



DEVELOPMENT PLAN - VOL.II

DRAFT

AN – VOL.II DESTINATION MEDICAL CENTER ROCHESTER, MINNESOTA VOLUME II – PLANNING DOCUMENTS





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SECTION 5.0 MARKET RESEARCH

5.1 EXECUTIVE SUMMARY

Beginning in May 2014, AECOM Technical Services, Inc. (AECOM) was engaged by the Destination Medical Center (DMC) Economic Development Agency (EDA) to assess market conditions for uses supporting the DMC economic development strategy in Rochester, Minnesota. A series of analyses were conducted focusing on seven of eight core areas that are part of the DMC concept platform for development:

- 1. Health and Wellness
- 2. Commercial Research and Technology
- 3. Retail, Dining, Entertainment, Arts, and Culture
- 4. Sports and Recreation
- 5. Livable City
- 6. Learning Environment
- 7. Hospitality and Conventions
- 8. Transportation (not included in this analysis)
- 9. AECOM's core findings are discussed below.

ECONOMIC AND DEMOGRAPHIC CONTEXT

- Rochester needs qualified workers in all sectors, but particularly in science, technology, engineering, and mathematics (STEM). The Rochester-Olmsted Council of Governments has projected that by 2030, there will be a labor force need of 37,000 and a labor force gap of 19,762. With additional jobs demand created by the DMC development, AECOM estimates that the gap could be as much as 21,800 jobs. The Mayo Clinic and DMC growth will create more opportunities and also more demand for qualified employees from outside the area.
- The primary economic driver for the greater Rochester-Olmsted area, as well as for the DMC, is the Mayo Clinic. The envisioned economic development strategy is the creation of more bio-med-tech clusters, including established firms with relationships with the Mayo Clinic, established firms with a relationship to the sector but not connected to the Mayo Clinic, and start-up firms. These clusters will create opportunities to maximize Rochester's natural advantages.
- Older STEM workers in the Rochester area are reaching retirement, and new bio-med-tech businesses that are a key element of the DMC growth and expansion will need to attract a younger workforce. This new workforce will create demand for housing, retail, dining and entertainment, health and wellness options, and other amenities.
- A critical aspect of the success of the DMC concept is the need to create a live-work environment that will be attractive to the younger workforce that will support the Mayo Clinic's growth, new bio-med-tech businesses, and other operations across a wide spectrum of uses. This will create an attractive location to live and work. The core areas for the DMC work together to offer a lifestyle

that will be attractive to new workers, and will continue to offer a high quality-of-life to current residents and employees. The "Millennial" generation of workers who will be recruitment targets for DMC expansion tend to favor more urban work environments. The lifestyle alternatives under consideration for the DMC are designed with this in mind.

COMMERCIAL RESEARCH AND TECHNOLOGY

- concept.
- a 20-year development program horizon.
- proximity to the Mayo Clinic and cutting edge research.

COMMERCIAL OFFICE

- buildings.
- Mayo Clinic.
- potential growth could reach up to 600,000 square feet over the next 20 years.

HOTELS & HOSPITALITY

- occupancy rate of 62.2%.
- 10.5% annually between 2014 and 2034, averaging 1.9%.
- the period 2014 through 2034.

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 Our research suggests that a mixed-use research park would offer the best format for developing bio-med-tech in the DMC and for creating the jobs-driver needed to support a larger development

Analog research suggests that a research cluster of approximately 650,000 to 1,000,000 square feet, in addition to research facilities at the Mayo Clinic, is an appropriate scaled development. The research cluster would average approximately 250,000 to 300,000 square feet per 5-year phase over

• The research cluster should present a collaborative physical and program structure that emphasizes

There is limited demand for traditional commercial office space in downtown Rochester due to a relatively large difference in asking rents between space downtown and space in suburban office

 There are office uses included in the estimated space for the research cluster, the educational space in the University of Minnesota Rochester (UMR) campus, and the estimated growth space at the

AECOM estimates that the amount of office space needed downtown by 2034 is 225,000 square feet. However, with more aggressive capture rates, targeted development, potential incentives, and the allure of being part of a dynamic downtown, the amount of office space needed to accommodate

The downtown Rochester submarket has 16 properties with 2,794 rooms. Occupancy in this submarket peaked in 1998 at 69.3%. In 2013, occupancy averaged 64.1%. This compares to a market

• The supply of hotel rooms in the downtown submarket is expected to grow at an annual rate of 0 to

It is estimated that seven hotels totaling 1,304 rooms will enter the DMC downtown market during

 Rochester will most likely remain a third-tier regional meetings destination during the period covered by this analysis because of its size, economic growth prospects, limited air service, and location.



 The "new" expanded Mayo Civic Center should be able to outperform the competitive set. Similarly, increasing sales staffing and budget (together with goal setting and accountability) should also result in further increases in market share.

RETAIL, DINING, AND ENTERTAINMENT (RDE)

- Markets supporting retail, dining, and entertainment (RDE) development in Rochester include residential markets inside the DMC, in Rochester excluding the DMC area, Olmsted County excluding Rochester, students at UMR, employees inside the DMC, visitors (tourists, patients, conferences and events, business), and "inflow" (other expenditures from outside sources).
- Preliminary estimates of retail demand in the DMC area from 2015 to 2039 range from 206,000 to 348,000 square feet, including entertainment space as a cultural arts center.
- Demand will be primarily driven by residential growth and employment from the DMC project.
- For shopping, goods stores account for 46% of demand, food and beverage stores (consumed at home) account for 29% of demand, and restaurants account for 20% of demand.

RESIDENTIAL

- It is estimated that 2,200 to 3,100 units of for-sale and for-rent housing would be needed in the DMC.
- The DMC should contain a range of housing types: for-sale multi-family, for-rent multi-family, high-rise, duplexes, and townhomes.
- Inclusionary zoning or housing development incentives will be needed to ensure a housing mix that includes affordable and workforce units, as well as market-rate units.
- New employment in the DMC and resulting new households serve as a multiplier of demand for neighborhood-serving businesses.

OTHER **A**REAS OF **F**OCUS

- The DMC learning environment should include lifelong learning opportunities, from pre-school to older adult/continuing education.
- Health and wellness goes beyond the Mayo Clinic's efforts to include design that encourages healthy lifestyles.
- Sports and recreation can include organized sports leagues, but also low- and no-cost activities such as biking and hiking on public trails.

5.2 GENERAL LIMITING CONDITIONS

In the performance of its services on behalf of Destination Medical Center Economic Development Agency ("EDA") and Destination Medical Center Corporation ("DMCC", collectively with EDA, the "Client"), AECOM Technical Services, Inc., ("AECOM") (a) is not recommending any action be taken by EDA or DMCC; (b) is not acting as a municipal advisor to EDA or DMCC and does not owe a fiduciary duty pursuant to Section 15B of the Securities Exchange Act of 1934, as amended by the Dodd-Frank Wall Street Reform and Consumer Protection Act, to EDA or DMCC with respect to the information and material contained in this communication or any project deliverable; and (c) is acting in its own interests. EDA and DMCC should discuss any information and material contained in this communication and project deliverable with EDA and DMCC's internal and/or external advisors and experts that it deems appropriate before acting on analyses and/or recommendations provided by AECOM in connection with the proposed assignment.

It is agreed by the Client that the report is not to be used in conjunction with any public or private offering of debt or equity securities without prior written consent. In the event AECOM provides written consent, Client shall ensure that it conspicuously notes on released offering of securities documents that AECOM shall not be deemed to be an "expert" within the meaning of Section 11 of the Securities Act of 1933, as amended ("Securities Act"), or within the category of persons whose consent is required by Section 7 of the Securities Act.

AECOM will devote effort consistent with (i) the level of diligence defined in Article 2.4 of this Consulting Services Agreement and (ii) the time and budget available for its work, to ensure that the data contained in this report is accurate as of the date of its preparation. The study will be based on estimates, assumptions and other information developed by AECOM from its independent research effort, general knowledge of the industry, and information provided by and consultations with the Client and the Client's representatives. No responsibility is assumed for inaccuracies in reporting by the Client, the Client's agents and representatives, or any third party data source used in preparing or presenting this study. AECOM assumes no duty to update the information contained in the study unless it is separately retained to do so pursuant to a written agreement signed by AECOM and the Client.

It is understood by the Client that AECOM can make no guarantees concerning the recommendations which will result from the proposed assignment, since these recommendations must be based upon facts discovered by AECOM during the course of the study and those conditions existing as of the date of the report. To protect you and other Clients, and to ensure that the research results of AECOM's work will continue to be accepted as objective and impartial by the business community, it is understood that our fee for the undertaking of this project is in no way dependent upon the specific conclusions reached or the nature of the advice given by us in our report to you.

AECOM's findings represent its professional judgment. Neither AECOM nor its parent corporation, nor their respective affiliates, makes any warranty, expressed or implied, with respect to any information or methods disclosed in this document.



AECOM has served solely in the capacity of consultant and has not rendered any expert opinions in connection with the subject matter hereof. Any changes made to the study, or any use of the study not specifically identified in the agreement between the Client and AECOM or otherwise expressly approved in writing by AECOM, shall be at the sole risk of the party making such changes or adopting such use.

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This document may include "forward looking statements". These statements relate to AECOM's expectations, beliefs, intentions or strategies regarding the future. These statements may be identified by the use of words like "anticipate," "believe," "estimate," "expect," "intend," "may," "plan," "project," "will," "should," "seek," and similar expressions. The forward looking statements reflect AECOM's views and assumptions with respect to future events as of the date of this study and are subject to future economic conditions, and other risks and uncertainties. Actual and future results and trends could differ materially from those set forth in such statements due to various factors, including, without limitation, those discussed in this study. These factors are beyond AECOM's ability to control or predict. Accordingly, AECOM makes no warranty or representation that any of the projected values or results contained in this study will actually be achieved.

This study is gualified in its entirety by, and should be considered in light of, these limitations, conditions and considerations.

5.3 INTRODUCTION

The Destination Medical Center (DMC) Economic Development Agency (EDA) engaged AECOM Technical Services, Inc. (AECOM) to support its objective to prepare a program and strategy for the DMC to be developed in Rochester, Minnesota.

The purpose of the DMC concept is to transform Rochester into one of America's model destination cities based on its position as an international leader in medical research, treatment, and innovation. Although the impact of the DMC will reach throughout the region and state, the physical center of the DMC is an area that includes the core of downtown Rochester and adjacent areas (Figure 5-1) that form a concentration of mixed uses that support and complement economic development and job growth. The DMC Strategic Plan complements the Rochester Downtown Master Plan.

Growth will be centered around eight core elements of investment and development, which will be the focal point of private investment in the community:

- 1. Health and Wellness
- 2. Commercial Research and Technology
- 3. Retail, Dining, Entertainment, Arts, and Culture
- 4. Sports and Recreation
- 5. Livable City
- 6. Learning Environment
- 7. Hospitality and Conventions
- 8. Transportation

AECOM participated in public information forums, group and individual stakeholder meetings, planning team discussions, and meetings with staff and officials from the City of Rochester, County of Olmsted, the Rochester Area Economic Development (RAEDI), the Mayo Clinic, and the Convention and Visitors Bureau; realtors; property owners; developers; housing advocates; neighborhood representatives; and business owners.

As an economic development strategy, the DMC is one of several concurrent efforts in Rochester and Olmsted County to foster and expand the area's position as a major employment center and an economic driver for the state and region, while improving its attraction as a place to live, work, and create business opportunities.

The Rochester area presents a high quality of life. It has excellent residential neighborhoods, growing employment opportunities, and educational opportunities. In fact, it already has what many cities across the country strive to have.







FIGURE 5-2 - AERIAL IMAGE OF DESTINATION MEDICAL CENTER STUDY AREA

But Rochester is also unique. It has an internationally known medical institution that serves as an economic engine, the Mayo Clinic. As a result, the Rochester area offers an opportunity for bio-medical-technical development related to, and unrelated to, the Mayo Clinic.

The economic foundation that the Mayo Clinic provides allows for many of the quality-of-life advantages Rochester enjoys. But Rochester, Olmsted County, and the State of Minnesota recognize that the Mayo Clinic economic engine is not without competitors and challenges. And there is no luxury of status quo: Things will not stay the same. As the Mayo Clinic grows and evolves with the changes in the medical sector, the city and region must continue to attract the highest-quality employees, not just for the Mayo Clinic, but also for the potential new bio-science and technology businesses that are interested in the DMC. These new jobs and households would fuel demand for service businesses, cultural programs, new amenities, and educational experiences.

The challenge of the DMC is how to catalyze growth, understand and capitalize on market opportunities, and prepare the economic environment for private investment and public/private partnerships while balancing the desire to foster a healthy, inclusive, and inviting community.

Note: The following data are reported by the County of Olmsted, the City of Rochester, and a variety of other geographies. Whenever possible, the boundaries of the DMC study area was used. Some sources used Census block groups or proprietary "downtown" boundaries. Generally, "downtown" includes the DMC project area, but may include some adjacent areas that also include the Saint Marys Campus.

5.4 DEMOGRAPHICS

AECOM evaluated historic and projected demographic and employment trends to identify key drivers of demand that will inform development perimeters for DMC planning. The demographic and employment analysis places the DMC in a broader context, focused on how the region has performed in comparison to the State of Minnesota.

This section also focuses on key challenges facing employers in the City of Rochester and Olmsted County relating to finding a new workforce to replace retiring baby boomers. However, this projected loss of jobs will also lead to new opportunities to attract labor for the job openings that will be created in the future.

The DMC planning area is located in downtown Rochester (Figure 5-2). The City of Rochester is located in Olmsted County in the southeast area of Minnesota. The regional transportation network includes Interstate (I) 90, US Route (US) 14, US-52, and US-63.

The City of Rochester is located approximately

- 1.5 hours from Minneapolis/St. Paul
- 3.5 hours from Madison, Wisconsin; Sioux Falls, South Dakota; and Des Moines, Iowa



5.4.1 HISTORIC POPULATION

In 2013, there were an estimated 110,337 people living in Rochester, nearly three-guarters of the people living in Olmsted County. Since 1980, Rochester has captured an increasing share of growth in Olmsted County.

Additional population growth details:

- From 1980 to 2013, Olmsted County grew by approximately 57,000 residents, averaging a growth of 1,700 people per year. More than 90% of this growth occurred in the City of Rochester, increasing the population of city residents from 63% to 74% of the County population (Figure 5-3).
- While Olmsted County grew 62% in the past 30+ years, the City of Rochester nearly doubled in population, increasing 90% since 1980.
- The compound annual growth rate in the City of Rochester was twice the annual growth rate in Olmsted County: 2.0% compared to 1.5%, respectively.
- The population growth index illustrates that both the City of Rochester and Olmsted County have grown at a faster pace than Minnesota as a whole since 1980 (Figure 5-4).

With a greater share of the county population living inside the City of Rochester, there is greater demand for city services. It might be assumed that this population has a greater affinity for planned areas that have more density and form. It might also be assumed that the growth in city population offers an opportunity to develop more amenities such as retail goods and services, recreational opportunities, and arts and cultural offerings.

Population growth projections within the City of Rochester may be affected by the success of the DMC. Should the new development and job growth meet objectives, there will likely be growth in the "millennials" population, a target group for new jobs creation within the DMC. Population growth projections based on historic growth does not reflect the growth that may be shaped by the DMC developments.

5.4.2 POPULATION AND HOUSEHOLD PROJECTIONS

According to the State of Minnesota, Olmsted County is projected to be the eighth fastest-growing county in Minnesota. The City of Rochester is projected to continue to comprise an increasing share of Olmsted County's population, surpassing 77% of the population by 2040 (Figure 5-5).

The population index (Figure 5-6) illustrates how the population of both Olmsted County and the City of Rochester are projected to grow more quickly than the population of Minnesota. Additional population growth details include the following:

From 2010 to 2040, Olmsted County will grow by about 71,000 people, according to Rochester-Olmsted Council of Governments (ROCOG) projections. This comes to an overall increase of about





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49% and an average annual growth rate of 1.3%. This compares to 57,000 new residents between 1980 and 2013.

Maxfield Research prepared a Housing Needs Assessment for Olmsted County and Rochester, projecting demand from 2013 to 2030.

- households (42%) at an annual rate of 1.8%.

Looking ahead at the potential population growth that may occur as a result of DMC development, AECOM identified population changes that should be considered:

- closely tied to attraction of members of this age cohort.

- options.
- 47% of millennials would give up their cars if their city had robust public transportation.

The DMC should allow for this preference and develop transit, bike, and other transit modes to appeal to and attract the workforce population necessary for DMC success.

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Eighty-two percent of the growth in Olmsted County is projected to occur in the City of Rochester.

In the City of Rochester, the population increase will be slightly greater than Olmsted County, with a growth of 54%, or an annual growth rate of 1.5%. Between 1980 and 2013 there were nearly 52,500 new residents. Between 2010 and 2040, the ROCOG estimates that the population of Rochester will grow by 57,900.

From 1990 to 2010, the City of Rochester grew by about 15,000 households (54%) at an annual rate of 2.2%. Meanwhile, Olmsted County grew by about 17,000 households (42%) at an annual rate of 1.8%.

From 2010 to 2030, Maxfield Research projects that the City of Rochester will grow by 20,000 households (47%) at an annual rate of 2.2%. Olmsted County is projected to grow by about 24,000

Population growth resulting from job growth in the bio-medical-tech sector as part of the DMC development strategy will likely include a high number of people who would be considered part of the "millennials" age cohort. Born between 1982 and 1993, there are more than 80 million people in this cohort in the US. Approximately one in every three employees in the US is a millennial, a critical component of the DMC's job creation strategy. DMC development should considered that success is

The millennial group seems to prefer urban, walkable locations that provide a work-life balance. The DMC concept and core areas can be presented as supporting the values of this age cohort.

 Housing types; retail, dining, and entertainment offerings; and health, wellness, sports, and recreation offerings should be developed in harmony with the lifestyle and lifecycle needs of this cohort.

• The Rockefeller Foundation and Transportation for America found the following in a 2014 study:

54% of millennial respondents would consider moving if another city had more and better transit

Cities that do not invest in effective transit solutions today stand to lose out in the long-run.



5.5 LABOR FORCE

UNEMPLOYMENT

Since 2004, the unemployment rate of the City of Rochester and Olmsted County have been similar and consistently lower than the unemployment rate of Minnesota (Figure 5-7). As of 2013, the unemployment rate of the City of Rochester was 4.2%, nearly identical to the 4.1% in Olmsted County and lower than the 5.1% rate in Minnesota.

The unemployment rate in Rochester and Olmsted County remained less than 5% until 2009, when it peaked to more than 6%. Unemployment is currently at pre-recession levels for both the City of Rochester and Olmsted County. Unemployment rates at all levels of geographies (city, county, and state) were significantly lower than national levels of unemployment during the recession, when unemployment reached 10% in 2009 (it has now dropped to approximately 6%).

EMPLOYMENT **C**OMPARISON

The Employment Index (Figure 5-8) shows how the City of Rochester has gained jobs at a faster rate than both Olmsted County and Minnesota. The City of Rochester demonstrated its economic strength with relative job stability during the last recession.



FIGURE 5-7 - UNEMPLOYMENT RATE (SOURCE: BUREAU OF LABOR STATISTICS)



FIGURE 5-8 - EMPLOYMENT INDEX (SOURCE: BUREAU OF LABOR STATISTICS)

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Health & Social Svcs Other Svcs Retail Lodging /F&B #F.I.R.E. ■ Manuf Construction Local Govt/Ed Business Svcs Information Fed & State Govt Trans/Whse/Util Wholesale Farm = Mining Ag Serv/Nat. Res FIGURE 5-10 - EMPLOYMENT PROFILE, OLMSTED COUNTY, 2010

5.5.1 HISTORIC EMPLOYMENT IN OLMSTED COUNTY From 1990 to 2010, employment in Olmsted County grew by 40%, or 1.5% per year. The annual rate of increase from 2000 to 2010 was 0.3%, much lower than historical growth, due to the last recession (Figure 5-9). The current employment profile of Olmsted County indicates that the local economy is driven by the Mayo Clinic. Nearly two out of five jobs in Olmsted County are in health care and social assistance (Figure 5-10).

The employment profile of Olmsted County has changed significantly since 1990. Health care and social services employment has almost doubled over the last 20 years (Figure 5-11)

Other key industry changes include the following:

- The share in retail trade has declined from 12.6% to 10.7%.
- The share in manufacturing has declined from 15.2% to 7.2%.



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• The share of employment in health and related services increased from 27% in 1990 to 37% in 2010.



5.5.2 Shift Share Analysis

Another way to think of historic employment change is to consider the change in the context of national sectoral trends (Figure 5-12). Shift-share analysis attributes local growth to national trends and unique local factors. Regional job growth is split into three effects: industrial mix, national growth, and regional competitive effect. The "bubble diagram" chart (Figure 5-13) visually represents three factors:

- The X axis: "Industrial Mix Effect" shows the share of growth explained by growth of the sector at the national level. Movement to the right indicates sectors that are becoming more important in the national economy.
- The Y axis: "Regional Competitive Effect" shows the share of growth explained by growth beyond the national level of growth. It captures growth reflecting an increased competitive advantage of the sector in region.
- Bubble size represents the relative size of employment by industry as of 2012.

The national growth effect, which is not represented in Figure 5-13, explains how much of a region's industrial growth is explained by the national economy. If the nation's economy is growing, all else held equal, growth in the local economy in each industry would be expected.

For Olmsted County, the larger "bubbles" represent sectors that are growing, such as health care, driven by Mayo Clinic growth and related industries. The information sector, although not as large as health care, is positioned for growth, as is the management sector.

The chart is built on historical and projected 2-digit industry data from 2002 through 2012.



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5.5.3 LIVING AND WORKING DOWNTOWN

AECOM estimated the share of population and employment located in downtown Rochester and eight comparative locations in the US. These cities were chosen for their comparable size and scale, and presence of a major medical center or institutional employer close to downtown. A 0.5-mile radius was used to determine the area of downtown. The center of the circle was determined by first locating concentrations of existing employment density and adjusting to capture the downtown area as defined by community plan areas. The following observations were made about population concentrations in the downtown relative to the larger city area in the comparable locations:

- Approximately 4% of the City of Rochester's population lives in downtown, which is in the middle of the range of population share downtown among comparable locations (Figure 5-14).
- Madison, Wisconsin; Boulder, Colorado; Eugene, Oregon; and Ann Arbor, Michigan have 6 to 13% of the population located in the identified downtown area.

The following observations were made about population and employment concentrations in the downtown of the comparable locations (Figure 5-15):

- The ratio of population-to-employment in downtown Rochester is 5% and represents the lowest population relative to downtown employment of all comparable areas.
- In contrast, Eugene, Oregon, has the highest population-to-employment ratio downtown (72%).







SOURCE: ONTHEMAP (U.S. CENSUS), ESRI A

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	72%	
	63%	
41%		
37%		

	370		
		13%	
LIVING D ND AECO	DOWNTOWN, 20 DM)	10	



Distance	Average, 2002–2011	Direction	Average, 2002–2011
Less than 10 miles	65%	North	16%
10 to 24 miles	18%	Northeast	9%
25 to 50 miles	8%	East	10%
Greater than 50 miles	9%	Southeast	13%
		South	12%
		Southwest	8%
		West	14%
		Northwest	19%



5.5.4 EMPLOYMENT IN ROCHESTER With such a high concentration of jobs in downtown Rochester and relatively low share of people there, the central business district draws workers from throughout the region as shown in Figures 5-16 and 5-17.

Data from On the Map from 2002 to 2011 shows where Rochester workers live:

- On average, nearly 53% of those working in Rochester also live in Rochester.
- 65% of workers in Rochester commute less than 10 miles to work (Figure 5-16).
- Nearly 19% of workers commute from the northwest and 16% come from the north (Figure 5-17).
- Less than 1% of workers come from Minneapolis to work in Rochester.

(SOURCE: U.S. CENSUS, ON THE MAP)



5.5.5 EMPLOYMENT PROJECTIONS

From 2010 to 2040, the ROCOG forecasts employment in Olmsted County to increase by 53%, or by more than 57,000 jobs (Figure 5-18). The sectoral composition of employment will drastically shift in the region away from farming and toward service-oriented industries (Figure 5-19).

- Health and social services are predicted to make up an increasing share of employment. In 1990, health and social services made up 26% of employment in Olmsted County; by 2040, the sector will comprise 39% of employment.
- The information sector is forecasted to have the highest annual growth rate of 2.6%, partially due to its relatively low current level.
- Farm employment is the only sector forecasted to lose employment, with an average annual rate of decline of 0.9%.





SOURCES: ROCHESTER-OLMSTED COUNC

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Age	2010	2040	Growth	Share of Growth
0 to 24	47,747	64,765	17,018	24%
25 to 44	40,200	52,735	12,535	18%
45 to 64	38,168	45,366	7,198	10%
65+	18,133	52,332	34,199	48%
Total	144,248	215,198	70,950	100%

FIGURE 5-20 - POPULATION CHANGE BY AGE COHORT, OLMSTED COUNTY (SOURCE: ROCHESTER-OLMSTED COUNCIL OF GOVERNMENTS)

	Change 2000–2012
Births	26,627
Deaths	10,406
Natural Increase	16,221
International Net Migration	6,258
Domestic Net Migration	178
Total Net Migration	6,436

5.5.6 LABOR FORCE CHALLENGES **PROJECTIONS BY AGE COHORT**

The population increase in Olmsted County is estimated to vary significantly among age cohorts (Figure 5-20).

- age group. These are likely current residents of Olmsted County.
- 0 to 24).

NET MIGRATION

As a result of the projected population trends, ROCOG estimates that net migration needs to increase by a factor of two to three times above historic levels to meet future labor force needs. ROCOG illustrates the impact of this issue with information from 2000 to 2012 (Figure 5-21).

Key findings are as follows:

- International net migration accounted for 97% of total net migration.
- Only 3% of net migration was from within the US.

LABOR GAP

An upcoming challenge for Rochester employers will be filling the labor force gap created by the increase in jobs and the retirement of the Baby Boomer generation. If the labor force participation rate (LFPR) remains constant as people age, the labor force need will outpace the labor force growth in Olmsted County by approximately 22,000 (Figure 5-22). The ROCOG suggests that some of the gap may be filled from keeping Baby Boomers in the work force and an increase in net commuting from outside of the county.

ROCOG estimates that the older adult LFPR will double from 24% to 48%. This predicted increase would occur because of the following:

- 60 to 70.
- Older adults are remaining healthy for a longer time.
- Eligibility for full Social Security benefits occurs at older ages than it did historically.

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In 2010, there were 18,133 people over the age of 65. By 2040, the ROCOG projects that this age group will increase to 52,332. Nearly half of the population growth projected by 2040 will be in this

The core of the workforce, those between 25 and 65 years old, will grow by 19,700 residents. This group currently makes up 54% of Olmsted County's population. By 2040, this will fall to 47%.

Nearly one-quarter of the projected population growth will be by children and young adults (ages

Natural increase accounted for nearly three-quarters of population change in Olmsted County.

Much of the older adult population growth over the next 20 years will be in younger seniors, ages



The remaining gap may be made up by migration to the county or by existing regional residents commuting from surrounding counties. Net commuting increased 40% from 2000 to 2010, partially due to the concentration of jobs in Olmsted County. From 2000 to 2012, Olmsted County employment grew by 8,335 jobs, while many surrounding counties lost jobs.

5.5.7 THE SCIENCE GAP

The science gap, the trend of Americans being less attracted to careers in science, technology, engineering, and mathematics (STEM), may affect the future of the DMC.

- One of the key challenges in the US is that the science and engineering (S&E) workforce is trending older. From 1993 to 2013, the share of the S&E workforce aged greater than 50 years increased from 20 to 33% (Figure 5-23). This same age cohort is approaching retirement. One question is, can older S&E workers be encouraged to continue to work full- or part-time past retirement age?
- Foreign-born staff are increasingly filling American laboratory and technical jobs. Competing countries are training qualified personnel quickly, and American companies are outsourcing some research to countries with lower wages. In 2013, the Economic Policy Institute concluded that the United States has more than a sufficient supply of workers available to work in STEM occupations. Other industry sources suggest that, although there may be enough STEM workers being produced in the US for every job, it is the demand for STEM competencies that exceed the supply. This debate is closely connected to the policy considerations regarding H-1B visas. One out of every five engineering graduates from American universities is foreign born. At the master's degree level, the ratio is closer to one out of every two. And 56% of doctoral grads in engineering were from abroad in 2011. The more advanced the education level, the higher probability that STEM graduates are foreign born.
- The challenge for Rochester and the DMC remains how to provide employment opportunities that are financially, professionally, and socially attractive to members of the STEM workforce in an increasingly competitive job market. The social aspect of this equation should not be underestimated, as workers have a broad choice of job locations across the US. The total DMC offering becomes part of the job attraction for prospective employees, and part of the job offering from employers who want to attract the best and brightest.

Age Cohort	2010	2030	Growth	LFPR*	Labor Force Growth
0 to 19	39,508	49,529	10,021	10%	1,002
20 to 59	79,703	90,656	10,953	90%	7,104
60+	25,037	52,178	27,141	24%	6,378
Total	144,248	192,364	48,116	36%	17,238
Labor Force Grow	th Need				37,000
Labor Force Gap					19,762
				* Labor Fo	rce Participation Rate

FIGURE 5-22 - OLMSTED COUNTY LABOR FORCE GAP (SOURCE: ROCHESTER-OLMSTED COUNCIL OF GOVERNMENTS AND AECOM)



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5.5.8 MEDIAN HOUSEHOLD INCOME

Households in the City of Rochester fall into slightly lower income bands, on average, than households in Olmsted County, but the general income distribution picture as of 2014 is very similar for the two geographies.

Key household income details include the following:

- than \$50,000 in comparison to the state (Figure 5-24).
- (Figure 5-25).
- been a decline in MHI in Rochester since 2005, once adjusting for inflation (Figure 5-26).



DEVELOPMENT PL **DESTINATION MEDICAL CENTER** DRAFT

In both the City of Rochester and Olmsted County, there is a lower share of households earning less

• Approximately 30% of households in both the City of Rochester and Olmsted County are highearner households, earning more than \$100,000, compared to 25% oh households in Minnesota

• The median household income (MHI) in Rochester is about 4% lower than the MHI of Olmsted County and 8% higher than the MHI of Minnesota. While higher than the state and US, there has



5.6 DMC CORE AREAS – ECONOMIC OPPORTUNITIES ANALYSIS

The DMC Master Plan will guide development program planning and ensure that the plan meets the objectives established for the DMC. The market analysis is primarily focused on assessing market feasibility of the DMC concept and to inform development programming and economic and fiscal impacts analysis.

Market feasibility is composed of several components that are critical to identifying market-supportable development potential around the delineated DMC and in the downtown area. The analysis includes the following:

- 1. **Demographic & Economic Profile.** Examines "drivers" of demand for visitor-serving hospitality/ hotels and entertainment venues; commercial office space; residential units (for-sale and for-rent); employment trends and forecasts; household income; customer spending profiles; age cohorts (e.g., population/household growth trends and forecasts); workforce composition; visitor and household retail spending; and visitor and convention trends.
- 2. **Real Estate Market Conditions Analysis.** Evaluates characteristics and trends among specific uses associated with the DMC core focus areas (e.g., inventory, leasing/absorption activity, rents, sales, new construction, proposed development), looking closely at existing and developing competition to the DMC.
- 3. **Demand/Development Potentials.** Measures prospective development program(s) in the DMC area by testing market support for specific uses and phasing strategies.

BASE DOCUMENT REVIEW

To understand the context in which the DMC is to be developed, AECOM reviewed the following data:

- Rochester Downtown Master Plan (RDMP)
- University of Minnesota Rochester (UMR) Master Plan and programming documents
- Mayo Clinic 5-Year Plan Update
- City of Rochester Capital Improvement Plan
- Infrastructure Master Plan
- Information prepared in advance of the initial DMC concept
- Other information as provided by the EDA, the City of Rochester, the County of Olmsted, and the Mayo Clinic

AECOM participated in meetings with the consulting team, EDA and City of Rochester staff, and other representatives to understand current project issues, confirm current site plans/uses, review relevant supporting documentation such as previous studies, understand other project issues, and identify relevant contacts and administrative protocols for field research.

The AECOM team used site visits to better understand current site conditions in the DMC, the downtown, and Rochester (e.g., key economic roles and relationships between and among the sub-districts, historic structures or districts, projects in construction, connectivity with surrounding neighborhoods and the county, traffic/transit patterns and accessibility).

STAKEHOLDER INTERVIEWS

AECOM conducted in-person and/or telephone interviews with stakeholders identified in consultation with EDA staff. Interviews were conducted with selected commercial real estate specialists, development/ institutional representatives, hotel managers, Convention and Visitors Bureau officials, meeting and event planners, retailers, technology company entrepreneurs, venture capital firms, and other market sources in Rochester. Interviews were designed to do the following:

- Gauge market response to ongoing plann concept
- Assess views of competitive product types, absorption potentials, target markets, meeting/ conference potentials, pricing, development costs, and other economic issues
- Address current strengths and weaknesses of downtown Rochester, Rochester in general, and the DMC area, and the experience of comparable and competitive projects and uses

ECONOMIC & **D**EMOGRAPHIC **P**ROFILE

AECOM prepared an economic and demographic profile to evaluate appropriate economic indices or "drivers" designed to measure fundamental sources of demand for the proposed uses, including population and household growth trends and forecasts, age distribution and cohorts to understand demand for new housing, and other uses.

AECOM examined employment growth and distribution trends and forecasts, and characteristics of specific employment sectors to understand potential demand for workplace uses such as professional and medical offices.

AECOM reviewed household, visitor, and employee retail spending patterns based on available data and other measures of economic growth that inform potential supporting retail, food service, and leisure/ entertainment uses in the DMC.

MAJOR ECONOMIC DRIVERS

AECOM reviewed and collected new data regarding the primary economic drivers affecting long-term development potential of the DMC, the downtown, and the adjacent sub-districts: employment categories and growth in the Rochester central business district, housing patterns and pricing, demand trends by major category (to be explored in greater detail in the use-specific demand analyses conducted later in this task), interim and long-term development policies regarding the downtown or considered for the DMC

DEVELOPMENT PLAN DESTINATION MEDICAL CENTER DRAFT

Gauge market response to ongoing planning and redevelopment initiatives, such as the DMC





(reduced dependency on automobiles, improved/increased transit access to the DMC area, appropriate density increases for various categories, re-use/adaptation opportunities for selected existing buildings located in the DMC [whether designated as historic or non-historic redevelopment opportunities]), planning for new commercial/residential mixed-use projects in the DMC or downtown, and apparent opportunities and constraints resulting from the current development pipeline.

The economic overview used current available data. AECOM's primary source was geographic information systems (GIS) and demographic databases, augmented by the Census and other data provided by the EDA and the City of Rochester. This information was supplemented with specific market-supply findings and demographic information from other sources.

5.6.1 HEALTH & WELLNESS

The term wellness has been applied in many ways. According to the National Wellness Institute, there appears to be general consensus that wellness is

- A conscious, self-directed and evolving process of achieving full potential
- Multi-dimensional and holistic, encompassing lifestyle, mental and spiritual well-being, and the environment
- Positive and affirming

The definition of wellness used by the National Wellness Institute is that wellness is an active process through which people become aware of, and make choices toward, a more successful existence. The National Wellness Institute developed a six-dimensional model that demonstrates the interconnectedness of each and the contribution each makes toward healthy living. The six dimensions are physical, social, intellectual, spiritual, emotional, and occupational well-being (Figure 5-27). Others have expanded on this idea, and have included other components such as environmental and financial.

The field of urban planning grew out of concerns for public health and welfare as cities industrialized in the early 20th century, creating unsanitary conditions in factories and throughout neighborhoods. The focus of the design of the built environment was the health of a community defined in terms of the environment, economy, and equity, which led to a segregation of uses and sprawl, with the proliferation of automobiles and highways. Policies have changed over the years with a return to more traditional neighborhoods with a mix of uses and pedestrian and transit amenities in more compact areas.

Today, city planners are increasingly aware of the impacts of the built environment on public health, and health is playing a large role in design. Cities are focusing on the health and well-being of their employees and residents, wanting to create environments and opportunities for community members to improve their physical, mental, and spiritual well-being. This notion of wellness can include living spaces, social networks, economy, education, environment, transportation, and youth and family issues, as well as providing resources for health and illness.

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ess of achieving full potential



A healthy community can be generally characterized as having access to the following:

- Recreation and open space
- Healthy foods
- Medical services
- Public transit and safe, active transportation networks for walking and biking
- Quality affordable housing
- Clean air and water
- Economic opportunities

Healthy cities have complete, safe neighborhoods and public spaces; are focused on environmental quality; and have "green" and sustainable development and practices.

Healthy concepts have been integrated into parks and recreation plans, but have also become focal points in sustainability plans, transportation master plans, neighborhood plans, and economic development initiatives such as the DMC.

One of the goals of the DMC is to help develop Rochester to become an international attraction for those who are focused on wellness, not just coping with illness. That includes providing options for improving health and fitness, effectively managing the increase in visitors and residents, increasing the social connections that foster a vibrant community, and attracting highly trained young professionals to keep Rochester at the top in the health care field.

The Mayo Clinic is one of the largest not-for-profit health care organizations in the US, and has its beginnings in Rochester, Minnesota. Today, the economy of Rochester is driven by the Mayo Clinic, with more than 32,000 people employed at the Mayo Clinic and Hospital at Saint Marys Campus. Each year, the clinic is a destination for more than half a million patients at its facilities in Rochester, Arizona, and Florida.

The Mayo Clinic has been recognized for its high-quality patient care. US News and World Report named the Mayo Clinic as the best hospital in the nation in its 2014/2015 rankings. The magazine ranked the Mayo Clinic No. 1 in eight specialties: diabetes and endocrinology; ear, nose, and throat; gastroenterology and Gl surgery; geriatrics; gynecology; nephrology; neurology and neurosurgery; and pulmonology. The Mayo Clinic ranked No. 2 in three additional specialties: cardiology and heart surgery, orthopedics, and urology.

In addition to meeting the needs of its patients, the Mayo Clinic's other core missions include research and education. According to a 2008 report by Batelle, the Mayo Clinic commits \$390 million annually to research and education. The Minnesota Partnership for Biotechnology and Medical Genomics was formed in 2003 by the Mayo Clinic, the University of Minnesota, and the State of Minnesota to further bioscience research and innovation that improves health and saves lives while offering economic advantages to the state. By 2012, the partnership had launched more than 54 collaborative research teams to initiate projects to find disease solutions that can be commercialized. This partnership has the added benefit of growing the state's research infrastructure, recruiting new scientists to the state, and drawing in more than \$100 million in external research dollars, including more than \$60 million in grants from the National Institute of Health.

The Mayo Clinic is also developing future scientists, researchers, and medical staff through various offerings. The Mayo Medical School, which opened in 1972, receives nearly 5,000 applications every year. In 2014, the medical school accepted 94 students, and the class size is 45. Currently there are 195 students enrolled. As of fiscal year 2011, the Mayo Medical School had graduated 1,420 doctors since 1976. Of those, more than one-third (34%) stay and practice medicine in Minnesota. Other programs include the Mayo Graduate School, Mayo School of Graduate Medical Education, Mayo School of Health Sciences, and the Mayo School of Continuous Professional Development. In addition, the Mayo Clinic participates in program development at UMR.

The Mayo Clinic has a significant physical presence in Rochester. The downtown campus is nearly 109 acres. The Mayo Support Campus, outside of downtown, is an additional 57 acres. Mayo Clinic buildings, not including parking, comprise more than 7 million square feet of space downtown, 2.7 million at Saint







DEVELOPMENT PLAN DESTINATION MEDICAL CENTER DRAFT







FIGURE 5-28 - ESTIMATED SQUARE FOOTAGE OF MAYO CLINIC IN ROCHESTER, MINNESOTA (SOURCE: EDA AND AECOM)

Marys Campus, and 250,000 square feet at the Support Campus. In total, the Mayo Clinic owned nearly 15.6 million square feet of building space, including parking garages, as of 2011. Figure 5-28 shows an estimate for potential growth for the Mayo Clinic through 2035, assuming a moderate growth rate. At this pace, Mayo space may reach 19 million square feet by 2035. Based on this potential growth, an additional 6.8 million square feet for health and wellness are included in the proposed DMC development program.

MAYO CLINIC HEALTH AND WELLNESS INITIATIVES

In May 2014, the Dan Abraham Healthy Living Center opened with the goal of providing individualized wellness programs. Based on the Mayo Clinic's research on wellness and its affect on health, the Mayo Clinic Healthy Living Program was designed to help people achieve long-term, sustainable healthy behavior change, which has been shown to influence chronic diseases, morbidity, mortality, and the quality of life. The three pillars of wellness are physical activity, nutrition, and resiliency. Services include on-site assessments and ongoing coaching. Specifically, the Mayo Clinic offers the following:

Healthy Living PlanA 4-day wellness experience geared toward improving health and guality of life. Participants receive a comprehensive health assessment and have access to a personal wellness coach.

- participants work to reach their goals.
- treatments and integrative therapies.
- from Mayo Clinic. Each retreat is custom designed.
- as nutritious cooking, yoga, Pilates, stress management, and exercise classes.

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• Healthy Weight Plan. A 2-day on-site program with 12 months of post-visit digital and telephonic support. Guests receive access to Mayo Clinic experts in weight management and behavior change. The program delivers a personalized weight-loss plan and ongoing support and guidance as

• Healthy Living for Executives. A 1-day wellness experience that complements the Mayo Clinic Executive Health Program designed specifically for executives juggling the demands of a busy career. **Rejuvenate Spa Services.** Multiple therapies to enhance wellness, including an array of esthetic

Corporate Wellness Retreat. Business planning sessions can be combined with wellness services

• Healthy Living Classes. A variety of healthy living classes that complement wellness services such

EXECUTIVE HEALTH PROGRAM

The Executive Health Program is targeted to business executives and offers personalized, coordinated, and time-effective evaluations. The program includes a comprehensive medical history review and physical exam. Preventive screening tests are conducted, including a heart fitness evaluation. A lifestyle assessment is completed that focuses on approaches to nutrition, stress management, alcohol and tobacco use, personal safety, and other indicators of disease risk. In October 2013, the W. Hall Wendel Jr. Center for Executive Health was opened to offer patients increased benefits and amenities for executives, including the following:

- Private business offices
- On-site concierge services
- Nourishment bar with healthy snacks and beverages
- Increased nursing support
- On-site laboratory

TACOMA, WASHINGTON

The Tacoma-Pierce County Health Department developed a Built Environment Program with the vision of creating "smart and sustainable built environments promoting healthy communities." Through partnerships with policy makers, planners, and community members, the health department's goal is to ensure that communities are healthy and sustainable through the following:

- Encouraging land-use and transportation planning decisions based on a balanced triple-bottom-line approach: people, prosperity, and planet
- Engaging affected communities to help influence the shaping of their communities
- Addressing health disparities among diverse populations
- Mitigating public health risks

BOULDER, COLORADO

The Boulder County Civic Forum (BCCF) was formed with a grant from the Colorado Trust's Colorado Healthy Communities Initiative. The BCCF involved more than 400 citizens in a 2-year process of defining health from four perspectives: people, environment, economy, and culture and society. The BCCF mission statement, developed in 1995, is "to promote healthy decision-making that will sustain the environmental quality, livability, and economic vibrancy of the Boulder County region." The BCCF produced two Boulder County Community Indicators Reports, one in 1998 and another in 2000. These reports have helped measure community progress toward the BCCF vision.

One particular area of focus has been youth. The Youth Net Report was a significant project that produced strategies for youth development. One outcome was a comprehensive and integrated K-12 school health curriculum. The purpose of this program was to provide all kids at all levels with a more integrated approach to knowledge and skill development for health support and the prevention of a range of negative behaviors. The BCCF also created an after-school program at several junior high schools providing tutoring, leadership training, and constructive social interaction.

SPORTS MEDICINE AT MAYO CLINIC

Recently relocated in the Dan Abraham Healthy Living Center, the sports medicine program was started in the late 1980s. The focus has been to investigate all aspects of sports injury, treatment, and prevention to provide optimal treatment to those involved in sports- or fitness-related activities. The goal of the research is to enhance performance and decrease injuries during play.

The Mayo Clinic wants to grow several components of this program, including for amateur sports enthusiasts, the youth market, high school teams for training and assessment, and increasing treatment of sports-related injuries. As part of the focus on wellness, the Mayo Clinic wants to attract regional athletic programs to Rochester for specialized training. The Mayo Clinic would also like to expand into the elite sports medicine care and sports enhanced performance markets. The Mayo Clinic has partnered with the Minnesota Lynx and Timberwolves and opened a 20,000-square-foot facility in downtown Minneapolis.

Across the country, cities and communities are taking steps to become healthier.

HENRY FORD

In 2012, Henry Ford Bloomfield Hospital hired a resident farmer to grow organic produce hydroponically in a 1,500-squarefoot greenhouse. Funds for the \$1 million complex, including a 1,500-square-foot education center, were from an anonymous donor. In addition to reducing food costs for the hospital, the greenhouse provides patients with healthy meals. The produce is also used in the hospital's 90-seat demonstration kitchen, where cooking classes are offered to the community and served in the hospital café. The hospital also has a seasonal farmer's market that is open to the public. School field trips teach children about a healthier lifestyle, and the garden is open for physical, occupational, and behavioral therapy, as well as a place of respite for staff, patients, and visitors.



DEVELOPMENT PLAN DESTINATION MEDICAL CENTER DRAFT

HENRY FORD WEST BLOOM FIELD HOSPITAL, DETROIT,





5.6.2 COMMERCIAL, TECHNOLOGY & RESEARCH This section focuses on the potential for research and design (R&D) and technology commercial uses within the city and for the DMC. The analysis primarily focuses on the growing alignment between medical centers, universities, and life sciences. The analysis provides an overview of the "university research park" concept, its development characteristics, and its evolving role as an active driver of economic development. It also provides a summary of past and projected trends in venture capital investment in life science industries. In addition, a number of competitive facilities and comparable R&D and technology master plans have been evaluated.

UNIVERSITY RESEARCH PARK CONCEPT

The Association of University Research Parks defines a University Research Park (URP) as a property-based venture that has the following attributes:

- A property master plan designated for research and commercialization
- Partnership with at least one university or other research institution
- Encouragement of the establishment and growth of new companies
- Technology translation from the lab to the marketplace
- A focus on technology-led economic development

In general, URPs are created physical environments that can generate, attract, and retain technology companies and talent in alignment with sponsoring research institutions (e.g., universities, public/private research lab). A URP enables the flow of ideas between technology innovators and technology companies. The innovations, technologies, and intellectual properties generated by research institutions assist in creation of startup companies, retain and expand existing firms, and attract new business to the region (Figure 5-29).

UMR's program in Rochester is not research-related, although it may evolve that way in the future. The research institution driving the concept is the Mayo Clinic.



FACTORS FOR SUCCESS

According to the Association of University Research Parks survey (2012), there are six key attributes for success relating to innovation that were rated by the vast majority of URP directors as being "very high" or "high" importance to the success of the park:

- Good match between the core competency of the affiliated university and the recruited tenants
- Capacity to assist early-stage business organization in commercialization
- Access to equity capital sources for research park tenants
- Priority availability of multi-tenant space for incubator graduates
- Priority access to university resources, facilities, faculty, and staff (in the case of the DMC, access to the Mayo Clinic is a significant factor in this regard)
- Availability of a formal business incubator in the research park boundaries

Although the key factors differentiating URPs from science and technology parks and standard office/ business parks are the potential linkages with affiliated research/educational institution(s) and the new trends toward mixed-use, live/work/play environments, according to the 2012 survey, four of the top five reasons why tenants are located in a URP relate to quality of buildings, flexibility in leasing, reputation, and cost of locating in the research park. Thus, while university and research interactions are the key differentiating factor for URPs, the real estate basics of quality and cost are ultimately a critical factor in determining the development's success. The URS model is relevant to the DMC strategy, as it most closely resembles the potential relationship prospective companies may have with the Mayo Clinic, UMR, the Mayo Clinic Medical School, and any educational institution-affiliations Mayo may develop in the future.

ACCESS TO CAPITAL

URP directors indicated in the 2012 survey that the greatest challenge facing them is obtaining capital for park development and renovation. Similarly, another contemporary challenge for URPs is identifying, supporting, and growing a sufficient tenant base. A significant factor influencing the challenge of attracting tenants was a lack of capital available for tenants.

To examine historic trends associated with venture capital financing, AECOM used "The Money Tree Report," which is a quarterly study of venture capital investment activity in the US. AECOM examined life sciences venture funding (defined as investment in biotechnology and medical devices) at the national and regional levels to better understand order-of-magnitude capital available for start-ups most likely to be attracted to the DMC.

Biomedical refers to applying scientific advances to improve human health. The biomedical industry is composed of pharmaceutical, biotech, medical device, and diagnostics segments.

Biotechnology refers to developers of technology promoting drug development, disease treatment, and a deeper understanding of living organisms. It also includes human, animal, and industrial biotechnology products and services, as well as biosensors, biotechnology equipment, and pharmaceuticals.

Medical devices refers to companies that manufacture and/or sells medical instruments and devices, including medical diagnostic equipment (X-ray, CAT scan, MRI), medical therapeutic devices (drug delivery, surgical instruments, pacemakers, artificial organs), and other health-related products such as medical monitoring equipment, aids for people with disabilities, reading glasses, and contact lenses.







ACCESS TO CAPITAL (NATIONAL)

In the first quarter of 2014, venture capitalist invested \$9.5 billion in the life sciences, which represents the highest quarterly total since the second quarter of 2001 (Figure 5-30). However, life sciences venture funding is facing intense competition for venture capital compared to other sectors (Figure 5-31).

The life sciences share of total venture funding in the quarter decreased to 17% from 24% in the first quarter of 2013 and a peak of 32% in 2009. Venture capital dollars have moved away from the life science sectors such as like biotechnology and medical devices, which have longer investment duration and higher capital requirements, into shorter-duration and capital-light industries such as software. The majority of venture capital dollars were invested in the technology sector, which accounted for 64% of the total investment during the quarter.

The first quarter 2014 was the strongest on record for early stage investments for both medical devises and equipment and biotechnology funding. This robust performance indicates a positive outlook for the rest of the year, with life sciences venture investment for 2014 expected to be the strongest since the recession.



ACCESS TO CAPITAL (REGIONAL)

Figures 5-32, 5-33, and 5-34 illustrate the relative share of the North Central region of total life sciences investment in comparison to other regions that have historically led investment in the life sciences industries. Historically, Minnesota has received approximately 75% of the total venture capital funding in the North Central region. Since 1995, approximately 84% of the funding has gone to medical devices and equipment, and the remaining 16% has funded biotechnology.

On a per-deal basis, Minnesota has a higher average funding amount than the larger North Central region. However, compared to national venture capital for life sciences, the per-deal amount is significantly lower than the national average. This illustrates that other, more mature markets, such as San Diego, Silicon Valley, and New England, are attracting more deals with larger investment dollars (each region averages more than \$9 million per deal).

The Money Tree report may not include investment made by Mayo Clinic Health Solutions/Mayo Medical Ventures Fund, which operates as the investment arm of the Mayo Foundation for Medical Education and Research. The venture capital and private equity firm specializes in early stage, incubation, startup, mid venture, middle market, and mature investments. The potential availability of local funding is a unique attribute for the DMC.



Note: The North Central region includes Minnesota, Iowa, Wisconsin, North Dakota, South Dakota, and Nebraska.





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Cluster	Weighted Score	Rank
Boston Metro	86.9	1
San Francisco Bay Area	72.4	2
San Diego Metro	70.7	3
Raleigh-Durham	58.3	4
New Jersey/NYC/Westchester	55.4	5
Los Angeles/Orange County	51/5	6
Philadelphia Metro	50.2	7
Suburban Maryland/Washington, DC	47.0	8
Minneapolis/St. Paul metro	44.0	9
Seattle Metro	40.4	10

FIGURE 5-35 - 2014 SCIENCE CLUSTER SCORECARD (SOURCE: JONES LANG LASALLE)

COMPETITIVE POSITION AND TRENDS

LIFE SCIENCES SCORE CARD

The greater Minneapolis/St. Paul metro area ranked 9th based on Jones Lang LaSalle's proprietary life sciences scorecard (Figure 5-35). The scorecard uses several factors that measure the propensity for new industry growth in a metro area:

- Employment concentration (25%)
- Employment growth (10%)
- Establishment concentration (10%)
- Venture capital funding (20%)
- National Institute of Health funding (20%)
- Patents (15%)

LIFE SCIENCES EVOLVING TRENDS

A recent trend is the rise of virtual biotech companies that were born of the need to capitalize on fastmoving science in the current frugal venture-capital environment. In past decades, biotech firms were founded as fully integrated companies with their own labs and scientific teams pursuing multiple projects. Often, they would start with venture-capital funding before raising larger sums through public stock offerings.

This business model is not as prevalent now because financing is harder to find, in part because many expensive biotech investments did not pan out as well as investors had hoped, wanting quicker returns on their investment. Big shifts in the pharmaceutical industry, meanwhile, have helped make the virtual model possible. Large drug companies have laid off thousands of scientists, many of whom formed or joined contract research organizations that offer drug-development services. Biotech startups can now call on these firms to perform much of their laboratory and clinical work.

Increasingly, these companies generally start with one or two partners seeking to develop a scientific breakthrough. They keep overhead down by hiring consultants and outsourcing lab work. Those companies that maintain office space often share it with other virtual biotechnology firms in an incubator-like setting, similar to many co-working shared spaces that have become increasingly popular as alternatives to leasing office space.

The issue of decreased demand for physical space was also raised in the Association of University Research Parks survey. This trend may represent a challenge to DMC planning.

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Source: New Generation of Startups Aim to Keep Costs Low While Pursing Lofty Research Goals, Jeanne Whalen, Wall Street Journal,

June 4, 2014



UNIVERSITY RESEARCH PARK DEVELOPMENT

CRITICAL INTERACTIONS

The key factors differentiating a URP from a typical technology or business park is the meaningful interaction between companies in the URP and the park's affiliation with one or more research/educational institution(s). These interactions can include the following:

- Internship and employment opportunities for students
- Sharing facilities and equipment
- Conducting collaborative research

In addition, most URPs have a university presence within or near the park, which often includes research labs and education and training facilities. URP tenants conduct R&D; employ high concentrations of scientific, technical, and professional workers; and generate products or processes that are based on scientific or technological discoveries.

DEVELOPMENT TRENDS

Although the research park model has been in existence for nearly 60 years, the physical development of URPs continues to evolve. As shown in Figure 5-36, many trends reflect the changing nature of URPs.

As the predominate research park model, the URP provides a format that may be replicated by the DMC, working with the Mayo Clinic and potential partner universities. Proximity and access to Mayo Clinic research and institutes would be important success factors in a similar development as part of the DMC.

"Research parks are seen increasingly around the world as a means to create dynamic clusters that accelerate economic growth and international competitiveness. They are widely considered to be a proven tool to encourage the formation of innovative technology companies. They are also seen as an effective means to general employment and to make companies more competitive."

(Source: National Research Council)

Early Parks "Stand Alone"	19 Conn
Real estate operations Industrial park model No partnerships or incentives	Anch R&E Inr center inc Mul fa Som provid

FIGURE 5-36 - EVOLUTION OF UNIVERSITY RESEARCH PARK CONCEPT (SOURCES: AURP AND AECOM)

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990s nections"

nored with D facilities

novation rs and tech cubators

Iti-tenant acilities

ded directly

Post-2000 'Regional Economic Generator"

Mixed-use

Support to startups and entrepreneurs

> Formal accelerator space

Tenant firms partnering

More amenities (e.g., day care, wellness)

Niche positioning



MIXED-USE ENVIRONMENTS TO ENCOURAGE INNOVATION

IMPORTANCE OF MIXED-USE ENVIRONMENTS

URPs are being integrated into the urban fabric to create dynamic lifestyle communities that can better attract high-skilled and entrepreneurial technology professionals to a region. As such, the inclusion of housing, restaurants, retail, and hotel and conference centers are becoming common in recent URP planning.

Recent development trends suggest a move toward more urban environments characterized by mixed-uses and live-work-play attributes. According to the Association of University Research Parks, 35% of all URPs are located in urban areas. Since 2000, it is estimated that 40% of URPs have been developed in urban areas compared to approximately 30% prior to 2000. Also, the Association of University Research Parks research suggests that future URP development will include a more mixed-use environment to attract businesses and their employees.

In the 2012 Survey of North American University Research Parks, the share of reported URPs that include food/restaurants, retail, and housing was only 6%. However, within 5 years, the share of URPs that will include these amenities is projected to rise to approximately 20%.

INNOVATION DISTRICT CONCEPTS

The Brookings Institute Innovation Districts Report (2014) defines innovation districts as follows:

- Knowledge/technology-driven economy understanding the value and function of density and proximity
- Oriented toward open innovation, changing where firms locate and how buildings/districts are designed
- Shifting demographic and household dynamics that fuel demand for more walkable neighborhoods where housing, work, and amenities intermix

The following is a summary from the Brookings Institute's report regarding a model to facilitate innovation.

EXAMPLE: AN "ANCHOR PLUS" MODEL

The "anchor plus" model, primarily found in the downtowns and mid-towns of central cities, is where large-scale mixed-use development is centered around major anchor institutions and a rich base of related firms, entrepreneurs, and spin-off companies.

A vision for growth provides actionable guidance for how an innovation district should grow and develop in the short-, medium-, and long-term along economic, physical, and social dimensions. The innovation district @4240 (St. Louis, Missouri) was envisioned with advanced industries, housing, and revitalized public spaces.



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(Source: www.at4240.com)



REPRESENTATIVE URBAN RESEARCH/TECHNOLOGY CENTERS (PLANNED OR IN PROGRESS)

The following examples of representative urban research/technology centers provide an overview of development trends at competitive medical facilities and comparable medical districts to the DMC.

Figure 5-37 summarizes key attributes of the selected case studies. Specific information regarding each master planned development are presented in subsequent sections of this analysis.

CORTEX (ST. LOUIS, MISSOURI)

The goal of the Cortex Innovation Community district in St. Louis's Central West End is to promote biotech development in the St. Louis area. Cortex acts as a physical connector between the medical sciences industry and the institutions of higher learning, such as Washington University, Saint Louis University, and Barnes-Jewish Hospital.

The 240-acre district receives more than \$500 million in research funding from the National Institute of Health each year, ranking the district among the top in the country for funding. The Cortex district will ultimately provide 1 million square feet of space, all customizable. To date, \$155 million has been invested in the district, with another \$189 million currently being deployed.

Cortex began in 2002 with the creation of a non-profit consisting of Washington University in St. Louis, BJC Healthcare, University of Missouri – St. Louis, St. Louis University, and the Missouri Botanical Garden. The master plan for the area includes \$2.1 billion in construction, more than 4.5 million square feet of mixed-use development (research, office, clinical, residential, hotel, and retail), and a new light-rail station.

The site of the Cortex district is adjacent to numerous medical schools and research centers; Forest Park, an urban park offering cultural amenities; historic residential neighborhoods with affordable options for the workforce; and the bustling downtown of St. Louis. Several incubators support innovative technologies, including the Center for Emerging Technologies, the BioGenerator, and the Cambridge Innovation Center.

Parallels with the DMC plan include intention to build a mixed-use community among and adjacent to existing historic neighborhoods. The size and scale of the development presents an example of large-scale integrated planning.

THE SCIENCE + TECHNOLOGY PARK (BALTIMORE, MARYLAND)

Located in east Baltimore, Maryland, the Science + Technology Park at Johns Hopkins is part of an 80acre mixed-use development project (being developed by Forest City Enterprises) adjacent to the Johns Hopkins Medical Center. The initial 31-acre phase of development is planned to combine 1.5 million square feet of office and R&D space, 1,200 new or renovated residential units, a broad variety of retail services and amenities, and a network of parks and pedestrian links that will help connect the community with the adjacent Johns Hopkins campus.

			Bio/Med/ Office/	Square		
Urban Research/Technology Center	Location	Acres	Comm. (square feet)	Feet per Acre	Hotel Rooms	Residential Units
Cortex	St. Louis, MO	200.0	4.5 million	22,500	350	1,000
Science + Technology Park	Baltimore, MD	80.0	1.5 million	18,750	180	1,200
Phoenix Biomedical Campus	Phoenix, AZ	28.0	6.0 million	214,300	NA	NA
University Park at MIT	Cambridge, MA	27.0	1.5 million	55,500	210	530
Durham Innovation District	Durham, NC	10.0	1.1 million	110,000	NA	NA
Alexandria Center for Life Sciences	New York, NY	3.5	1.3 million	371,400	NA	NA
Average			2.7 million	132,100		

FIGURE 5-37 - EXAMPLES OF URBAN RESEARCH/TECHNOLOGY CENTERS (SOURCE: INDIVIDUAL FACILITIES AND AECOM)

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The first of the five planned life science/office facilities in the park is anchored by the Rangos Building, which includes 281,000 gross square feet of life sciences and R&D space. The facility is connected to other university research facilities via a sky bridge, and the building is intended to provide state-of-the-art facilities for organizations seeking to participate in joint research programs with Johns Hopkins. The university has pledged to make sophisticated research equipment elsewhere on its campus available to building tenants.

Other completed development includes four residential projects, which include approximately 550 residential units. Current development under construction includes a 1,450-space parking structure with ground floor retail, a 235,000-square-foot building for the Maryland Department of Health and Mental Hygiene, and the Henderson-Hopkins School.

The goals of the Science + Technology Park at Johns Hopkins are to bring new economic drivers to the city and to stabilize and recreate that portion of the east Baltimore community. The development is applicable to the DMC concept because housing and commercial uses are critical elements in the development plan. The master plan deemed housing as a necessary support use of the park because of the lack of suitable housing in the east Baltimore area. Like DMC's interrelated connections to the Mayo Clinic, this development leverages its proximity to Johns Hopkins by creating a needed link between the research park and the university.

PHOENIX BIOMEDICAL CAMPUS (PHOENIX, ARIZONA)

Located in downtown Phoenix, the Phoenix Biomedical Campus spans 28 acres. The area is anchored by a collaboration between two institutes of higher education: Arizona State University and the University of Arizona.

It is home to several research and medical organizations: the Mayo Clinic, St. Joseph's Hospital and Medical Center, the Translational Genomics Research Institute and the International Genomic Consortium headquarters, the National Institute of Diabetes and Digestive and Kidney Disorders, the University of Arizona College of Pharmacy-Phoenix, and VisionGate. The City of Phoenix owns the Phoenix Biomedical Campus.

A Downtown Phoenix Master Plan was adopted in 2004 to guide development through 2014. Part of the plan includes 6 million square feet of space at full build-out. To date, more than 615,000 square feet has been built in four buildings, with additional buildings under construction and planned. To attract the International Genomics Consortium, the City of Phoenix donated land and provided concessions of \$51 million for its facility and \$12 million in operating support.

The scale of the urban setting and facility may not be analogous to the DMC, but given the Mayo Clinic's presence within the region and its potential familiarity with the planning effort, this campus is a similar example of large-scale planning.

UNIVERSITY PARK AT MIT (BOSTON, MASSACHUSETTS)

University Park at the Massachusetts Institute of Technology (MIT) exemplifies a park placing a premium on amenities. In addition to 1.5 million square feet of wet-lab space in nine buildings and 530 residential units in five buildings, the park includes a 210-room hotel and conference center, two restaurants, a health club, a full-service grocery store, banking services, and a childcare center. MIT owns the land and the park developers hold long-term leases. The park is one of the largest private development projects in the city of Boston. The last new building on the MIT-owned land was completed in 2005.

The project began in 1984 and has been developed in five phases. The project's rental apartment development was more than the master plan originally called for, since demand for housing in Cambridge outstripped that for office space by the time of the project's completion. The inclusion of the Hotel@MIT was designed to provide the necessary accommodation and conference center space for university and existing businesses at the research park.

The scale of the urban setting of University Park at MIT may not be analogous to the DMC, but the premium placed on support amenities in research parks may be illustrative. Moreover, the trend toward the inclusion of housing and hotel space is appropriate for consideration in DMC planning.

DURHAM INNOVATION DISTRICT (DURHAM, NORTH CAROLINA)

Longfellow, a Boston-based real estate firm, and Duke University are partnering to develop the Innovation District life sciences hub in downtown Durham. Longfellow's portfolio includes a 180,000-square-foot development in Research Triangle Park, a recently renovated Research Lab (a former Liggett & Myers building), and the near-complete transformation of downtown Durham's Carmichael Building from a tobacco warehouse to Class A laboratory and office space. In all, Longfellow's investment amounts to around \$125 million, with more planned.

To help facilitate growth of life sciences in Durham, the firm awarded grants to the Duke University Talent Identification Program and to Durham Technical Community College. The City of Durham was also awarded funding by Longfellow through a grant to the Durham Chamber Legacy Foundation. The grants total \$260,000. Each grant recipient will use its funds to provide academic resources and financial aid to promising Durham-area students who are pursuing STEM-related fields of study. Students in grades 4 through college are expected to benefit from the grant.

The development is in a comparable-scale downtown environment, with a strong university partnership and aspirations of economic development.

ALEXANDRIA LIFE SCIENCE CENTER (NEW YORK, NEW YORK)

The Alexandria Center for Life Science is a 310,000-square-foot, 15-floor facility of Class A laboratory and office space with more than 1 acre of open space with East River views. The center is Leadership in Energy and Environmental Design (LEED) Gold certified. The second phase of development will include a



410,000-square-foot laboratory and office building. There is also an optional parcel that, upon completion, would bring the campus to 1.1 million square feet.

New York's first life science park, the Alexandria Center for Life Science fosters innovative collaborations among New York's academic and medical institutions, scientific talent, investment capital, and commercial life science industry. Serving New York with its first world-class commercial laboratory space, the Alexandria Center enables the city to capitalize on its talent, and speeds the translation of new life science discoveries "from bench to bedside."

Select amenities include a hotel, event space, fine and casual dining (celebrity-chef-branded), and open space components. The development is comparable to DMC planning because it has integrated amenities to attract talent. Furthermore, the developer, Alexandria Real Estate Equities, is one of the largest real estate investment trusts focused on providing high-quality real estate for the life science industry. Current US locations include Seattle, San Francisco, Los Angeles, San Diego, Florida, Research Triangle Park, New Jersey, Philadelphia, and Washington, DC. There are currently no locations in the Midwest.Demand Estimates and Development Vision

DEMAND ESTIMATES

Unlike other uses where demand can be estimated based on the market context, demand estimates for life sciences for this report were estimated based on AECOM's evaluation of existing comparable developments and the overall vision of the DMC (Figure 5-38). Based on this analysis, AECOM estimates that the DMC should plan for the following:

- 750,000 to 1,250,000 square feet of realized space over the 20- to 25-year horizon
- 150,000 to 250,000 square feet per 5-year phase

PLANNING VISION

The working planning vision is a new home and address for the expansion of the Science and Technology Institutes for the Mayo Clinic. Located near the core downtown area that includes the Gonda Tower, this innovation center would be positioned to enhance these proximities, which are essential for the continued growth of the research community. A contemporary departure from the boxy building character that has dominated the Rochester skyline, this center would accommodate "loft labs" that would be iconic and architecturally inspiring, designed with the idea of establishing a more aspirational identity for the Rochester skyline.

The science buildings would be grouped around an urban square with below-grade parking, much like Post Office Square in Boston and Union Square in San Francisco. The setting would resemble that of University Park at MIT, integrating scientific research facilities with other uses and amenities.

A "commons" would provide interconnected indoor and outdoor meeting places, and would function as centralized gathering spots for visitors, scientists, and researchers to comingle and collaborate.

DEVELOPMENT VISION

Other envisioned elements for the DMC are the following:

- **Light Pavilion.** A crystalline arrival pavilion, combining the pastoral feel of New York's Tavern on the Green with the splendor of Paris' Louvre Pyramid visitor center.
- **Centers of Excellence.** A series of flexible and interdisciplinary lab lofts that provide state-of-the-art facilities in an open, connected, and collaborative vertical campus.
- Windows on the Institutes. Contemporary open storefronts and bay windows that overlook the Commons, inviting the outside world a glimpse of the life and creative activity happening inside.
- Creative Cloud. A glowing glass pavilion hovering above the Commons that functions as a place for meetings and conferences.
- **The Commons.** A Wi-Fi-connected urban park suited to the 22nd century, providing a unique setting to engage in creative interactions within a beautiful public square.
- **Sentient Space.** State-of-the-art technology will be embedded into and around the buildings and public spaces, allowing workers, visitors, and patients to receive information in real time.

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pace over the 20- to 25-year horizon ase







relationship between the Mayo Clinic and the University of Rochester.

OFFICE MARKET

AECOM examined data from the CoStar Group to analyze recent trends in office markets in Olmsted County, Rochester, and downtown. The CoStar Office Report calculated office statistics using CoStar Group's database of existing and under-construction office buildings. This included all classes and all sizes, and multi-tenant and single-tenant buildings, including owner-occupied buildings.

NATIONAL OFFICE TRENDS

National demand for office space was negatively affected by the economic downturn beginning in 2008, and vacancies began to rise, peaking in 2010 at 13.5%. Demand for space is slowly recovering, but companies are working leaner with fewer employees and requiring less space. Current vacancy rates average just less than 12%, and around 10% in some major metro areas. There is an uptick in demand for Class B and C space, and for suburban office park space, indicating that companies may be looking to trim costs or get more space for their real estate budget.

Office space development was affected by tighter lending standards, but as those have loosened, the development pipeline is starting to grow. According to CoStar, 35 million square feet of office space was absorbed across the US through mid-2014, up 35% from the same time period in 2013. There were also 95 million square feet under construction as of July 2014, a 27% increase from the year before, although still below historical averages of 125 million square feet. Rental rates are also starting to improve. In the nearterm, more stable industry sectors such as health care, government, and educational services are likely to drive demand for office space.

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University Connection. Programmed spaces and a campus linkage system will strengthen the



OFFICE MARKET IN OLMSTED COUNTY

Data from CoStar indicates that there is 2.62 million square feet of office space throughout Olmsted County, with the majority, 2.58 million square feet, located in Rochester. Since the 4th quarter of 2007, four buildings have been added, all in Rochester, with 131,600 square feet of space, or almost 20,000 square feet per year. No new office space has been built in Rochester since the 2nd quarter of 2009 (Figure 5-39).

Vacancy rates had been slowly increasing, reaching their peak at 14.4% in the 3rd guarter of 2013. A decline in the 4th quarter was followed by a single property (IBM) emptying, which added 187,800 square feet of space to the vacancy inventory. This pushed the current vacancy rate past 21%.

Office space was renting at \$10.59 net-net-net (NNN) per square foot in Rochester as of the 1st guarter of 2014, still in slight decline; peak rates were \$14.08 NNN per square foot (Figure 5-40). Most office space in the market would realistically be classified as Class B or C; true Class A space is limited.

Downtown Rochester, defined as a single Census tract, has 11 buildings with 421,750 square feet of office space. The vacancy rate of this space has remained well below the regional average, peaking at 5.2% in the 1st quarter of 2014. One building was added in the 2nd quarter of 2009 with 111,400 square feet of office space.

Data from CoStar on rental rates for downtown properties is limited. Based on interviews with real estate professionals in Rochester, office rents are between \$20 and \$21 NNN per square foot downtown for Class A properties, and slightly lower in the surrounding area.





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PROJECTING OFFICE DEMAND IN OLMSTED COUNTY

AECOM reviewed current employment and projections for Olmsted County from 1990 through 2040 using data from the ROCOG Planning and Analysis Division. As shown in Figure 5-41, there is considerable growth projected in heath and social services sectors. Between 2010 and 2040, this sector is projected to add 25,600 new jobs in Olmsted County, 45% of all new jobs in the county over this time period.

Only select sectors of employment require office space. In total, the share of office jobs in Olmsted County is estimated at nearly 25% from 2010 through 2040 (Figure 5-42). These jobs occur in the information; finance, insurance, and real estate (F.I.R.E.); business services; health and social services; and government sectors.

The focus of this effort was to estimate new office space to account for projected employment growth. Therefore, the analysis focused on net new office jobs in the county. AECOM also wanted to adjust for office jobs that would be occurring at the Mayo Clinic, as those jobs would likely be located in other DMC buildings designed for medical space, education, or bio-med-tech. Total office space in the DMC includes Mayo Clinic and bio-med-tech business office space that was estimated as part of the Mayo Clinic growth and technology/healthcare growth.

Nationally, office market fundamentals have tracked closely with the broader economy, particularly in terms of employment. However, compared to previous office market downturns that were driven by over-supply, the current downturn is linked to a decline in the demand for space. This is attributed to employment losses in office-using sectors and firms relinguishing office space to minimize leasing costs in an effort to remain profitable. Coupled with more telecommuting, collaborative work spaces, and nondedicated office space, worker density has increased and the amount of space per worker has fallen. In this analysis, AECOM allocated 200 square feet of office space per worker.



PROJECTING OFFICE DEMAND IN DOWNTOWN ROCHESTER

Based on employment projections for workers needing office space, excluding the Mayo Clinic, there is demand for nearly 1.3 million square feet of office space through 2033 in Olmsted County (Figure 5-43).

To estimate what share of the office space may be absorbed downtown, AECOM examined employment trends using data from the US Census On the Map. Between 2002 and 2011, the share of workers in the Olmsted County working downtown averaged 30%. Among services workers, this share was 42%.

Data from CoStar shows that, of the 2.6 million square feet of office space in Olmsted County, nearly 422,000 square feet, approximately 16%, is located downtown.

Based on current capture rates of office space in Olmsted County, AECOM estimates that the amount of office space needed downtown by 2034 is 225,000 square feet. However, with more aggressive capture rates, targeted development, potential incentives, and the allure of being part of a dynamic downtown, the amount of office space needed to accommodate potential growth could reach up to 600,000 square feet over the next 20 years. Figure 5-44 shows potential capture rates of the Olmsted County office market into downtown, and corresponding office space that would be needed to fill that demand.

Office development will occur in phases and is contingent upon the project's ability to create a critical mass of office tenants. Potential long-term drivers of demand include fostering partnerships with the Mayo Clinic and its providers; spin-off and spill-over demand by other area developments; and professional services firms seeking boutique space in a mixed-use, vibrant downtown.

Note: Additional, detailed demand analyses tables are found in the appendices at the end of this report.





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Sport	Room Nights	Sport	Room Nights
Basketball	6,469	Baseball	2,412
Wrestling	4,883	Swimming	2,293
Hockey	4,104	Soccer	2,020
Volleyball	3,649	Pool/Darts	997
Softball	3,574		

5.6.3 HOTEL AND HOSPITALITY

The hospitality industry is the second-largest industry in Rochester according to the Rochester Convention and Visitors Bureau, with 12,028 full-time jobs at local hotels, restaurants, retailers, car rental agencies, taxis, the airport, and related industries. These 12,000 jobs provide services to Rochester's 2.76 million annual visitors.

Visitors spent \$331 million on lodging, restaurants, retail, recreation, and transportation while in Rochester. Those in Rochester for the day spent an average of \$74, compared to \$264 for overnight visitors. In total, the economic impact of visitor spending was \$535 million in 2013. On average, 25% of all visitor dollars are spent on lodging.

The Mayo Clinic provides care for 1.5 million patients each year from more than 140 countries. Twothirds (67%) of visitors to Rochester are for the Mayo Clinic and 16% are there for conventions or sports tournaments (Figure 5-45). In 2013, there were 160 events hosted in Rochester and 76 sporting events.

Convention attendees tend to stay longer and spend more than leisure travelers. In 2013, 160 groups were hosted, making up 15% of hotel occupancy. The largest convention was the Minnesota Association of Christian Home Educators, which brought in 4,000 attendees and generated 1,260 room nights and \$1 million in total economic impact.

The Rochester Amateur Sports Commission has been hosting events since 1991. There are a number of high school sports league playoffs and championships hosted in Rochester, including for wrestling, basketball, soccer, volleyball, hockey, and swimming. Basketball events generated the most room nights in Rochester, as shown in Figure 5-46.

Combined, the 76 events hosted by the Rochester Amateur Sports Commission in 2013 generated \$30 million in economic impact in Rochester. In addition to the Mayo Civic Center, there are several facilities in Rochester that can host sporting events, including the University Center Rochester Regional Sports Center, National Volleyball Center, Graham Arena, Fuad Mansour Soccer Complex, and Rochester Regional Stadium and Bubble, as well as softball and baseball complexes.

It is estimated that approximately 127,300 visitors will attend convention and sporting-related events in Rochester in 2014.



HOTEL MARKET ANALYSIS

PKF Consulting USA (PKF) was retained by AECOM to evaluate the Rochester hotel market and meetings industry, and to forecast future growth over the next 20 years. The findings of this analysis are presented here.

PKF purchased data from Smith Travel Research (STR), a research firm that tracks supply and demand data for the hotel industry. Data from STR provides a summary of the supply of and demand for lodging in a market area. "Supply" refers to the actual number of hotel rooms available for rent during the period, and "demand" is the actual number of rooms sold. The number of rooms sold divided by the rooms available results in "occupancy," which is displayed as a percentage of available rooms. The term "room nights" refers to the hotel industry's metric of one room for one night. For example, a 100-room hotel has 36,500 available room-nights per year. If the same hotel sells 21,900 room-nights during that year, it will have achieved a 60% occupancy.

STR groups hotels into "chain scale" segments based on their average daily room rates. These segments with example brands are shown below:

- Luxury Four Seasons, Ritz Carlton, St. Regis
- Upper Upscale Marriott, Hilton, Hyatt
- Upscale Courtyard, Doubletree, Hilton Garden Inn
- Upper Midscale Hampton Inn, Holiday Inn Express, Holiday Inn
- Midscale Best Western, Ramada
- Economy Days Inn, Motel 6, Super 8

Each of these segments is represented in the Rochester lodging market.

PKF has analyzed trends in the Rochester's hotel market for the north, south, and downtown submarkets since 1995.

- North Submarket There are a cluster of hotels near the IBM Rochester facility along Route 52, roughly 4 miles north of downtown. Some of these include Hampton Inn and Suites, Comfort Inn, Country Inn and Suites, and TownePlace Suites.
- South Submarket A variety of hotels are located south of downtown and north of the Rochester International Airport. These are primarily Midscale and Economy hotels.
- Downtown Submarket This submarket includes all hotels within an approximate 2-mile radius of the Mayo Clinic. There are properties in all six chain scales represented in this submarket.

The downtown submarket has 16 properties with 2,794 rooms (Figures 5-47 and 5-48). Occupancy in this submarket peaked in 1998 at 69.3%. In 2013, occupancy averaged 64.1%, the highest level since 2007. This compares to a market occupancy rate of 62.2%. Room supply has outpaced demand slightly since 1995, growing at an average annual rate of 1.6% compared to demand growing at 1.5% per year through 2013.



Property	STR Chain	Year Built	Rooms
Broadway Residence & Suites	Luxury	2004	121
Marriott	Upper Upscale	1989	202
Kahler Inn & Suites	Upscale	1991	271
Aspen Suites	Upscale	2002	82
Springhill Suites	Upscale	1998	86
The Kahler Grand Hotel	Upscale	1927	660
Residence Inn	Upscale	2004	89
Courtyard	Upscale	2005	117
Hilton Garden Inn	Upscale	1999	143
Doubletree	Upscale	1989	212
Holiday Inn	Upper Midscale	1971	173
Centerstone Plaza (former Best Western)	Upper Midscale	1965	214
Holiday Inn Express & Suites	Upper Midscale	2012	85
Ramada	Midscale	1977	149
Days Inn Rochester	Economy	1991	71
GuestHouse Inn	Economy	1972	119

FIGURE 5-48 - HOTEL PROPERTIES IN DOWNTOWN SUBMARKE

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Day-of-week patterns demonstrate the strong demand generated by the Mayo Clinic. As can be seen in Figure 5-49, during the previous 3-year period, Mondays, Tuesdays, Wednesdays were the days with the highest occupancy, averaging approximately 70%. This mirrors the typical stay of a patient seeking medical attention at the Mayo Clinic.

PROJECTED PERFORMANCE OF DOWNTOWN SUBMARKET

According to PKF, numerous factors will affect the timing and flow of new hotels to the downtown submarket:

- through 2017.
- tend to attract new projects to enter the market.
- softer occupancies and lower rates and profitability prevail.
- Capital market conditions. The availability and cost of debt financing.
- owing to the growing cost of land.
- development.

Considering the above factors and the numerous new hotel projects that are in various stages of development, the supply of hotel rooms in the downtown submarket is expected to grow at an annual rate ranging between 0 and 10.5% annually between 2014 and 2034, averaging 1.9% growth.

PKF developed hotel demand projections through 2034 based on the historical demand patterns in the downtown submarket and the PKF-HR Hotel Horizons Forecast for Rochester. Following are some noteworthy factors that were considered in developing these projections:

occupancy during this period was 63%.

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• **Timing in the hotel investment cycle.** There are four basic phases within a given cycle: the growth period, the peak valuation period, the period of decline, and the recovery period. These vary in length and duration. On a national basis, PKF is predicting that the current growth period will continue

- During the growth period, occupancy and average daily room rates are rising, and because hotels are largely fixed-cost businesses, cash flows increase at a disproportionate rate. These conditions

- Typically new supply and/or economic disruptions tend to end the growth phase, whereupon

Barriers to entry. The availability and cost of land are important factors in many markets, particularly in urban submarkets. For the downtown Rochester submarket, the barriers to entry are increasing

 Public/Private partnerships, subsidies provided by local government. In some circumstances, the development of a hotel is not financially feasible without some sort of assistance or subsidy from the public sector. Examples include property tax abatements, tax increment financing, municipal guarantee of private loans, guarantees, and sale/leasebacks. These types of projects often occur in the decline or recovery phases of the hotel investment cycle in an effort to spark economic

Demand increased at an average annual rate of 1.6% from 1995 to 2013. The average annual market



- The completion of the Mayo Civic Center expansion and renovation will allow Rochester to more effectively compete with other markets for state association and medical meetings.
- Peak months have historically occurred June through October when market occupancy is typically in the high-60% to low-70% range. Conversely, during November through March, many Rochester hotels operate with occupancy below 60%. This seasonality effectively puts a limit on the highest occupancy the market can achieve.

On balance, demand is expected to increase at an annual rate ranging from 0.0 to 5.8% between 2014 and 2034, and averaging 2%, slightly higher than the estimated growth in supply.

PKF discussions with area hoteliers, representatives of the Mayo Clinic, and the Rochester Convention and Visitors Bureau revealed that there are multiple projects in various stages of development in the downtown submarket (Figure 5-50). As such, PKF modeled the following supply additions into its projections:

- **108-Unit Homewood Suites.** Currently under construction adjacent to the Courtyard Marriott across from Saint Marys Campus, this hotel is expected to open in the fourth quarter of 2014.
- 165-Unit Upscale Extended-Stay Hotel*. Proposed to be built on a site located near the Courtyard and the Homewood Suites (presently under construction), this project is being developed by Javon Bea, the owner of the existing Marriott and Kahler hotels. The brand, if any, has not been finalized. This hotel is expected to open in 2016.
- 210-Unit Upper Upscale Hotel*. A proposed Hilton to be built by Titan Development (owner of the Doubletree and Hilton Garden Inn), this hotel would be part of a larger mixed-use development at the corner of South Broadway and East Center Street, and would be connected to the Mayo Clinic via skyway. Construction has not begun, but the hotel is expected to open in mid-2016.
- 275-Unit Luxury Hotel Associated Bank Project*. According to the Rochester Convention and Visitors Bureau, the Associated Bank Building was purchased by an investment group within the past year and will be converted into a hotel within the next few years. Preliminary plans call for the project to be a mixed-use development with a 275-unit luxury/upper upscale hotel that would be connected to the Mayo Clinic via skyway. AECOM assumed this project will open in 2017.

In addition to the projects mentioned above, AECOM expects further hotel development to occur. As such, based on past performance of the downtown submarket and the current chain scale mix, AECOM made the following assumptions with regards to supply growth:

* Although these projects have been announced, they are still in early concept phases and may or may not be developed as described. Listing these projects should not be considered an endorsement. Should one or more of these projects not come to fruition, there is sufficient market demand for similarly scaled hotels to be developed.

Note: Additional detailed demand analyses tables are found in the appendices at the end of this report.



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MAYO CIVIC CENTER EXPANSION



- property will enter the market mid-year 2020.
- a 175-unit upscale property will open in 2023.

MEETINGS MARKET

The following discussion assumes the completion of the presently planned expansion and renovation of Mayo Civic Center facilities. The renovation is intended to not only add space but to improve the competitive position of the Mayo Civic Center in terms of quality, modern technology, functionality, and appearance.

The dynamics of the "meetings" business can be complex. Most meetings seek a venue based on characteristics that may or may not be flexible, such as the following:

- Size, number of attendees, exhibition space requirements, and other physical factors
- Dates
- Pricing
- Hotel accommodations

Use of the Mayo Civic Center has been and will be governed by the center's ability to attract larger meetings and its proficiency at simultaneously accommodating multiple smaller meetings.

In 2012–2013, Strategic Advisory Group, a consulting firm, was engaged to perform an operations and management analysis of the Mayo Civic Center. Among other things, the report concluded that the Mayo Civic Center's utilization is comparable to peer venues. Given that this data is from an un-renovated facility, it seems reasonable to expect that, post-renovation, the Mayo Civic Center should capture a higher share of existing meetings than its peer facilities.

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Upper Upscale Hotel. Owing to the strong performance of the Marriott (2013 average daily room rates of \$220-\$225; 68% occupancy) and the lack of hotel inventory in the upper upscale segment, there is an opportunity for an upper upscale hotel to enter the market between 2019 and 2025, since market occupancy is expected to exceed 65%. This is envisioned to be a full-service property with a restaurant, meeting space including a ballroom, and an overall amenity package comparable to the existing Marriott. As such, AECOM has hypothetically assumed that a 220-unit upper upscale

Upscale Hotel. Hotels in this chain scale currently make up the majority of the downtown submarket inventory. This product accommodates the needs of the type of travelers visiting the market due to the amenities offered and the price point. Brands currently not represented in the market within this chain scale include Hyatt Place, Aloft, and AC by Marriott. AECOM has hypothetically assumed that

 Upscale Hotel. Due to the presence of the Mayo Clinic, AECOM feels that there will continue to be significant demand for extended-stay hotel rooms in the market. As such, AECOM has hypothetically assumed that a 150-unit upscale extended-stay property will enter the submarket in 2031.

Venue location (e.g., accessibility by car and air, proximity to prospective attendees, time of year)



This report also made a number of recommendations to improve utilization. One important recommendation involves setting goals, incentives, and accountability for sales and bookings. Another recommendation of the Strategic Advisory Group report was to improve record keeping and data collection, which would allow measurement of management's activities and their success at achieving goals and objectives.

The Mayo Civic Center is scheduled to expand and renovate its facilities to improve its offerings to a wide range of meetings. The Mayo Civic Center has stated that the expanded space will allow for the capture of lost business and to expand its offering to new groups and events. In particular, the Mayo Civic Center has suggested that it could attract two simultaneous convention events of 1,000 participants each within the new facilities. The new Mayo Civic Center will include the following:

40,000-square-foot ballroom

188,000-square-foot increase in usable space

Small group meeting rooms

In addition to improving utilization by increasing the Mayo Civic Center's penetration of existing meetings, three other factors have the potential to induce future growth in utilization, and possibly expansion of the Mayo Civic Center:

- Growth in the number of meetings held in the region
- Growth in the number of meetings generated by local entities
- Growth in the number of local entities holding meetings

REGIONAL MEETINGS GROWTH

According to the 2014 American Express Meeting Forecast Report, the number of meetings in North America is expected to grow at an annual rate of 1.5%. American Express also forecasts 0.6% growth in the number of attendees per meeting, but zero growth in overall meetings spending.

Further, the PriceWaterhouseCoopers (PwC) 2013 Convention Center Report notes the following national trends:

- Overall demand, measured by occupied square foot days and occupancy rate of exhibition halls, is on the rebound after 4 years of decline (Figure 5-51).
- Average attendance per event has remained relatively constant over the past 3 years, at a level similar to fiscal year (FY) 2009, after dipping to a low in FY 2010.
- Overall rental revenue continues to decrease, despite increased demand, due, in part, to reduced rates for consumer shows and "other" events.
- The overall and marketing budgets of destination marketing organizations have increased each year since FY 2009, and are forecasted to continue growing in FY 2014.



DEVELOPMENT PLAN DESTINATION MEDICAL CENTER DRAFT



The American Express report shows that although some meetings have moved to smaller cities, likely for cost reasons, meeting planners continue to show a preference for larger cities. Nearly three-quarters of meeting buyers and planners indicated that their meetings will primarily be in large cities during 2014. Research by PKF showed that more meeting planners moved toward first-tier cities between 2012 and 2013 (Figure 5-52).

There is little that Rochester or the DMC can do to alter these preferences. However, there are strategies that could be adopted that would improve perceptions of Rochester and facilitate travel:

- Cultivate a more attractive and vibrant downtown with diverse retail and eating and drinking establishments
- Improve air travel options and pricing
- Increase and improve regional marketing and sales efforts

To grow the meetings market in Rochester, the number of meetings generated by local entities needs to increase, the number of entities holding meetings needs to grow, or both.

In Rochester, the only "local entity" of sufficient size to exhibit significant growth would be the Mayo Clinic and related constituencies. Interviews thus far with Mayo Clinic officials did not indicate any plans to increase the annual number of meetings. However, once the new and improved Mayo Civic Center is available, members of the Mayo Clinic community may find it conducive to the development of new meetings, training, and other functions.

It is possible that growth in this segment can be induced or stimulated by the following:

- Offering reduced or subsidized rates for facility rentals and related meeting costs to local entities for events that draw overnight attendees
- Offering attractively priced and tailored meeting planning services for this segment
- Adopting internal Mayo Clinic strategies to encourage its component parts to actively develop programs that bring meetings to Rochester (e.g., training, continuing education, pharmaceutical)
- Incentivizing local and non-local health care entities to hold events in Rochester to foster closer relationships with the Mayo Clinic community

According to PKF, to increase the number of entities holding local meetings, the Mayo Civic Center can attract additional regional meetings to Rochester, and Rochester itself needs to grow. The renovation/expansion of the Mayo Civic Center is expected to significantly improve the facility's competitive position, which should attract additional meetings. Implementation of certain recommendations in the Strategic Advisory Group report would also be expected to improve the Mayo Civic Center's penetration of regional meetings.

In addition, to the extent that the Mayo Clinic community and downtown Rochester can attract new businesses to downtown, the number of local meetings is likely to increase. An example would be inducing a medical products company to open offices in Rochester that might choose to have local meetings as result of the updated Mayo Civic Center. These inducements are typically economic.

CONCLUSION

PKF's analysis concludes that Rochester will probably remain a third-tier regional meetings destination during the period covered by this analysis because of its size, economic growth prospects, limited air service, and location. Another limiting factor is its present business monoculture resting on health care. Although health care has been rapidly growing nationwide, there is increasing uncertainty as to how governmental policies and legislation might affect the health care industry nationwide and in Rochester. Moreover, the Mayo Clinic has seen the advent of significant new competitors in the last 20 years, and it seems likely that this will increase in the next 20 years, as many US cities have recently advanced or developed economic growth initiatives centered on health care.

The Strategic Advisory Group report benchmarked the Mayo Civic Center as comparable along several parameters, including number of events, sales staffing, and budget. The expanded Mayo Civic Center should be able to outperform the competitive set. Similarly, increasing sales staffing and budget (together with goal setting and accountability) should result in further increases in market share.

Within the health care industry, the Mayo Clinic has the opportunity to continue to be a globally renowned knowledge and cultural leader. Fortuitously for the Rochester meetings industry, this leadership could result in increasing the number of medical professionals from around the world who visit the city. Some of this growth will happen organically and by the momentum and reputation of the Mayo Clinic, as it has in the past. However, the most successful scenario in this regard will have the support of a focused, institutional objective to develop programs that will bring doctors, teachers, technicians, and consultants and their related associations, professional affiliations, and industry events and conferences to Rochester.

There is an opportunity to diversify the economic base of Rochester by attracting health care and nonhealth-care businesses to locate in and around the city. Competition for these relocations in the Midwest is fierce. However, Rochester has several attractive characteristics:

- Uniquely high-quality health care
- A relatively stable economy
- Low cost of living
- A quality public education system, including several highly rated schools
- destinations

Based on its analysis of national and local trends in the meetings market, PKF estimates that the future growth in regional meetings and attendance for Rochester will range from 0 to 2% annually over the next 20 years.

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Proximity to Minneapolis/St. Paul, one of the Midwest's premier cultural, educational, and recreational



5.6.4 RETAIL, DINING, AND ENTERTAINMENT

Retail, dining, and entertainment (RDE) developments generally fall into two categories:

- Arts and cultural venues/districts and entertainment districts
- Destination developments, such as a destination medical center

Frequently, RDE districts or destination complexes are located adjacent to another major activity center, such as

- Sports/entertainment facilities
- Office clusters or central business districts
- Convention centers and/or hotel clusters
- Attractions clusters

Usually the RDE district/complex is a pedestrian-friendly and multi-use environment, where the uses are intended to complement each other, creating a multi-faceted leisure experience, thereby increasing the project's overall attractiveness to visitors. This characteristic leads to an increase in

- Frequency of visitation
- Distance from which visitors come
- Amount of time and spending at the development

Retail within a destination development may be similar to a shopping center or "Main Street"-type environment, frequently tailored to appeal to a specific market segment or multiple market segments, and generally acts as an amenity attraction to the larger project uses. Segments offered may include the following:

- Impulse purchases such as gifts, toys, clothing accessories, casual clothing, and sports clothing/goods
- Upper and/or high-end luxury goods such as fashion apparel and accessories, shoes, and jewelry
- Home furnishings such as furniture, lighting, and linens
- Convenience goods such as toiletries and food-at-home goods

Dining is typically located adjacent to or within the retail:

- Limited service: café, "grab-n-go" and pre-prepared food items, fast food, and buffet options
- Full service: fast casual and more formal "sit-down" restaurants

Entertainment venues may also be located adjacent to or within the retail areas:

- Arts and cultural facilities
- Multi-plex or mega-plex movie theaters
- Upscale bowling

- Family entertainment/gaming centers
- Bars/lounges/night clubs
- Live performance venues such as theaters, dinner theater, and comedy clubs

operating hours and service access.

RDE destination complexes are different from traditional shopping centers in the following ways:

- Rents tend to be higher due to their greater level of design guality, larger common areas, higher levels of programming, and sometimes more desirable locations.
- The tenant mix has a greater emphasis on entertainment-oriented RDE.
- Amenity levels and reinvestment rates are higher.
- RDE components are frequently mixed with other uses, such as hotels, offices, residential, and cultural facilities.
- Anchors tend to be more varied, not just department stores, with the intention of
- Creating activity on-site via entertainment (multi-plexes, game centers, sports bars, liveperformance venues)
- Extending activity on-site via unique dining (signature restaurants, themed bars/restaurants, entertainment bars/clubs)
- Inducing visitation via iconic/international retailers (flagship stores)

sales per square meter, profit margin, rent rates) if well located, developed, and operated.

and Olmsted County markets over that same time period.

scale specialty grocers, new fast-casual restaurant concepts, and high-service specialty stores.

DEVELOPMENT **DESTINATION MEDICA**

- Other venue types may include ice skating rinks, events venues, cultural centers, and indoor theme parks.
- The dining and entertainment components need to have their own access point(s) to enable more flexible

- Entertainment destination projects are generally smaller than the more standard regional/super regional mall, but can outperform them on other measures (e.g., visitor length of stay, visitors per square meter,
- Retail growth, as well as dining and entertainment, is typically driven by growth in population/households and income/employment. The DMC concept is based on a growth structure driven by Mayo Clinic and non-Mayo-Clinic job growth projected over the next 20 years. The tenant mix of the DMC RDE development will need to reflect the shopping interests of the new populations that are projected to be in the Rochester
- National commercial real estate brokers Cassidy Turley reported in its Retail Forecast 2014 that "from a retailer growth perspective, we continue to see strong activity at the far ends of the economic spectrum. Luxury retailers are back and are looking for space." Given land costs and regional household income levels, higher price point tenants would likely be part of the tenant mix for this area of the DMC. On the neighborhood shopping level, retail growth has been tracked for health/wellness/spa operators, small-



Name	Address	Anchor Tenants
Apache Mall	333 Apache Mall 1201 12 th St. SW Rochester, MN 55902	Herberger's, Macy's, JCPenney, Scheels (opening 2015)
Broadway Commons	30 25th Street SE Rochester, MN 5904	Michael's Crafts, Kohl's, Sports Authority, Bed Bath & Beyond
Crossroads Shopping Center	1201 S Broadway Rochester, MN 55904	Hancock Fabrics, Pier 1 Imports, OfficeMax, Walgreens
Maplewood Square Shopping Center	4050 U.S. 52 Rochester, MN 55901	Best Buy, Hobby Lobby, Ashley Furniture
Marketplace Center	2950 41 st St NW Rochester, MN 5901	Super Target, Staples, Home Depot
Miracle Mile Shopping Center	115 16 th Avenue NW Rochester, MN 55901	Wild Birds Unlimited, Toy Zone, The Mouse, HOM Furniture
Northwest Plaza	3400 55 th St. NW Rochester, MN 55901	Wal-Mart, Sam's Club, Gander Mountain, Petco
Shoppes on Maine	4611 Maine Avenue SE Rochester, MN 55904	Lowe's, SuperTarget, PetSmart, Old Navy, Dick's Sporting Goods
Shops at University Square (connected to Skyway)	111 S Broadway Rochester, MN 55904	Barnes and Noble, specialty retail & dining
The Grand Shops / Kahler & Marriott (includes Subway)	20 2 nd Avenue SW Rochester, MN 55902	None; boutique shops and dining, includes Mayo Clinic Store(s)
TJ Maxx Plaza	1300 Salem Road SW Rochester, MN 55902	TJ Maxx, Tuesday Morning, Party City
Skyway / Subway	Downtown Core Rochester , MN	None

FIGURE 5-53 - ROCHESTER RETAIL CONCENTRATIONS

The growing competition from e-stores has increased the need for brick and mortar operators to include electronic shopping and high-tech touch experiences in their stores. With a new development oriented toward the future, the DMC has an opportunity to take advantage of this retail development to gain market share and differentiate itself from competing centers.

RETAIL CONCENTRATIONS IN ROCHESTER

Retail in downtown Rochester takes several forms. It includes traditional street retail and dining, enclosed shopping center characteristics at University Square connected to the Skyway, food courts and limited retail at points along the Skyway, and boutiques and convenience retail and dining in the Subway. Most anchor-oriented shopping in Rochester is located in suburban-style shopping centers and the Apache Mall (Figure 5-53).

Although there are no destination RDE developments in Rochester, clusters have formed that act to attract shoppers. For example, the dining cluster in the Historic Third Street area is already establishing a distinct identity, and could be marketed individually with a distinct logo, image, and advertising concept. Other neighborhood-serving retail and dining clusters appealing to residents and students could form.

The DMC core area is probably best positioned geographically to create a destination center concept. Although transportation and parking challenges will have to be addressed, the center area would be the most compatible location for destination retail.

Downtown Rochester has two unique retail environments: the downtown Skyway and the downtown Subway. The Skyway is an above-ground series of bridges and corridors that encompasses approximately 17 blocks, linking hotels, shopping, and the Mayo Clinic. The Subway is an underground tunnel and corridor environment that primarily connects the Mayo Clinic to the Kahler Hotel shops complex and links up to the Skyway. The climate-controlled area and ease of use by Mayo Clinic patients staying in connected hotels argue for their popularity.

Rochester is one of about 25 cities in North America that have some sort of over-ground pedestrian system. Tenants in the Skyway include institutional and professional offices, as well as food and beverage operations (quick service primarily) and services, and soft goods (in the Shops at University Square). Food services cluster at corridor intersections; some corridors can seem quite deserted at times.



DOWNTOWN SKYWAY AND SUBWAY

There are approximately 65 shops in the Kahler Grand Hotel and the Marriott connected via subway (Figure 5-54) that include apparel and accessories, services, and food services (mostly quick service). In the past year, the new owners of the Kahler Group have been re-examining leases and tenant mix. Brokers report that retail space in the subway is highly sought-after due to high pedestrian traffic, and vacancies rarely remain for long.

Some previous studies, such as the one by the Urban Land Institute and the Progressive Urban Management Associates retail analysis completed in conjunction with the Downtown Master Plan, have been critical of both systems. Such criticism is based on urban planning principles that encourage an activated street. However, the success of both systems as real estate developments and their popularity suggest that they both have a place in the retail mix. Some of the most successful Skyway and Subway tenants have street locations as well. That location strategy increases customer awareness and supports street activity while recognizing the value of the upper and lower locations.

A discussion with brokers about business turnover suggests that retail tenants in the Skyway and Subway might best think of their business format as something similar to an airport retail environment. Both environments are characterized as follows:

- Customers usually have a brief amount of time to shop (travelers at airports; Mayo Clinic employees and guests)
- Shoppers are often convenience shopping or looking for small gifts and hand-held items
- Larger items require free or assisted shipping
- Stores usually stock limited inventory items that focus on best-selling goods and services

RDE DEMAND – GENERAL METHODOLOGY

RDE demand is based on a step-by-step process (Figure 5-55):

- Identify the markets that comprise the available groups: households, employees, students, tourists/ visitors, and other inflow.
- Quantify total market size by distance (walking, drive time), employee clusters, student enrollment, visitor counts, and other factors.
- Qualify market expenditures by type:
- Food at home General retail
- Recreation, sports, and

culture

- Food away from home Consumer services
- Capture gualified market expenditures by market area (primary, secondary, and tertiary). Capture rates are assigned by current spending patterns, historical spending patterns, and spending by market types (students, employees, household type, competition).
- Convert to supportable square feet gross leasing area based on estimated sales productivity by type.





DEVELOPMEN **DESTINATION MEDICAL** DRAFT



	Primary Trade Area DMC	Secondary Trade Area Rest of Rochester	Tertiary Trade Area Rest of Olmsted County	Total
Population	1 m m m m m m m m m m m m m m m m m m m			
2013	2,770	106,366	38,386	147,522
2018	2,878	110,332	39,974	153,184
Annual Growth Rate	0.8%	0.7%	0.8%	0.8%
Households				
2013	1,790	42,278	14,450	58,518
2018	1,892	44,011	15,126	61,029
Annual Growth Rate	1.1%	0.8%	0.9%	0.8%
Median Household Income				
2013	\$25,0620	\$62,300	\$74,100	\$64,100
2018	\$29,300	\$76,600	\$89,600	\$78,400
Annual Growth Rate	3.2%	4.2%	3.9%	4.1%

FIGURE 5-56 - RESIDENT MARKET DEMOGRAPHICS, 2013 TO 2018, EXCLUDING DEMAND FROM DMC EMPLOYMENT GROWTH

Establishment Type	On-Site Households/DMC Area	Rochester (excluding DMC)	Olmsted Gounty (excluding Rochester)	Employees	Visitors (per visit)	Students
Food and Beverage Stores	\$3,230	\$5,100	\$5,650	\$1,590	\$10	\$1,050
Health and Personal Care Stores	\$520	\$890	\$1,020	\$800	\$10	\$50
Shoppers Goods Stores						
Furniture and Home Furnishings	\$310	\$540	\$610	\$270	\$0	\$130
Electronics and Appliance	\$290	\$500	\$570	\$270	\$0	\$10
Clothing and Clothing Accessories	\$550	\$910	\$1,000	\$800	\$30	\$430
Sporting Goods, Hobby, Books, Music	\$250	\$420	\$470	\$270	\$10	\$70
General Merchandise	\$2,410	\$3,990	\$4,460	\$1,060	\$30	\$830
Miscellaneous Store Retailers	\$280	\$510	\$580	\$270	\$0	\$40
Subtotal Shoppers Goods Stores	\$4,090	\$6,860	\$7,680	\$2,920	\$70	\$1,510
Food Service Establishments						
Full-Service Restaurants	\$1,150	\$1,840	\$2,020	\$600	\$30	\$270
Limited-Service Eating Places	\$1,190	\$1,910	\$2,100	\$710	\$30	\$280
Drinking Places	\$70	\$100	\$110	\$70	\$10	\$20
Subtotal: Food Service Establishments	\$2,400	\$3,860	\$4,230	\$1,380	\$60	\$570
Total: Selected Establishment Types	\$10,240	\$16,710	\$18,580	\$6,690	\$150	\$3,180

FIGURE 5-57 - AVERAGE SPENDING BY RETAIL ESTABLISHMENT TYPE AND SOURCE MARKET

MARKETS DRIVING RDE DEMAND

The markets used to estimate RDE demand for the DMC included the following:

- Resident markets (Figure 5-56)
- Inside the DMC (residents living in the DMC area)
- Rochester, excluding the DMC area
- Olmsted County, excluding Rochester
- Students at UMR
- Employees working inside the DMC
- Visitors (tourists, patients and party, conferences and events, business)
- Inflow (other expenditures from outside sources)

SPENDING FORECAST BY MARKET GROUP

Spending estimates were developed for each source market (Figure 5-57):

- On-site households/DMC, the primary market
- Rochester excluding the DMC, the secondary market
- Olmsted County excluding Rochester, the tertiary market
- DMC employees
- Visitors
- Students

Using Economic Census 2007 (2012 data are releasing in fall 2014), ESRI Business Analyst, the International Council of Shopping Centers Office Worker Retail Spending Patterns report, G. Paulin "Expenditures of College-Age Students and Nonstudents," data from the Bureau of Labor Statistics, and internal AECOM research databases, spending by market sector was forecast, then a forecast of total expenditures by source market, 2013 to 2022, was prepared (see the appendix to this report).

DEVELOPMENT **DESTINATION MEDICAL** DRAFT





RDE DEMAND – CAPTURE RATE CONSIDERATIONS

Capture rates use qualitative judgments based on professional experience and opinion supported by current and historic spending patterns (Figures 5-58 through 5-61). In addition, destination center type may shape rates assigned to each store type: What stores are compatible with the overall center concept?

When assigning capture rates, best practice suggests to err on the side of caution and be more conservative to avoid overbuilding.

Specific capture by venue or store type is typically not part of a master planning process, but happens at the parcel development planning level by the private sector developer with an eye toward specific tenant types. Capture ranges from low to high provide plan flexibility at a master planning level.

	nign	Average
\$350	\$400	\$375
\$375	\$425	\$400
\$300	\$400	\$350
\$425	\$475	\$450
\$325	\$375	\$350
	\$350 \$375 \$300 \$425 \$325	\$350 \$400 \$375 \$425 \$300 \$400 \$425 \$400 \$325 \$375

Establishment Type	Category	Value
Food and Beverage Stores	Supermarket	\$490
Health and Personal Care Stores	Drugstore/Pharmacy	\$430
Shoppers Goods Stores		
Furniture and Home Furnishings	Furniture	\$160
Electronics and Appliance	Electronics	\$300
Clothing and Clothing Accessories	Mixed Apparel (Women, Men, Children)	\$270
Sporting Goods, Hobby, Books, Music	Sporting Goods	\$220
General Merchandise	Junior Department Store	\$150
Miscellaneous Store Retailers		\$220
Food Service Establishments		
Full-Service Restaurants	Restaurant with Liquor	\$360
Limited-Service Eating Places	Restaurant without Liquor	\$250

DEVELOPMENT PLAN DESTINATION MEDICAL CENTER DRAFT







DEMAND FOR RETAIL SPACE IN DMC AREA

Based on past, current, and projected spending and anticipated growth in residents, employees, and visitors associated with the DMC, AECOM developed preliminary estimates of retail demand in the DMC area from 2015 to 2034 for approximately 206,000 to 348,000 square feet.

Demand is primarily driven by residential growth and employment from the DMC project.

In the calculation of supportable retail space, AECOM's lower end of the range assumed market capture of 7.4%, which is equal to the current share of Olmsted County retail space that is located in the DMC area. This most-conservative capture rate assumes that, at minimum, the DMC developments can ensure that downtown maintains its current position. The high end of the range was calculated assuming a capture rate of 12.5%, which would occur with a fully realized DMC RDE environment that represents significant growth in downtown appeal. The average of 9.97% is a reasonable capture growth scenario in the context of the DMC business development/employment strategy and the anticipated residential growth and development plans, Mayo Clinic growth, and UMR growth.

Shoppers goods stores account for 46% of demand (Figure 5-62). A "shoppers good" is typically defined as a higher-end product occasionally bought by consumers that are usually compared for their appropriateness, quality, cost, and features before purchase occurs. Consumers tend to take more time when purchasing a shopping good, and they might even travel to buy such goods.

Food and beverage stores (consumed at home) account for 29% of demand. This category includes grocery and convenience foods consumed off premises. Restaurants (all types) represent 20% of the retail demand. Typically, food and beverage consumed on premise is a high category for downtown locations. A strategy to increase eating out in the DMC area may be needed to support growth in this category until a larger resident population is developed inside the DMC area.



RDE – ENTERTAINMENT AND CULTURAL ARTS

Movie theaters are typically a key anchor for RDE destinations, with either a multiplex (five to 14 screens) or a megaplex (15+ screens). IMAX large-screen theaters can be a major destination attraction in and of themselves.

Most movie theater guests prefer to travel no more than 15 minutes to reach a theater, although they may travel up to 30 minutes, particularly if it is part of a shopping center/destination and it is a larger multiplex, megaplex, or IMAX.

Annual movie theater attendance varies significantly by age group, averaging four times per year for all ages, with lower rates for younger and older groups.

Although there is some room in the Rochester market for more screens, the introduction of a multiplex or megaplex would likely take market share from existing theaters. In contrast, the unique nature of an IMAX or other experiential theater could add additional patrons. A more in-depth theater and IMAX analysis could identify the viability of such an operation in the DMC business mix.

One aspect of the RDE mix is the entertainment element associated with culture and visual and performing arts. Rochester has a lively arts scene, including the Rochester Arts Center, private galleries, the Rochester Symphony Orchestra & Chorale and other vocal music groups, Rochester Chamber Music Society, and the Community Band. Performing arts include the Rochester Dance Company, the Rochester Civic Theatre, the Rochester Repertory Theatre, and other theatre groups. The City of Rochester has its own Music Department. The new "C4" arts group brings new visual and performing arts to the community.

There is increasing attendance at live theater in the city, with greater than 200 performances per year. However, there is strong competition from the Twin Cities. Rochester residents provide a significant number of subscriptions to arts groups in the Twin Cities due to the high quality of performance artists and venues there. Building a subscribing audience and community support for arts and culture in quality venues in Rochester can create a foundation for more funding.

Arts organizations have voiced a concern that smaller performing arts groups find it more difficult to find affordable rehearsal and performance space. In the DMC development program, a multi-use, "black box" space may be useful. There is a "black box" theater in the new Mayo Civic Center design. Whether that space will be affordable and available for smaller community performers should be explored.

Visual artists also have difficulty finding studio space. Many cities have encouraged artist cooperative spaces. One example is the Torpedo Factory Arts Center in Alexandria, Virginia. The Torpedo Factory houses more than 165 visual artists who produce artwork in a wide variety of media, including painting, ceramics, photography, jewelry, stained glass, fiber, printmaking, and sculpture. The artists invite visitors to join them in their studios and observe their creative processes, creating a destination attraction. The Torpedo Factory also features an art school, café, and gift shop. It is owned by the city and managed by a non-profit organization and board.

One Minnesota-based resource worth investigating is Artspace, headquartered in Minneapolis. Artspace is a national non-profit with a network of affordable arts facilities that include studio and live-work space. Whether the Artspace program is compatible with Rochester's needs is yet to be determined, but having an internationally known arts organization nearby is worth considering.

The downtown location of Barnes and Noble (the former Chateau Theater) is being sold. Although the loss of a downtown bookstore is regrettable, the sale presents an opportunity to reuse the structure, perhaps as a performing arts or cultural space. A specific market and feasibility study will be required, but successful theater rehabilitations have served as catalytic elements of several downtown redevelopment efforts. A cultural arts facility could be multi-purpose, allowing for use for a range of performances, lectures, and programs.



DEVELOPMENT P **DESTINATION MEDICAL CENTER** DRAFT



OPPORTUNITIES

- New employment generated by the growth of the Mayo Clinic and DMC-related non-Mayo-Clinic development would enhance the total available markets for RDE venues. A vibrant RDE sector would improve Rochester's image as a place to live and work.
- Enhanced RDE development may attract a range of shoppers, diners, and entertainment visitors from outside Olmsted County and add to the visitor experience.
- RDE provides good support to many other elements of the overall DMC economic development goals.
- RDE can serve as a highly-visible, high-impact sign that downtown Rochester is a "place to be."
- In addition to destination RDE in the center of the DMC, there are opportunities for neighborhood shopping in new residential areas that would be part of the greater DMC.
- Strengthening the Third Street restaurant cluster with graphic banners on parking decks, a marketing program, and merchandising plan could be an easy way to create energy for the DMC in the early going.
- The downtown location of Barnes and Noble (the former Chateau Theater) is being sold. Although this represents a loss of a downtown bookstore, the sale presents an opportunity to reuse the structure, perhaps as a performing arts or cultural space. A specific market and feasibility study would be required, but successful theater rehabilitations have served as catalytic elements of several downtown redevelopment efforts.

CHALLENGES

- Rochester.
- airport may be the best way to build strong performers underground.
- may strengthen the overall concept.
- that will choose to shop and dine in the DMC.
- and transit will need to be smooth, reasonably priced, and safe.

DEVELOPMEN **DESTINATION MEDIC**

The proximity of the Twin Cities and the Mall of America offers a nearby alternative to the DMC RDE development. Previous studies have identified that Rochester households do not spend as much locally as typically might be found in a similarly sized community. An attractive mix of RDE venues will be necessary to attract a larger spending share than currently found in

 Retail and food service in the Subway functions like airport retail. Convenience, guick service, and small goods seem to perform well. Merchandising the space as one would merchandise an

The Skyway has a mixed retail environment, including shopping mall-type tenants, a range of dining options, and food courts. Merchandising the Skyway in clusters with distinct identities

RDE growth is tied to job growth to create the critical mass necessary to support expanded spending. Retail is an amenity. The focus has to remain on building a sufficiently sized market

• As with all elements of the DMC, access to the destination RDE development by automobile



5.6.5 LEARNING ENVIRONMENT

Fostering a "learning environment" in the DMC means more than coordinating with the public school system or area colleges and universities. It also means creating an environment where learning and lifelong education are core values.

Within the DMC area, Rochester already has a number of educational institutions, including pre-schools, public and parochial elementary and secondary schools, private educational programs, and higher education (e.g., UMR, Cardinal Stritch University, Rochester Community and Technical College, Augsburg College – Rochester, and Saint Marys University-Minnesota). The student population of the higher education institutions brings a vitality and market that can be attractive to others who might consider Rochester as a location for education and post-graduate work.

The presence of a medical school associated with the Mayo Clinic and the Mayo Institutes are major assets and offers an opportunity to expand programs to attract life sciences students and programs. Perhaps a "study abroad"-type program could be developed to allow STEM students from universities elsewhere in the country to work with Mayo Institutes. Such a program could create collaborative learning programs, introduce students to opportunities in Rochester, and raise awareness of the DMC.

A full learning environment program should include lifelong learning, including programs for older adults. Roughly 37 million Americans age 65 and older represent slightly more than 12% of the country's total population. By the year 2030, the number of Americans in this age group will nearly double, accounting for one-fifth of the population. Although many of the initiatives of the DMC are targeted at millennials (a large component of the future workforce), another group to attract is Baby Boomers.

As part of a larger Aging in Place Initiative, a workshop, "Enhancing Lifelong Learning: Developing a Livable San Diego County for All Ages," was hosted in 2008 by San Diego County's Aging and Independence Services that showcased the county as a national model for its lifelong learning and Aging in Place strategies. At the San Diego workshop, participants heard a lifelong-learning presentation from Professor Joaquin Anguera of the Department of Gerontology at San Diego State University. Professor Anguera presented a discussion of "learning cities," a concept that promotes community lifelong learning in which all segments of city government and civil society work together to make cities thriving learning environments. In his presentation, Professor Anguera shared the four criteria for a learning city:

- Provides a structural and mental framework that allows its citizens to understand and react positively to all the learning challenges
- Requires inspirational leadership and management (a shared sense of purpose and direction)
- Creates a dynamic, participative, and culturally aware environment
- Inspires citizens to contribute to city life and culture (sharing their talents)

Building a similar paradigm for lifelong learning as part of the DMC initiative will highlight the work already happening in Rochester and create an opportunity to engage the entire community. Within the DMC

development program, additional multi-use educational space with high-tech facilities could be used to expand offerings and attractions.

In addition to building a DMC with educational institutions and programs, a physical learning environment can further the overall DMC goals. UMR is currently developing its master plan for its future campus. The renovated Mayo Civic Center is including higher-quality audio-visual equipment for conferences. Mayo Clinic prepares videos and training programs, and hosts several online conferences a year. The Mayo Clinic Innovation Center's annual fall Transform event is a good example of using technology to provide ongoing learning opportunities on-site and remotely.

HIGHER LEARNING

MAYO MEDICAL SCHOOL

Opening in 1972 with 40 students out of 473 applicants, the Medical College at the Mayo Medical School offers a medical education experience affiliated with the Mayo Clinic. In 2013, the College of Medicine had 3,055 full- and part-time faculty on staff. In 2013, 195 students were enrolled. Although relatively small in enrollment, the prestigious reputation of the school can be used to raise the quality of learning opportunities in the area.

Of all Mayo Medical School graduates, 34% practice medicine in Minnesota. Of the 702 graduates included in the FY 2011 number who were from Minnesota and received capitation grants (100% of Mayo Medical School students receive financial aid), 326 have stayed in Minnesota to practice medicine. An effort to bond these graduates to Rochester through an enhanced DMC could help retain and attract talented professionals, particularly to practice at the Mayo Clinic or associated DMC-located bio-med-tech companies.

UNIVERSITY OF MINNESOTA ROCHESTER (UMR)

Formally established in December 2006, UMR is the newest campus in the University of Minnesota system. UMR offers a health sciences and biosciences education curriculum, including degrees in Health Professions (B.S.), Health Sciences (B.S.), and Biomedical Informatics and Computational Biology (M.S. and Ph.D.), in addition post-secondary enrollment options for high school seniors. Enrollment includes approximately 750 undergraduate and graduate students.

Expansion plans have recently been approved that include a 10-year campus development program for 125,000 square feet that will incorporate new spaces plus 22,500 square feet of existing space. The current classroom space in the University Square development downtown is included in the plan, but some of the UMR uses might consider integrating with the research space and encourage more collaboration with the Mayo Medical School and other educational institutions.



ROCHESTER COMMUNITY & TECHNICAL COLLEGE (RCTC)

Established 1915 as Rochester Junior College, RCTC enrollment (fall 2013) was 5,601 undergraduates and 456 high school enrollees. Of those enrollees, 4,950 were Minnesota residents. Degrees offered include Associate in Arts, Associate in Applied Science, Associate in Science, diplomas, and certificates. The largest programs are liberal arts, nursing, business, law enforcement, and health information technology.

Unique programs include administrative clinical assistant, advanced hospital nursing assistant, clinical neurophysiology technology, dental hygiene, equine science, horticulture technology, human services, surgical technology, veterinary technology, and welding technology.

RCTC also offers intercollegiate sports, including nationally known varsity Division III athletics program offerings in men's baseball, basketball, football, golf, and wrestling, and women's basketball, golf, soccer, softball, and volleyball.

The RCTC campus in located out of the downtown area, but consideration should be given to opportunities to include RCTC in an integrated educational strategy in the DMC area and linkages with new businesses recruited through the DMC.

OTHERS

The Mayo Clinic already has experience working with other universities and educational institutions as part of its partnering outreach. As the DMC develops, the Mayo Clinic could include more collaborations with health science, bio-science, and medical research higher education institutions by offering "study abroad" programs and partnerships in Rochester, and joint educational conferences and seminars in newly developed facilities at the Mayo Civic Center or venues to be developed in the DMC. Such programs can serve as introductions to Rochester and the DMC, and the opportunities for education, career, and lifestyle that are available in Rochester.

OTHER LEARNING ENVIRONMENT OPPORTUNITIES

Additional educational opportunities that could develop as the DMC grows and the Mayo Civic Center venue is redeveloped and available could include learning at all stages of life and career:

- care delivery, and other bio-med-tech industry-related programs.
- Sports-related camps for youth groups could be offered.
- Personal wellness expos could be promoted regionally.
- brand that lends calm and rationality to a volatile subject.
- Clinic's ongoing outreach could encourage science studies.

Within the development planning concept, approximately 90,000 square feet was set aside for educational space as part of the research center. This square footage represents a programming objective, and is not specifically assigned to a named user.

DEVELOPMENT PL DESTINATION MEDICAL DRAFT

Executive education seminars could focus on topics related to life sciences, health care and health

Public health seminars and training, perhaps in conjunction with the Mayo Clinic, the National Institute of Health, and the Centers for Disease Control and Prevention, could be offered. With current concerns about epidemiology and public health readiness, the Mayo Clinic's reputation could be a

Seminars, workshops, and programs for high school and middle school students that links to Mayo



5.6.6 SPORTS & RECREATION

The United Nations' World Health Organization identified physical activity as an essential strategy to address the problems of sedentary living and obesity in children and adults. In a recent study by the World Health Organization Europe, Promoting Physical Activity and Active Living in Urban Environments, it was found that active living contributes to physical and mental health, social cohesion, and community well-being.

One element in a community health and wellness strategy is the promotion of and access to sports and recreational opportunities. Consistent with this position, sports and recreation is a core component of the DMC concept.

According to the Centers for Disease Control and Prevention, more than one-third (78.6 million) of US adults are obese. In Minnesota, the prevalence of obesity in the adult population is estimated to be 26%. Although lower than many Midwestern states, Minnesota still has significant adult obesity issues. Childhood obesity continues to be a major issue nationally, with approximately 17% of children aged 2 through 19 obese, or 12.7 million kids.

Participation in physical activity may be influenced by such factors as

- The built and natural environments
- Social influencers
- Gender, age, and ability



Other factors may include fear of crime, road safety, access to sports and recreation facilities, and community opinions about activities (such as cycling as a mode of transit or recreation).

In the 2013 Community Health Needs Assessment produced by the Olmsted County Public Health Services, Olmsted Medical Center, and the Mayo Clinic, it was found that "physical activity levels are positively affected by structural environments such as the availability of sidewalks, bike lanes, trails, and parks, and legislative policies that improve access to facilities that support physical activity."

As part of its analysis of the core areas of focus for the DMC, AECOM researched sports participation in the US and Minnesota, as well as examples of urban sports and recreation programs to identify potential program elements to include in the DMC program.

SPORTS PARTICIPATION

Identifying opportunities to provide facilities and programs for increasing physical activity in an urban environment such as the DMC area requires understanding participation levels in various sports and activities to inform the planning process. The National Sporting Goods Association prepares an annual research survey, Sports Participation in the United States, that measures the annual number of participants in each sport/activity, the frequency of participation, total days of participation, and the mean (average) and median (mid-point) number of days of participation annually.

Sports that may be accommodated within the urban core of the DMC that can appeal to a range of ages and both genders include the following:

- Aerobic exercising
- Basketball
- Bicycle riding
- Bowling
- Exercise walking
- Hiking

Examining frequent participation of selected sports in Minnesota (Figure 5-63) suggests that sports and recreation facilities with aerobic exercise options, a running track, free weights and weight equipment, and yoga classes may be attractive in the DMC. Sports and recreation facilities can be offered in public and private facilities. Outdoor opportunities for biking and running offer low cost means for a broader range of people to participate.

- Running/Jogging
- Skateboarding
- Swimming
- Weight lifting
- Working out at a club
- Yoga





SPORTS AND RECREATION IN THE DMC CONTEXT

In the context of the DMC concept, activities in open spaces can serve to support social interaction and health and wellness. Activities in open spaces (formal and informal), may include watching or participating in organized sporting events, participating in informal, "pick-up" sports, walking, and bicycling. The DMC core area of sports and recreation should be considered in its broadest sense to include open spaces.

Open spaces can support environmental and heritage conservation, as well as include traditional historic landscapes, such as Central Park and Soldiers Memorial Field in Rochester. They also have a positive impact on air and water quality, protect biodiversity, and reduce heat build up from impervious surfaces in an urban setting.

Open spaces, sporting events, and recreational activities can also serve to support economic activity in the DMC and Rochester by supporting such businesses as events promoters, bicycle and other equipment rentals and sales, and attracting visitors for events.

Open space, natural areas, and program recreational areas also support the development and values of residential projects in the DMC. Several studies have highlighted the value of residential properties near recreational facilities.

Nearby Soldiers Memorial Field provides a park and sports facilities with softball, football, and soccer fields; tennis courts; sand volleyball courts; horseshoe courts; a running track; and swimming pools. It also has playgrounds for children (Figure 5-64). Soldiers Field represents an opportunity to rethink sports and recreation in an urban context. Currently, program discussions are on hold.

There is a trail loop system that connects downtown and Soldiers Memorial Field with other areas of the city that can be completed and expended for sports and recreation in formal and informal ways.

The Zumbro River offers an additional opportunity to expand recreational space. Uses need to be explored that are compatible with flood control and other physical aspects of the space.



5.6.7 LIVABLE CITY

The demand for residential units in the DMC area was estimated using data sets from a variety of sources:

- 2014 Olmsted County Housing Study, Maxfield Research
- **ROCOG Employment Growth and Population Growth projections**
- AECOM estimated Mayo Clinic employment growth
- US Census Bureau data for downtown employees by place of residence
- US Census American Community Survey tenure by units in structure from 2008–2012
- Stakeholder interviews with housing advocates, realtors and brokers, property owners, and neighborhood representatives

Baseline analyses were prepared to estimate demand for single-family units and multi-family units based on new household growth for rental and for-sale properties and for market rate, affordable subsidized, and senior units (affordable and market rate).

Additional demand based on projected DMC employment growth and an estimated "downtown share" of new units demand based on current percentage of capture was prepared to estimate additional new unit demand.

Two analyses were prepared: one based on a moderate growth estimate of DMC-induced employment and residential demand and one with a higher growth estimate. The results were used to prepare a "high to low" range estimating residential demand. Five-year development periods were used to illustrate the growth and development program for the DMC.

With the exception of a few high-rise housing properties for older adults, downtown Rochester does not have residential development. Single-family residential neighborhoods may be found adjacent to downtown, but not in the core area. In the adjacent neighborhoods, there are low-scale apartment blocks in single-family neighborhoods.

Additionally, there does not seem to be an established market for condominiums in Rochester. Without an established market, there seems to be limited financing and reluctance on the part of the development community to create such a market. The residential demand analysis calculated potential for for-sale and for-rent condominium units.

As the DMC core is assumed to have an urban form, all estimated units were for multi-family developments; single-family homes have been assumed to remain in adjacent neighborhoods, as land costs and density preferences in a downtown setting tend to make single-family homes a less likely option. The single-family neighborhoods provide an additional housing option. These neighborhoods contain older and historic



(SOURCE: U.S. CENSUS BUREAU, ESRI)



DEVELOPMEN **DRAF**



	2013-2020	2020-2030	Total
For Sale, Single-Family Demand			
Olmsted County	2,910	5,170	8,080
Average Annual Demand	420	470	450
For Sale, Multi-Family Demand			
Olmsted County	1,080	2,200	3,280
Average Annual Demand	160	200	180
Rental, Multi-Family Demand			
Olmsted County	2,890	4,180	7,070
Average Annual Demand	410	380	390
Older Adult Housing Demand			
Olmsted County	3,150	1,100	4,250
Average Annual Demand	450	100	240
Total Olmsted County Housing Demand	10,030	12,650	22,680
FIGURE 5-67 - DEMAND FOR ADDITIONAL HOUSIN (EXCLUDES DMC EMPLOYMENT PROJECTIONS) (SC	G, OLMSTED COU DURCES: MAXFIELI	NTY 2013 TO 203 D RESEARCH ANI	0 D AECOM)

homes that can be rehabilitated and should remain as a priority to maintain this housing option near downtown.

Assuming sufficient incentives and support can be developed for condominium market development, the units estimated include flats, townhomes, and high-rise units. The analysis assumed that single-family demand could be met in the adjacent neighborhoods and elsewhere in Rochester.

AECOM examined downtown employment and residential populations in comparable cities having universities or major institutions in downtown:

- Eugene, Oregon
- Madison, Wisconsin
- Boulder, Colorado
- Ann Arbor, Michigan

Using these cities as analogs, a benchmark "share" of potential downtown residential development was established to determine achievable goals for developing downtown neighborhoods in Rochester.

Figures 5-65 and 5-66 compare the share of City residents who live and work downtown, as defined as within ½ mile of the employment center. In Rochester, 1% of residents live in downtown, defined by a single Census tract, compared to 13% in Ann Arbor, Michigan. However, 35% of residents work in the downtown.

In the comparable cities AECOM profiled, there is a relatively small share of city residents who both live and work in the downtown, about 1 to 3%. Significantly more downtown residents actually work outside of downtown (64% in Rochester).

RESIDENTIAL DEMAND IN OLMSTED COUNTY

Demand for residential units is driven by population growth and job growth. Housing type is estimated based on household characteristics (size, income, age cohorts, and type as a percentage of the overall market). Estimating demand requires establishing baseline demand. Using the Maxfield housing study and population and employment estimates, AECOM prepared a series of analyses estimating the demand for units by type and the DMC/downtown's share of units (Figure 5-67).

- Knoxville, Tennessee
- Fort Collins, Colorado
- Shreveport, Louisiana



RESIDENTIAL DEMAND IN THE DMC AREA

After determining the demand for additional housing for Olmsted County, a similar analysis was prepared to determine the baseline demand in the City of Rochester and the DMC's share of that demand.

Assigning a share of new demand based on existing residential ratios and population growth, it was estimated that 2,200 units of for-sale and for-rent housing would be needed in the DMC (Figure 5-68). Duplexes are included in multi-family estimates.

This demand is combined with projections of housing demand from employment growth in the DMC (addressed on the following page) to develop an estimate total demand ranges.

For Sale, Single-Family Demand

Rochester Demand

Average Annual Demand

Existing Share to DMC Area*

DMC Area Demand

For Sale, Multi-Family Demand

Rochester Demand

Average Annual Demand

Existing Share to DMC Area*

DMC Area Demand

Rental, Multi-Family Demand

Rochester Demand

Average Annual Demand

Existing Share to DMC Area*

DMC Area Demand

Senior Housing Demand

Rochester Demand

Average Annual Demand

Existing Share to DMC Area*

DMC Area Demand

Total DMC Area Housing Demand

FIGURE 5-68 - DEMAND FOR ADDITIONAL F DMC EMPLOYMENT PROJECTIONS) (SOURC

* Existing share based on analysis of US Census Bureau American Community Survey tenure by units in structure date from 2008 to 2012.

DEVELOPMENT PLAN DESTINATION MEDICAL CENTER DRAFT

	2015 - 2024	2025 - 2034	Total
	3,270	4,940	8,210
	360	550	
	0%	0%	
	0	0	0
	1.580	2.660	4.240
	180	300	
	4%	5%	
	70	140	210
	3,600	5,160	8,760
	400	570	
	13%	14%	
	450	720	1,170
	1,910	1,200	3,110
	210	130	
	26%	27%	
	500	320	820
	1,020	1,180	2,200
OUSING, [OMC AREA 201	5 TO 2034 (E)	CLUDES



		DMC E	mployees B	eyond Base	eline	
% Living in DMC	25,000	30,000	35,000	40,000	45,000	50,000
0.4%	70	80	90	110	120	130
1.0%	170	200	230	270	300	330
1.5%	250	300	350	400	450	500
2.0%	330	400	470	530	600	670
2.5%	420	500	580	670	750	830
3.0%	500	600	700	800	900	1,000
3.5%	580	700	820	930	1,050	1,170
4.0%	670	800	930	1,070	1,200	1,330

RESIDENTIAL DEMAND RESULTING FROM DMC JOB GROWTH

In addition to the housing demand resulting from the growth of households and population, new housing will be required to accommodate the households created as a result of DMC projected job growth from the growth of Mayo Clinic and non-Mayo-Clinic employment (Figure 5-69).

AECOM estimated new job growth at the Mayo Clinic based on past growth and publicly announced growth. The estimates used are not to be assumed to be exact job creation figures from the Mayo Clinic, but only as a reasonable estimate for planning purposes. The additional, non-Mayo-Clinic job growth is based on previous analyses of job creation and is an early estimate of DMC job creation. Actual job creation and timing will likely be different, but these estimates are useful for planning purposes. As the catalytic effect of the DMC occurs, additional jobs and housing demand will occur. Depending on how robust that catalytic affects results, more units as a factor of those new jobs will be required.

People currently working in the DMC area live throughout the region. Therefore, AECOM estimated that potential housing demand across a range from 0.4% to 4.0% of total new housing demand could be supported downtown. In addition, AECOM estimated that the ratio of new households per new employee was two-thirds, recognizing that the average number of workers per household is 1.3.

Based on this analysis, AECOM estimates potential demand for 230 to 500 housing units resulting from employment in the DMC.

In later years in the DMC, greater job growth will result in a higher demand for downtown housing.





RESIDENTIAL DEVELOPMENT ESTIMATES

AECOM prepared a baseline analysis resulting in total demand of 2,200 units, with no single-family demand assumed in the DMC. Figure 5-70 illustrates the findings. The distribution of unit types are based on population growth projections by age cohort, growth associated with employment growth, and the profile of employee household types likely to be in that growth cohort.

For the "low" estimate, residential demand in the DMC area is estimated at 2,200 units from 2015 to 2034.

- study and a county housing analyses.
- is conservative.
- The strong capture of older adult housing units is based on existing concentrations.

The analysis assumes that a variety of product types, including townhomes, flats, and high-rise, would be necessary to provide the widest range of market options and opportunities for development.

For the "high" estimate, residential demand in the DMC area was estimated at 3,100 units from 2015 to 2034. The Rochester demand was also based on the "Comprehensive Housing Needs Assessment," but also an increased share of housing was assigned to the DMC, assuming that it will be more attractive as a location than the current downtown, and that new employees will be of a market group for whom downtown living is an attraction. Other assumptions included the following:

- Increased demand for rental multi-family
- duplex and attached townhomes)
- product variety



FIGURE 5-70 - RESIDENTIAL DEVELOPMENT SUMMARY

DEVELOPMENT **DESTINATION MEDICAL** DRAFT

Rochester demand was based on "Comprehensive Housing Needs Assessment" from the Maxfield

For-sale multi-family is unproven in the downtown area, so the share of for-sale multi-family product

Establishment of for-sale multi-family as an element of downtown area housing (could include

Increased capture of older adult housing units based on proximity to health care and amenities, and





Use	Phase 1	Phase 2	Phase 3	Phase 4	Total
Health (square feet)	1,200,000	1,700,000	1,800,000	2,100,000	6,800,000
Bio-Med-Tech (square feet)	180,000	150,000	380,000	310,000	1,020,000
Office (square feet)	0	50,000	110,000	150,000	310,000
Hotel (rooms)	760	240	230	150	1,380
Residential (units)	450	750	860	790	2,850
Retail/Dining/Entertainment (square feet)	50,000	110,000	120,000	40,000	320,000

WORKFORCE AND AFFORDABLE HOUSING

In May 2014, Maxfield Research prepared a study, Housing Needs of Olmsted County, in which it analyzed growth, demographic changes, shifts of housing preferences, and the supply and demand for a range of housing types across the county. The report was funded by a partnership of Olmsted County, the Rochester Area Foundation, and the Mayo Clinic. Two key findings of the study were that there is a significant need for affordable rental housing and that increasing prices of for-sale housing makes it difficult for low- and moderate-income households to purchase homes. The report also noted strong demand for older adult housing at market rate and affordable rates.

Maxfield identified that the vacancy rate for affordable rental units in December 2013 was 1.2%. This rate does not keep up with population growth for low- and moderate-income households in the county. The study also noted that average workers cannot afford the average for-sale home price of \$200,000.

IMPLICATIONS FOR DMC RESIDENTIAL DEVELOPMENT

The Maxfield study was county-wide, but increasing land costs in the DMC area would suggest that developing affordable and workforce units will be even more challenging in the DMC area. The people who will be employed in the DMC will not only be medical and technical professionals, but also retail clerks, hotel housekeeping staff members, food and beverage workers, and other wage employees. Although many will live outside of the DMC area and commute by transit, if available, the DMC would be well-served to have workers living in and enjoying the DMC. The challenge of how to include such housing inside the DMC boundary while keeping developments feasible suggests that some sort of scattered, inclusive housing strategy that uses higher market rates in multi-family developments to subsidize workforce and affordable units would be a way to diversify the household economic cohorts. The City of Rochester may want to consider an affordable housing overlay that presents a requirement to develop affordable or workforce housing units or a payment-in-lieu-of-development to a dedicated DMC housing equity fund as a way to build the needed units. There are many examples of inclusive housing strategies that can be used as models to meet Rochester's specific needs and to address unique DMC funding issues.

5.6.8 Development Program and Phasing Strategy Using the ranges of supportable square feet or units resulting from the market analysis, AECOM consulted with the DMC planning team to prepare a program and phasing strategy. The Development Summary (Figure 5-71) represents a target within the supportable ranges identified in the market analysis.

The phasing strategy distributes the market-supportable estimates with green space, transit space, health care space assumed to be developed by the Mayo Clinic, and allocations for programmed educational and entertainment arts or cultural uses. Those distributions occur across the DMC development timeline of 20 years, starting slowly at first as infrastructure improvements are put in place and employment centers with resulting employment and household growth grows and builds momentum.

DEVELOPMENT P DESTINATION MEDICAL DRAFT



5.7 DEVELOPMENT AND PLANNING CASE STUDIES

The case studies presented here (Figure 5-72) were selected to provide insights for Rochester, Minnesota, and the proposed Destination Medical Center (DMC). Some were selected because of the reputations of their medical centers similar to the Mayo Clinic in Rochester, Minnesota (Figure 5.75). Some represent attempts to develop bio-tech and bio-med industry clusters, and others are examples of successful downtown or district regeneration based on similar themes that underpin the DMC plan.

These are exemplary practices with different lessons learned from each, but by no means are they the only ones. They are examples among many from around the country. The situation in Rochester is unique: a world-renowned medical institution in the downtown of what is otherwise a small city within a rural region. Most of the examples are from either larger cities or districts and similar size cities within a large metropolitan area. Sheer market area size enables opportunities that may not be as replicable at the same scale in Rochester; however, many of the approaches taken, the planning and economic development principles, and how these communities organized for economic development and diversification are replicable and may inform the DMC plan and its implementation.

For each city and metropolitan area, some basic demographic and employment data are presented. For comparison, data for Rochester is found on the following page (Figures 5-73 – 5-74).

Organization and City	Mec Cei
Medical Centers	
Cleveland Clinic Cleveland, OH	
Johns Hopkins Medical Center Baltimore, MD	,
Bio-Med/Bio-Tech/R&D Parks	
BioCom Connect San Diego, CA	
Cortex St. Louis, MO	
Phoenix Biomedical Campus Phoenix, AZ	
Downtown/District Redevelop	ment
Bellevue, WA	
Des Moines, IA	
Madison, WI	
Oklahoma City, OK	
Portland OR	

DEVELOPMENT PLAN DESTINATION MEDICAL CENTER DRAFT





	2000	2010	2014
City of Rochester			
Population	85,806	106,769	109,946
Number of Households	34,116	43,025	44,607
Median Age	34.3	35.0	36.1
Median Household Income (Current Dollars)	\$49,090	\$56,826	\$64,007
Share of Population with College Degree or More	38.1%	39.9%	43.2%
Rochester Metropolitan Statistical Area	2000	2010	2014
Population	124,277	206,877	211,538
Number of Households	47,807	81,907	84,428
Median Age	35.0	37.5	38.1
Median Household Income (Current Dollars)	\$51,316	\$59,702	\$62,583
Share of Population with College Degree or More	34.7%	35.3%	34.5%





(Sources: Census 2000, American Community Survey 2010 1-year estimates (Median Household Income and city educational attainment), Current Population Survey 2010 (MSA educational attainment) ESRI Business Analyst Online, Walkscore.com, LEHD OnTheMap, Mayo Clinic Annual Report, 2012



5.7.1 CLEVELAND CLINIC (CLEVELAND, OHIO) ECONOMIC DEVELOPMENT INITIATIVES

Cleveland has become one of the leading biomedical, health care, and technology regions in the country, with more than 600 health care companies, 65 national investors, and \$600 million in annual research. Since 2003, more than \$1 billion has been invested in more than 100 Cleveland companies. In 2013, Cleveland's health care companies attracted \$201 million in venture capital. Biomedical companies employ approximately 33,000 people in the 18-county region, and have become a \$5.6 billion industry, up from \$3.5 billion in 2000.

The Health Tech Corridor (HTC) (Figure 5-76), located in the heart of Cleveland, promotes itself as "a prime location for biomedical, health care, and technology companies looking to take advantage of close proximity to four world-class health care institutions, including the Cleveland Clinic and University Hospitals, eight business incubators, four academic centers, and more than 120 high-tech companies engaged in the business of innovation." The 3-mile 1,600-acre HTC connects nine neighborhoods with various residential, retail, office, and entertainment uses.

The Cleveland Clinic anchors the HTC. Consistently ranked among the top hospitals in the US, the main hospital occupies 166 acres and 50 buildings within the Corridor. The Cleveland Clinic was founded in 1921 with a vision of providing outstanding patient care based on cooperation, compassion, and innovation. The hospital is widely recognized for cardiac care. With \$7 billion in revenue, it is among the top grossing hospitals in the US according to Becker's Hospital Review (Figure 5-79).

Another notable component of the HTC is the Global Center for Health Innovation, located adjacent to the Cleveland Convention Center. Commonly referred to as the "Medical Mart," the Global Center for Health Innovation was publically financed through a quarter-cent local sales tax passed in 2007. The 1-million-square-foot campus houses health manufacturers and service providers such as GE Healthcare and the Cleveland Clinic, and is designed to showcase the future of health and health care on themed floors. The project, modeled after the Merchandise Mart in Chicago, is anticipated to bring tens of thousands of doctors and hospital administrator visitors each year to see new medical technology; attend medical shows, conventions, and conferences; and take continuing-education classes. The strategy in developing the medical mart as part of the \$465 million convention complex was to support the burgeoning biomedical businesses and the more established health care and bioscience industries in the HTC.

The second floor of the Global Center for Health and Innovation focuses on people, patients, and caregivers. Cleveland Clinic's space on this floor includes a rotating exhibit that features patients and their innovative treatment, cutting-edge medical devices, and wellness videos on common health care topics. The exhibit is self-guided, designed with conference attendees and the general public in mind. The Cleveland Clinic space is also used by its experts to speak with various audiences about leading-edge health care topics.



DEVELOPMENT PLAN DESTINATION MEDICAL CENTER DRAFT



	2000	2010	2014
Cleveland City			
Population	478,632	396,815	382,427
Number of Households	190,760	167,490	164,413
Median Age	35.6	36.2	36.8
Median Household Income (Current Dollars)	\$25,928	\$25,977	\$25,845
Share of Population with College Degree or More	14.8%	13.3%	14.3%
Cleveland-Elyria Metropolitan Statistical Area	2000	2010	2014
Population	2,148,144	2,077,240	2,061,013
Number of Households	853,165	854,893	857,551
Median Age	40.5	41.4	42.2
Median Household Income (Current Dollars)	\$42,215	\$52,962	\$49,062
Share of Population with College Degree or More	23.3%	27.0%	28.0%

FIGURE 5-77 - CLEVELAND, OH DEMOGRAPHICS (CITY WALK SCORE[®] = 57)



IMPACT ON CITY

An essential component of the HTC is the transformation of Cleveland's Euclid Avenue through a strategic \$200 million investment in a bus rapid transit (BRT) system, completed in 2008. Euclid Avenue connects the two largest commercial districts in northeast Ohio: downtown and University Circle. By connecting downtown with University Circle, the BRT service contributes to the unification of Cleveland's top economic generators. The project (called HealthLine) included enhancements such as roadway improvements, 1,500 new trees, public art, and landscaped medians to make it a place where businesses want to locate and people want to use.

The assumption was that connecting the major health care and university anchors with the downtown would spur economic development and revitalize Cleveland's downtown. According to the Institute for Transportation and Development Policy, which evaluated 21 North American transit corridors in 2013, the HealthLine generated nearly \$115 in economic development for every dollar spent on the bus corridor. A study by Sasaki estimated that the BRT corridor catalyzed \$5.8 billion in spin-off investments and more than 13.5 million square feet of development. Old buildings along Euclid Avenue have been rehabilitated into housing and retail, there is new construction in the corridor, and existing institutions have expanded. This development included the Midtown Tech Park, which opened in 2011 and includes 128,000 square feet of state-of-the-art incubator space. In addition, more than 5,000 housing units were developed to assist the corridor's revitalization.

Another development that anchors the HTC is the medical mart. The HealthLine and evolving HTC are forming strategic links among diverse stakeholders, including public, private, nonprofit, and neighborhood interests. In addition, the HealthLine is powered by hybrid technology that combines a diesel engine with electronic transmissions, thus reducing emissions and increasing fuel economy.

The Cleveland Clinic and University Hospitals of Cleveland purchased naming rights to the BRT line in a 25-year, \$6.25 million deal. Naming it the HealthLine ties the service to Cleveland's branding as a hub of medical care and research. By physically linking large hospitals, startups, convention space, and cultural amenities, the corridor is propelling Cleveland's evolution into a world-class destination for the health care and biotech industries.

The Cleveland Clinic is a regional economic engine, employing 33,000 people and pumping more than \$3.5 billion a year into the local economy. Its Innovations program turns caregivers' ideas and discoveries into products, devices, and software, and spins them off as companies. The program has enabled more than 66 new job-creating businesses.

Research is a core component of the hospital. The Cleveland Clinic Lerner Research Institute, home to laboratory-based, translational, and clinical research, has annual research expenditures of approximately \$250 million. In addition, the Cleveland Clinic spends \$92 million in charity care, free health screenings, and patient education forums annually.



Recognizing the strength of the health care industry, there are several regional organizations working to create opportunities for residents, local vendors, and contractors. For example, the Cleveland Foundation's Greater University Circle Initiative is a multi-pronged initiative focused on strengthening the relationship between the neighborhoods and institutions in the area surrounding the Cleveland Clinic campus and other medical centers, universities, and cultural institutions. The goal is to develop programs, projects, and policies that revitalize this area and benefit residents. The initiative includes investments in retail, housing, transportation, open space, and workforce development, with the aim of revitalizing previously disinvested neighborhoods. The Cleveland Clinic is a key partner in this initiative.

INSIGHTS AND IMPLICATIONS

The HTC is not only an economic development strategy for the Euclid corridor, but also for the city of Cleveland. The project has helped Cleveland make a transition from an industrial economy to a knowledgebased economy. The various components of the HTC strategy have built upon existing strengths and synergies provided by the Cleveland Clinic, including education, research, health care, and tourism (both patient-based and medical-mart-based). The HTC is comparable to the DMC because it is envisioned as a vibrant area where people can live, work, and play. It, like the DMC, also leverages the strengths of the local economy, which are concentrated in the health care industry.

Similar to the proposed DMC, the HTC and related development received funding from public, private, and philanthropic sources.

Established: 1921 Employees: 49,779 Revenue: \$7.0 Billion FIGURE 5-79 - CLEVELAND CLINIC PROFILE

Online, Walkscore.com, LEHD OnTheMap, Cleveland Clinic Form 990, 2012

DEVELOPMENT PL DESTINATION MEDICAL CENTER DRAFT



Sources: Census 2000, American Community Survey 2010 1-year estimates (Median Household Income and City educational attainment), Current Population Survey 2010 (Metropolitan Statistical Area Educational Attainment) ESRI Business Analyst



	2000	2010	2014
Baltimore City			
Population	651,154	620,961	620,718
Number of Households	257,987	249,903	251,435
Median Age	34.5	35.1	36.0
Median Household Income (Current Dollars)	\$30,078	\$38,346	\$38,357
Share of Population with College Degree or More	22.6%	24.2%	26.6%
Baltimore-Columbia-Towson MSA	2000	2010	2014
Population	2,552,994	2,710,489	2,759,570
Number of Households	974,071	1,038,765	1,059,842
Median Age	38.0	38.7	39.2
Median Household Income (Current Dollars)	\$57,291	\$75,705	\$66,722
Share of Population with College Degree or More	28.2%	34.6%	35.7%

FIGURE 5-80 - DEMOGRAPHICS OF BALTIMORE, MD (CITY WALK SCORE[®] = 66)



5.7.2 JOHNS HOPKINS MEDICAL CENTER (BALTIMORE, MARYLAND) **ECONOMIC DEVELOPMENT INITIATIVES**

Medical research institutions and their associated activities are key drivers of economic development. The innovations, technologies, and intellectual properties generated by research institutions assist startup companies, retain and expand existing firms, and attract new business to the region.

The Johns Hopkins' research facilities are located at Bayview Medical Center, Johns Hopkins Hospital, Johns Hopkins University campus, and Montgomery County Campus at the Shady Grove Life Sciences Center. (Figure 5-82)

The Johns Hopkins University Montgomery County Campus at the Shady Grove Life Sciences Center is one of the nation's leading biotechnology clusters. It was established based on a cooperative effort involving Johns Hopkins University, the Montgomery County government, and many of the Technology Council firms in the Interstate (I) 270 corridor.

Since opening for classes in 1988, the campus has become a major educational resource for Montgomery County and the surrounding Washington, DC, area. Facilities and services include 40 classrooms, a state-ofthe-art teaching wet lab, four computer labs, a distance learning classroom, a library with electronic search capabilities, a 300-seat auditorium, 150-seat presentation room, faculty and student lounges, a bookstore, vending areas, and the Food for Thought Café. The success of the programs offered at the Montgomery County Campus by four Johns Hopkins divisions resulted in the construction of the Academic and Research Building, which opened in January 2000.

Another noteworthy economic development initiative is the Baltimore Development Corporation's Emerging Technologies Center @ Johns Hopkins Eastern Campus, which provides flexible space and support services to startup companies associated with Johns Hopkins and other universities in the city of Baltimore.

IMPACT ON CITY

One key development strategy that has had an impact on the city of Baltimore, Maryland, is the development of the Science + Technology Park at Johns Hopkins. The project is part of an 80-acre mixed-use development adjacent to Johns Hopkins Medical Center that is being developed by Forest City Enterprises (Forest City). The initial 31-acre phase of development is planned to combine 1.5 million square feet of office and research and development (R&D) space, 1,200 new or renovated residential units, and a broad variety of retail services and amenities together with a network of parks and pedestrian links that will help connect the community with the adjacent Johns Hopkins campus.

The first of the five planned life science/office facilities in the park is anchored by the Rangos Building, which includes 281,000 gross square feet of life sciences and R&D space. The facility is connected to

DEVELOPMENT **DESTINATION MEDICAL** DRAFT



other university research facilities via a sky bridge, and the building is intended to provide state-of-theart facilities for organizations seeking to participate in joint research programs with Johns Hopkins. The university has also pledged to make sophisticated research equipment elsewhere on its campus available to building tenants.

Other completed development includes four residential projects that consist of approximately 550 residential units. Current development under construction includes a 1,450-space parking structure with ground-floor retail, a 235,000-square-foot building for the Maryland Department of Health and Mental Hygiene, and the Henderson-Hopkins School.

The Shady Grove Life Sciences Corridor is a plan aimed at doubling the size of Montgomery County's life sciences cluster. The project includes development of approximately 4.5 million square feet of research and office space at the Belward Research Campus, a 108-acre site owned by Johns Hopkins near the University's Montgomery County Campus. If successful, the plan will reshape the local environment.

INSIGHTS AND IMPLICATIONS

As one of the consistently top-ranked medical research institutions and clinics in the world, Johns Hopkins is often considered one of the Mayo Clinic's peers in health care, life science research, and public health leadership. There are several key similarities between Johns Hopkins and the Mayo Clinic:

- Major connections to the National Academy of Sciences and the National Institutes of Health.
- Johns Hopkins receives significant public and private grants and donations. According to the National Science Foundation, Johns Hopkins led US universities in research spending for the 34th straight year in fiscal year (FY) 2012, performing \$2.1 billion in medical, science, and engineering research and development.
- They are both engaged in a current expansion that includes its home community. Johns Hopkins is a key partner in the redevelopment of a large area of the city of Baltimore.

Some major differences are the following:

- Johns Hopkins is associated with a major university (enrollment of 21,327). Its medical school has 1,417 students and 2,551 full-time 1,291 part-time faculty.
- Johns Hopkins is in the Baltimore/Washington, DC, Metropolitan Statistical Area (MSA), a metropolitan area with more than 9 million people. The job opportunities for spouses are many.

Sources: Census 2000, American Community Survey 2010 1-year estimates (Median Household Income and City educational attainment), Current Population Survey 2010 (MSA educational attainment) ESRI Business Analyst Online, Walkscore.com, LEHD OnTheMap, Johns Hopkins Bayview Medical Center Form 990, 2012, Johns Hopkins Hospital Form 990, 2012



DEVELOPMENT **DESTINATION MEDICAL DRAF**

Other Revenue

Other Revenue



- The Baltimore MSA has a higher cost of living than the Rochester MSA.
- Johns Hopkins is located in Baltimore, Maryland, adjacent to low- and moderate-income neighborhoods, economically challenged districts, and in a city struggling with difficult social issues.

One major goal of the Science and Technology Park at Johns Hopkins is to bring new economic drivers to the city of Baltimore. The park will provide traditional laboratory and office space, and also build-to-suit options for biological research companies, small-scale manufacturing firms, pharmaceutical firms, and other businesses related to the biotech industry.

The development will feature reconfigured, attractive streets and sidewalks that are consistent with the city's architecture. The housing will include a range of affordable and market-rate units, both for sale and for rent. Residential product options will include single-family row homes, condominiums, apartments, and graduate school housing.

The development is applicable to the DMC concept because housing, commercial uses, and attracting new and innovating companies are critical elements. Similarly, the Shady Grove Life Sciences Corridor attempts to leverage the life sciences cluster to grow and expand development opportunities in the future. Like DMC connections to the Mayo Clinic, these development plans leverage Johns Hopkins to help revitalize the surrounding community by creating a needed link between research and economic development.



5.7.3 BIOCOM/CONNECT (San Diego, California)

ECONOMIC DEVELOPMENT INITIATIVES

The San Diego region is one of the top life science industry regions in the world, with a significant concentration of more than 400 bio-technical, bio-medical, and related companies. This industry cluster is mutually supported by a medical-instruments industry and allied technology clusters in telecommunications (anchored by Qualcomm), marine biology, software, defense technology, and an emerging clean-tech industry cluster. The convergence of these industries is leading to innovations in telemedicine, bio-fuels, and information technology. JLL's Life Sciences Scorecard ranks the region 3rd nationally, just behind the San Francisco Bay area and the Boston metro area.

The region hosts 80 research institutions, including the Scripps Institute of Oceanography, the Salk Institute, and the Sanford-Burnham Medical Research Institute, most of which are clustered near each other and the University of California, San Diego (UCSD) in La Jolla and the Torrey Pines Mesa. Two-thirds of the research institutes are part of the UCSD system, and one-third are private or affiliated with other academic institutions. UCSD ranks among the top life-science universities globally, and has a highly ranked medical school. Several of these institutions are on former public pueblo lands that were donated by the city of San Diego to induce economic development. The development of the region's life science industry was aided by two important industry organizations: CONNECT and BIOCOM.

BIOCOM

BIOCOM, founded in 1995, is a 501(c)(6) nonprofit, member-driven trade organization representing organizations in the life science industry (Figure 5-85). BIOCOM focuses on the health, energy, agriculture, and bioscience sectors. Specifically, the life science sectors that BIOCOM propels are biotechnology, pharmaceutical, diagnostic, medical device, connected health, agriculture, and bio-renewable energy. BIOCOM represents approximately 600 member companies, service providers, and research institutions, of which approximately 66% are industry, 24% are service providers, and the remaining 10% are venture capital, nonprofit, academic institution, and research institution members.

BIOCOM started in response to a crisis: a severe drought in the early 1990s. As an emergency measure, the San Diego City Council was going to shut off water for several hours a day for all manufacturers to conserve the region's water, unaware of how critical a reliable source of water was to the biotech industry. CEOs from biotech companies and service providers to the industry such as architects, commercial and industrial brokers, and developers of technology space, attorneys, financial, and others, concluded that they needed an industry organization for this emerging industry cluster to have greater political impact. They started out as two organizations, one for industry called the Biotechnology Industry Council and one for service providers to the industry. Fortunately, the drought ended and water rationing was not executed. The policy response, however, brought together the biotechnology industry with service providers. The providers organization become BIOCOM. A key moment was the decision to combine the two organizations to directly link biotechnology companies with service providers and funders under the BIOCOM banner in 1995. This link defines BIOCOM's success.

The organization increased awareness of the growing biotechnology industry to the San Diego region. Local and state government supported the industry because of its higher wages, cleaner processes, and association with health. BIOCOM helped its members, especially smaller members, by forming a Purchasing Group, which strengthened its relationship with members and defined its role as a member service organization for the biotechnology industry. BIOCOM also developed educational programs for members. These programs became UCSD Extension programs, reinforcing the industry's relationship with the university, and eventually became part of the curriculum at UCSD and community colleges. An early event was the first CalBioSummit in 1992, which included a live-feed from then-Governor Pete Wilson, who was a former Mayor of San Diego. This event brought the state's attention to San Diego and its life sciences network.

BIOCOM's other notable programs include the Nobel Laureate Dinner with the Swedish Consulate and the BIO Annual meeting, which brings world attention to the San Diego region and its role in the global biotechnology industry. More recently, BIOCOM organized the BIOCOM Institute to share knowledge and engage with K-12 science, technology, engineering, and mathematics (STEM) education; teacher training; professional development; and mentorship and internship programs, including a San Diego Festival of Science and Engineering.

BIOCOM also engages in public policy at the local, state, and federal levels. Popular programs are the following:

- Venture Days, which connects members with venture capitalists from around the country
- Partner Days, which connects buyers and sellers for potential business partnerships, mergers and acquisitions (M&A), licensing opportunities, and joint ventures
- A "Products in Development" database of companies in life sciences and biotechnology in the San Diego region and Southern California
- A life sciences company location map
- County in 2013) and M&A deals (\$19 billion in Southern California in 2013)

New initiatives include programs related to biorenewables, digital health, contract research organizations, and global initiatives.

BIOCOM employed a staff of 20 people in 2012, along with five volunteers, working with an approximately \$4 million annual budget.

DEVELOPMENT PLAN DESTINATION MEDICAL CENTER DRAFT

 SoCal Facts, which provides information on National Institute of Health Funding in Southern California by county (\$1.74 billion in Southern California and \$541 million in 54 deals in San Diego


	2000	2010	2014
San Diego City	1000		
Population	1,222,081	1,307,402	1,332,138
Number of Households	450,385	483,092	494,023
Median Age	33.7	34.4	35.0
Median Household Income (Current Dollars)	\$45,733	\$60,037	\$59,779
Share of Population with College Degree or More	42.6%	40.4%	42.0%
San Diego-Carlsbad Metropolitan Statistical Area	2000	2010	2014
Population	2,813,833	3,095,313	3,179,381
Number of Households	994,677	1,086,865	1,113,315
Median Age	34.7	35	35.7
Median Household Income (Current Dollars)	\$47,067	\$60,439	\$60,904
Share of Population with College Degree or More	29.5%	34.6%	34.7%

FIGURE 5-83 -DEMOGRAPHICS OF SAN DIEGO, CA (CITY WALK SCORE[®] = 49)



CONNECT⁽¹⁾

CONNECT was established in 1985 as a UCSD component at a time when the San Diego region was trying to diversify its economic base as its Cold War-based industries in defense and aerospace were contracting. CONNECT was formed to catalyze the creation of innovative technology and life science products in San Diego by "connecting" inventors with entrepreneurs, capital sources, professional service providers, and research organizations. According to its website, CONNECT has "assisted in the formation and development of more than 3,000 companies," assisting them in attracting more than \$2 billion in investment capital. One of its primary roles is to be a convener, bringing together scientists, researchers, and inventors with potential business partners and investors, as well as with each other to spawn new ideas. The program has built successful mentorship and education programming for entrepreneurs as part of the effort to increase innovation and commercialization in the region.

At the time it was formed, the San Diego region was undergoing a structural economic transformation as its traditional economic base was declining and attracting companies was difficult. CONNECT's formation was based on the premise that home-grown startups and expansion was the more sustainable economic development strategy for regeneration. Companies such as SAIC, IMED, Qualcomm, IVAC, Hybritech, and Linkabit, spawned by scientists and technology research institutions on the Torrey Pines Mesa and at UCSD, were in their formative phases. University and business leaders, through the San Diego Economic Development Corporation, saw the need for an organization like CONNECT to leverage the region's research community to develop commercial products and services to diversify the region's economic base. CONNECT focuses on the point where an innovation is being assessed for commercialization and needs assistance with the transition.

Over the years, CONNECT spawned other related trade organizations in the region for specific industry clusters, such as CommNexus San Diego, CleanTECH San Diego, the Wireless Life Sciences Alliance, and BIOCOM (described below).

In 2005, CONNECT became independent of UCSD, reincorporating as the CONNECT Association, a 501(c) (6) trade organization, and the CONNECT Foundation as a 501(c)(3) charitable foundation. This enabled CONNECT to engage in public policy and advocacy on behalf of its members. The CONNECT Association has nine board members. The CONNECT Foundation has 90 board members, with 24 serving on its executive committee.

The CONNECT team is made up of 12 employees, three of which are members of the San Diego Sport Innovators team, which is a new component focused on high-performance sport technology and led by NBA Hall of Famer (and San Diego native) Bill Walton. CONNECT had a total operating budget of \$3.7 million in FY 2013. The organization claims 1,800 volunteers and holds 350 events for its members and supporters (Figure 5-85).

⁽¹⁾ Source: CONNECT website



IMPACT ON CITY

The physical location where the life science industry is clustered in San Diego is suburban-coastal, with many of the institutes and companies overlooking or near the Pacific Ocean in campus environments, similar to UCSD. Over time, the industry has expanded into some of the suburban business park locations, such as in Carlsbad to the north, and is supported by two town center locations: the community of La Jolla and North University City. The La Jolla area, including Torrey Pines Mesa (92037 zip code), supports 53,000 jobs and approximately 39,000 residents. Major medical employers include Scripps Memorial, Scripps Green, UCSD Thornton, VA Medical Center, and UCSD Health Systems Hospital and medical facilities. North University City is San Diego's second downtown, a mixed-use, higher-density community anchored by Westfield's University Town Center (UTC), a regional shopping center that is currently expanding into a mixed-use, residential/commercial center. The University City area (zip code 92122) supports 16,000 jobs and 44,000 residents. The new Mid-Coast light-rail transit line that will connect UCSD to UTC to downtown San Diego, located approximately 13.5 miles to the south, is in final design and construction, and is expected to open by 2016.

INSIGHTS AND IMPLICATIONS

Because of the area's suburban campus character in an "Edge City" environment, this is not considered a case study model for leveraging the biomedical industry for a downtown regeneration; rather, it is considered an exemplary model for leveraging scientific institutions and basic research to create a worldrenown bio-tech and biomedical industry to diversify the region's economic base. Two key economic development organizations, CONNECT and BIOCOM, facilitated this transition and were instrumental in bridging together the world of institutions with commerce.

The key lesson for DMC from the San Diego experience is that the community of institutional R&D may not naturally connect with the world of product development, venture investment, and commerce without entities to bring the communities together. Although there are various ways this meeting of minds may occur, the CONNECT/BIOCOM model is one that has proven very successful in diversifying a region's economy through life sciences within a generation.



Sources: Census 2000, American Community Survey 2010 1-year estimates (Median Household Income and City educational attainment), Current Population Survey 2010 (MSA educational attainment) ESRI Business Analyst Online, Walkscore.com, LEHD OnTheMap, Biocom Form 990, 2012, CONNECT Annual Report

DEVELOPMENT PLAN DESTINATION MEDICAL CENTER DRAFT



5.7.4 CORTEX (St. Louis, Missouri) **ECONOMIC DEVELOPMENT INITIATIVES**

Development of the Center of Research Technology and Entrepreneurial Exchange (CORTEX) goes back to a broader partnership that was advanced in St. Louis, Missouri, by William Danforth, who was the Chancellor at Washington University and the founding chair of the Danforth Plant Sciences Center. Beginning in 2001, conversations led to the formation of the Coalition for Plant and Life Sciences, which was created through the interest of major business organizations in St Louis, and led by William Danforth, as a regional economic development initiative. The coalition included a broad number of public and private organizations involved in the plant and life sciences, including Washington University, as well as companies such as Sigma-Aldrich and Monsanto. Reflecting its success, this organization was rebranded as BioSTL in 2011. The Center of Research Technology and Entrepreneurial Exchange (CORTEX) was one of the early initiatives of this group (Figure 5-89).

The vision behind CORTEX is significant. Its "local mission" was to serve as the regional focal point for technology, innovation, and entrepreneurism, essentially a real estate development that could capture and grow commercialized research that flowed out of anchor institutions such as Washington University, Saint Louis University, and the University of Missouri-St. Louis. In addition, it has a "global mission" to establish St. Louis as an internationally recognized technology hub, a goal that is linked, in part, to the success of the related entities noted above.

CORTEX has benefited from several sources of investment. Historically, the program benefitted from access to tax credit support through the Missouri Development Finance Board. More recently, the program has been able to access a reported \$35 million in tax increment financing (TIF) in 2012 to fund a major expansion plan, with a potential value of approximately \$2.1 billion. The TIF funding will be used to sustain several infrastructure projects, including a new interstate interchange, as well as support development of a Shriners Hospital. A recently awarded roughly \$10 million Tiger Grant will fund a new Metro Link rail station in the district, and expand the existing Central West End Station.

The success of CORTEX needs to be entirely viewed in context with broader efforts undertaken since 2000 by the Danforth Foundation, Washington University, and a significant number of related partners, including organizations such as BioGenerator, which is a privately funded 501(c)(3) organization that is positioned to fund, incubate, and grow bioscience companies locally. Since 2003, 42 portfolio companies within BioGenerator have raised more than \$140 million in capital.

These efforts also link with more than a reported \$1 billion in venture capital funding since 2001, which grew initially from specific seed investments by Washington University, the Danforth Foundation, and the McDonnell family. Growth in the biosciences across St Louis was also supported by enabling state legislation, including the Missouri Life Sciences Research Trust Fund, which started in 2003 and allows researchers to apply for grants in the following fields:

- Plant and animal science
- Medical device
- Biomaterials and composite research
- Diagnostics

IMPACT ON CITY

The objective of the organization has been to transform a former midtown industrial neighborhood into a vibrant, 24/7, live-work-play-learn and innovation community.

The district is anchored by several organizations:

- Washington University Medical Center
- St. Louis University
- BJC Health Care
- **Barnes-Jewish Hospital Foundation**
- University of Missouri-St. Louis
- firm
- BioGenerator
- Cambridge Innovation Center

CORTEX itself was planned largely as a real estate and land assembly project, one with a clear focus on the incubation of new companies in the plant and life sciences. The 240-acre district was initially developed with a reported 370,000 square feet of space, anchored by CORTEX 1, a 165,000-square-foot lab and office building. The CORTEX district is bounded by Grand Avenue to the east, Kingshighway to the west, I-64 to the south, and Forest Park Avenue to the north. The district is adjacent to downtown St. Louis and the Central West End, which, in 2014, was designated a "Great Places in America" by the American Planning Association. CORTEX benefits from direct interstate and passenger rail access.

With current projects underway (including health care expansions and a new IKEA), CORTEX will include approximately 1.6 million square feet and support approximately 2,800 jobs. At build out, the district is expected to support more than 7.7 million square feet of space and more than 13,000 jobs.

DEVELOPMENT P DESTINATION MEDICAL DRAFT

- Nanotechnology related to drug development and delivery
- Clinical imaging
- Information technology related to human health

 The Center for Emerging Technologies (CET), which supports a number of startup companies, including Stereotaxis, which was one of the first "graduates" from CET and is now a NASDAQ-listed



INSIGHTS AND IMPLICATIONS

Clearly a success in context with broader efforts to grow the plant and life sciences locally, CORTEX continues to reflect the strengths of its individual anchors, but it does not fully resemble its original vision as a mixed-use live/work/play and innovation area. Transit improvements currently underway, however, will continue to position the district for additional mixed-use opportunities.

The success of the district needs to be viewed entirely in context with the broader array of regional and state-wide initiatives that have fueled regional growth in the plant and life sciences.

Lessons for the development of the DMC are the following:

- There is a need to better integrate the individual anchors from the start. The Mayo Clinic can help facilitate and accelerate the integration by working with new anchoring companies in the early planning stage to identify synergies and mutually beneficial project opportunities.
- The mixed-use element proposed for the DMC is integral to economic development goals. CORTEX works as a real estate project, but is still trying to realize the vision of a live/work environment. The DMC can use a fully realized mixed-use concept to promote and accelerate attraction of the targeted industry sectors and anchors, and their workforce. A successful DMC is more than a collection of bio-med-tech companies, but is a complementary cluster that has a relationship to the Mayo Clinic workforce and growth strategy in which each respective company has a stake in the future success of the others.
- The university partnerships provide some suggestions for collaborative efforts between the Mayo Clinic, University of Minnesota Rochester (UMR), Mayo Medical School, and other educational institutions that might be invited to partner. The Mayo Clinic already has experience with such partnerships. The CORTEX experience shows the strength of such a collaboration.





St. Louis City
Population
Number of Households
Median Age
Median Household Income (Current Dollars
Share of Population with College Degree or
St. Louis Metropolitan Statistical Area
Population
Number of Households
Median Age
Median Household Income (Current Dollars)
Share of Population with College Degree or
FIGURE 5-87 - DEMOGRAPHICS OF ST. LOUI

DEVELOPMENT P **DESTINATION MEDICAL** DRAFT

	2000	2010	2014
	348,189	319,294	317,858
	147,076	142,057	142,916
	34.1	34.8	35.8
	\$27,156	\$32,688	\$32,843
More	23.5%	28.5%	28.9%
	2000	2010	2014
	2,675,343	2,787,701	2,797,310
	1,039,873	1,109,665	1,121,404
	38	38.8	39.4
	\$44,437	\$56,537	\$53,099
More	25.35	28.0%	30.4%

, MO (CITY WALK SCORE[®] = 74)







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5.7.5 PHOENIX BIOMEDICAL CAMPUS (PHOENIX, ARIZONA) **ECONOMIC DEVELOPMENT INITIATIVES**

Phoenix, Arizona, was one the only major cities in the US without an academic research hospital or medical school. The solution conceived by city, state, and academic leaders was the creation of the Arizona Biomedical Collaborative and Phoenix Biomedical Campus. The Arizona Biomedical Collaborative is a partnership between Arizona State University (ASU) and the University of Arizona (UA) that allows each institution to leverage its biomedical and science programs to support an innovative research campus serving the larger Phoenix region.

ASU and the UA are often regarded as rivals, as they seek to attract the brightest students from the state and region. ASU's largest campus sits just a few miles from downtown Phoenix, while UA is located in Tucson, Arizona. UA operates a nationally ranked medical school and research hospital, and a strong pharmacy program, while ASU lacked the same bioscience background. Despite the challenges of cooperation, the project has leveraged the strengths of each partner, giving Phoenix the foundation for a premier biomedical campus by sharing assets of each university. Budgets and administration of the campus are shared between the two institutions.

The project's vision would not have been possible without the support of the city of Phoenix and state of Arizona. A Downtown Phoenix Master Plan was adopted in 2004 to guide development. The first phase expanded ASU into downtown, supported by a \$233 million general obligation bond referendum and development of the planned city-owned Phoenix Biomedical Campus just blocks away. In 2006, 28 acres of land were allocated for the biomedical campus, and construction began on research facilities to support the faculty, students, and other researchers. The state of Arizona helped fund construction of some of the facilities.

The private sector has support of the initiative as well. A number of corporations and research foundations partnered with the new Arizona Biomedical Collaborative. Local hospitals have also sought to construct facilities near the campus to provide professional training and health care services. To date, more than 615,000 square feet has been built in four different buildings during the first phase of development of the medical and bioscience campus, with additional buildings under construction and planned. The city of Phoenix's Community and Economic Development Department leads promoting the development.

IMPACT ON CITY

Availability of jobs to support a highly skilled workforce and access to comprehensive health care are two necessities for the sustained development of growing economies and metropolitan areas. As part of the Downtown Phoenix Master Plan, it was acknowledged that "education, research, and innovation are the key to Phoenix's place in the knowledge-based economy." The city leveraged the campus to attract several research and clinical medical organizations, including the Mayo Clinic, St. Joseph's Hospital and Medical Center, the Translational Genomics Research Institute and the International Genomic Consortium headquarters, the National Institute of Diabetes and Digestive and Kidney Disorders, the University of Arizona College of Pharmacy-Phoenix, and VisionGate.

In tandem with the focused economic development efforts, the city also acknowledged that a critical factor in determining the success of the downtown knowledge economy is an authentic sense of community. To that end, the Downtown Phoenix Master Plan recommended a diverse range of housing choices. The 10-year plan called for 10,000 housing units in the downtown area, as housing was a critical component to the downtown's revitalization. As of the last progress update, prior to the recession, 4,000 units had been approved or were under construction.

The city has encouraged arts and culture to help act as an additional economic catalyst. A voter-approved bond helped make a \$600 million investment in the expansion of the Phoenix Convention Center to encourage tourism and associated hotel room demand, which led to a 1,000-room Sheraton Hotel located in the downtown to support the convention center.

INSIGHTS AND IMPLICATIONS

It is too early to determine the success of the Arizona Biomedical Collaborative and Phoenix Biomedical Campus in achieving the goal of fostering the growth of biomedical industries in Arizona. The partnership has helped to establish the foundation for what is expected to become an economic engine in the future and a core aspect of downtown development.

Consultants involved with the project believe that the Phoenix Biomedical Campus could become a leading revenue generator within 20 years. Their analysis projects the creation of more than \$2.1 billion in economic activity annually and employment for as many as 24,000 individuals.

The following lessons learned can inform the DMC development:

- government.

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 Government, institutional, and private-sector support are all necessary to achieve success. The Mayo Clinic is obviously an important partner in the realization of the DMC, and state and local government are actively engaged. The private sector in Rochester, Olmsted County, and Minnesota are needed in a large way to support their own initiatives, and to work with the Mayo Clinic and

To achieve an authentic sense of community, the Downtown Phoenix Master Plan recommended a diverse range of housing choices. As the city of Rochester looks at housing needs in and adjacent to the DMC, it is important to adopt housing and development policies that reinforce diversity of housing types and price points so that the DMC develops into a real community and neighborhood.

Phoenix recognized the role that arts play in creating a vibrant and attractive place. The arts should play a similar role in helping to define and "round out" the character and personality of the DMC.









	2000	2010	2014
Phoenix City			
Population	1,326,827	1,445,632	1,492,199
Number of Households	467,878	514,806	531,494
Median Age	32.2	32.8	33.3
Median Household Income (Current Dollars)	\$41,207	\$42,260	\$45,848
Share of Population with College Degree or More	29.3%	24.9%	26.0%
Phoenix-Mesa-Scottsdale MSA	2000	2010	2014
Population	3,251,876	4,192,887	4,386,002
Number of Households	1,194,250	1,537,173	1,604,978
Median Age	34.7	35.3	35.7
Median Household Income (Current Dollars)	\$44,752	\$51,633	\$52,166
Share of Population with College Degree or More	25.1%	31.4%	28.7%

FIGURE 5-92 - DEMOGRAPHICS OF PHOENIX, AZ (CITY WALK SCORE® = 38)





Sources: Census 2000, American Community Survey 2010 1-year estimates (Median Household Income and City educational attainment), Current Population Survey 2010 (MSA educational attainment) ESRI Business Analyst Online, Walkscore.com, LEHD OnTheMap, City Phoenix Detail Budget (2014-2015)



5.7.6 Bellevue, Washington ECONOMIC DEVELOPMENT INITIATIVES

Bellevue, Washington, is an example of a relatively young city that transformed its conventional, suburbanscale downtown into a new mixed-use sub-regional residential, commercial, and employment center, anchored by an economic base in technology industries. This transformation occurred over two decades.

A city of 134,000, Bellevue is a similar size to Rochester, and is one of five metropolitan centers in the heart of the 3.6 million population Puget Sound region. Regional planning policy and its Urban Growth Boundary have steered growth toward the metropolitan centers.

Historically a bedroom community to Seattle that incorporated in the 1950s, Bellevue sits amidst a technology region that includes Microsoft and its spin-off and related companies. Bellevue has become a major technology hub as technology companies, including Microsoft, have chosen to expand or relocate in downtown Bellevue rather than in their original suburban campus environments. A decade ago, Microsoft had approximately 100 employees in Bellevue, but it now employs 7,500 in the city, mostly in downtown. Expedia is headquartered in downtown.

Of the approximately 139,000 workers in Bellevue, 45,000 work downtown. More than 70,000 are projected by 2030. Citywide employment is projected to grow to 202,000 by 2035. The technology base within Bellevue's downtown has made Bellevue more economically resilient. During the Great Recession, the rate of job loss was greater outside of downtown than within downtown.

As downtown evolved into an economic center, it also evolved into a regional tourism and cultural center, becoming the cultural heart of the Eastside Puget Sound region. The city has a 300,000-square-foot convention center, and is considering developing a 2,000-seat, \$170 million performing arts center.

The city is expanding its transit infrastructure to connect the region sustainably. The East Link Light Rail system, expected to open in 2022/2023, includes three light rail stops, one of which is by the hospital. A transit-oriented district is planned around each station.

Bellevue updated its Economic Development Strategy last year. Bellevue's Economic Vision is "A prosperous and vibrant international city with innovative and entrepreneurial businesses and a high quality of life for residents."

The strategy started with a Situation Assessment that defined Bellevue's emerging role and importance in the Eastside region, which, over the last 30 years had become one of the world's great information technology, software, computer, and Internet hubs. The primary industry clusters include information technology, business services, tourism, health and beauty, educational services, and, to a lesser extent, aerospace and clean technology. Information technology and the small but emerging clean technology clusters are the two fastest-growing clusters. Professional, scientific, and technical services is the greatest source of new business, generating approximately 10,700 new jobs in the last 30 years, of which almost 4,200 have been in the last decade. The Economic Development Strategy puts emphasis on cultivating the next generation of technology entrepreneurs, position Bellevue as a Pacific Rim Gateway City, strengthen tourism, and develop an economic development marketing campaign. The Strategy's themes are "Collaboration, Regionalism, and Internationalism." Diverse districts, housing choices, and transportation, and quality of life are key elements, all of which relate to Bellevue's downtown strategy.

The downtown planning strategy is based on the themes of "Viability, Livability, and Memorability." Environmental sustainability is also tied to the downtown plan and the city's Economic Development Strategy.

The strategy is not just aspirational, it is also responding to market forces that have emerged during the last decade. As Microsoft expanded during this time, it decided to expand into downtown Bellevue rather than the nearby Redmond campus where it is headquartered, in part to compete for global talent that wants to work and live in more urban environments. Others followed suit.

The Bellevue Downtown Association (Figure 5-97) plays an important partnership role with the city and downtown investors and property owners. Downtown does not have a Business Improvement District. The city also does not use tax increment, which is prohibited in the state of Washington. However, Bellevue's downtown does participate in a limited form of tax sharing that is similar to tax increment through the county's Transfer of Development Rights program. The city also employs a density bonus program based on a \$15 per square foot fee up to a maximum floor-area ratio. The major tools that Bellevue uses are public investment and supportive planning policy to create value that attracts private investment.

IMPACT ON CITY

The process has diversified Bellevue, which now boasts a multi-cultural, high-income population with significant East Indian, Chinese, Japanese, and Korean populations. Approximately 40% of Bellevue's population is foreign-born; this number is even higher in schools, at 51%, where more than 80 languages are spoken. The city has a Chinese Technology High School. This diversity has attracted foreign investors. Asian investors, particularly Chinese, are buying land at approximately \$500 per square foot in downtown Bellevue to invest in new development. As downtown has grown, its population has become much younger, more educated, and more racially and ethnically diverse relative to Bellevue as a whole. It is truly becoming an international downtown in a suburban city.

As the downtown's job base grew, demand for urban housing also grew. Downtown had 1,000 residents 15 years ago, and now boasts 11,000 residents, and is projected to grow to 19,000 by 2030. The urban housing type evolved as values rose, starting with the periphery then coming to the core. The earlier phases of housing were typically four to five stories over one-story commercial, wood frame construction on a podium. As market support and land values rose, mid- and high-rise housing using steel construction became feasible.

The downtown is divided into nine districts. Certain streets were designated signature streets to help organize and frame downtown, with an emphasis on many modes of travel: car, transit, biking, and walking. Each signature street has a primary economic function (shopping, entertainment, commerce), and some are designated pedestrian corridors. The planned Transit Priority Network links the Medical Institution District,



adjacent to downtown, to the downtown proper. This multi-modal approach to the city's mobility strategy has resulted in traffic counts staying the same as 1990 levels despite the substantial growth that has occurred. The city is currently discussing reductions in its parking ratios.

Parks, open space, and green linkages are important elements to improve quality of life and enhance the pedestrian experience, strategically placed and integrated with development.

INSIGHTS AND IMPLICATIONS

Bellevue demonstrates that, with the right regional economic engines, a vibrant mixed-use downtown can emerge in a few decades, even in a smaller suburban, mid-century city that does not have the historic foundation on which to build the character of a district. Another important feature is linking to a broader economic region and how intra-regional transit systems make these connections, not just for commuters but economically as well. A distinguishing lesson from Bellevue that perhaps was not originally anticipated was how the creation of a downtown environment desired by technology companies to attract talent also diversified Bellevue's population, which, in this case, has strong linkages to the Pacific Rim and has attracted investment capital. Even a relatively small suburban city can become a global economic gateway.

Sources: Census 2000, American Community Survey 2010 1-year estimates (Median Household Income and City educational attainment), Current Population Survey 2010 (MSA educational attainment) ESRI Business Analyst Online, Walkscore.com, LEHD OnTheMap, Bellevue Downtown Association Form 990, 2012

	2000	2010	2014
Bellevue City			
Population	111,906	122,363	128,302
Number of Households	46,762	50,355	52,928
Median Age	38.4	38.9	39.3
Median Household Income (Current Dollars)	\$62,388	\$80,500	\$88,127
Share of Population with College Degree or More	61.0%	59.1%	61.2%
Seattle-Tacoma-Bellevue MSA	2000	2010	2014
Population	3,043,878	3,439,809	3,579,892
Number of Households	1,196,568	1,357,475	1,413,782
Median Age	36.8	37.5	37.9
Median Household Income (Current Dollars)	\$50,733	\$66,035	\$66,838
Share of Population with College Degree or More	35.9%	39.8%	37.5%

FIGURE 5-95 - DEMOGRAPHICS OF BELLEVUE, WA (CITY WALK SCORE[®] = 38)







DEVELOPMENT **DESTINATION MEDICAL** DRAFT



5.7.7 Des Moines, Iowa

ECONOMIC DEVELOPMENT INITIATIVES

Downtown development in Des Moines has been anchored by active urban planning decisions that have been made over the past 20 years to address the following challenges:

- The need for additional city revenue and population growth
- The need to provide development sites in the city that could compete for local companies that would otherwise select suburban sites
- The impact of the great flood of 1993 that inundated the Court Avenue Entertainment District and the city's water treatment plant
- Managing retail opportunities in a downtown where skywalk connections remain relevant
- Dealing with pressures linked to expanded public assembly buildings, including the Des Moines Convention Center, which was ahead of its time when first built, but became obsolete in terms of size within a decade

The forward progress was guided by a series of planning efforts that led to implemented projects. The 1990 Vision Plan started the process for downtown Des Moines by identifying eventual needs for downtown housing and the importance of defined gateways into downtown from the south, east, and west, leveraging its rivers as assets. Outcomes of the plan were as follows:

- Creation of new downtown housing units.
- Initial planning and land acquisition for the development of the Western Gateway, which is now anchored by Meredith (publishing), Nationwide (insurance), and Wellmark (health care), and defined by public investments in the 13-acre Gateway Park, which includes a large sculpture park

and architecturally distinct Des Moines Library. Approximately \$24 million in land acquisition and street scape was leveraged into about \$500 million in private improvements.

In 1998, the Major Projects Task Force built on the 1990 Vision Plan with a focus on projects that would improve quality of life, create economic value, attract people to downtown, and enhance the image of the region. Recommendations included the following:

- A precise goal to build 2,000 housing units downtown over the next 10 years
- An expanded entertainment district on Court Avenue
- Completion of the West Gateway Project
- Establishment of a downtown special service district
- Development of expanded trail connections and a riverwalk
- Hall of Pride

Planning studies in 2003 and 2008 reinforced the framework that had already been laid down during the 1990s. There was a continued focus on riverfront development and public art. One area of focus was Walnut Street, which had been a bus-only corridor; plans focused on the idea of re-opening it to cars, reinforcing its role as a spine that connects the capitol to 15th Street. Other strategies focused on the need to update the skywalks.



Agbioscience



Biorenewables



Biotech

FIGURE 5-98 - FOUR FOCUS SECTORS OF GREATER DES MOINES PARTNERSHIP

DEVELOPMENT P DESTINATION MEDICAL CENTER DRAFT

 Development of Martin Luther King Jr. Parkway on the south side of downtown created opportunities for new development in River Point by significantly enhancing access to the downtown from the south.

Expanded public assembly buildings, including the Iowa Events Center, Wells Fargo Arena, and Iowa



Advanced Manufacturing



IMPACT ON CITY

In terms of market response, downtown saw the construction of approximately 4,500 housing units between 2001 and 2011, valued at approximately \$500 million. These projects aligned with private investment in about 100 projects with a total value of approximately \$1 billion, which was supported by additional public investment in public facilities and infrastructure. Projects in the East Gateway included an enhanced streetscape between downtown and the capitol that was leveraged into a reported \$100 million in private investment.

INSIGHTS AND IMPLICATIONS

Organizationally, downtown has been supported in several ways. At a regional level, the Greater Des Moines Partnership has been at the forefront of downtown initiatives, supported by the City of Des Moines and Polk County (Figure 5-101). In downtown, the Downtown Des Moines Self Supported Municipal Improvement District (SSMID) is dedicated to keeping the downtown clean and safe. The SSMID is a business improvement district that is funded by downtown taxpayers (surcharge on property tax). The downtown has also seen the emergence of the Des Moines Redevelopment Company (DMRC) (Figure 5-101). The DMRC is a nonprofit organization that was formed to support acquisition of buildings and sites for redevelopment. The DMRC was established to be able to guickly pursue development opportunities that align with the regional vision and downtown economic development goals.

Downtown Des Moines shares many physical attributes with Rochester, including a riverwalk, flood control issues, and expanded public events venues. One lesson from Des Moines that may be applied to Rochester and the DMC is the specific housing goals and the use of public transportation and other infrastructure improvements to set a tone and to define the downtown space. Des Moines is also facing a challenge with its skywalk system, and recognizes the need to keep it up-to-date.

Des Moines City Population Number of Households Median Age Median Household Income (Current Dolla Share of Population with College Degree Des Moines, West Des Moines MSA Population Number of Households Median Age Median Household Income (Current Dolla Share of Population with College Degree



Sources: Census 2000, American Community Survey 2010 1-year estimates (Median Household Income and City educational attainment), Current Population Survey 2010 (MSA educational attainment) ESRI Business Analyst Online, Walkscore.com, LEHD OnTheMap, Greater Des Moines Partnership Form 990, 2012

DEVELOPMENT **DESTINATION MEDICAL DRAF1**

	2000	2010	2014
	199,491	203,433	208,908
	80,713	81,369	83,579
	33.7	34.3	35.1
rs)	\$38,408	\$42,986	\$43,997
or More	21.8%	23%	24.6%
	2000	2010	2014
	481,394	569,633	605,072
	189,371	223,268	237,129
	35.2	35.7	36.4
rs)	\$46,651	\$56,812	\$61,240
or More	28.7%	32.0%	34.5%

FIGURE 5-99 - DEMOGRAPHICS OF DES MOINES, IA (CITY WALK SCORE[®] = 42)







5.7.8 MADISON, WISCONSIN **ECONOMIC DEVELOPMENT INITIATIVES**

The Madison, Wisconsin, region has leveraged the expertise in its cornerstone industries, including manufacturing, agriculture, and health care, and its innovation engines such as the University of Wisconsin (Madison) to develop thriving new industry sectors in areas such as life sciences, information technology, and value-added food production. Underpinning the region's culture of innovation is a highly educated and skilled workforce, with education levels above the national average, and globally recognized research and development assets.

The University of Wisconsin (Madison) helps lead innovation activity, with more than \$1 billion per year in academic research and development, consistently ranking among the nation's top-five in both research expenditures and patent generation. To complement the university, an increasing number of incubators, accelerators, and maker spaces, such as the Whitewater Innovation Center, Sector67, Portage Business Enterprise Center, gener8tor, 100state & 100health, and the Janesville Innovation Center, have been developed to help foster ongoing innovation in the Madison region.

The region is also at the center of health information technology innovation, home to Epic, a market leader in software development for electronic medical records. Founded in 1979 with fewer than 10 employees, Epic is now a \$1.5 billion enterprise with 7,000 employees and is the largest single private-sector employer in the region.

Wisconsin has a wide range of state tax incentives to help businesses grow and create jobs, including targeted tax credit, loan, and grant programs. A key to the region's success is the collaborative community that exists between education and industry to help translate ideas into solutions. Cooperation between entrepreneurs and firms is fostered through a variety of organizations that encourage economic development in the region.

IMPACT ON CITY

According to Paul Jadin of the Madison Regional Economic Partnership, "Offering a diverse quality of experience, the Madison region is a place where dynamic, talented, hardworking people want to be. Our urban and rural communities create opportunities for sports, arts and culture, family activities, and outdoor recreation all within easy access and at a more affordable rate than many other major markets."

Madison's economic strategy acknowledges the importance of placemaking. Innovation will create opportunities in the region, but "above all and connecting everything, it is Madison's appeal as a place that truly sets us apart. This includes creating vibrant neighborhoods and bustling commercial districts that will grow our tax base, building an unmatched local food system, cleaning our lakes, becoming the nation's undisputed best city for biking, and supporting the success of our schools."

	2000	2010	2014
Madison City			
Population	209,951	233,209	239,122
Number of Households	90,087	102,516	105,855
Median Age	31.1	32.0	32.4
Median Household Income (Current Dollars)	\$41,941	\$50,508	\$52,800
Share of Population with College Degree or More	55.8%	54.5%	53.2%
Madison Metropolitan Statistical Area	2000	2010	2014
Population	535,421	605,435	620,625
Number of Households	215,899	250,898	259,192
Median Age	35.7	36.4	37.0
Median Household Income (Current Dollars)	\$49,223	\$60,439	\$60,833
Share of Population with College Degree or More	40.6%	43.3%	40.9%



DEVELOPMEN **DESTINATION MED** DRAF1





FIGURE 5-104 - PROFILE OF MADISON REGION ECONOMIC PARTNERSHIP

The downtown is shifting from being primarily a business center to include residential and entertainment neighborhoods. In the past several years, there has been a huge increase in the number of luxury condos and apartments being built downtown aimed at young professionals. The Overture Center for the Arts, a performing arts center which also houses the Madison Museum of Contemporary Art, opened in 2004. It is a major downtown anchor and served as a catalyst for new development and improvements downtown. At the same time, many of the retail stores along State Street have remained independently owned with few national chains. This is largely a result of the size of available retail space does not make big box stores possible.

INSIGHTS AND IMPLICATIONS

Madison has leveraged its appeal as a place to complement its economic development efforts to attract a number of nationally and globally recognized companies. These companies are attracted to the region because of a supportive business environment and a high quality of life.

Madison's success leveraging its quality of life and sense of place into an economic development attractor provides a clear lesson for the Rochester DMC. By creating an attractive location for businesses and their employees, the DMC can also offer diverse experiences by combining arts and culture, recreation, and activities for families and singles in an attractive and affordable location. Understanding the importance of place as a location decision-factor for businesses and, as importantly, employees who are pursued by those businesses, is a key part of the DMC's future. The effort is not just attracting industry, but attracting people to a special place.

Sources: Census 2000, American Community Survey 2010 1-year estimates (Median Household Income and City educational attainment), Current Population Survey 2010 (MSA educational attainment) ESRI Business Analyst Online, Walkscore.com, LEHD OnTheMap, MadREP Form 990, 2012



5.7.9 OKLAHOMA CITY, OKLAHOMA ECONOMIC DEVELOPMENT INITIATIVES

Oklahoma City established the MAPS (Metropolitan Area Projects) capital improvement program for new and upgraded sports, recreation, entertainment, cultural, and convention facilities in 1993. Instead of using separate bond issue propositions for each of the proposed projects, which could have risked achieving voter approval of only a few select projects, all the selected projects were placed on a single ballot that proposed a 5-year, 1% increase in sales tax that would pay for the desired development.

The sales-tax-funded initiative was created to revitalize downtown (including an area of empty warehouses) and improve Oklahoma City's national image. This was a unique approach to garner public support for the different projects and also achieve the overall vision of growth of the economy and community. During the 5 years it was in effect, more than \$309 million was collected from the MAPS program. In addition, the deposited tax revenue earned approximately \$54 million in interest. The tax expired on July 1, 1999, and all of the original MAPS projects were completed by 2004:

- The Chickasaw Bricktown Ballpark
- Renovation of the Cox Convention Center
- Improvements at the Oklahoma State Fairgrounds
- The Bricktown Canal
- Construction of the Ronald J. Norick Library/Learning Center
- New trolleys
- Rebuilding the Civic Center Music Hall
- Improvements to the North Canadian River
- Construction of the Ford Center

By funding the projects with a limited term, the projects were built debt free. The US Conference of Mayors noted, "Using a pay-as-you-go structure allowed Oklahoma City to build world-class facilities without the burden of debt for future generations and city leaders. Oklahoma City citizens made the historic decision to invest their own money in the city they called home."

Following the original MAPS, the city has passed two additional General Obligation Bonds, along with MAPS for Kids, MAPS 3, and the Big League City initiative. To date, it is estimated that nearly \$5 billion in economic impact can be attributed to the original MAPS program. This represents a nearly 10-to-1 return on the city's original investment. During 2013, citizens were encouraged to see many of the MAPS 3 projects break ground. MAPS 3 is a 10-year, \$777 million construction program funding eight quality-of-life projects, including a new convention center, modern streetcar, and 70-acre downtown park. Since the inception of MAPS, Oklahoma City has invested more than \$2 billion in special projects, roads, and public safety.

FIGURE 5-105 - MAPS LOGO THE MAPS LOGO REPRESENTS THE NINE ELEMENTS OF MAPS: THE NEW AT&T BRICKTOWN BALLPARK, RENOVATION OF THE NOW COX CONVENTION CENTER, IMPROVEMENTS AT THE STATE FAIRGROUNDS, THE BRICKTOWN CANAL, A NEW LIBRARY/LEARNING CENTER, NEW TROLLEYS, A NEAR-REBUILDING OF THE CIVIC CENTER MUSIC HALL, IMPROVEMENTS TO THE NORTH CANADIAN RIVER, AND CONSTRUCTION OF THE FORD CENTER.

DEVELOPMENT PLAN DESTINATION MEDICAL CENTER DRAFT







	2000	2010	2014
Oklahoma City			
Population	506,250	579,999	616,511
Number of Households	204,461	230,233	243,501
Median Age	34.1	34.7	35.7
Median Household Income (Current Dollars)	\$34,947	\$44,043	\$46,076
Share of Population with College Degree or More	29.2%	27.1%	28.6%
Oklahoma City Metropolitan Statistical Area	2000	2010	2014
Population	1,095,421	1,252,987	1,319,196
Number of Households	429,743	489,654	513,958
Median Age	34.7	35.3	36.3
Median Household Income (Current Dollars)	\$36,797	\$49,233	\$50,086
Share of Population with College Degree or More	23.3%	29.0%	27.5%

FIGURE 5-106 - DEMOGRAPHICS OF OKLAHOMA CITY, OK (CITY WALK SCORE[®] = 32)

IMPACT ON CITY

The MAPS programs had a significant impact in Oklahoma City, both from an economic and quality-of-life perspective. MAPS had a dramatic impact on revitalizing the downtown area. In the 1980s, Oklahoma City was recovering from the end of the oil boom and the collapse of Oklahoma's energy business. Efforts to attract major businesses were failing, and most economic development efforts had stalled. Downtown activity was non-existent after working hours, and the population was in decline. Furthermore, the city's infrastructure was in need of significant repair.

Investments in the area resulting from MAPS (the ballpark, canal, a refurbished convention center, a reconstructed music hall, a 20,000-seat arena, a library/learning center, and river improvements) helped draw tourists and local residents to the downtown area. Bricktown is considered the core investment area that led the transformation of the former warehouse district into an entertainment district that now includes an art museum, numerous dining and entertainment establishments, a movie theater, and a variety of retail offerings. The Oklahoma City Thunder, a National Basketball Association team, plays at the Ford Center in the district, and games have generated a substantial increase in business in downtown and the greater Bricktown area.

Sources: Census 2000, American Community Survey 2010 1-year estimates (Median Household Income and City educational attainment), Current Population Survey 2010 (MSA educational attainment) ESRI Business Analyst Online, Walkscore.com, LEHD OnTheMap, Oklahoma City Economic Development Foundation Form 990, 2012, Alliance for Economic Development of Oklahoma City Form 990, 2012



INSIGHTS AND IMPLICATIONS

To remain competitive, Oklahoma City acknowledged that it has to be a place where companies want to locate and employees (current and prospective) want to live, work, and play. The original MAPS program is an example of what is thought to be the first in the country of a public facility enhancement project of this size. Investment in the downtown helped economic development efforts and has elevated the community to what Mayor Mick Cornett calls a "big league" city. The program is nationally recognized as a model for economic development that focuses on targeted catalytic development and infrastructure development as a tool for downtown revitalization.

Bricktown began as a local Main Street revitalization program and grew into an anchor for redevelopment. Oklahoma City made key investments that created a "place," just as the targeted DMC investments are intended to do. Some of the investments will not "pencil out" in and of themselves, but their value should be gauged in the larger context of creating an attractive place that will encourage recruitment of key employee groups and companies, and create a sense that people "have to be there."

Lead Agency:	Oklahoma City Economic Development
Established:	Foundation 1981
Employees:	3
Revenue:	\$1.8 Million
Lead Agency:	Alliance for Economic Development of Oklahoma City
Lead Agency: Established:	Alliance for Economic Development of Oklahoma City 2011
Lead Agency: Established: Employees:	Alliance for Economic Development of Oklahoma City 2011 8

DEVELOPMENT P DESTINATION MEDICAL CENTER DRAFT







Downtown Portland

5.7.10 PORTLAND, OREGON ECONOMIC DEVELOPMENT INITIATIVES

The Portland, Oregon, example is one of homegrown innovation centered on place-making. Known today as one of the national models for sustainable city planning and development, its conversion from a resource-based industrial city started in the 1970s with a focus on creating a more livable city. It was an evolutionary process based on Portland's natural beauty, the people's strong sense of the importance of place, and their pioneering, risk-taking attitudes.

Key drivers of economic development regionally were Intel, Nike, Oregon Health Sciences, trade, and universities. More recently, Portland has become attractive for startup companies whose entrepreneurs are drawn to Portland because of its lifestyle and innovation. The city's economic development strategy focuses on the traded-sector economy and four industry clusters (software, advanced manufacturing, athletic and outdoor products, and clean-tech), industries that pay a livable wage. Approximately \$157 million in financial assistance has leveraged \$1.2 billion in investment.

The goal was to make the city the best place for the people who live there. More than 40 years ago, the state passed landmark legislation that created an urban growth boundary to control sprawl and preserve agricultural and natural resource lands. This directed growth to the cities and promoted a level of density that, in turn, supported investment in transit. This strategy was embraced by both public and private sectors. Local developers supported the idea of livability and concerned themselves with community building.

The Portland Development Commission (PDC) has been the lead agency for downtown regeneration (Figure 5-111). The city is organized by bureaus chaired by commissioners. The PDC has its own commission. Its main tool has been the use of Development Agreements and bonus zoning to drive the quality and type of development, and obtain public benefits in exchange for public money, much of it from tax increment collected from redevelopment areas (limited to 15% of the city) and enhanced entitlements. The city funds economic development efforts with General Funds, and leverages investment in transit and parks. If the city and the transit agency builds transit, the base density is increased. If a park is built, the base density increases even more.

The investment in mobility (light rail, street cars, BRT, walking and biking infrastructure) has been key. Approximately \$3.5 billion of investment has occurred within two blocks of a streetcar alignment. More than 10,200 new housing units and 5.4 million square feet of office, institutional, and retail construction has occurred within two blocks of the alignment.

The city helped subsidize the first projects of the type it wanted to establish market comps to attract future private financing. The city also reduced its parking ratio. Today, in several districts, the city does not require parking because the districts are supported by excellent transit service and are designed to facilitate walking and biking. In neighborhoods, some minimum parking is required for projects with more



than 50 units, but in downtown, some projects are being financed and built without parking. Parking is aggressively priced in downtown, providing a disincentive to drive.

The Pearl District is one of the notable sub-districts of downtown that used this approach, beginning in the 1980s. Much of the redevelopment of the Pearl District was the result of collaboration between the city of Portland and the private sector. Developers initially saw the market for five-story, mixed-use buildings. The city wanted a higher density, so it invested more public monies to increase density and built three public parks tied to a development agreement to build at a higher density.

The PDC is also committed to affordable housing, requiring affordable housing in development agreements; plus, 30% of TIF goes to affordable housing. If developers do not provide affordable housing in their projects, they have to provide land at a low cost so the PDC can build the housing. Approximately 30% of the Pearl District housing is affordable for low- and moderate-income households.

In 2000, a 26-member steering committee composed of city officials, developers, community leaders, planners, designers, and others, representing a wide range of viewpoints, met to discuss the future of the Pearl District to re-evaluate existing plans and policies, and to focus on the development priorities of the neighborhood. In addition to the steering committee, an executive committee met to provide advice on the planning process and to make initial recommendations to the steering committee. As a result, the "Pearl District Development Plan, A Future Vision for a Neighborhood in Transition" was adopted in October 2001 by the City Council. As of the 2010 Census, the Pearl District is home to approximately 6,000 residents in about 5,300 households. The Pearl District is also home to Powell's City of Books, the US Postal Service's main processing facility for Oregon, and several art galleries and institutions.

IMPACT ON CITY

Prior to 1990, abandoned warehouses, functionally obsolete industrial buildings, and run down cafes dominated the Pearl District. Important components of the district's transformation, before the aforementioned planning efforts, included the opening of Powell's Books in the early 1970s that soon became a Portland landmark. In the late 1970s, artists began to move to the Pearl District, many of whom were attracted by the low-cost lofts where they could work and live. By the mid 1980s, art galleries were opened by the artists who inhabited the area. Investors also began to purchase warehouses in the district to convert them into unique living spaces. Additional retail and restaurants became viable as the Pearl District became a more popular destination.

Many consider the Pearl District as a model for urban neighborhoods throughout North America. Beyond the transformation from a downtown industrial area to a "hip" residential area with upscale shops and restaurants, the development of the streetcar is also thought to play a role in its success. The Pearl District is connected to the upscale residential area known as Northwest Portland and also to the vibrant downtown area primarily because of the transit linkages created by the Portland Streetcar. The pedestrian-friendly

	2000	2010	2014
Portland City			
Population	529,994	583,776	602,686
Number of Households	223,947	248,546	257,211
Median Age	35.9	36.9	37.4
Median Household Income (Current Dollars)	\$40,146	\$47,185	\$50,232
Share of Population with College Degree or More	38.4%	42.2%	49.8%
Portland-Vancouver-Hillsboro MSA	2000	2010	2014
Population	1,927,881	2,226,009	2,296,285
Number of Households	745,531	867,794	896,982
Median Age	36.7	37.5	38
Median Household Income (Current Dollars)	\$46,090	\$57,343	\$57,441
Share of Population with College Degree or More	28.9%	36.5%	42.5%



DEVELOPMEN **DESTINATION MED DRAF**





FIGURE 5-111 - PROFILE OF PORTLAND DEVELOPMENT COMMISSION

nature of the streets and neighborhood also enhance urban linkages between the Pearl District and the rest of the city.

INSIGHTS AND IMPLICATIONS

The Pearl District combined many attributes of successful downtown redevelopment, including planning and the ability to leverage a TIF financing strategy. Because the PDC had the power to provide financial support for large-scale development, TIF allowed the city of Portland to invest in area that initially did not support much housing and to improve the infrastructure to support new residents. Revitalization of the Pearl District has played a critical role in Portland's housing strategy and in achieving regional and state goals for growth management. Success in creating a high-density urban neighborhood has helped relieve pressure to expand the urban growth boundary and protect rural resource lands.

At a larger scale, according to the Portland economic development officials interviewed, the primary lessons learned have been the following:

- incubators, of which nine are private.
- signed a city-to-city trade agreement with a city in China.
- training, and other assistance.

Sources: Census 2000, American Community Survey 2010 1-year estimates (Median Household Income and City educational attainment), Current Population Survey 2010 (MSA educational attainment) ESRI Business Analyst Online, Walkscore.com, LEHD OnTheMap, Venture Portland Form 990, 2013, PDC CAFR 2012-2013

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 Place Matters – the city's green building strategy has spurred industry innovation in planning, architecture, and storm water design, and has become a "living lab" that has attracted entrepreneurs.

 Grow Your Own – 85% of the economic development effort is focused on growing companies and industries at an early stage, not recruitment. 80% of Portland's business have fewer than 20 employees. The city supports this effort with a \$1.5 million Portland Seed Fund, the first publically backed seed accelerator equity fund in the US, funded by General Funds. So far, 46 companies (mostly tech) have created 350 jobs in 2.5 years, attracting \$40 million in outside investment. The city also created its Early Adopter Program to connect startups with city procurement contracts to beta test products and services, and is building a new accelerator facility. Portland has 10 accelerator/

 Think Global – a focus on building exports. Portland formed the We Build Green Cities brand as part of its Greater Portland Export Plan, and assists in promoting companies oversees in areas such as eco-district development, master planning services, outdoor goods, and other opportunities. It has

Share Prosperity – extend economic development opportunities to minority populations and entrepreneurs. Portland has developed programs to assist minority-owned startups in traded industries with free rent for a year, grants through an innovation challenge, technical and business



These lessons apply in the case of the DMC:

- Place Matters the quality of the DMC design, environmental positioning, quality of life, and lifestyle offering will encourage many to want to locate in Rochester
- **Grow Your Own** leveraging the relationships with the Mayo Clinic to help local companies develop in a way unavailable to many other startups and expansions
- **Think Global** Mayo Clinic's global reputation and reach in life sciences need to be leveraged, as it is a unique differentiator
- Share Prosperity helping small businesses and minority- and women-owned businesses to be part of the DMC vision will pay dividends and present the idea that Rochester is a place to start a business or build one

DEVELOPMENT PLAN DESTINATION MEDICAL CENTER DRAFT







SECTION 6.0 MASTER PLAN 6.1 DMC VISION

The Destination Medical Center is a historic moment for the City of Rochester. The vision and Master Plan will shape the character, culture, and economic health of the city for the next 100 years. It seeks to connect residents and visitors to the place and to the City by providing buildings and places that inspire the minds, engage the senses, and appeal to all ages and backgrounds to live, work, play and thrive in Rochester. Rochester, with its compact and walkable urban core, provides a unique opportunity for Mayo Clinic and the citizens of Rochester to realize an authentic city. It provides a vibrant urban downtown environment, and the address that will attract the best and the brightest talent while at the same time be a desirable place to live and work. The plan incorporates the large-scale program and vision with places and public spaces that are comfortable, valuable, and more engaging for all.

The DMC master plan creates development of significant quality and value. A whole that is greater than the sum of its parts and aims at achieving the following criteria:

- Incorporate and expand upon the design aspirations of Mayo Clinic and the City of Rochester
- Integrate new programs fully with the businesses, intuitions, and residents
- Be flexible, inclusive, and offer a variety of ideas
- Artistically interpret and integrate the history and cultural context of the existing City and its residents
- Seize maximum advantage of its location and existing infrastructure

The master planning design effort recognized the importance of starting the assignment the proper way with the right resources and the right process. The creative analysis process of this effort provided the key to unlocking the value and design direction for the City. This process was careful, thorough, open, and inclusive. Many ideas and points of view were incorporated to arrive at the most visionary yet appropriate strategic direction. The DMC vision is bold. It enhances and extends Rochester so that it can evolve in exciting and dynamic ways, while at the same time feel like a natural evolution of the city fabric and culture. The result is a design vision and master plan for a uniquely integrated city development that will attract visitors from all over the region and beyond. The development will feature one-of-a-kind, timeless elements and places designed to generate enormous value.

There was no preconceived image or formula followed during the planning process, nor was it fixated on a rigid style or point of view. The design effort focused on a process that lead to distinct strategic ideas that will gain consensus with all stake holders. In some cases our approach was bold – in others, modest. The diversity of development and environments included in the master plan represents a range of responses to the specifics of each stakeholder and context. The DMC master plan creates buildings (and places) that respond to the unique setting. After studying the essential characteristics and opportunities of each neighborhood, street, and place the design responds to all of Rochester's variety and complexity while expressing a bold identity. This all-encompassing formula creates the long-term real estate value and retains the most memorable symbols of any vision. In addition to Mayo Clinic and the health care marketplace, the DMC Master Plan includes attractions and amenities for all. It will include significant residential and mixed use components, making the overall development a true, mixed use urban development and neighborhood that appeals to residents and visitors alike. The master plan envisions and articulates a destination development to attract a wide range of the marketplace while also creating a place of timeless value. The master plan is flexible, market driven, and allows for changes and evolution of the program over time.

The strategic design has to be market driven and match the goals of the DMC Act, the business objectives of the City and Mayo Clinic with built-in adaptability to the vicissitudes of the market. The goal is to build the vision and not to create false expectations. Large-scale development plans are difficult to implement, and the most difficult part is getting started. The proposed projects for the first phase of the DMC Initiative is scaled to be completed in five years but substantial enough to have an impact and convey the larger vision. This approach allows the DMC plan to win credibility in the marketplace. The first phase is also critical in establishing the quality and image of the entire development. Subsequent development should ensure that each phase is responsive to the market and can sustain itself without burdening future phases with extraordinary operating and maintenance costs. The emphasis on creating an achievable first phase is paramount to the DMC long-term success.

At the core of the DMC design is a belief that urban redevelopment is the most vital, sustainable, and efficient form of human settlement. The culture and climate of Rochester makes this even more important. The master plan leverages existing infrastructure to the greatest extent possible, promotes pedestrian movement, and maintains a sensitive balance between development and the natural environment. These are not radical notions, but rather principles that enable cities to sustain themselves for centuries.



City of Progress

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FIGURE 6.1-1 - Aerial View



6.1.1 Relationship to DMC's Eight Core Areas The plan focuses on eight distinct core areas of the DMC Initiative:

- Commercial Research and Technology
- Learning Environment
- Hospitality and Convention
- Sports and Recreation
- Livable City
- Retail/Dining/Arts and Entertainment
- Health and Wellness
- Transit

These core areas of programmatic emphasis comprise the full spectrum of uses and activities found in healthy and vibrant world renowned cities. In order for Rochester to take its place in the global competition it must offer these as well so that it can compete now and in the future. The DMC initiative is not a comprehensive planning initiative, but a more focused and specific development plan that is supported by the Rochester Downtown Master Plan(RDMP) and the Comprehensive Plan. The DMC master plan incorporates new market-driven development and responds to the unique opportunities within the city.

6.1.2 User Experience Goals

An important goal of the DMC master plan is to provide a variety of high quality and memorable experiences for all user groups which include:

- Resident
- Commuter
- Business
- Patient
- Visitor

The quality of these experiences share a commonality noted in an active mixed-use environment composed of great public spaces and integrated with a convenient transit network that connects all of the key places in the DMC Development District. The user experiences that follow relate to the key places that are described in further detail in Section 6.3.





FIGURE 6.1-3 - Festival Market

DEVELOPMENT PLAN DESTINATION MEDICAL CENTER DRAFT





FIGURE 6.1-4 - Downtown Waterfront: Residential Experience at Zumbro Market



FIGURE 6.1-5 - Downtown Waterfront: Residential Experience overlooking Waterfront Square

6.1.2.1 RESIDENT EXPERIENCE

Critical to the DMC master plan is the establishment of a strong residential community. This community will transform the downtown into a 24-hour mixed-use neighborhood with a variety of residential housing types located throughout the Development District, but concentrated within the Downtown Waterfront. The neighborhoods will be walkable to work downtown as well as enriched by convenient retail, restaurants, entertainment, a public market, recreation and cultural offerings (See Figure 6.1-4, Zumbro Market). Residents will also experience and a modern urban lifestyle enhanced by strong connections to an improved network of open space including The Crescent (Figure 6.1-6), a reactivated waterfront, city-wide trails network and street car system to key destinations.



Highline, New York, NY









FIGURE 6.1-7 - Heart of the City: Commuter Experience at the Portal



FIGURE 6.1-8 - Central Station: Commuter Experience walking through Central Park

6.1.2.2 COMMUTER EXPERIENCE

The master plan provides for several modes of transit to be woven into the downtown fabric and provides commuters with convenient access to the City of Rochester via fast and reliable connections including local and regional bus systems. Key arrival points to the DMC Development District are enriched with welcoming urban plazas and parks and integrate state of the art transit stops with real-time arrival information (Figures 6.1-7 & 6.1-9). The streets are updated to support a bicycle and pedestrian network, expanding commuter options so as to provide easy and safe exchange between most downtown destinations. The Transit Terrace blends into Central Park, permitting easy intermodal connections downtown between all transit modes while providing for future potential high speed rail connections (Figure 6.1-8).



Street Car, Houston, TX









FIGURE 6.1-10 - Discovery Square: Business Experience in the Translational Cloud



FIGURE 6.1-11 - Facilities and Public Space to attract the best and brightest talent

6.1.2.3 BUSINESS EXPERIENCE

The proximity of the downtown to Mayo Clinic, physicians, researchers, doctors and scientists makes it an ideal location to attract private research, bio-medical, bio-technology and related businesses. Discovery Square is the focal point for the new workplace environment of the DMC business community similar to the Google Campus. This community must attract the best and brightest in order to achieve the project goals of becoming a nationally and internationally recognized address for Health Science Research. The Translational Cloud and The Square, the public park amenity at Discovery Square, will provide a supportive setting for fostering a focus on collaboration between the Mayo Clinic and other companies in the biomedical, bio-technology and related sectors (See Figures 6.1-10 & 6.1-12).



Google Campus, Mountain View, CA









FIGURE 6.1-13 - Heart of the City: Patient Experience at Integrated Care Pavilior



FIGURE 6.1-14 - Heart of the City: Patient Experience at the Wellness Center

6.1.2.4 PATIENT EXPERIENCE

Downtown Rochester provides patients with easy access to the Mayo Clinic's facilities, physicians and staff in an environment dedicated to health, wellness and integrated care. Key to enhancing this experience is a welcoming arrival which includes easy navigation from conveniently located transit to a series of high quality, fully accessible interior spaces including the Visitor's Center, Integrated Care Pavilion and Wellness Center (Figures 6.1-13 & 6.1-14). Iconic downtown places such as Peace Plaza and the proposed Ice Pavilion are seamlessly integrated with Mayo Clinic facilities, allowing a patient equal access to the great spaces of the downtown experience along with the general public (Figure 6.1-15).



Patient Experience at Mayo Clinic Visitor's Center









FIGURE 6.1-16 - Downtown Waterfront: Visitor Experience at Waterfront Square



FIGURE 6.1-17 - Heart of the City: Visitor Experience dining on the Balcony

6.1.2.5 VISITOR EXPERIENCE

DMC master plan looks to enrich downtown Rochester with a series of places creating unique, year-round destinations attracting visitors not otherwise coming to Rochester. These places will extend throughout the DMC Development District providing easily accessible and iconic places to visit including First and First (Figures 6.1-17 & 6.1-18), the Zumbro Market (Figure 6.1-16), a reactivated waterfront, city-wide trails and a street car system to key destinations. The visitor experience will further benefit from the planned expansion of the Mayo Civic Center and growth in convenient retail, restaurants, entertainment, recreation and cultural offerings.



The Terrace at Trump, Chicago










6.1.3 Overview of Planning Phasing Purpose & Strategy Working towards a transformation for Rochester from "City in Progress" to "City of Progress", the main emphasis of the planning strategy for DMC is to build up the center of the existing City of Rochester (Figure 6.1-19). The purpose of the development plan is to create a specific physical design strategy that will show how the city can grow and evolve in the context of substantial funding and business development opportunities. This vision is centered on the creation of great streets and public spaces that will create the address and value to spur growth within the downtown area. The plan is about places that will foster and sustain vibrant urban life and make the downtown area attractive to residents, visitors, and businesses.

The DMC master plan focuses on the creation of places, avoiding the idea of specific projects. These places allow the plan to be flexible and evolve over time and to attract the greatest amount of investment. While maintaining a focus on an achievable first phase within the Heart of the City (and specifically First and First, see Figure 6.1-20), the master plan has flexibility to change and respond to market conditions and physical design criteria. The goal is to establish and uphold the key design principles and places that define the plan while the long term development process unfolds.

The State of Minnesota, the county and the City of Rochester have created a unique environment that will enable the city and Mayo Clinic to grow above and beyond what would normally be possible with the current economic model. The goal of the DMC master plan is to enhance, extend, and grow what is already present within the city. The result will make the city a destination for residents and visitors alike through exciting programmatic offerings. The plan envisions a twenty-year time frame with a specific emphasis in creating catalytic change within the first three to five years.

The Development District program and phasing (Figures 6.1-22 and 6.1-23) are based on an in-depth market analysis of the core areas of focus (Section 5.0) and an analysis of transit strategies and parking requirements to accommodate growth as a result of the DMC Initiative over a 20-year development time frame. Figure 6.1-21 illustrates the areas of the key places (Section 6.2) in the Development District and Figure 6.1-24 illustrates the conceptual full build-out of the full program.





FIGURE 6.1-21 - Development District Illustrative Plan





FIGURE 6.1-22 - Development District Program Plan









FIGURE 6.1-24 - Development District Aerial View



6.2 **REGIONAL & AREA ANALYSIS**

6.2.1 REGIONAL MAP & OVERVIEW

The City of Rochester is part of the rural landscape of The State of Minnesota. Its location is central to many small towns and municipalities within the three state region of Minnesota, Wisconsin and Iowa. There are few physical characteristic that have shaped Rochester more than the picturesque qualities of the rolling agricultural landscape and the Zumbro River that surrounds the city, shaping the city grid and its public amenities. The DMC plan recognizes this unique location within the state by reinforcing the creation of a denser urban destination at a distance from the larger metro Minneapolis/St. Paul area, as an alternative to the big city atmosphere.

Rochester is easily accessed from the much larger Minneapolis/St. Paul, but it is also an independently functioning city. The city is located about 90 minutes away by car. (Figure 6.2-1) It's "small city" character defines its friendly neighborhoods and convenient home town feel. The DMC master plan seeks to define the small city character and take advantage of the inherent conveniences and accessible atmosphere that will be attractive to residents and visitors. The city is easily accessed by car and buses. The portals to the city are influenced by the commuters and visitors that arrive from major highways along the southern and western edges of the city. Air service is provided by Rochester International Airport which provides access, but does not compete with air service from MSP International Airport due to its close proximity to the Twin Cities.

There are many natural landscapes within a short drive including the Mississippi River. The compact urban core is well connected to the nearby natural amenities with parks and trails that extend in all directions. The unique ability to have both an urban destination and easy access to natural amenities is one of the key characteristics that the DMC plan will take advantage of. The plan aims to create the "smallest large city" in Minnesota with an authentic "hometown" environment.







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FIGURE 6.2-2 - Existing Second Street Arrival



FIGURE 6.2-3 - Michigan Avenue Water Tower Address

6.2.2 EXISTING ROADWAYS / ACCESS / CONNECTIONS The existing street and block plan in downtown Rochester provides a regular grid for a wide variety of developments and programmatic uses. The street system is easy to navigate and reinforces the development of a compact urban downtown area. There are three key arrival streets within the limits of the downtown perimeter: Second Street, North and South Broadway, and Civic Center Drive. Providing a great arrival image and experience on these key arrival streets is essential to the plan. (Figure 6.2-4)

Second Street is the primary east-west street connecting from the Heart of the City out to the major arterial Highway 52 at Exit 55. The design character of this street is mixed architecturally and can benefit from redevelopment. (Figure 6.2-2) The street is the primary connector between Mayo Clinic's downtown campus and the St. Marys campus. It is an important street both from a circulation and arrival standpoint. Second Street is the first impression that many visitors have when they arrive from the highway. Marking the St Marys Campus with a gateway closer to downtown (similar to the Water Tower along Michigan Avenue, see Figure 6.2-3) creates a positive arrival image within the DMC master plan.

Civic Center Drive is also a main connecting street from the highway at Exit 56 into the downtown area. Civic Center Drive is a relatively new street and it has a curving suburban form that is out of character with the strong grid that makes up the center of the city. The plan of the street follows a northwest to southwest diagonal alignment that follows the existing rail line and creates a direct connection to the Central Business District and on to the Civic Center area. The DMC master plan will take advantage of this direct connection while at the same time improving the overall arrival experience by establishing an improved entry to Central Park and transitioning to a more local roadway typical of the downtown fabric of the city.

North and South Broadway is a key north-south corridor that passes through the Heart of the City. The intersection at Broadway and Second Street marks the development center of the city. Broadway south of Second Street has the most character and retains some of the historic scale with continuous street walls. The street continues south and connects well with the Zumbro River and Soldiers Field. Broadway provides a key arrival experience into the city and will be an important street in the redevelopment of the downtown. The plan looks to recast the street in the central area of the city so that it becomes more pedestrian friendly and lives up to its historic roots as a "Main Street" in downtown Rochester.

The downtown street network is comprised of a regular series of streets and blocks that create a pedestrian scale and urban atmosphere in the Heart of the City. There are several locations where streets have been closed and blocks combined to provide for larger development parcels. The DMC master plan seeks to reinforce the basic grid of streets and in some cases to reestablish the grid as the best way to reinforce the urban district and connectivity between neighborhoods.











6.2.3 EXISTING CONDITIONS / LAND USE Plummer Building, but needs a renewed focus (Figure 6.2-6).

Nevertheless, with anchors for land use in the downtown including Mayo Clinic, the largest integrated medical practice in the world and University of Minnesota Rochester, a forward-looking research university, both of which are continuing to grow and expand, the city has a healthy economic opportunity for future development. With the combined strengths of these key institutions, an active engaged community, and distinctive natural and built features, the city has the potential to sustain itself as a significant economic force and vibrant community in the future.

The expansion of residential uses within the DMC master plan is crucial to the development of the downtown. Residential uses are proposed throughout the DMC Development District, but especially around the downtown waterfront. The residential development will anchor the downtown and encourage a full array of supporting uses such as retail, food markets and cultural venues that will appeals to residents and visitors alike.



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The existing downtown in the City of Rochester is fortunate to have many of the ingredients of a great urban downtown already—including historic architecture, large public parks, strong neighborhoods within walking distance of each other, and the Zumbro River within the core. The vision looks to build on these assets as well as to address some existing challenges including a downtown dominated by health care buildings, many vacant lots, blank institutional walls and surface parking areas that give it a look of emptiness (Figures 6.2-5 & 6.2.-7) and the great attention to the skyline which was begun with the









FIGURE 6.2-8 - Existing Development District Land Use



6.2.4 SUMMARY OF CITY LAND USE POLICIES / REGULATIONS ZONING

The Zoning Ordinance and Land Development Manual of the City of Rochester, Minnesota establishes and regulates zoning within the city. The downtown core is composed of a number of zoning districts, but the majority of the DMC Development District is zoned within the Central Development Core. (Figure 6.2-9) The Central Development Core is further divided into sub-zones which address Medical, Residential, Central Business District and Fringe uses with slight variations in allowable density. Regardless of the sub-zone, the Central Development Core encourages density and has few limitations on allowable building height. The remaining areas are zoned for Residential, Business or Manufacturing. These are found predominantly towards the edges of the DMC Development District and are defined by density restrictions and building height limits between 20-35 feet. The existing zoning within the Downtown will allow Rochester to grow towards the DMC Development Plan.

LAND USE POLICY

Aligned with the Rochester Downtown Master Plan (RDMP) approved in August 2010, the city's existing land use policies and regulations within the downtown seek to establish a strong and sustainable framework of open space, streets, and an engaging public realm that forms a foundation within which future development can occur. (Figure 6.2-10) The land use policy for the Downtown is composed of the following frameworks: a land-use framework of Districts that envisions the specific mix of land uses that makes up each distinct area of Downtown; an urban design framework that defines the urban form of the city by giving shape to the public realm through building massing, density, and the scale of streets; and, an open space framework that sets the landscape character and helps define priority investments for streets, the river, trails, open spaces, and plazas. The land-use, urban design and open space frameworks are generally consistent with the DMC vision.





FIGURE 6.2-10 - RMDP Land-use Framework

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6.2.5 Overview of Previous Studies & History **PREVIOUS STUDIES**

There are many planning studies and development plans that preceded the DMC effort. The most notable plans are the Mayo Clinic 5 Year Plan Update (2011), Envision UMR (2014) and RDMP (2010), which was adopted as part of the City's Comprehensive Plan in June, 2012. The goals and objectives of these plans are reflected throughout the DMC Vision.

- Mayo Clinic 5 Year Plan Update: Prepared for Mayo Clinic and submitted to the city, this plan coordinates growth between the city's Medical Institutional Campus Special District and the broad civic and community goals of the city. The DMC vision leverages the projected growth of Mayo Clinic and supports it with an enhanced public realm, improved transit and complementary new development for a more vibrant urban experience within the downtown.
- Envision UMR: Prepared for the University of Minnesota Board of Regents, this plan works to integrate the expansion of the campus into the fabric of the downtown. The DMC vision builds on Envision UMR by strengthening connections from the campus and encouraging meaningful collaboration with the proposed Medical and Bio-tech partners in Discovery Square.
- **Downtown Rochester Master Plan:** Prepared for the City of Rochester in 2010 and adopted into the City's Comprehensive Plan in 2012, this plan establishes a series of strong and sustainable frameworks to promote and guide the growth of the Downtown. The DMC Vision integrates the goals of the plan and overlays them with details for a network of key places, transit infrastructure and ambitious new development goals.

HISTORY

Since it was founded in 1854 by George Head, the City of Rochester has been defined by steady growth and an exceptional ability to respond to opportunity. Rochester was an important agricultural center for several decades, buoyed by railways links that brought a steady flow of immigrant workers and left with grains and produce. The arrival of Dr. William W. Mayo during the Civil War, began a shift towards the medical and technological enterprises that continues today. The downtown, like the city as a whole, has been shaped by growth and adaptation. Understanding the history and growth of the city has informed the DMC vision throughout the design process. (Figure 6.2-11)

Broadway has been the major retail destination throughout the history or Rochester, with the intersection of Broadway and Second Street SW (formerly Zumbro Street) serving as the central focus of the city. The influence of Mayo Clinic on the usage patterns of the downtown has shifted the center towards Plummer Building and Gonda Tower. This shift was reflected in the RDMP's emphasis on First Street as a critical development spine. The DMC vision emphasizes the shift further by establishing First and First as the new center anchoring the Heart of the City.

Second Street, originally called Zumbro Street, has always been the primary civic axis and arrival corridor for the Downtown. Historically Second Street was the address for many churches and other civic functions. Current it is the spine that unites Mayo Clinic's campuses and provides the front door to the downtown core. The master plan's introduction of a streetcar route and several new civic spaces on Second Street reinforces the civic importance of the street and enhances the arrival sequence for visitors to the city.

Rochester is currently the third largest city in the State of Minnesota with a population well over 100,000 people. Like many American cities of this size it has grown away from the downtown core considerably. The past 60 years have been characterized by a hollowing out of the downtown core, in favor of development around the City's perimeter. The DMC vision reverses this trend by emphasizing dense downtown development, viable infill development in the districts and improvements that support the needs of existing downtown properties.

Rochester has been defined by the Zumbro River for better and worse since it was founded along the river's banks. In the 19th century, the river drove the city's agricultural economy by providing irrigation to farmers, power to the mills and water to the downtown breweries. As the city grew and the medical and technological economies demanded less of the river it was increasingly ignored. The flood of 1978 brought renewed attention to the river and spurred a dramatic reengineering of the river to avoid a repeat tragedy. While effective as flood control measures, the changes enhanced the isolation of the river from the residents of the City. The development of Waterfront Square and the promenades along the river work to reduce the division and encourage the city to embrace the river as an amenity.

The downtown was historically characterized by a network of well scaled blocks and streets, occasionally interrupted by public parks or civic squares. As downtown institutions grew in scale, their increased spatial needs required that many smaller blocks became consolidated. The clear network of evenly spaced streets gave way to confusing new patterns marked by dead ends and confusing navigation. The DMC vision introduces a series of new or enhanced civic spaces throughout the plan to better orient visitors and humanize the scale of the downtown.



Historic commercial development on Broadway











6.3 KEY PLACES

Six Destination Experiences and Addresses

The DMC Development District encompasses six unique places: Heart of the City, Discovery Square, Downtown Waterfront, Central Station, St Marys Place and UMR/Recreation. The framework by with the places are shape is outlined below.

The Vision:

- A bold concept for the future
- A framework for growth
- Market driven plan
- Financed through a mix of public and private investments

Problems to solve:

- Position Rochester as a global destination medical center
- Attract new residents and visitors to Rochester and get them to stay
- Create dynamic sustainable economic growth based on unique talent and local facilities
- Recognize the specific needs of the patients and companions that visit Rochester
- Establish a vision that is a creative evolution of the existing city and culture, not an import
- Design a well-crafted, achievable, first phase that can be accomplished guickly using conventional means

Designed to offer:

- A positive and inspired sense of arrival
- A convenient city full of year-round activities
- Sustainable economic development which perpetually exists at the cutting edge
- A renowned and iconic address that becomes a global model
- A public realm that is inviting, convenient, and barrier free providing easy access to all meeting and exceeding all ADA requirements

An area that includes:

- A series of memorable experiences that appeal to a wide audience
- Iconic places and attractions where people want to be
- Programmatic offerings and venues that cannot be acquired anywhere else in the area
- A compact and walkable series of lively streets and active public spaces that are ADA accessible and connected in the heart of downtown

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DMC recommended projects prioritized and phased through a separate evaluation process



6.3.1 HEART OF THE CITY6.3.1.1 HEART OF THE CITY PRINCIPLES

First and First: Catalyst for the future of Rochester

The core of downtown Rochester at Peace Plaza is the true heart of the DMC master plan. It is a place of connected spaces and urban experiences that build off of the convenient and walkable attributes of the city. Enhanced public areas and new development would strengthen Peace Plaza as the symbolic heart of the city with new attractions and features at key places along its length. (Figure 6.3-5)

At the west end near the Gonda Tower the lower level subway passages would be "day lighted" with the Ice Pavilion, a grand new sunken plaza visually connected to the Landow Atrium with ice skating, dining, and picture windows that look out from the subway passages. "First and First" located in the middle of Peace Plaza is at the main crossroads within the downtown (located at First Street and First Avenue). This area would be enhanced on all four corners with new development and amenities including a dramatic arched Light Pavilion canopy high above the intersection. The Light Pavilion defines the key intersection and would be a must see attraction with special lighting effects that create a lively theatrical atmosphere (Figure 6.3-12).



"First and First" would also provide a beautiful grand dining terrace that spans First Avenue connected to the Château Theater making the theater a key part of the overall design and cultural experiences offered in the space. At the east end of Peace Plaza would be a new Waterfront Passage that connects to the Downtown Waterfront and "Gardens Neighborhood". The Waterfront Passage opens up the dead end to Peace Plaza and makes the plaza more integrated with new development and the rest of the downtown. (Figure 6.3-3)

At Second Street at the base of the Plummer Building is a new urban public arrival space called The Portal.

The public square flatters the Plummer Building establishing the landmark tower as the focal point of a gently curving space that would serve as the front door to science and Bio-tech development of Discovery Square. Mixed-use buildings including Bio-tech, Healthcare, Education, Hospitality and Restaurant/Retail would surround The Portal along with a convenient streetcar station making The Portal the symbolic and economic connection to science and technology in the Heart of the City. The Heart of the City embraces the aspirational skyline introduced by Plummer Building while creating new, modern day symbols of Mayo Clinic's global preeminence and Rochester's future as a global destination.



FIGURE 6.3-3 - Waterfront Passage & Plaza St



FIGURE 6.3-4 - Dramatic canopy at Potsdamer Platz (Berlin, Germany)

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6.3.1.2 HEART OF THE CITY KEY PLACES

- **The Balcony** The Balcony would build on the theatrical imagery and memories of the Château Theater and integrate the restored theater into the overall "First and First" experience. The Balcony would span First Avenue with an outdoor dining space and indoor weather protected connections to the eastern end of Peace Plaza. The Balcony would be the place to view all of the activities and excitement at "First and First" and the Light Pavilion especially evenings and during events and festivals that are staged in Peace Plaza.
- "The Grand Arch" The Grand Arch marks the intersection of Second Street and First Avenue with a skyway bridge and arch element that serves as a preview to the lively spaces on Peace Plaza and "First and First". This marks the passage to the waterfront and connects the Heart of the City with a visible and celebratory feature in the streetscape.
- **Ice Pavilion** Exposing the multi-level network around the Gonda Building, the Ice Pavilion is an enhancement of the ground floor spaces and an expanded offering of year-round amenities including a central winter skating area in the tradition of New York City's Rockefeller Center which also functions as a restaurant during warm weather months (Figure 6.3-6)
- Integrated Care Pavilion Located at The Portal, the Integrated Care Pavilion would be the dramatic front door and first impression to Discovery Square. Doctors, researchers, and scientists would co-mingle in this light and airy atrium space to share ideas and to introduce procedures and methodologies that can be directly applied to patient care. (Figure 6.3-7)
- The Light Pavilion A soaring crystalline arrival roof structure at the intersection of "First and First" adjacent to mixed-use development
- The Plaza Steps Located at the east end of the Peace Plaza, the Plaza Steps are a stage-like setting that take pedestrians to the upper levels, all fully accessible and flanked
- with restaurants and cafes. The Portal - a new public space,
- transit station, and development address, including the Plummer Building and Bio-Business Center at the Heart of the City
- Waterfront Passage Extending Peace Plaza across Broadway into the "Garden District", with an atgrade connection to the Downtown Waterfront and Civic Center







FIGURE 6.3-7 - Integrated Care Pavilion

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6.3.1.3 HEART OF THE CITY PROGRAM

Figure 6.3-10 provides the development program for Heart of the City based on the market analysis. For more details regarding building height, scale and density within Heart of the City, refer to Appendix 5, Design Guidelines.











FIGURE 6.3-12 - Heart of the City Aerial



6.3.2 DISCOVERY SQUARE6.3.2.1 DISCOVERY SQUARE PRINCIPLES

The Institutes: Technology and Science in the City fostering Private Development

Discovery Square is the focal point for the expansion of the "Science and Technology Institutes" of Mayo Clinic and an ideal location to expand private research, technology and related business in the downtown area. Located steps away from the Gonda Building and the Mayo Medical School, Discovery Square is positioned to take advantage of these proximities that are essential for the continued growth of the research and bio-medical and bio-technology community. The buildings are designed with the idea of establishing a more robust Rochester skyline. The science buildings are grouped around a beautiful and lively urban square that appeals to the widest constituencies of city dwellers. The Square provides interconnected indoor and outdoor meeting places that function as centralized gathering spots for visitors, scientists, researchers and the medical community to co-mingle and collaborate. (Figure 6.3-13) The Square is designed to be playful and artful, similar to the Google Commons in order to, quite simply, attract the best and the brightest, the most creative minds in the world.



The Square is an environment designed to attract the best and brightest of the next generation



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6.3.2.2 DISCOVERY SQUARE KEY PLACES

- Hi-tech Domain State-of-the-art technology would be embedded into and around the buildings and public spaces of Discovery Square allowing workers, visitors, and patients to receive information in real time
- Institutes A series of flexible and interdisciplinary lab lofts that provide state-of-the-art facilities in an open, connected, and collaborative vertical campus
- **Partnership Alley** Building off the alleyway system, a network of inter-connecting passageways for an integration of buildings and communities
- The Square A Wi-Fi connected urban park suited to the 22nd-century, providing a unique setting for the best and the brightest to engage in creative interactions within a beautiful urban public square (Figure 6.3-15)
- **Translational Cloud** A glowing glass pavilion hovering in the air above The Square connecting all of the buildings serving as a meeting place for conferences and events (Figure 6.3-16)
- University Connection Programmed spaces and a campus linkage system that strengthen the relationship between Mayo Clinic, Mayo Medical School, the University of Rochester and other institutional partners
- Windows on the Institutes Contemporary open storefronts and bay windows that overlook The Square, inviting the outside world inside for a glimpse of the life and creative activity going on inside



Central space for development - Union Square, San Francisco





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6.3.2.3 DISCOVERY SQUARE PROGRAM

Figure 6.3-19 provides the development program for Discovery Square based on the market analysis. For more details regarding building height, scale and density within Discovery Square, refer to Appendix 5, Design Guidelines.













DOWNTOWN WATERFRONT 6.3.3 6.3.3.1 DOWNTOWN WATERFRONT PRINCIPLES

The Gardens: Healthy Living / Nature in the City

"The Gardens" is totally integrated with the Zumbro Riverfront in order to create a neighborhood where the natural landscape and the city are interconnected to form a unique urban character. "The Gardens" becomes the center of culture and history providing a healthy living and working environment. The Gardens is the new Downtown Waterfront neighborhood that would serve as a place to explore and stroll for visitors and tourists using the Civic Center. Much as the Zumbro River gently meanders into Rochester, "The Gardens" similarly combines the sustainable qualities of the city and its natural surroundings. The Crescent is the main public space connecting the district and extending to Waterfront Square. It is planned as a lushly planted rain garden and landscaped public space that extends the impression of the river while creating an attractive setting for residents and businesses alike. (Figure 6.3-22) The Crescent also brings art, recreational, and cultural attractions to the area. The Gardens is an authentic mixed-use district evolved from the specific history and culture of Rochester providing a one-of-a-kind neighborhood for residents, health oriented businesses, and visitors to the Civic Center. The Downtown Waterfront is a model of modern urban living where the landscape and the buildings are intertwined for sustainable healthy living. (Figure 6.3-23)





Culture and Arts anchor, WaterFire - Providence, RI



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6.3.3.2 WATERFRONT SQUARE KEY PLACES

- "Barcelona Corner" (including the Government Center Plaza) the gateway, transit station, and address for an expanded new market development on the east side of the Zumbro River and south to future development areas
- Civic Center Bridge A beautiful curving pedestrian bridge that connects Mayo Park to the south side of the river and Government Center. The Civic Center Bridge improves access and visibility to the Art Center and enhances pedestrian activity along the water's edge.
- Civic Center Promenade The promenade is an extension of the public spaces around the existing Art Center giving greater access and visibility to the museum and Mayo Park. The promenade would host outdoor activities and art shows to add to the cultural offerings of the Downtown Waterfront.
- The Crescent A modern state of the art sustainable landscape promenade that includes rainwater collection, trails, cultural and health amenities as a place to relax and stroll through the city. The Crescent is the cultural address for the Downtown Waterfront. (Figure 6.3-25)
- Government Center Promenade The government center promenade would better integrate the Government Center with the river and provide a setting for strolling and looking back to the city skyline. The promenade completes the pedestrian ring of circulation that surrounds the Zumbro River and the Downtown Waterfront.
- **"The Light Loop" and Amphitheater** An artful and visually exciting river light show that uses the Zumbro River as the canvas for lighting and special effects turning the river itself into a town square for art and festivities. The Amphitheater provides a spectator gallery for the events with seating extending down closer to the river.
- Mayo Park and The Main Stage An iconic and sculptural outdoor performance venue that is a focal point from within Mayo Park
- The Park Blocks A series of mixed-use neighborhood blocks that make up the urban fabric of the Downtown Waterfront. The blocks would feature active ground floor uses to reinforce the lively street scene that defines this new waterfront neighborhood (Figure 6.3-22).
- Promenade Extension The promenade extension connects to development parcels on the south side of the Zumbro River across from Mayo Park. The promenade extends the value of the river frontage and help to activate the waterfront with new mixed use development.
- **Waterfront Promenade** The curving plaza would provide panoramic views down the river from the Zumbro Market to Fourth Street. The promenade terminates the historic district with its small shops and restaurants as complements to the contemporary buildings in the Downtown Waterfront.
- Waterfront Square A year-round event space (including a winter ice rink) extending the presence of the river and establishing the address at the intersection of Second Street, the Zumbro River, The Crescent and the expanded Civic Center
- Zumbro Market A central market and food hall relocated to Waterfront Square featuring healthy fresh foods, dining, and products that come straight from the farm. Zumbro Market would also house cafes and a local brew house to add to the lively urban atmosphere. (Figure 6.3-26)



FIGURE 6.3-25 - The Crescent



FIGURE 6.3-26 - Zumbro Market at Waterfront Square

DEVELOPMENT PLAN DESTINATION MEDICAL CENTER DRAFT

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6.3.3.3 DOWNTOWN WATERFRONT PROGRAM Figure 6.3-29 provides the development program for Downtown Waterfront based on the market analysis. For more details regarding building height, scale and density within Downtown Waterfront, refer to













6.3.4 CENTRAL STATION 6.3.4.1 CENTRAL STATION PRINCIPLES

Transit Terrace: A Place that is appealing for all, even those who may not be using transit

Central Station is the new nexus of transportation and arrival in the downtown area. Conveniently located on the northern edge of downtown, the area is recast to incorporate mixed-use development, parking amenities, and a world class regional transit station to serve the downtown. Central Station embodies the principles of "Open Transit" with access to multiple travel modes within the Transit Terrace including park-and-ride, regional and local bus, bike and pedestrian as well as accommodating a potential future connection to high-speed rail connection (i.e. Zip Rail). The north-south connection down to Gonda and Discovery Square will be provided through the Downtown Circulator, street car and a link into the existing subway-skyway network. Central Station anticipates a transit-oriented development complete with an authentic mixed-use neighborhood program. It also leverages transit architecture to create iconic spaces where people want to gather, whether or not they are using transit. The station fronts the historic Central Park and provide a green oasis in the heart of the vibrant arrival district. (Figure 6.3-32)

6.3.4.2 CENTRAL STATION KEY PLACES

- **Central Park** A refurbishment of the historic Central Park space, reminding people of Rochester's beginnings (Figure 6.3-33)
- The Grand Hall An interior grand arrival hall looking out on Central Park and the skyline beyond, including a light-filled room with restaurants, art gallery, and performance space
- The Great Lawn A generous open lawn space within the heart of Central Park that provides for flexible events and gatherings throughout the year
- Transit Terrace A full service intermodal station that includes all modes of transit, including future commuter and high speed rail



Grand Hall as an iconic space - Grand Central Station, New York, NY





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6.3.4.3 CENTRAL STATION PROGRAM

Figure 6.3-35 provides the development program for the Central Station based on the market analysis. For more details regarding building height, scale and density within Central Station, refer to Appendix 5, Design Guidelines.





FIGURE 6.3-36 - Central Station Section



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FIGURE 6.3-41 - Sacre Coeur steps

6.3.5 St. Marys Place 6.3.5.1 ST. MARYS PLACE PRINCIPLES

The Great Room: A Welcoming "Urban Foyer" for the City of Rochester

St. Marys Place is a new public space and development address at the threshold of downtown. The space not only serves as a warm welcome to visitors and residents arriving on Second Street, but also creates an eastern entrance for Mayo Clinic which brings its western campus, St. Marys Hospital closer to the downtown. Saint Marys Place recalls the history and culture of the City while at the same time creating a modern and welcoming arrival address for development along Second Street. St Marys Place is lined with a variety of hospitality uses, including smaller boutique hotels, bed & breakfasts, a Culinary Institute, outpatient offices and general "Main Street" shops that bring convenience and life to the place. The defining core of St Marys Place is a new transit station that links to the downtown. Parking is integrated to provide convenient access for both the hospital and transit station. St. Marys Park is connected to St. Marys place with a fully ADA accessible grand stair and elevator providing access to the currently underutilized park for all. (Figure 6.3-40)

6.3.5.2 ST. MARYS PLACE KEY PLACES

- tradition of the Sacre Couer steps in Paris (Figure 6.3-41)
- boarding place for the new transit line on Second Street
- ADA access up to St. Marys park.



Arrival Focal Point - St Anne's Circle, Annapolis, MD

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• St. Marys Steps – A picturesque neighborhood grand staircase to the top of Saint Marys Park, providing panoramic views of the city and to the historic "Pill Hill" neighborhood above in the

• Transit Pavilion – A glass enclosed "greenhouse" that serves as a comfortable, warm, and convenient

The Tower – A modern interpretation and complement of the St. Francis Bell Tower Campanile, providing an address and symbolic entrance for the hospital on St. Marys Place. The tower provides











6.3.5.3 ST. MARYS PLACE PROGRAM

Figure 6.3-45 provides the development program for St. Marys Place based on the market analysis. For more details regarding building height, scale and density within St. Marys Place, refer to Appendix 5, Design Guidelines.



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6.3.6 UMR/RECREATION6.3.6.1 UMR/RECREATION PRINCIPLES

Bringing nature, the individual, and the community together to create dynamic experiences and rewarding lifestyles

The new UMR/ Recreation place is the recreation and education hub of the downtown. Located south of the downtown adjacent to Discovery Square, the area creates a welcoming and inspirational destination for the community, students and visitors by activating the space with programming for all seasons, ages and abilities. UMR is programmed to reach a broad audience of users and blend spaces and connections between the park, campus and city, leveraging opportunities for collaboration between students, instructors and industry professionals. Amenities provided within the area enhance access by including convenient walking paths, biking trails, mass transit, vehicular drop-offs and parking. The physical design is shaped to promote a sustainable future by preserving important historic elements and creating new public spaces and buildings that engage the river and its adjacent natural spaces. The result is a strong architectural and natural design reflecting the Envision UMR plan approved 2014, while working in concert with the larger goals of the DMC vision.

6.3.6.2 UMR/RECREATION KEY PLACES

- **Campus Lawn** A signature green space for the campus. The campus lawn creates a connection between UMR and Soldiers Memorial Field and provides a flexible lawn for passive recreational uses
- Gateway Plaza A generous plaza that provides flexible space for farmer's markets, food trucks, a
 pop-up skating rink and other uses
- Partnership Building A mixed-use building that provides future expansion capacity for UMR and much needed space for university partners
- Pedestrian "Main Street" An extension of First Avenue, the pedestrian street becomes the spine that connects the new buildings and open spaces of the UMR campus to downtown
- Soldier's Memorial Field A hub of active recreation including golf, tennis, softball and running, the park provides a tangible connection to the Zumbro River in close proximity to the downtown

6.3.6.3 **PROGRAM**

Figure 6.3-51 provides the program plan for UMR's planned expansion (envision Master Plan, September 2014) at the southern end of the Development District adjacent to Soldier's Field. Figure 6.3-50 provides an illustrative site plan.



IGURE 6.3-48 - Campus In the City - Philad



FIGURE 6.3-49 - Campus On the Park - Metrotech, Brooklyn, NY

DEVELOPMENT PLAN DESTINATION MEDICAL CENTER DRAFT

lphia, PA















FIGURE 6.4-2 - Mayo Park events

6.4 PARKS AND OPEN SPACE

6.4.1 OPEN SPACE NETWORK

The City of Rochester has a great inventory of recreational and natural parklands that connect the city to the countryside and beyond. There are few formal urban parks within the downtown area. The Open Space Network within the DMC Development District is to feel connected, while providing a unique experience for users in the individual spaces. (Figure 6.4-3) These spaces will provide options for users whether it's an employee on a fifteen minute break or a visitor from out of town with four hours to spare while waiting for a loved one to get out of surgery. Experiences in the spaces will vary with the seasons. Accessibility will be essential for patients and visitors as well as everyday users.

- important for the overall open space network.
- to Downtown Rochester's Civic Center, Mayo Park and the Light Loop Amphitheater
- with the City Loop trail system. (Figure 6.4-1)
- of pavement currently present.
- Waterfront Promenade, and Civic Center Promenade visible across the river.
- Loop", a lighted water feature in the middle of the Zumbro River.
- passive recreation. (Figure 6.4-2) The City currently has plans to renovate the park.

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 Central Park - The City of Rochester currently has a Master Plan developed for Central Park based on input the Leadership Greater Rochester Group has gathered from the community. While the DMC plan doesn't propose any additional improvements to the park, creating connections to are

Civic Center Promenade - a wide waterfront promenade along the Zumbro River and located next

• **The Crescent** - a linear park that connects Waterfront Square to Central Park. The park is a greenway that will be a vital connection in the open space/public amenities network. There will be a heavy focus on movement through The Crescent, with smaller spaces that branch off of the main corridor of the park (pocket parks). This element will include sustainable rain gardens and be integrated

• Government Center Plaza - is a small urban park that will serve as a place for shoppers and employees at the Government Center to rest with landscaping placed to soften the vast amounts

• Government Center Promenade - is a wide waterfront promenade located adjacent to the Government Center. It overlooks a lighted water feature in the Zumbro River, with the amphitheater,

• Light Loop Amphitheater - an extension of the Civic Center Promenade with seating along the river at the flood wall. The amphitheater is positioned so that the seating is surrounding "The Light

Mayo Park - is an existing four acre park adjacent to the Civic Center, with the north portion of the park serving as an active recreation space and the southern portion of the park used for events and











FIGURE 6.4-5 - Waterfront Square

- creating a space of interaction and activity for people.
- space rather than a destination for users.
- network that the plan is creating.
- and discovery will be incorporated into the space.
- at the top.
- some visitors will experience on their way to Downtown Rochester.
- from Third Street to Fourth Street.
- system in place within the Zumbro River (Figure 6.4-5).

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Peace Plaza - a grand plaza in the center of the Heart of the City with connections to nearby subway and skyway networks. The plaza is home to many of the special features including the Ice Pavilion, Light Pavilion, and The Balcony. A lot of activity within these adjacent special features and buildings will occur relative to the street level. Peace Plaza serves as an important central node on the street,

The Portal - an urban plaza that is well-connected to subway, skyway networks, and a transit line running down Second Street. The character of the plaza is defined by people moving through the

Promenade Extension - is an extension of the Government Center Promenade. The character of this space is more naturalistic, with extensive native plantings and intermittent seating options.

 Soldier's Memorial Field - Soldier's Memorial Field is a large park located just south of Downtown Rochester and on the west side of the University of Minnesota Rochester campus. The city is currently planning to redevelop this park. While the DMC Development Plan does not propose any improvements to the park, creating connections to it will be important for the overall open space

• **The Square** - an urban park at street level, located adjacent to the elevated Transitional Cloud. The character of this space centers around shared community information and a gathering of the minds. Informational kiosks, interpretive exhibits, public art and/or other elements to foster ideas

• St. Marys Park - an existing park next to St. Marys Hospital provides much-needed green space. (Figure 6.4-4) The City of Rochester has plans to upgrade the park. As part of the DMC Development Plan, a grand staircase and an exterior elevator will connect up from Second Street and St. Mary's Place. The stairs will incorporate planters that will hint at the beautiful landscape awaiting visitors

St. Marys Place - is a plaza within an elongated traffic circle located just north of the existing St.Marys Park. This area will be a transit hub located west of Downtown, and will be the first space

UMR - The University of Minnesota Rochester (UMR) campus, located just south of Downtown Rochester and east of Soldier's Memorial Field, is home to a large lawn area and beautiful mature canopy trees. This area has plans for redevelopment. This will serve as an important link in the open space network and connections to it will be an important part of the open space plan for downtown.

Waterfront Promenade - an extension of the Civic Center Promenade and Light Loop Amphitheater

• Waterfront Square - an urban plaza positioned at the terminus of The Crescent near the Zumbro River. It is adjacent to many special features including Zumbro Market, the Waterfront Promenade, the Light Loop Amphitheater, and the Civic Center Promenade. The plaza will feature a large water feature and seasonal ice skating sheet. This will be designed so as not to impact the existing flood



6.4.2 SKYWAY/SUBWAY SYSTEM

Downtown Rochester has developed a three level circulation system that has the advantage of convenient connections in all seasons, particularly cold and inclement weather. (Figure 6.4-6) This unique multi-level system risks losing street level vibrancy to below-grade and above-grade activities and conveniences. The DMC Development Plan places a priority on connecting the skyway and subway to the street level to reinforce the street as the primary circulation and development address. Too many of the existing skyways cross streets at strange angles and block views in the street. The subways can be narrow and dark creating a disorienting experience for pedestrians. The plan also demonstrates how the skyways and subway system can be better designed and in some cases extended in ways that contribute to the overall character of the downtown area.

There are several strategic design concepts that are included in the plan that successfully "daylight" the main subway corridors. The Ice pavilion is a concept that opens up the existing subway system at a key below grade cross roads at the base of the Gonda Building. The Ice Pavilion creates a large sunken plaza that reveals the tremendous pedestrian intersection and creates an active "Town Square" that brings natural light and activity to this key area, similar to Hancock Plaza. (Figure 6.4-7). At "First and First" the plan creates a larger open space, grand stairs and elevators towers to terminate the eastern boundary of the subway system and connect to the street and skyway system.

The plan for the skyway system maintains skyways connection from "First and First" through to the Civic Center and incorporates new skyways connections south to Discovery Square. The new skyway connections are specifically designed to improve views to and from the upper level pedestrian pathways and connects the skyways to the street and public spaces so that they complement the character of the street. This is most evident in the new skyways connection to the Government Center. The curving skyway is treated as an above street promenade that encircles the waterfront square and engages the river while making weather protected connections to key destinations along the downtown waterfront. (Figure 6.4-8)

The subway and skyway system is a valuable amenity in Rochester. The DMC Development Plan extends this system and incorporates key new design improvements that allow the system to better contribute to the downtown streetscape.





FIGURE 6.4-7 - Grand stair connected to street - Hancock Plaza, Chicago, IL

DEVELOPMENT **DESTINATION MEDICAL**







6.4.3 PUBLIC ART

Public Art is a part of Rochester's history, evolving culture and collective memory. It reflects and reveals the values of society and adds meaning to the city. As artists respond to the city, they reflect their inner vision to the outside world, and in doing so create a chronicle of the Rochester public experience. The city already has significant installations mostly surrounding Mayo Clinic and the Mayo Civic Center. The DMC master plan allows the incorporation of a a full program of Public Art that includes a variety of media displayed in a range of cultural and performance venues. The plan envisions traditional forms of artwork but emphasizes new programming and unique Public Art venues so that the culture of the city can be expressed and enhanced.

The intent is to use public space as an outdoor museum, letting works of art impact the city, to set them under the light of day where they intrude upon our daily life. In the intervening years the goal is to increase the amount of arts and cultural programming within the public realm. Previously untapped public spaces will become coveted outdoor galleries in which contemporary art is displayed, and a new forum is provided for emerging artists to display their work and reach wider audiences. Many artists will exhibit their works in Rochester parks and public spaces, demonstrating an astonishing array of styles, forms, materials and conceptions that reflect the past and future city.

There are several key locations where public art and art programs are featured in the plan. The Downtown Waterfront will build off of the Rochester Art Center (Figure 6.4-10) with an outdoor installation fronting on the Civic Center, "The Light Loop" within the Zumbro River (Figure 6.4-9), and other installations along The Crescent. These programs are associated with and designed for key public places as a way to further enhance their impact. This will build upon the city's demonstrated commitment to public art in and around Mayo Clinic and Rochester Arts Center where they exhibit sculpture in environment.





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FIGURE 6.5-2 - Small scale, historic character

6.5 HISTORIC DISTRICT AND PRESERVATION PLANNING

6.5.1 PLANNING CRITERIA

Within the DMC Development District are a number of historically significant properties that capture the history of the Rochester and continue to contribute to the vibrancy of the downtown. (Figure 6.5-1) The Rochester Historic Inventory prepared in May and June of 2014 by the 106 Group analyzed 200 properties and 31 were categorized as Rochester Heritage Sites. The DMC Development plan supports the findings of this report and captures within the vision several of the key identified properties. This can be seen clearly at The Portal where the plaza fronts on the Plummer Building with a gateway down to Discovery Square and the integration of the Château Theatre with a key role as a cultural anchor within Peace Plaza. Beyond specific properties, the plan further recognizes the role of the historic fabric in enriching the character of the downtown, best noted at Third Street. (Figure 6.5-2)

The criteria listed below was used for the identification of Historic Landmark Districts and Assets within the 106 Group report was that established through City Ordinance 19B, which also created the Rochester Heritage Preservation Commission.

- City, The State or the United States
- Location as a site of a significant historic event
- Location within and contribution as an element of an historic district
- City
- recognized style or movement
- significant architectural innovation
- feature of a neighborhood, a district, the community or the City.

6.5.2 INVENTORY OF HISTORIC LANDMARKS DISTRICTS AND ASSETS The Historic Landmark Districts and Assets are identified as Heritage Sites within the 106 Group Report. The Phase 1 report determined the extent to which Rochester currently contains cultural resources that may be potentially eligible for designation according to City Ordinance 19B or the National Register of Historic Places criteria. The survey excluded archaeological resources and cultural landscapes. These sites were organized by properties or districts and designated as historic into three categories: Existing NRHP Listed Properties, Existing NRHP Eligible Properties and Properties for Further Evaluation. The result was a list of 31 properties, 27 of which are within the DMC Development District. (Figure 6.5-3)

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Character, interest or value as part of the development, heritage or cultural characteristics of the

Identification with a person who significantly contributed to the culture and development of the

Embodiment of distinguishing characteristics of an architectural style period, form or treatment

Identification as the work of an architect or master builder whose individual efforts have influenced the development of the City or have contributed to the development of a nationally or internationally-

Embodiment of elements of architectural design, detail, material or craftsmanship that represent a

Location, scale or other physical characteristics representing an established and familiar visual









6.6 ENVIRONMENTAL & SUSTAINABILITY TARGETS

Sustainability is broadly recognized as the ability to meet the needs of the present generation without compromising the ability of future generations to meet their own needs. Destination Medical Center is ideally positioned to be a sustainability leader. In the following section, existing sustainability initiatives are described, which are then tied into a framework designed for Destination Medical Center to measure and evaluate performance.

6.6.1 BACKGROUND

Destination Medical Center as a sustainable community is fundamentally supported by the decision to invest in Rochester, where the City has already taken steps to advance sustainability. The Energy Commission is leading the City toward a sustainable energy future through the creation of a baseline greenhouse gas inventory, reduction targets, and the development and implementation of an Energy Action Plan including measurement, verification, and reporting. The Rochester Downtown Alliance has set forth a vision for a forward-looking downtown with the Urban Village Design Guidelines. The City of Rochester is participating in the Regional Indicators Initiative in order to assess progress and promote efficiency.

Beyond the borders of Rochester, Olmsted County's environmental commission assures the coordination and integration of County functions that impact the environment. The State of Minnesota is focused on increasing opportunities for healthy choices through the Statewide Health Improvement Program (SHIP). The City of Rochester is also a voluntary participant in Minnesota GreenStep Cities, a statewide challenge, assistance, and recognition program to help cities achieve their sustainability and quality-of-life goals.

Additionally, the Mayo Clinic has acting on sustainability for decades, including considerations of power resources, energy, recycling, chemicals used in interior finishes, and even the selection of building materials with 200-year life spans. Each site or region has its own green committees, which include diverse departmental representation in order to collect input and participation from all stakeholders. The Mayo Clinic has a Green Advisory Council comprised of leadership from each green committee, giving strategic direction for the entire organization, defining metrics, and collecting data via a sustainability scoreboard.

6.6.2 SUSTAINABILITY FRAMEWORK OVERVIEW The DMC sustainability framework is designed to complement the Development Plan objectives for Destination Medical Center, providing a rigorous and actionable basis for achieving specific sustainability goals. Commitment to this framework demonstrates leadership on sustainability, embeds a culture of sustainability within design, construction and operations, and makes sustainability an integral part of decision-making.

Beyond the initial commitment, this framework provides a detailed process and procedure for planning, monitoring, reporting, evaluating, and reviewing performance. It assigns responsibility for achieving and exceeding sustainability and targets, and it references compliance with relevant sustainability policies and guidance.

DEVELOPMENT PLAN DESTINATION MEDICAL CENTER



SUSTAINABILITY FOCUS AREAS

The sustainability framework is organized around eight focus areas which are driven by the Development Plan objectives and commonly referenced indicators which span the "triple bottom line" of environmental, social, and economic impacts. The focus areas are graphically depicted in Figure 6.6-1 and are as follows:

- 1. Human Health and Wellness
- 2. Community Health
- 3. Economic Health
- 4. Energy
- 5. Water
- 6. Materials and Waste
- 7. Transportation and Mobility
- 8. Climate

Within each focus area, the sustainability framework outlines recommended starting points for a vision, goals, targets, and key performance indicators (KPIs), as depicted in Figure 6.6-2. These elements are meant to be starting points for broader conversations, and will be determined by a sustainability committee to fully reflect the aspirations of the DMC. This process is described in further detail in Section 6.6.3.

It is expected that sustainability initiatives will cut across multiple focus areas, and establish a framework organized primarily at a district scale, but with specific connections to larger scale (City, County) initiatives and frameworks and smaller scale (Place, Buildings) guidelines and strategies to address social, economic, and environmental conditions, as depicted in Figures 6.6-3 and 6.6-4. The framework acts as a guiding document from design of the Development District to operations, while also communicating sustainability aspirations to the public. The framework references guidelines and standards for the built environment, as well as outlining municipal and private targets to "lead by example" within the urban and global communities. The EcoDistricts Framework (ecodistricts.org) was used as the primary starting point, with modifications made to reflect the unique nature of the Destination Medical Center. A full list of assessment tools, guidelines, and reference documents used to create this sustainability framework are included in Figure 6.6-11.

SUSTAINABILITY VISION Statement of aspirations SUSTAINABILITY GOALS Description of the qualities of the vision and aspirations SUSTAINABILITY TARGETS Levels of performance that are sustainable KEY PERFORMANCE INDICATORS FOR SUSTAINABIL-Long term indicators of sustainability goals measured annually and compared to targets Places

DMC City of Rochester, Olmsted County, and larger jurisdictions

DEVELOPMEN **DESTINATION MEDICAL** DRAFT







DESTINATION **DRAF1**

Communicates role of scales to achieving

Human



HUMAN HEALTH AND WELLNESS

SUSTAINABILITY VISION*

Promote human health and well being

SUSTAINABILITY GOALS*

- 1. Initiate a healthy workplace environment: implement social programs that sustain long-term activity increase and healthy nutrition and food options
- 2. Foster a 'Healthy Office Culture' standard: inspire a culture of health and sense of creativity within the workplace to help alter daily routines that allow for more physical movement
- 3. Access physical and mental health opportunities: shape the built environment and workplace infrastructure with features that encourage physical activity and social interaction
- 4. Access healthy features and indoor environments: access to daylight, views, natural ventilation, smoke-free environments, healthy food and beverage options, vegetated and open spaces, social hubs, wellness centers, and recreational facilities

ASPIRATIONAL SUSTAINABILITY TARGETS*

- 1. Increase participation in wellness programs by 10% from a 2012 baseline year
- 2. Ensure that staff health and well-being is included as a key priority
- 3. Establish a cohort study of health and well-being issues among staff and wider lifestyle factors
- 4. Collect and publish annual data on sickness absence to enable long-term monitoring of trends

KEY PERFORMANCE INDICATORS FOR SUSTAINABILITY*

Wellness program participation rate (%) Sickness absences





*Recommended

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COMMUNITY HEALTH

SUSTAINABILITY VISION*:

Promote health and create a culture of community

SUSTAINABILITY GOALS*

- or management through clinical and community linkages
- "Healthy Rochester Plan"
- programs, cycle lanes, bike parking, shuttle and bus rapid transit
- recreational services
- interaction and connectivity

KEY PERFORMANCE INDICATORS FOR SUSTAINABILITY*

Healthy lifestyle community program funding (\$)



1. Create health profiles for Buildings and Places highlighting accessible healthy features and benefits 2. Create livable communities that increase opportunities for chronic disease prevention, risk reduction,

3. Foster partnerships with the city government and other private sector organizations to develop a

4. Design street-scale features that promote walking and active transportation such as bikeshare

5. Enhance public spaces with transit oriented development and co-locating health services with

6. Design open spaces and social hubs (public indoor and outdoor spaces) that encourage social

*Recommended



ECONOMIC HEALTH

Sustainability Vision*

Promote lasting economic development with opportunities for the entire community

Sustainability Goals*

- 1. Ensure neighborhood investments provide direct community benefit through job creation and investment opportunities
- 2. Provide quality and consistent local job opportunities through DMC projects
- 3. Develop strategies to attract new businesses to the market, including Small Business Enterprise, Minority Business Enterprise, and Women's Business Enterprise participation
- 4. Focus on strategies to attract, retain, and foster the development of a highly skilled workforce

Aspirational Sustainability Targets*

- 1. Support at least 28,000 direct jobs by 2034 build-out
- 2. Support an average of 1,800 construction jobs annual during construction

Key Performance Indicators for Sustainability*

New jobs supported throughout Rochester Construction Jobs created Area Median Household Income Growth (\$) Affordable Housing Growth (# of units)

ENERGY

Sustainability Vision*

Implement the most progressive, responsive, and resilient district energy network in the country

Sustainability Goals*

- 1. Create a clean, reliable and flexible energy network through an upgraded infrastructure, new efficient systems and the optimization of renewables
- 2. Create a new ethos and culture of conservation at Destination Medical Center 3. Provide building and district guidelines for future expansion and existing building renovations and
- retrofits

Aspirational Sustainability Targets* DMC:

1. Reduce energy consumption by 25% below 2012 levels by 2030.

Building:

- 1. Design to 20% below ASHRAE 90.1-2010.
- 2. Reduce EUI by 25% below 2012 levels by 2030.

Key Performance Indicators for Sustainability* DMC:

Total Energy Total Energy Costs

Building:

Energy Use Intensity Energy Cost Intensity

*Recommended



*Recommended



WATER

Sustainability Vision*

Meet both human and natural needs through reliable and affordable water management

Sustainability Goals*

- 1. Reduce water consumption through conservation
- 2. Reuse and recycle water resources wherever possible
- 3. Manage stormwater and building water discharge within the Development District

Aspirational Sustainability Targets*

- 1. Reduce potable water consumption below 2012 levels by 2030
- 2. Increase irrigation water coming from recycled sources by 2030
- 3. Increase the Green Area Ratio by 2030

Key Performance Indicators for Sustainability*

Total Water Use (kgal) Potable Water use (kgal) Irrigation Water Use (kgal) On-site Stormwater Treatment (kgal) On-site Wastewater Treatment (kgal) **Open Space Ratio**

MATERIALS AND WASTE

Sustainability Vision*

Handle material, recycling, and waste streams in a manner that best balances environmental and economic impacts

Sustainability Goals*

- parts
- content
- composting

Aspirational Sustainability Targets*

1. Reduce total waste generated by 30% below 2012 levels by 2030

Key Performance Indicators for Sustainability*

Total Waste Generated (tons) Recycling Rate (%) Compostables/Organics Recovery Rate (%) Construction Waste Generated (tons) Construction Waste Recycled (tons) Salvaged Products (lbs) Emissions from Disposal (mt CO₂e)

***R**ecommended



1. Optimize material reuse and salvage and encourage use of regionally manufactured products or 2. Where opportunities for waste prevention are limited, maximize use of products made with recycled 3. Capture greatest residual value of organic wastes (including food) through energy recovery and/or

*Recommended



TRANSPORTATION AND MOBILITY

Sustainability Vision*

Provide convenient and comfortable access to residents, visitors, patients, and employees while reducing transportation's impact on human health and the natural environment

Sustainability Goals*

- 1. Provide accessible services through mixed-uses and improved street access
- 2. Prioritize transit and active transportation
- 3. Reduce per capita vehicle miles traveled and emissions per mile traveled
- 4. Use low and zero emission vehicles

Aspirational Sustainability Targets*

- 1. Reduce drive alone mode share to 50% or less by 2035
- 2. Reduce per capita vehicle miles traveled by 30% below a business-as-usual baseline by 2030
- 3. Reduce transportation-related greenhouse gas emissions by 50% below 2008 levels by 2030

Key Performance Indicators for Sustainability*

Emissions (mt CO₂e) Vehicle Miles Traveled (mi) Mode Share for transit, walk, bike, and carpool (%) Walk Score (1-100)

CLIMATE

Sustainability Vision*

Achieve climate neutrality across the Destination Medical Center

Sustainability Goals*

- 1. Create a new culture of conservation
- retrofits
- 3. Position buildings to optimize daylighting

Aspirational Sustainability Targets*

1. Reduce DMC-wide emissions per square foot by 80% below 2005 levels by 2050

Key Performance Indicators for Sustainability*

Emissions (mt CO₂e) Offset purchases (mt CO₂e)



2. Provide building, site, and transportation guidelines for future expansion and existing buildings and

*Recommended



6.6.3 PROCESS FOR IMPLEMENTATION SUSTAINABILITY COMMITTEE FORMATION

Through partnerships with the appropriate City of Rochester Departments and Committees (i.e. Department of Planning and Zoning, Committee on Urban Design and Environment, Rochester Energy Commission, etc.), an implementation strategy is for the Destination Medical Center Corporation (DMCC) to form a joint Sustainability Committee, as a governing entity, to implement and manage flexible environmental sustainability programs that support future growth opportunities for both the City of Rochester and DMC on the building, district, and city scales. Members of the volunteer committee will be selected by the DMCC through a participatory process, and may include representatives from the City of Rochester, the Mayo Clinic, the University of Minnesota Rochester, and at-large community leaders and residents.

The Sustainability Committee will establish a mission statement, as well as temporary working groups to investigate organizational options, funding support, and processes for expanding and diversifying participation. The team will develop implementation strategies aligned with the DMC's funding resources and workforce capacity, in order to effectively implement the district-wide vision and goals. The resulting information collected by the working teams will serve as a means to examine a wide range of topics related to sustainability for developing elements of a Sustainability Plan, in addition to identifying appropriate feasibility studies as needed. With an emphasis on integrating social, economic, and environmental needs, a Sustainability Plan directs the focus to understanding the interconnectedness of the community, City of Rochester, and DMC's mission and goals, and helps with efficient decision making.

COMMITMENT

The Sustainability Committee will explore developing a more precise Sustainability Plan aligned with the City, County, and Mayo Clinic's existing plans, policies, and governing documents, as well as all other individual efforts that address the topic of sustainability. The potential benefits of the Sustainability Plan include: better cross-jurisdictional and cross-departmental coordination and collaboration, enhanced communication with policymakers and stakeholders regarding sustainability priorities, improved positioning for grant funding, awards, and recognition, cost savings from the implementation of sustainability initiatives, and many others.

The Sustainability Committee may also be tasked with establishing baseline measurements for key performance indicators and confirming time-defined targets in order to measure success for both public and private developments. In some cases, further development of indicators may be required, such as health indicators for equity and social justice, through a participatory and transparent process demonstrating commitment to a sustainable vision for the DMC.

PROJECT IDENTIFICATION

To achieve the ambitious goals for each performance area, a district-wide assessment is essential to determine the most effective project priorities for the DMC. A district-wide assessment can help identify specific action steps for sustainable DMC development in accordance with existing City initiatives, while

also exploring the community leaders and innovators' vision for a sustainable Downtown Rochester and DMC. Such assessment can enable the DMC to determine strategies of greatest impact and prioritize the most appropriate projects. Existing and pipeline projects can also be incorporated into this assessment to complement new initiatives.

FEASIBILITY ASSESSMENT & DEVELOPMENT

The integration of infrastructure, buildings, and behavior change projects into an existing built environment that meet ambitious performance goals is enhanced through new joint ventures, effective governance models, and extensive community involvement. Successful DMC sustainability projects can benefit from a series of feasibility assessments, developed by the Sustainability Committee, that are in coordination with public agencies, district stakeholders, utility companies, and private developers. Such feasibility studies can help determine the community's level of interest and support in proposed projects, identify funding support, recognize potential process efficiencies, and ultimately provide clear directive and potential paths for moving forward.

MANAGEMENT

As DMC projects are planned and built, ongoing monitoring is essential to understand the full range of social, economic and environmental impacts. Key performance indicators can be used to regularly collect data to show the overall value of particular project interventions. In addition, qualitative documentation and lessons learned about DMC implementation will be essential to refining the DMC approach. Reporting responsibilities will be designated by the Sustainability Committee in order to manage proposed outreach, educational activities, and administrative details, in addition to coordinating discussions on identifying the types of structure and process necessary to guide the efforts of a large and diverse coalition of organizations and individuals. It is expected that management of the Sustainability Plan will largely leverage existing efforts, while the Sustainability Committee will investigate the availability of managerial resources.



6.6.4 Tools

In addition to the public commitments that will be established alongside the formation of the sustainability committee, Destination Medical Center can employ various policy tools to support the achievement of sustainability goals. These include incentive programs as well as regulation and enforcement activities.

DESIGN GUIDELINES

The Urban Village Overlay Zone Design Guidelines, for instance, provide a detailed vision for a location within downtown Rochester where the community, downtown workers, Mayo patients, and University of Minnesota Rochester could come to live, work, play and learn. This includes the promotion of mixeduse buildings with shops on the ground floor and housing on upper floors, so that individuals can walk between destinations without traveling across multiple suburbs. Proposals for projects within the district are expected to adhere to the guidelines when RDA or City assistance is sought for endorsement, grant requests, tax increment financing, incentive developments, land purchases, and other activities as determined by the City.

INCENTIVES

In concert with the design guidelines, the Rochester Downtown Alliance and the City of Rochester offer a Facade Improvement Grants Program which offers up to \$100,000 available annually for business and property owners to support a high quality retail and business environment in downtown Rochester. Up to 50% of the cost associated with the design and construction of improvements to a building's facades (up to \$20,000) are covered under the grants. This program already supports the economic health of the Destination Medical Center. Should incentive programs be established for brownfield redevelopment, they could similarly be tied to the design guidelines.

Some municipalities are also providing incentives in the form of density bonuses for high performance green buildings. Developers that pursue and achieve voluntary green building certifications such as LEED are able to achieve special zoning exceptions for height and/or floor area ratios.

ASSESSMENT TOOLS

Several assessment tools and guidelines exist to guide this process, which are outlined in Figure 6.6-11 with reference to the relevant sustainability focus area(s) and scale(s) to which they apply. These can be used as benchmark standards for incentive and enforcement programs, as well as non-binding references that promote best practices in the built environment.





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	SUSTAINABILITY FOCUS AREA						
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ASSESSMENT TOOLS	Human Health and Wellness	Community Health	Economic Health	Energy	Water	Materials and Waste	Transportat and Mobil
EcoDistricts	Health + Well Being	Community Identity	Equitable Development	Energy	Water	Materials Management	Access + Mobility
Enterprise Green Communities	Healthy Living Environment	Location + Neighborhood Fabric		Energy Efficiency	Site Improvements Water Conservation	Materials Beneficial to the Environment	Location + Neighborhoo
Envision Sustainable Infrastructure Rating System	Quality of Life Climate and Risk	Quality of Life	Quality of Life Leadership	Resource Allocation Climate and Risk	Resource Allocation Natural World	Resource Allocation	Quality of Life
Green Garage Certification	Programs		Management	Technology and Structure Design	Technology and Structure Design	Technology and Structure Design	Management, Programs
LEED O+M/BD+C	Indoor Environmental Quality			Energy & Atmosphere	Water Efficiency Sustainable Sites	Materials & Resources	Sustainable Sites
LEED ND	Neighborhood Pattern and Design	Neighborhood Pattern and Design	Neighborhood Pattern and Design	Green Infrastructure and Buildings	Green Infrastructure and Buildings	Green Infrastructure and Buildings	Smart Location and Lir
Living Building Challenge	Health and Happiness			Energy	Water	Materials	
STAR Community Rating System	Health & Safety	Education, Arts & Community; Equity & Empowerment	Economy & Jobs	Climate & Energy	Built Environment Natural Systems	Climate & Energy	Built Environmen
Sustainable Sites	Human Health and Well-Being		Assessment & Planning		Water	Materials Selection	Site Selection
WELL Building Standard	Air, Water, Nourishment, Light, Fitness, Comfort, Mind	Nourishment, Fitness		Air, Light, Comfort	Water	Air, Mind	Fitness

GUIDELINES

Active Design Guidelines			
Evidence-based Design Accreditation & Certification			
Healthier Hospitals Initiative	Healthier Food		
NACTO Urban Street and Bikeway Design			
Social Economic Environmental Design (SEED)		Social	Economic
Urban Village Overlay Zone Design Guidelines			

ion							
	Healthier Food			Leaner Energy		Safer Chemicals, Less Waste, Smarter Purchasing	
		Social	Economic	Environmental	Environmental		Environmenta

INITIATIVES

Minnesota GreenStep Cities	Economic and Community Development; Land Use	Economic and Community Development	Buildings and Lighting	Environmental Management	Environmental Management	Transportat
Regional Indicators Initiative			Energy	Water	Waste	Travel
Rochester Mobility Transportation Master Plan						
Statewide Health Improvement Program (SHIP)						

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