

# Appendix A

Map LU-1: Current Land Use (2016) .....43

Map LU-2: 2040 Land Use ..... 45

Map LU-3: Opportunity Sites..... 47

Map LU-4: Significant Public Views ..... 48

Map LU-5: Thive MSP 2040 Community Designation. 60

Map LU-6: Gross Solar Potential.....61

# Appendix B

Figure LU-1: Current Land Use Table (2016) .....63

Figure LU-2: 2040 Land Use Table .....63

Figure LU-3: Figure LU-3: 2040 Employment Density  
and General Land Use Mix ..... 64

Figure LU-4: 2040 Residential Land Use Density  
Ranges.....64

Figure LU-5: Transit Density Goals.....65

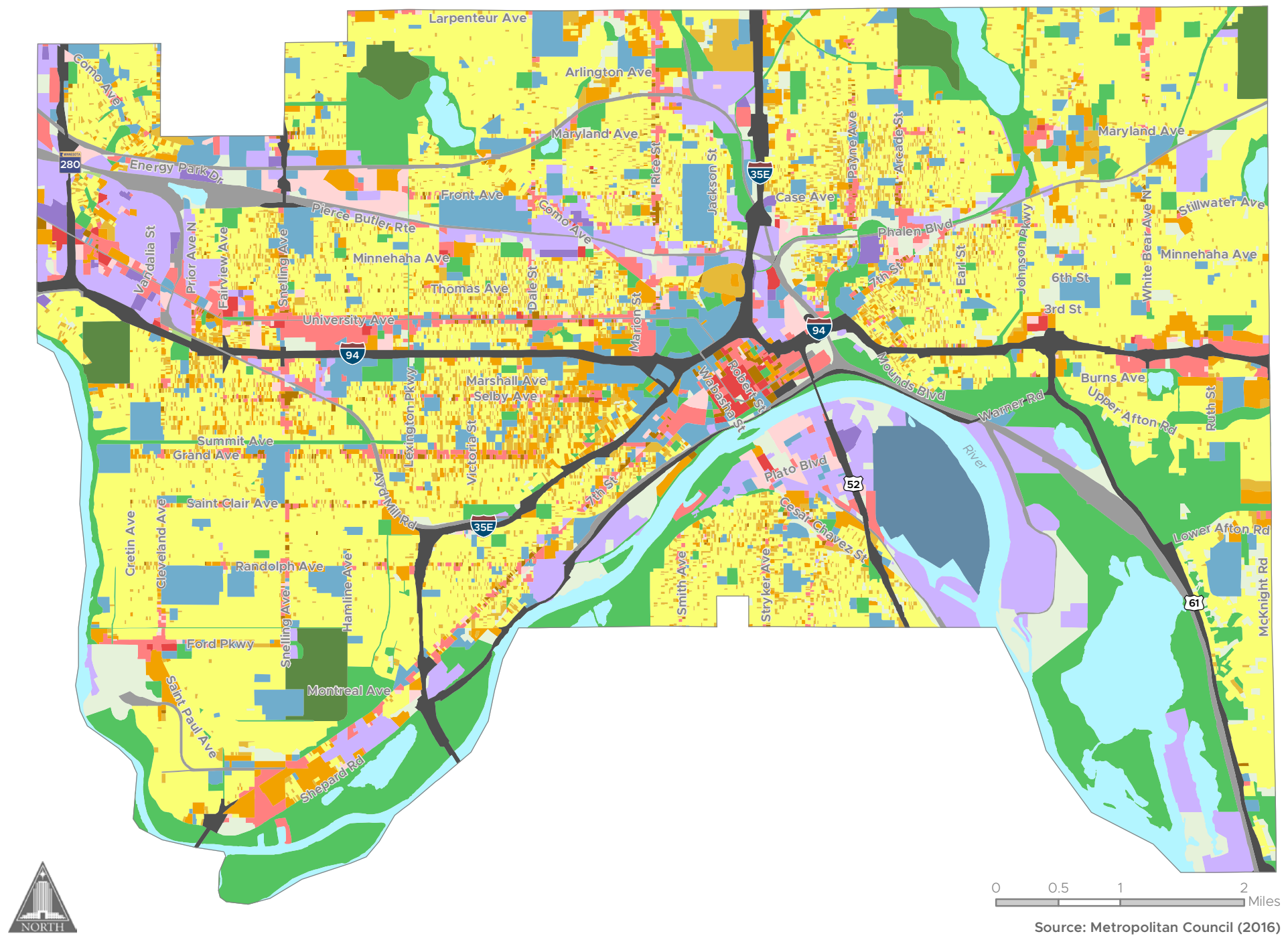
Figure LU-6: General Housing Unit Development  
Estimates and Timeline Based on Opportunity Sites...65

# Appendix C

Figure LU-7: Summary of Policies Organized by Goal 66



Map LU-1: Current Land Use



## Abbreviated Land Use Descriptions from Chapter

### Neighborhood Nodes

Neighborhood Nodes are compact, mixed-use areas that provide shops, services, neighborhood-scale civic and institutional uses, recreational facilities and employment close to residences. They may be neighborhood centers, transit station areas or urban villages, and have often developed adjacent to major intersections or at former street car stops. Neighborhood Nodes serve a neighborhood's daily needs, including access to food; reduce public infrastructure disparities; improve livability; and accommodate growth.

### Downtown

Downtown is the highest-density mixed-use area of Saint Paul and a regional transportation hub, encompassing all the B4 and B5 Zoning Districts and most of Planning District 17.

### Mixed-Use

Mixed-Use areas are primarily along thoroughfares well-served by transit. The main distinguishing characteristic is a balance of jobs and housing within walking distance of one another.

### Urban Neighborhoods

Urban Neighborhoods are primarily residential areas with a range of housing types. Single-family homes and duplexes are most common, although multi-family housing predominates along arterial and collector streets, particularly those with transit. Multi-family housing, schools, neighborhood parks, religious institutions and cemeteries may also be scattered throughout Urban Neighborhoods. Limited neighborhood-serving commercial may also be present, typically at intersections of arterial and/or collector streets.

### Semi-Rural

Semi-Rural land is primarily large-lot, low-density residential, with more limited public infrastructure than elsewhere in the city. Development is limited by the river bluffs; preservation of green space, including the tree canopy, is emphasized.

### Industrial

Industrial land uses are a major source for employment in Saint Paul and are a significant net positive payer of property taxes, relative to the City services consumed. They have traditionally been defined as manufacturing, processing, warehousing, transportation of goods and utilities. More contemporary uses, driven by technological advances, include medical tech and limited production and processing.

### Major Parks and Open Spaces

Major Parks and Open Space land use includes regional parks, City parks larger than 200 acres, City parks adjacent to the river and parkways.

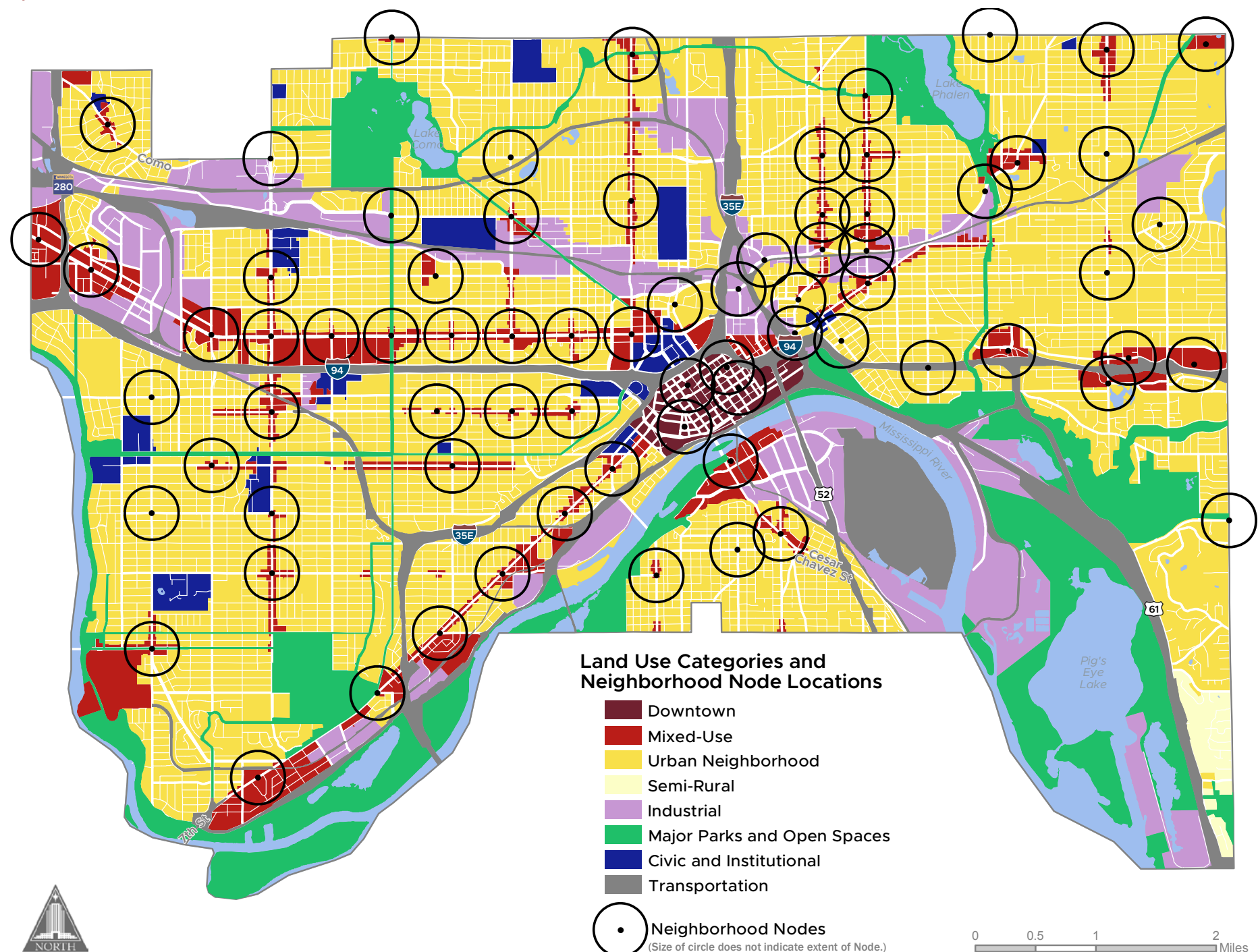
### Civic and Institutional

Civic and Institutional land use includes buildings and open space for major institutional campuses.

### Transportation

Saint Paul is a city with a rich infrastructure of multi-modal transportation systems. The Transportation land use category includes streets, walking and biking pathways, light rail and bus rapid transit routes, highways, railroads, the Mississippi River and the Saint Paul Downtown Airport.

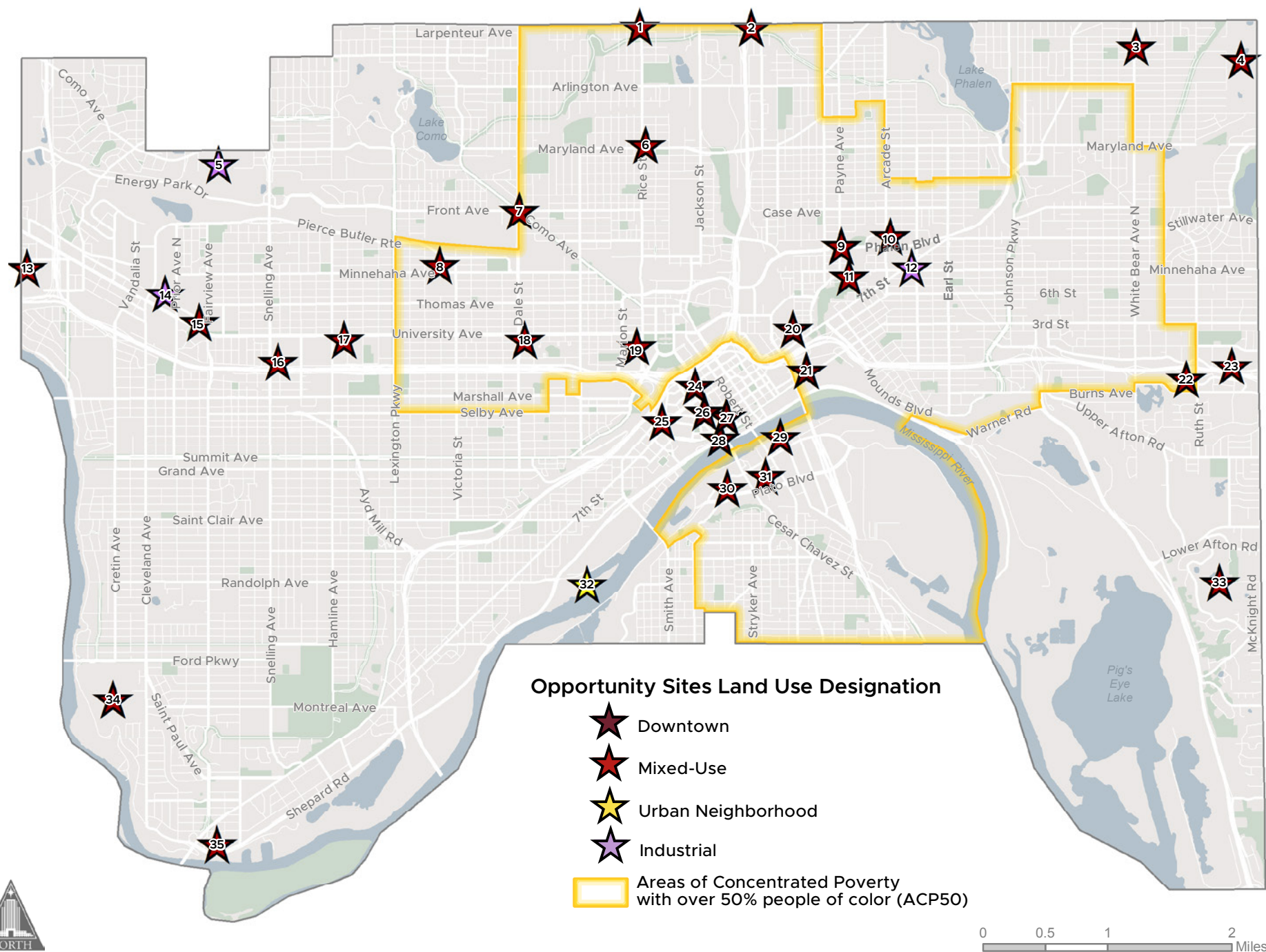
Map LU-2: 2040 Land Use



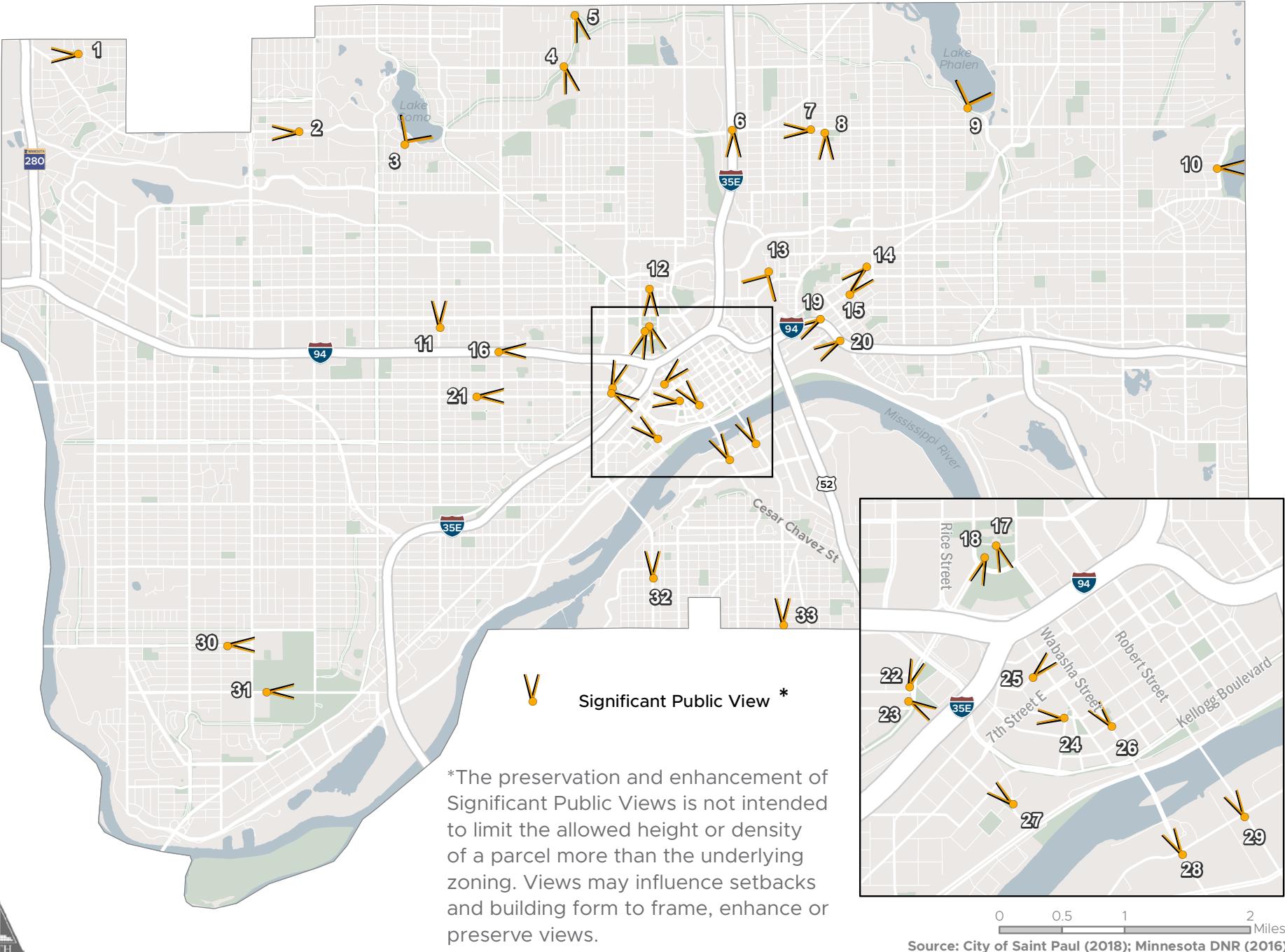


- |                                             |                                     |
|---------------------------------------------|-------------------------------------|
| ★ 1, Rice-Larpenteur Site                   | ★ 19 - Sears Site                   |
| ★ 2, 35E-Wheelock                           | ★ 20 - 7th Street East              |
| ★ 3, Hillcrest Center - White Bear-Hoyt     | ★ 21 - Prince Street                |
| ★ 4, Hillcrest Golf Course                  | ★ 22 - Suburban                     |
| ★ 5, State Fair Parking                     | ★ 23 - Sunray Center                |
| ★ 6, Rice-Maryland                          | ★ 24 - McNally Smith School Site    |
| ★ 7, Como-Front-Dale                        | ★ 25 - Gateway Site                 |
| ★ 8 - Minnehaha Mall                        | ★ 26 - Wabasha Court                |
| ★ 9 - Payne-Phalen                          | ★ 27 - Central Station              |
| ★ 10 - Payne-Arcade Strip Mall              | ★ 28 - Ramsey-West Site             |
| ★ 11 - Hamms Brewery                        | ★ 29 - West Side Flats 1            |
| ★ 12 - Beacon Bluff Site 7th-Minnehaha      | ★ 30 - West Side Flats 2            |
| ★ 13 - Wayerhaueser Site                    | ★ 31 - West Side Flats 3            |
| ★ 14 - Amtrak Site                          | ★ 32 - Island Station               |
| ★ 15 - Goodwill Parking University-Fairview | ★ 33 - Boys Totem Town              |
| ★ 16 - Snelling-University Redevelopment    | ★ 34 - Ford Site                    |
| ★ 17 - Target Outlot                        | ★ 35 - Johnson Brothers - Riverbend |
| ★ 18 - Unidale Mall                         |                                     |

Map LU-3: Opportunity Sites



Map LU-4: Significant Public Views





### View 1: Hendon Avenue West



From Hendon Avenue, one of the highest points in St. Anthony Park, are views of the downtown Minneapolis skyline.

### View 2: Como Avenue West



Looking west on Como Avenue west of Como Park provides a view of the downtown Minneapolis skyline.

### View 3: Nagasaki Road at Lake Como



From Nagasaki Road there are several vistas of Lake Como and its far shore.

#### View 4: Wheelock Parkway Ridge



This section of Wheelock is on a ridge providing views of the city to the south. However, the wooded area is overgrown blocking views. It could use some selective trimming and removal of invasive species to open the landscape to people using the Grand Round.

#### View 5: Horseshoe Bend



Horseshoe Bend along Wheelock Parkway is a remnant of a landform marking the southern terminus of glaciers from the last ice age. This high point provides outstanding views to the east and south from Wheelock and the park at the top of the hill.

#### View 6: 35E South to Downtown



Coming into downtown from the north on 35E there is a prolonged view of the downtown skyline.



### View 7: Maryland Avenue West



There is a wonderful long westward view of the Minneapolis skyline rising over the neighborhood west of the intersection of Payne Avenue and Maryland Avenue.

### View 8: Payne Avenue South to River Valley



South of the intersection of Payne Avenue and Maryland Avenue there is a broad southward sweeping view of the Mississippi River Valley and the bluffs of the West Side. This view is very dramatic, particularly at certain times of the day and year. This change in topography and the view that comes with it really enhances the very special sense of place along a several-block stretch of Payne Avenue. This is a dramatic view for a city where so many places are characterized by their flatness in topography.

### View 9: Wheelock Parkway at Lake Phalen



On Johnson Parkway, facing north between Phalen Boulevard and Wheelock Parkway East/East Lakeshore Drive there is a very wide and wonderful view of Lake Phalen. This view along this stretch of parkway is one of the more dramatic ones in the city.

### View 10: Beaver Lake Park



This location from Edgewater Boulevard provides views overlooking Beaver Lake Park and the lake behind it.

### View 11: Victoria Street Station



The Saint Paul Fellowship Church is a handsome local landmark, immediately visible from the proposed station location. It was identified in the Victoria Station Area Plan as a key vista from the LRT station. New development at the NW corner of Victoria and University should be set back to protect and enhance views of the church steeple.

### View 12: North Capitol Street



A rarer Minnesota Capitol view from the north can be seen from North Capitol Street. Views from this street have been diminished over time from right of way vacations. This view is with the Capitol Area Architectural and Planning Board area.

View 13: Rivoli Street



The southern end of Rivoli Street provides one of the absolute best, yet least known, picture postcard views of the Saint Paul skyline. Ongoing work to define an overlook and/or green space here could ensure that this remarkably breathtaking view is preserved and available to the public for generations into the future.

View 14: East 7th Street



Longer views southeast to the downtown Saint Paul skyline are seen from the top of the hill on East 7th Street west of Margaret Street.

View 15: East 6th Street



Looking east on East 6th Street there is a great view of the façade of Sacred Heart Church where the street bends.



### View 16: I-94 West to Downtown



Coming into downtown from the west on I-94 there is a view of the downtown skyline.

### View 17: South from Capitol



This view was planned in 1903 by Cass Gilbert to be one of the main axial views from the Capitol (along with John Ireland Boulevard and Cedar Street). It is part of the longer view from Smith Avenue (across the High Bridge) to the Capitol, and was initially planned to terminate at Cleveland Circle. Unfortunately, in the 1950s, the Veterans Service Building was built north of what is now I-94, essentially obliterating the view beyond it.

### View 18: John Ireland Boulevard to Cathedral



This view was planned in 1903 by Cass Gilbert to be one of the main axial views from the Capitol (along with the corridor noted in View 17 and Cedar Street). This view is intact today and unobstructed, now framed by the Transportation Building.

View 19: I-94 West to Downtown



Coming westward on I-94 around the bend between Dayton's Bluff and Mounds Park there is a view of Lafayette Bridge, the ballpark in Lowertown and the downtown skyline. This is the first view of a major skyline in Minnesota for those travelling west along that interstate.

View 20: Mounds Boulevard to Downtown



Mounds Boulevard provides beautiful day and night views of the downtown skyline as it sits in the Mississippi River Valley year-round. The Mounds Station Area Plan calls for wider pedestrian and bike facilities to allow people to properly enjoy this unparalleled view of the city.

View 21: Selby Avenue to Downtown



Eastward views from Selby Avenue east of Chatsworth Street frame the tops of some downtown buildings, particularly the First Bank Building and its iconic illuminated, flashing "1." For this reason, night views can be more impressive than the daytime as well as those during the winter months when the trees are bare.



## View 22: John Ireland to Capitol



This view was planned in 1903 by Cass Gilbert to be one of the main axial views from the Capitol (along with the corridor noted in View 17 and Cedar Street). This view is intact today and unobstructed, now framed by the Transportation Building and Minnesota Historical Society.

## View 23: Cathedral to Downtown



From the Cathedral steps, the skyline is visible over open space on top of the historic Selby streetcar tunnel. Retaining this area as open space is critical to maintaining the view, and understanding the relationship between downtown and the Selby terrace.

## View 24: West 6th to Cathedral



This view up 6th Street is also identified in the Seven Corners Gateway Development Evaluation Tool as an important view to be preserved when the Cleveland Circle (Seven Corners Gateway) site is developed. The Seven Corners Gateway Development Evaluation Tool view corridor starts on the other side of the skyway, closer to W. 7th Street, but the impact of any development would essentially be the same. The skyway that originally connected the two St. Paul Companies office buildings was designed specifically to allow for views through it to the Cathedral. Because of the stature and lighting of the Cathedral, preservation of this view at night is also important.

### View 25: West Exchange Street



This view looking east from Wabasha to Cedar along Exchange Street terminates at Central Presbyterian Church, listed on the National Register of Historic Places and designated as a local heritage preservation site. Also contributing to the importance of the view are the scale of Exchange Street, the framing of the view by buildings in the block between Wabasha and Cedar streets, and the character of the street as defined by the lush tree canopy on both sides of Exchange Street.

### View 26: Cedar Avenue to Capitol



This view is the primary axial view established by Cass Gilbert in the 1880s in his plans for the State Capitol and Capitol Mall. Skyways should not be allowed to obstruct this view, and any new development along Cedar Street should be designed to frame the view. Land use, and building type, height and setback between Exchange Street and the Capitol are regulated by the Capitol Area Architectural and Planning Board. Because of the stature and lighting of the Capitol, preservation of this view at night is also important.

### View 27: Chestnut Avenue to Cathedral



Chestnut Avenue is a major gateway into downtown and W. 7th Street neighborhood from Shepard Road and the Mississippi River. Future development on the United/Children's Hospital campus at the base of the bluff at Smith Avenue should be designed to frame and/or enhance this view. Because of the stature and lighting of the Cathedral, preservation of this view at night is also important.

View 28: Wabasha Avenue



The view as one comes over the Wabasha Street bridge is of the downtown skyline and Mississippi River. The west side of Wabasha Street north of Fillmore Street is very likely to be developed in the next 20 years, so framing this view with the proper scale and height of buildings will be critical to maintaining and framing the view.

View 29: Robert Street



The view as one comes over the Robert Street bridge is of the downtown skyline and Mississippi River. The east side of Robert Street north of Fillmore Street is very likely to be developed in the next 20 years, so framing this view with the proper scale and height of buildings will be critical to maintain and framing the view.

View 30: Ford Parkway to Water Tower



As one climbs the hill moving westward on Ford Parkway the Water Tower comes into view. This is an important community landmark in one of the high points of the city. A historic building, it was designed by Cap Wigington, the first African-American municipal architect in the country.



### View 31: Montreal Avenue to River Valley



Eastward views from Montreal Avenue provide glimpses of the river valley below in the long view.

### View 32: Smith Avenue to Capitol



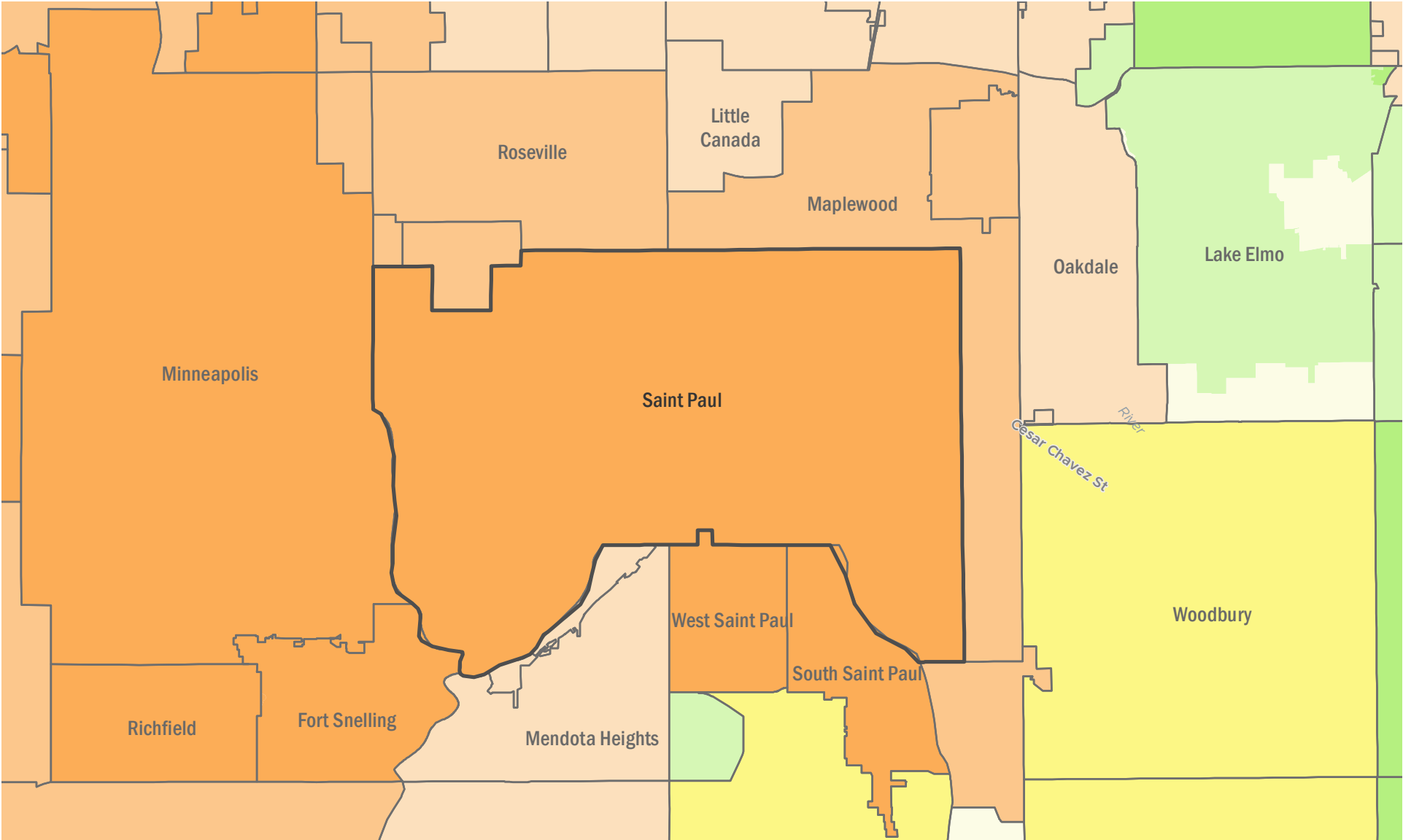
This is the long view identified by Cass Gilbert in his 1880s plans for the Capitol building. It is also noted for preservation in the Seven Corners Gateway Development Evaluation Tool. With so much distance between the view point and the Capitol, it is unlikely that anything built along the corridor would obstruct this critical Capitol view. Because of the stature and lighting of the Capitol, preservation of this view at night is also important.

### View 33: Robert Street to River Valley






Northward views from north of Annapolis Street along Robert Street glimpses of the river valley below in the long view.



Map LU-5: Thrive MSP 2040 Community Designation





*Thrive MSP 2040 Community Designation*

 City of Saint Paul Boundary

 Rural Residential  
 Diversified Rural

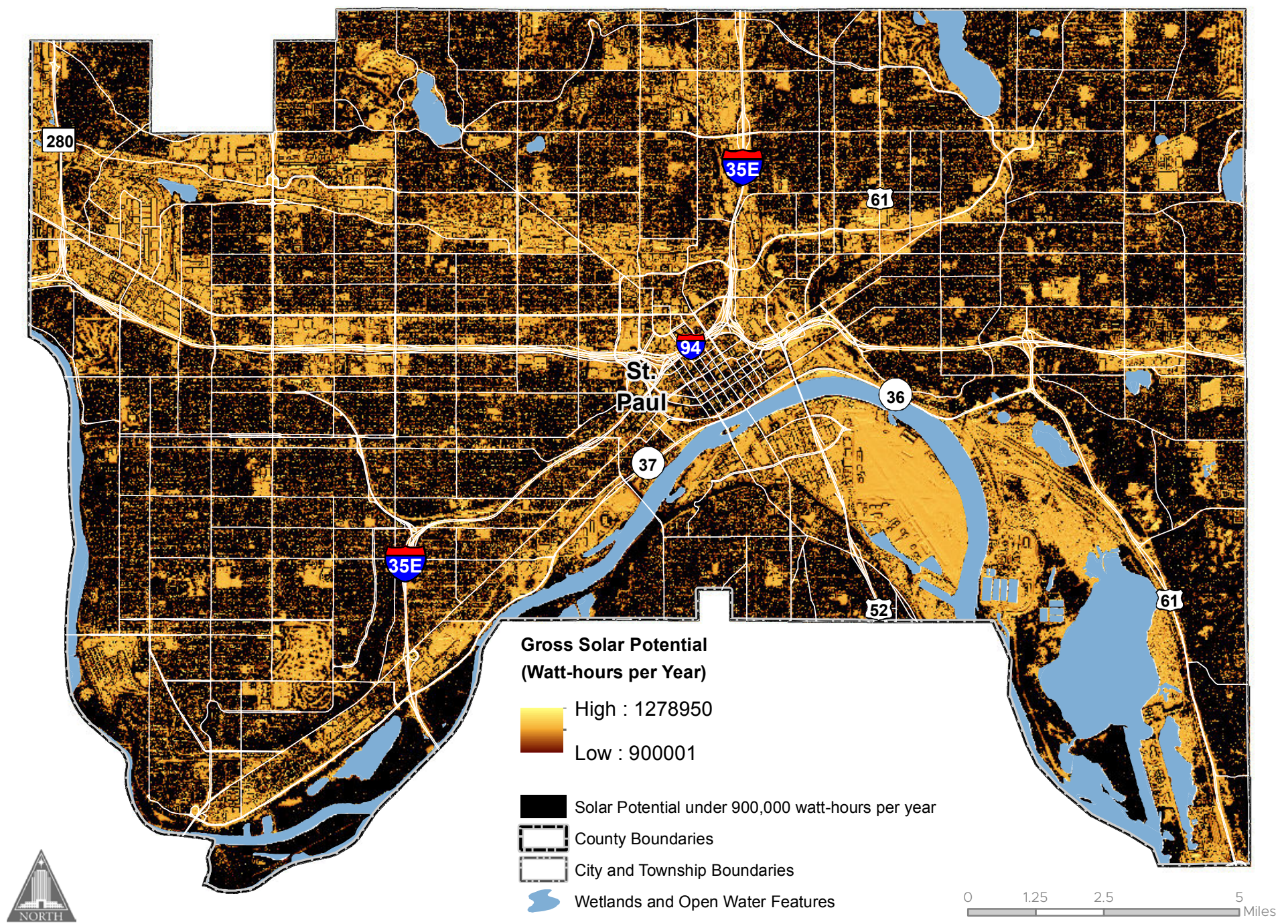
 Suburban Edge  
 Suburban

 Urban  
 Urban Center





Map LU-6: Gross Solar Collection Potential





## Gross and Rooftop Solar Resource Calculations

| Gross Potential (Mwh/yr) | Rooftop Potential (Mwh/yr) | Gross Generation Potential (Mwh/yr)** | Rooftop Generation Potential (Mwh/yr)** |
|--------------------------|----------------------------|---------------------------------------|-----------------------------------------|
| 66,151,161               | 10,968,464                 | 6,615,116                             | 1,096,846                               |

\*The gross solar potential and gross solar rooftop potential are expressed in megawatt hours per year (Mwh/yr), and these estimates are based on the solar map for your community. These values represent gross totals; in other words, they are not intended to demonstrate the amount of solar likely to develop within your community. Instead, the calculations estimate the total potential resource before removing areas unsuitable for solar development or factors related to solar energy efficiency.

The gross solar generation potential and the gross solar rooftop generation potential for your community are estimates of how much electricity could be generated using existing technology and assumptions on the efficiency of conversion. The conversion efficiency of 10% is based on benchmarking analyses for converting the Solar Suitability Map data to actual production, and solar industry standards used for site-level solar assessment.

\*\*In general, a conservative assumption for panel generation is to use 10% efficiency for conversion of total insolation into electric generation. These solar resource calculations provide an approximation of each community's solar resource. This baseline information can provide the opportunity for a more extensive, community-specific analysis of solar development potential for both solar gardens and rooftop or accessory use installations. For most communities, the rooftop generation potential is equivalent to between 30% and 60% of the community's total electric energy consumption. The rooftop generation potential does not consider ownership, financial barriers, or building-specific structural limitations.

Source: Metropolitan Council Local Planning Handbook - Solar Resource Calculation

## Appendix B: Tables Required by Metropolitan Council

Figure LU-1: Current Land Use Table (2016)

| Land Use                        | Acres         | Percent of Total |
|---------------------------------|---------------|------------------|
| Agricultural                    | 14            | 0.0%             |
| Airport                         | 531           | 1.5%             |
| Golf Course                     | 654           | 1.8%             |
| Industrial and Utility          | 2,397         | 6.7%             |
| Institutional                   | 2,646         | 7.4%             |
| Major Highway                   | 1,322         | 3.7%             |
| Major Railway                   | 892           | 2.5%             |
| Mixed Use Commercial            | 165           | 0.5%             |
| Mixed Use Industrial            | 178           | 0.5%             |
| Mixed Use Residential           | 222           | 0.6%             |
| Multifamily                     | 1,611         | 4.5%             |
| Office                          | 478           | 1.3%             |
| Open Water                      | 2,384         | 6.6%             |
| Park, Recreational, or Preserve | 4,588         | 12.8%            |
| Retail and Other Commercial     | 1,383         | 3.9%             |
| Single Family Attached          | 1,795         | 5.0%             |
| Single Family Detached          | 13,067        | 36.4%            |
| Undeveloped                     | 1,555         | 4.3%             |
| <b>Total</b>                    | <b>35,882</b> |                  |

Figure LU-2: 2040 Land Use Table

| Land Use                    | Acres         | Percent of Total |
|-----------------------------|---------------|------------------|
| Civic and Institutional     | 850           | 2.4%             |
| Downtown                    | 412           | 1.1%             |
| Industrial                  | 3,355         | 9.3%             |
| Major Parks and Open Spaces | 4,189         | 11.6%            |
| Mixed-Use                   | 2,746         | 7.6%             |
| Semi-Rural                  | 222           | 0.6%             |
| Transportation              | 2,838         | 7.9%             |
| Urban Neighborhood          | 18,773        | 52.2%            |
| Water                       | 2,577         | 7.2%             |
| <b>Total</b>                | <b>35,962</b> |                  |

Figure LU-3: 2040 Employment Density and General Land Use Mix\*

| Land Use Type      | Employment Density (FAR)** | Commercial/Office/ Residential |
|--------------------|----------------------------|--------------------------------|
| Downtown           | 3.0-8.0                    | 20%/50%/30%                    |
| Mixed-Use          | 0.3-6.0                    | 30%/30%/40%                    |
| Urban Neighborhood | 0.3-2.0                    | 5%/5%/90%                      |
| Industrial         | 0.0-6.0                    | 80%/15%/5%                     |

\* Land use mix represents a generalized average for the land use type citywide. It is not a mandate or requirement for any individual development project.

\*\*FAR applies to only employment generating land uses. Minimum FAR includes existing employment uses, such as commercial parking and outdoor storage.

Figure LU-4: 2040 Residential Land Use Density Ranges\*

| Land Use Type      | Base Range        | At Neighborhood Node |
|--------------------|-------------------|----------------------|
| Downtown           | 30-300 units/acre |                      |
| Mixed-Use          | 15-75 units/acre  | 20-200 units/acre    |
| Urban Neighborhood | 7-30 units/acre   | 15-55 units/acre     |
| Semi-Rural         | 2-15 units/acre   | n/a                  |
| Citywide**         | 20 units/acre     |                      |

\*Density ranges represent a goal for new development averaged across the generalized future land use type. Individual projects may exceed targeted goals.

\*\*Metropolitan Council's requirement for communities with the urban core designation. All of Saint Paul falls within this category.

Figure LU-5: Transit Density Goals\*

| Distance from transit | Transit type               | Min (units/acre)** | Target (units/acre)*** |
|-----------------------|----------------------------|--------------------|------------------------|
| 1/2 Mile              | Fixed rail transitway      | 50                 | 75-150                 |
|                       | Bus rapid transitway       | 25                 | 40-75                  |
| 1/4 Mile              | Arterial bus rapid transit | 15                 | 20-60                  |
|                       | High-frequency transit     | 10                 | 15-60                  |

\*Average for new development in areas identified in a station area plan as appropriate for redevelopment.

\*\*Minimum represents an average goal for new development.

\*\*\*Individual projects may exceed target goals.

Figure LU-6: General Housing Unit Development Estimates and Timeline Based on Opportunity Sites\*

| 2040 Land Use      | 2020  |                       | 2030  |                       | 2040  |                       | TOTAL |                       |
|--------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|
|                    | Acres | Development Estimates | Acres | Development Estimates | Acres | Development Estimates | Acres | Development Estimates |
| Downtown           | 1.9   | 17-173                | 6.1   | 55-551                | 0.0   | 0                     | 8.0   | 72-724                |
| Mixed-Use          | 37.4  | 273-2,332             | 193.6 | 1,460-13,274          | 194.5 | 1,475-13,539          | 425.5 | 3,208-29,144          |
| Urban Neighborhood | 0.7   | 4-19                  | 75.1  | 484-2,060             | 134.2 | 888-3,757             | 209.9 | 1,376-5,836           |
| Industrial         | 0.0   | 0                     | 15.3  | 0                     | 31.5  | 0                     | 46.9  | 0                     |
| TOTAL              | 40.1  | 295-2,524             | 290.1 | 1,999-15,995          | 360.2 | 2,363-17,296          | 690.3 | 4,657-35,705          |

\* The purpose of this table is to satisfy Metropolitan Council requirements to illustrate development capacity for population growth estimates. The figures in this table are estimated based on many broad assumptions. Redevelopment sites included in the analysis were generally larger than one acre. This information is likely to be less accurate over time as market conditions and redevelopment sites change. Some sites may have an approved master plan which guides development and will provides a more accurate development estimate.



# Appendix C

Figure LU-1: Summary of Policies Organized by Goal

| Goal                                                                                     | Policies                                                                                                                         |
|------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| 1. Economic and population growth focused around transit.                                | LU-1; LU-22; LU-35; LU-55                                                                                                        |
| 2. Neighborhood Nodes that support daily needs within walking distance.                  | LU-23; LU-30; LU-31; LU-32; LU-33                                                                                                |
| 3. Equitably-distributed community amenities, access to employment and housing choice.   | LU-3; LU-16; LU-19; LU-20; LU-34; LU-36; LU-37; LU-42                                                                            |
| 4. Strong connections to the Mississippi River, parks and trails.                        | LU-21; LU-40; LU-41; LU-49                                                                                                       |
| 5. Infrastructure for all ages and abilities.                                            | LU-38; LU-39; LU-54                                                                                                              |
| 6. Equitable, adaptable and sustainable land use and development patterns and processes. | LU-5; LU-7; LU-8; LU-12; LU-13; LU-14; LU-15; LU-17; LU-27; LU-29; LU-43; LU-47; LU-48; LU-50; LU-51; LU-52; LU-56; LU-60; LU-61 |
| 7. Quality full-time jobs and livable wages.                                             | LU-2; LU-6; LU-24; LU-26; LU-44; LU-45; LU-46; LU-53; LU-57; LU-58; LU-59                                                        |
| 8. People-centered urban design.                                                         | LU-4; LU-9; LU-10; LU-11; LU-18; LU-25; LU-28                                                                                    |