencies. This analysis was performed using 2019 data.

The chosen performance measures are displayed in **Table 9**. For each selected measure, supplementary tables provide the City of Grand Island's value, the minimum value among the peer group, the maximum value among the peer group, the mean of the peer group, and the percent deviation that the City of Grand Island's values are from the mean.

Peer System Selection Methodology

The peer selection was conducted using 2019 National Transit Database (NTD) data. The peers were identified using the Transit Cooperative Research Program (TCRP) methodology. The TCRP uses five service characteristics and eight urban area characteristics as grouping factors in determining peer agencies, as described below:

Service Characteristics for Determining Peers

- **Total Vehicle Miles Operated:** Total distance traveled annually by revenue service vehicles, including both revenue miles and deadhead miles.
- **Total Operating Budget:** Reported total spending on operation, including administration, maintenance, and operation of service vehicles.
- **Percent Demand Response:** Percentage of demand response service for an agency, measured based on the number of vehicles operated in maximum service.

- **Percent Service Purchased:** Percentage of transit service purchased from outside service providers, measured based on the number of vehicles operated in maximum service.
- **Service Area Type:** An identifier for determining the service and extent of coverage of an agency.

The [Florida Transit Information System](#) (FTIS), which is a suite of web-based systems to aid agencies in transit planning, was the medium used to search for peer agency information; this system draws from NTD datasets and was selected for use due to its applicability for transit agencies outside of Florida.

Urban Area Characteristics for Determining Peers

- Urban Area Population
- Population Growth Rate
- Population Density
- State Capital
- Percent Population with a College Degree
- Percent Poverty
- Annual Delay (Hours) Per Traveler
- Freeway Lane-Miles Per Capita
- Distance

The data for all population-related variables was extracted from the American Community Survey (ACS). Likeness scores were first determined for each individual screening and peer-group factor. Next, total likeness scores were calculated from the individual scores. **The lower the score of a potential peer system, the more similar it is to the target system.** Based on the results of the TCRP peer selection process, four transit systems were selected for the peer review analysis. Additionally, the City of Wilson, NC's mobility on-demand (MOD) system was chosen outside of the NTD database. The City of Wilson, NC recently contracted with Via, a transit technology company, to implement RIDE which is a mobility on-demand (MOD) transit service. While Wilson, NC was not included in the FTIS search, the data for this system was provided by agency staff and was used in the peer comparison. The selected peer systems are identified in **Table 8** and described in further detail below.

Table 8: Peer Transit Systems

| Type | System | Location |
|---------------------|-------------------------------------|----------------|
| TCRP Likeness Peers | Autauga County Rural Transportation | Prattville, AL |
| | Butler County Transit | El Dorado, KS |
| | Haywood Public Transit | Clyde, NC |
| | Cletran | Cleburne, TX |
| MOD | RIDE | Wilson, NC |

Peer Systems

Autauga County Rural Transportation

Autauga County, Alabama is in the central portion of the state, just outside of the capital city of Montgomery. It is roughly 600 square miles and home to 59,000 people. The area is largely rural and

therefore does not offer fixed route transit service. Autauga County Rural Transportation, which is demand response only, serves elderly and disabled populations Monday through Friday from 7:30 AM to 4 PM. Services are provided on a first come, first served basis to the Montgomery Cancer Center and doctors' offices in the Montgomery area. The route structure is based on city limits. Trips inside city limits are \$1.50 per way, trips outside city limits are \$1.75 and trips to Montgomery and out of county are \$3.00 per way.

Butler County Transit

Butler County is situated in the southern portion of the state of Kansas and is the largest county by area in the state, with over 1400 square miles and a population of roughly 70,000. The Butler County Transit Program is in the city of El Dorado and provides public transportation services through the Butler County Department on Aging. The service is open to the public and offers curb-to-curb service as well as four routes. The Augusta and El Dorado routes are provided Monday-Friday from 8:30 AM to 4 PM. The Andover Route is by appointment only and runs Monday-Friday 8:30 AM to 12 PM. The Wichita Route runs Wednesday and Thursday, arriving in Wichita at 10:30 AM and leaves at 2 PM. The fares range from \$0.50 to \$4.00 per way.

Haywood Public Transit

Haywood Public Transit, located in Clyde, North Carolina, provides public transportation services for the Haywood County. The service is a division of Mountain Projects, Inc. which is a community based non-profit organization providing vital services to the elderly, disadvantaged, and general public in Western North Carolina. Transit service is provided by appointment only Monday-Friday from 6 AM to 5:30 PM. In addition to providing service in Haywood County, Haywood Public Transit connects to a deviated fixed route service provided by Mountain Mobility of Buncombe County to create regional mobility in Asheville and surrounding areas.



Source: Haywood Public Transit

Cletran

Cletran, or City/County Transportation, is the public transportation provider serving Johnson County, Texas. Johnson County is located within the Dallas–Fort Worth–Arlington metropolitan statistical area and has a population of over 170,000. Services provided include demand response, as well as the Interurban Commuter Bus route serving the cities of Cleburne, Joshua, and Burleson with connecting service to other cities in Johnson County and Fort Worth. The Interurban Commuter Bus terminates at the Intermodal Transportation Center in downtown Fort Worth to enable easy access to transfer to the T transit services in Fort Worth and the Trinity Railway Express (TRE) into Dallas. The hours of operation for demand response service vary by city but are roughly 12 hours per day, 5 days a week. The Interurban Commuter Bus has a set schedule running North 6 AM to 6 PM and South from 8 AM to 7 PM with four stops in between the Cleburne Intermodal Depot and the Fort Worth Intermodal Transfer Center.



Source: Cletran – City/County Transportation

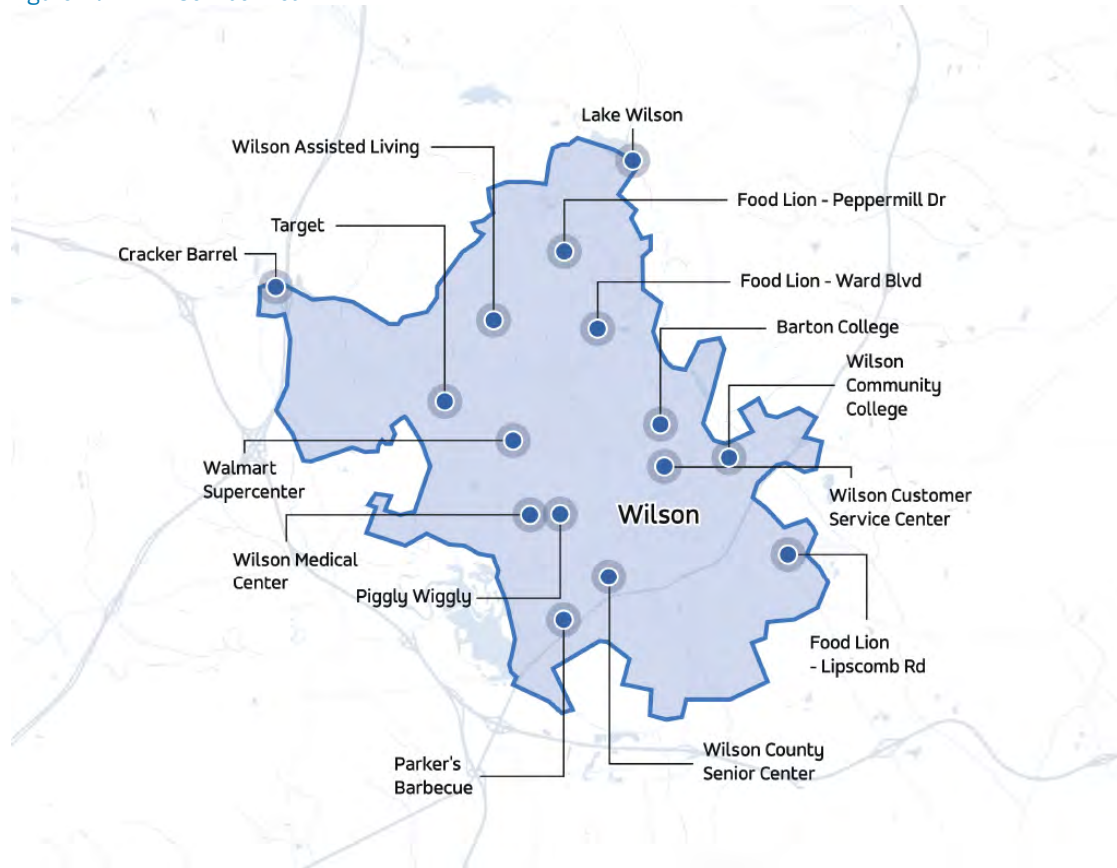
RIDE

RIDE serves the City of Wilson, NC which is just east of The Triangle (Raleigh, Durham, Chapel Hill). In September 2020, the agency shifted from fixed route service to on-demand micro-transit service using the company Via. The decision to shift their system to on-demand micro-transit was made due to low fixed route ridership, gaps in the service provided by fixed route, high operating costs, and lack of transportation network companies (TNCs). When the program launched, the agency's total operating cost per trip decreased from \$23.00 for fixed route service to \$11.00 for the new on-demand service. Transit ridership more than doubled in the weeks following the initial launch, where users waited an average of only 15 minutes for a ride once it had been booked via a smart phone device.



Source: RIDE | Wilson, NC

Figure 27: RIDE Service Area



General Performance Measures

The comparison of general performance indicators for the peer review systems is presented in this section. Performance indicators include population, population density, ridership, revenue miles and hours, and vehicles. **Table 9** provides a summary of how Grand Island compares with the peer group. Refer to **Appendix A** for more detail on the peer group performance measures comparison.

Table 9: Summary of Peer Review Performance Measures

| Performance Measure | Grand Island | Peer Group Minimum | Peer Group Maximum | Peer Group Mean | Grand Island % Deviation from Mean |
|--------------------------------------|--------------|--------------------|--------------------|-----------------|------------------------------------|
| Service Area Population | 61,492 | 31,706 | 171,361 | 72,414 | -17.8% |
| Service Area Population Density | 113 | 44 | 236 | 158 | -39.8% |
| Passenger Trips | 28,171 | 19,307 | 105,606 | 44,129 | -56.6% |
| Revenue Miles | 145,603 | 72,761 | 353,601 | 231,078 | -58.7% |
| Revenue Hours | 13,798 | 5,856 | 22,478 | 16,055 | -16.4% |
| Vehicles Operated in Maximum Service | 11 | 7 | 20 | 13 | -18.2% |
| Total Operating Expenses | \$603,707 | \$220,584 | \$1,097,057 | \$734,124 | -21.6% |
| Passenger Fare Revenues | \$66,869 | \$10,293 | \$158,409 | \$61,349 | 8.3% |

Summary of General Performance Measures

The City of Grand Island is closely aligned with its peers when comparing service area population, revenue hours, vehicles operated in maximum service, total operating expenses, and passenger fare revenues. Most of the values deviate within 25% from the peer group mean, except for service area population density, passenger trips, and revenue miles. Passenger fare revenues are 8% above the mean which indicates the fare is higher for Grand Island than most of its peers. The agency falls significantly below the mean of its peers for population density, passenger trips, and revenue miles. Passenger trips are skewed by the mobility on-demand system in Wilson, NC. Revenue miles are nearly 100,000 miles less than the average of the peer systems which is likely due to the relatively low number of trips conducted by Grand Island in 2019.

Effectiveness Measures

The categories selected to measure effectiveness were passenger trips per revenue mile, passenger trips per service area capita, and weekday span of service. A comparison of Grand Island's performance versus that of the peer group is presented in **Table 10**. Refer to **Appendix A** for more detail on the peer group effectiveness measures comparison.

Table 10: Summary of Peer Review Effectiveness Measures

| Effectiveness Measures | Grand Island | Peer Group Minimum | Peer Group Maximum | Peer Group Mean | Grand Island % Deviation from Mean |
|---|--------------|--------------------|--------------------|-----------------|------------------------------------|
| Passenger Trips per Revenue Mile | 0.19 | 0.10 | 0.27 | 0.23 | -21.1% |
| Passenger Trips Per Service Area Capita | 0.46 | 0.21 | 2.38 | 0.87 | -76.1% |
| Weekday Span of Service (in hours) | 11.50 | 7.50 | 15 | 11 | 4.3% |

Summary of Effectiveness Measures

The City of Grand Island provides an effective service when compared to its peers. Grand Island's trips per revenue hour are 21% below the mean; however, the mean is skewed by the mobility on-demand system in Wilson, NC. This is also the case for trips per service area capita. RIDE skewed the measure significantly since their trips are roughly five times that of the other systems. Grand Island operates 11.5 hours per day which is slightly above the mean weekday span of service.

Efficiency Measures

The selected efficiency measures were categorized by cost efficiency measures and operating ratios. **Table 11** provides a comparison of Grand Island and the peer group's performance on efficiency measures. Refer to **Appendix A** for more detail on the peer group's efficiency measures comparison.

Table 11: Summary of Peer Review Efficiency Measures

| Efficiency Measures | City of Grand Island | Peer Group Minimum | Peer Group Maximum | Peer Group Mean | Grand Island % Deviation from Mean |
|---|----------------------|--------------------|--------------------|-----------------|------------------------------------|
| Average Fare | \$2.37 | \$0.34 | \$2.42 | \$1.22 | 94.3% |
| Farebox Recovery (%) | 11.08% | 1.28% | 11.08% | 6.35% | 42.7% |
| Operating Expense Per Passenger Trip | \$21.43 | \$11.00 | \$31.08 | \$19.60 | 8.6% |
| Operating Expense Per Revenue Hour | \$43.75 | \$31.83 | \$60.63 | \$46.06 | -5.3% |
| Operating Expense Per Revenue Mile | \$4.15 | \$2.63 | \$4.15 | \$3.23 | 22.2% |
| Operating Expense Per Service Area Capita | \$9.82 | \$3.20 | \$22.56 | \$12.09 | -23.0% |

Summary of Efficiency Measures

The City of Grand Island proves to run an efficient system when compared to its peers. The average fare for the City of Grand Island is nearly 100% higher than the average of its peers and in turn, the farebox recovery for the City of Grand Island is about 43% higher than the peer group average. The review of operating expenses for Grand Island revealed that they are below the average per revenue hour (5%) and service area capita (23%) but above average for per revenue mile (22%) and per passenger trip (8%).

Summary of Performance Indicators

The City of Grand Island is performing well compared to the peer systems. Passenger trips are relatively low due to the density of the area, which led to the dramatic difference from the mean for passenger trips per capita and revenue mile. The higher-than-average fare for Grand Island and farebox recovery provides for a cost-efficient system. The on-demand mobility system in Wilson, NC provides significantly more trips than the other peers because the demand response service functions more like a transportation network company, meaning the service can provide a variety of trip types for the rural population beyond the life-sustaining and medical trips that are typically the sole focus for demand response only systems. Additionally, Cletran in Cleburne, Texas has a large population and provides a commuter route that connects the rural area with the Dallas-Fort Worth metropolitan area. These systems skewed several of the performance measures as identified in the table below and in the corresponding graphics in previous sections. Overall, Grand Island's system is functioning at the optimal level given the area's demographic constraints. **Table 12** provides a summary of Grand Island's performance relative to the peer services.

Table 12: Peer Review Summary

| Performance Indicators/Measures | % Deviation from Mean |
|---------------------------------------|-----------------------|
| General Performance Indicators | |
| Service Area Population | -17.8% |
| Service Area Population Density | -39.8% |
| Passenger Trips | -56.6% |
| Revenue Miles | -58.7% |
| Revenue Hours | -16.4% |
| Vehicles Operated in Maximum Service | -18.2% |
| Total Operating Expense | -21.6% |
| Passenger Fare Revenues | 8.3% |
| Service Supply | |
| Passenger Trips Per Capita | -76.1% |
| Passenger Trips Per Revenue Mile | -21.1 |
| Quality of Service | |
| Weekday Span of Service | 4.3% |
| Cost Efficiency | |
| Operating Expense Per Capita | -23% |
| Operating Expense Per Passenger Trip | 8.6% |
| Operating Expense Per Revenue Mile | 22.2% |
| Operating Expense Per Revenue Hour | -5.3% |
| Operating Ratio | |
| Farebox Recovery Ratio | 42.7% |
| Fare | |
| Average Fare | 94.3% |

Chapter 5 – Situational Appraisal

The purpose of this chapter is to review the existing service area policies, procedures, and studies relevant to the Transit Development Plan. The plans reviewed in this chapter can be found in **Table 13**.

Table 13: Federal, State, and Local Plans Reviewed

Federal



- Bipartisan Infrastructure Law (BIL)
- Coronavirus Aid, Relief, and Economic Security (CARES) Act
- Coronavirus Response and Relief Supplemental Appropriations Act of 2021
- American Rescue Plan Act of 2021

State



- Nebraska's 2040 Statewide Transportation Plan
- Grand Island/Hastings/Kearney Intercity Bus Study

Local



- Regional Transit Needs Assessment and Feasibility Study
- 2045 Long Range Transportation Plan
- Grand Island Area MPO Bicycle and Pedestrian Master Plan
- CRANE Public Transportation Agency Safety Plan

Federal Policies, Procedures, and Studies

Bipartisan Infrastructure Law (BIL)

The Bipartisan Infrastructure Law, as enacted in Infrastructure Investment and Jobs Act of November 2021, reauthorized Federal surface transportation programs for fiscal years 2022 through 2026. This legislation provides additional funding to support local transit agencies while establishing several new transit programs. The BIL aims to advance public transportation through four priorities:

- Safety
- Modernization
- Climate
- Equity

While the BIL establishes these priorities, the program's stated focus is to promote equity throughout transportation systems and support transit's role in combatting climate change. As such, all FTA discretionary grant programs will focus on promoting equity.⁵

⁵ Federal Transit Administration, [Bipartisan Infrastructure Law](#)

Coronavirus Aid, Relief, and Economic Security (CARES) Act

The Coronavirus Aid, Relief, and Economic Security (CARES) Act provided \$25 billion to transit agencies to help to prevent, prepare for and respond to the COVID-19 pandemic. The Federal Transit Administration (FTA) allocated \$22.7 billion to large and small urban areas and \$2.2 billion to rural areas. Funding is provided at a 100 percent federal share, with no local match required, and is available to support capital, operating, and other expenses generally eligible under those programs to prevent, prepare for, and respond to COVID-19. Eligible expenses include operating expenses incurred beginning on January 20, 2020, and other expenses to maintain transit services such as paying for administrative leave for transit personnel due to reduced operations during an emergency.

Coronavirus Response and Relief Supplemental Appropriations Act of 2021

The Coronavirus Response and Relief Supplemental Appropriations Act of 2021 (CRRSAA) includes \$14 billion in supplemental appropriations allocated to support the transit industry during the COVID-19 public health emergency. These funds are distributed among urbanized areas (\$13.26 billion), rural areas and tribes (\$678.2 million), and Enhanced Mobility of Seniors and Individuals with Disabilities (\$50 million). Like the CARES Act, the supplemental funding is provided at 100-percent federal share, with no local match required.

American Rescue Plan Act of 2021

The American Rescue Plan Act of 2021 (ARP) includes \$30.5 billion in federal funding to support the nation's public transportation systems as they continue to respond to the COVID-19 pandemic and support the President's call to vaccinate the U.S. population.

The relief funds are distributed as follows, at 100-percent federal share:

- \$26.6 billion to be allocated by statutory formulas to urbanized and rural areas and tribal governments
- \$2.2 billion to FTA grant recipients in communities that demonstrate additional pandemic-associated needs.
- \$1.675 billion for projects in the Capital Investment Grants (CIG) Program
- \$50 million under the Enhanced Mobility of Seniors and Individuals with Disabilities formula program
- \$25 million for competitive planning grants
- \$5 million for competitive tribal grants

State Policies, Procedures, and Studies

Nebraska's 2040 Statewide Transportation Plan

The 2040 Statewide Transportation Plan (STP) serves as the guide to Nebraska's multimodal transportation system, providing a vision and series of system goals and objectives, the strategies and policies necessary to achieve the Plan's vision, and metrics for evaluating progress made towards these goals. The key themes related to public transit found in the 2040 STP include:

- **Mobility choices for people and freight:** Provide efficient, affordable, and equitable options across all modes for moving people and goods throughout Nebraska and beyond.
- **Safety:** Provide a transportation system in Nebraska that is safe for all users.

- **Support for economic and community vitality:** Choose investments in Nebraska's transportation system that best support the vitality of Nebraska's economy and all of its communities.

Grand Island/Hastings/Kearney Intercity Bus Study

The Grand Island/Hastings/Kearney Intercity Bus Study, published in 2020, was conducted to evaluate the feasibility of daily intercity bus service between Grand Island, Hastings, and Kearney. The study was based on NDOT's recognition of the need to increase mobility for residents and visitors of these communities and a series of potential service routes were identified. The potential implementation of this service could build off existing CRANE service and provide additional ridership that can support further investment in Grand Island's public transit system.

Local Policies, Procedures, and Studies

Regional Transit Needs Assessment and Feasibility Study

GIAMPO published the Regional Transit Needs Assessment and Feasibility Study in 2017. This Study provides an overview of existing transit services in the GIAMPO region, analyzes transit demand, develops short-term public transit opportunities, and presents a 3- to 5-year budget and implementation plan for regional transit improvements; this study provides the backdrop for transit opportunities within the community and set the direction for short-term transit priorities. The implementation plan can be found in **Table 14**.

Table 14: Regional Transit Needs Assessment and Feasibility Study Implementation Plan

| Initial Implementation Steps | | 2018 | 2019 |
|------------------------------|--|------|------|
| 1 | Research Rideshare software program options and develop Request for Proposals (RFP) for purchasing the Rideshare software for implementation. | ✓ | |
| 2 | Implement Rideshare software and coordinate with software developer staff to design software infrastructure relative to local and regional needs. | ✓ | |
| 3 | Coordinate with Enterprise Vanpool program representative and establishments such as JBS and Veterans Home. | ✓ | |
| 4 | Finalize contract with vendor and rollout Enterprise Vanpool program. | | ✓ |
| 5 | Develop general marketing plan for community outreach and awareness for transit services. | ✓ | |
| 6 | Continue coordination with Nebraska Department of Transportation (NDOT) on the Intercity Bus Plan. | ✓ | ✓ |
| 7 | Coordinate with NDOT to develop RFP for Intercity Bus Service Operations Plan and Park and Ride Study. | ✓ | |
| 8 | Coordinate with local agencies and establishments to fund the local match for the vehicles and other capital improvements for intercity bus service. | ✓ | |
| 9 | Develop Bid for service contract of transit operations. | ✓ | |
| 10 | Develop RFP for transit facility preliminary planning | | ✓ |

2045 Long Range Transportation Plan

The GIAMPO 2045 Long Range Transportation Plan (LRTP) is a 25-year plan which prioritizes those projects in the Urbanized Area that best meet the future transportation needs in the region. The LRTP was developed through public outreach and a technical assessment of how all modes of the service

areas transportation network work together as a single integrated system. This approach included an analysis of every mode to include public transit. The GIAMPO also projected future population and employment need to provide planning guidance for the next 25 years. The final 2045 LRTP includes strategies to align future planning efforts and a prioritized list of initiatives based on funding constraints, a technical analysis, and community input and stakeholder feedback. The guiding principles including in the development of the LRTP are presented in **Table 15**.

Table 15: LRTP Goals and Objectives

| Goal | Objective |
|--|--|
| System Safety | <ul style="list-style-type: none"> • Reduce the incidence and rate of crashes • Reduce severe injury and fatal crashes • Reduce bicycle and pedestrian crashes |
| Multimodal Connectivity and Accessibility | <ul style="list-style-type: none"> • Provide improved connections to key destinations across the community • Reduce regional freight impediments • Increase the connectivity of the bicycle and pedestrian system • Continue to provide quality public transit services |
| Economic Development | <ul style="list-style-type: none"> • Identify transportation strategies that support economic development projects • Identify transportation strategies that provide enhanced access to jobs for low-income residents • Provide active transportation options that promote the health and well-being of residents |
| System Preservation | <ul style="list-style-type: none"> • Identify sufficient financial resources to maintain all Federal-Aid streets and bridges in fair or good condition |
| Environment and System Resiliency | <ul style="list-style-type: none"> • Promotes energy conservation, especially for non-renewable energy sources • Transportation projects should limit impacts to the natural and build environment • Invest in alternative and renewable fuel infrastructure when practical • Identify strategies to make transportation infrastructure more resilient to natural and manmade events |
| Traffic Operations and System Reliability | <ul style="list-style-type: none"> • Limit the emergence of recurring congestion • Improve travel reliability on arterial roadways • Support high levels of freight reliability on the state highway system |

Grand Island Metropolitan Area Bicycle and Pedestrian Master Plan

Adopted in 2018, the Grand Island Metropolitan Area Bicycle and Pedestrian Master Plan seeks to provide a framework for expanding the local bicycle and pedestrian network. The Plan aims to create a network for bicycle and pedestrian users that meets the needs of all residents while providing safe and direct connections to community destinations. Plan recommendations identify bicycle and pedestrian improvements that can support Grand Island's transit system and result in an expansive multi-modal network wherein users are able to rely on both the transit and active transportation systems to meet their travel needs.

CRANE Public Transportation Agency Safety Plan

CRANE's Public Transportation Agency Safety Plan (PTASP) is a Federally required document for transit agencies receiving Federal funds under FTA's Urbanized Area Formula grants. The PTASP serves as CRANE's safety plan and includes processes and procedures to implement Safety Management Systems (SMS).⁶ The existing PTASP details safety performance targets, policies, risk management, safety assurance, and safety promotion measures for Grand Island's public transit operations.

⁶ Federal Transit Administration, [Public Transportation Agency Safety Plans](#)



Chapter 6 – Goals and Objectives

The goals and objectives developed as part of the TDP provide the framework for realizing the vision articulated for Grand Island's future transit system. These goals and objectives aim to reflect the values of the Grand Island community while aligning with other local and regional planning efforts. Development of the goals and objectives was completed through a review of the baseline conditions, past transit planning goals and objectives, and input gained from community members during public engagement activities.

Guiding Principles, Goals, and Objectives

The main goals and subsequent objectives were developed around five guiding principles.

Vision Statement

"Public transit is crucial to the future of our community. A transit system is important for the community because thousands of individuals use CRANE every year to get to and from work, education and training, health care access, and more. This improves overall quality of life and leads to a stronger, more vibrant community for all." - GO GI Transit

Guiding Principles

A set of five guiding principles were established to provide cohesive themes for the development of the goals and objectives. The guiding principles are presented in **Figure 28**.

Figure 28: Guiding Principles



Goals and Objectives

The goals and objectives were developed and finalized based on the findings of the Situation Appraisal, input from public involvement, and stakeholder engagement. The guiding principles, goals, and related objectives are presented in **Table 16**.

Table 16: Goals and Objectives

| Performance and Efficiency |
|---|
| Goal 1: Enhance service performance and efficiency. |
| Objective 1.1: Improve ridership productivity of the transit system. |
| Objective 1.2: Improve cost-efficiency of the transit system. |
| Objective 1.3: Increase transit availability by using technology. |
| Objective 1.4: Identify service improvements that are anticipated to increase transit ridership. |
| Objective 1.5: Identify and pursue diverse funding sources. |
| Objective 1.6: Promote staff retention and development. |
| Collaboration |
| Goal 2: Continue to seek new and expand existing partnerships to support transit ridership growth and provide equitable service to low income, elderly, disabled, and other transportation disadvantaged populations. |
| Objective 2.1: Develop relationships with key stakeholders and major employers to support community initiatives that promote economic development. |
| Objective 2.2: Develop transit-friendly land use policies, regulations, and land development criteria. |
| Objective 2.3: Partner with the local colleges and post-secondary institutions to inform the faculty, and students about the system and its viability as an alternative commuting option. |
| Safety and Security |
| Goal 3: Establish and manage safety activities to minimize risk and create a culture of employee, passenger, and pedestrian safety and security. |
| Objective 3.1: Implement and maintain a hazard identification. |
| Objective 3.2: Maintain the transit system in a State of Good Repair. |
| Objective 3.3: Achieve a level of safety performance that meets or exceeds the agency's established performance targets. |
| Objective 3.4: Expand employee training opportunities. |
| Technology |
| Goal 4: Identify opportunities to pursue and implement transit technology options where needed. |
| Objective 4.1: Evaluate the feasibility of alternative and renewable fuel infrastructure when practical. |
| Objective 4.2: Invest in data sharing and collection technologies when practical, such as automatic passenger counting (APC), automatic fare collection (AFC), or automatic vehicle location (AVL) |
| Objective 4.3: Evaluate the feasibility of integrating new and emerging technologies when practical. |
| Public Awareness |
| Goal 5: Improve CRANE service awareness and public support. |
| Objective 5.1: Develop a continuing public involvement campaign that includes surveys, discussion groups, interviews, and participation in public events. |
| Objective 5.2: Increase the agency's social media presence to educate the community on transportation issues and highlight transit service benefits such as service reliability, passenger cost savings, and environmental benefits. |

Chapter 7 – Public Involvement

Informative, educational and timely input from the public is a critical element of the TDP process. Receiving feedback that reflects the community's goals and values will help ensure CRANE understands the public's views as future service plans are developed.

Public involvement activities conducted as part of the TDP included focus group meetings with key stakeholders, interviews with community leaders, public engagement booths held during Project Connect, and virtual outreach in the form of a project website and web surveys. This chapter of the TDP summarizes the outcomes of the major public involvement activities while **Appendix B** contains a comprehensive documentation of each public involvement activity.

Key Stakeholder Focus Group Meetings

Key stakeholder focus group meetings were hosted by the City of Grand Island during the development of the TDP. A total of nine meetings were held with the intent of bringing together representatives of key groups to inform them of the GO GI Transit planning process and solicit feedback on plan topics including existing conditions and system gaps, potential transit service options considered in the scenario assessment process, plan recommendations, and the TDP implementation plan.

Participants in the focus group meetings were organized based on the groups they represent. These groups are summarized in **Table 17**. Each group met three times throughout the development of the TDP. Notice of these meetings was circulated via legal ads and press releases; a Spanish translator was available at all meetings to ensure all attendees were able to participate fully in discussion.

Table 17: Grouping of Key Stakeholders for the GO GI Transit Plan Focus Group Meetings

| Focus Group | Focus Group Description |
|---|---|
| Economic / Transportation / Businesses / Health: | Area chambers of commerce, economic development corporations, and large employers |
| Agency: | City of Grand Island and Hall County public officials |
| Education / Community Organizations: | Public and post-secondary institutions, non-profit groups, human services groups, emergency responders, and others operating in the GIAMPO region |

Focus Group Meeting #1

The first set of focus group meetings was held at the Grand Island City Hall Community Meeting Room on December 13, 2021. The purpose of this meeting was to inform key stakeholders of the TDP planning process while offering the groups an opportunity to share their thoughts on what the existing needs of Grand Island's transit system are. Overall, 45 individuals participated in the meetings with the breakdown of attendees by focus group shown below:

- **Economic / Transportation / Businesses / Health Group:** 7 attendees
- **Agency Group:** 8 attendees
- **Education / Community Organizations Group:** 31 attendees

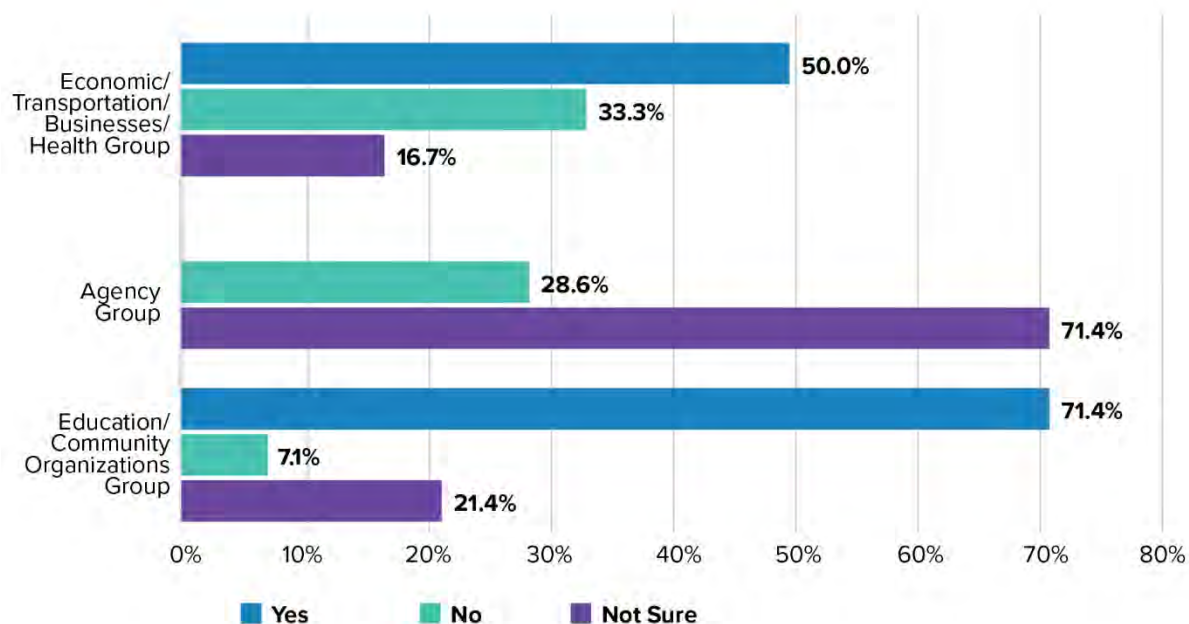
The meetings began with a presentation providing an overview of the current transit system, the GO GI Transit planning process, and their role in providing input. Next, they were invited to participate in three activities:

1. **Background Poll:** Attendees were polled to gather an understanding of their and their constituents use of CRANE, as well as ability to book rides.
2. **Barriers Identification Activity:** This activity allowed participants to identify barriers that either they or their constituents had experienced with the current transit service.
3. **Mapping Activity:** Attendees used tabletop maps of the City of Grand Island and Hall County to mark transit generators, locations of transit opportunity, and gaps in the system.

Background Poll Activity

Input shared during the background poll activity indicated most attendees have not used CRANE public transit before but are aware of the service and how to book a ride. Overall, attendees shared that member of the communities they represent either use CRANE transit or they are unsure if their constituents use the service, as shown in **Figure 29**.

Figure 29: Focus Group Responses to Constituents Use of CRANE



Barriers Identification Activity

The barriers identification activity provided valuable insight into the existing challenges to transit in the Grand Island community. Common barriers mentioned across all three focus groups included a general lack of awareness of transit and how to use the service, a lack of an online option for booking rides, and current hours of service. Additional barriers mentioned during the focus group meetings are shown in **Table 18**.

Mapping Activity

The mapping activity asked attendees to provide input on current transit generators, transit opportunities, and existing transit gaps on a tabletop map of Grand Island. Some of the feedback gained during this activity identified major employment and retail centers as transit generators while

medical centers and redevelopment sites serve as opportunities to enhance transit services. The full results of this activity are in **Appendix B**.

Table 18: Barriers Identification Activity Comments

| Focus Group | Comment |
|--|---|
| Economic / Transportation / Businesses / Health | 24-hour lead time required (example: vehicle won't run) |
| | Translation was barrier, now calls are translated if needed |
| | Stigma associated with transit use - not part of Nebraska culture |
| | Don't know about CRANE |
| | Learning/comfort with the system |
| | Trust can be a barrier from vulnerable populations |
| | App/online booking option |
| Agency | Perceptions of service |
| | Not a "bus line" |
| | Education piece - how to use service |
| | Consider "fixed route" to JBS? |
| | 24-hour notice for trip |
| | Potential hours of service |
| | Seasonal needs for parks & rec |
| Education / Community Organizations | 24-hour booking lead time is too long |
| | Trip needs change over the day |
| | Service hours need to be longer |
| | Night shift needs |
| | Lower age threshold desired |
| | Lack of awareness/need to educate |
| | Language for awareness |
| | Operator can use translator on bus |
| | Fixed route can eliminate barrier to understanding service |
| | Hours of operation (ex: night shift and after school) |
| | Intercity (tri cities) concern of potential confusion with two transit services |

Community Youth Council Meeting

Another opportunity to solicit feedback from Grand Island area residents came at the Grand Island Community Youth Council (CYC) meeting held on Monday, December 13, 2021 at the Grand Island City Hall Community Meeting Room. The CYC meeting had 10 attendees, which included sophomores, juniors, and seniors from local high schools. During this meeting, the students were given a brief presentation providing an overview of the current transit system, the GO GI Transit planning process, and their role in providing input. The CYC attendees were also invited to participate in activities similar to those held during the focus group meetings.

Based on the feedback from the CYC group, the main challenges of the existing CRANE system are:

- The 24-hour notice time to guarantee a ride
- CRANE's service hours as opposed to Uber or Lyft's 24-hour service

Full documentation of the CYC group's feedback is found in **Appendix B**.

Focus Group Meeting #2

The second series of focus group meetings were hosted by the City of Grand Island at the Grand Island City Hall Community Meeting Room on May 31, 2022. The goal of the second round of focus group

meetings was to provide an opportunity for community representatives to give their input on the three potential transit service options being considered in the study.

The same focus groups from Meeting #1 were invited to the second round of meetings; stakeholder attendees were organized into the same groups. Attendance for meeting #2 is summarized below:

- **Economic / Transportation / Businesses / Health Group:** 8 attendees
- **Agency Group:** 10 attendees
- **Education / Community Organizations Group:** 23 attendees

The meetings began with a presentation providing an overview of the current transit system, a status update on the GO GI Transit plan schedule, and a summary of key findings from the December focus group meetings and survey. Next, attendees were invited to participate in the following activities:

1. **Expansion of Service Activity:** Attendees were polled to gather an understanding of which expansion features of the current transit service they find most important.
2. **Mobility on Demand (MOD) Activity:** This activity allowed participants to identify the advantages and disadvantages of adding a MOD service.
3. **Fixed Route Mapping Activity:** Attendees used tabletop maps of the City of Grand Island and Hall County to mark areas for possible fixed route opportunities.

Expansion of Service Activity

Results of the expansion of service activity poll found that stakeholders across all three groups believe same-day booking capabilities and longer operating hours are the most important features of expanding current transit service. All three groups indicated that more weekend hours are preferable to service on holidays.

Mobility on Demand Activity

The MOD activity was structured as discussion in which stakeholders were invited to talk through the perceived advantages and disadvantages of a MOD service model. Common themes related to the advantages of MOD shared between the groups included the convenience and flexibility a MOD system enables and the potential of this system to attract higher ridership levels. Common themes regarding the disadvantages of a MOD system were concerns over increased costs of operating this type of system as well as the potential technology barrier for users who do not have access to a smart phone or computer. **Table 19** summarizes the advantages and disadvantages each group identified during the MOD activity.

Fixed Route Mapping Activity

The third activity invited attendees to review a tabletop map depicting potential fixed routes, similar to **Figure 33** in the Scenario Evaluation chapter (**Chapter 8** – Scenario Evaluation). Attendees who participated in the fixed route mapping activity commented on the density of land uses needed to support fixed route service and destinations to consider when planning routes. The complete stakeholder input can be found in **Appendix B**.

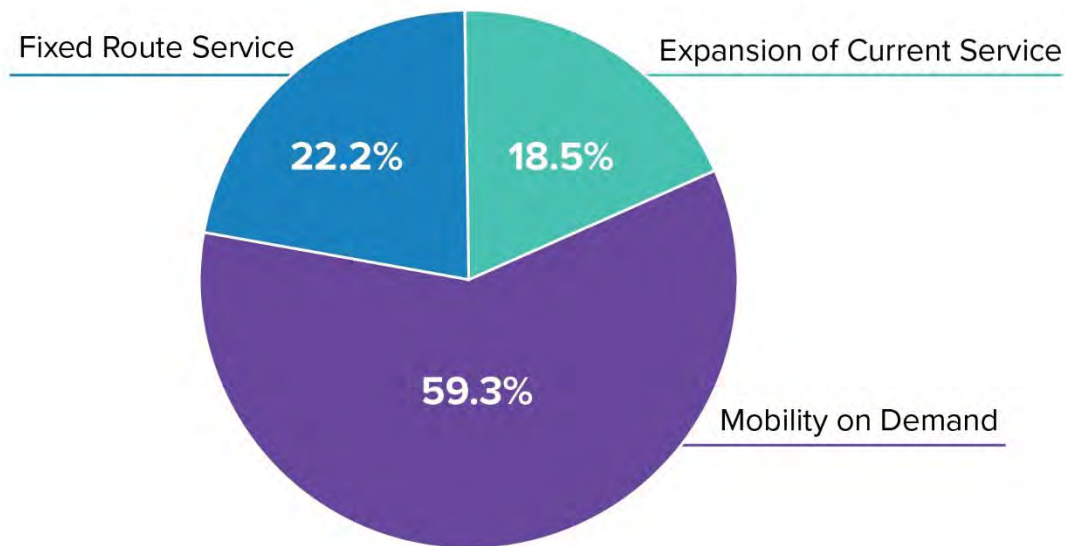


Table 19: MOD Activity Comments

| Focus Group | Advantages | Disadvantages |
|--|---|--|
| Economic / Transportation / Businesses / Health | Visitors know how to use | Competition for users could drive up CRANE ADA costs |
| | Less pre-planning for rider | Contracts with large / corporate providers can be hard to manage |
| | Flexibility for users | Cost to operate |
| | Opens to more potential riders | Riders may have a longer walk to the bus compared to door-to-door pickup |
| Agency | Rebrand the system | Gets rid of market for regular Uber/Lyft service |
| | More riders | |
| | Same day service | |
| Education / Community Organizations | Tailored service to meet need | Digital access barrier for all? |
| | Can see it leading to more ridership i.e not waiting for bus at the stop | More drivers or vehicles |
| | Convenient | Cost? |
| | Attracts more demographics | Technology requirement |
| | Attract additional services | 24 hour? |
| | Pilot 3 years could determine ridership for future fixed route | Advanced booking still required? |
| | CCC classes end at 9:00 p.m. | What if there aren't drivers for MOD (Uber, etc.) |
| | More incentive for drivers flexibility | |
| | New system may attract drivers due to demand (ex: Doordash) | |
| | MOD for 2-3 years could aid with a 'stereotype' of users to cater to more fixed | |
| | 24 hours services? Would be beneficial for after bars downtown | |
| | What are the other types of models? | |
| | Public private partnership | |

After the three activities wrapped up, attendees were invited to take a final poll to gauge their preferences in terms of the scenarios presented to them during the focus group meetings. Overall, focus group members demonstrated a preference for the MOD scenario, followed by the fixed route service scenario. Expansion of the current system took third place in the voting. **Figure 30** summarizes the breakdown of focus group participant votes.

Figure 30: Key Stakeholder Preferences for GO GI Transit Scenarios



Focus Group Meeting #3

The third series of focus group meetings were hosted by the City of Grand Island at the Grand Island City Hall Community Meeting Room on October 27, 2022, and a virtual meeting was held October 31, 2022 as a supplementary meeting for those unable to attend the October 27th Education / Community Organizations group session. The aim of Focus Group Meeting #3 was to present the draft TDP recommendations and gather feedback from key stakeholders. A total of 23 stakeholder representatives attending the third round of focus group meetings:

- **Economic / Transportation / Businesses / Health Group:** 9 attendees
- **Agency Group:** 6 attendees
- **Education / Community Organizations Group:** 3 attendees
- **Virtual Option:** 5 attendees

Attendees at the focus group meetings were given a brief presentation providing an overview of the current transit system, a status update on the GO GI Transit plan schedule, and a summary of key findings from the May focus group meetings and survey. Next, the team mentioned the overarching recommendation is to continue baseline operations and explained regarding the three scenarios (expansion of current service, mobility on demand, fixed route service) that based on need and available funding, the City is moving forward with service expansion. They shared more on the phasing and funding options that accompany a service expansion. Following the presentation, attendees were invited to participate in the following activities:

- **Service Expansion Activity:** Attendees were asked to rank the three service enhancements identified as part of the TDP in order of importance.
- **Service Expansion Discussion:** Upon voting, attendees were asked to share their thoughts regarding each service enhancement and the potential for each to meet the current needs of the system.

Service Expansion Activity

The results of the Service Expansion Activity found that all focus groups felt extended hours is the most important service expansion besides the Education/Community Organizations group, who voted same-day service as the most important enhancement. Same day service was generally the second most important service enhancement while all groups felt extended service days was the third most important enhancement for CRANE to implement.

Service Expansion Discussion

Following the presentation of the potential future service expansion options being considered in the study, attendees were asked to share their thoughts on each. Key takeaways from the discussion were:

- Same-day service and/or quicker turnaround times are needed to offer more support for vulnerable populations.
- Extended hours, especially later evening hours, would help future riders.
- Intercity service, fixed routes, and routes to key locations such as JBS, Hornady, or the Kearney airport would improve the service and increase ridership.

Project Connect Booth

Project Connect is an annual event held by social service organizations in Grand Island and Hall County. The event is held to assist individuals and families who are experiencing homelessness or near homelessness receive immediate services such as medical, dental, housing, legal, vision, and veteran's services.

As equity is an important element of Grand Island's transit service, the TDP project team hosted a booth at Project Connect which took place on October 27, 2022 at the Pinnacle Bank Expo at Fonner Park. Attendees at Project Connect were invited to learn about the TDP and share feedback on potential service enhancements. A survey and Spanish translation services were available at this event.



Community Leader Interviews

Community leader interviews were held during the scenario evaluation process to gain further understanding how community members view existing transit service, their thoughts on the transit service scenarios, funding options, and other topics. A total of four interviews were conducted with representatives of the following organizations:

- Central Community College
- Economic Development Council
- Hall County
- United Way

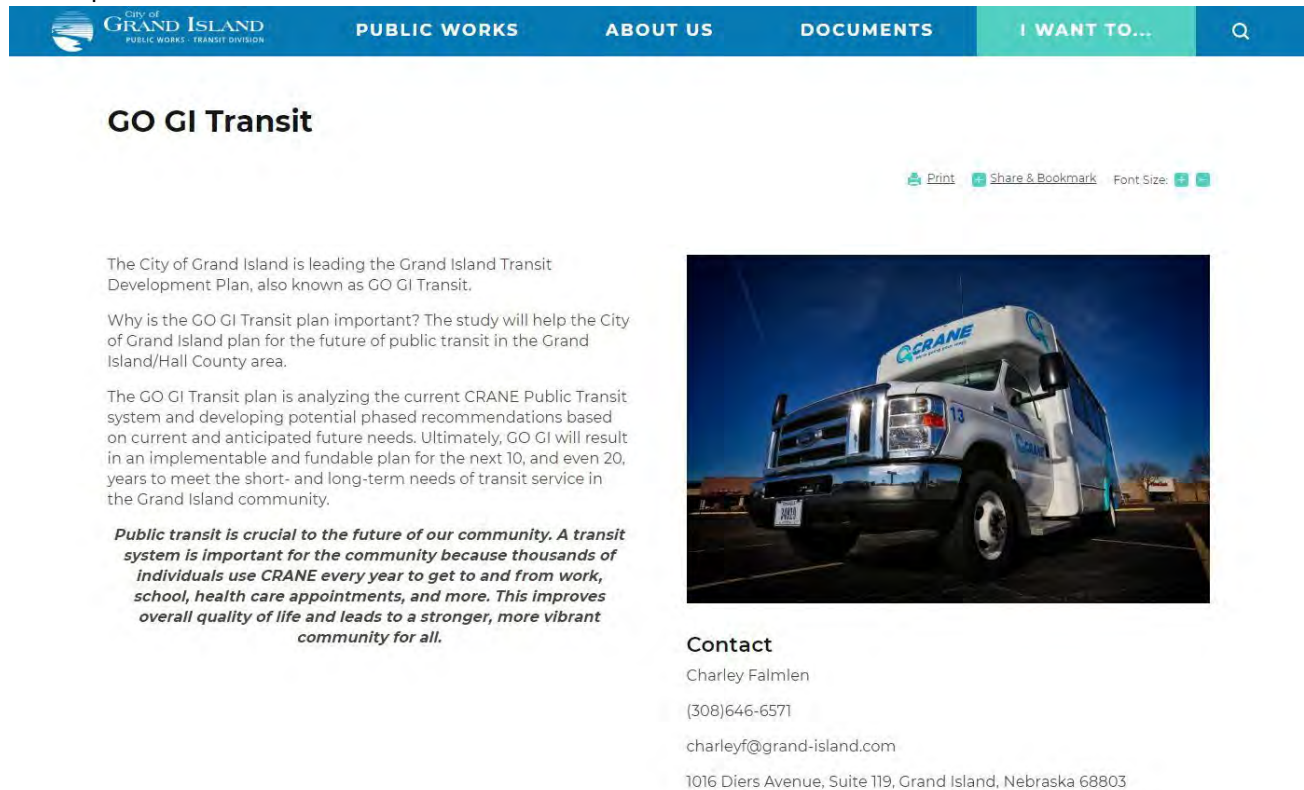
Major themes heard during the interview process relate to the barrier created by the 24-hour advanced noticed required to book a ride with CRANE's existing service, the potential benefits of a fixed route service in providing reliable transit, and the need for regular, dependable transit service to meet the needs of the community. Full transcripts of the community leader interviews can be found in **Appendix B**.

Virtual Engagement

Additional public engagement activities utilized online platforms with the goal of reaching a broader audience via web-based communication tools. The main tools during the GO GI Transit planning process were a project website and web surveys, which are detailed below.

Project Website

A project website was developed for the GO GI Transit Plan and was hosted on the City of Grand Island's Public Works webpage. Information published on the site included a plan overview, links to interim project deliverables, and access to web surveys. The page was updated regularly throughout the TDP's development.



Web Surveys

Web Survey #1

The City of Grand Island hosted a survey from December 6 through December 20, 2021⁷ to seek public input on their experience, needs and desires for the transit system. The survey was promoted via social media, legal ad, press release, and email blast. Additionally, a Spanish speaking team member canvassed Grand Island on December 14 to further promote the survey with Spanish speaking

⁷ The study team let the survey remain open through January 2022 to allow for Central Community College students and staff to take the survey when the semester began.

community members. The City received a total of 274 responses (268 English and 6 Spanish) throughout the survey. Key takeaways from Web Survey #1 are below while **Appendix B** contains the complete results.

Key Takeaways

- The 24-hour notice required to guarantee a ride is considered a hindrance to using the service for some users.
- There is a general lack of awareness of the transit service.
- Many respondents desire a fixed, regular route with stops at popular destinations.
- Some respondents would like to see hours extended later in the evening and offered on Sunday.
- Overall respondents had okay to great experiences with the CRANE service.
- Several note that more accessible mass transit options are needed in Grand Island.
- Many are in favor of implementing and expanding public transportation in the city.
- There is a lack of communication between bus drivers and customers which could be useful during passenger pick up.

Web Survey #2

A second survey hosted by the City of Grand Island was available to community members from May 31 through June 14, 2022 to seek public input on the three potential transit service options being considered for the transit system. The survey was promoted via social media, legal ad, press release, and email blast. The City received a total of 212 responses (207 English and 5 Spanish) throughout the survey. Key takeaways from Web Survey #2 are below while **Appendix B** contains the complete results.

Key Takeaways

General

- Both CRANE riders and non-CRANE riders say that availability should be the most important goal for the GO GI Transit Plan
- Some respondents note that public transit is more advantageous than ever given the current surge in gas prices
- Both riders and non-riders mention frustration with the 24-hour reservation requirement
- There is a lack of marketing and advertising / general awareness for the service
 - Many non-riders noted that they presumed CRANE buses were an assisted living transportation service as opposed to a public transportation system
- Spanish-speaking drivers would be helpful to the Hispanic population

Expansion of Current Service

- This option was considered most beneficial for Grand Island and Hall County as well as most likely to be realistically implemented in the next five to ten years
- Extending hours is highly favorable with the Grand Island public
 - A common suggestion included 5:00 a.m. to midnight, adding Sundays and holiday service
- Many would like a bus stop near schools (while still avoiding pickup lines)

Mobility on Demand

- This option was considered second most favorable by both CRANE riders and non-CRANE riders
 - It nearly tied "Expansion of Current Service" for the most beneficial for Grand Island and Hall County
 - Several surveyors note it as especially favorable if it removes the 24-hour reservation requirement

- Utilizing technology may appeal to a younger demographic but be a barrier to an older demographic
 - May allow the service to tap into a new market of riders while still accommodating current riders

Fixed Route

- Both CRANE riders and non-CRANE considered this option as the least likely to be realistically implemented in the next five to ten years
- Many non-riders feel this is option is the most comfortable, predictable, and easy to grasp

Web Survey #3

A third survey hosted by the City of Grand Island (City) was available to community members from October 24 through November 10 to seek public input on the draft GO GI Transit plan recommendations being considered for the transit system. The survey was promoted via social media, legal ad, press release, and email blast. The City received a total of 226 responses (223 English and 3 Spanish) throughout the survey. Key takeaways from Web Survey #2 are below while **Appendix B** contains the complete results.

Key Takeaways

General

- Both CRANE riders and non-CRANE riders say that availability should be the most important goal for the GO GI Transit Plan

Expansion of Current Service

- Of the three different service enhancements included in the service expansion scenario, respondents identified the following priorities:
 - Extended hours was the highest ranking enhancement for respondents, with 49% responding that it was the most important element to add to current services.
 - Same day service was the second ranked enhancement for respondents, with 33% of respondents responding that it was the most important element to add to current services.
 - Expanded days was the third ranked enhancement for respondents, with 18% of respondents responding that it was the most important element to add to current services.

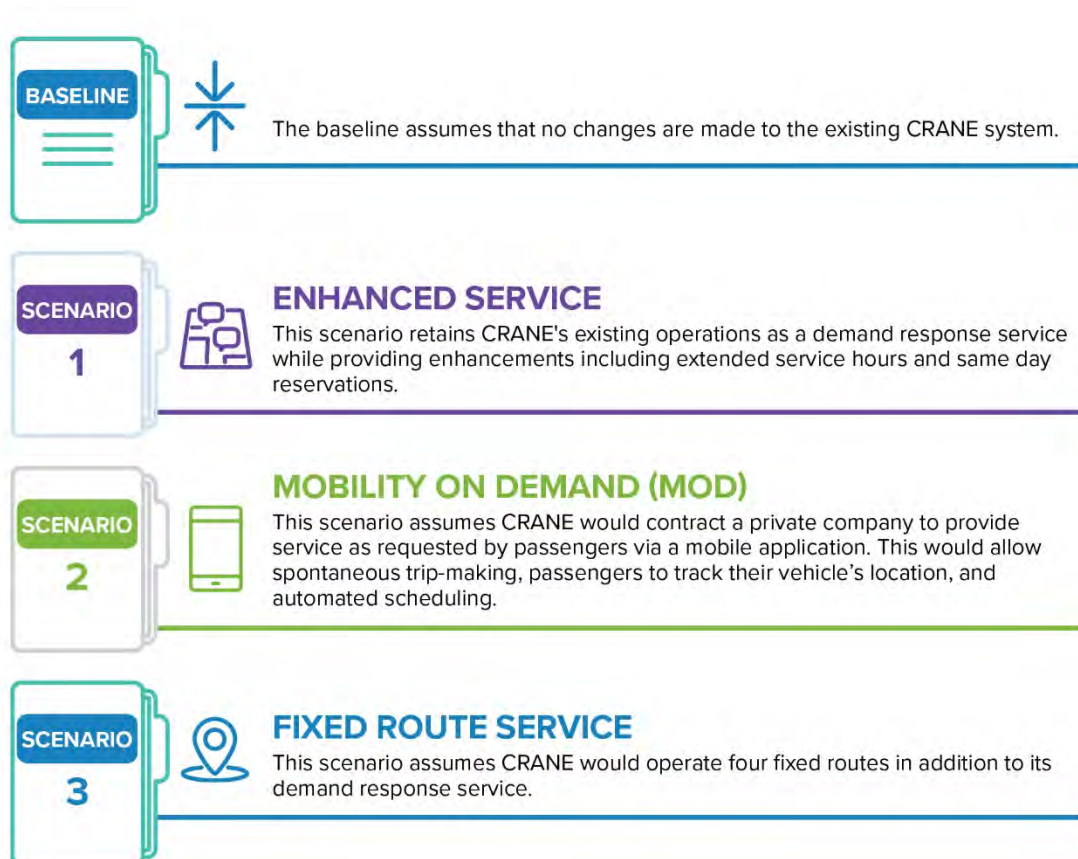
Public Comment Period on Draft TDP Document

Upon completion of the draft TDP document, a 30-day period in which the public was invited to comment was opened so that all community members had a final opportunity to provide feedback on the Plan.

Chapter 8 – Scenario Evaluation

The purpose of the Scenario Analysis is to conduct a thorough and objective evaluation of the range of alternatives to compare each scenario's performance relative to the baseline. This analysis used an agreed upon set of performance measures to assess how well each scenario meets the goals and objectives of the community. The baseline scenario assumes a continuation of CRANE's current service without any major adjustment to operations; this scenario is used to evaluate outcomes of the three scenarios developed to reflect service changes, which include Enhanced Service, Mobility on Demand (MoD), and Fixed Route Service. Each of the three scenarios are briefly described in **Table 20**. This chapter details the scenario analysis methodology and the results of those findings. For a full description of the methodology and data sources used in the Scenario Evaluation, refer to **Appendix C**.

Table 20: Scenario Description



Scenario Development

The scenarios were developed through community and stakeholder outreach, an assessment of baseline conditions, review of peer agencies, and a thorough review of local, regional, and state planning documents. This section provides an evaluation of the impact of implementing one or more of the transportation options. **Table 21** presents general assumptions including forecasted inflation based on United States Bureau of Labor Statistics estimates (2019) and ridership growth from the GIAMPO 2045 LRTP for the scenarios.

Table 21: General Growth Assumptions

| Metric | Value |
|-------------------------------------|-------|
| Inflation Rate (annual) | 2.20% |
| All Modes Trip Growth Rate (annual) | 0.69% |

Baseline

The baseline scenario had two components:

- A historical component that used 2019 data (**Table 22**) to understand how the system performs under current conditions
- A forecasting component to build off 2019 data to estimate 2022 metrics (**Table 23**).

The 2022 ridership was calculated using the averages from May to February, 2022. Based on these calculations, service area daily ridership was multiplied by the number of service days to estimate annual ridership. As shown in the tables below, there is a significant increase in total ridership from 2019 to 2022. This increase is partially attributed to recent service improvements implemented between 2020 and 2021.

Table 22: 2019 Performance Metrics

| Metric | Value |
|---------------------------------------|-----------|
| Operating Cost per Passenger Trip | \$21.43 |
| Total Operating Expenses | \$603,707 |
| Total Annual Weekday Ridership (2019) | 28,130 |
| Number of Revenue Vehicles | 12 |
| Average Fare per Person | \$1.83 |

Table 23: 2022 Forecasted Ridership

| Metric | Value |
|---------------------------------------|--------|
| Weekday Daily Ridership | 194.36 |
| Weekday Annual Ridership | 49,561 |
| Saturday Daily Ridership | 56.42 |
| Saturday Annual Ridership | 2,934 |
| Saturday Ridership Percent of Weekday | 29% |

The baseline scenario assumes no change in service hours or days of operation from the prior year. These baseline service characteristics are presented in **Table 24**.

Table 24: Baseline Service Characteristics

| Service Characteristic | Value |
|-----------------------------|--------------------|
| Weekday | 6:00 AM to 5:30 PM |
| Saturday | 9:00 AM to 3:00 PM |
| CRANE holidays (no service) | 6 |
| Service Weekdays | 255 |
| Service Saturdays | 52 |
| Sundays (no service) | 52 |

Scenario 1: Enhanced Service

Enhancing the existing demand response service offers a variety of benefits without requiring existing users to re-learn how to ride public transit. Since the infrastructure and processes are already in place, changes may happen quickly with a limited number of unknown variables to consider compared to the other expansion scenarios. Assuming there are no initial capital costs, if the service changes are not well received by the public or do not add significant value, the service can easily be adjusted.

For this scenario, enhanced service assumes demand response operations continue but the service starts earlier in the day and runs later at night to provide more options for users. Extended hours and expanded days improve access for those working outside of regular business hours and for riders looking to use transit for non-work trips like shopping and recreation. In addition to extended service hours, this scenario incorporates enhanced trip scheduling, allowing requests to be made the same day as the trip to provide scheduling flexibility.

The full range of enhancements for this scenario are outlined in **Table 25**.

Table 25: Scenario 1: Enhanced Service Elements

| Enhancement | Description |
|------------------|--|
| Extended Hours | <u>Weekdays</u> : extend service to 8:00 PM <u>Saturdays</u> : begin service at 8:00 AM. End service at 6:00 PM |
| Expanded Days | Expand service to operate on Sundays and holidays |
| Same-Day Service | Guaranteed service when requests are made the same day as the trip |

Capital Costs

Capital costs associated with the enhanced service scenario would be the purchase of additional buses. For this scenario, CRANE will need at least one additional vehicle in the next 20-year period to meet forecasted demand. After inflation, the estimated cost of the additional vehicle would be approximately \$115,000.

Figure 31: CRANE Bus



Scenario 2: Mobility on Demand

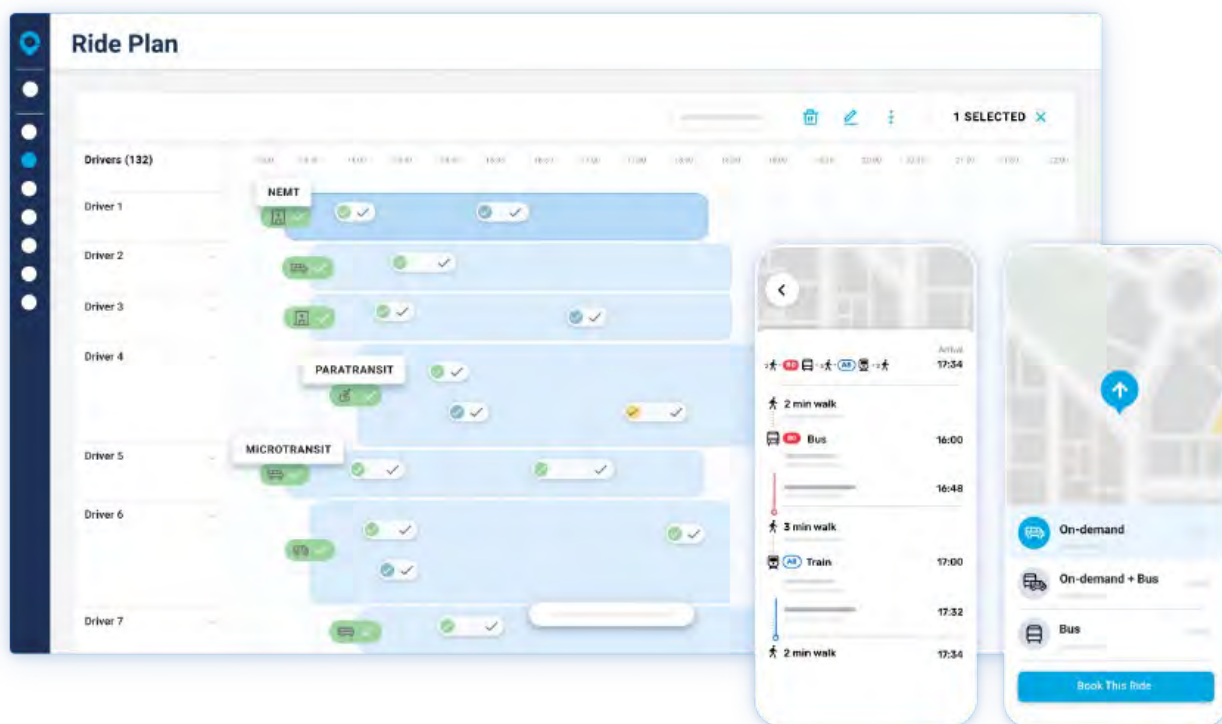
A recent trend in transit planning is Mobility on Demand (MoD), in which transit operates similarly to mobility as a service providers like Uber and Lyft. MoD allows for curb-to-curb service (or at a minimum pick-up points that require a short walk), spontaneous trip-making, vehicle location tracking, and automated scheduling that other types of public transportation do not offer. Services can be prescheduled and/or requested on-demand through a dispatch system accessed using a smartphone application, computer, and/or call-in system. MoD increases access to the number of destinations that individuals can get to using transit and reduce the walk time when compared to fixed route. Because of the nature of the service, ADA requirements can be automatically met using this method, although maintaining the existing ADA services using a separate demand-response system would be possible.

In this scenario, CRANE would contract with a private company to operate rides as requested by passengers. To estimate the service characteristics and performance, a review was conducted of newly established MoD programs in two cities with similar population and rural character to Grand Island: Valdosta, Georgia, and Wilson, North Carolina.

Capital Costs

As a contracted service, implementing MoD does not typically come with additional capital costs for the agency. The cost of additional vehicles to meet increasing demand and scheduling software is negotiated into the contract with the private provider.

Figure 32: Mobility on Demand Software



Scenario 3: Fixed Route Service

Fixed route service is notably efficient at providing trips for large numbers of people traveling between common origins and destinations. Offering a fixed route system that serves downtown Grand Island and major activity centers may potentially reduce traffic congestion and vehicle emissions long-term. Implementing this option may also promote Transit Oriented Development (TOD) and growth along the route corridors. This type of service is also widely adopted within larger urban areas and often operated by the transit agency independently. Another benefit of fixed route service is that trips do not require a reservation and supports routine for users who take the same trip regularly.

In this scenario, CRANE would operate fixed route service in addition to its demand response service. Characteristics of this service would include those presented in **Table 26**.

Table 26: Scenario 3: Fixed Route Service Characteristics

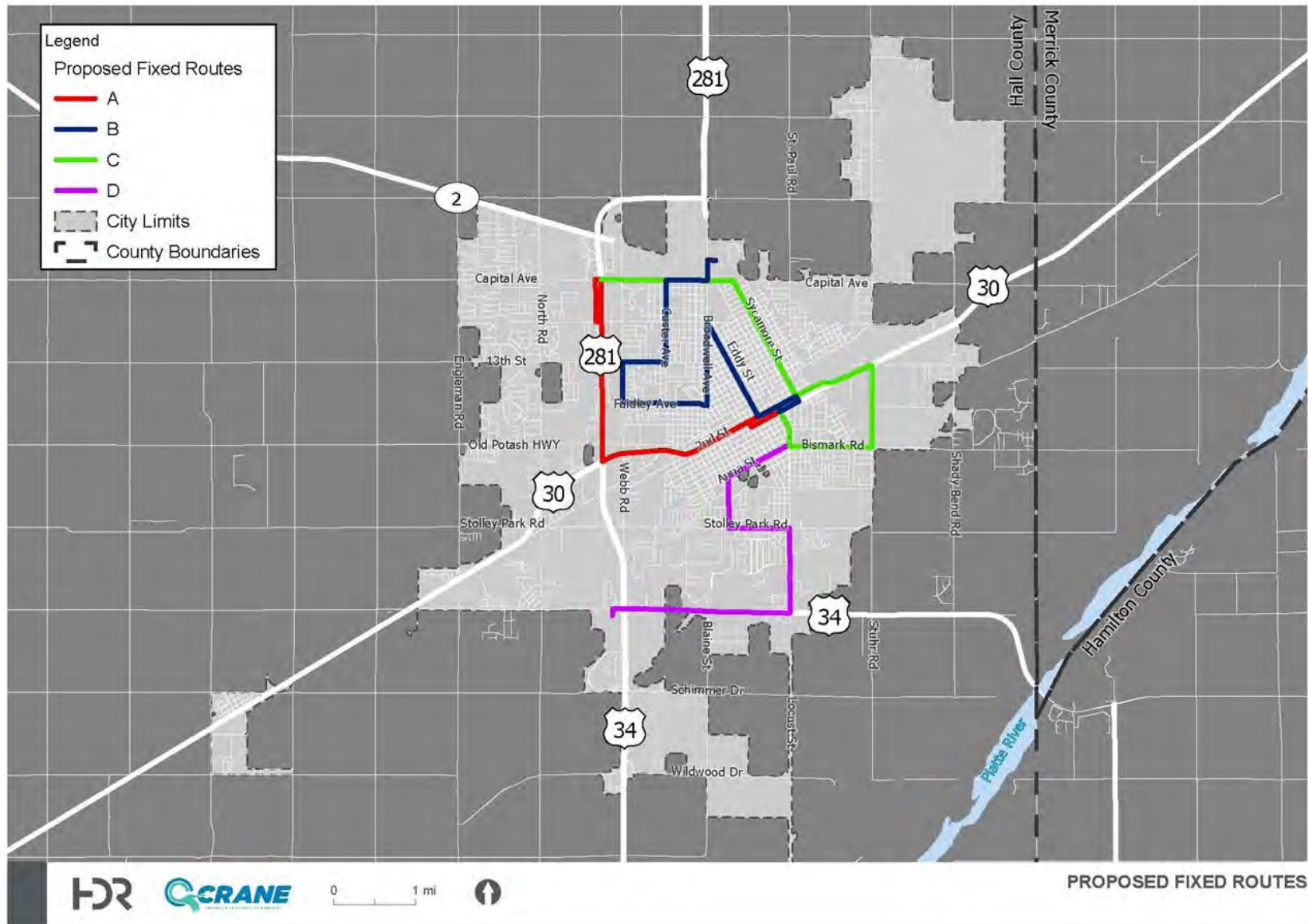
| Characteristic | Value |
|--------------------|-------------|
| Headway | 60 minutes |
| Stop Spacing | ¼ mile |
| Vehicle Type | Cutaway Bus |
| Average Speed | 15 mph |
| Number of Routes | 4 |
| Number of Vehicles | 4 |

A potential fixed route system with four routes could run between Downtown Grand Island and other highly developed portions of the city, using the same vehicle types currently used for demand response service. The potential fixed route service map is presented in **Figure 33**.

Capital Costs

Fixed route service would require bus stops, shelters, and signage. It is assumed that a bus stop and related signage would be placed every ¼ mile along each of the routes with 20% of those stops having shelters and benches. The capital cost for stops and related amenities in the first year is estimated to be approximately \$450,000. The newly constructed stops and fixed-route infrastructure would additionally require annual maintenance, estimated to be approximately \$36,000 per year. According to scenario analysis results, fixed route service could accommodate future demand without the need to purchase additional vehicles. However, to maintain a state of good repair, vehicles would need to be replaced over the 20-year period.





Figure 33: Potential Fixed Route Service Map



Scenario Evaluation

After each scenario was defined and modeled, the results were then compared against the evaluation criteria to determine which scenario should be implemented. Assessing each scenario involved a comparison of costs and benefits. The criteria presented in **Table 27** were developed to evaluate the performance of the three alternatives.

Table 27: Performance Measures

| Measure | Explanation |
|---|---|
| Operating Costs  | The annual operating cost to provide public transportation services. |
| Forecasted Ridership  | The growth in ridership incurred by implementing the proposed scenario. |
| Operating Expenses per Passenger Trip  | Operating costs divided by ridership. |
| Long-Term Budget Risk  | Supplemental funding opportunities to support transit service. |

Scenario Results

Cost and efficiency measures were forecasted for 5-year, 10-year, and 20-year periods. The results of this analysis are presented in **Figure 34** through **Figure 36**.

Figure 34: Annual Operating Costs (Millions)

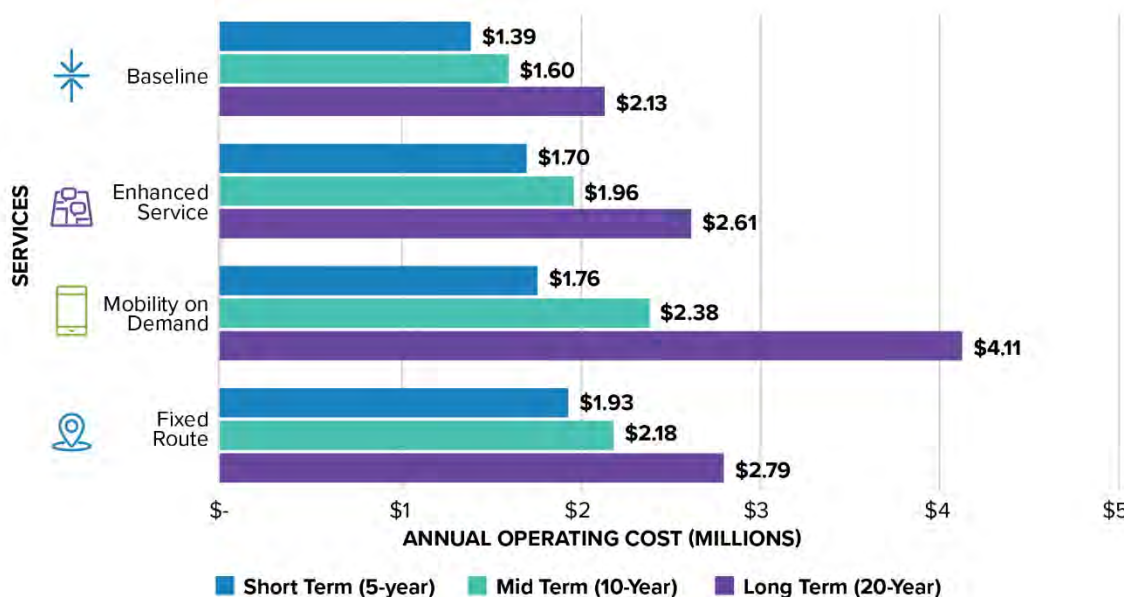


Figure 35: Annual Ridership (Passenger Trips)

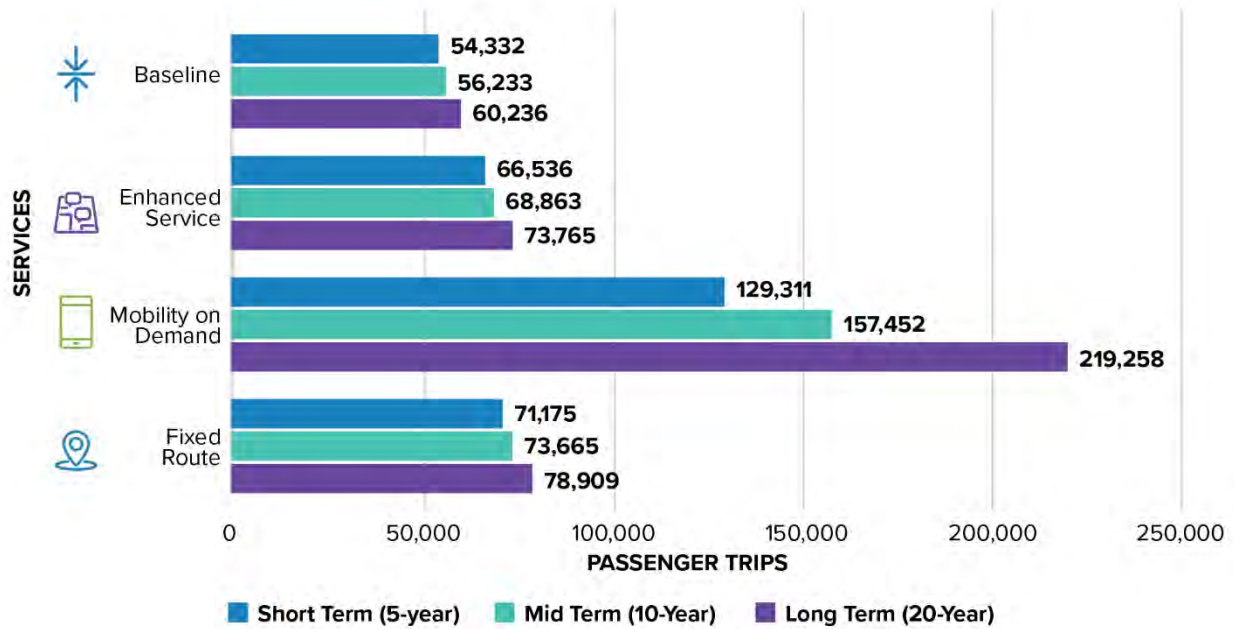
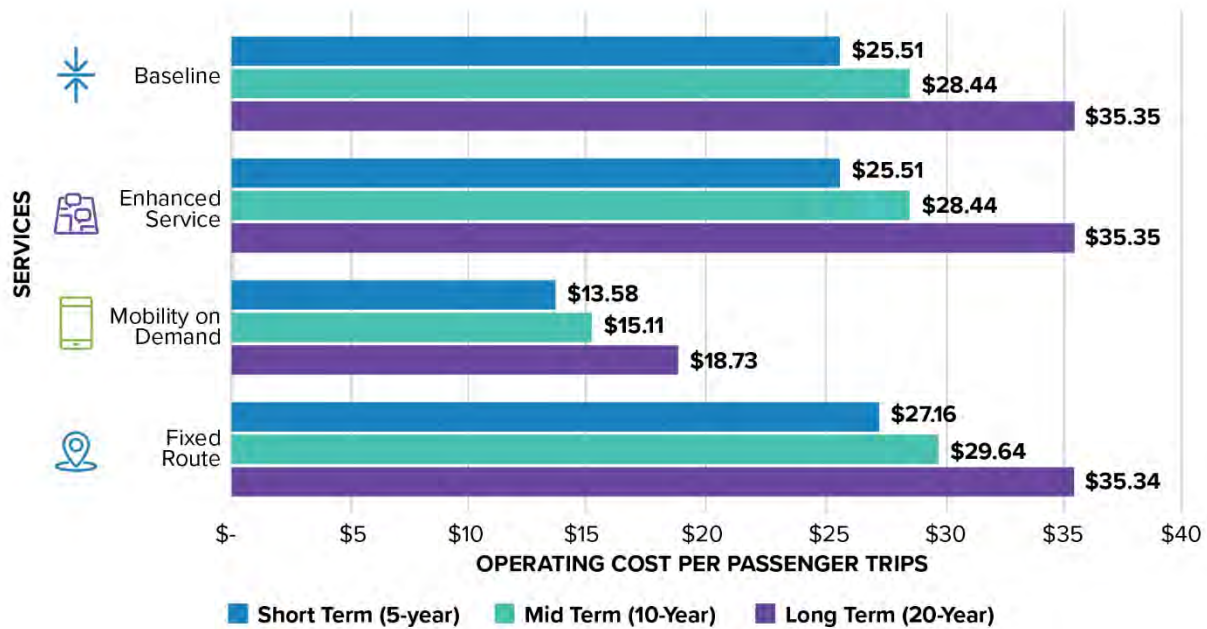


Figure 36: Operating Cost per Passenger Trip



System Resiliency

In addition to performance metrics, it is important to take into consideration the long-term implications of current trends that may affect each scenario over the next 20 years. This includes long-term system resiliency and assessing how demographic, land-use, and travel patterns may affect the transit network means acknowledging the changes that could trigger a re-evaluation in the future.

Changing Workplace

Nearly two years into the COVID-19 pandemic, roughly six-in-ten U.S. workers who say their jobs can mainly be done from home (59%)⁸ are working from home all or most of the time. This means the percent of non-work trips is growing when compared to work trips. Riders using public transit for shopping, recreation, and other non-work trips have different needs than the traditional commuter. For choice riders, transit will need to become increasingly more comfortable and convenient to be a desirable alternative to personal vehicles.

Emerging Technology

The emergence of new technologies will also change the mobility landscape with electric vehicles (EV), autonomous vehicles (AV), and micro-mobility paving the way. The rapid adoption of EV technology is reflected in research conducted by Pew Research Center which found that in 2020, nearly 1.8 million EVs were registered in the U.S.⁹, more than triple the amount in 2016. AV technology continues to advance, with several public and private companies launching pilot programs. These programs have included shuttles, buses, and ride-hail services.

Land Use and Development

Significant changes in development and land use patterns could also lead to changes in levels of efficiency for each of the scenarios. Land use patterns are inextricably linked to transit. Transit networks have the power to shape development, influence property values, and contribute to resident quality of life. How communities develop also affects how convenient and appealing public transportation is for residents. For example, the introduction of a large warehouse or distribution center on the outskirts of town may promote increased development in that area.

Summary of Results

Based on the ridership and cost forecasting model, the alternatives performed against the evaluation criteria in the following ways:

- **Enhanced Service**
 - Enhanced service is forecasted to produce the lowest increase in ridership of the three scenarios with an approximate increase of 22.4% over the baseline for the 20-year period.
 - The cumulative operating cost for enhanced service (\$40.69 million) also increases 22.4% from the baseline (\$33.23 million) over the TDP timeframe of 2022 through 2042.
 - Given the increase in cumulative operation costs, the average enhanced service operating cost per passenger trip (\$29.61) for the 20-year period will increase slightly when compared to the baseline (\$29.53).













⁸Pew Research Center, [COVID-19 Pandemic Continues to Reshape Work in America](#)

⁹Pew Research Center, [Today's electric vehicle market: Slow growth in U.S., faster in China, Europe](#)

- While enhanced service could meet customer needs short term, the service may not achieve economies of scale. If demand increases and/or the average trip length becomes longer, the operating cost will also increase.
- **Mobility on Demand**
 - Mobility on-demand has the highest potential increase in ridership over the 20-year period, with estimated ridership seeing a 200% increase over the baseline for the 20-year period.
 - This scenario has the highest operating cost with a cumulative operating cost of approximately \$56.41 million over the 20-year period, which is significantly higher (69.75%) than the baseline of \$33.23 million.
 - There is a significant forecasted increase in ridership brought on by the ability to schedule same day trips and the convenience of trip scheduling and planning via mobile app.
 - The 20-year average operating cost per passenger trip is the lowest (\$15.99) when compared to the baseline (\$29.53).
 - Mobility on Demand service has high levels of adaptability to meet the changing needs of transit users. However, concerns have been raised over smaller vehicles typically used for on-demand service, as they may cause more congestion when compared to larger buses, especially as more vehicles are added to the fleet.
- **Fixed Route Service**
 - Fixed route service performs better than enhanced service with an estimated 31% increase in ridership over the 20-year period, when compared to baseline.
 - This scenario has the second highest operating cost with a cumulative operating cost of approximately \$44.49 million over the 20-year period, which is higher than the baseline (\$33.23 million) by 33.62%.
 - The 20-year average operating cost per passenger trip for fixed route (\$30.12) is slightly higher than the baseline service scenario (\$29.53). As ridership increases with fixed route service, the cost per passenger trip would decrease.
 - Due to the area having a low population density, there may not be sufficient ridership to cost-effectively provide service expansion in the future. This service type may also not effectively accommodate emerging technologies and/or changing customer needs.

Table 28 summarizes the results for each of the scenarios. This summary provides a comparison of each scenario's performance relative to the baseline service scenario.

Table 28: Scenario Evaluation

| Alternative | Forecasted Ridership | Operating Cost | Operating Cost Per Passenger Trip | Long-Term Budget Risk |
|---------------------|---|---|---|---|
| Enhanced Service |  |  |  |  |
| Mobility on Demand |  |  |  |  |
| Fixed Route Service |  |  |  |  |

 Fair
  Better
  Best

Recommended Strategy Approach

Based on the results of the scenario evaluation, the recommended strategy approach is a continuation of the existing service while monitoring operational and financial conditions to implement enhanced services, including the potential elements of:

- Expanded service hours
- Expanded service days
- Same day booking for trips

These elements of the enhanced service scenario could be implemented once the necessary funding and need arises. While the MoD scenario saw the greatest increase in ridership and the lowest operating cost per passenger, the high operating costs could prohibit an efficient rollout of this service. Fixed route service is anticipated to encourage adequate growth in ridership while maintaining reasonable operating costs, however the operating cost per passenger trip and long term budget risk render fixed route service as a potentially infeasible scenario.

The continuation of the baseline scenario paired with potential implementation of enhanced services was determined to be the optimal approach for the City of Grand Island in reaching the goals and objectives of this TDP through its implementation and operation while remaining fiscally constrained.

The reasons for selecting this strategy approach include:

- Current users rely on the CRANE's door-to-door and ADA service.
- Best supports the development of the Inter City bus service in coordination with the NDOT.
- Best manages the risk of costs escalating beyond current budgets.

Further discussion of the implementation and funding plan are in **Chapter 9**.

Chapter 9 – Financial and Implementation Plan

The GO GI Transit Financial and Implementation Plan details the estimates of revenue that will be available to the city so that the current transit system is maintained while potential service enhancements are able to be implemented. The plan also provides the estimated costs that Grand Island is anticipated to incur over the next 20 years. The purpose of this plan is to establish a potential schedule for implementing potential service enhancements and outline the required funding to implement these enhancements.

Transit Funding in Grand Island

Current revenues for CRANE transit come from a mix of Federal, state, and local sources which are supplemented by fares and ticket sales from CRANE users.

Federal Transit Funding Sources

Grand Island receives annual Federal funding to support transit operations and capital. While many Federal transit funding sources exist, the main programs that Grand Island receives funding from are:

- **FTA Section 5307 Urbanized Area Program:** Funding for urbanized areas and governors to support transit capital and operating assistance. FTA Section 5307 funds require a local match, with Federal share for capital expenditures capped at 80 percent of net project cost, 90 percent for cost of vehicle-related equipment for ADA and Clean Air Act compliance, and 50 percent of net project cost for operating assistance.
- **FTA Section 5311 Formula Grant for Rural Areas:** Formula-based funding for rural areas to support transit capital, planning, and operating assistance. FTA Section 5311 funds require a local match, with Federal share for capital projects capped at 80 percent, 50 percent for operating assistance, and 80 percent for ADA non-fixed route paratransit service. These funds support service in Hall County outside of the Grand Island urbanized area.
- **FTA Section 5339 Bus and Bus Related Facilities:** Funding for States and designated recipients to replace, rehabilitate, and purchase buses and related transit equipment. Section 5339 funds are also available to construct bus-related facilities. FTA Section 5339 funds require a local match with Federal share for net project cost capped at 80 percent.

State Transit Funding Sources

Available transit revenues sourced from Nebraska Department of Transportation (NDOT) are mainly granted through subsidies to aid transit operations and capital expenditures which are sourced from the State's budget.

Local Transit Funding Sources

Grand Island also relies on local sources of funding to support transit operations. These funds are come from several different sources, including the City's General Fund and contributions from Hall County.

Funding Assumptions

A series of assumptions were developed for this Financial and Implementation Plan. These assumptions follow those detailed in the Scenario Evaluation chapter (**Chapter 8**), with some minor revisions.

Revenue Assumptions

In estimating the future revenues that will be available to the City of Grand Island for transit investment, the following were assumed:

- Transit revenues received from FTA 5307 for operations assume a split of 50 percent Federal dollars, 25 percent state match, and 25 percent local match. FTA 5307 funds for administration, maintenance, and equipment and assume a split of 80 Federal, 10 percent state match, and 10 percent local match.
- Amount of FTA Section 5307 funding that the City is eligible for is assumed to grow at an annual rate of 0.84 percent, which was the population growth rate assumed in the GIAMPO 2045 Long-Range Transportation Plan
- Forecasted capital revenues are assumed to match forecasted capital expenditures

Cost Assumptions

In estimating future costs incurred by the City of Grand Island related to the implementation of the recommended service enhancements, the following were assumed:

- Operating costs and capital costs were grown at an annual rate of 4.0 percent to reflect a conservative level of long-term inflation
- Transit vehicle replacement schedule assumes that all current transit vehicles will be replaced with Ford Transits once they reach their scheduled replacement date

FY2022 Funding – Baseline

The baseline year for the TDP financial forecasting is FY2022, which serves as the launch point for estimating future transit revenues and costs. **Table 29** summarizes the baseline costs and revenues for FY2022. As seen in the table, total costs amount to nearly \$1.4 million for the fiscal year while revenues from Federal, state, local, and operational sources balance these costs out.

Table 29: Total Revenues and Costs for FY2022

| Revenue/Cost Source | 2022 Level |
|--|--------------------|
| Revenue | |
| FTA 5307 Funds | \$767,803 |
| Local Funding | \$270,094 |
| State Funding | \$270,094 |
| Fares, Ticket Sales & Revenue | \$73,595 |
| Total Revenue | \$1,381,585 |
| Costs | |
| Service, Administrative, and Maintenance Costs | \$1,381,585 |
| Total Costs | \$1,381,585 |

Implementation Plan

There is a well-documented appreciation by current riders for the services provided by the CRANE Public Transit program. With this in mind, the plan intends to recommend the Grand Island to continue with baseline operations, while monitoring enhancement service options. When public support, current ridership support, private partnerships, and operational potential are advantageous, the potential

implementation of enhancement service options will be pursued. Enhancement service options which best support the development of the Inter City bus service in coordination with the Nebraska Department of Transportation will be prioritized. These potential phased service options include extended hours of service, extended service into Sunday, and same-day service.

Estimated costs for the potential service enhancements were assumed to take place over the next 8 years under the following schedule:

- **Extended hours:** beginning in 2025
- **Expanded service days:** beginning in 2027
- **Same day service:** beginning in 2030

While the assumed schedule was used to develop revenue and cost projections, the implementation phasing for these enhancements is used exclusively for illustrating a potential implementation schedule, therefore these target years may change to adapt to the City's fiscal capacity. It is recommended that the City of Grand Island adheres to the service triggers described below to realize the appropriate conditions necessary to guide their implementation.

Maintain Current System (Short-Term)

The priority for transit service in the short term should be the maintenance of the current system. Continued maintenance of an efficient transit system can allow the City of Grand Island to prepare for the implementation of future service enhancements by identifying potential new sources of transit funding, and potential partnerships with local organizations who can support implemented service enhancements.

The continuation of existing service applies to service both within Grand Island and rural Hall County; any adjustments to rural service will be coordinated between the City of Grand Island and Hall County.

Enhanced Service (Mid- to Long-Term)

The potential timeline for enhanced service is phased with extended hours implemented in 2025, followed by expanded days in 2027, and finally same day service in 2030. These are suggested triggers, and not necessarily considered recommended services without the necessary funding sources and partnerships first identified. The goal is to provide CRANE and the City of Grand Island time to generate support, design the service, market the enhancement, implement it, and evaluate the new service before starting the next enhancement.

Extended Hours Triggers

As stated in the Scenario Evaluation chapter (**Chapter 8**), extended service hours are assumed to be:

- **Weekday service:** extended to 8:00 PM
- **Saturday service:** begin service at 8:00 AM, end service at 6:00 PM

To properly gauge the phasing of extended service hours, the following triggers were identified.

Intercity Bus Service

NDOT completed a [Grand Island/Hastings/Kearney Intercity Bus Study](#) in 2020, along with a [2022 update](#), that evaluated the feasibility of operating intercity bus service between these three communities based on the existing lack of reliable transportation options. This Study identified a preferred alternative that included four routes connecting all three of these communities. An

implementation plan was developed for the phasing of the intercity service, with an anticipated start date of August 2021. However, the COVID-19 public health pandemic caused a delay in implementation.

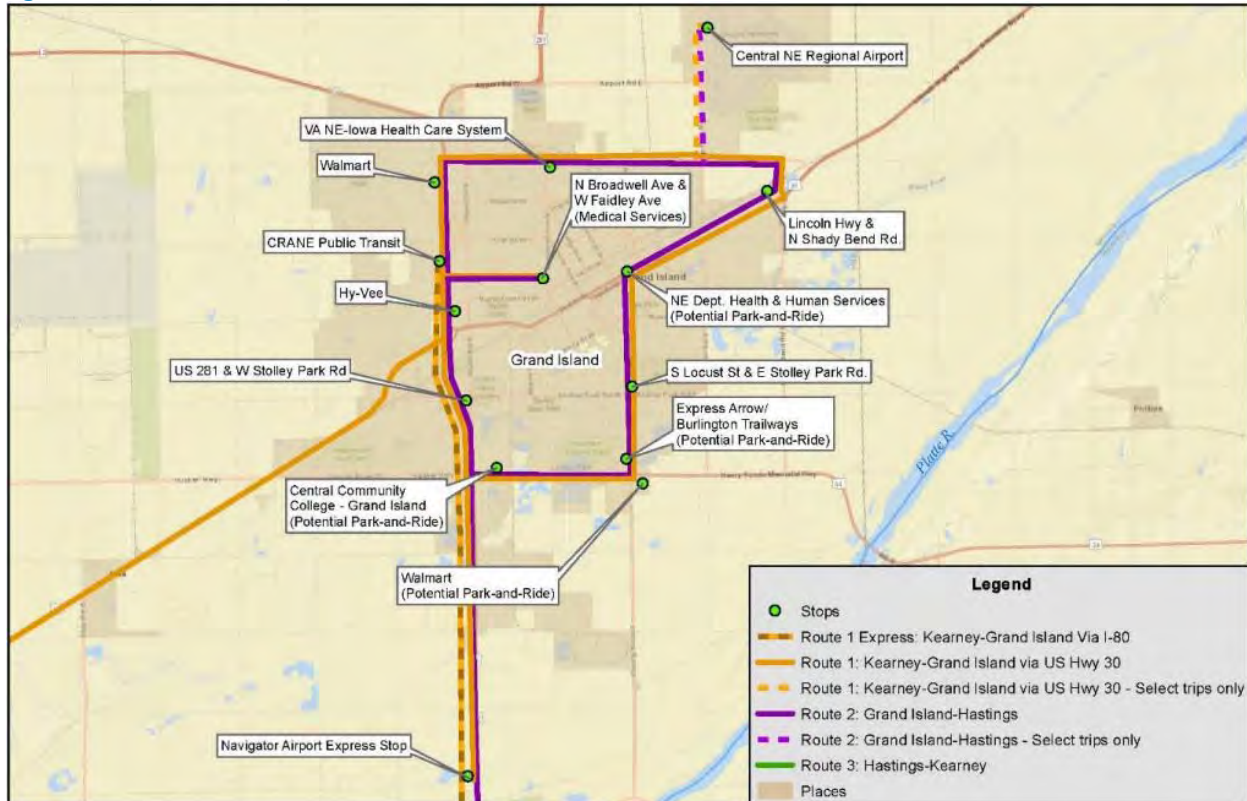
The potential implementation of these intercity routes serves as a trigger for the City's implementation of extended service hours. With the potential increase in the number of individuals traveling to Grand Island from outside the community, extending service hours could support these users by providing additional opportunity for transit service. This intercity service could also provide a reliable transportation option for residents of Grand Island who need to travel outside the community; through extending service, users who arrive in Grand Island in the evening can still have reliable and affordable transportation that takes them to home or to other destinations. **Figure 37** shows the routes proposed for the full intercity service while **Figure 38** shows the proposed routes within Grand Island.

Figure 37: Proposed Grand Island/Hastings/Kearney Intercity Bus Routes



Source: Nebraska Department of Transportation, Grand Island/Hastings/Kearney Intercity Bus Study

Figure 38: Proposed Intercity Bus Service Routes for Grand Island



Source: Nebraska Department of Transportation, Grand Island/Hastings/Kearney Intercity Bus Study

Partnerships with Employment/Education Facilities

A second trigger for implementing extended service hours relates to potential partnership agreements with facilities that generate travel demand, specifically larger employers, and education facilities. By partnering with the community's employers and educational institutions, the City of Grand Island could generate additional annual revenue through contracted service for partner's employees or students.

These partnerships would be more attractive for employers and educational institutions should CRANE service operate later into the evening, as proposed by the enhanced service scenario. These extended hours could benefit institutions such as Central Community College, wherein students and faculty attending night classes could have an additional transportation option.

Funding Opportunities

Funding opportunities were identified as the third trigger for implementing extended operating hours. One of the main constraints keeping the City from extending hours today is the increased cost of this enhancement. Should additional funding become available through Federal or state grant opportunities, the increase in revenue could provide the funding needed to bridge the existing funding gap.

RIDE CITRUS UNIVERSAL ACCESS PARTNERSHIPS

Citrus Connection, operated by Lakeland Area Mass Transit District, is the public transit system in Polk County, Florida. Universal Access is a local partnership program in which employers and educational institutions may enter into annual fixed rate service agreements with the transit operator. Employees and students are then eligible to use Citrus Connection 6 days a week at no charge to them.

Expanded Days Triggers

As stated in the Scenario Evaluation chapter (**Chapter 8**) extended service days are assumed to be:

- **Expanded service days:** service offered on Sundays and holidays

To properly gauge the phasing of expanded service days, the following triggers were identified.

Changes to/Expansion of Intercity Bus Service

Expanding CRANE's days of service to include Sundays and holidays would offer users more opportunity for transportation within Grand Island, especially when paired with extended service hours. However, expanding service days would come with a significant increase in operating costs. One trigger for expanding service days would be any changes or expansion of the planned intercity bus service between Grand Island, Hastings, and Kearney that could be supported by CRANE service on Sundays and holidays.

Religious Community Support/Partnerships

An additional trigger for implementing expanded service days is support and/or partnerships with local religious organizations. As Sundays are a common day for religious services, support from local religious organizations could offer consistent demand for CRANE services as users would have the additional transportation option to get them to and from their destination. This would also create a potential for partnerships between religious organizations and the City similar to what is described in the preceding section for employer/educational institution partnerships.

Same Day Service

As stated in the Scenario Evaluation chapter (**Chapter 8**), extended service days are assumed to be:

- **Same day service:** Guaranteed service for trip requests made on the same day as the trip

To properly gauge the phasing of same day service, the following triggers were identified.

Technology Upgrades

The major trigger for implementing same day service is technology upgrades. The implementation of same day booking capabilities is contingent upon software upgrades that facilitate real-time routing of transit vehicles so trip requests can be efficiently integrated into scheduled vehicle runs.

One approach to upgrading transit technology within Grand Island is contracting with a transit technology vendor to help guide the transition to same day service. The selection of a vendor would likely require the City follow local procurement procedures. See **Appendix D** for a complete list of accessibility technology vendors that could aid the City in upgrading the technology needed to implement same day service.

EXAMPLE ACCESSIBILITY TECHNOLOGY VENDORS

- CTS Software—scheduling, billing, dispatch, and reporting software for paratransit operations
- TrackItTransit—reservation services that enable users to find transportation that meets their needs through Transportation Network Companies (TNCs) or paratransit providers
- TSS Paratransit—reservations, booking, scheduling, routing, dispatch, reporting, billing, and operations management

Increased Overall Ridership from Previous Expansions

A second trigger identified for implementing same day service would be an increase in overall ridership associated with extended service hours and expanded service days. Should both these enhancements

see a substantial increase in ridership, it could create a need to provide same day trip booking while providing additional farebox revenue that could aid in funding the same day service expansion.

Funding Opportunities

Additional funding opportunities are a third trigger identified for implementing same day service capabilities. One Federal program applicable to implementing same day service is the FTA's [Enhancing Mobility Innovation](#) grant, which provides funding at an 80 percent Federal and 20 percent local match for technology projects that encourage transit use. Eligible activities under this grant program include projects that develop novel operational concepts and/or demonstrate innovations that improve mobility and enhance the rider experience, focused on innovative service delivery models, creative financing, novel partnerships, and integrated payment solutions, or other innovative solutions. Additional eligible activities are projects that develop software to facilitate demand-response public transportation that dispatches transit vehicles through riders' mobile devices or other means.¹⁰

Partnerships with Employment/Education Facilities

Building off partnerships with employment and educational institutions as outlined under the Extended Hours trigger can garner further support for the implementation of same day service as these partnerships, and the contracts associated with them, can strengthen CRANE service's position as a critical transportation option in the community. By demonstrating an ability to provide reliable transit service for partner organizations, CRANE could serve as an economic development tool through attracting employers to the community.

Performance Measures

Ongoing monitoring and evaluation of CRANE service is a key element tied to the service enhancements described as part of the enhanced service scenario. Performance-based evaluation, through the use of performance measures, is an effective way to monitor how CRANE operations and evaluate progress made towards system goals.

Performance measures can also aid in the implementation of service enhancements by acting as a trigger for phasing these enhancements. Two performance measures that could be used in support of implementing the described service enhancements are:

- Annual ridership
- System efficiency

Annual Ridership

Annual ridership can serve as a performance measure for evaluating progress made towards expectations set forth in the Scenario Evaluation chapter (**Chapter 8**). Pairing the annual ridership performance measure with the implementation triggers described in this chapter can guide the City of Grand Island in implementing service enhancements by acting as a quantifiable metric for determining the need for extended service hours, expanded days of service, and same day service. As such, an annual ridership metric will rely on data collection for CRANE service which is already an on-going effort conducted by the City.

System Efficiency

System efficiency refers to the ability of CRANE service to provide cost-effective transportation to users. The main concern related to system efficiency is the ability of the City to facilitate transit

¹⁰ Federal Transit Administration, [Enhancing Mobility Innovation](#)

service that is both affordable and efficient, while balancing future investment to enhance service without degrading efficiency.

System efficiency measures can build off metrics that are currently in place, such those described in the Peer Review chapter (**Chapter 4**) of the TDP which are summarized below.

- Operating Expense Per Passenger Trip
- Operating Expense Per Revenue Hour
- Operating Expense Per Revenue Mile
- Operating Expense Per Service Area Capital

Grand Island's Future Funding Scenario

Future transit costs and revenues for Grand Island were analyzed to understand the fiscal impact of potentially adding service enhancements over the next 20 years. This analysis assumes a phased implementation of service enhancements, which are detailed in the Scenario Evaluation chapter (**Chapter 8**).

Given the nature of implementing the service enhancements, which rely on the service triggers outlined in the preceding section, the future funding scenario is presented via two scenarios:

- **Baseline scenario:** Assumes a “business-as-usual” approach wherein the existing demand-response service is operated without any major service improvements.
- **Expanded service scenario:** Assumes a full implementation of the enhanced service scenario, with phased service enhancements occurring in 2025 (extended hours), 2027 (expanded days), and 2030 (same day service).

Table 30 and **Table 31** summarizes the annual forecasted revenues and costs associated with the baseline and expanded service scenarios over the TDP planning horizon. As seen in the tables, costs associated with the enhanced service scenario are anticipated to increase at a greater rate when compared to the baseline scenario which raises the need for the City to identify opportunities to supplement funding to support the implementation and operation of enhanced service.

Table 30: Future Funding for the Baseline Scenario

| Revenue | 2022 Baseline | 2023 | 2027 | 2032 | 2037 | 2042 |
|-------------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| FTA 5307 Funds | \$767,803 | \$798,515 | \$934,149 | \$1,136,536 | \$1,382,769 | \$1,682,350 |
| Local Funding | \$270,094 | \$282,060 | \$334,965 | \$414,159 | \$510,803 | \$628,691 |
| State Funding | \$270,094 | \$282,060 | \$334,965 | \$414,159 | \$510,803 | \$628,691 |
| Fares, Ticket Sales & Revenue | \$73,595 | \$74,214 | \$76,830 | \$80,231 | \$83,782 | \$87,491 |
| Total Revenue | \$1,381,585 | \$1,436,849 | \$1,680,910 | \$2,045,084 | \$2,488,157 | \$3,027,224 |
| Costs | | | | | | |
| Service Costs* | \$1,381,585 | \$1,436,849 | \$1,680,910 | \$2,045,084 | \$2,488,157 | \$3,027,224 |
| Total Costs | \$1,381,585 | \$1,436,849 | \$1,680,910 | \$2,045,084 | \$2,488,157 | \$3,027,224 |

*Service costs include operations, maintenance, equipment, and administration

Table 31: Future Funding for the Enhanced Service Scenario

| Revenue | 2022 Baseline | 2023 | 2027 | 2032 | 2037 | 2042 |
|--|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| FTA 5307 Funds | \$767,803 | \$798,515 | \$1,053,483 | \$1,336,168 | \$1,625,653 | \$1,080,156 |
| Local Funding | \$270,094 | \$282,060 | \$385,013 | \$502,637 | \$620,851 | \$1,758,342 |
| State Funding | \$270,094 | \$282,060 | \$385,013 | \$502,637 | \$620,851 | \$669,504 |
| Fares, Ticket Sales & Revenue | \$73,595 | \$74,214 | \$96,068 | \$102,906 | \$106,569 | \$110,231 |
| Total Revenue | \$1,381,585 | \$1,436,849 | \$1,919,577 | \$2,444,349 | \$2,973,924 | \$3,618,234 |
| Costs | | | | | | |
| Service Costs* | \$1,381,585 | \$1,436,849 | \$1,919,577 | \$2,444,349 | \$2,973,924 | \$3,618,234 |
| Total Costs | \$1,381,585 | \$1,436,849 | \$1,919,577 | \$2,444,349 | \$2,973,924 | \$3,618,234 |

*Service costs include operations, maintenance, equipment, and administration

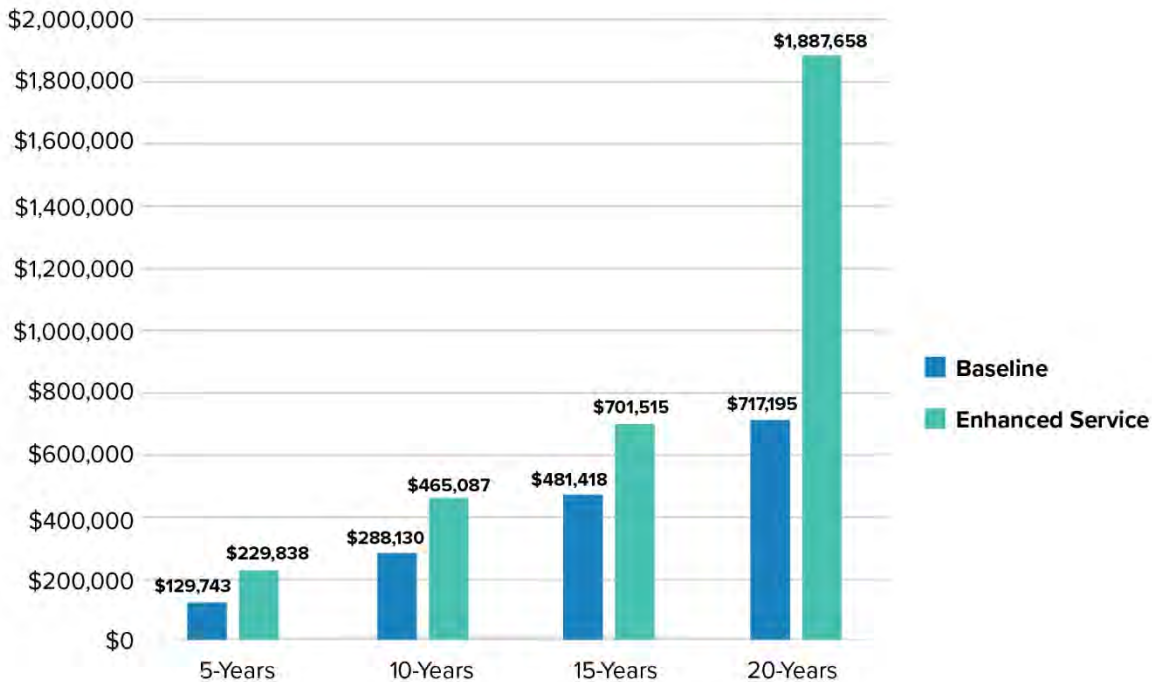
A potential barrier to implementing service enhancements in the future is the anticipated gap between Federal revenues, specifically FTA 5307 funds, and the matching state and local contributions. Given the amount of annual FTA 5307 funds that the City is estimated to be eligible for, assuming a full receipt of these funds is accumulated annually it is estimated that a funding shortfall for 5307 funds begins in 2039. At this point, a significantly higher percentage of non-Federal transit funds would be required to maintain service levels. To counter this shortfall, additional state and local funding (whether through private partnerships or new public revenue sources) is necessary to bridge the gap in funding.

Figure 39 demonstrates the anticipated amounts of state and local funding that will be needed to support both the baseline and enhanced service scenarios. As seen in the figure, an additional \$717,000 in state and local funding is likely required to support a “business-as-usual” approach to transit service in the community over the next 20 years. For the enhanced service scenario, it is estimated that state and local sources will need to contribute nearly \$1.9 million in additional funds over the 20-year period to support extended hours, expanded days, and same day service.

Current & Future Administrative Requirements

The system growth outlined in this document comes with administrative implications. As operations increase, so does the need for operational capital, including but not limited to facility space. For this reason, it is suggested that the City of Grand Island continue to research facility options and move forward when an opportunity is both beneficial and feasible. Management of additional capital, and the contracts associated that additional capital, also may require additional administrative staff. As service continues to grow, the City of Grand Island may need to add additional City staff for the management of the program. While these considerations are important elements of the current and future transit system, facility space and expansion of CRANE staff are not reflect in the TDP's forecasted revenues and costs associated with the baseline and expanded service scenarios.

Figure 39: Additional State and Local Funding Needs for the Baseline and Enhanced Service Scenarios



Conclusion

This Transit Development Plan was developed to guide the direction of Grand Island's transit over the next 20 years. As the community continues to grow and develop, the transit system can potentially expand its role in getting workers to their jobs and residents to their medical, shopping, and recreation destinations, as funds allow. Through partnerships with local organizations, building off regional transit planning efforts, and maintaining existing service, Grand Island can continue shaping the community's transit system to achieve its vision, goals, and objectives through potential service enhancements of longer operating hours, expanded service days, and same day ride booking capabilities.

Grand Island is a community with a clear vision for the future. As a regional hub within central Nebraska, Grand Island is home to a sizeable population with numerous work, medical, recreation, and retail opportunities. Transportation is an important part of the community, providing the networks that allow residents to get to where they need to go. While residents and workers within the community have demonstrated a strong reliance on the roadway system, there exists opportunity for transit to play a greater role in meeting the community's transportation needs.

Appendix A

Baseline Conditions Technical Memorandum

A



Appendix B

Public Involvement

B



Appendix C

Scenario Evaluation Methodology

C



Appendix D

List of Accessibility Technology Vendors

D

