

The Impact of a Walkable, Workable, and Livable Midtown Omaha

Produced for:
Midtown 2050 Development Corporation
January 24, 2017

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Preface

The Impact of a Walkable, Workable, and Livable Midtown Omaha

Introduction

The subsequent analysis was prepared for the Midtown 2050 Development Corporation by Ernest Goss, Ph.D., Principal Investigator, Scott Strain, Co-Principal Investigator, and the Goss & Associates Economic Solutions team. Findings remain the sole property of the Midtown 2050 Development Corporation and may not be used without prior approval of this organization.

Goss & Associates thanks the Midtown 2050 Development Corporation for their cooperation. However, any errors, omissions, or misstatements are solely the responsibility of Goss & Associates and the principal investigators. Throughout this study, the area slated for redevelopment and revitalization is referred to as the “Midtown 2050 area.”

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¹This study was completed independent of Creighton University. As such, Creighton University bears no responsibility for findings or statements by Ernie Goss, Scott Strain, or Goss & Associates, Economic Solutions.

Foreword

The *Destination Midtown* plan led to Midtown Crossing, a thriving, walkable Omaha community in the heart of Omaha’s Midtown area. However, while Midtown Crossing thrives, the remainder of Omaha’s primary Midtown area has trailed similar cities in terms of growth in livability and walkability.

Despite its lag in this key area, the Midtown population is growing at a rate approximately equal to the rest of the state of Nebraska and the U.S. Annual population growth of 0.80 percent is expected, along with household growth per year of 0.89 percent for the primary Midtown area. Median household income is expected to rise by 2.2 percent annually.²

Building on *Destination Midtown’s* success, *Midtown 2050* intends to fine-tune and escalate the progress toward an expanded, pedestrian-friendly, economically sustainable urban center. Mutual of Omaha, the same corporate leader that spearheaded *Destination Midtown*, along with the University of Nebraska Medical Center (UNMC) are anchor institutions for this effort.

To succeed, *Midtown 2050* expects to attract consumers who include younger, well-educated adults, often termed Millennials, as well as retiring and working baby boomers. By drawing in retailers and restaurants, creating green spaces and civic areas, such as parks and sports facilities, and creating a walkable community, Midtown Omaha expects to appeal to this growing audience.

Through investments in public transit, *Midtown 2050* plans to connect Midtown districts and neighborhoods, thereby attracting businesses, employers, visitors and new residents. The desired result will be an economically thriving urban core linking the Omaha suburbs to the city’s Riverfront.

²Midtown Omaha 2050, *Final Charrette Report*, 2016, p. 91.

Preface

With Midtown pedestrian traffic limited primarily to the Midtown Crossing area, residents, including Millennials and baby boomers, need internal walkable, access throughout Midtown neighborhoods. Midtown 2050's transportation strategy includes a Farnam/Harney streetcar to operate in conjunction with other planned and existing systems. The proposed streetcar will connect Downtown to major Midtown destinations including Midtown Crossing.

Goals of the study

The goal of this study is to estimate the impact on quality-of-life and economic growth for the Omaha community, and the State of Nebraska, due to accelerated development of the Midtown area, specifically by anchor institutions of UNMC and Mutual of Omaha, as the "Midtown 2050 Area."

Throughout this study, the area slated for redevelopment and revitalization is referred to as the "Midtown 2050 area."

Using input-output multipliers, the study will provide sales, earnings and job impacts in addition to estimating the impact of a more highly developed Midtown Omaha on yearly state and local tax collections.³

In addition to monetary impacts, well-developed urban centers have been found to have a significant impact on the quality-of-life of residents and visitors. The proposed study will detail these impacts including:

- The impact of quality-of-life (QOL) factors as a result of Midtown 2050 on business and industry location decisions, focusing on the retention and attraction of educated Millennials.
- The impact of ease of access to high quality healthcare as would be afforded by surrounding walkable neighborhoods and an effective transportation plan.
- The impact of Midtown 2050 on the area's, and Nebraska's, "brain gain."
- The impact of improved Midtown transportation as a major force for attracting out-of-area visitors, including visitor spending.
- The impact of Midtown 2050 on overall growth and redevelopment on the area.



Rendering of Midtown Omaha after implementation of the Midtown 2050 Plan
Midtown 2050 Development Corporation

³Estimates of state and local tax collections will be provided.

Executive Summary

The Impact of a Walkable, Workable, and Livable Midtown Omaha

I. Monetary Impact of Midtown Development (Midtown 2050)

A. Construction Phase (24 months):

1. Streetcar⁴

- a) 3.2 miles of track, \$155 million direct construction investment.
- b) Supports an average of 1,695 jobs per year, directly and indirectly.
- c) Results in \$252.5 million of increased sales activity in the Omaha economy.
- d) Provides \$106.2 million in wages and salaries.
- e) Adds an additional \$16.8 million in self-employment income.
- f) Contributes \$7.1 million to state and local tax revenues.

2. Restoration and Development

- a) Adds approximately \$1.4 billion in direct construction investment in office, commercial (retail, food service and drinking places), civic, residential and parking areas.
- b) Produces approximately 7.6 million square feet of new commercial and civic space.
- c) Supports an average of 15,021 jobs per year.
- d) Increases wages and salaries by \$930.6 million and self-employment income by \$142.4 million.
- e) Produces state and local tax revenue of \$63.3 million.

B. Operational Phase (5 years):

1. Streetcar

- a) Results in \$6 million in annual operating budget for the streetcar; over \$31 million during the 5 years analyzed in this report.
- b) Supports an average of 129 total jobs (direct+induced+indirect) each year.
- c) Increases sales activity, or total impact, by \$42.6 million over the 5-year period.
- d) Boosts wages and salaries by \$20.7 million.
- e) Generates a \$1.7 million increase in self-employment income.
- f) Contributes \$1.8 million to state and local tax revenues.

2. Restoration and Development

- a) Produces \$8.7 billion for the 5 years in sales activity.
- b) Supports an average of 11,184 jobs each year.
- c) Boosts wages and salaries by \$3.9 billion over the five year period.
- d) Generates \$182.7 million in self-employment income.
- e) Contributes \$362.3 million to state and local tax collections for the five-year period.

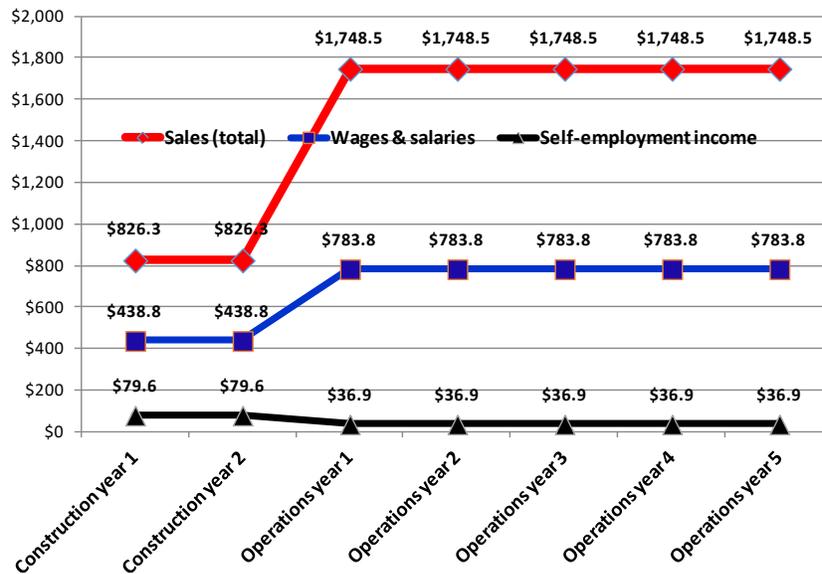
⁴A portion of the impacts are outside the study area.

Executive Summary

II. Economic Impact Summary

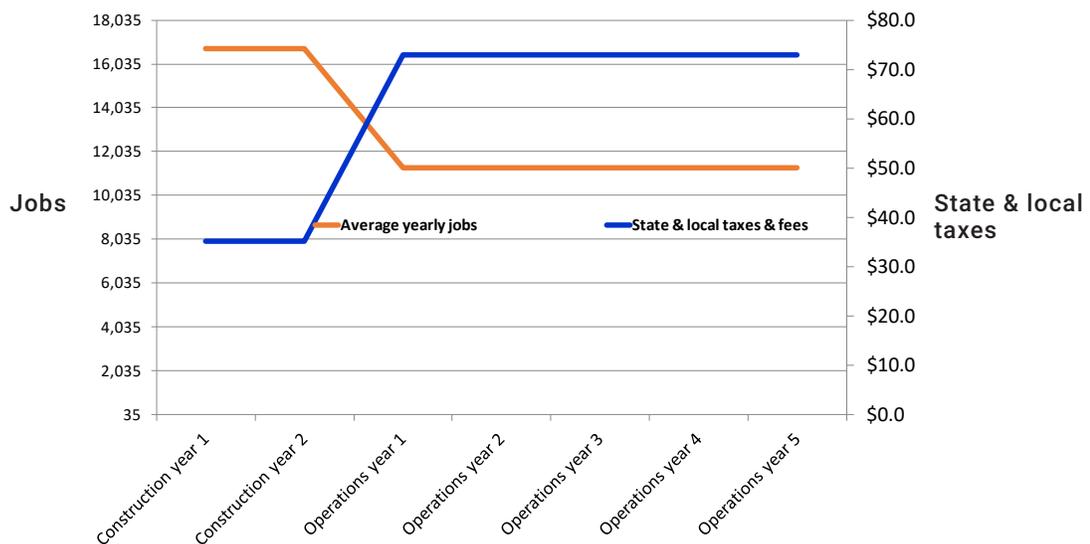
Figures Ex.1 and Ex.2 summarize economic impacts for the two years of construction and five years of operations.

Figure Ex.1: Total sales, wages & salaries and self-employment income impacts for 2 years construction and 5 years operations (in millions of 2016 \$\$s)



Source: Goss & Associates

Figure Ex.2: State and local tax and jobs impacts for 2 years construction and 5 years operations (in millions of 2016 \$\$s)



Source: Goss & Associates

Executive Summary

Summary of Impacts and Rate-of-Return to City of Omaha

In Table Ex.1 is provided a summary of economic impacts for the construction phase of 24 months and for the first five years of operations. Except for jobs, all estimates are in present, or 2016, dollars.

Table Ex.1 Summary of impacts except for jobs, all estimates are in millions of 2016 dollars

	Construction (24 months)		
	Street car	Restoration & development	Total
Jobs (yearly average)	1,695	15,021	16,716
Sales/output/total	\$252.5	\$1,400.0	\$1,652.5
Wages & salaries	\$106.2	\$930.6	\$1,036.8
Self-employment income	\$16.8	\$142.4	\$159.2
State & local tax collections	\$7.1	\$63.3	\$70.4
	Operations (first 5 years)		
Jobs (yearly average)	129	11,184	11,313
Sales/output/total	\$42.6	\$8,700.0	\$8,742.6
Wages & salaries	\$20.7	\$3,900.0	\$3,920.7
Self-employment income	\$1.7	\$182.7	\$184.4
State & local tax collections	\$1.8	\$362.3	\$364.1

Source: Goss & Associates based on Implan System impacts

In Table Ex.2 are estimates of the rate-of-return for the City of Omaha's financial support via infrastructure spending including roads, sewers and street improvements. These estimates do not take into consideration any tax increment financing (TIF). All estimates are in 2016 dollars and the rate-of-return is inflation adjusted. As listed, the City of Omaha will collect sufficient sales taxes and property taxes to be paid back its \$140.1 million of investment in 13 years and 4 months.

Table Ex.2: Rate of return on City of Omaha support (2016 dollars) for 20 years of operations

City infrastructure support (Source: HDR)	\$140.1 million
Average yearly rate-of-return for Omaha	7.1%
Payback period	13 years and 4 months

Source: Goss & Associates and HDR

As listed, the City of Omaha will collect sufficient sales taxes and property taxes to be paid back its \$140.1 million of investment in 13 years and 4 months.

Executive Summary

III. Nebraska and Omaha need net in-migration to stimulate economic growth.

A. Migration is selective, thus economic development initiatives, to be more effective, must focus on those most likely to move.

1. The likelihood of an interstate move is:
 - a) More than twice as high for individuals age 18 - 34 than any other age group.
 - b) More than twice as high for individuals with a bachelor's or advanced degree than individuals with a high school diploma only.
 - c) In 2014 and 2015, a net of almost three million Americans migrated into metropolitan areas of the nation and out of non-metropolitan areas of the U.S.
2. Nebraska continues to suffer from the loss of the earnings of net movers, or "brain drain."
 - a) In 2015, there were 664,758 Nebraska residents that were born outside of Nebraska and 843,647 individuals born in Nebraska living outside the state. This equals a net loss or "brain drain" of 178,889 residents.
3. In 2015, Nebraska ranked 44th in terms of the loss to brain drain. That is, only six states and the District of Columbia, lost more in population to net out-migration than Nebraska.
4. It is estimated that in 2015, brain drain from Nebraska generated a net loss of 92,821 workers with \$6.2 billion in lost wages and salaries, and \$1.3 billion in state and local taxes and fees.
5. Two West North Central states, Minnesota and Missouri, experienced brain gains as more individuals and families moved into these two states than moved out of the states.

B. Well-educated Millennials disproportionately move into metropolitan areas that are walkable with significant greenspace and excellent public transportation.

1. The area planned for development has experienced twice the rate of in-migration in 2015 from outside the U.S. and Nebraska than the rest of Omaha and Nebraska.
2. The area planned for development has the amenities and profile that will attract a high share of the most mobile, well-educated Millennials.

The area planned for development has experienced twice the rate of in-migration in 2015 from outside the U.S. and Nebraska than the rest of Omaha and Nebraska, and has the amenities and profile that will attract a high share of the most mobile, well-educated Millennials.

Executive Summary

IV. The expansion planned for the area will enhance the area's ability to anchor and enhance overall Omaha Metropolitan growth and development.

A. Close-in urban neighborhoods are becoming magnets for educated Millennials.

1. College-educated 25 - 34 year olds are more than twice likely than all residents of metro areas to live in close-in urban neighborhoods.
2. Two-thirds of the nation's 25-34 year olds with a bachelor's degree live in the nation's 51 largest metropolitan areas.
3. In 2000, young adults with a four-year degree were about 77 percent more likely to live in close-in urban neighborhoods than other metro residents. In 2015, these well-educated young adults were about 126 percent more likely to live in these close-in urban neighborhoods.
4. In the 25 large metropolitan areas whose close-in urban neighborhoods have experienced population growth since 2000, the increase in the number of 25 - 34 year-olds with a four-year degree has accounted for a majority of the net increase in population in 18 cities, and all of the net increase in population in 7 of 25 largest cities. An increasing share move close-in due to the availability of public transportation since a rapidly rising percentage are not driving.
 - a) Approximately three-fourths, or 76.7 percent, of individuals ages 20 to 24 in 2014 possessed a driver's license. This represented a sharp decline from 79.7 percent in 2011, 82 percent in 2008 and 91.8 percent in 1983.
 - b) The percentage with driver's license among Millennials has declined steadily during this time period from 94.6 percent in 1983 to 82.7 percent in 2014.

B. Omaha's Midtown 2050 Plan encompasses an area that is ideally suited to anchor overall city growth due to its potential for attracting and retaining the most mobile and educated young workers.

1. Residents of the Midtown 2050 area are significantly more likely to have earned a bachelor's degree or a graduate/professional degree than the remainder of the Omaha MSA.
2. Furthermore, residents of this area are approximately twice as likely to have lived in another state in 2014 than residents of the remainder of the Omaha MSA.
3. In terms of age, the percentage of residents age 20 to 24 in the area proposed for redevelopment is approximately 2.5 times that of the rest of the Omaha MSA, and the percentage of residents age 25 - 34 is approximately 1.5 times that of the remainder of the Omaha MSA. This represents the economic "seed corn" for future Omaha MSA growth.

The high percentage of young, educated workers living in the area proposed for development represents the economic "seed corn" for future Omaha MSA growth.

Executive Summary

C. Omaha's Midtown is an area ideally suited to support a streetcar.

1. An anchor of educated Millennials and growth in this group underpins overall MSA population growth.
 - a) It is concluded that each one percent increase in the base of educated Millennials in 2000 increased overall 2000-15 MSA population growth by 2.1 percent.
 - b) Additionally, the model indicates that each one percent increase in the growth rate of educated Millennials between 2000 and 2015 boosted overall MSA population growth by 0.4 percent between 2000 and 2015.
2. In 2015, there were approximately 51,000 educated Millennials living in the Omaha MSA with approximately 2,600 of these individuals living in the area proposed for restoration and development. Attracting from outside the state of Nebraska an additional 100 educated Millennials per year for the next 10 years to the area proposed for restoration and development is estimated:
 - a) To increase overall Omaha MSA population by 7,200 for the full 10 years.
 - b) To boost Omaha MSA employment by 3,500 for the full 10 years.
 - c) To heighten Omaha MSA gross domestic product by 0.58 percent in the tenth year of the educated Millennial expansion.

Attracting from outside the state of Nebraska an additional 100 educated Millennials per year for the next 10 years to the area proposed for restoration and development is estimated:

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- To boost Omaha MSA employment by 3,500 for the full 10 years.
- To heighten Omaha MSA gross domestic product by 0.58 percent in the tenth year of the educated Millennial expansion.

Executive Summary

V. Streetcars' Success and Failures

A. Lessons learned:

1. Many of the lessons learned come from Portland, Oregon system which is regarded as the most successful in the U.S.
2. Early development and leadership must come from private community involvement. The development community in Portland played an important early role due to its coalition building, and its willingness to make a financial commitment to the streetcar, as it pursued a particular vision for the redevelopment of areas through which the streetcar operated. However, there must be city involvement. At present the Portland streetcar system operates under an agreement between the city (through Portland Streetcar Inc.) and Tri-Met (Respondents SA-3, RTP-3).
3. The cities with more successful systems minimized the importance to tourism and maximized the significance to economic development and revitalization via transportation.⁵
4. Transportation should be the focus. Portland's system was integrated into other public transportation assets and was intended to serve, first and foremost, the transportation needs of workers and the population in the city.
5. Criteria in evaluating streetcar projects for public funding should weigh heavily on their transportation effectiveness and efficiency as well as ridership potential.
6. A streetcar system must tie into other public (e.g. buses) and private transportation options (parking).
7. Researchers have concluded that special generators such as hotels, convention centers, museums, and university campuses are major explanatory factors for streetcar ridership. A streetcar that provides access to more special generators will experience higher ridership.
8. Studies have found that streetcars increase the property values of real estate located close to streetcar access points. Noise, unsightly tracks and obstructed views are factors that could potentially lead to a decrease in property values.
9. Streetcar systems have generated low public costs. According to the St. Louis Federal Reserve, the taxpayer cost per year of St. Louis's light rail system is \$6 per person annually.
10. Most light rail systems could not operate without public subsidies. For example, fares cover only 39 percent of the costs of the Portland light rail system.
11. Local improvement districts (LID) push projects forward. In Portland major property owners successfully pushed for a LID that produced \$12.5 million in property tax revenues.
12. Joint powers agreement serve to leverage existing organizations' strengths; there should be a strong connection to statewide and metropolitan transportation plans and plan performance measurement.
13. Construction impacts are temporary thus decision making must be focused on the operations phase of the streetcar system.

⁵Little Rock, Memphis and Tampa emphasized the importance of system to tourism. These are also three systems that have been less than successful than cities focusing on economic development and transportation (e.g. Portland).

Executive Summary

14. The systems with the highest ridership and strongest performance are those that serve a diversity of trip types and are not dominated by tourist trips. Ridership should show little seasonal variation.

15. Use of vintage streetcars, while esthetically pleasing, results in excessive costs and downtime.

B. Omaha streetcar challenges:

1. Population and employment in the area slated for development are below that of the most successful U.S. systems.⁶
2. Weather issues may make the system subject to seasonal usage. Seasonal variation in ridership has been found to render systems less efficient and more costly to taxpayers and riders.
3. Current low use of public transportation in Omaha presents a hurdle that must be effectively overcome.
4. Historically, there has been too little collaboration with Nebraska Department of Roads. To insure greater success, this must be a factor that is addressed. Since this project is intended to serve the economic interests of the State of Nebraska, that collaboration should be forthcoming.

C. Omaha streetcar opportunities:

1. The area planned for the system has significant generators of ridership including major medical facilities, universities, sports venues and cultural amenities.
2. The area planned for the system has the highest share of educated Millennials in the MSA and is comparable to other cities that have successfully launched streetcar systems.
3. This area already has a significantly higher percentage of individuals either walking or taking public transportation to work. The share in Omaha's streetcar area walking to work is only slightly lower than that in Portland.
4. The proximity to Omaha's Riverfront Development will increase ridership and enhance success of the system.

⁶Employment data were not available for zipcode 68175, Mutual of Omaha; zipcode 68178, Creighton University; zipcode 68179, Union Pacific; zipcode 68197, First National Bank of Omaha; zipcode 68198, University of Nebraska Medical Center.

Section 1 - Educated, Young and Metropolitan Movers: Economic “Seed Corn”

Introduction

U.S. Census data released in December 2016, present a sobering warning for Omaha and Nebraska future economic growth. The data raise new concerns about educated residents leaving Nebraska. The state experienced a net loss of 11,640 people with at least a bachelor’s degree between 2011 and 2015. That’s up from 5,520 during the previous five-year period, which included the Great Recession.

In this most recent five-year period, Nebraska ranked 44th in the rate at which it lost residents with college degrees. It was 34th between 2006 and 2010 as states like Nebraska lost educated residents at the highest rates.

Because mobility declines rapidly with age, the location decisions made by individuals in their 20s and early 30s play a key role in shaping metropolitan economic success for decades.

This not only presents a current economic problem but also undermines future growth since these individuals, the younger and better educated, are the “seed corn” for the economy.

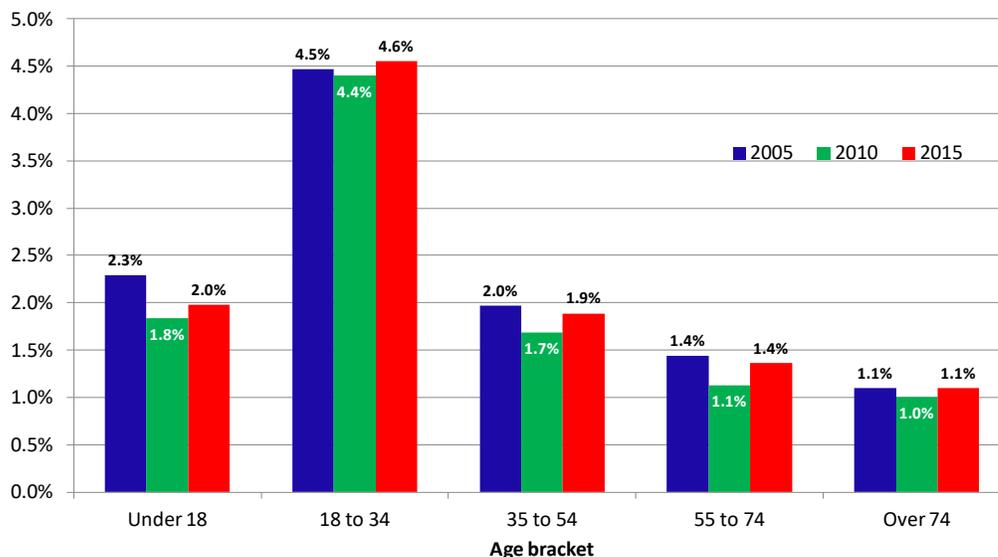
Omaha and Nebraska should strive to keep residents with college degrees in the state to have families, buy homes and help drive the economy as they age.

Movers: Younger and More Educated

U.S. movers. Young adults are much more likely to move geographically than older adults. In fact, the correlation between moving and age is quite strong. Figure 1.1 profiles interstate migration rates by age for the U.S. for 2001 and 2011. Young, well-educated adults are the most mobile Americans. Despite a decades-long, nationwide decline in moving by Americans, one million college educated, 25 - 34 year olds move across state lines each year.

Because mobility declines rapidly with age, the location decisions made by individuals in their 20s and early 30s play a key role in shaping metropolitan economic success for decades. Figure 1.1 shows that individuals age 18 to 34 are more than twice as likely to move than any other age group for 2005, 2010 and 2015.

Figure 1.1: U.S. interstate movers by year by age, 2005, 2010 and 2015



Source: U.S. Census Bureau

Interstate moves are also more common for more highly educated persons. As a result, young, well-educated people are the most likely to move across state lines, and make up a significant fraction of American movers. Figure 1.2 shows clearly that more educated individuals are more likely to move interstate.

According to data gathered in the American Community Survey, nearly one million 25 - 34 year olds reported that they had lived in a different state (or outside the United States) in the year prior to being surveyed.



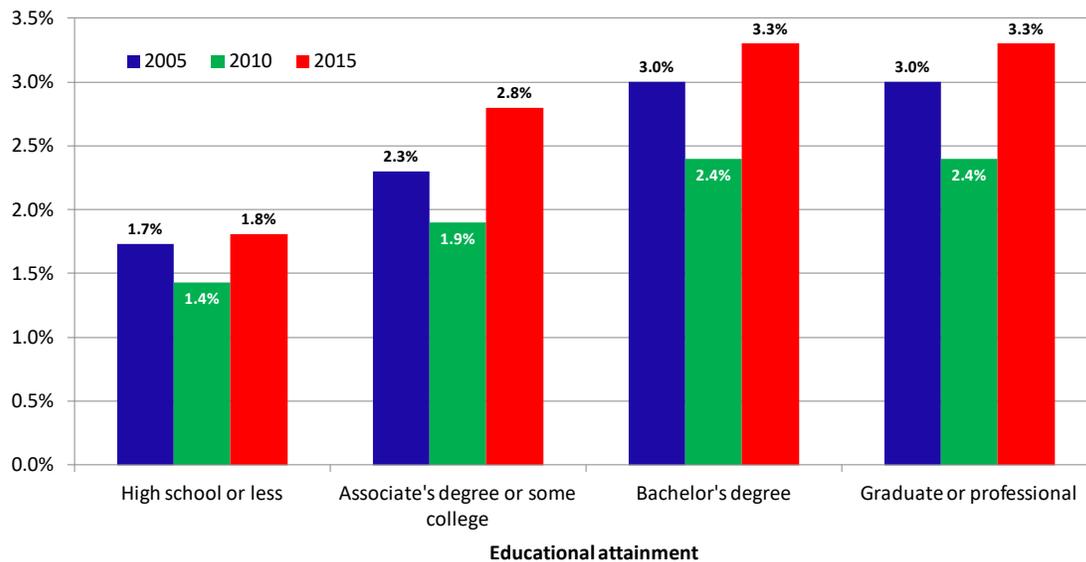
The number of migrants declined somewhat in the wake of the Great Recession, but exceeded one million again in 2011.

Furthermore, well-educated young adults disproportionately migrate to, or remain in, metropolitan areas, especially those that embrace measures that enhance livability, workability and walkability.

According to the latest U.S. Census data, two-thirds of the nation's 25-34 year olds with a bachelor's degree live in the nation's 51 largest metropolitan areas.

Furthermore, well-educated young adults disproportionately migrate to, or remain in, metropolitan areas, especially those that embrace measures that enhance livability, workability and walkability.

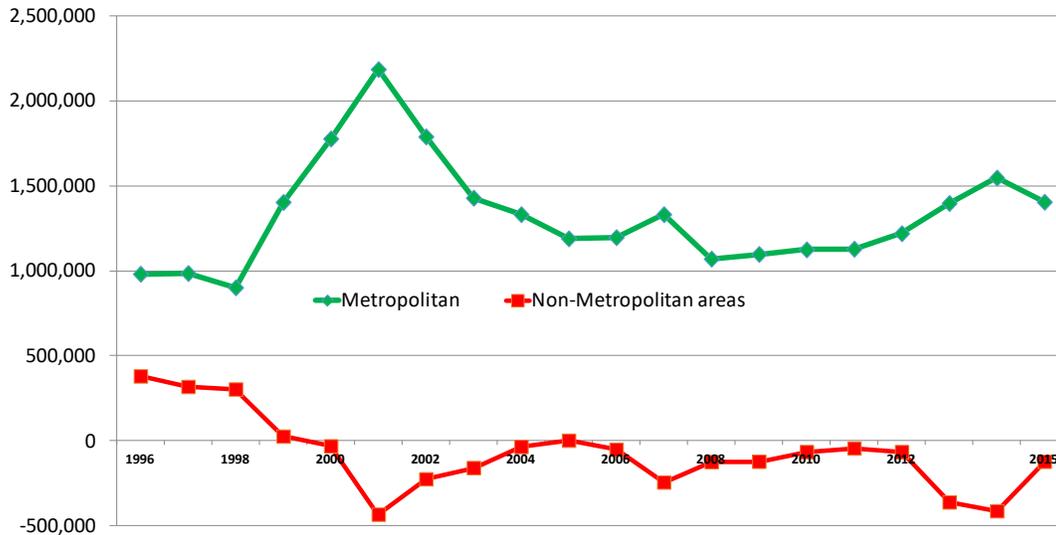
Figure 1.2: Interstate movers by educational attainment, 2005, 2010 and 2015



Source: U.S. Census Bureau

Figure 1.3 shows how metropolitan areas have gained migrants compared to non-metropolitan areas from 1996 - 2015.

Figure 1.3: Number of net in-migration by year, metropolitan areas versus non-metropolitan areas, 1996 - 2015



Source: U.S. Census Bureau

Nebraska and Omaha movers. In 2015, there were 843,647 U.S. residents born in Nebraska, but living in another state. In fact, in 2015, there were 182,901 more individuals born in Nebraska than currently live in the state. Since migration is selective of younger, better educated individuals, this “brain drain” is a significant drag on current and future economic growth for the state and the metropolitan area.

On the other hand, the area proposed for revitalization and restoration has been much more successful at attracting individuals outside the state.⁷ Table 1.1 show this clear success.

Table 1.1: Birth of current residents of Omaha, Nebraska, Midtown 2050 area, 2015

	Omaha	Nebraska	Midtown 2050 area
Foreign born (includes U.S. territories)	7.9%	8.4%	16.2%
Born & reside in Nebraska	59.4%	69.7%	45.3%
Born outside of Nebraska	31.7%	21.9%	38.5%
	100.0%	100.0%	100.0%

Source: U.S. Census Bureau

On the other hand, the area proposed for revitalization and restoration has been much more successful at attracting individuals outside the state.

⁷Data for those born in the area but living outside the state is not available.

Table 1.2 lists U.S. states with historic brain gains. These gains represent the net number of individuals born in other states, but living in the specific state. As listed, Nevada, as a percent of its population, experienced the largest historical gain with a net gain of 1,750,372 individuals, which represents 60.5 percent of Nevada's 2015 population.

Table 1.2: Brain gain states

Rank	State	Gain: Born outside state but living in state	Drain: Born in state but living outside state	Net gain	Net gain as Percent of state population
1	Nevada	2,146,424	396,052	1,750,372	60.5%
2	Florida	12,984,771	2,440,415	10,544,356	52.0%
3	Arizona	4,148,168	1,023,414	3,124,754	45.8%
4	Colorado	3,126,719	1,270,031	1,856,688	34.0%
5	Washington	3,775,272	1,392,572	2,382,700	33.2%
6	Oregon	2,179,949	934,084	1,245,865	30.9%
7	New Hampshire	770,156	393,070	377,086	28.3%
8	Georgia	4,608,265	1,739,795	2,868,470	28.1%
9	Maryland	3,168,590	1,489,102	1,679,488	28.0%
10	Texas	11,083,675	3,547,672	7,536,003	27.4%
11	California	17,690,251	7,062,025	10,628,226	27.2%
12	Virginia	4,229,939	2,035,397	2,194,542	26.2%
13	North Carolina	4,304,264	1,795,052	2,509,212	25.0%
14	Delaware	514,631	306,979	207,652	22.0%
15	South Carolina	2,071,076	1,067,457	1,003,619	20.5%
16	Idaho	860,143	523,418	336,725	20.3%
17	Alaska	429,984	303,149	126,835	17.2%
18	Tennessee	2,632,473	1,520,663	1,111,810	16.8%
19	New Jersey	4,250,513	2,992,507	1,258,006	14.0%
20	Utah	1,130,291	709,925	420,366	14.0%
21	New Mexico	973,950	687,437	286,513	13.7%
22	Vermont	313,705	233,174	80,531	12.9%
23	Hawaii	672,315	504,857	167,458	11.7%
24	Connecticut	1,605,411	1,230,927	374,484	10.4%
25	Oklahoma	1,539,651	1,204,658	334,993	8.6%
26	Wyoming	347,847	306,831	41,016	7.0%
27	Montana	472,394	409,563	62,831	6.1%
28	Minnesota	1,773,334	1,459,316	314,018	5.7%
29	Arkansas	1,140,586	1,006,327	134,259	4.5%
30	Massachusetts	2,606,749	2,321,998	284,751	4.2%
31	Missouri	2,059,919	1,873,820	186,099	3.1%
32	Wisconsin	1,649,563	1,500,625	148,938	2.6%
33	Indiana	2,088,980	1,997,431	91,549	1.4%
34	Alabama	1,455,135	1,412,717	42,418	0.9%
Total for gaining states		104,805,093	49,092,460	55,712,633	24.4%

Source: U.S. Census Bureau

Table 1.3 lists U.S. states with historic brain drains. As presented, Nebraska ranked number 44 with only six states and the District of Columbia suffering larger percentage losses. In 2015, there were 843,647 individuals born in Nebraska but living outside Nebraska's borders. On the other hand, there were 664,758 individuals born outside Nebraska but living in Nebraska. This results in a brain drain of 178,889, valued at \$6.2 billion for 2015 as presented in Table 1.4.

Table 1.3: Brain drain states, 2015

Rank	State	Gain: Born outside state but living in state	Drain: Born in state but living outside state	Net gain	Net gain Percent of state population
35	Kentucky	1,347,146	1,357,611	-10,465	-0.2%
36	Rhode Island	458,203	464,830	-6,627	-0.6%
37	Kansas	1,205,610	1,240,506	-34,896	-1.2%
38	Maine	477,725	493,867	-16,142	-1.2%
39	New York	7,308,401	7,807,590	-499,189	-2.5%
40	Illinois	4,218,641	4,702,259	-483,618	-3.8%
41	Pennsylvania	3,465,515	4,116,750	-651,235	-5.1%
42	Ohio	2,882,072	3,698,632	-816,560	-7.0%
43	Michigan	2,323,978	3,034,199	-710,221	-7.2%
44	Nebraska	664,758	843,647	-178,889	-9.4%
45	Mississippi	852,034	1,159,691	-307,657	-10.3%
46	Louisiana	1,013,117	1,502,639	-489,522	-10.5%
47	Iowa	903,539	1,399,315	-495,776	-15.9%
48	South Dakota	301,304	478,535	-177,231	-20.6%
49	West Virginia	559,606	1,027,106	-467,500	-25.4%
50	North Dakota	274,866	497,026	-222,160	-29.4%
51	District of Columbia	431,392	1,148,499	-717,107	-106.7%
Total for draining states		28,687,907	34,972,702	-6,284,795	-6.7%

Source: Goss & Associates based U.S. Census Bureau data

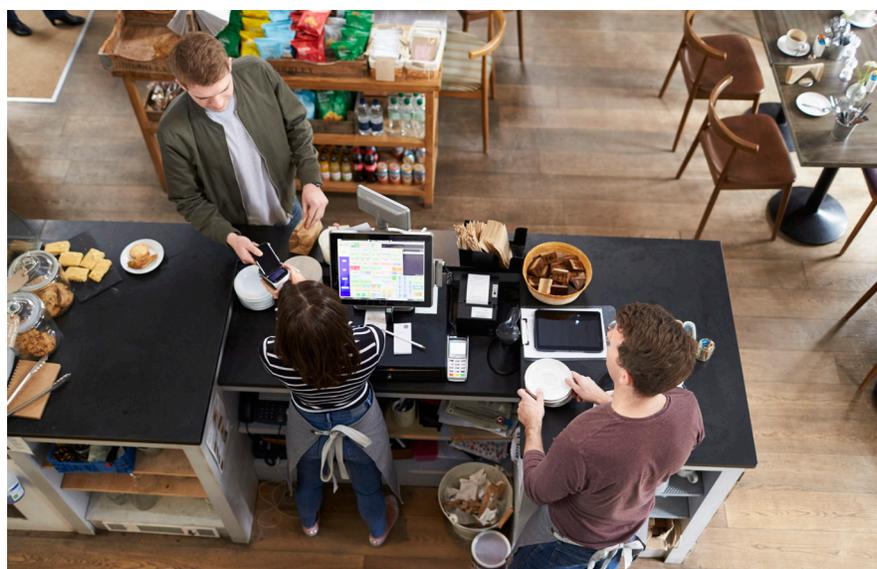


Table 1.4: Estimated accumulated value of Nebraska brain drain, 2015

Average salary	Share of population 2015	Salary
High school or less	16.1%	\$21,230
Associate's degree	25.0%	\$37,060
Bachelor's degree	29.5%	\$101,620
Graduate degree	29.5%	\$81,780
	100.00%	
Employment loss (51.9% of population drain)	-92,821	Wages & salaries lost
Management occupations		-\$2,779,220,454
Welders		-\$859,989,826
Food preparation		-\$316,703,138
Legal occupations		-\$2,236,613,351
Wages & salaries lost 2015		-\$6,192,526,768

Source: Goss & Associates

The Federal Reserve Bank of Kansas City estimated that between 1985 and 1990, Nebraska experienced a "brain drain" of highly educated individuals 25 years of age and older of \$1,230,800,000 as listed in Table 1.5. The estimates contained in Table 1.4 are for 2015 and include losses for other earlier years. Losses in Table 1.5 are for the period 1985 - 1990 only.

Table 1.5: Nebraska Income losses due to migration, 1985 - 1990

	Number	Total income
In-migrants	28,637	+\$834,600,000
Out-migrants	41,643	-\$1,326,900,000
Net income		-\$1,230,800,000
Percent of state personal income per year		1.1%

Source: Deron Ferguson, "The Tenth District's Brain Drain: Who Left and What Did It Cost," <https://www.kansascityfed.org/publicat/red/pdf/1q95dran.pdf>

Section 2 - Anchoring and Stimulating Omaha and Nebraska Growth: The Rising Importance of Greenspace, Walkability and Public Transportation

Introduction

As discussed in Section 1 of this report, young adults are much more likely to move geographically than older adults. Moreover, they are more likely to be attracted to areas such as that planned for development and examined by this study. In fact, the correlation of moving and age is quite strong with young, well-educated adults as the most mobile Americans.

Because mobility declines rapidly with age, the location decisions individuals make in their 20s and early 30s play a key role in shaping metropolitan economic success for decades.

Furthermore, well-educated young adults disproportionately migrate to, or remain in, metropolitan areas, especially those that embrace measures that enhance livability, workability and walkability. According to the latest U.S. Census data, two-thirds of the nation's 25-34 year olds with a bachelor's degree live in the nation's 51 largest metropolitan areas, those with a million or more population; this includes the Omaha-Council Bluffs MSA.

Table 2.1 lists the nation's largest MSAs by population in 2015. This data are next used to model the impacts of an anchor in 2000 (Column 2) of educated Millennials and of growth in educated Millennials from 2000 and 2015 (Column 3) on overall MSA population growth (Column 4). Model results are listed in Appendix A.

It is concluded that each one percent increase in the base of educated Millennials increased overall 2000-15 MSA population growth by 2.1 percent.

Additionally, the model indicates that each one percent increase in the growth rate of educated Millennials between 2000 and 2015 boosted overall MSA population growth by 0.4 percent between 2000 and 2015. Predicted population growth from the model are listed in Column 5 of Table 2.1

As presented in Table 2.2, residents of the Midtown 2050 area are significantly more likely to have earned a bachelor's degree or a graduate or professional degree. Furthermore, residents of this area are approximately twice as likely to have lived in another state in 2014 than residents of the remainder of the Omaha MSA.

And in terms of age, the percentage of residents age 20 to 24 in the area proposed for redevelopment is approximately 2.5 times that of the rest of the Omaha MSA and the percentage of residents age 25 - 34 is approximately 1.5 times that of the remainder of the Omaha MSA.



Millennial Couple jogging on Bob Kerry Pedestrian Bridge, November 2016. Photo: Goss & Associates

Table 2.1: Educated Millennials, percentage in 2000, percent growth 2000-15 and overall MSA population growth, 2000-15

MSA	Anchor	Growth	Popgrowth	Predicted	Under or over performed
Atlanta	6.1%	16.7%	24.0%	4.7%	over
Austin	7.1%	75.7%	37.3%	32.0%	over
Baltimore	4.8%	41.4%	6.2%	12.5%	under
Birmingham	4.1%	21.9%	7.2%	2.8%	over
Boston	7.2%	27.9%	3.7%	11.8%	under
Buffalo	3.8%	30.7%	-3.0%	5.8%	under
Charlotte	4.5%	62.6%	29.1%	20.9%	over
Chicago	5.3%	21.4%	4.0%	5.1%	under
Cincinnati	4.3%	17.9%	6.0%	1.4%	over
Cleveland	4.0%	5.8%	-3.3%	-4.3%	over
Columbus	5.3%	42.2%	13.5%	14.0%	under
Dallas	4.8%	43.1%	23.5%	13.4%	over
Denver	7.5%	46.6%	16.7%	20.4%	under
Des Moines	5.4%	51.1%	18.3%	18.1%	over
Detroit	4.0%	-2.4%	-3.5%	-7.7%	over
Hartford	4.6%	40.1%	5.6%	11.5%	under
Houston	4.0%	74.5%	26.1%	24.9%	over
Indianapolis	4.5%	42.5%	13.8%	12.3%	over
Jacksonville	3.2%	77.8%	19.8%	24.7%	under
Kansas City	4.9%	31.7%	10.9%	8.7%	over
Las Vegas	2.8%	72.7%	41.8%	21.6%	over
Los Angeles	4.1%	46.4%	3.7%	13.2%	under
Louisville	3.7%	41.1%	10.2%	10.2%	over
Memphis	3.6%	19.4%	9.2%	0.7%	over
Miami	3.6%	43.5%	11.1%	10.9%	over
Milwaukee	4.5%	30.6%	3.7%	7.4%	under
Minneapolis	6.0%	32.2%	10.5%	11.1%	under
Nashville	4.7%	74.2%	21.0%	26.3%	under
New Orleans	3.5%	37.5%	-11.1%	8.1%	under
New York	5.3%	39.4%	3.3%	12.8%	under
Oklahoma City	3.6%	56.4%	14.4%	16.4%	under
Omaha	4.7%	40.9%	12.8%	12.2%	over
Orlando	4.1%	73.2%	29.8%	24.7%	over
Philadelphia	4.6%	38.4%	4.9%	11.0%	under
Phoenix	3.9%	44.2%	28.9%	11.8%	over
Pittsburgh	4.1%	43.2%	-3.1%	11.7%	under
Portland	4.8%	57.9%	15.5%	19.6%	under
Providence	3.7%	23.5%	1.1%	2.7%	under
Raleigh	7.6%	37.9%	41.8%	17.0%	over
Richmond	4.8%	31.5%	14.4%	8.3%	over
Riverside	1.8%	88.4%	29.8%	26.3%	over
Rochester	4.1%	19.5%	1.6%	1.7%	under
Sacramento	3.6%	52.7%	19.6%	14.9%	over
St. Louis	4.1%	30.7%	4.2%	6.5%	under
Salt Lake City	4.3%	58.8%	15.8%	19.0%	under
San Antonio	3.1%	66.4%	25.2%	19.7%	over
San Diego	4.4%	63.2%	10.0%	21.1%	under
San Francisco	7.4%	32.6%	5.1%	14.2%	under
San Jose	7.7%	21.3%	5.8%	10.1%	under
Seattle	5.7%	57.1%	13.0%	21.0%	under
Tampa	3.1%	59.9%	16.2%	16.9%	under
Virginia Beach	3.4%	42.3%	6.1%	10.1%	under
Washington	7.2%	39.9%	16.5%	16.8%	under

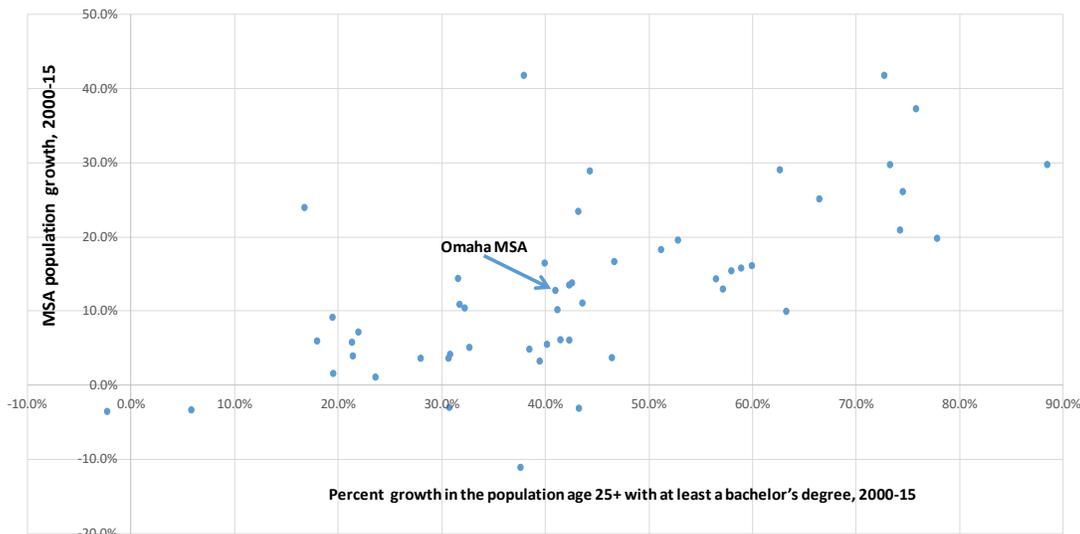
Source: Goss & Associates based U.S. Census Bureau data

Table 2.2: Demographic profile of Omaha MSA, Midtown 2050 area, Nebraska, U.S., 2015				
	Omaha		Nebraska	U.S.
	MSA	Midtown 2050 area		
Percentage of individuals over 24 with bachelor's degree	14.8%	21.3%	19.6%	18.5%
Percentage of individuals over 24 with graduate or professional degree	7.5%	14.0%	9.7%	11.2%
Percent lived in different state in 2014	7.3%	13.7%	6.6%	6.1%
Percentage age 20-24	6.6%	16.4%	7.3%	7.1%
Percentage age 25 - 34	14.4%	21.3%	13.7%	13.5%

Source: Goss & Associates calculations based on U.S. Census Bureau

In 2015, there were approximately 51,000 educated Millennials living in the Omaha MSA with approximately 2,600 of these individuals living in the area proposed for restoration and development. Retaining and/or attracting an additional 100 educated Millennials per year for the next 10 years to the area proposed for restoration and development is estimated to increase overall Omaha MSA population by 7,195 by the end of the tenth year. It is also estimated that this addition would increase employment by 3,500 for the full 10 years and heighten Omaha MSA gross domestic product by 0.58 percent in the tenth year of the educated Millennial expansion.⁸

Figure 2.1: MSA overall population growth and growth in educated Millennials, 2000-15



Source: Goss & Associations based on U.S. Census Bureau

⁸These estimates are derived from the model listed in Appendix A.

The number of persons aged 25 - 34 with a four-year degree or higher living in metropolitan New Orleans increased by 17,376 from 2000 to 2015. Buffalo and Pittsburgh have experienced large increases since the year 2000 in the amount of young adults with four-year degrees. But the growth of degree attainment appears to be substantially influenced by the declining numbers of 25 - 34 year olds in each metropolitan area. The number of young adults without a four-year degree has declined sharply in each of these metropolitan areas.

At the other end of the spectrum, some growing cities have become relatively less attractive to talented young adults. An example is Atlanta, which was one of the nation's fastest growing metropolitan areas since 2000. Despite recording an increase in overall population of about 24 percent in the past 15 years, Atlanta recorded just a 16.7 percent increase in the number of young adults with at least a four-year degree. This represents a remarkable reversal from the 1990s, when Atlanta recorded the fifth fastest rate of growth among large metropolitan areas in the number of 25 - 34 year old adults with a four year degree. (46 percent)⁹

It is argued by the present study that Atlanta represents a category of city that Omaha seeks to avoid emulating. That is a city with a lack of walkability, bikeability and sufficient green space. The proposed restoration and development area could serve to insure that the Omaha MSA will remain a destination for workers and families, particularly younger well-educated that can form a base for future growth and attractive of other highly productive workers.

As presented, the percentage with driver's license among Millennials has declined steadily during this time period from 94.6 percent in 1983 to 82.7 percent in 2014.

⁹Cortright, Joe. (2014). The Young and Restless and the Nation's Cities. <http://cityobservatory.org/wp-content/uploads/2014/10/YNR-Report-Final.pdf>.

Millennials Locate in Close-in Neighborhoods

Within the largest metropolitan areas, well educated young adults are increasingly moving to close-in urban neighborhoods. Close-in urban neighborhoods are defined as those areas within 3 miles of the center of each metropolitan area's central business district. These areas encompass the commercial center of each city along with nearby residential neighborhoods.



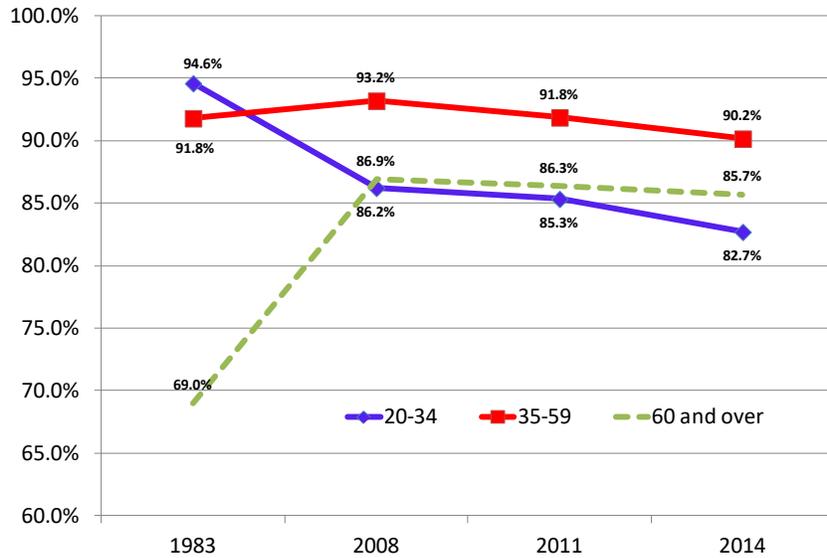
Talented young adults, in the aggregate, are much more likely to choose to locate in close-in urban neighborhoods than are other Americans. In the 51 largest metropolitan areas, college-educated 25 - 34 year olds are twice as likely as all residents of metro areas to live in close-in urban neighborhoods.

Many of these younger adults move close-in due to the availability of public transportation as an increasing percentage are not driving. According to a recently released report by the University of Michigan's Transportation Research Institute, approximately three-fourths, or 76.7 percent, of individuals ages 20 - 24 in 2014 possessed a driver's license. This represented a sharp decline from 79.7 percent in 2011, 82 percent in 2008 and 91.8 percent in 1983.¹⁰

Figure 2.2 profiles individuals with a driver's license by age from 1983 to 2014. As presented, the percentage with a driver's license among Millennials has declined steadily during this time period from 94.6 percent in 1983 to 82.7 percent in 2014.

¹⁰RECENT DECREASES IN THE PROPORTION OF PERSONS WITH A DRIVER'S LICENSE ACROSS ALL AGE GROUPS," Michael Sivak and Brandon Schoettle, University of Michigan Transportation Research Institute, January 2016, <http://www.umich.edu/~umtriswt/PDF/UMTRI-2016-4.pdf>

Figure 2.2: Percentage of drivers by age with drivers licenses, 1983-2014



Source: Goss & Associates based on University of Michigan

In 2000, young adults with a four-year degree were about 77 percent more likely to live in close-in urban neighborhoods than other metro residents. Now, these well-educated young adults are about 126 percent more likely to live in these close-in urban neighborhoods. Since 2000, the number of young adults with a four-year degree living in close-in neighborhoods in the nation's largest metro areas increased 37.3 percent.

In 2000, young adults with a four-year degree were about 77 percent more likely to live in close in urban neighborhoods than other metro residents. Now, these well-educated young adults are about 126 percent more likely to live in these close-in urban neighborhoods.

Outside these close-in neighborhoods, the number of young adults with a four-year degree increased only half as fast, about 16.7 percent. These close-in neighborhoods, which on average account for less than five percent of the nation's metropolitan population, accounted for about 20 percent of the growth in college educated young adults over the past decade.

The college attainment rate of young adults living in close-in neighborhoods in the largest metropolitan areas increased to 55 percent from 43 percent in 2000. Outside the three-mile urban core, educational attainment rates increased slightly from about 31 percent to about 35 percent.

Overall, these close-in neighborhoods have higher levels of educational attainment among their young adult population than the overall metropolitan areas of which they are a part. The college attainment rate of young adults living in close-in neighborhoods in the largest metropolitan areas increased to 55 percent from 43 percent in 2000. Outside the three-mile urban core, educational attainment rates increased slightly from about 31 percent to about 35 percent.

Increasingly, businesses are locating in or near urban centers to better tap into the growing pool of well-educated young workers and because these central city locations enable firms to better compete for talent locally and recruit talent from elsewhere. The availability of talented young workers also plays a key role in the formation and growth of new firms. Startups and young firms employ disproportionately large numbers of young, well-educated workers.

Talented young adults are playing a key role in driving urban revitalization. The 25 large metropolitan areas whose close-in urban neighborhoods have experienced population growth since 2000, the increase in the number of 25 - 34 year-olds with a four-year degree has accounted for a majority of the net increase in population in 18 cities, and all of the net increase in population in 7 of 25 largest cities.

Urban cores attracted increased numbers of young adults even in metropolitan areas that were losing population and hemorrhaging talented young workers. Metropolitan Buffalo, Cleveland, New Orleans and Pittsburgh, all of which experienced population declines over the past decade, saw an

increase in the number of young adults with a college degree in their close-in neighborhoods. In these cases, the numerical increases were from small bases, but show that the urban core is attractive even in these economically troubled regions.

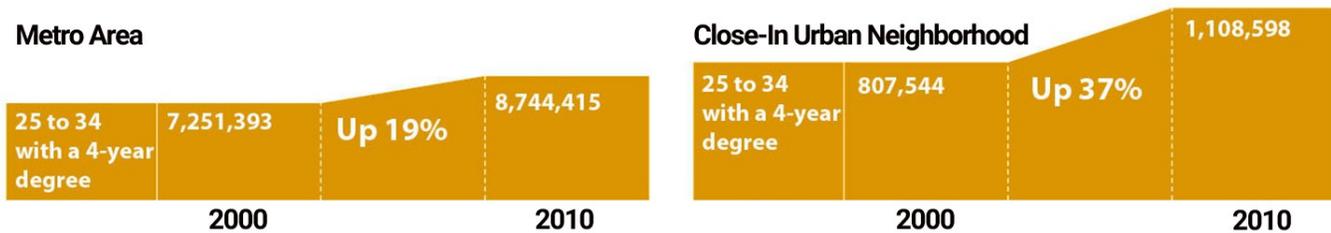
Due to the Midtown 2050 area's high share of educated Millennials drawn from outside the state, the area contributes to brain gain rather than brain drain. Table 2.4 provides an estimate of this contribution for 2015. As presented a brain gain of almost \$90 million was created in 2014 from individuals born outside Nebraska but living in the Midtown 2050 area.

Table 2.3: Relative preference for close-in urban neighborhoods, 1980 - 2010

	1980	1990	2000	2010
Population 25-34	10%	12%	32%	51%
25-34 with a four-year degree	NA	NA	77%	126%

Source: Decennial Census, years cited, American Community Survey, 2008-12 five year data. Figures represent the proportionately greater likelihood that a person in the demographic group would reside in a close-in neighborhood than the average metropolitan resident.

Figure 2.3: Population 2000 to 2010, large metropolitan areas and their close-in urban neighborhoods



Source: U.S. Census Bureau

Table 2.4: Brain gain from non-Nebraskans living in the Midtown 2050 area for 2014

Population of Midtown 2050 Area-2014 (age 16 and over)	16,726
Number born outside Nebraska	7,380
Percent of population employed	58.1%
Brain gain from non-Nebraskans	4,288
Average income of workers	\$20,973
Brain gain-2014	\$89,932,224

Source: Goss & Associates based on U.S. Census data

Table 2.5 shows how walkable cities out-perform non-walkable cities in terms of household income.

Table 2.6 lists the methods of commuting to work for the Omaha 2014 employed. As listed, the percentage of employed that walk to work in the proposed restoration and development area is more than seven times that of the remainder of the Omaha MSA. Furthermore, the percentage of employed that take public transportation to work in the proposed restoration and development area is more than double that of the remainder of the Omaha MSA.

Table 2.5: Walkable v. non-Walkable cities compared, 2014 (top 60 metros)

	Top walkable Cities	Bottom walkable cities	Omaha MSA
Percent of employed that walk to work	3.1%	1.5%	1.8%
Percent of employed that take public transportation to work	10.3%	1.9%	0.9%
Percent of employed that car pool to work	7.7%	10.1%	9.1%
Average household income	\$83,090	\$75,554	\$57,357

Source: U.S. Census Bureau

Table 2.6: Method of commuting to work, 2014

	Omaha MSA	Zip 68102	Zip 68131	Combined Zips 68102 and 68131
Commute via auto alone	83.6%	63.6%	73.1%	70.0%
Commute via carpool	9.2%	4.6%	8.6%	7.3%
Commute via public transportation	0.9%	2.0%	2.2%	2.1%
Commute via walking	1.8%	24.6%	8.2%	13.6%
Worked at home office	3.4%	3.9%	5.9%	5.2%
Mean travel time to work (minutes)	20.1	16.1	16.8	16.6

Source: Goss & Associates calculations based on U.S. Census data

Open and Green Spaces

Recent analyses suggest that open spaces may have substantial positive impacts on surrounding property values and hence, the property tax base, providing open space advocates with convincing arguments in favor of open space designation and preservation that can be backed up with actual, dollar impacts. In some cases, the increase in property tax from housing in close proximity to green spaces may equal or even exceed the costs of maintaining them, representing a welcome net gain to a city's coffers.

In no case reviewed has an open space been found to have a negative impact on surrounding property values, though evidence does suggest that factors including topography, visual attractiveness, recreational opportunities provided, and the availability of other open spaces in the area, may reduce the positive impact of individual amenities in some cases.

In some cases, the increase in property tax from housing in close proximity to greenspaces may equal or even exceed the costs of maintaining them, representing a welcome net gain to a city's coffers.

Knarr found nine factors that accounted for the differences in a metropolitan area's ability to attract young, well-educated migrants. Among the nine, already having a young, well-educated population is the most important. The researchers referred to this phenomenon as "like-to-like" migration.

Their top cities included Washington, D.C.; San José, Calif.; Ann Arbor, Mich.; and Iowa City, Iowa - all which boast that more than half of their residents over the age of 22 have at least a bachelor's degree, compared with only about 30 percent for the entire U.S. population. "Civic leaders seeking to attract new businesses, particularly ones that provide services to Millennials, or who are interested in hiring Millennials, will want to market their demographic profile if it includes a large population of the young and well educated."¹¹

Summary

This section has profiled the area proposed for restoration and development. It was demonstrated that this area has the demographic profile that will support overall metropolitan Omaha growth. Workers in this area are much more likely to commute to work via walking or taking public transportation.

The area has a higher share of educated Millennials that will form the "seed corn" for overall metropolitan growth for future decades.

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In some cases, the increase in property tax from housing in close proximity to greenspaces may equal or even exceed the costs of maintaining them, representing a welcome net gain to a city's coffers.



Midtown Crossing

¹¹<https://www.aier.org/research/what-are-best-job-destinations-college-grads>.

Section 3 - The Omaha Streetcar - Lessons Learned: Opportunities, and Challenges

Introduction¹²

In national city comparisons, in efforts to stimulate downtown revitalization and economic development, many U.S. cities have implemented light rail systems over the past 50 years with both economic hits and misses. These systems are usually designed to carry large volumes of suburban commuters to downtowns, and they are often aligned parallel to major highway corridors. In many cases, such as Portland, light rail has also sparked major new investments in downtown office, housing and retail projects.

The DART light rail system in Dallas resulted in higher real estate values for properties adjacent to the line as well as an additional \$1.3 billion in real estate development.

Denver's light rail line in Lodo (Lower Downtown), has resulted in vibrant new urban neighborhoods. The line is anchored by the Lower Platte River, Coors Field and the 16th Street transit mall/

Two decades ago, Portland's aging central business district was experiencing a shrinking retail sector and growing rates of office space vacancies. However, with a light rail system that has grown to transport more than 60 million passengers per year, the trend has reversed, and the resulting new development in and around station areas is estimated at \$2 billion.

It is argued by Vock that, "Hands down, the most emulated streetcar system in the country is Portland's. A pilgrimage to Portland is virtually a prerequisite for any city leader serious about building a streetcar system at home."¹³

As planned in Omaha, the Portland system connects a major hospital and university campus, cultural venues and commercial establishments. Similar to Portland's light rail connection to the area's other public transportation, Midtown 2050 plans include enhancement of the existing Bus Rapid Transit (BRT) service by the Farnam/Harney streetcar and Dodge Street BRT.

The next portions of this section discuss the benefits, costs, and lessons learned from previous streetcar developments.

It is argued that "...the most emulated streetcar system in the country is Portland's. A pilgrimage to Portland is virtually a prerequisite for any city leader serious about building a streetcar system at home."

¹²HDR. Streetcars and Economic Development...the linkage Between Them. <http://midtowngreenway.org/files/mgc/ckfinder/files/streetcars%20and%20economic%20development.pdf>

¹³Daniel C. Vock, "Streetcars: If You Build It, Will They Come?" *Governing Magazine*, June, 2016. <http://www.governing.com/topics/transportation-infrastructure/gov-streetcars.html>.

The Benefits of Light Rail or Streetcars¹⁴

1. Positive but small impact on property values.

Past empirical research has generally concluded that light rail has a positive impact on residential property values. However, that same research has measured a relatively small impact. A study examining the Portland, Oregon system found that the system increased property values by \$75 for every 100 feet closer a home is to a light-rail station. The same researchers estimated that the average home price in New York declined by about \$2,300 for every 100 feet farther from the station.¹⁵

According to a research study by Texas A&M University:

These impacts are strongest in station areas, as access to rail increases property value on nearby property. The positive impact of rail on property values does not hold true for property directly adjacent to the rail line however.¹⁶

2. Job creation. Construction impacts are temporary, thus decision making must be focused on the operations phase of the streetcar system.

3. Reduced emissions. A report from the American Public Transit Association (APTA) concludes that each person riding light-rail transit vs. driving an automobile for one year reduces hydrocarbon emission by nine pounds, nitrogen oxide emissions by five pounds, and carbon monoxide emissions by 62.5 pounds.¹⁷

4. Low public costs. According to the St. Louis Federal Reserve, the taxpayer cost per year of the St. Louis light rail system is \$6 per person annually.

¹⁴Portions of these benefits and costs come from: "Light –Rail Transit: Myths and Realities," Federal Reserve Bank of St. Louis, October 13, 2016.

¹⁵Lewis-Workman, Steven and Brod, Daniel. "Measuring the Neighborhood Benefits of Rail Transit Accessibility." Transportation Research Record, No. 1576, 1997, pp. 147-153.

¹⁶Jeffrey C. Arndt, Curtis Morgan, John H. Overman, Terry L. Clower, Ph.D., Bernard L. Weinstein, Ph.D., and Michael Seman, M.S. "Transportation, Social and Economic Impacts of Light and Commuter Rail." FHWA/TX-10/0-5652-, Texas Transportation Institute, The Texas A&M University System, Sept. 2009.

¹⁷American Public Transit Association. 1993 Transit Fact Book, Washington, D.C., 1993.

Taxpayer support or subsidies must be considered in the valuation.

The Costs of Light Rail or Streetcars Include:

1. Potential decrease in property values. Some studies have concluded that residential property values can be affected negatively because light rail is seen by some as a nuisance. Noise, unsightly tracks and obstructed views are factors that could potentially lead to a decrease in property values.

2. Possible leakage of construction jobs. Construction jobs are temporary and may go to contractors outside the area depending on the bidding process.

3. Taxpayer support or subsidies must be considered in the valuation.

4. Possible traffic congestion. Cities such as Portland, Oregon have experienced continued increases in traffic congestion despite the light rail system. It is not clear if the congestion would have been worse without the system.

5. Rail transit is more limited than auto transit. Except for Millennials, consumers continue to prefer auto transport. The value people place on auto transit over rail transit is even more pronounced when one considers that rail transit fares can be less than a dollar a day. Furthermore, rail transit is much more limited than auto transit because trains must follow tracks or designated routes.

6. Need for subsidies. Most light rail systems could not operate without public subsidies. For example, fares cover only 39 percent of the costs of the Portland light rail system.

For example, fares cover only 39 percent of the costs of the Portland light rail system.

Lessons Learned from U.S. Streetcar Successes and Failures:

1. **Local improvement districts (LID) push projects forward.** In Portland, major property owners successfully pushed for a LID that produced \$12.5 million in property tax revenues.
2. **Development community involvement.** The development community in Portland played an important early role. Due to its coalition building and its willingness to make a financial commitment to the streetcar, the development of community insured success.
3. **City involvement.** At present the Portland streetcar system operates under an agreement between the city (through Portland Streetcar Inc.) and Tri-Met (Respondents SA-3, RTP-3). In Memphis, the City took the lead while the private sector followed. The Memphis system is currently closed.
4. **Tourism.** The cities with more successful systems minimized the importance to tourism and maximized the significance to economic development, revitalization and transportation.
5. **Nostalgia myopic goal.** Memphis is a prime example where this focus led to higher costs, lower effectiveness and current shutdown.
6. **Public transportation integration.** Portland's system was integrated into other public transportation assets and was intended to serve, first and foremost, the transportation needs of workers and the population in the city. This was also the case in Seattle, another city with a successful implementation.
7. **Transportation effectiveness, efficiency and ridership are key.** Criteria in evaluating streetcar projects for public funding should weigh heavily on their transportation effectiveness and efficiency as well as ridership potential.
8. **Importance of networks for ridership and performance.** Research has suggested the importance of networks for ridership and performance, as well-designed networks with lots of service connections allow riders to reach a wider array of destinations than less connected networks.
9. **Reasonable fare.** Transit riders are sensitive to the fare charged, so one would expect ridership to be higher in cases with lower fares.
10. **"Generators" that boost ridership.** Ramos and Brown noted the importance of special generators such as hotels, convention centers, museums, and university campuses as explanatory factors for multiple stop-level streetcar ridership. A streetcar that provides access to more special generators should thus expect to enjoy higher ridership.¹⁸
11. **Jobs and ridership go hand-in-hand.** Population and employment represent trip origins and destinations, so one would expect streetcars that serve more people and more jobs to enjoy higher ridership than those that serve fewer people and fewer jobs.
12. **Longer systems work better than shorter systems.**
13. **Avoid dependence on tourism and seasonal usage.** The streetcars with the highest ridership and strongest performance are those that serve a diversity of trip types and are not dominated by tourist trips and little seasonal variation.
14. **Lessons from California:**
 - Long history of funding support and leadership from state DOT;
 - Long history of statewide rail planning;
 - Strong local support and involvement;
 - State DOT as partner with regions in rail development,
 - Use of joint powers authority.
15. **Lessons from Florida:**
 - FDOT assists local and regional transportation authorities in competing for federal funding with the state's own "New Starts" funding.
 - FDOT offers a variety of additional strategic state funding opportunities for transit infrastructure;

¹⁸Ramos-Santiago, Luis Enrique, Jeffrey R. Brown, and Hilary Nixon. "Transit Performance of Modern-Era Streetcars: Consideration of Five US Cities." *Transportation Research Record: Journal of the Transportation Research Board* 2534 (2015): 57-67.

- FDOT developed programs that emphasize enabling of more local and regional investment in transit development.
- FDOT developed policies encouraging collaboration among local and regional entities.
- Project funding is contingent upon its consistency with state and regional plans.
- FDOT funds programs encouraging intermodal facility development for connectivity between bus and light rail.

Lessons from Georgia:

- Emphasis on local commitment and participation in rail development.
- Long-term vision and planning effort – planning since the early 1990s.
- Integration and compatibility with other local and regional transportation plans for a multimodal planning effort.
- Emphasis on developing intermodal facilities for connectivity to bus and light rail.

16. Lessons from Minnesota:

- Joint powers agreement leverages existing organizations’ strengths.
- Ability to pass taxing authority and broad local/regional participation; and
- Strong connection to statewide and metropolitan transportation plans and plan performance measurement.



Photo: Goss & Associates

Memphis, Portland and Omaha: A Comparison¹⁹

This section of the study examines the transit performance of streetcars in two U.S. cities: Memphis and Portland. These were selected to document strong and weak performing streetcars and to identify the factors that might explain variation in streetcar performance.

Portland emerges as the highest ridership, most productive and second most cost effective streetcar city in the U.S. Ramos attributes Portland’s stronger transit performance to its local setting and planning/operating decisions that emphasize the streetcar’s role as both transportation investment and development tool, an approach that contrasts with the other cities where development and tourism objectives are the dominant factors in streetcar decision making.²⁰

In June 2014, Memphis Area Transportation Authority (MATA) suspended all trolley service. Although the Memphis Trolley is an aging, vintage system, the Federal Transit Association (FTA) requirements for the line are the same as a newly-established system, which results in an essential rebuild, or purchase of new trolleys, as well as the need to replace portions of track. MATA is also required to rewrite safety and security processes, policies and goals, and has contracted with engineering and construction group SNC-Lavalin to help complete this process.

Prior to recertification and startup, the Memphis trolley service remains idle while an estimated 181 separate tasks involving 39 plans and approximately 300 documents are being prepared. Each plan must be approved by the regional association of the FTA, as well as its headquarters and by the Tennessee Department of Transportation.

MATA must also complete the safety and security process. This includes, but is not limited to, identification of potential threats to the system, an emergency preparedness plan, personnel training, and emergency drills.

¹⁹Memphis streetcar area is contained in zipcode 38103 and 38105. The Portland streetcar area is in zipcodes 97201, 97205, 97209, 97210, 97214, and 97232. The planned Omaha streetcar will serve zipcodes 68102 and 68131.

²⁰Luis Enrique Ramos, “The Transit Performance of Modern-Era Streetcars: A Consideration of Five U.S. Cities,” Department of Urban and Regional Planning, Florida State University.

Table 3.1 compares the Memphis, Portland and proposed Omaha Streetcar System.

Table 3.1: Comparison of Memphis and Portland Steetcar systems, 2015			
	Memphis	Portland	Omaha Proposed
Year opened	1993	2001	n.a.
Number of vehicles	10	11	4
Number of stations	25	76	20
Length	7.0 miles	7.35 miles	3.2 miles
2012 ridership and Omaha potential	1,491,841	3,664,538	503,700
Service productivity (PKM/VKM)	5.03	17.84	?
Cost effectiveness (\$ per trip/boarding)	\$2.61	\$3.24	?
Bus ridership - 2012	58,562,828	59,509,235	n.a.
Assessment	Lower tier	Standout performer	
Population covered	57,518	117,060	19,659
Employment covered	24,847	64,899	16,505
Fare (2016) monthly pass	n.a.	\$40	?
Fare (2016) less than 3 hours	n.a.	\$2.00	?
Seasonal usage	Yes	No	?
Current status	Service temporarily suspended	Fully operational	n.a.

Source: Ramos, 2014

It is the conclusion of this study that critical to the success of the streetcar adding to the economic vitality of the Omaha MSA is that it serves to attract and retain educated, employed Millennials that are more likely to depend on public transportation to work.

Educational Attainment. Table 3.2 compares the three areas in terms of educational attainment. As listed, Omaha's proposed metropolitan area has a similar profile to that of the comparison MSAs. However in terms of streetcar areas, Omaha's has the lowest percent of residents that possess a bachelor's degree among the comparison cities. While this might be considered a challenge, it certainly represents an opportunity to anchor future economic growth for the total Omaha MSA by making the area more attractive to these educated Millennials.

Table 3.2: Percentage of individuals over 24 years of age with bachelor's degree or graduate degree, 2015			
	Bachelor's or Graduate degree	Percentage change 2012 - 2014	Percentage change 2010-2015
Memphis (street car)	50.0%	2.8%	n.a.
Memphis (metro area)	26.3%	0.7%	19.4%
Portland (street car)	64.3%	1.7%	n.a.
Portland (metro area)	34.9%	0.3%	57.9%
Omaha (street car)	34.3%	0.3%	n.a.
Omaha (metro area)	22.3%	0.7%	40.9%

Source: Goss & Associates calculations based on U.S. Census Bureau

Commuting

Table 3.3 lists the percent of employees that commuted to work via walking or public transportation. As listed, workers in Omaha's streetcar area are more likely to walk to work than those in Memphis and only slightly less likely than workers in Portland.

Data in Table 3.3 do raise the concern of low ridership of public transportation in Omaha and its potential negative impact on streetcar ridership.

Table 3.3: Percent of workers commuting via public transportation, 2014

	Percent walking to work	Percent commuting with public transportation
Memphis (street car area)	8.8%	3.4%
Memphis (metro)	1.2%	1.2%
Portland (street car area)	16.8%	16.9%
Portland (metro)	3.5%	6.2%
Omaha (Street car area)	13.4%	2.2%
Omaha (rest of metro)	1.6%	0.9%

Source: U.S. Census Bureau



Midtown Crossing, Turner Park

Economic Performance

Table 3.4 profiles economic performance data for the three streetcar areas between 2012 and 2014. As listed, Portland outperformed Memphis and Omaha in terms of new job growth and average payroll per worker expansion. Omaha topped both Memphis and Portland in terms of new business formation. Memphis lagged Omaha and Portland in all three economic performance measures.²¹

Table 3.4: Economic performance streetcar areas, 2012-14				
	Private firms			
Streetcar area	2012	2014	2012-14	Percent change
Memphis	986	965	-21	-2.1%
Portland	7,701	7,887	186	2.4%
Omaha	1,047	1,077	30	2.9%
	Private employees			
Memphis	28,037	28,063	26	0.1%
Portland	123,755	127,893	4,138	3.3%
Omaha	32,300	33,220	920	2.8%
	Payroll per private worker			
Memphis	\$59,687	\$58,664	-1,024	-1.7%
Portland	\$50,498	\$54,340	3,841	7.6%
Omaha	\$61,134	\$64,844	3,710	6.1%

Source: Goss & Associates calculations based on U.S. Census Bureau, County Business Patterns

Tables 3.5 and 3.6 compare labor force participation rates and unemployment rates respectively for Memphis, Portland, and Omaha for 2014. Labor participation rates are the percent of the population that has a job or is looking for a job.



Midtown Crossing, 2012

²¹Mutual of Omaha

Table 3.5: Labor force participation rates, 2014

	Street car	Rest of metro
Memphis	58.5%	65.2%
Portland	71.7%	67.3%
Omaha	66.1%	71.9%

Source: U.S. Census Bureau

Table 3.6: Unemployment rates, 2014

	Unemployment rates	
	Street car	Rest of metro
Memphis	10.3%	10.9%
Portland	9.0%	9.6%
Omaha	10.8%	5.5%

Source: U.S. Census Bureau

Industry. Location quotients (LQ) are a valuable and typical method of quantifying how concentrated a particular industry, cluster, occupation, or demographic group is in a region as compared to the nation. It can reveal what makes a particular region “unique” in comparison to the national average.

An LQ equal to 1.0 indicates that the particular industry has the same concentration as the nation, an LQ greater than 1.0 indicates that the particular industry has a greater concentration than the nation. For this industry, it also indicates that the industry exports goods or services to residents outside the area. An LQ less than 1.0 indicates that the particular industry has a lower concentration than the nation. For this industry, it also indicates that it is importing goods or services from outside the area. Table 3.7 lists LQs by industry for Memphis, Portland, and Omaha for 2014.

Table 3.7: Location quotients, Cincinnati, Memphis, Portland and Omaha, 2014

	Memphis		Portland		Omaha	
	Streetcar Zips	Rest of Metro	Streetcar Zips	Rest of Metro	Streetcar Zips	Rest of Metro
Agriculture, forestry, fishing and hunting, and mining	0.12	0.01	0.34	0.01	0.43	0.69
Construction	0.44	2.78	0.30	2.98	0.68	1.09
Manufacturing	0.81	1.61	0.73	2.13	0.75	0.83
Wholesale trade	0.92	0.34	1.04	0.33	0.70	1.04
Retail trade	0.59	4.14	0.95	4.20	0.91	1.00
Transportation and warehousing, & utilities	1.64	0.97	0.51	0.43	0.81	1.16
Information	0.70	0.29	1.58	0.41	1.18	1.10
Finance, insurance & real estate	1.28	2.57	1.02	3.16	1.04	1.47
Professional, scientific, and management	1.09	1.41	1.52	1.76	1.15	0.99
Educational services, and health care	1.43	2.04	1.08	1.99	1.15	1.03
Arts, entertainment, recreation, accommodation & food services	0.65	0.41	1.46	0.38	1.77	0.87
Other services, except public administration	0.81	0.53	0.94	0.54	0.77	0.85
Public administration	1.23	0.99	0.66	0.72	0.32	0.80

Goss & Associates based on U.S. Bureau of Labor Statistics data.

Section 4: Impact of Midtown Development

Overview

Implementation of a streetcar system is expected to be positive and significant. A well-developed urban core, as planned, that includes walkable neighborhoods with an appropriate transportation plan appeals to well-educated Millennials, which underpin future growth.

Such development will encourage Millennials to remain in the area and raise families, forming a basis for future population growth in the area - in other words, the “seed corn” for the economy. This will underpin overall Omaha development for decades to come. In an earlier section of this study, it was concluded that each one percent increase in college educated individuals between 20 - 34 years of age increases overall population growth by 0.4 percent.

Goss & Associates was asked by the Midtown 2050 Development Corporation to estimate the economic impact of construction and annual operations of the planned streetcar line and additional office, commercial, residential, civic and parking opportunities in streetcar study area. The construction phase is assumed to be 24 months; the operational phase was studied over a 5-year period.

The economic impacts identified in this study are short-run in nature and represent annual, recurring events. Long-run, but intangible factors, such as workforce development, and knowledge enhancement are acknowledged, but no attempt is made to assign dollar values to them in this section.

The proposed streetcar line in Omaha will spur economic growth in the local economy. Traveling through many of Omaha historic neighborhoods, the proposed 3.2 mile line will connect North Downtown with Midtown Omaha. The construction phase expenditures for the streetcar project are currently estimated to be \$155 million. The annual budget for the streetcar operation is estimated to be \$6 million for the first year.

The streetcar project will offer additional opportunities for Omaha. The potential exists for new investment in office, commercial and residential facilities. Additionally, the potential exists for new educational facilities and green spaces in the study region. The University of Nebraska Medical Center and Turner Park North, LLC see the potential for the projects in Figure 4.1 to flourish within the streetcar’s Tax Increment Financing District.

Figure 4.1: Midtown Projects

Project 1: Civic/institutional space with approximately 959,600 square feet. Construction costs are estimated at \$167.9 million. It is envisioned that the project will include the construction of 3 new schools. In addition, the project involves the enhancement of existing and creation of new public spaces in the study area. More than 3,500 new parking spaces, with construction valued at \$45.8 million, will allow residents and visitors the opportunity to live, park and walk in the neighborhoods on the streetcar line.

Project 2: Commercial (retail, food service and drinking places)/office space with approximately 2.7 million square feet. The value of construction is estimated at \$368.3 million. The project will include more than 9,700 new parking spaces for customers and employees; parking construction is valued at \$125.4 million.

Project 3: Commercial (retail, food service and drinking places)/residential space with approximately 2,735,200 square feet. The value of construction is estimated at \$393.9 million. The project includes in excess of 4,000 new parking spaces for customers and residents, valued at \$51.9 million.

Project 4: Multi-family residential space valued at \$63.5 million, covering approximately 423,500 square feet. The project involves 411 new parking spaces for residents at the space, valued at \$5.3 million.

Project 5: Office space with approximately 873,300 square feet, valued at \$131.0 million. The space will have more than 3,200 new parking spaces for employees at the project. The construction cost of the parking is estimated at \$41.6 million.

Project 6: Single-family residential construction of 9 units, with construction valued at \$3.0 million.

Source: Midtown Omaha 2050

In total, the 6 projects represent \$1.6 billion in new investment for Omaha and represent approximately 7.6 million square feet of new investment; 2.8 million square feet of new office space; 1.2 million square feet of new commercial space; 959,600 square feet of civic and institutional space; 2.6 million square feet of residential space and in excess of 21,000 of new parking spaces.

The remainder of this section summarizes the economic impact of the planned development over a two-year construction period and a five-year operation phase. It should be recognized that the impacts identified in the section do not include the added impact from the attraction and retention of Millennials. This impact was estimated in an earlier section.

Summary of Impacts - Construction Phase (24 months)

Direct impacts.²² Restoration and development spending for Midtown 2050 projects will result in direct economic effects on the local economy through additional new spending for goods and services as well as an increase in wages paid to workers employed in the area.

Midtown 2050, which provides for restoration and development in the Midtown Omaha area, along with streetcar services, will inject nearly \$11.55 billion of new spending in the area.

These expenditures, related to the 3.2 mile streetcar line and 7.1 million square feet in new construction investment, such as office, commercial and civic spaces, will be in the form of sales of goods and services, and wages paid to workers employed in the area. For the purposes of this analysis, it is assumed construction will occur during a 24-month period.²³

Table 4.1 provides a summary of the project's investment in Omaha. Direct impacts related to streetcar construction include \$108.5 million, with an additional \$46.5 million in architectural and engineering services, \$929.0 million in non-residential commercial space, \$50.3 million in residential construction, and \$419.3 million for architecture and engineering, for a total of \$1,553.7 million.

These impacts include office, commercial, civic and residential construction, and approximately 21,000 new parking spaces.

Table 4.1: Direct impacts, construction costs (24 months)

	Amount
Construction (streetcar)	\$108,500,000
Architectural and engineering (streetcar)	\$46,500,000
Non-residential (office, commercial & civic)	\$929,045,458
Residential (single & multi-family)	\$50,343,930
Architecture and engineering - residential and non-residential	\$419,309,738
Total direct impacts	\$1,553,699,126

Source: HDR

Such development will encourage Millennials to remain in the area and raise families, forming a basis for future population growth in the area - in other words, the "seed corn" for the economy.

²²Direct impacts do not include spillover impacts (indirect plus induced). These direct impacts represent simply the first round of spending by vendors and contractors in the area.

²³The assumptions and methodology used to produce these estimates are contained in the accompanying appendices. Dollar amounts are inflation-adjusted and presented in 2016 dollars.

Total construction impacts. In addition to providing direct impacts, the construction phase will result in spillover impacts. These impacts drive additional business-to-business and household spending that is not directly tied to expenditures for the project. As shown in Table 4.2, more than \$252.5 million in estimated additional sales activity will take place as a result of streetcar construction. Residential and commercial construction performed during restoration and development will generate an increase in sales activity in the region of approximately \$2.2 billion.

State and local tax coffers will receive an estimated \$7.1 million boost due to streetcar construction, with residential and commercial construction adding an additional \$63.3 million in state and local tax revenues.

Table 4.2: Total impacts (direct+indirect+induced), construction phase (24 months)

Type of impact	Streetcar	Residential & Commercial
Sales (output)	\$252,537,840	\$2,214,511,776
Wage and salary income	\$106,203,897	\$930,602,003
Self-employment business income	\$16,845,758	\$142,413,406
State and local taxes and fees	\$7,109,761	\$63,292,534
Employment - average per year	1,695.4	15,021.4

Source: Goss & Associates from IMPLAN system

Summary of Impacts - Operations Phase (five year period)

Direct operations impacts. The direct operational impacts from both categories are provided in Table 4.3. The streetcar’s direct impact will be \$6 million for year 1 of operations and will total \$31.2 million during the first 5 years of operation. Restoration and development will generate a direct impact on the economy of more than \$940.7 million during the first year of operations and will total approximately \$4.7 billion during the first 5 years of operations.

Table 4.3: Direct impacts, operational phase – streetcar and residential, commercial and civic (5 years)

Type of impact	Year 1	Years 2 to 5	Total
Streetcar	\$6,000,000	\$25,224,241	\$31,224,241
Restoration and development*	\$940,728,792	\$3,762,766,674	\$4,703,495,466

Source: Goss & Associates

*Office, commercial, civic, parking and residential housing operations



Creighton University Harper Center located in Midtown Omaha.

Photo: Goss & Associates

Total operations impacts. Table 4.4 provides a summary of the impact on the Omaha economy of the streetcar operations as well as residential and commercial operations. As with the construction phase, the operational phase will drive spillover impacts in the study area. During the first 5 years of operation, economic activity associated with the streetcar will increase total sales activity in the region by approximately \$42.6 million. In addition, streetcar operations will increase state and local tax revenues by an estimated \$1.8 million during the first 5 years of operation.

The streetcar will stimulate commercial real estate sales and rentals and draw new firms to the area along or near the line. The office, commercial, civic, parking and residential operations will drive additional business-to-business and household spending not directly tied to direct expenditures for the project. This additional activity will result in an estimated increase of \$8.7 billion in sales to the local economy during the first 5 years of the operational phase.

The economic activity generated by residential and commercial operations will increase state and local tax revenues by approximately \$362.3 million during the five years covered in this study.

Table 4.4: Total impacts (direct+indirect+induced), operational phase (5 years)

	Year 1	Years 2 to 5	Total
Streetcar operations			
Sales (output)	\$8,521,095	\$34,057,664	\$42,578,759
Wage and salary income	\$4,144,494	\$16,564,979	\$20,709,473
Self-employment business income	\$331,364	\$1,324,416	\$1,655,780
State and local taxes and fees	\$361,286	\$1,444,012	\$1,805,298
Employment (average per year)	129.2	129.2	129.2
Restoration and development*			
Sales (output)	\$1,743,794,557	\$6,974,967,076	\$8,718,761,632
Wage and salary income	\$780,169,445	\$3,120,624,360	\$3,900,793,805
Self-employment business income	\$36,534,714	\$146,131,318	\$182,666,031
State and local taxes and fees	\$72,454,281	\$289,804,293	\$362,258,574
Employment (average per year)	11,184.1	11,184.1	11,184.1

Source: Goss & Associates

*Office, commercial, civic, parking and residential housing operations

Detailed Industry Economic Impacts – Construction Phase

The streetcar construction phase will impact all 19 sectors in the model used for estimation.²⁴ As seen in Table 4.5, outside of the construction and professional, scientific and technical services (architecture and engineering) sectors, the top three sectors impacted by the streetcar construction, in terms of sales activity, will be the following: finance and insurance (\$16.6 million); real estate and rental and leasing (\$12.9 million) and health care and social assistance (\$12.4 million). Firms in the retail, food service and drinking places sector will likely see a boost of \$12.2 million in sales activity. Additional detailed industry impacts for Omaha are contained in Appendix E.

Table 4.5: Impact of streetcar construction (24 months)

Sector	Sales	Wage & Salary Income	Average jobs per year
Construction	\$99,890,182	\$36,902,906	563.1
Professional, Scientific, and Technical Services	\$62,112,269	\$35,886,854	405.5
Finance and Insurance	\$16,635,824	\$5,096,968	79.2
Real Estate and Rental and Leasing	\$12,949,934	\$1,007,609	46.0
Health Care and Social Assistance	\$12,389,344	\$6,531,020	110.6
Retail, Food Service and Drinking Places	\$12,219,178	\$5,549,838	212.0
Manufacturing	\$5,816,423	\$1,135,668	18.8
Administrative and Support & Waste Management and Remediation Services	\$5,114,567	\$2,934,506	78.6
Other Services (except Public Administration)	\$4,914,516	\$2,476,947	61.7
Information	\$4,168,398	\$968,594	13.3
Wholesale Trade	\$3,976,850	\$2,565,848	25.4
Public Administration	\$3,801,011	\$1,328,036	13.7
Transportation and Warehousing	\$2,934,610	\$1,496,909	19.9
Management of Companies and Enterprises	\$1,575,868	\$821,381	7.0
Educational Services	\$1,540,276	\$764,760	16.0
Accommodation, Arts, Entertainment, and Recreation	\$1,108,417	\$367,797	22.0
Utilities	\$975,774	\$189,446	0.5
Mining, Quarrying, and Oil and Gas Extraction	\$368,550	\$147,457	1.7
Agriculture, Forestry, Fishing and Hunting	\$45,849	\$31,355	0.4
Total:	\$252,537,840	\$106,203,897	1,695.4

Source: Goss & Associates, from IMPLAN System

²⁴Presented are the retail, food services and drinking places industries as one sector to more closely represent the commercial sector activity expected for the Streetcar TIF district. In addition, this allows isolation of the impact of new activity to the region. The relative concentration of commercial sector employment in Douglas County compared to the State of Nebraska is used. Doing this, it was found that the potential exists for Douglas County to draw approximately 40 percent to 45 percent of its commercial activity from outside of the county. That said, some of the commercial activity may represent activity drawn from other parts of Douglas County.

As seen in Table 4.6, the restoration and development construction phase will impact all 19 sectors in the model. Outside of the construction and professional, scientific and technical services (architecture and engineering) sectors, the top three sectors impacted by the streetcar construction, in terms of sales activity, are finance and insurance (\$147.0 million); real estate and rental and leasing (\$109.9 million) and health care and social assistance (\$108.5 million). Firms in the retail, food service and drinking places sector will likely see sales activity increase by \$104.4 million.

Table 4.6: Impact of residential, commercial and civic construction (24 months)

Sector	Sales	Wage & Salary Income	Average jobs per year
Construction	\$900,224,490	\$335,014,734	5,291.6
Professional, Scientific, and Technical Services	\$536,464,212	\$310,304,854	3,502.5
Finance and Insurance	\$147,007,779	\$44,586,822	699.0
Real Estate and Rental and Leasing	\$109,924,382	\$8,062,460	397.5
Health Care and Social Assistance	\$108,514,683	\$57,202,588	968.8
Retail, Food Service and Drinking Places	\$104,369,760	\$47,057,422	1,816.3
Manufacturing	\$51,790,088	\$10,717,460	181.9
Administrative and Support and Waste Management and Remediation Services	\$41,564,390	\$23,956,022	641.2
Wholesale Trade	\$37,212,232	\$24,009,185	237.3
Other Services (except Public Administration)	\$37,053,307	\$18,248,011	476.7
Information	\$36,624,361	\$8,491,020	115.8
Public Administration	\$32,651,962	\$11,439,708	117.6
Transportation and Warehousing	\$23,139,913	\$11,797,282	158.8
Management of Companies and Enterprises	\$13,657,798	\$7,118,782	60.5
Educational Services	\$13,455,706	\$6,680,744	139.8
Accommodation, Arts, Entertainment, and Recreation	\$9,849,316	\$3,266,448	196.3
Utilities	\$8,260,489	\$1,606,710	4.3
Mining, Quarrying, and Oil and Gas Extraction	\$2,368,910	\$781,024	11.7
Agriculture, Forestry, Fishing and Hunting	\$377,998	\$260,727	3.8
Total:	\$2,214,511,776	\$930,602,003	15,021.4

Source: Goss & Associates, from IMPLAN System

Table 4.7 provides a summary of impact of the construction phase on state and local tax revenues. The streetcar construction has the potential to add \$7.1 million to state and local tax revenue.²⁵ The restoration and development construction will add approximately \$63.3 million to the local tax base. The fiscal impact occurs over a 24-month time span.

Measure	Streetcar	Restoration and development
State tax revenue impact - individual income	\$1,770,590	\$15,492,346
State tax revenue impact - sales	\$1,517,377	\$13,608,873
State tax revenue impact - corporate income	\$221,791	\$1,996,684
Local tax revenue impact - sales	\$413,830	\$3,711,511
Local tax revenue impact - property	\$2,089,676	\$18,730,520
Other state and local taxes and fees	\$1,096,497	\$9,752,600
Total state and local taxes and fees	\$7,109,761	\$63,292,534

Source: Goss & Associates, from IMPLAN System
*Office, commercial, civic, parking and residential construction



²⁵Fiscal impacts do not include any potential tax incentives provided by state or local entities.
THE IMPACT OF A WALKABLE, WORKABLE, AND LIVABLE MIDTOWN OMAHA

Detailed Industry Economic Impacts – Operational Phase

This study looks at the operational phase over 5 years for both the streetcar and the restoration and development activities. Table 4.8, provides a summary of the impact of the first year of operations for the streetcar. Streetcar operations will support more than \$8.5 million in sales activity in the Omaha economy and the activities of 129 jobs, with wage and salary income in excess of \$4.1 million (includes employee and self-employed business income).

In terms of sales, the top three sectors impacted by the streetcar, outside of transportation and warehousing, are finance and insurance (\$613,928), health care and social assistance (\$480,576) and real estate and rental and leasing (\$412,240). Sales in the retail, food service and drinking places are expected to increase by \$389,448.

Table 4.8: Operations impact, streetcar (first year)

Sector	Sales	Wage & Salary Income	Average jobs per year
Transportation and Warehousing	\$5,439,119	\$2,964,917	104.8
Finance and Insurance	\$613,928	\$194,611	2.9
Health Care and Social Assistance	\$480,576	\$253,291	4.3
Real Estate and Rental and Leasing	\$412,240	\$25,343	1.3
Retail, Food Service and Drinking Places	\$389,448	\$178,913	6.8
Professional, Scientific, and Technical Services	\$213,994	\$117,356	1.4
Other Services (except Public Administration)	\$150,266	\$83,070	2.0
Public Administration	\$141,942	\$48,828	0.5
Administrative and Support and Waste Management and Remediation Services	\$138,294	\$74,902	2.0
Information	\$121,153	\$28,198	0.4
Wholesale Trade	\$108,028	\$69,699	0.7
Manufacturing	\$92,979	\$14,274	0.2
Educational Services	\$57,897	\$28,740	0.6
Management of Companies and Enterprises	\$53,736	\$28,009	0.2
Accommodation, Arts, Entertainment, and Recreation	\$39,291	\$12,820	0.8
Construction	\$30,051	\$13,602	0.2
Utilities	\$28,777	\$5,636	0.0
Mining, Quarrying, and Oil and Gas Extraction	\$8,042	\$1,339	0.0
Agriculture, Forestry, Fishing and Hunting	\$1,333	\$946	0.0
Total:	\$8,521,095	\$4,144,494	129.2

Source: Goss & Associates, from IMPLAN System

The fiscal impacts presented in Tables 4.9 and 4.10 do not include the potential impact of any tax incentives that might diminish the tax revenue collected from the projects. Table 4.10 provides a summary of the 5-year streetcar operations phase. State and local tax revenue will increase by \$1.8 million, with local property tax revenue increasing by an estimated \$582,586. State and local sales tax collections will increase by more than \$540,000. Individual income tax revenue will increase by an estimated \$338,273.

Table 4.9: Tax revenue impact, streetcar operations phase (5 years)

Category	Year 1	Years 2 to 5	Total
State tax revenue impact - individual income	\$67,697	\$270,576	\$338,273
State tax revenue impact - sales	\$85,324	\$341,106	\$426,430
State tax revenue impact - corporate income	\$13,592	\$54,327	\$67,919
Local tax revenue impact - sales	\$23,270	\$93,029	\$116,299
Local tax revenue impact - property	\$116,590	\$465,996	\$582,586
Other state and local taxes and fees	\$54,813	\$218,978	\$273,791
Total state and local taxes and fees:	\$361,286	\$1,444,012	\$1,805,298

Source: Goss & Associates, from IMPLAN System

Table 4.10 provides a summary of the 5-year restoration and development operations phase. As shown, state and local tax revenues will increase by \$362.3 million, with local property tax revenue increasing by \$120.9 million. State and local sales tax collections will increase by more than \$112.0 million. Individual income tax revenue will increase by an estimated \$63.1 million.

Table 4.10: Tax revenue impact, restoration and development operations phase (5 years)

Category	Year1	Years 2 to 5	Total
State tax revenue impact - individual income	\$12,632,646	\$50,529,694	\$63,162,340
State tax revenue impact - sales	\$17,721,317	\$70,881,698	\$88,603,015
State tax revenue impact - corporate income	\$2,044,327	\$8,176,568	\$10,220,895
Local tax revenue impact - sales	\$4,833,087	\$19,331,372	\$24,164,459
Local tax revenue impact - property	\$24,174,337	\$96,692,518	\$120,866,855
Other state and local taxes and fees	\$11,048,567	\$44,192,443	\$55,241,010
Total state and local taxes and fees:	\$72,454,281	\$289,804,293	\$362,258,574

Source: Goss & Associates, from IMPLAN System

*Office, commercial, civic, parking and residential housing operations

Summary of Impacts and Rate-of-Return to City of Omaha

In Table 4.11 is provided a summary of economic impacts for the construction phase of 24 months and for the first five years of operations. Except for jobs, all estimates are in present or 2016 dollars.

Table 4.11 Summary of impacts except for jobs, all estimates are in millions of 2016 dollars

	Construction (24 months)		
	Street car	Restoration & development	Total
Jobs (yearly average)	1,695	15,021	16,716
Sales/output/total	\$252.5	\$1,400.0	\$1,652.5
Wages & salaries	\$89.4	\$788.2	\$877.6
Self-employment income	\$16.8	\$142.4	\$159.2
State & local tax collections	\$7.1	\$63.3	\$70.4
	Operations (first 5 years)		
Jobs (yearly average)	129	11,184	11,313
Sales/output/total	\$42.6	\$8,700.0	\$8,742.6
Wages & salaries	\$19.1	\$3,900.0	\$3,919.1
Self-employment income	\$1.7	\$182.7	\$184.4
State & local tax collections	\$1.9	\$362.3	\$364.2

Source: Goss & Associates based on Implan System impacts

In Table 4.12 are estimates of the rate-of-return for the City of Omaha's financial support via infrastructure including roads, sewers and street improvements. These estimates do not take into consideration any tax increment financing (TIF). All estimates are in 2016 dollars and the rate-of-return is inflation adjusted. As listed, the City of Omaha will collect sufficient sales taxes and property taxes to be paid back its \$140.1 million of investment in 13 years and 4 months.

Table 4.12: Rate of return on City of Omaha support (2016 dollars) for 20 years of operations

City infrastructure support (Source: HDR)	\$140.1 million
Average yearly rate-of-return for Omaha	7.1%
Payback period	13 years and 4 months

Source: Goss & Associates and HDR

Appendices

Appendix A: Statistical Modeling Results

Table A.1 lists statistical modeling results. Dependent factor: population growth; independent variables: percent of educated Millennials in 2000, percentage growth in educated Millennials, 2000 - 2015.

Table A.1: Statistical modeling results

Table A.1: Statistical modeling results						
SUMMARY OUTPUT						
<i>Regression Statistics</i>						
Multiple R	0.70					
R Square	0.48					
Adjusted R Square	0.46					
Standard Error	0.08					
Observations	53					
<i>ANOVA</i>						
	df	SS	MS	F	Significance F	
Regression	2	0.34	0.17	23.46	6.51E-08	
Residual	50	0.36	0.01			
Total	52	0.70				
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	-0.15	0.06	-2.66	1.0413%	-0.27	-0.04
% educated Millennials-2000	2.10	0.91	2.30	2.5762%	0.26	3.93
% growth educated Millennials, 2000-15	0.43	0.06	6.82	0.0000%	0.30	0.55

Source: Goss & Associates based on U.S. Census data

Appendix B: The Importance of Midtown Spending on the Economy

Revenues from outside the state are more powerful than revenues of firms that deal in intra-state commerce in terms of job and income creation since a high proportion of these revenues are “new” to the area and are not offset by reduced spending in other area industries. In the case of Midtown, dollars are injected through investments for capital spending and via spending related to health operations and education.

Economic impacts identified in this study are short-run in nature and represent annual, recurring events. Indicators are discussed for long-run, more intangible impacts on the regional economy such as workforce development, and decreased spending and increased employment due to improved healthcare. However, assignment of dollar values for these indicators is outside the scope of this study.

In terms of long-term, but less measurable impacts, the presence of a vibrant Midtown increases the attractiveness of the community and encourages the startup and/or relocation of other businesses in the state. By contributing to the area’s attractiveness due to the availability of quality health care, Midtown influences community growth in non-healthcare related industries. Moreover, Midtown’s

commitment to quality health care contributes to the overall growth of state and local economic activity.

Table A.1 provides an overview of the influences of health care and other spending on community and economic development. Broadly speaking, the multiplier effect of Midtown spending is a combination of direct, indirect, and induced impacts on local economies.

The direct impact is the economic activity generated by Midtown’s purchases. Direct expenditures include a wide range of goods and services ranging from staff salaries to medical equipment. These purchases generate further expenditures, or indirect impacts, within the economy. As suppliers and local vendors spend income received from Midtown, businesses derive further benefit upstream and downstream.

Moreover, wages are paid to employees as a result of the direct and indirect expenditures. The wage income then exerts an increase in expenditures via the local consumption of goods and services. These effects are called induced impacts. The sum of the direct, indirect, and induced impacts is the total economic impact.

Table B.1: Impact of Midtown on Nebraska

Issue	Measurement	Community Impact
Direct payments	Wages paid to Midtown employees	Increases sense of collective identity; builds social capital; learning opportunities; creates “quality jobs.”; encourages the in-migration of educated workers; increase quality-of-life via provision of superior health care
Purchase inputs/equipment	Payments to medical, scientific equipment vendors	Encourages the startup and/or relocation of businesses to Iowa and Nebraska to supply products and services
Research funds from outside the state	Community and state recognition; grants and contracts to institutions	Creates recognition of state’s high tech/scientific sector; builds community pride; personal interaction of diverse individuals
Philanthropic and government support	Donated services	Physicians/faculty/staff/researchers/ students provide valuable “free” services to the community
“Brain gain”	Educated, high human capital individuals	Direct plus matching funds assist in bringing highly educated, highly paid individuals to the region

Source: Goss & Associates

Appendix C: Types of Economic Impacts

Direct economic impacts. Spending by Midtown has direct economic effects on the local economy through expenditures for goods and services and employee salaries. The most obvious direct expenditures are wages paid to workers employed by Midtown such as vendors, medical facilities, and construction firms.

In addition, expenditures by visitors to their facilities and programs produce direct impacts on the region, affecting primarily the accommodations industry. Direct economic impacts are color coded **green** in Figure C.1.

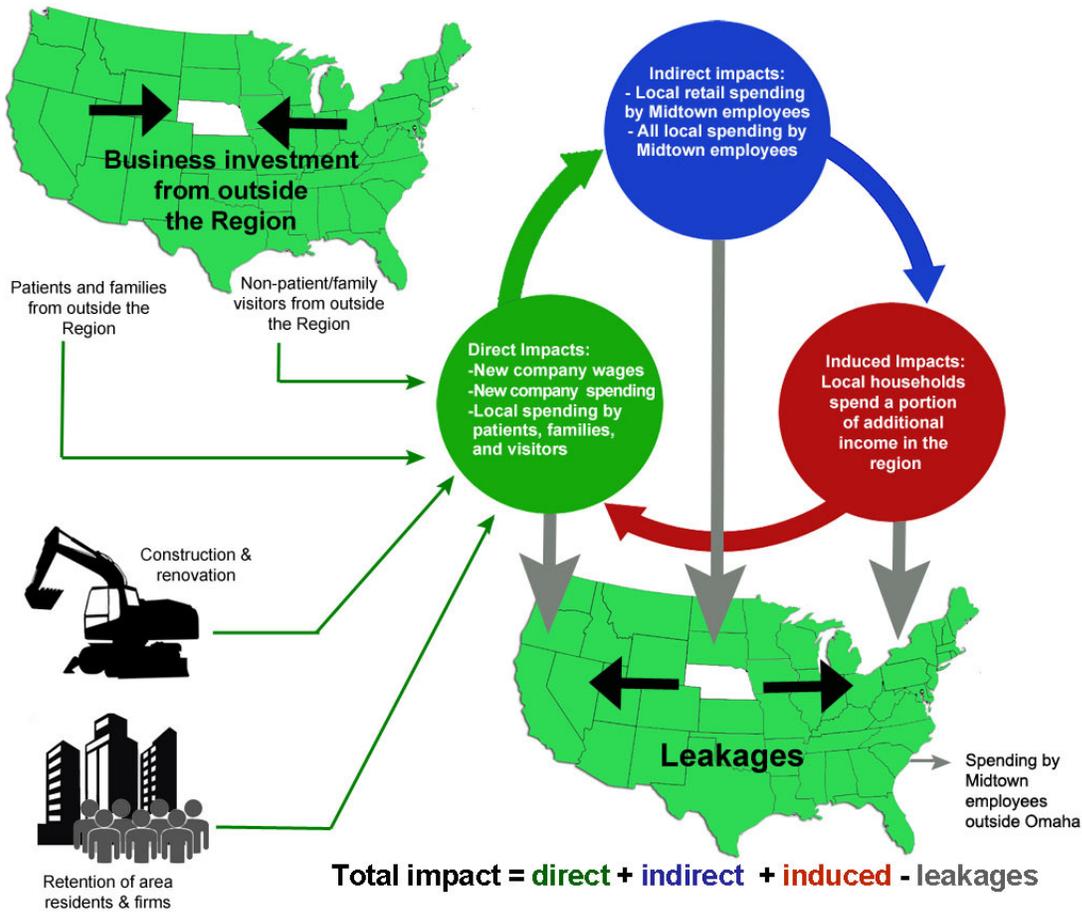
Indirect Economic Impacts. Midtown spending also produces indirect economic effects on the area economy. Hospitals and clinics, for

example, generate indirect effects by increasing: (a) the number of firms drawn to the community; (b) the volume of deposits in local financial institutions and; (c) economic development. Examples of indirect economic impacts are color coded **blue** on Figure C.1.

Induced Economic Impacts. Induced impacts in the region occur as the initial spending feeds back to industries in the region when workers in the area purchase additional output from local firms in a second round of spending. That is, Midtown spending increases overall income and population, which produces another round of increased spending adding to sales, earnings and jobs for the area. Examples of induced economic impacts are color coded **red** in Figure C.1.

Figure C.1 depicts examples of the flow of funds into and out of Midtown. As indicated, the total impact is the sum of direct (green arrows), indirect (blue arrows) and induced (red arrows) impacts minus leakages (gray arrows). Leakages represent Midtown spending outside of the area. Input-output multiplier systems are used to estimate each of the impacts in Figure C.1 by industry.

Figure C.1: Schematic of Impacts



Source: Goss & Associates 2016

Appendix D: The Multiplier Effect

When employees of Midtown spend their salaries within the community, that spending filters through the local economy, causing increased overall spending greater than the initial spending. The impact of this respending is known as the multiplier effect. Economic impacts that take place outside the local economy, for example employee dollars spent in Des Moines or Kansas City, are called leakages and reduce the multiplier and overall impacts. They are excluded when estimating regional economic impacts.

As Midtown increases in size, institutions become more proficient and focused on meeting its needs. Furthermore, suppliers unique to hospitals, clinics and restaurants are more likely to locate in close proximity to Midtown. This not only expands income and jobs in Metropolitan Omaha and Nebraska, it increases the size of multipliers related to health care and medical schools.

The direct economic impact supports additional economic activity in the economy due to the “multiplier” impact. For example, hospital purchases of goods and services support other local businesses. Further, businesses throughout the community are supported when Midtown employees spend their paychecks. This additional economic activity is known as the multiplier impact.

The multiplier impact (indirect and induced) resulting from the direct economic impact is estimated utilizing the IMPLAN model. The total economic impact is the sum of the direct impact and the multiplier impact. Estimates of the tax revenue impact also are derived from the total economic impact.

While the direct effects of institutional spending can be measured by a straightforward methodology, the indirect and induced effects of spending must be estimated using regional multipliers. Community characteristics that affect leakages, and consequently the multiplier include:

Location. Distance to suppliers affects the willingness to purchase locally. For example, if Omaha firms are unable to provide supplies at competitive prices, and there are alternative suppliers in Kansas City that are more price-competitive, then Midtown businesses and healthcare facilities will be more likely to spend outside the community. This results in greater leakages, lower multipliers and smaller impacts.

Population size. A larger population provides more opportunities for companies and workers to purchase locally. Larger population areas are associated with fewer leakages and larger multipliers. Thus, in general, Midtown dollars flowing into Omaha will have larger impacts than the same level of dollars flowing into more rural areas of Nebraska.

Clustering. A community will gain more if the inputs required by local industries for production match local resources and are purchased locally. Thus, over time, as new firms are created to match the requirements of Midtown, leakages will be fewer, resulting in larger multipliers and impacts. This issue is at the heart of economic development, amplifying the impacts of the clustering of healthcare-related firms.

As a result of Midtown medical facilities, the Omaha metropolitan area hosts extensive medical operations infrastructure, for which financial impacts are sizeable, and those impacts will grow as Midtown expands.

Appendix E: Detailed Industry Impacts for Omaha

Table E.1 summarizes the 5-year impact on local wage and salary income. Omaha wage and salary income will likely see a \$20.7 million increase over the 5-year operations phase in this study. The following sectors that will experience the greatest income increase: transportation and warehousing (\$14.8 million); health care and social assistance (\$1.3 million) and finance and insurance (\$972,445).

Table E.1: Operations impact on wage and salary income, streetcar (5 years)

Sector	Year 1	Years 2 to 5	Total
Transportation and Warehousing	\$2,964,917	\$11,850,373	\$14,815,290
Health Care and Social Assistance	\$253,291	\$1,012,370	\$1,265,661
Finance and Insurance	\$194,611	\$777,834	\$972,445
Retail, Food Service and Drinking Places	\$178,913	\$715,089	\$894,002
Professional, Scientific, and Technical Services	\$117,356	\$469,054	\$586,410
Other Services (except Public Administration)	\$83,070	\$332,019	\$415,089
Administrative and Support and Waste Management and Remediation Services	\$74,902	\$299,372	\$374,273
Wholesale Trade	\$69,699	\$278,578	\$348,277
Public Administration	\$48,828	\$195,158	\$243,986
Educational Services	\$28,740	\$114,869	\$143,608
Information	\$28,198	\$112,704	\$140,902
Management of Companies and Enterprises	\$28,009	\$111,947	\$139,956
Real Estate and Rental and Leasing	\$25,343	\$101,294	\$126,637
Manufacturing	\$14,274	\$57,053	\$71,327
Construction	\$13,602	\$54,363	\$67,965
Accommodation, Arts, Entertainment, and Recreation	\$12,820	\$51,242	\$64,062
Utilities	\$5,636	\$22,525	\$28,161
Mining, Quarrying, and Oil and Gas Extraction	\$1,339	\$5,353	\$6,692
Agriculture, Forestry, Fishing and Hunting	\$946	\$3,782	\$4,728
Total:	\$4,144,493	\$16,564,978	\$20,709,471

Source: Goss & Associates, from IMPLAN System

A summary of the 5-year impact of the restoration and development activities appears in Table E.2. Omaha sales activity will see an increase of \$8.7 billion from the on-going operations in the new office, commercial, civic, residential and parking areas. The sector used as a proxy for the occupant of the new office space, management of companies and enterprises, accounts for \$4.2 billion of the total increase in sales. Real estate and rental and leasing will experience an estimated sales increase of \$733.3 million and finance and insurance will experience an increase of \$619.6 million in sales activity.

Table E.2: Operations impact sales activity, residential, commercial and civic (5 years)

Sector	Year 1	Years 2 to 5	Total
Management of Companies and Enterprises	\$848,490,433	\$3,393,960,644	\$4,242,451,077
Real Estate and Rental and Leasing	\$146,673,808	\$586,574,774	\$733,248,582
Finance and Insurance	\$123,929,696	\$495,708,069	\$619,637,764
Retail, Food Service and Drinking Places	\$123,873,530	\$495,488,326	\$619,361,856
Professional, Scientific, and Technical Services	\$119,514,719	\$478,050,312	\$597,565,031
Health Care and Social Assistance	\$90,239,312	\$360,951,026	\$451,190,339
Information	\$80,624,443	\$322,495,509	\$403,119,952
Administrative and Support and Waste Management and Remediation Services	\$45,007,707	\$179,987,842	\$224,995,549
Public Administration	\$35,620,483	\$142,478,857	\$178,099,340
Other Services (except Public Administration)	\$31,649,005	\$126,593,614	\$158,242,619
Manufacturing	\$23,330,317	\$93,319,602	\$116,649,919
Wholesale Trade	\$20,515,940	\$82,062,334	\$102,578,274
Transportation and Warehousing	\$13,752,944	\$55,010,787	\$68,763,731
Accommodation, Arts, Entertainment, and Recreation	\$12,066,642	\$48,265,957	\$60,332,600
Educational Services	\$10,938,117	\$43,751,708	\$54,689,825
Construction	\$8,908,757	\$35,633,690	\$44,542,447
Utilities	\$7,134,774	\$28,538,455	\$35,673,229
Mining, Quarrying, and Oil and Gas Extraction	\$1,245,832	\$4,983,210	\$6,229,042
Agriculture, Forestry, Fishing and Hunting	\$278,096	\$1,112,359	\$1,390,455
Total:	\$1,743,794,557	\$6,974,967,076	\$8,718,761,632

Source: Goss & Associates, from IMPLAN System

Table E.3 provides a summary of the 5-year operations phase of the restoration and development activities. Overall, wage and salary income will increase by approximately \$3.9 billion. Management of companies and enterprises accounts for \$2.2 billion of the total increase. Professional, scientific and technical services will experience an estimated income increase of \$321.9 million and retail, food service and drinking places will see a sales increase by \$297.7 million.

Table E.3: Operations impact on wage and salary income, residential, commercial and civic (5 years)

Sector	Year 1	Years 2 to 5	Total
Management of Companies and Enterprises	\$442,254,199	\$1,769,016,230	\$2,211,270,430
Professional, Scientific, and Technical Services	\$64,371,011	\$257,479,127	\$321,850,138
Retail, Food Service and Drinking Places	\$59,536,482	\$238,143,349	\$297,679,831
Health Care and Social Assistance	\$47,557,418	\$190,226,389	\$237,783,807
Finance and Insurance	\$42,156,309	\$168,621,800	\$210,778,109
Administrative and Support and Waste Management and Remediation Services	\$21,064,357	\$84,242,151	\$105,306,508
Information	\$18,673,059	\$74,691,711	\$93,364,770
Other Services (except Public Administration)	\$15,571,175	\$62,283,637	\$77,854,812
Public Administration	\$15,547,517	\$62,189,057	\$77,736,574
Real Estate and Rental and Leasing	\$13,327,997	\$53,294,281	\$66,622,277
Wholesale Trade	\$13,236,803	\$52,946,293	\$66,183,096
Transportation and Warehousing	\$7,022,366	\$28,088,967	\$35,111,333
Educational Services	\$5,427,575	\$21,709,921	\$27,137,496
Manufacturing	\$4,487,711	\$17,950,558	\$22,438,270
Accommodation, Arts, Entertainment, and Recreation	\$4,157,207	\$16,628,624	\$20,785,831
Construction	\$3,971,026	\$15,883,499	\$19,854,525
Utilities	\$1,393,464	\$5,573,727	\$6,967,191
Mining, Quarrying, and Oil and Gas Extraction	\$215,513	\$862,031	\$1,077,545
Agriculture, Forestry, Fishing and Hunting	\$198,255	\$793,006	\$991,262
Total:	\$780,169,445	\$3,120,624,360	\$3,900,793,805

Source: Goss & Associates, from IMPLAN System

Table E.4 provides a summary of the impact of the first year of operations for the Midtown 2050 area projects. These operations will support over \$1.7 billion in sales activity in the local economy and the activities of over 11,000 jobs, with wage and salary income of approximately \$780.2 million (includes employee and self-employed business income).

The \$848.5 million in sales activity in the management of companies and enterprises sector is attributable to the occupancy of the new office space, with a smaller impact driven by indirect and induced expenditures. In terms of sales outside of management of companies and enterprises, the top three sectors impacted by the streetcar are real estate and rental and leasing (\$146.7 million), finance and insurance (\$123.9 million) and retail, food service and drinking places (\$123.8 million).

Table E.4: Operations impact, restoration and development (first year)

Sector	Sales	Wage & Salary Income	Average jobs per year
Management of Companies and Enterprises	\$848,490,433	\$442,254,199	3,756.4
Real Estate and Rental and Leasing	\$146,673,808	\$13,327,997	715.8
Finance and Insurance	\$123,929,696	\$42,156,309	651.9
Retail, Food Service and Drinking Places	\$123,873,530	\$59,536,482	2,274.3
Professional, Scientific, and Technical Services	\$119,514,719	\$64,371,011	794.3
Health Care and Social Assistance	\$90,239,312	\$47,557,418	803.6
Information	\$80,624,443	\$18,673,059	267.3
Administrative and Support and Waste Management and Remediation Services	\$45,007,707	\$21,064,357	590.0
Public Administration	\$35,620,483	\$15,547,517	200.8
Other Services (except Public Administration)	\$31,649,005	\$15,571,175	406.2
Manufacturing	\$23,330,317	\$4,487,711	77.2
Wholesale Trade	\$20,515,940	\$13,236,803	130.8
Transportation and Warehousing	\$13,752,944	\$7,022,366	97.9
Accommodation, Arts, Entertainment, and Recreation	\$12,066,642	\$4,157,207	234.7
Educational Services	\$10,938,117	\$5,427,575	114.1
Construction	\$8,908,757	\$3,971,026	55.2
Utilities	\$7,134,774	\$1,393,464	3.7
Mining, Quarrying, and Oil and Gas Extraction	\$1,245,832	\$215,513	6.8
Agriculture, Forestry, Fishing and Hunting	\$278,096	\$198,255	3.0
Total:	\$1,743,794,557	\$780,169,445	11,184.1

Source: Goss & Associates, from IMPLAN System

Table E.5 expands on the sales activity associated with the streetcar operations. The streetcar operations will boost local sales activity by nearly \$42.6 million over the 5-year operational phase in this study. The transportation and warehousing sector accounts for \$27.2 million of the sales. Finance and insurance comes in second at \$3.1 million and health care and social assistance places third at \$2.4 million.

Table E.5: Operations impact on sales activity, streetcar (5 years)

Sector	Year 1	Years 2 to 5	Total
Transportation and Warehousing	\$5,439,119	\$21,739,423	\$27,178,543
Finance and Insurance	\$613,928	\$2,453,786	\$3,067,714
Health Care and Social Assistance	\$480,576	\$1,920,797	\$2,401,373
Real Estate and Rental and Leasing	\$412,240	\$1,647,669	\$2,059,910
Retail, Food Service and Drinking Places	\$389,448	\$1,556,572	\$1,946,020
Professional, Scientific, and Technical Services	\$213,994	\$855,305	\$1,069,299
Other Services (except Public Administration)	\$150,266	\$600,591	\$750,857
Public Administration	\$141,942	\$567,324	\$709,267
Administrative and Support and Waste Management and Remediation Services	\$138,294	\$552,742	\$691,036
Information	\$121,153	\$484,234	\$605,388
Wholesale Trade	\$108,028	\$431,772	\$539,800
Manufacturing	\$92,979	\$371,625	\$464,605
Educational Services	\$57,897	\$231,408	\$289,305
Management of Companies and Enterprises	\$53,736	\$214,777	\$268,513
Accommodation, Arts, Entertainment, and Recreation	\$39,291	\$157,040	\$196,330
Construction	\$30,051	\$120,109	\$150,160
Utilities	\$28,777	\$115,019	\$143,796
Mining, Quarrying, and Oil and Gas Extraction	\$8,042	\$32,143	\$40,185
Agriculture, Forestry, Fishing and Hunting	\$1,333	\$5,327	\$6,659
Total:	\$8,521,095	\$34,057,664	\$42,578,759

Source: Goss & Associates, from IMPLAN System

Appendix F: Researchers' Biographies

Ernie Goss is the Jack MacAllister Chair in Regional Economics at Creighton University and is the initial director for Creighton's Institute for Economic Inquiry. He is also principal of the Goss Institute in Denver, Colo. Goss received his Ph.D. in economics from The University of Tennessee in 1983 and is a former faculty research fellow at NASA's Marshall Space Flight Center. He was a visiting scholar with the Congressional Budget Office for 2003-2004, and has testified before the U.S. Congress, the Kansas Legislature, and the Nebraska Legislature. In the fall of 2005, the Nebraska Attorney General appointed Goss to head a task force examining gasoline pricing in the state.

He has published more than 100 research studies focusing primarily on economic forecasting and on the statistical analysis of business and economic data. His book Changing Attitudes Toward Economic Reform During the Yeltsin Era was published by Praeger Press in 2003, and his book Governing Fortune: Casino Gambling in America was published by the University of Michigan Press in March 2007.

He is editor of *Economic Trends*, an economics newsletter published monthly with more than 11,000 subscribers, produces a monthly business conditions index for the nine-state Mid-American region, and conducts a survey of bank CEOs in 10 U.S. states. Survey and index results are cited each month in approximately 100 newspapers; citations have included the New York Times, Wall Street Journal, Investors Business Daily, The Christian Science Monitor, Chicago Sun Times, and other national and regional newspapers and magazines. Each month 75-100 radio stations carry his Regional Economic Report.

Scott Strain is a senior research economist at Goss & Associates. He has worked as an economist and statistician for more than 20 years providing forecasts and analysis across a wide-range of industries. Scott served as an industry economist, working in new product development regarding both quantitative and qualitative research. Scott was Senior Director of Research for an economic development agency, providing economic impact and tax incentive analysis to both private businesses and government entities. He served on the business advisory committee that worked with Nebraska state senators and the director of the state's Economic Development Department to develop the Nebraska Advantage Act – a comprehensive package of business incentives that has helped to add more than \$6 billion in new capital investment and over 13,000 new jobs in the state of Nebraska since the Act's inception in 2006.