CHAPTER 1

ACTIVE TRANSPORTATION ENVIRONMENT

THIS CHAPTER OUTLINES THE EXISTING CONDITIONS IN GRAND ISLAND PERTINENT TO WALKING AND BICYCLING. These conditions include determinants of a future bikeway system such as destinations, existing facilities, and opportunities as well as a broader understanding as to how the region has developed and grown from land use and motor vehicle transportation aspects.

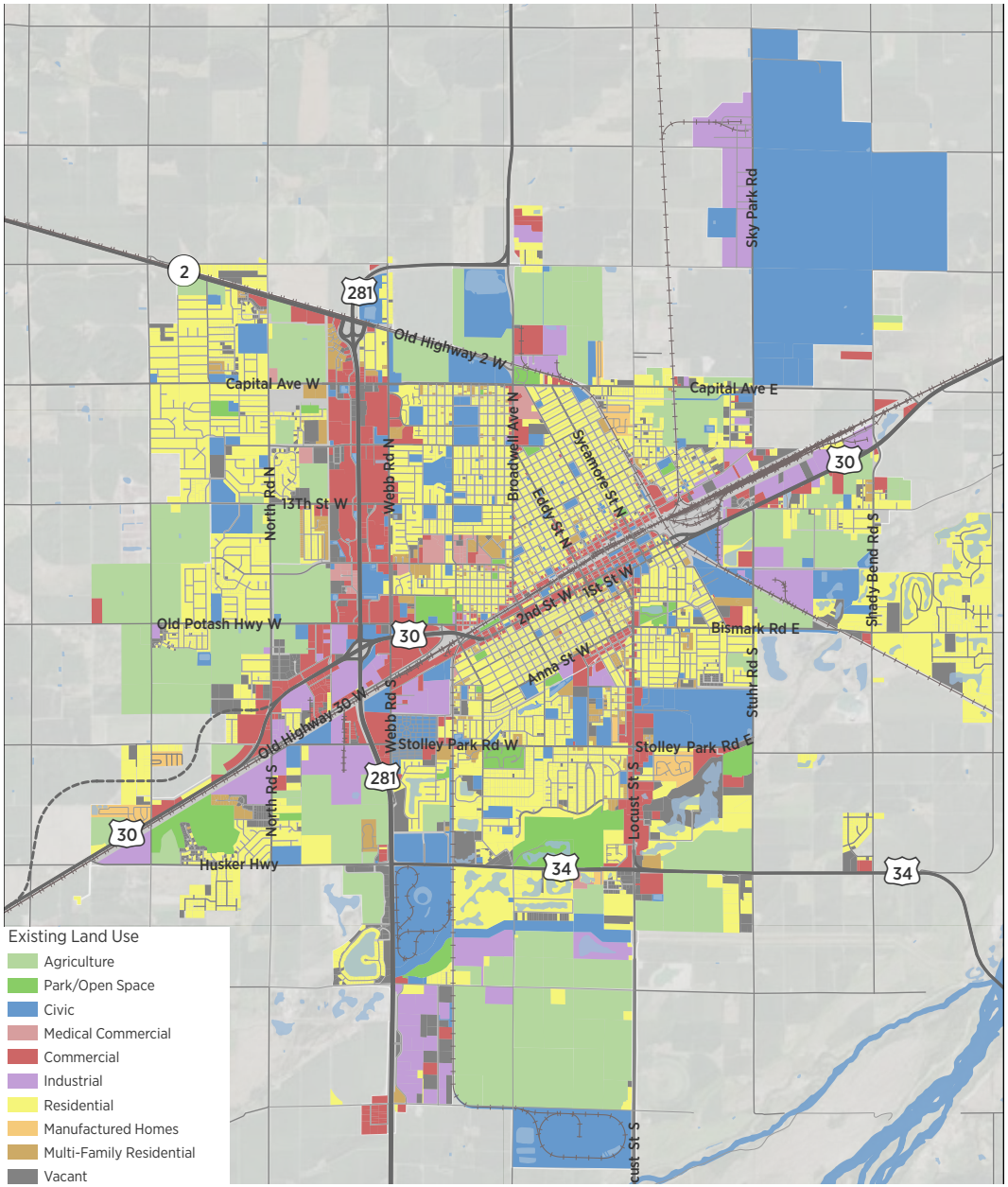
Existing Conditions
This section considers factors that can help determine the structure and character of the Grand Island area's active transportation network. Areas of analysis break into two general areas:

Demand – Factors that suggest a need for facilities and can be analyzed together to suggest the structure of the network. These factors include both points of origin such as population density and destinations such as parks, schools and places of employment. Area of analysis include

- Current land use
- Future land use
- Population density
- Employment density
- Parks and trails
- Schools and sidewalks

Facilities – These factors analyze aspects of existing infrastructure and their suitability for a future active transportation network. Areas of analysis include

- Functional street classification
- Trails and bike routes
- Average daily traffic
- Crash incidence and traffic control
- Low traffic streets with continuity
- Transit potential
- Barriers

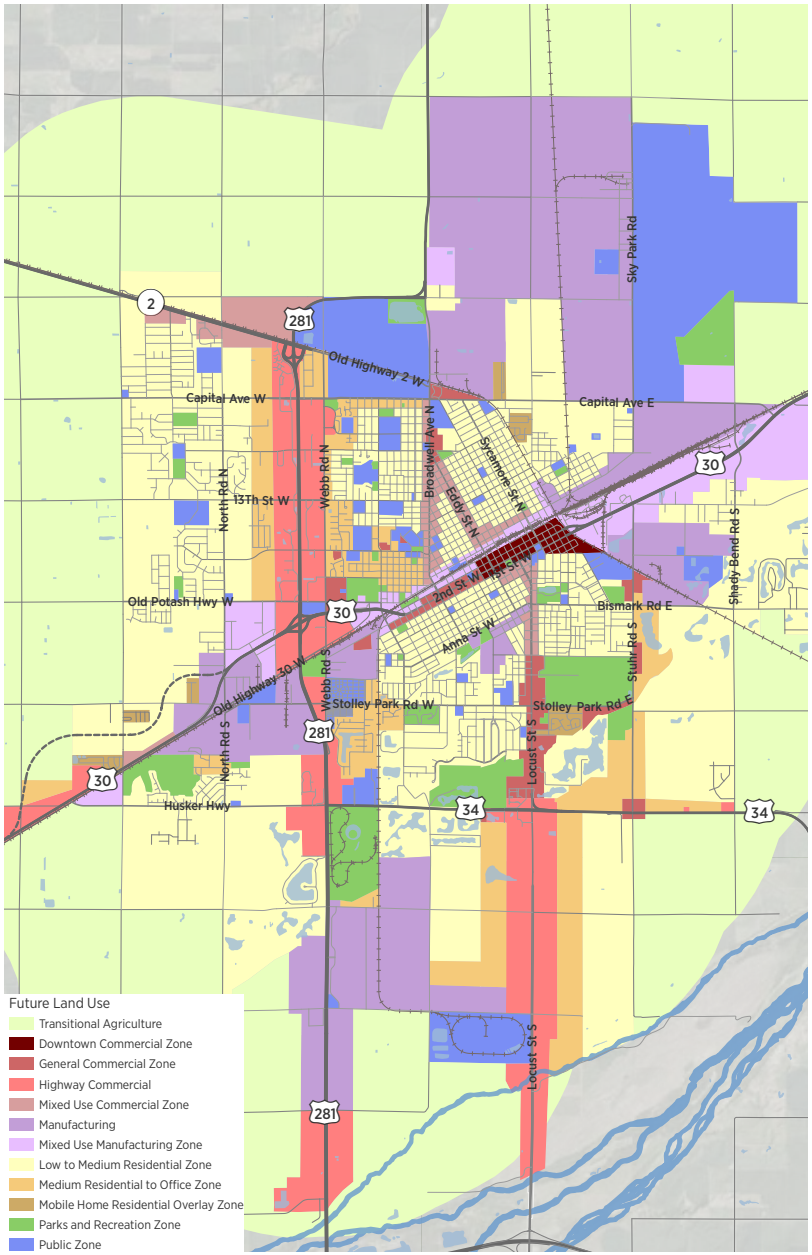


Source: Regional Planning Commission, 2017

Existing Land Use

Land use patterns help determine the structure of an active transportation network. Major determinants include concentrations of higher density housing, major employers, medical complexes, civic and cultural uses, and commercial concentrations. The streets that serve some of these key areas may not be fully compatible with bicycle transportation, but all should accommodate pedestrians and provide secondary accessways for bicyclists. Key land use factors include:

- Downtown Grand island, including the core district between Eddy and Sycamore, extended east and west along the US 30 corridor. Fourth Street north of the UP has developed as a significant traditional commercial district with a strong specialization in ethnic Hispanic enterprises.
- The dominant US 281/Webb Road commercial corridor, with Diers Avenue and Allen Drive providing parallel local circulation. South Locust, the Five Points cluster are also important commercial centers.
- The Faidley corridor north to 10th Street between Broadwell and Webb, including St. Francis Medical Center, adjacent medical office buildings, and the Grand Island Housing Authority's complex of residential developments. A second major medical and mixed use center is planned for the southwest quadrant of the US 281 and Husker Highway intersection.
- Key civic concentrations, including the VA, Fonner Park, Stuhr Museum, the Central Community College campus, public and parochial schools, and parks, ranging from Pier and Stolley Parks to smaller neighborhood open spaces.
- Major industrial employment centers generally along the UP and BNSF corridors, including JBS with 3,200 employees. Employees of food processing plants like JBS often use bicycles for travel to work for economic reasons.

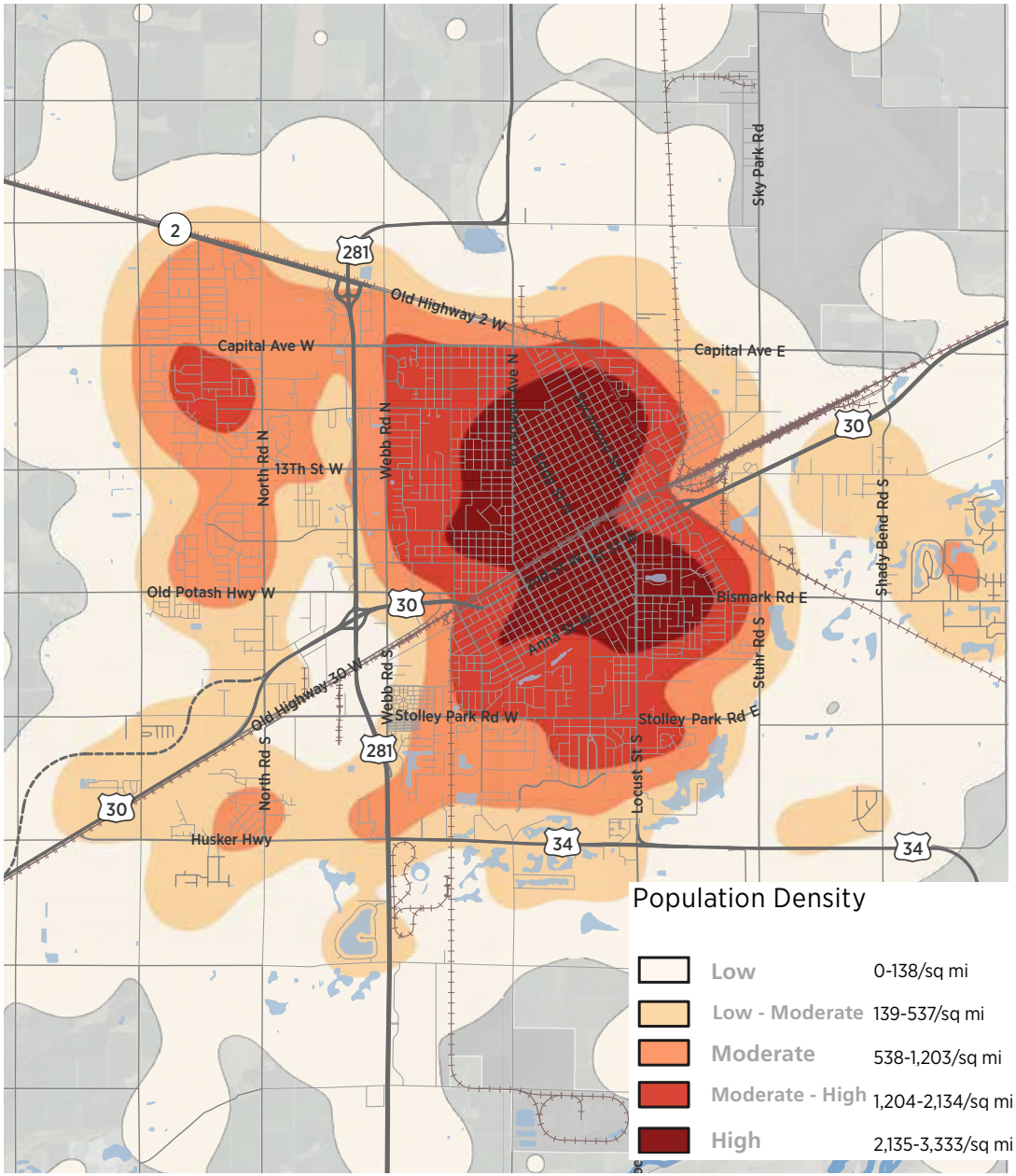


Source: Grand Island Comprehensive Plan

Future Land Use

An active transportation network should ultimately be master planned to serve projected growth directions, illustrated by the Future Land Use map on this page. Key directions include:

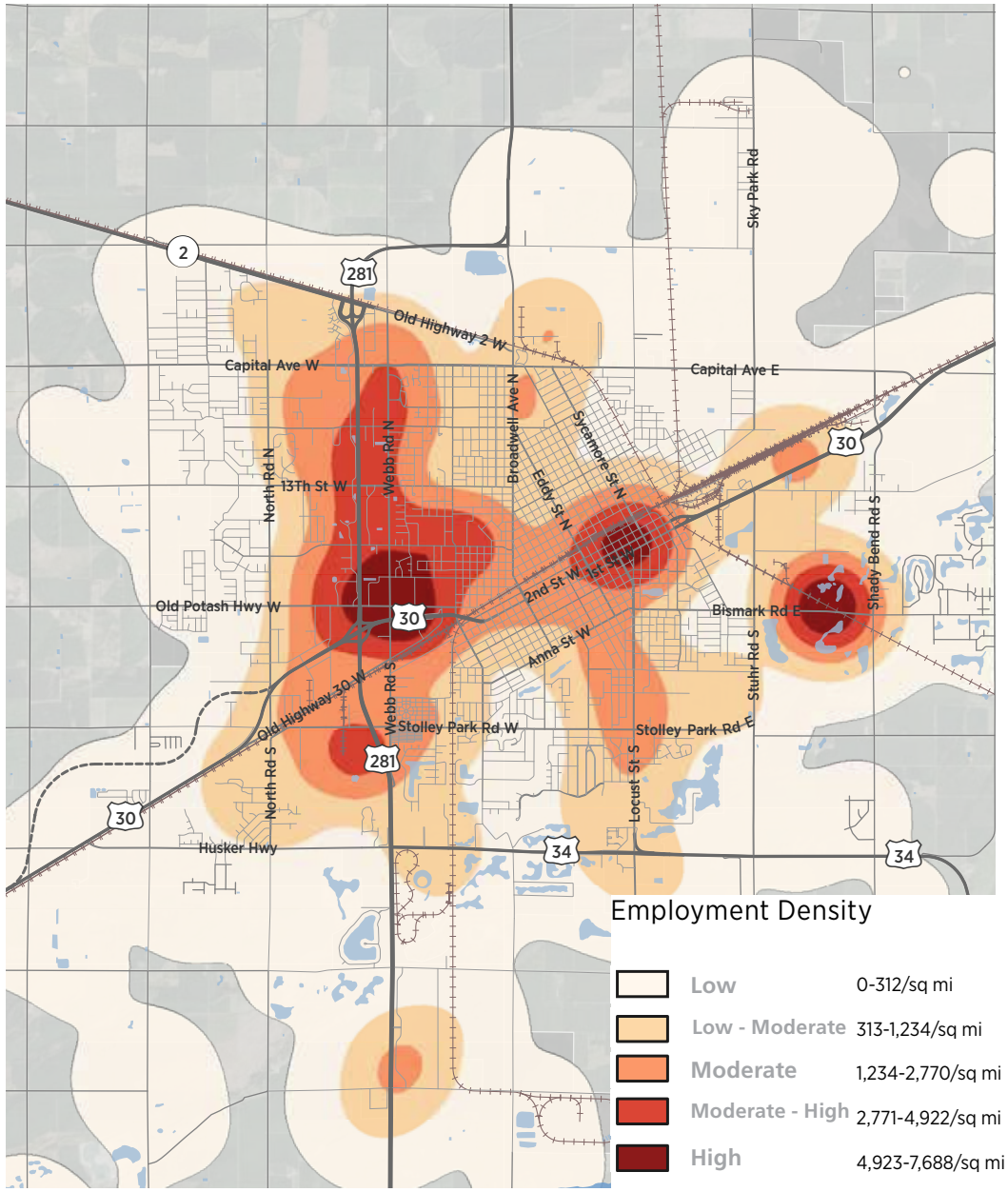
- Contiguous residential growth west to Engleman Road and south of Husker Highway.
- Extension of linear commercial development along South Locust toward I-80 and south along US 281 to and south of Husker Highway.
- Substantial industrial growth west of the airport to Broadwell and along the US 281 corridor.



Source: U.S. Census Bureau

Population Density

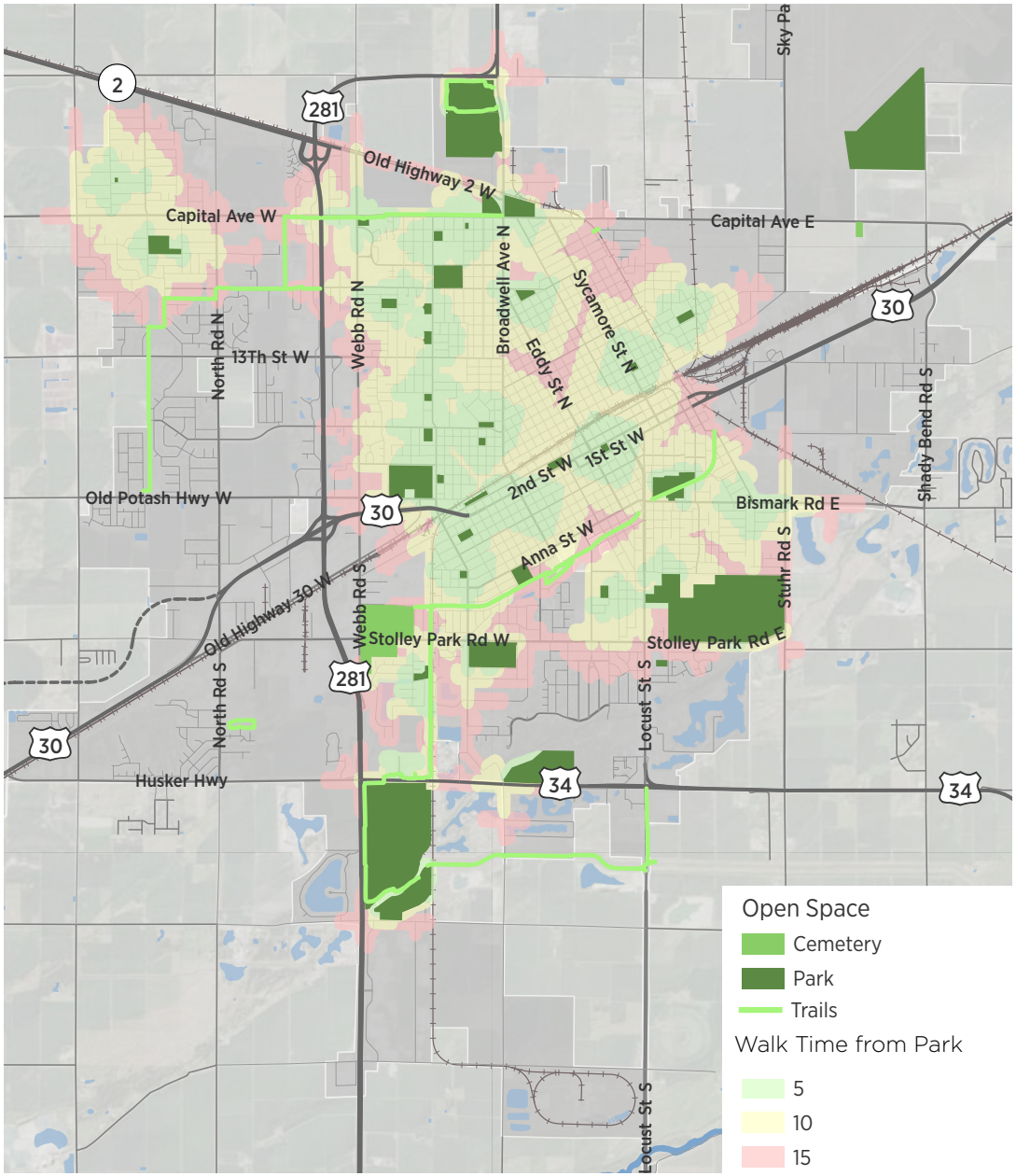
Population density is correlated to active transportation demand. As density increases, more destinations are located closer to more people, bringing biking and walking within the capability of a larger population. The map uses block group data to show population per square mile. The city displays a smooth concentric gradation, with the highest density found between Oak and Custer from about 20th Street to Fonner Park. A second density ring extends east of Webb and north of Stolley Park, with an island of higher density in the George Park area of northwest Grand Island.



Source: U.S. Census Bureau

Employment Density

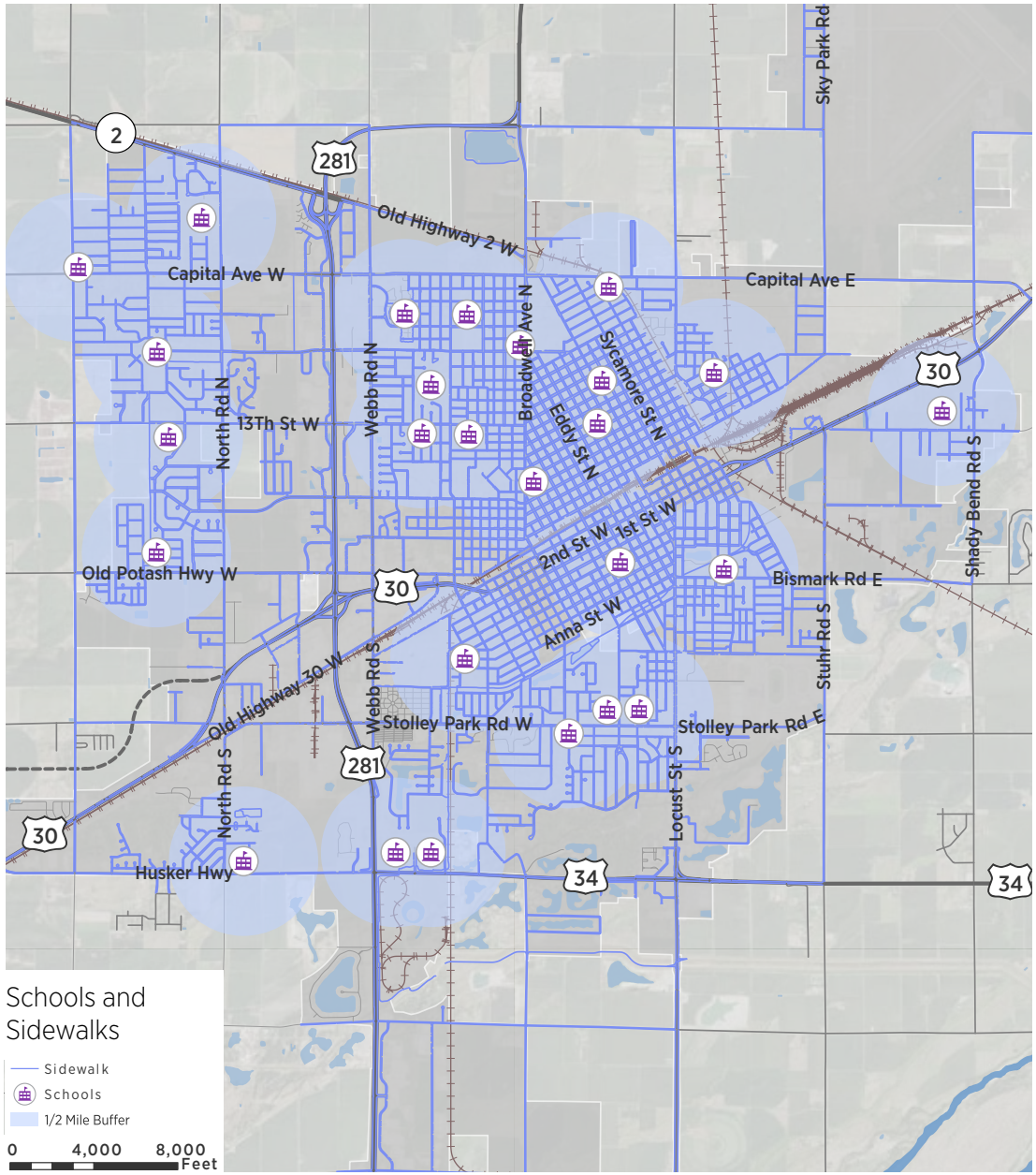
Employment density is also correlated to active transportation demand, identifying concentrated job centers. The map on this page uses census data to illustrate jobs per square mile in the city. The city's three most concentrated employment areas are the eastside industrial area with JBS, the city's largest single employer and some other industries; the downtown core; and the US 281/ Webb Road corridor, combining major industrial and retail employment. This underscores the value of providing a strong bicycle and pedestrian connection to the eastside industrial area.



Source: RDG Planning & Design; GIAMPO

Parks and Trails

Parks and trails are among the most important destinations for an active transportation network. Indeed, trails are uniquely both destinations and means of reaching destinations such as parks and recreation assets. The map at left illustrates the distribution of parks and walk time to neighborhood parks. Ideally, all parks should be served by the active transportation network and bicycle connections are especially important to major parks throughout the city and to neighborhood parks from areas outside of easy walking distance. Of major community parks, Pier, Hall County, and Ashley Parks and the Stuhr Museum grounds are directly served by trails. Stolley Park and George Park have close trail access and Stolley is bordered by the multi-modal Stolley Park Road. Eagle Scout Park has a popular internal trail but is separated from the rest of the trail network. Other parks are typically served by sidewalks and local streets, but not by trails or major bike routes. It is also important to note that many of Grand Island's school campuses have significant neighborhood recreational facilities.



Source: City of Grand Island; GIAMPO; RDG Planning & Design

Schools and Sidewalks

Schools are also primary destinations for the Grand Island area's active transportation network, with elementary and junior high students being especially important constituencies. High school students, many of whom drive to school, also present a possible growth market if bicycling is viewed as a contemporary trend. The map at left overlays the city's sidewalk system and school locations, and indicates that:

- Most of school sites have good sidewalk access, although road barriers interrupt this in some attendance areas.
- Sidewalk access decreases in peripheral or lower density areas, such as Seedling Mile on the extreme east side of the study area
- A number of schools enjoy good trail access. These include schools west of US 281 along the Shoemaker Trail/Independence Avenue corridor; and Gates and Dodge Elementary Schools along the John Brownell (Beltline) Trail. These facilities are used by students, but face obstacles at busy street crossings.
- A current gap is emerging with service to new school facilities developing along the Adams Street corridor north of Stolley Park Road.
- Grand Island's students are willing to walk and bike to school when facilities are available.


SCHOO
SPEE
LIMIT
15
STOP
WHEN
FLASHING
FINES
DOUBLED
DRUG
FREE
ZONE
Knickrehm School
NOSCHOOL
FRIDAY SEPT1
NO SCHOOL
MONDAY SEPT4
COUGARS
COUGARS