



Central Omaha TRANSIT ALTERNATIVES ANALYSIS

Purpose and Need

November 19, 2012



This page intentionally left blank

Table of Contents

1.0	PURPOSE AND NEED	1
1.1	Introduction	1
1.1.1	Previous and Ongoing Studies.....	2
1.2	Study Area Description.....	8
1.2.1	Overview	8
1.2.2	Land Use and Development Potential.....	11
1.2.3	Demographics of Study Area	15
1.2.4	Transit Service in Study Area.....	28
1.3	Statement of Need	34
1.3.1	Spatially Disconnected Activity Centers.....	34
1.3.2	Lack of Transit Priority Corridor	35
1.3.3	Increased Transit Demand from Population and Employment Growth	36
1.3.4	Imbalanced Parking Availability and Capacity.....	36
1.3.5	Poor Trip Circulation for Special Events	37
1.3.6	Lack of Timely Transit Access to Jobs	38
1.3.7	Lack of Adequate Stop and Service Amenities	38
1.3.8	Sustainability Goals/Measures in Adopted Plans.....	39
1.4	Statement of Purpose	40
1.4.1	Connect Major Districts, Destinations, and Activity Centers	40
1.4.2	Provide Simple, Localized, High-Frequency Transit Service	41
1.4.3	Support Population and Employment Growth, and Revitalization	41
1.4.4	Balance Parking Availability and Capacity.....	41
1.4.5	Improve Trip Circulation for Special Events	42
1.4.6	Maximize Transit Access to Highest Employment Corridor	42
1.4.7	Provide Adequate Stop and Service Amenities	42
1.4.8	Contribute to Meeting Sustainability Goals/Measures in Adopted Plans	42
1.5	Alternatives Analysis Goals	44

Tables

Table 1: Previous and Ongoing Studies.....	8
Table 2: Districts.....	11
Table 3: Demographics.....	16
Table 4: Metro System Weekday Ridership.....	32
Table 5: Metro Weekday Ridership for Routes within Study Area	33

Figures

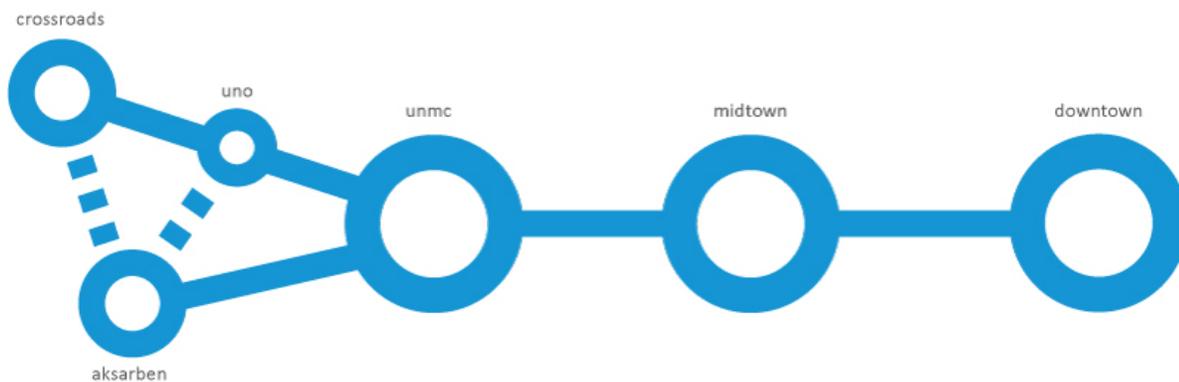
Figure 1: Study Area.....	9
Figure 2: Historic Streetcar Service	10
Figure 3: Districts	12
Figure 4: Land Use.....	13
Figure 5: Development Potential	14
Figure 6: Census Tracts	17
Figure 7: Total Population.....	18
Figure 8: Population Change 2000-2010.....	19
Figure 9: Total Employment.....	20
Figure 10: Employment Change (2000-2010)	21
Figure 11: Households.....	22
Figure 12: Low Income Households	23
Figure 13: Zero Car Households	24
Figure 14: Minority Population by Race.....	25
Figure 15: Population Under 18.....	26
Figure 16: Population Over 65	27
Figure 17: Metro Local Bus Routes	29
Figure 18: Metro Express Bus Routes	30
Figure 19: Metro Green Route (Downtown Circulator).....	31
Figure 20: Metro Stadium Circulator	31

1.0 PURPOSE AND NEED

1.1 Introduction

This section describes the Purpose and Need for the Central Omaha Transit Alternatives Analysis (AA) Study. The study is being led by Metro and is being undertaken in partnership with the City of Omaha and the Metropolitan Area Planning Agency (MAPA). The study will introduce comprehensive urban circulator transit service to connect activity centers and neighborhoods in Central Omaha while tying the regional transit network together to improve mobility and aid employment growth and economic development.

The study strives to address the challenges of navigating an under-connected corridor by providing a transportation connection between the following districts: Downtown, Midtown, University of Nebraska Medical Center (UNMC), University of Nebraska at Omaha (UNO), and the Crossroads and Aksarben Village areas.



By connecting employment and educational hubs, residential, shopping areas, civic resources, historic districts, cultural landmarks and entertainment venues in Central Omaha, the proposed alternatives will increase mobility and accessibility for the people who live, work and visit the corridor. The proposed alternatives will provide better linkages to the regional transit network and connect with key Metro bus routes. The proposed alternatives will also promote transit use, biking, and walking within the corridor while reducing the need to travel by automobile and decreasing greenhouse gas emissions. They will also provide improved transit service to low to moderate income populations in Downtown and throughout the study area.

In concert with local efforts, the proposed alternatives will play a pivotal role in improving pedestrian connections to the Missouri riverfront. Local plans such as the Destination Midtown Plan and North Downtown Plan identify needs to improve transit connections to areas immediately adjacent to the

Downtown core. The Downtown Omaha Master Plan envisioned a need to create a transit loop to provide more effective service throughout Downtown and connect to a future Downtown transit center, and extend to the new Midtown Crossing development and UNMC. In addition, recent development at Crossroads, the UNO Dodge, Pacific, and Center campuses, and Aksarben Village have created demand for new connections between these points and a desire for a revitalized transit system throughout the study area.

1.1.1 Previous and Ongoing Studies

In an effort to enhance, connect and activate the downtown core, the Omaha community realized the need for better transit service and in 1995 undertook the first of several feasibility studies to determine the possibility of implementing a streetcar in the downtown area, in response to the public's desire for a streetcar. Early results of these studies were positive, but proved to require more research. Development of additional studies, such as the Destination Midtown Master Plan, North Downtown Plan, and the Downtown Omaha Master Plan identified the need to improve transit connections to areas immediately adjacent to the downtown core. Special attention is paid to the recently adopted Environmental Element of the Omaha Master Plan (2010). Specific goals, strategies, and measurements have been adopted therein, by which identification and implementation of a transit alternative in this corridor can greatly contribute. Subsequent studies have built on the previous efforts to identify a transit connection extending to Midtown and UNMC, as well as additional connections to the UNO campus and Aksarben Village and Crossroads areas, traffic studies, and other non-build environmental considerations. The following provides a summary of previous and ongoing studies related to transit service in the corridor.

Destination Midtown Plan (2005)

The vision for Destination Midtown represents a unique partnership of public and private interests working together to make Midtown a destination of choice in Omaha. Using the vision as a guide throughout the planning process, recommendations incorporate a comprehensive framework for the resurgence of Midtown. The Destination Midtown Plan was funded by the Greater Omaha Chamber and approved by the Omaha City Council. This plan was managed by a board formed to provide oversight of the plan. A position was later created through the Greater Omaha Chamber to manage the area and program implementation, and prioritizes the following:

- Neighborhood Development
- Economic Development
- Transportation/Corridor Development
- Put into Action/Realize the Vision

Most recently, consideration has been given to update the plan and analyze the program implementation goals and objectives. While no formal decisions have been made to update the plan,

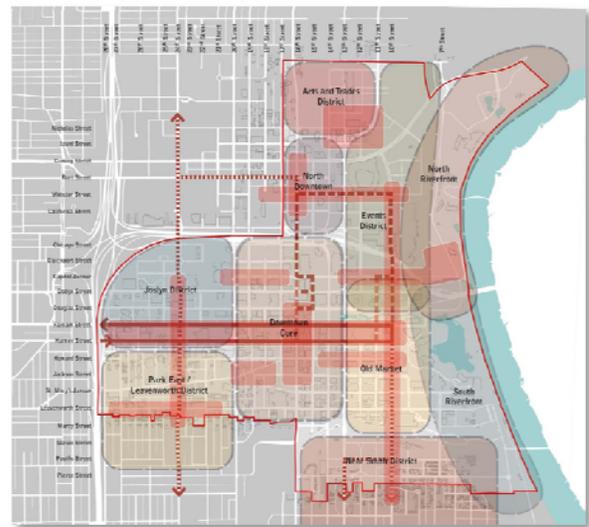
the position created through the Greater Omaha Chamber to manage the Midtown area is currently active. Quality of life and environmental goals associated to neighborhood development, walkability for nearby residences, and community activities have been achieved. In addition, the Dodge Street S-Curve Study (noted below) evolved from the Destination Midtown Plan, with concept refinement underway, and subsequent phases to follow.

North Downtown: Omaha’s New Urban Neighborhood (2005)

The North Downtown Conceptual Redevelopment Study, as it was originally called, was undertaken in order to establish a redevelopment plan for Omaha’s “front door” as the gateway to the Downtown area from I-480 and Omaha Eppley Airfield airport. The 80-block study area examined a variety of potential build-out scenarios for the area and ultimately created an implementation strategy to move the plan from vision to reality. The planning process established a comprehensive implementation strategy that examined both public sector and private sector initiatives and actions necessary to initiate and propel the desired level of redevelopment activity. The study was managed by the City of Omaha and approved by the Omaha City Council and focused on strategic policies, procedural requirements, regulatory initiatives, and infrastructure investments. In 2009, many of the goals and objectives established during for this plan were incorporated as part of the Downtown Omaha Master Plan.

Downtown Omaha Master Plan (2009)

The Downtown Omaha Master Plan was managed by the City of Omaha and attempts to lay out an ambitious, but achievable vision through 2030 to make the Downtown area a world class place to live, work and play and provide a resource for residents and workers, regional visitors and tourists. The study area runs from Seward Street on the north, 17th Street on the west, I-480 on the north and west, Leavenworth Street on the south, 16th Street on the west, Pierce Street on the South, and the Missouri River on the east. The study area is 2.2 square miles in size and incorporates specifics related to the need for development of a modern, multi-modal, Downtown transit center.



Ten principles were developed collaboratively during the planning process and summarize the community’s goals. These principles were approved by the Omaha City Council and say that Downtown should:

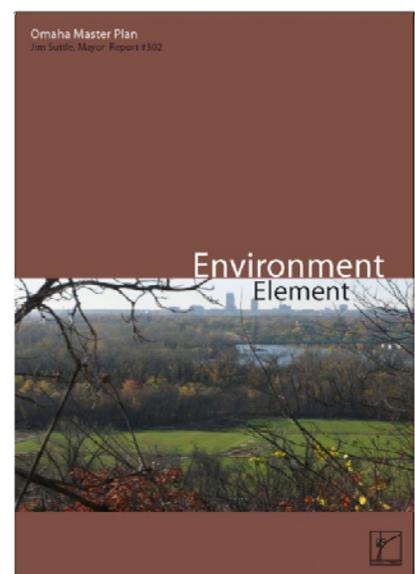
1. Be the dominant economic engine for the region
2. Be a great place to live, work, play, visit, and learn
3. Be home to the unique civic and cultural resources of the region
4. Have distinct neighborhoods, districts and corridors
5. Be urban
6. Have a comprehensive system of integrated, diverse open spaces for public use
7. Be a multi-modal environment where one can live everyday life without using a car
8. Comprise a series of integrated “park once” districts
9. Be a model of sustainable urbanism
10. Strive to cultivate a culture of design excellence

Omaha Master Plan Environmental Element (2010)

The Environment Element of the Omaha Master Plan is not only a guide for City actions and policies; it is a vision for the long-term environmental health and sustainability of the Omaha community and the natural resources and ecosystems on which it depends. Development of this Environment Element more comprehensively incorporates the issues to serve the purposes called for in the City Charter, which include establishing policies, goals and standards as a general guide for physical development that at a minimum address the areas of land use; the provision of urban services, including transportation, parks and recreation, utilities, public facilities, and disposal of solid and liquid wastes; housing and community development; economic development, environmental protection; development management; urban design; historic preservation; and any other areas, necessary to guide the physical development of the city. This element provides a unifying vision and approach to connect the issues. Five broad categories focus on important considerations that affect environmental resources, including: Natural Environment, Urban Form and Transportation, Building Construction, Resource Conservation, and Community Health.

The Urban Form and Transportation category provides direction for Omaha to substantially reduce its impact on the environment and the per capita cost of critical infrastructure and municipal services to increase its level of urban quality and community health by:

- Accommodating its potential urban population within a compact, contiguous urban area
- Productively and effectively using all land within its 2010 municipal limits
- Supporting an efficient city form with a balanced transportation network that increased the role of low impact and active transportation modes in providing access to all parts of the city



Goals under the Urban Form and Transportation category include the following:

- Large-Scale City Form: Develop a city form that both reduces the per capita cost of providing city services and establishes the density necessary to support more energy-efficient forms of transportation.
- Land Use and Development Policy: Generate development at higher residential densities and true mixed uses that produce more diverse environments and reduce the number of necessary automobile trips.
- Land Development: Create individual developments with components that are connected, walkable, and accessible to all modes of transportation, by providing safe, defined, and pleasant routes from the public realm to destinations, based on the needs of each mode.
- Transportation Network: Develop a transportation network that moves people and freight within and through the metropolitan area efficiently, maximizing access and minimizing vehicle miles traveled, energy consumed, and pollutants emitted.
- Transit: Develop a public transportation system that offers a degree of coverage, convenience, and amenity, that both provides transportation equity for dependent customers and makes transit an attractive option for discretionary passengers.
- Active Transportation: Provide a high level of citywide access and continuity to pedestrians and bicyclists, making active transportation a realistic and integral part of the city's transportation network.

Measurements under the Urban Form and Transportation category include the following:

The City of Omaha will measure success (as adopted by the Omaha City Council) by achieving the following measurements toward sustainability by 2030:

1. Omaha's population density will grow to 4,500 people per square mile. The current population density is 3,489 people per square mile. As a point of comparison, the population density was 6,171 people per square mile in 1950.
2. 10% of all trips in Omaha will be made by active transportation modes (pedestrian, bicycle, and public transportation). Today about 2% of all trips and 4.4% of commute trips are made by these modes.
3. Fewer than 65% of all work commuting trips will be made in single-occupant automobiles by 2030. Currently, about 82% of commuting trips are made in single occupancy automobiles.
4. Decrease per capita motor vehicle miles traveled (VMT) by Omaha motorists by 10%.

Omaha Transportation Master Plan Update (2012)

The Transportation Element of the Omaha Master Plan provides a blueprint for building a transportation system where there are balanced options on how to get around, such as roads, paths, and sidewalks that contribute to safe and healthy environments, infrastructure to improve livability and connectivity in Omaha's neighborhoods, and fiscally sustainable investments with sound economic returns. The Transportation Element is driven by four fundamental community goals developed throughout the planning process:



1. Provide balanced options for enhanced mobility
2. Attain a safe and healthy environment
3. Create livable and connected neighborhoods
4. Promote economic returns with fiscal sustainability

Omaha Downtown Improvement District Parking Management Plan (2012)

The parking management plan provides decision-making information for the on-street and off-street municipal parking system located in Downtown Omaha. The report addresses seemingly disparate elements and policies of the parking system that impact each other, the parking system as a whole and by extension the quality of Downtown as a destination, a place to work, and to live. The overriding theme within the findings and recommendations in each area is that a comprehensive approach improves the City's ability to manage its parking assets, which should yield real and tangible benefits to members of the public who spend time Downtown.

Dodge Street S-Curve Study (completion 2014)

Based on the Destination Midtown Master Plan and the Transportation Study of Selected Midtown Improvements, a recommendation was made to reconfigure the Dodge Street "S" curve near Turner Park. The City has allocated funding for an eight-month study (Phase 2 Concept Refinement) to examine the Destination Midtown study findings and provide additional recommendations and provide a Preferred Alternative. Phase 3 will be an Environmental Assessment and Preliminary Design for the Preferred Alternative as required by the federal government for a project of this size. Phase 3 is anticipated to be completed at the end of 2014.

Table 1: Previous and Ongoing Studies

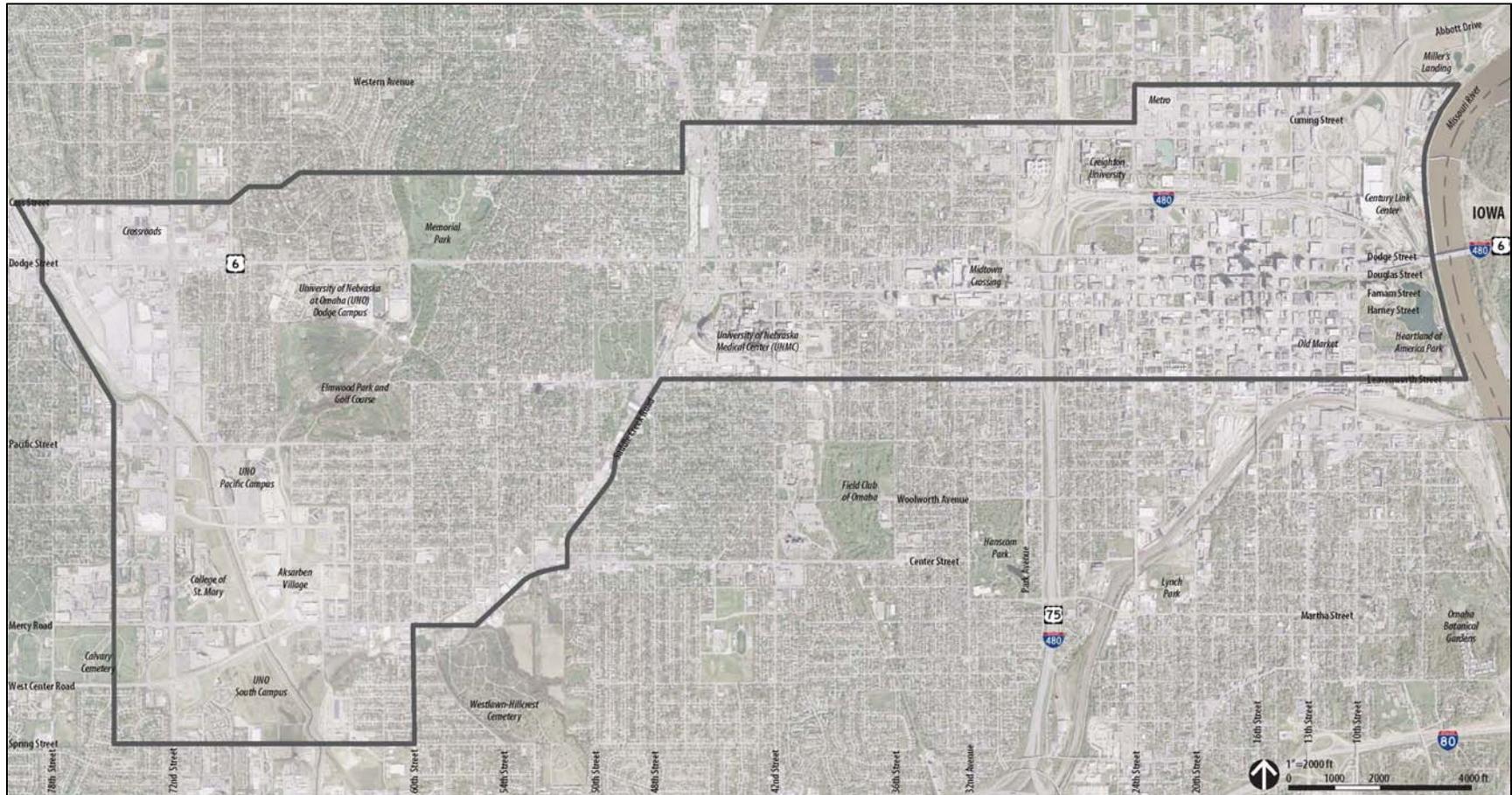
Previous and Ongoing Studies	Description
Destination Midtown Plan (2005)	Discusses enhancing the transit system to include extension of the retro bus circulator routes into Midtown and/or establishing a streetcar line linking Midtown to adjacent areas. Quality of life and environmental goals associated to neighborhood development, walkability for nearby residences, and community activities have been achieved.
North Downtown: Omaha’s New Urban Neighborhood (2005)	Plans ultimate build-out of North Downtown over next 10- 15 years. The strategy allows for a phased approach to be undertaken by both the City of Omaha and the private sector development community. Many of the goals and objectives established during for this plan were incorporated as part of the Downtown Omaha Master Plan (2009).
Downtown Omaha Master Plan (2009)	Identifies future options for Downtown transit service, including a transit corridor using the one-way couplet on Farnam and Harney Streets. Principles highlighted for downtown include a multi-modal environment, sustainable urbanism, economic vitality, and a destination center for the greater region. The recent opening of the TD Ameritrade Park aligns with the principles identified in the plan.
Environmental Element (2010)	Identifies 2030 sustainability measurements: Density of 4,500 people per square mile, 10% of trips be made by active transportation modes, fewer than 65% of work trips be made by single-occupant vehicles, vehicle miles traveled reduced by 10%.
Omaha Transportation Master Plan Update (2012)	Multi-modal transportation plan focused on walkability, biking, and transit which recommends both capital projects and transportation policy changes.
Downtown Omaha Parking Management Plan (2012)	Parking management within city government should be consolidated under one management entity. Recommendations for on-street/off-street parking, on-street parking enforcement, and planning and zoning provide the framework for a uniform system.
Dodge Street S-Curve Study (Completion 2014),	Examines the Destination Midtown study findings and provide recommendations to reconfigure the Dodge Street “S” curve near Turner Park.
Harney Street Bicycle Study (Completion 2013)	Project will convert one eastbound lane of the current four vehicular lanes of traffic to a trail that is set off by a landscaped median designated for walking and biking and to connect the high-profile areas of Downtown, Midtown Crossing, and UNMC.
MAPA Heartland 2050 Regional Vision (completion 2013)	Study will analyze the region’s transportation, housing, utilities, and land use patterns to develop principles that guide physical growth and aid in regional decision making.
MAPA/Metro Regional Transit Vision (completion 2013)	Study will assess current and anticipated needs for public transit service in the region, and evaluate steps to enhance transit service in the metropolitan area.

1.2 Study Area Description

1.2.1 Overview

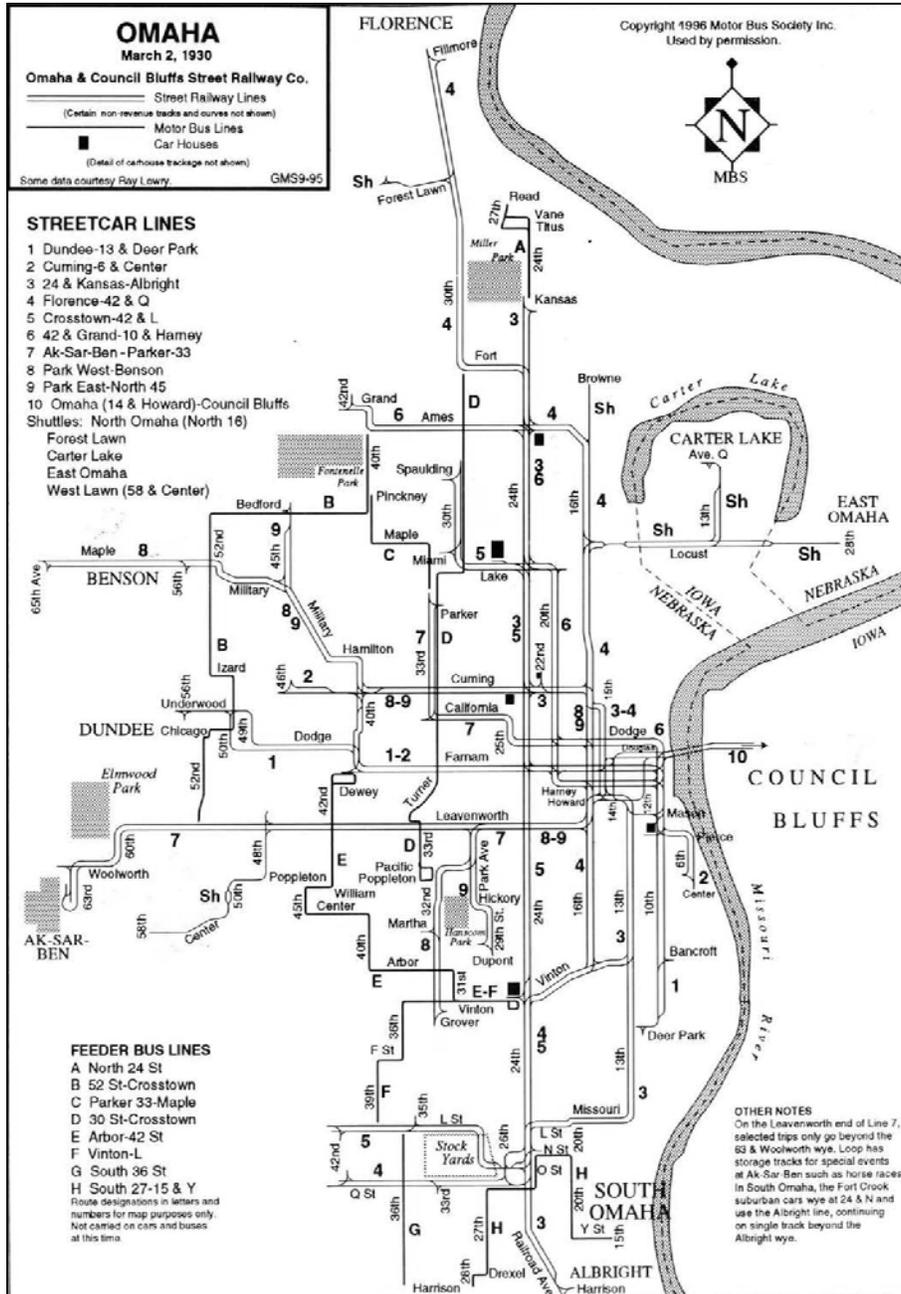
The study area is located within Central Omaha (Figure 1), and is generally bounded by 72nd Street on the west, the Missouri river on the east, Cuming Street on the north, and Center Road on the south. The study area encompasses the following districts: Downtown, Midtown, UNMC, UNO, and the Crossroads and Aksarben Village areas.

Figure 1: Study Area



A portion of the project study area once included a major streetcar system. Incorporated in 1886 and making its last run in 1955, the streetcar system connected Omaha with Council Bluffs, Iowa over the Missouri River via the Douglas Street Bridge. Some of the tracks from this streetcar system are still embedded in Downtown streets and adjacent neighborhoods. A map of historic streetcar service is shown in Figure 2.

Figure 2: Historic Streetcar Service



The study area is a medium-to-dense urban core that includes the highest concentration of population and employment in the region. It is also home to many of the region’s historic, cultural, and visitor attractions, such as the Durham Western Heritage Museum, Omaha Civic Auditorium, CenturyLink Center, TD Ameritrade Park, Holland Performing Arts Center, Omaha Children’s Museum, Bemis Center for Contemporary Arts, Heartland of America Park and Fountain, and the Joselyn Art Museum. Table 2 describes the general characteristics of the districts within the study area, while Figure 3 shows the location of these districts within the study area.

Table 2: Districts

District	Description
Downtown	Downtown includes the largest concentration of civic, cultural, and employment facilities in Omaha, as well as a growing residential population.
Old Market	Premier arts and entertainment district in Downtown featuring dining, shopping, corporate meeting facilities, hotels, and night life.
North Downtown	Developing mixed-use area with multiple event venues, notably CenturyLink Center and TD Ameritrade Park, the latter of which is home of the NCAA Men's College World Series.
Midtown Crossing	New mixed use development with restaurants, housing, and a LEED (Leadership in Energy and Environmental Design) certified hotel; adjacent to Mutual of Omaha headquarters.
UNMC	UNMC includes six colleges and two institutes serving more than 3,400 students. Total employment at UNMC and adjacent hospital is over 11,000. UNMC currently operates a shuttle to serve staff located at the Mutual of Omaha campus.
UNO	UNO is the largest university in Omaha with over 15,000 students and offers nearly 200 programs of study on three campuses (Dodge, Pacific, and Center).
Crossroads	The currently named Crossroads Mall will soon be renamed University Village at Crossroads to become a mixed-use development with stores, restaurants and apartments.
Aksarben Village	Research and business district with a mix of uses including dining and entertainment options, residential, shopping, a community park, and hospitality amenities.

1.2.2 Land Use and Development Potential

Existing land use in the study area is characterized by a mix of commercial/industrial, civic/academic, parks/open spaces, high/low density residential, and mixed-use development. In general, the area between Downtown, Midtown, and UNMC is characterized by commercial and civic land uses, along with parks/open spaces and mixed use development. Between UNMC, UNO Dodge, and Crossroads, the land use primarily includes commercial uses in the eastern portion with low density residential, academic, and parks/opens spaces to the west. The area linking Crossroads, UNO Pacific, Aksarben Village, and UNO Center includes more commercial and academic land uses, and some mixed-use development. Existing land use in the study area is shown in Figure 4.

Existing land use correlates to development potential in the study area. The potential development sites are located throughout the study area, but particularly in the corridor that connects Downtown, Midtown, UNMC, UNO, and the Crossroads and Aksarben Village areas. Potential development sites in the study area are shown in Figure 5.

Figure 3: Districts

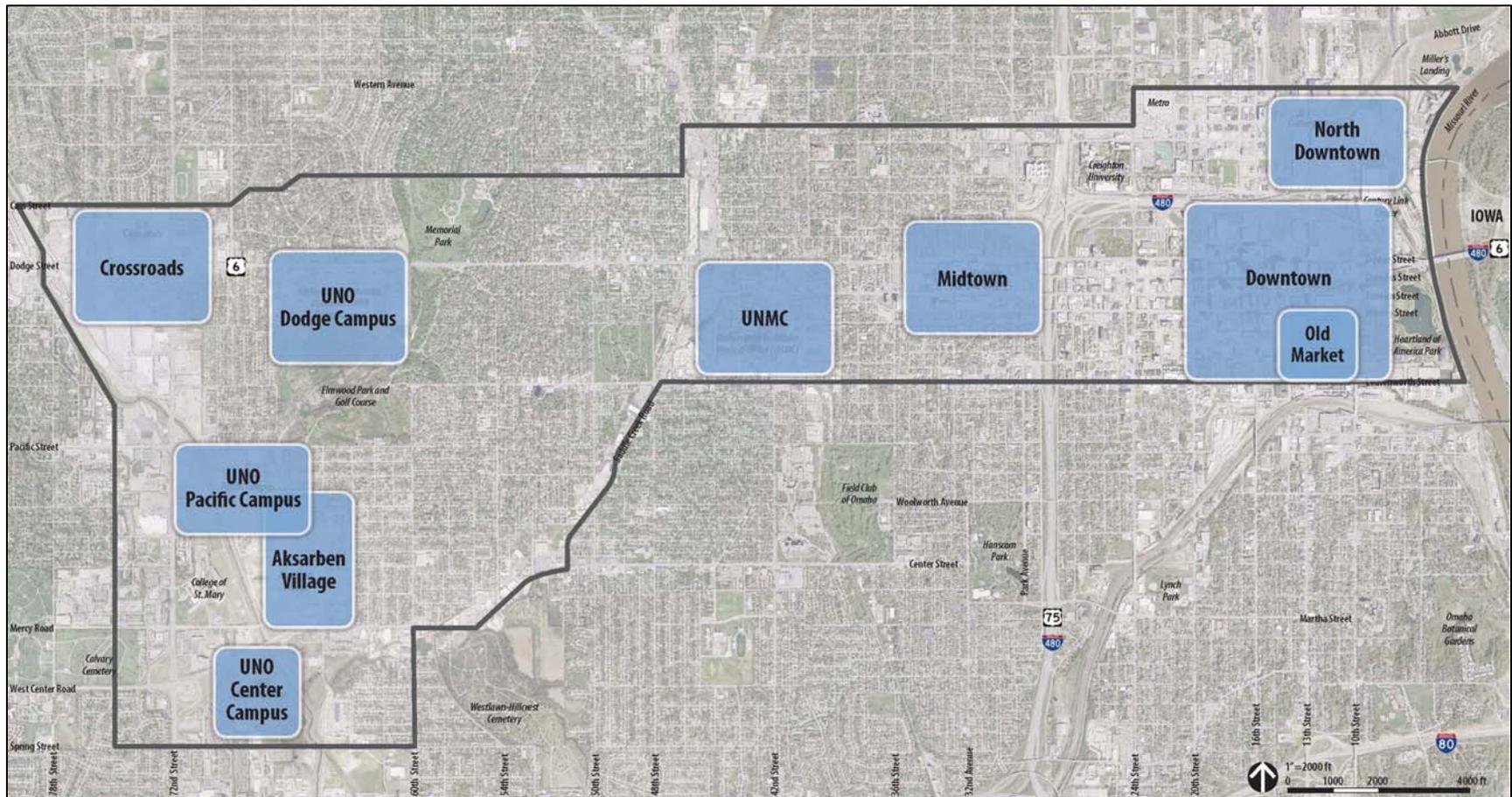


Figure 4: Land Use

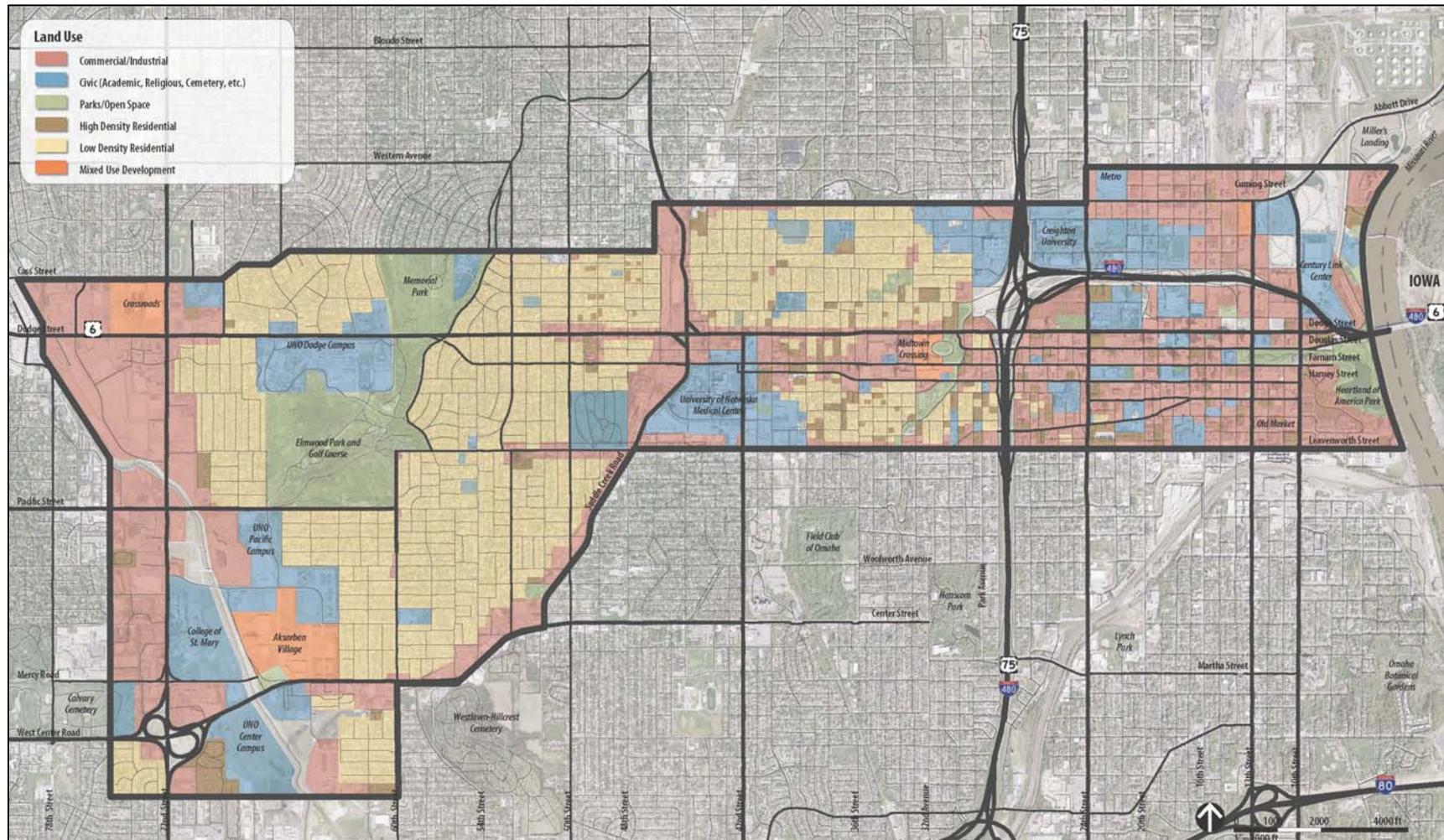
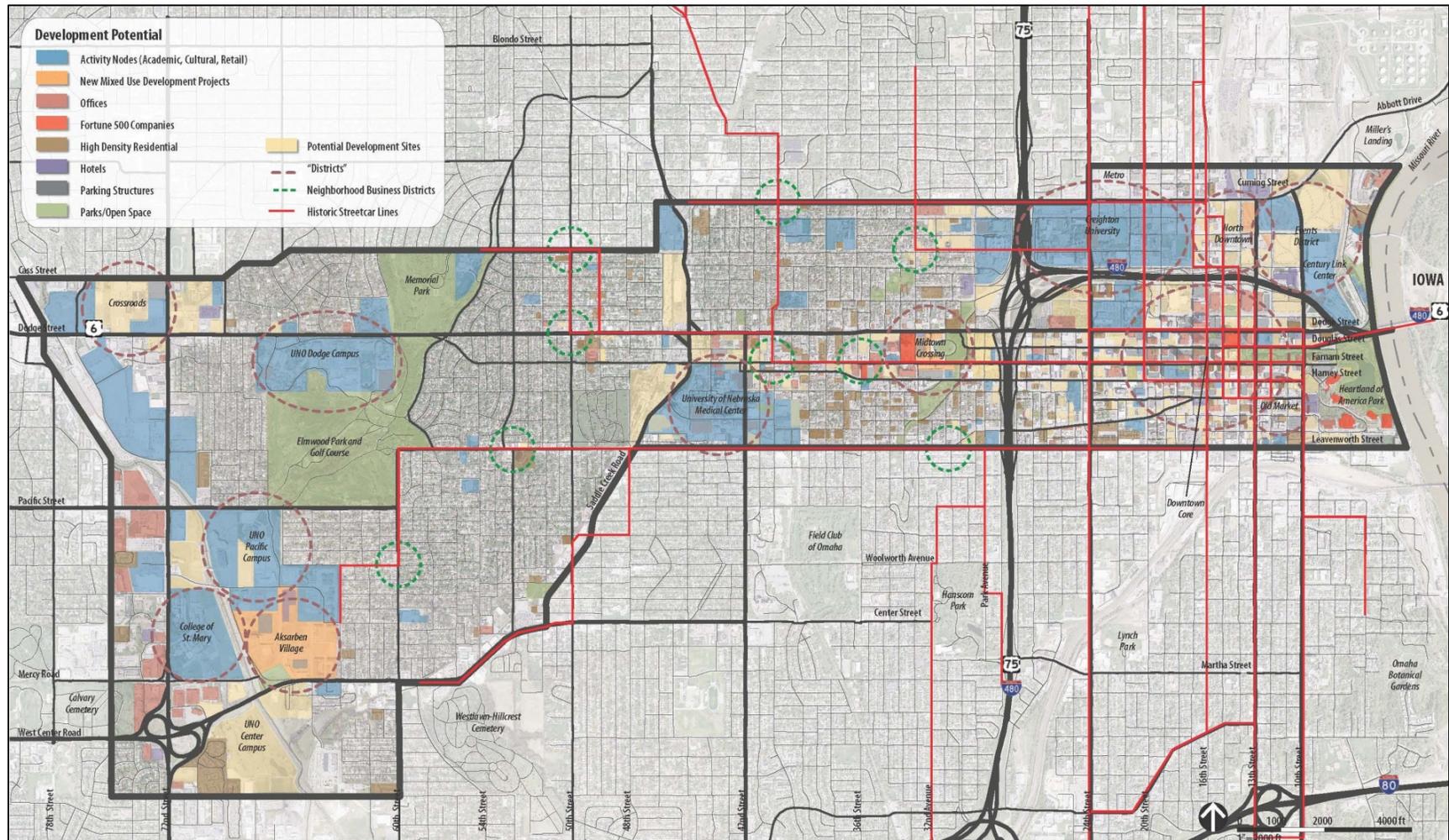


Figure 5: Development Potential



1.2.3 *Demographics of Study Area*

Existing demographic data for the study area is available from Census 2010. This includes population, population change between 2000-2010, households, low income households, zero car households, minority population, population under 18, and population over 65. Employment is not available from Census 2010 but is available from Metropolitan Area Planning Agency (MAPA), the Omaha area Metropolitan Planning Organization. The census tracts located in the study area are shown in Figure 6 while study area demographics are summarized by census tract in Table 3. These totals are adjusted according to the percentage of the census tract in the study area. The study area demographics by census tract are shown in Figures 7 through 15.

In general, demographics in the study area are characterized by proximity to the corridor's activity centers: Downtown, Midtown, UNMC, UNO, and Crossroads and Aksarben Village areas. In general, these activity centers have the highest concentration of employment (particularly Downtown, Midtown, UNMC, and UNO) in the study area. The areas surrounding these activity centers generally have the most population, although the largest increase in population between 2000 and 2010 is found in Downtown and around the UNO Pacific/Center Campuses and Aksarben Village. Other demographic trends in the study area are that the area around North Downtown/Creighton University and the area between Downtown and Midtown have the highest percentage of low income households and minority populations, while the latter also has the highest percentage of zero car households.

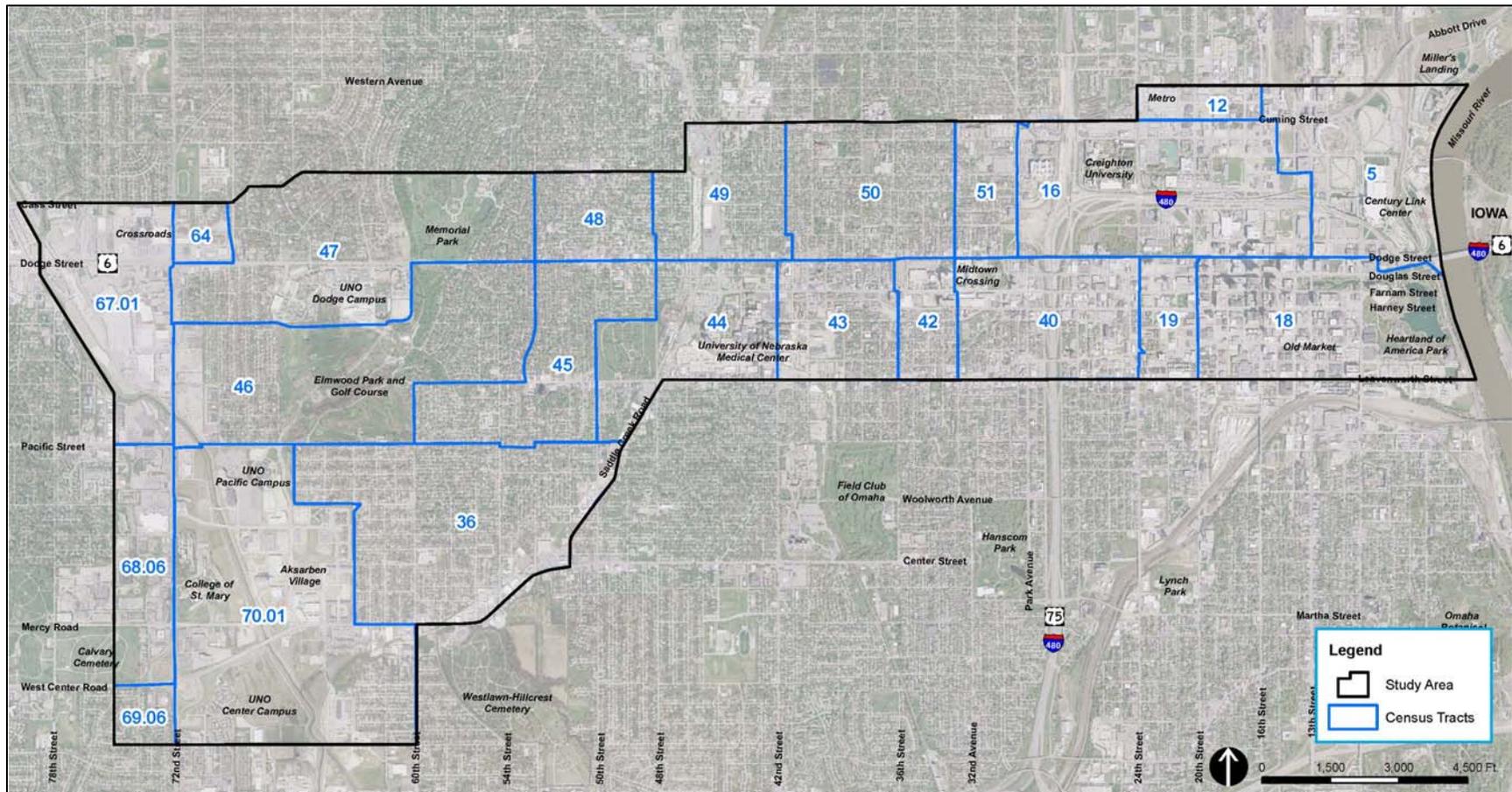
Table 3: Demographics

Census Tract	Total Population (2010)	% Population Change (2000-2010)	Total Employment	% Employment Change (2000-2010)	Total Households	Low Income Households	Minority Population	Zero Car Households	Population 18 and Under	Population 65 and Older
70.01	2,683	25.09%	3,260	-6%	1,081	407	614	122	316	249
69.06	232	1.85%	100	-21%	111	29	19	10	40	57
5	135	40.92%	260	21%	30	12	45	2	14	7
12	300	9.84%	239	0%	92	50	250	12	95	20
16	2,577	-3.99%	13,035	8%	147	147	459	16	51	31
18	2,442	31.85%	14,790	80%	955	324	685	137	129	75
19	759	-24.39%	747	-48%	460	257	348	146	133	43
36	4,178	-5.71%	2,401	152%	2,023	207	289	97	747	468
40	2,731	-8.78%	2,631	-32%	1,348	889	1,103	507	449	326
42	1,139	10.41%	2,988	695%	509	165	455	82	266	39
43	1,885	-2.63%	1,080	-17%	1,070	525	515	279	202	143
44	932	-17.19%	2,087	12%	450	91	91	41	152	70
45	2,844	-7.33%	400	-44%	1,453	326	161	60	523	545
46	2,318	-4.18%	762	-24%	1,049	274	319	110	467	261
47	2,315	10.69%	582	-28%	606	35	134	25	450	224
48	1,763	0.34%	730	-4%	934	329	352	120	351	123
49	1,944	-3.18%	712	-3%	894	433	846	181	441	125
50	3,903	-5.45%	871	126%	1,768	765	1,336	418	822	237
51	1,167	-11.04%	895	636%	479	218	637	96	297	69
64	275	-3.11%	44	-13%	112	28	43	9	62	33
68.06	740	-11.08%	3,447	-5%	296	104	192	20	153	123
67.01	779	-5.28%	2,349	-40%	359	76	80	28	166	157
Total	38,042	-1.24%	54,410	18%	16,226	5,690	8,974	2,517	6,326	3,425

Source: Census 2010, except Total Employment (MAPA 2000 and 2010).

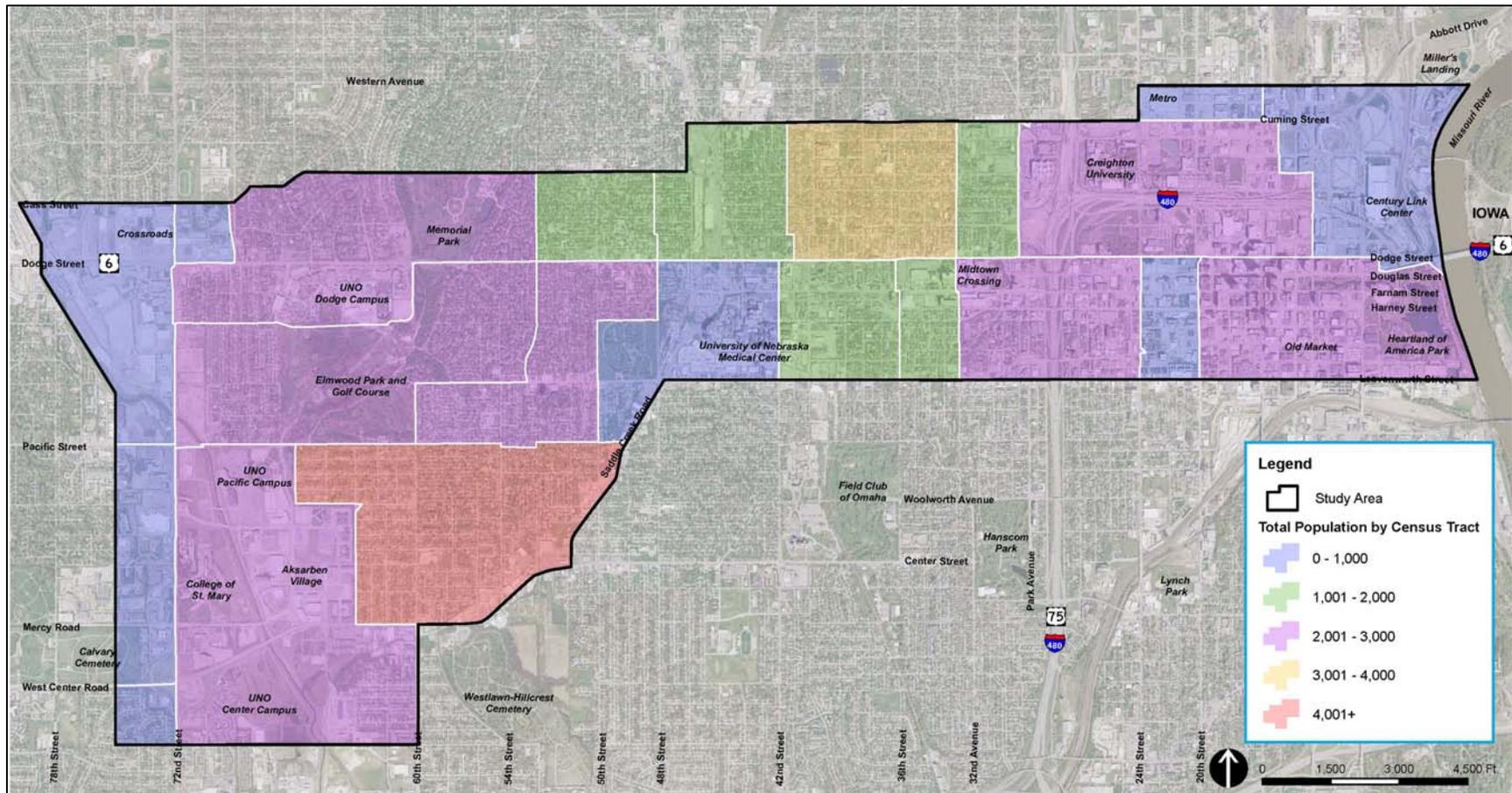
*2000 and 2010 MAPA employment numbers were compiled using different source data (2000 employment data received from the State of Nebraska and 2010 data received from InfoGroup), but provide the best available comparison.

Figure 6: Census Tracts



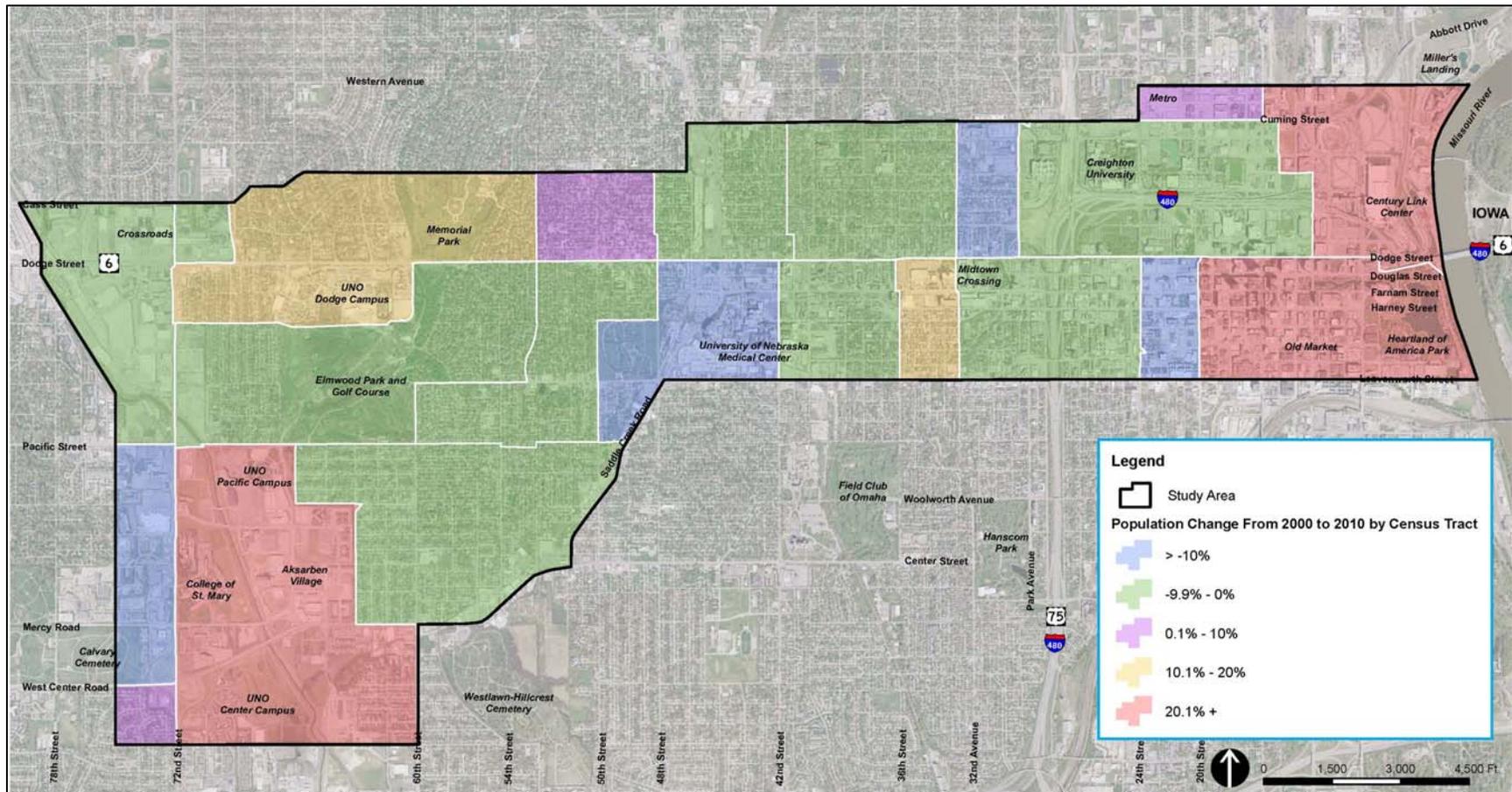
Source: Census 2010

Figure 7: Total Population



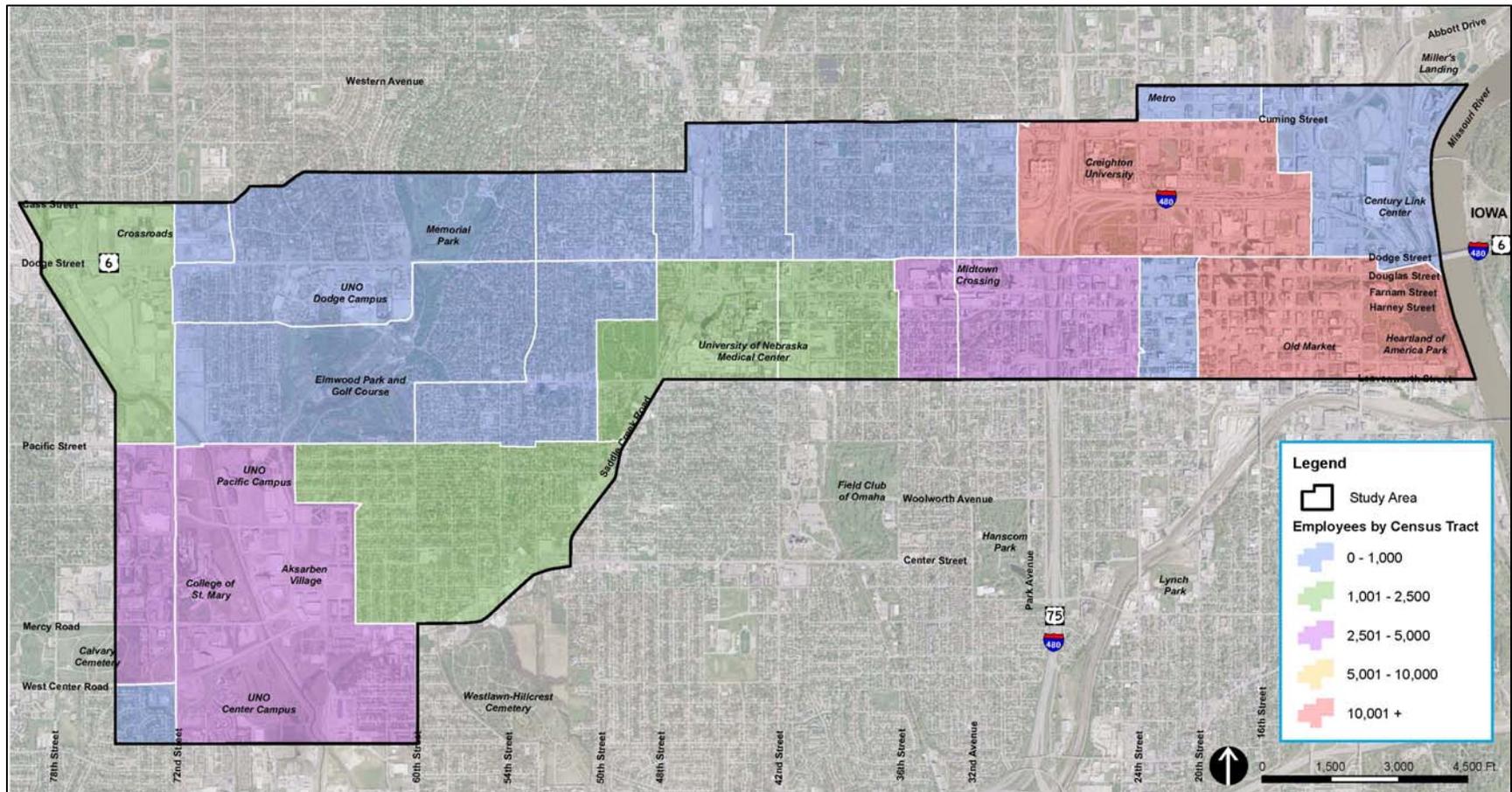
Source: Census 2010

Figure 8: Population Change 2000-2010



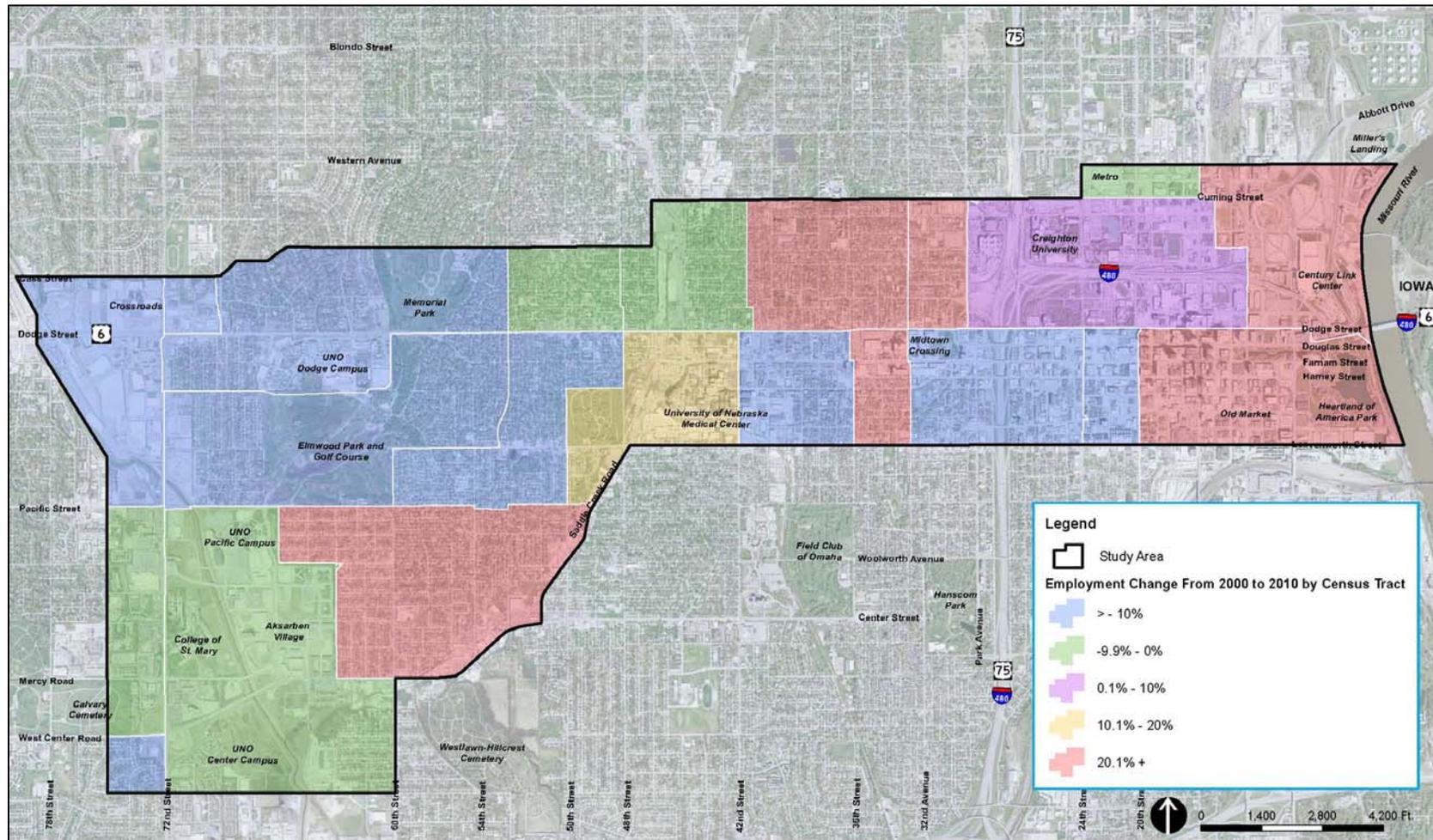
Source: Census 2010

Figure 9: Total Employment



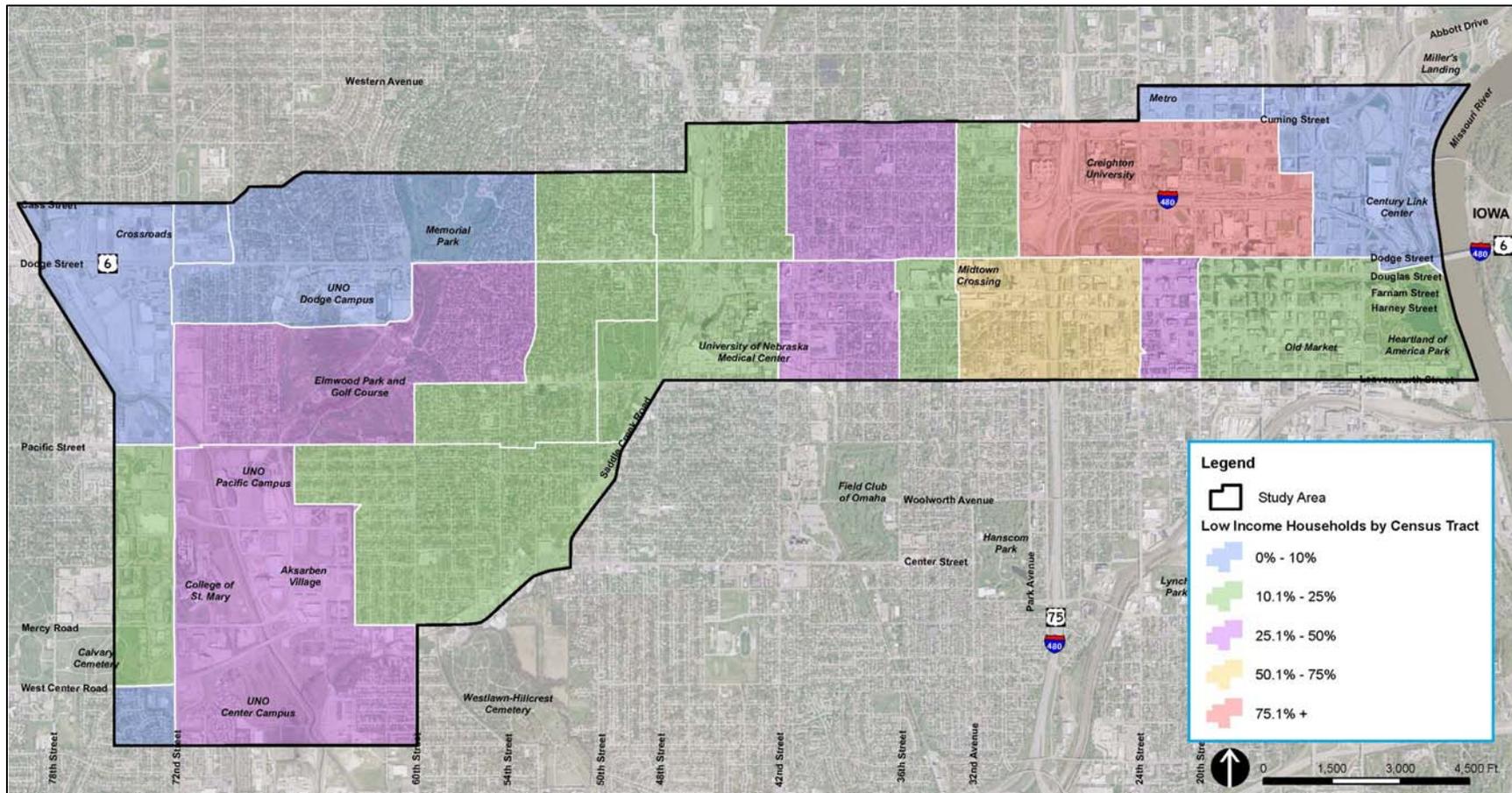
Source: MAPA 2010

Figure 10: Employment Change (2000-2010)



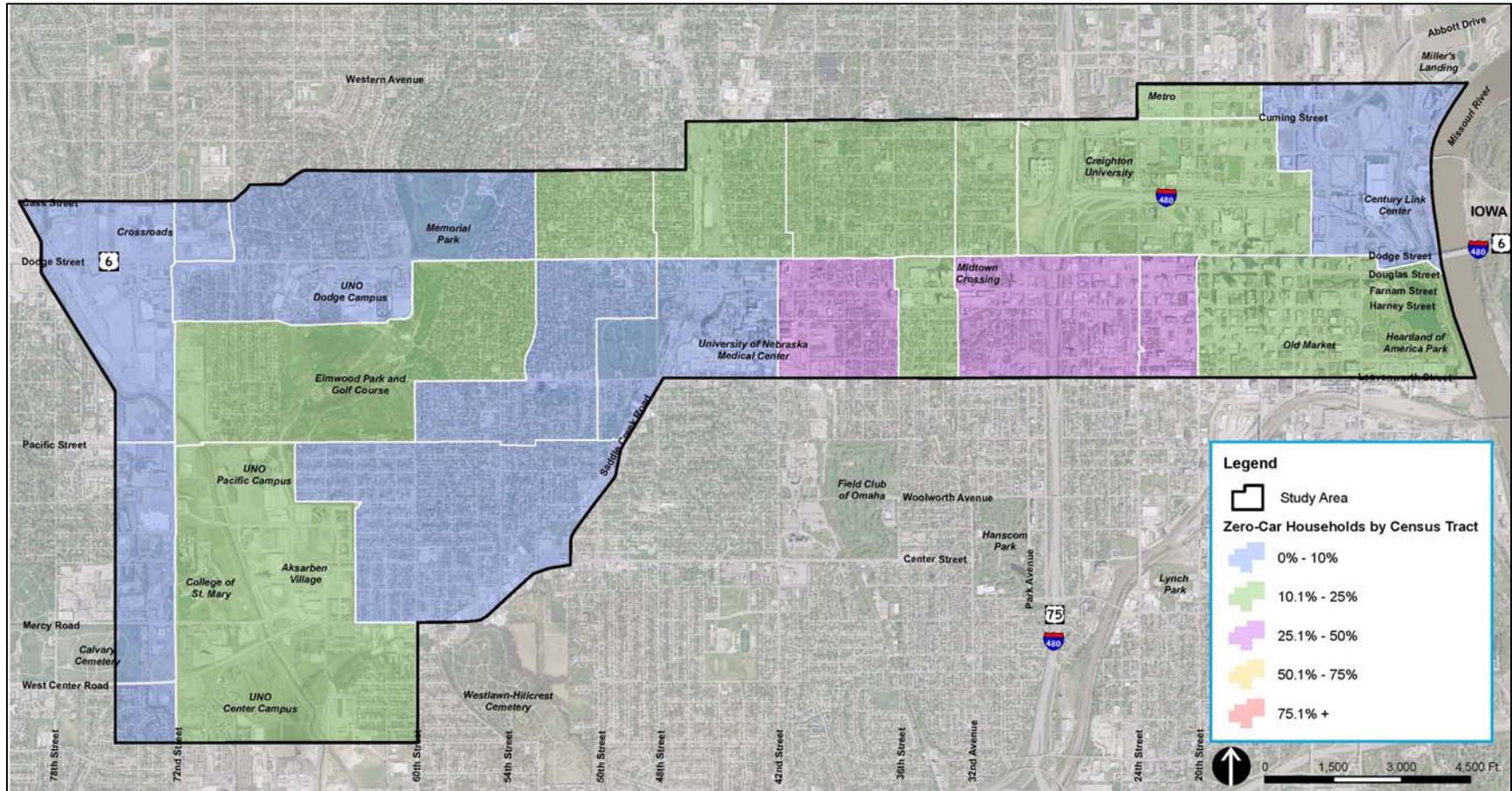
Source: MAPA 2010

Figure 12: Low Income Households



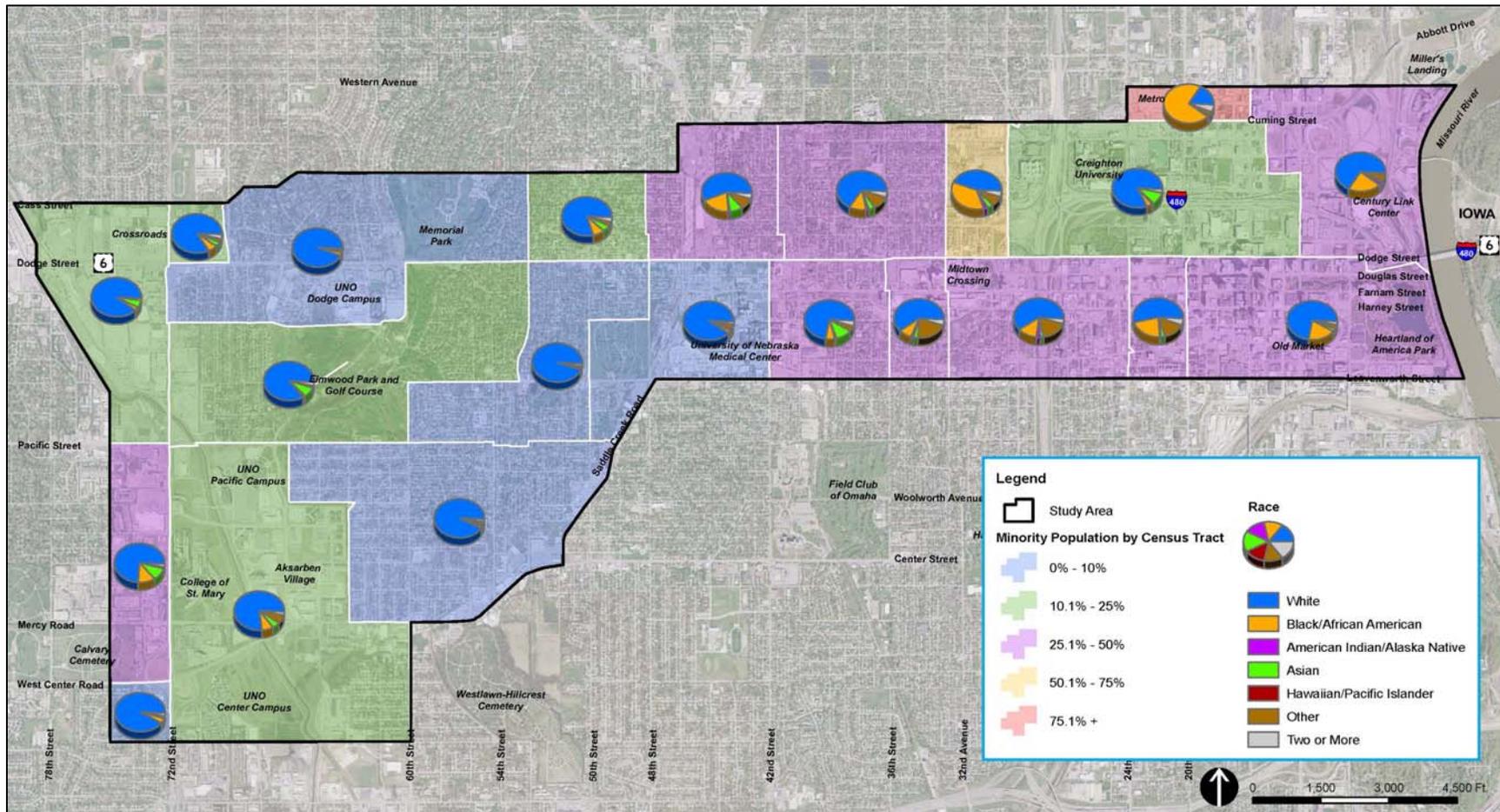
Source: Census 2010

Figure 13: Zero Car Households



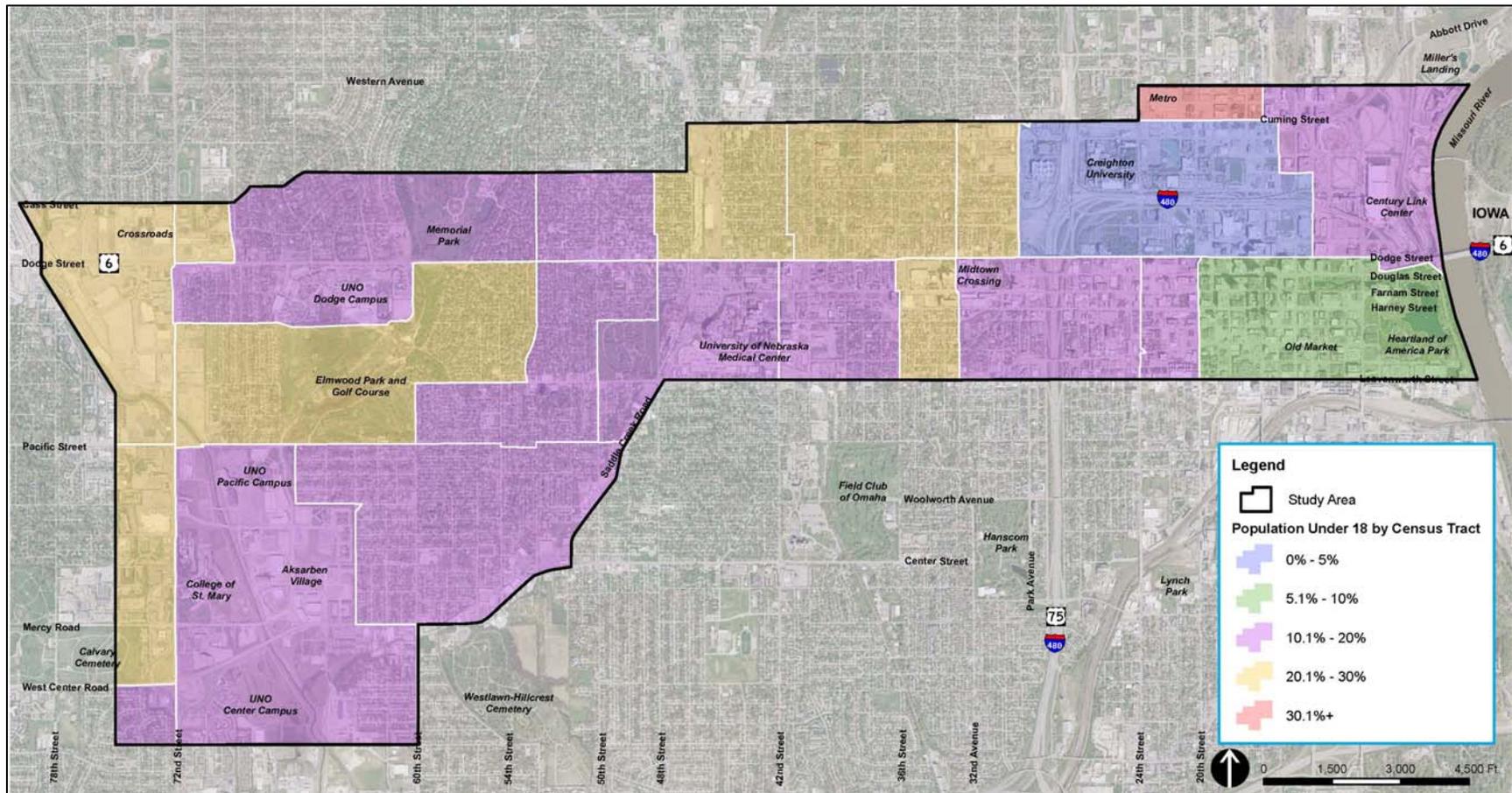
Source: Census 2010

Figure 14: Minority Population by Race



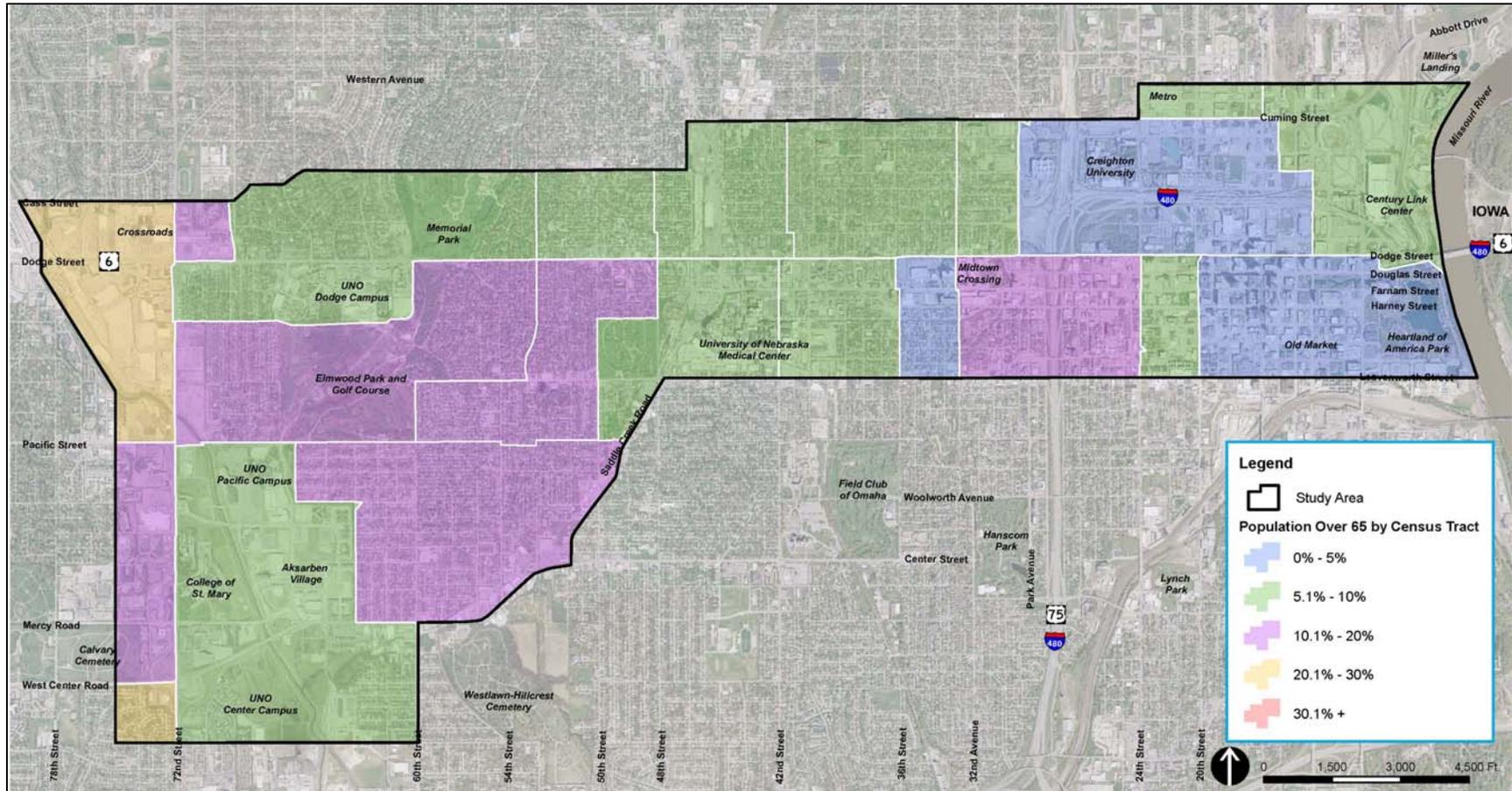
Source: Census 2010

Figure 15: Population Under 18



Source: Census 2010

Figure 16: Population Over 65



Source: Census 2010

1.2.4 Transit Service in Study Area

Metro is responsible for the operation of fixed route local and express bus service, as well as American with Disabilities Act (ADA) complementary paratransit service (MOBY) within the study area. Metro also operates a Downtown Circulator on weekdays during peak hours as well as Stadium Express and Circulator service during the College World Series in June of each year. Metro operates a fleet of 138 buses, with an average age of 11 years. Metro's fleet is 100 percent ADA accessible and includes 35 foot and 40 foot buses, as well as cut-a-way vans for MOBY service.



Many benches and bus shelters within Metro's service area were built in the 1970s. Shelters and benches are spread out throughout the study area, with a few new stop amenities within the study area.

Metro's core routes, such as the Route 2 on Dodge Street, provide weekday service from 5am-11pm, with 15 minutes service during the peak and 20 minute service during the off-peak. Saturday service is provided between 6am-9pm and Sunday service between 7am-7pm, both with 30 minute frequency. The Green Route (Downtown Circulator) operates during peak hours (5:30am-9:00am and 3:30pm-7:30pm) with 5 minute frequency. Metro local and express bus route coverage in the study area is shown in Figures 16 and 17. The Green Route (Downtown Circulator) and Stadium Circulator are shown in Figures 18 and 19.

Metro's fares are \$1.25 for local bus routes and \$1.50 for express bus routes, while transfers are \$0.25. The fare for the Green Route (Downtown Circulator) and Stadium Circulator is \$0.25 and no transfers are allowed. There are a number of fare discounts for students, children, and seniors, disabled, and Medicare passengers with Metro identification.

Metro is currently in the process of planning a new Downtown transit center at 16th Street and Cass Street, which will reorient much of the downtown bus service network. Currently, Metro uses an on-street transit facility on 16th Street between Dodge Street and Howard Street.

Ridership

Metro weekday ridership data is available for April 2012, with ridership for the total system shown in Table 4 and the study area shown in Table 5. This data shows that the total average weekday ridership for the Metro bus system is 14,877. The highest ridership Metro bus routes are the Route 2 (Dodge), 13 (Beltway South), 18 (Beltway North), and 30 (Florence). Each of these routes serves over 1,000 riders per day, with the Routes 2 and 18 serving over 1,600 riders per day. All of these routes with the highest ridership serve the study area, with the Route 2 (Dodge) providing east/west service throughout the length of the corridor.

Figure 17: Metro Local Bus Routes

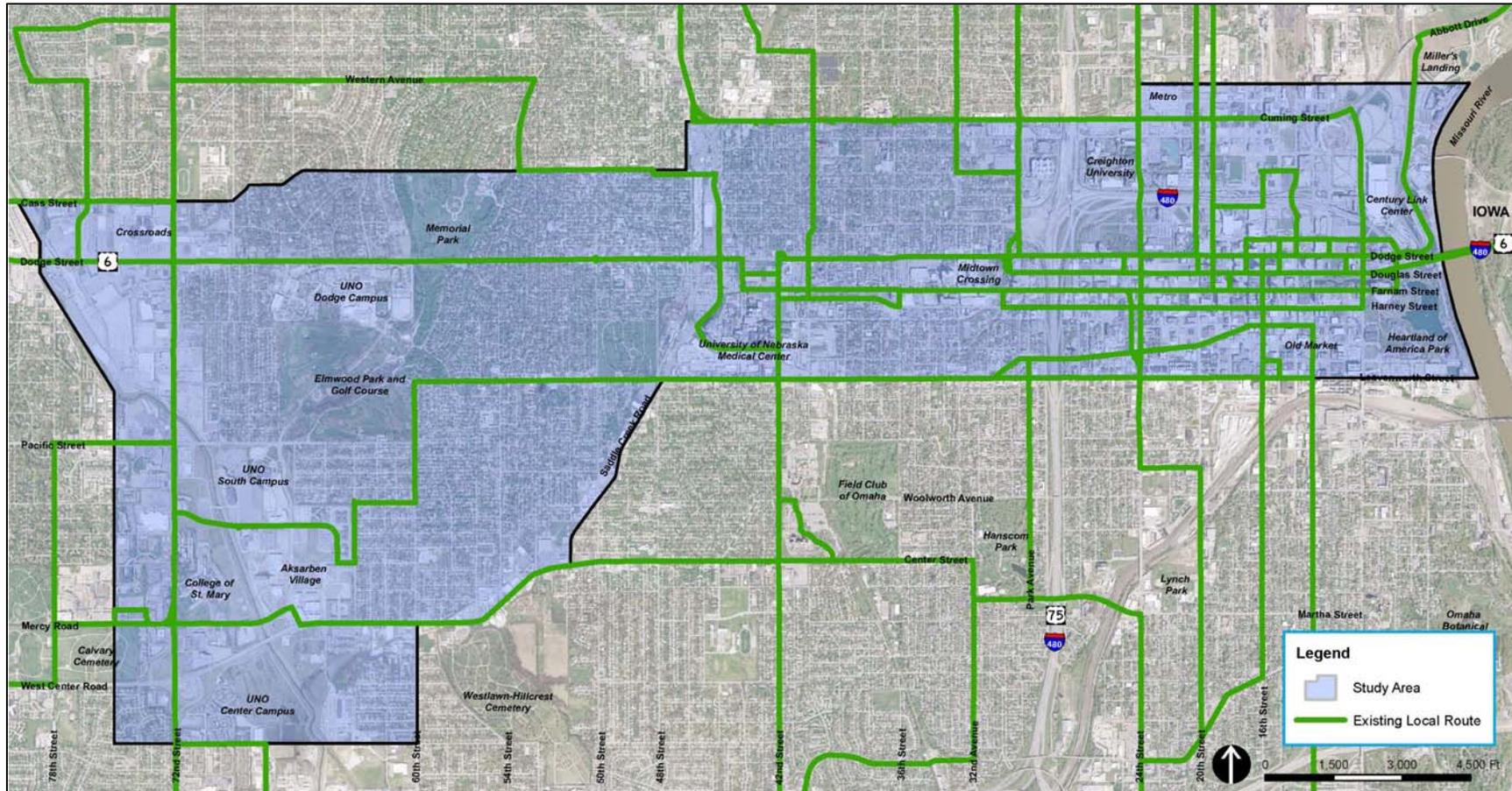


Figure 18: Metro Express Bus Routes

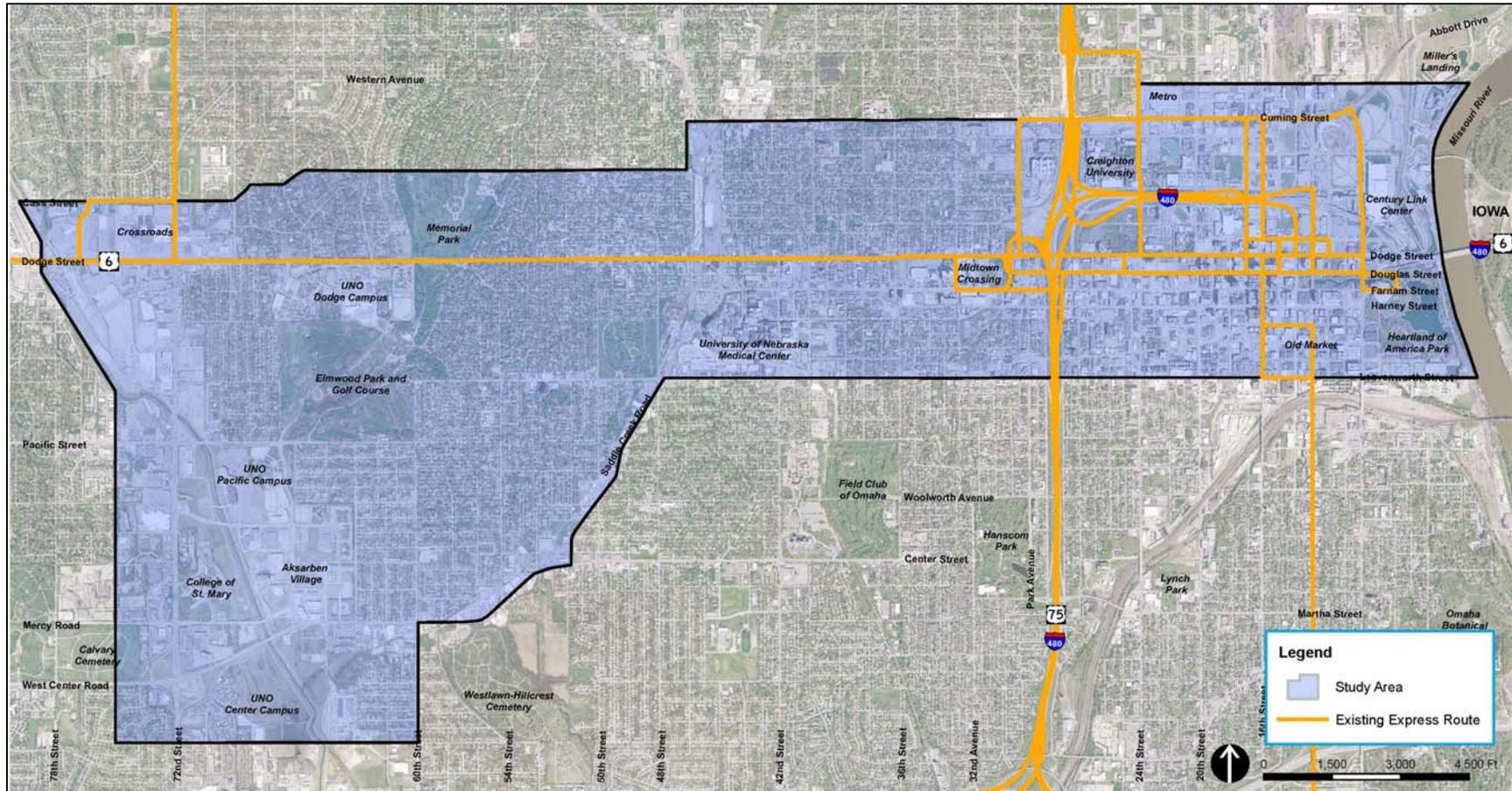


Figure 19: Metro Green Route (Downtown Circulator)

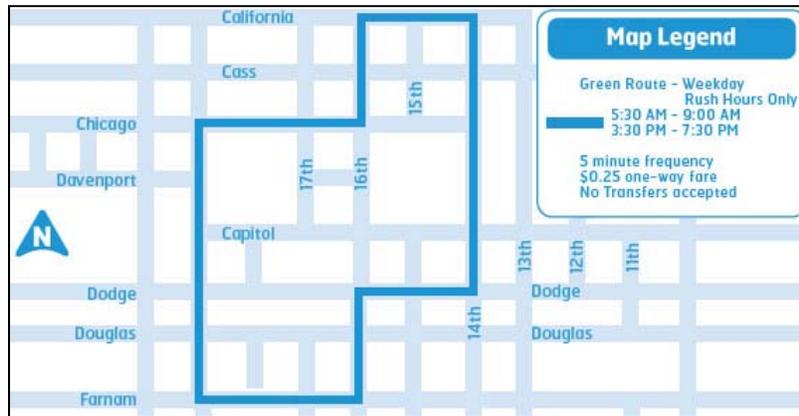


Figure 20: Metro Stadium Circulator

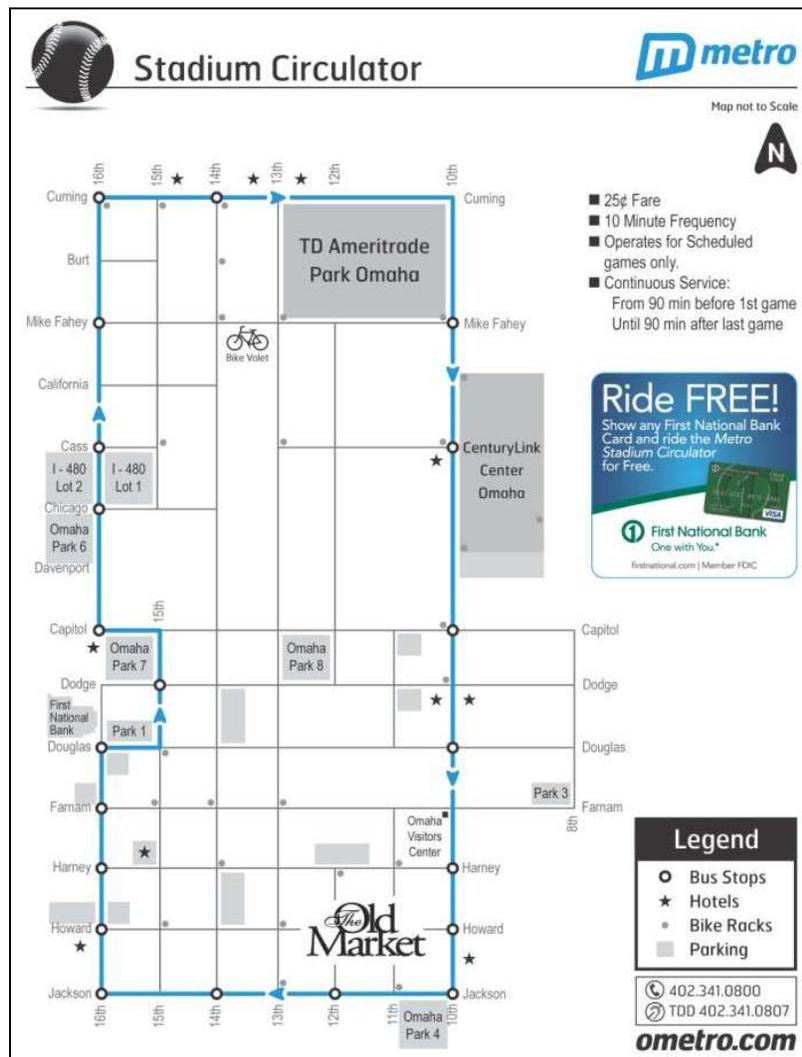


Table 4: Metro System Weekday Ridership

Route	Total Weekday Ridership	Average Weekday Ridership	Weekday Miles	Weekday Hours	Passengers per Mile	Passengers per Hour
1	887	42	98.71	6.93	0.4	6.1
2	35,580	1,694	939.82	75.43	1.8	22.5
3	14,955	712	471.86	35.80	1.5	19.9
4	14,636	697	590.85	40.55	1.2	17.2
5	12,015	572	840.22	51.93	0.7	11.0
7	16,905	805	534.59	45.30	1.5	17.8
8	9,174	437	653.11	44.20	0.7	9.9
9	2,940	140	159.93	13.10	0.9	10.7
11	10,360	493	552.44	43.83	0.9	11.3
13	21,209	1,010	881.18	64.10	1.1	15.8
14	15,060	717	807.45	54.25	0.9	13.2
15	14,419	687	839.43	59.88	0.8	11.5
16	2,058	98	236.28	13.45	0.4	7.3
18	33,951	1,617	1,079.30	82.82	1.5	19.5
22	2,729	130	246.51	15.33	0.5	8.5
24	11,397	543	282.02	30.00	1.9	18.1
25	2,508	119	179.97	12.63	0.7	9.5
26	4,995	238	206.42	14.93	1.2	15.9
30	23,788	1,133	519.15	41.87	2.2	27.1
32	6,379	304	394.48	34.15	0.8	8.9
34	456	22	58.19	3.17	0.4	6.9
35	11,850	564	346.57	29.73	1.6	19.0
48	769	37	110.44	6.93	0.3	5.3
55	14,794	704	720.51	52.25	1.0	13.5
92	3,501	167	200.03	9.55	0.8	17.5
93	673	32	122.97	5.27	0.3	6.1
94	965	46	140.04	5.80	0.3	7.9
95	1,119	53	99.36	5.12	0.5	10.4
96	922	44	99.25	4.88	0.4	9.0
97	3,255	155	265.40	11.33	0.6	13.7
98	904	43	107.91	6.10	0.4	7.1
Green	3,110	148	164.16	16.20	0.9	9.1
Blue	7,389	352	333.82	23.92	1.1	14.7
Yellow	6,546	312	331.22	22.60	0.9	13.8
Other	215	10				
Total	312,415	14,877	13,613.59	983.33	1.1	15.1

Source: Metro, April 2012

Table 5: Metro Weekday Ridership for Routes within Study Area

Route	Total Weekday Ridership	Average Weekday Ridership	Weekday Miles	Weekday Hours	Passengers per Mile	Passengers per Hour
2	35,580	1,694	939.82	75.43	1.8	22.5
3	14,955	712	471.86	35.80	1.5	19.9
4	14,636	697	590.85	40.55	1.2	17.2
7	16,905	805	534.59	45.30	1.5	17.8
8	9,174	437	653.11	44.20	0.7	9.9
9	2,940	140	159.93	13.10	0.9	10.7
11	10,360	493	552.44	43.83	0.9	11.3
13	21,209	1,010	881.18	64.10	1.1	15.8
14	15,060	717	807.45	54.25	0.9	13.2
15	14,419	687	839.43	59.88	0.8	11.5
16	2,058	98	236.28	13.45	0.4	7.3
18	33,951	1,617	1,079.30	82.82	1.5	19.5
24	11,397	543	282.02	30.00	1.9	18.1
30	23,788	1,133	519.15	41.87	2.2	27.1
32	6,379	304	394.48	34.15	0.8	8.9
34	456	22	58.19	3.17	0.4	6.9
35	11,850	564	346.57	29.73	1.6	19.0
55	14,794	704	720.51	52.25	1.0	13.5
92	3,501	167	200.03	9.55	0.8	17.5
93*	673	32	122.97	5.27	0.3	6.1
94*	965	46	140.04	5.80	0.3	7.9
95*	1,119	53	99.36	5.12	0.5	10.4
96*	922	44	99.25	4.88	0.4	9.0
97*	3,255	155	265.40	11.33	0.6	13.7
98	904	43	107.91	6.10	0.4	7.1
Blue	7,389	352	333.82	23.92	1.1	14.7
Yellow	6,546	312	331.22	22.60	0.9	13.8
Total	285,185	13,581	11,767.16	858.45	.98	13.71

Source: Metro, April 2012

* Express route boards downtown and takes patrons beyond study area.

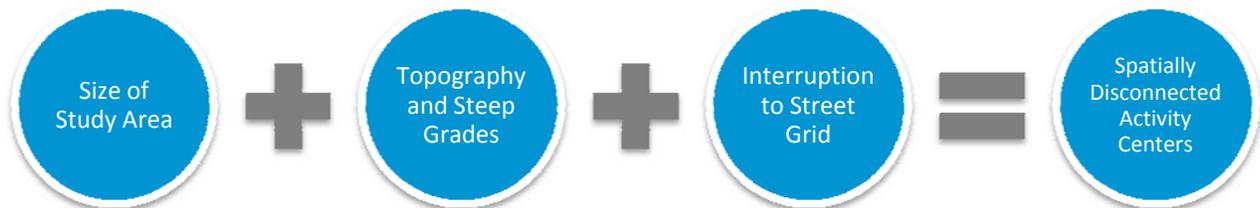
1.3 Statement of Need

This section describes the existing problems and deficiencies within the study area to demonstrate the need for the project. In evaluating the existing conditions in the study area, the following themes emerged which describe the need for the project:

1. Spatially disconnected activity centers
2. Lack of transit priority corridor
3. Increased transit demand from population and employment growth
4. Imbalanced parking availability and capacity
5. Poor trip circulation for special events
6. Lack of transit access to jobs
7. Lack of adequate stop and service amenities
8. Sustainability goals/measures in adopted plans

1.3.1 Spatially Disconnected Activity Centers

Activity centers and districts within and adjacent to the study area are spatially disconnected due to its size, topography, street grid, and location of freeways. The study area is large in size and stretches approximately six miles from Downtown on the east to Crossroads on the west, and two miles from Crossroads on the northwest and Aksarben Village on the southwest.



Topography poses a challenge for pedestrians and bicyclists who walk or bike to bus stops, many of which exceed a comfortable walking distance of a quarter-to-half-mile bus service access. Steep slopes to the west of UNMC rise 67 feet on Farnam Street between 46th and 48th Streets with an average slope of 9.3 percent. In addition, steep slopes around UNMC rise 34 feet on Farnam Street between 42nd and 41st Streets with an average slope of 10.3 percent.

Interstate 480 divides the study area, with six bridges and two streets connecting both sides, which limits opportunities for effective pedestrian and bicycle movement. Sidewalk quality is poor at times, or nonexistent, and interruptions to the street grid network are commonplace. The Gene Leahy Mall,

Doubletree Hotel on 16th Street, and a few large activity and shopping centers also discourage direct pedestrian and bicycle trips.

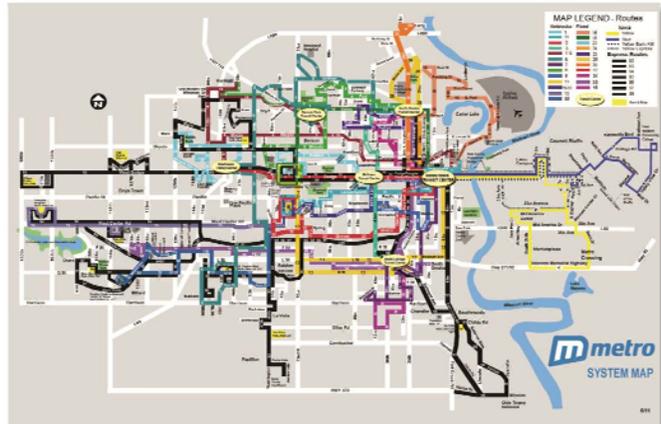
Weather conditions can limit pedestrian and bicycle circulation to bus stops and shelters as temperatures usually drop below 32 degrees Fahrenheit during five months out of the year and the average precipitation is 2 inches per month for seven months out of the year which can make it difficult to travel comfortably as a pedestrian or cyclist within the study area.

The combination of these spatial factors means that many trips within the study area often exceed a comfortable walking distance of a quarter-to half-mile, and inhibit pedestrian circulation to and/or from bus stops, especially stops without shelters and/or benches. For example, the following are distances between key activity centers and districts which can create voids of investment and activity:

Downtown/North Downtown to Old Market (0.9 miles), Old Market to Midtown (1.8 miles), Midtown to UNMC (1 mile), UNMC to UNO Dodge Street Campus (1.8 miles), Downtown to Crossroads (5 miles), and Crossroads to Aksarben Village (1.9 miles).

1.3.2 Lack of Transit Priority Corridor

Metro provides a high level of bus service to and from Downtown, but this service is a complex network of over a dozen bus routes, many of which require long transfer waits along the study corridor which can be confusing and time consuming to riders and can make trips difficult to navigate. No single bus route effectively serves the Downtown core and nearby activity centers, making the choice to use Metro more difficult than walking or driving in many instances. For example, the distance between TD Ameritrade Park and the Old Market is just under a mile, yet walking between these points is faster than taking the bus due to the lack of direct and frequent service. The exception is during the College World Series in June when Metro operates the Stadium Circulator with a simple route structure and 10 minute frequency.



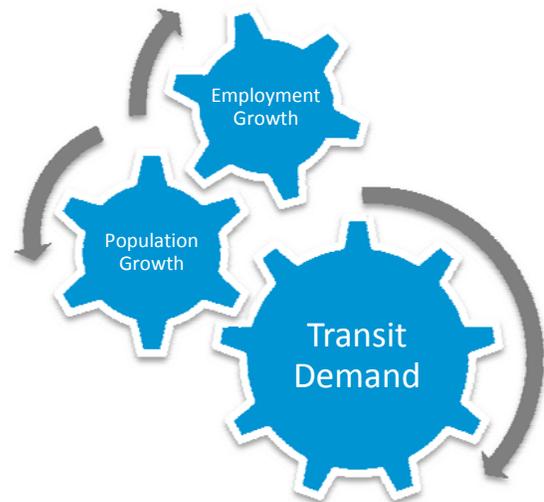
The success of the Stadium Circulator demonstrates the need to serve Downtown and surrounding travel markets with a high quality transit service. On the other hand, the Green Route (Downtown Circulator) is limited to the peak hour and does not provide service during lunch hour or late evenings when many workers or visitors may want to use it. Overall, the use of the Metro bus system is challenging as currently configured for Downtown circulation and connections to surrounding areas, especially for novice transit users.

While there is frequent Metro bus service to and from Downtown, the surrounding districts (particularly the west end of the corridor) lack frequent connection opportunities. A more developed transit priority corridor is key in providing an intuitive, user-friendly, and high quality transit service between Downtown and surrounding activity centers. Reconfiguring existing Metro bus routes and schedules could partially or fully resolve some connection and access issues. These issues will be examined along with the current Metro “hub and spoke” system in the MAPA/Metro Regional Transit Vision study which will be completed by the end of 2013. Findings from the Central Omaha Transit Alternatives Analysis will tie into the Regional Transit Vision.

1.3.3 Increased Transit Demand from Population and Employment Growth

A study of the alternative modes is needed in order to determine a preferred mode that will provide increased transit service to support future population and employment growth within the study area. According to Census 2010, the highest percentage of population growth in the study area between 2000 and 2010 occurred in Downtown and the UNO Pacific/Center campuses and Aksarben Village areas. These areas are at opposite ends of the corridor and have different transit service characteristics. Downtown has the highest level of transit service in the region while transit service around the UNO Pacific/Center campuses and Aksarben Village areas is much more limited. This indicates a need to redistribute existing transit resources and reprioritize transit investments to serve existing and growing population centers.

Most of the region’s largest employment centers are located within the study area (Downtown, Midtown, UNMC, UNO, and Crossroads and Aksarben Village areas). Each of these employment centers has mobility constraints, which may constrain future growth. For example, UNMC is almost landlocked with limited to no availability for parking expansion. Improved transit connections and increased service are needed to support UNMC’s growth for employees, patients and visitors of UNMC. Both UNMC and UNO operate shuttle systems for their employees and students, but more connections are needed for these users as well as other employers and universities (i.e., Mutual of Omaha and Creighton).



1.3.4 Imbalanced Parking Availability and Capacity

The Omaha Downtown Parking Management Plan concluded that the parking supply in Downtown is adequate but disproportionate. On-street parking is regularly in high demand and creates unnecessary

automobile circulation traffic while drivers try to locate on-street parking spots that are better located and free at prime times of the day. While most of the garages are publicly owned and affordable for either monthly or hourly options, there is an imbalance of garages with plenty of availability versus on-street parking in high demand areas. As such, management of the City’s parking assets is spread thin with disparate elements and policies that are not cohesive.

Improved transit circulation is needed to support better parking management by connecting parking supply and demand. For example, many of the parking lots and garages in Downtown are empty during



special events in North Downtown at CenturyLink Center and TD Ameritrade Park. Conversely, many of the parking lots around these event centers are empty during regular office hours in Downtown. The success of Metro’s Stadium Circulator, which is operated during the College World Series in June, demonstrates the ability to use the existing parking supply in Downtown for special events. This same approach could be used on a daily basis as part of a comprehensive parking management strategy supported by improved transit circulation.

1.3.5 Poor Trip Circulation for Special Events

Existing Metro bus service does not provide the everyday circulation needed for special events, particularly to and from North Downtown. As described earlier, there are a number of physical barriers separating Downtown and North Downtown, including Interstate 480, Gene Leahy Mall, and the Doubletree Hotel on 16th Street. These barriers, along with the distance between Downtown and the North Downtown event venues, provide obstacles for trip circulation for special events, which range from daily events to a growing number of planned weekly events throughout the year.



The success of Metro’s Stadium Circulator, which is operated during the College World Series in June, demonstrates the travel demand between Downtown and North Downtown for special events. However, this service does not operate during other times of the year when there are many other special events at CenturyLink Center, TD Ameritrade

Park, Holland Performing Arts Center, Orpheum, and other venues, in addition to the multitude of seasonal events such as the Farmers Market, Summer Arts Festival, and other niche events. Similarly, many of the hotels are located in Downtown and North Downtown, with many hotel patrons needing to go from a hotel in North Downtown to Downtown, or vice versa to special events.

1.3.6 Lack of Timely Transit Access to Jobs

The study is needed to address a lack of timely transit access to jobs. Based on the demographic information obtained from Census 2010 and MAPA, the census tracts with the highest population, low income households, and minority populations are different from those with the highest employment. While many of these areas are connected by the existing Metro bus service, the level of service is not conducive to providing improved access to jobs. This is further needed since the employment centers in Omaha are in a linear corridor between Downtown, Midtown, UNMC, UNO, and the Crossroads and Aksarben Village areas. In addition, there is increased opportunity for development of office space and other employment in Downtown and throughout the corridor.

According to a paper “Where the Jobs Are: Employer Access to Labor by Transit (July 2012)” by the Metropolitan Policy Program at Brookings, “the suburbanization of jobs obstructs transit’s ability to connect workers to opportunity and jobs to local labor pools.” Based on the results of this study, 76.2 percent of jobs in the Omaha metropolitan area are in neighborhoods with transit service, which ranks 38th among the 100 largest metropolitan areas. In addition, the typical job can reach 28.5 percent of the Omaha metropolitan population in 90 minutes via public transit, which ranks 32nd among metropolitan areas surveyed. While in the top 50 percent in both categories, there remains a need to improve the labor access rate in Omaha. One of the key findings from the Brookings paper is that “expanded transit networks and integrated land use decisions can improve transit’s utility to employers.” These figures and finding support the need for the project to further address a lack of transit access to jobs in Omaha.

1.3.7 Lack of Adequate Stop and Service Amenities

There is a need for more stop and service amenities within the study area. Many of the benches, bus shelters, and buses within the study area were either built or implemented in the 1970s and 1980s, to standards different than today. Many stops don’t have adequate amenities for patrons as they wait for buses (especially during inclement weather), and in some instances, are not easy to locate or get to because of topography. Service reliability, passenger comfort and quicker boarding times are difficult to meet as the system continues to age. Some stop amenities within the study area are slightly newer than the rest of the Metro service area, as new developments have implemented new amenities. Mutual of Omaha recently built a few shelters in the Midtown Crossing area and implemented an agreement to provide maintenance service for the shelters. Most recently, a local advocacy group rebuilt an existing dilapidated shelter and relocated it on 50th Street and Dodge Street.

1.3.8 Sustainability Goals/Measures in Adopted Plans

The adoption of a preferred alternative outcome from the AA study will assist in meeting sustainability goals presented earlier in Section 1.1.1 and restated in this section. The study is needed to address the 2030 sustainability goals outlined in the *Omaha Master Plan Environmental Element (2010)*. The Urban Form and Transportation category of this plan provides direction for Omaha to substantially reduce its impact on the environment and the per capita cost of critical infrastructure and municipal services to increase its level of urban quality and community health.

The study is needed to help Omaha achieve the following measurements toward sustainability by 2030 (as shown earlier in Section 1.1.1):

1. Omaha's population density will grow to 4,500 people per square mile. The current population density is 3,489 people per square mile. As a point of comparison, the population density was 6,171 people per square mile in 1950.
2. 10% of all trips in Omaha will be made by active transportation modes (pedestrian, bicycle, and public transportation). Today about 2% of all trips and 4.4% of commute trips are made by these modes.
3. Fewer than 65% of all work commuting trips will be made in single-occupant automobiles by 2030. Currently, about 82% of commuting trips are made in single occupancy automobiles.
4. Decrease per capita motor vehicle miles traveled (VMT) by Omaha motorists by 10%.

Increasing the density of development and encouraging pedestrian activity and alternative modes of transportation, especially transit services are fundamental to the concepts outlined in the plan.

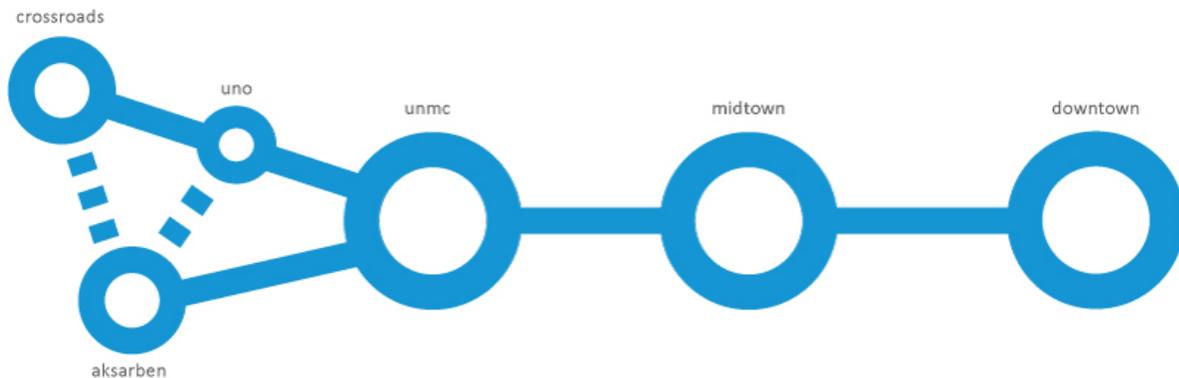
1.4 Statement of Purpose

The purpose of the study is to improve transit connections for residents, employees, and visitors to employment centers, educational facilities, various services, areas of interest, and the regional transit network while serving as a driver for employment growth and economic development. This study will improve transit connectivity and increase opportunities for mobility between Downtown, Midtown, UNMC, UNO, and the Crossroads and Aksarben Village areas. The following needs describe the purpose for the project:

1. Connect major districts, destinations, and activity centers
2. Provide simple, localized, high-frequency transit service
3. Support population and employment growth, and revitalization
4. Balance parking availability and capacity
5. Improve transit circulation for special events
6. Maximize transit access to highest employment corridor
7. Provide adequate stop and service amenities
8. Contribute to meeting sustainability goals/measures in adopted plans

1.4.1 Connect Major Districts, Destinations, and Activity Centers

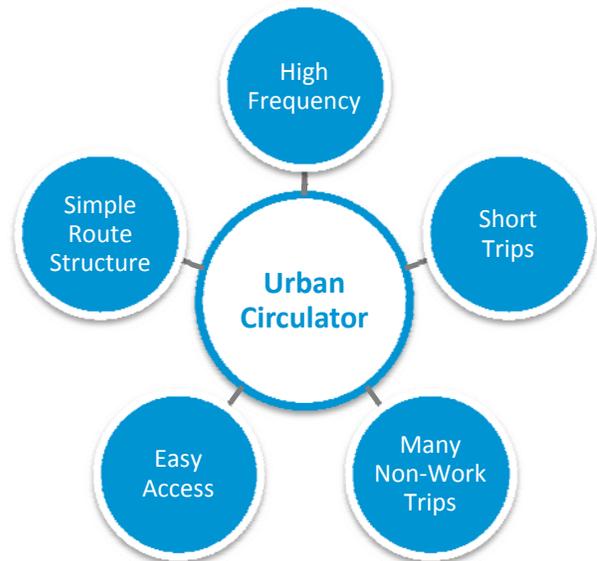
The study will strengthen the connection between major districts, destinations, and activity centers within the study area, fostering a more unified and cohesive corridor through the Downtown, Midtown, UNMC, UNO, and the Crossroads and Aksarben Village areas. The study will enable easy, frequent, and convenient travel throughout the study area for residents, employees, and visitors. This includes providing connections that overcome existing physical barriers (size of the study area, topography and street grades, and interrupted street grid) as well as improving trip circulation for special events.



1.4.2 Provide Simple, Localized, High-Frequency Transit Service

This study will improve transit mobility and circulation within the study area by improving frequency, service coverage and quality, and providing stronger intermodal connections. In particular, the study will enhance transit mobility as well as accelerate longer walking and biking distances within the study area. The study will provide high quality transit service that will differ from existing Metro bus service in terms of its operating characteristics. The study will provide an urban circulator transit service with the following characteristics:

- Simple route network that is user-friendly
- High-frequency all-day service that facilitates short trips
- Larger vehicle capacity to accommodate higher passenger load factors during peak hours and special events
- Low-floor vehicles to facilitate easy access and rapid boardings and alightings



1.4.3 Support Population and Employment Growth, and Revitalization

The study will support population growth in the study area, particularly in the areas with the largest population growth between 2000 and 2010 (Downtown, UNO Pacific/Center campuses, and Aksarben Village areas). The study will also support employment growth at some of the region’s largest employment centers. Many of these employment centers, such as UNMC and UNO, are physically constrained. The study will support their growth by improving connectivity between their multiple campuses and supporting less of a need for on-street parking and parking lots.

The study will build stronger physical connections between employment hubs, educational centers, residential neighborhoods, shopping areas, civic resources, historic districts, cultural landmarks and entertainment destinations, and unify the Downtown, Midtown, UNMC, UNO, Crossroads, and Aksarben Village areas into a unified corridor rather than a series of fragmented nodes. The connectivity will revitalize and strengthen the area’s economic competitiveness and help reactivate isolated neighborhoods.

1.4.4 Balance Parking Availability and Capacity

The study will help reduce the need to travel by car and promote a “park once” strategy to better utilize existing parking resources and discourage short automobile trips. Increased transit coverage and circulation within the study area will encourage people to take transit, further reducing the need for

parking facilities and the intense demand for prime on-street parking spaces. By reducing the need for parking in the corridor, particularly in Downtown, the project will allow the City to maximize the density of development that can be supported in Downtown, North Downtown and along the corridor, which will in turn support additional transit service and help the City meet its overall sustainability goals. Discussions are currently underway downtown to incorporate a reverse park and ride area in the development of a transit center at 16th and Cass Street. Opportunities to effectively utilize the City's parking assets will be maximized through the project and provide consistency with the sustainability and quality of life goals identified in the Downtown Omaha Master Plan.

1.4.5 Improve Trip Circulation for Special Events

The study will improve everyday trip circulation for special events. The study will provide a transit investment that addresses the distance and physical barriers separating Downtown and North Downtown. The study will facilitate movement between employment centers, special event venues, and hotels in and around Downtown, and provide new connections to other activity centers in the study area, such as Midtown Crossing. This improved trip circulation will distribute the economic benefit of these special events throughout Downtown and build upon a "park once" strategy.

1.4.6 Maximize Transit Access to Highest Employment Corridor

The study will create a transit priority corridor in the area with the region's largest employment centers in Omaha. This concentration of transit service and employment will improve transit access to jobs and facilitate intermodal connections. In many cases, the study will provide the benefit of serving locations that are both major employment and educational hubs, such as UNMC and UNO. In addition, the study will allow future employment to further concentrate in a corridor with high quality transit service.

1.4.7 Provide Adequate Stop and Service Amenities

The study will support additional stop and service amenities such as benches, shelters and transportation modes to improve the Metro rider experience and help promote a unified system identity. The study will identify opportunities for benches and/or shelters at locations that are easy to locate and get to, while considering inclement weather, topography, and connections to the Metro system. By providing adequate service amenities, passengers will benefit from a comfortable ride, service reliability, quicker boarding times, and overall improvements to travel time.

1.4.8 Contribute to Meeting Sustainability Goals/Measures in Adopted Plans

The study will address the 2030 sustainability goals outlined in the *Omaha Master Plan Environmental Element (2010)*. The study will help to address specific measures for increasing density, improving the mode split for active transportation modes, reducing commute trips by single occupant vehicles, and decreasing per capita motor vehicle miles traveled. These measures cannot be achieved without the

implementation of a major transit investment in the area of the highest population and employment density in Omaha.

The Urban Form and Transportation category from the *Omaha Master Plan Environmental Element* provides direction for Omaha to substantially reduce its impact on the environment and the per capita cost of critical infrastructure and municipal services to increase its level of urban quality and community health by:

- Accommodating its potential urban population within a compact, contiguous urban area
- Productively and effectively using all land within its 2010 municipal limits
- Supporting an efficient city form with a balanced transportation network that increases the role of low impact and active transportation modes in providing access to all parts of the city

Goals under the Urban Form and Transportation category from *Omaha Master Plan Environmental Element*) provide:

- **Large-Scale City Form:** Develop a city form that both reduces the per capita cost of providing city services and establishes the density necessary to support more energy-efficient forms of transportation.
- **Land Use and Development Policy:** Generate development at higher residential densities and true mixed uses that produce more diverse environments and reduce the number of necessary automobile trips.
- **Land Development:** Create individual developments with components that are connected, walkable, and accessible to all modes of transportation, by providing safe, defined, and pleasant routes from the public realm to destinations, based on the needs of each mode.
- **Transportation Network:** Develop a transportation network that moves people and freight within and through the metropolitan area efficiently, maximizing access and minimizing vehicle miles traveled, energy consumed, and pollutants emitted.
- **Transit:** Develop a public transportation system that offers a degree of coverage, convenience, and amenity, that both provides transportation equity for dependent customers and makes transit an attractive option for discretionary passengers.
- **Active Transportation:** Provide a high level of citywide access and continuity to pedestrians and bicyclists, making active transportation a realistic and integral part of the city's transportation network.

1.5 Alternatives Analysis Goals

These five comprehensive goals will guide the Central Omaha Transit Alternatives Analysis based on the study's Purpose and Need. These goals will provide the basis by which the transit alternatives will be defined, and will establish the methodology used to evaluate the transit alternatives within the study area.

- 1 •Improve mobility between Downtown, Midtown, UNMC, UNO, and the Crossroads and Aksarben Village areas
- 2 •Maximize the efficiency and effectiveness of the transit investment
- 3 •Increase support for Omaha's Master Plan land use and economic development goals and enhance the use of transit-supported land use, planning, and design strategies
- 4 •Increase sustainable transit investments that are compatible with the built environment
- 5 •Provide a transit investment that can be implemented within budget constraints for capital and operating expenses