05. LAND USE

The land use plan is arguably the most prominent chapter in the Richfield Comprehensive Plan. It gives people a visual representation of what the community is expected to look like in the future. The text, maps and images contained in this section identify a framework for the future of land in Richfield. This section helps guide the form of development and redevelopment of land in the City for the next 20 years. In doing so, it establishes how areas where people live, shop and work are anticipated to look and function in the future.

EXISTING LAND USE

Richfield's land use patterns have evolved over time. Changes that have occurred are the direct result of past planning efforts. Being a fully developed, first-ring City, Richfield has been cognizant of the need to redevelop and reshape areas of the community as they age and deteriorate. A number of plans have served as catalysts for both public and private investments that have changed the face of Richfield along some of its most prominent corridors and at several key community nodes. It is important to recognize and understand these planning efforts since they establish both a foundation and framework for future change. A summary of these past planning efforts are discussed in Chapter 2: Community Direction.

Today's land use patterns (see Figure 5-1 and Table 5-1) include a variety of uses ranging from single family to multifamily residential neighborhoods, and commercial and mixed use nodes strategically located along major transportation corridors. The community is further enhanced by a vast system of parks, public/quasi-public space and recreational amenities. The majority of Richfield consists of detached residential uses, which occupies almost half (45%) of the city. Public right-of-way comprises the second largest land development category (27%), followed by parks (6%).

FUTURE LAND USE PLAN

The future land use pattern in Richfield (see Figure 5-2 and Table 5-2) will evolve from what exists today. The almost total lack of undeveloped land in Richfield will make it very difficult for large scale development. Development, growth and change that occurs will result from redevelopment

Table 5-1. Existing Land Uses

Existing Land Use	2017 Acres	Percent
Detached Residential *	2,040.21	45.79%
Attached Residential **	198.28	4.45%
Commercial	288.00	6.46%
Mixed Use	11.92	0.27%
Parks & Recreation	286.36	6.43%
Public & Quasi-Public	217.33	4.88%
Right-of-Way	1,225.11	27.50
Water/Wetlands	169.06	3.79%
Vacant	18.83	0.42%
Total	4,455.10	100.00%

Source: Hennepin County Tax Assessors Office and the City of Richfield

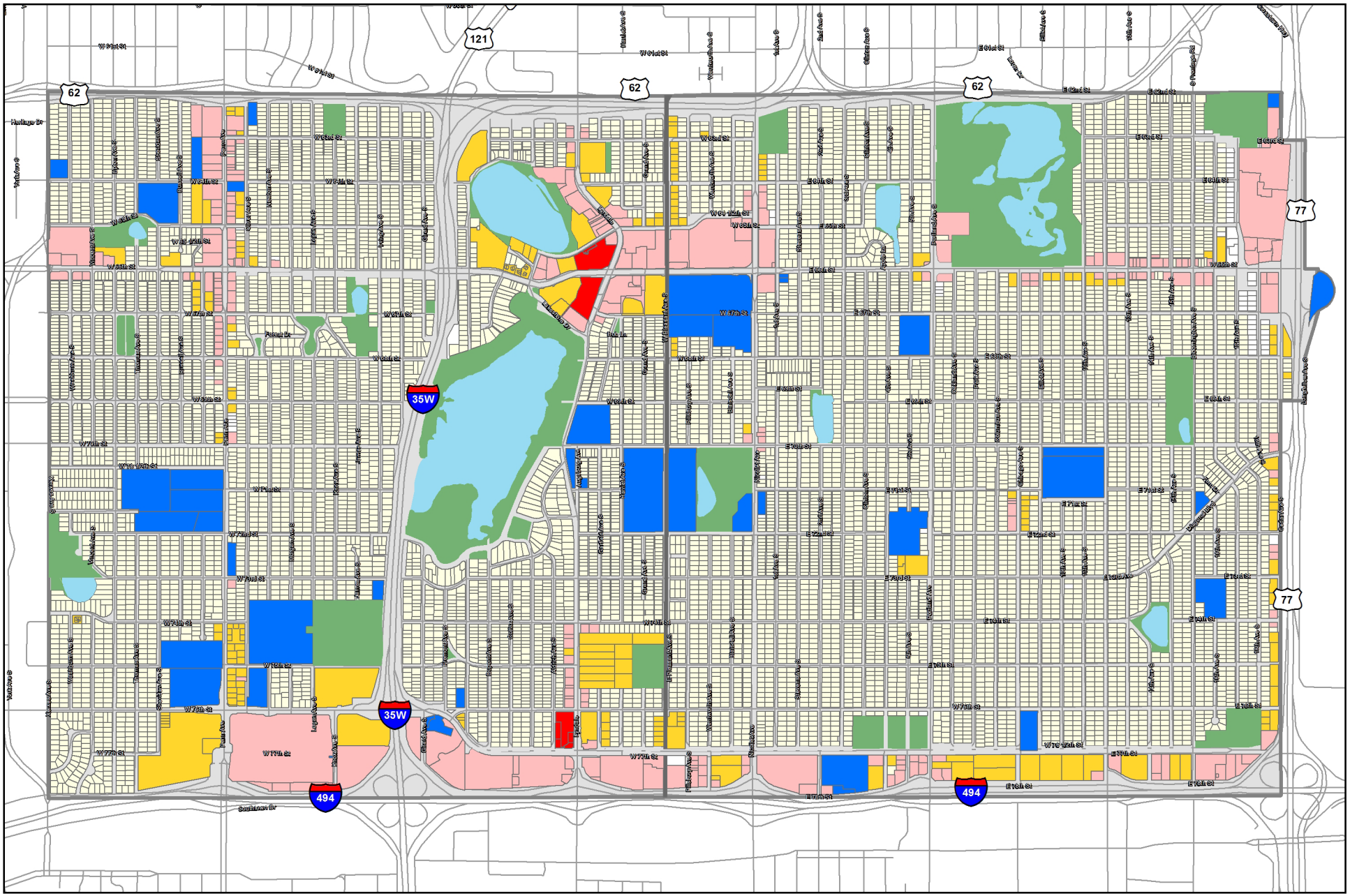
** Detached residential is typically a single dwelling unit that is comprised of 1 to 3 floors. Detached residential is the most common type of housing in Richfield.*

*** Attached residential can typically house more people than single detached residential units. The most common type of attached residential in Richfield includes townhomes, duplexes and apartment buildings.*

Table 5-2. Planned Land Uses

Planned Land Use	Acres	Percentage
Low Density Residential	1,958.66	43.96%
Medium Density Residential	107.52	2.41%
High Density Residential	88.63	1.99%
Neighborhood Commercial	2.81	0.06%
Community Commercial	58.21	1.31%
Regional Commercial	142.60	3.20%
Mixed Use	199.62	4.48%
Park & Recreation	301.80	6.77%
Public & Quasi-Public	213.23	4.79%
Right-of-Way	1,212.94	27.23%
Water/Wetlands	169.06	3.79%
Total	4,455.10	100.00%

Figure 5-1. Existing Land Use (2017)



Please Note: This map provides a general depiction of existing land uses based on Hennepin County Tax Accessor Data (September 2017). Please visit the Hennepin County Tax Accessor Website for current information regarding a property.

Existing Land Use (2017)

- Detached Residential
- Attached Residential
- Commercial
- Mixed Use
- Parks & Recreation
- Public/Quasi Public
- ROW
- Railroad
- Water
- Vacant

Figure 5-2. Future Land Use

2040 Planned Land Use

- Mixed Use
- Regional Commercial
- Community Commercial
- Neighborhood Commercial
- High Density Residential
- Medium Density Residential
- Low Density Residential
- Park
- Quasi-Public
- Right-of-Way (ROW)

initiatives and will be consistent with Metropolitan Council's socioeconomic forecasts (see Table 5-3). Areas that have been identified for redevelopment include:

- Lyndale Avenue & 66th Street
- Penn Avenue Corridor
- Cedar Avenue Corridor
- I-494 Corridor

Improvements within the redevelopment areas will be market-driven. The land use designations are intended to allow for flexibility in how these sites transform over the next twenty years. Predicting when redevelopment will occur over this time horizon is difficult. Redevelopment (phasing) will depend on when the market supports new uses and a property-owners willingness to sell. Regardless of these factors, the redevelopment areas have been largely guided for mixed-use to provide flexibility and enough land capacity to accommodate the projected socioeconomic forecasts.

Other areas of the community have some potential for absorbing a small portion of the community's projected growth. Some of these areas may include a change in use (e.g., from commercial to residential), or intensifying of the existing use of a property (e.g., from medium density residential to high density residential). Other sites have the capacity for infill development, which involves the development of projects to fit within the fabric of existing buildings and neighborhoods on vacant land, as well as underutilized parts of larger sites, such oversized parking lots.

For the purposes of this Comprehensive Plan, the City assumes a majority, if not all of the growth will occur within the redevelopment areas. This would result in an average density of 25 units per acre (see Table 5-4), which exceeds the required target of 20 units per acre for an "Urban Center." Table 5-5 also documents the redevelopment areas ability to meet the City's socioeconomic forecasts. This assumes some level of development will occur every decade at various density ranges. Based on these assumptions, the City's redevelopment areas and infill opportunity sites will provide enough land capacity to meet the socioeconomic forecasts, if development occurs at a higher density.

Table 5-3. Metropolitan Council Socioeconomic Forecasts for Richfield

Forecast Year	Population	Households	Employment
2010	35,228	14,818	15,604
2020	35,700	15,600	16,600
2030	35,600	16,000	17,100
2040	35,900	16,400	17,500

Table 5-4. Net Density Calculation

Land Use	Total Acres	Percent of Acres Guided for Residential	Total Acres Allocated for Residential	Min Units Per Acre	Total Units
LDR (Infill)	3.40	100%	3.40	1	3
MDR *	8.51	100%	8.51	8	68
HDR *	21.12	100%	21.12	35	739
Mixed Use (Redevelopment Areas)					
Lyndale/66th **	50.72	50%	25.36	25	634
Penn Ave	34.12	40%	13.65	25	341
Cedar	26.89	60%	16.13	25	403
I-494	2.44	70%	1.70	50	85
Total:	147.20		89.88		2,274.45
Net Density (2,274.45 units/89.88 acres)					25.30

** These calculations are based on a change in land use that intensifies the existing use of a property (e.g., medium density residential to high density residential).*

*** Mixed use for this area is guided at a density range of 50 to 150 units per acre. However, it is assumed a lower density range (25 units per acre) will occur at the fringes to serve as a buffer/transition between adjacent neighborhoods. In that respect, a lower density range (25 units per acre) was applied for a more conservative estimate. The City could achieve a net density of 32.36 units per acre if this land use category assumed 50 units per acre.*

Table 5-5. Residential and Employment Potential for Redevelopment Areas

Growth Areas	Net Developable Acres	Percent Residential	Net Developable Acres (Residential)	Density Range		Phasing of Net D	
Mixed Use (Redevelopment Areas)	**Acres**	**Percent**	**Acres**	**Min**	**Max**	**2020**	
Lyndale/66th	50.72	50%	25.36	50	150	10%	
Penn Ave	34.12	60%	20.47	25	100	10%	
Cedar	26.89	40%	10.75	25	75	15%	
I-494	2.44	30%	0.73	50	150	0%	
Infill/Land Use Change	**Acres**	**Percent**	**Acres**	**Min**	**Max**	**2020**	
Low Density Residential	3.40	100%	3.40	1	7	100%	
Medium Density Residential	8.51	100%	8.51	8	34	50%	
High Density Residential	21.12	100%	21.12	35	100	25%	
Total	**147.20**	**-**	**90.36**	**-**		**-**	
Met Council Growth Projections (Net): *							

Growth Areas	Net Developable Acres	Percent Employment	Net Developable Sq.Ft. (Non-Res.)	FAR		Emply. Per sq.ft.	Phasing of Net De	
Mixed Use (Redevelopment Areas)	**Acres**	**Percent**	**sq.ft.**	**Min**	**Max**	**sq.ft.**	**2020**	**2030**
Lyndale/66th	50.72	50%	1,104,746	0.50	2.00	1,000	10%	25%
Penn Ave	34.12	40%	594,483	0.50	1.00	1,000	10%	10%
Cedar	26.89	60%	702,731	0.50	2.00	1,000	15%	15%
I-494	2.44	70%	74,260	0.50	2.00	1,000	0%	100%
Infill/Land Use Change	**Acres**	**Percent**	**sq.ft.**	**Min**	**Max**	**sq.ft.**	**2020**	**2030**
Neighborhood Commercial	0.66	100%	28,851	0.50	1.00	1,000	50%	50%
Total	**114.83**	**-**	**2,505,070.57**	**-**		**-**	**-**	
Met Council Gro								

** The growth projection for 2020 is based on the differential between 2016 Census estimates (15,600) and Met Council's 2020 forecasts.*

evelopable Acres		Number of Housing Units (Min)			Number of Housing Units (Max)		
2030	2040	2020	2030	2040	2020	2030	2040
25%	25%	127	317	317	951	951	951
10%	10%	51	51	51	205	205	205
15%	25%	40	40	67	202	121	202
100%	0%	0	37	0	0	110	0
2030	**2040**	**2020**	**2030**	**2040**	**2020**	**2030**	**2040**
0%	0%	3	0	0	0	0	0
50%	0%	34	34	0	0	145	0
25%	50%	185	185	370	1,056	528	1,056
		441	**664**	**805**	**2,413**	**2,059**	**2,413**
		300	400	400	300	400	400
	Differential:	141	264	405	2,113	1,659	2,013

evelopable Acres	Number of Jobs (Min)			Number of Jobs (Max)		
2040	2020	2030	2040	2020	2030	2040
25%	55	138	138	221	552	552
10%	30	30	30	59	59	59
25%	53	53	88	211	211	351
0%	0	37	0	0	149	0
2040	**2020**	**2030**	**2040**	**2020**	**2030**	**2040**
0%	7	7	0	14	14	0
	145	**265**	**256**	**506**	**986**	**963**
owth Projections (Net):	350	500	400	350	500	400
Differential:	-205	-235	-144	156	486	563

Disclaimer

Table 5-5 was created to demonstrate the City's ability to accommodate the socioeconomic forecasts generated by the Metropolitan Council. Please note that the Floor Area Ratios (FARs) used for this planning exercise should not be used to dictate the size of development. Instead, the City's Zoning Code should be referenced to determine the size of development in a particular area. The City's Zoning Code is the official document that prescribes the size of development.

Land Use Changes

Previous comprehensive plans (1997 and 2008) have modified land use categories to better define the range of allowable and desired residential and non-residential land uses. As part of this plan, additional changes to the land use categories were made in order to both simplify and better-reflect community direction. For example, the 2008 Comprehensive Plan (and previous plans) distinguished office use from general commercial uses. The Zoning Code; however, allows office use in any commercial district. The office designation has been removed and integrated into other appropriate (commercial and/or mixed use) categories. These changes highlighted throughout this section.

Residential

A review of existing densities throughout the community has led to the consolidation of the Medium-High-Density Residential (MHR) category with the Medium-Density Residential (MDR) category. These two categories have been combined to better represent existing densities in the community and the intent to allow similar densities for new developments. The Medium Density Residential category will allow densities ranging from 8 to 34 units per acre.

Mixed Use

As part of the 2018 Plan, the mixed use category has been better-defined in the areas along 66th Street/Nicollet Avenue, Penn Avenue, Cedar Avenue and I-494. This additional information provides clarified density ranges and development patterns. These definitions are discussed in detail on page page 54.

Office

Past comprehensive plans have modified the office use categories to better reflect changing markets and economies. This update continues to refine the land use categories by consolidating the office use categories with the residential and commercial land uses. The purpose of this consolidation is to help simplifying the 2040 Land Use Plan, while supporting office use as part of residential and commercial developments in a mixed use format. These changes include:

- The Office (O), Regional Commercial/Office (RCO), and Community Commercial/Office (CCO) categories have been removed. The presence of office is now supported as part of the Community Commercial (CC) and Regional Commercial (RC) categories.
- The High Density Residential /Office (HDRO) category has been removed. The presence of office is now supported as part of the Mixed Use and High Density Residential (HDR) Category.

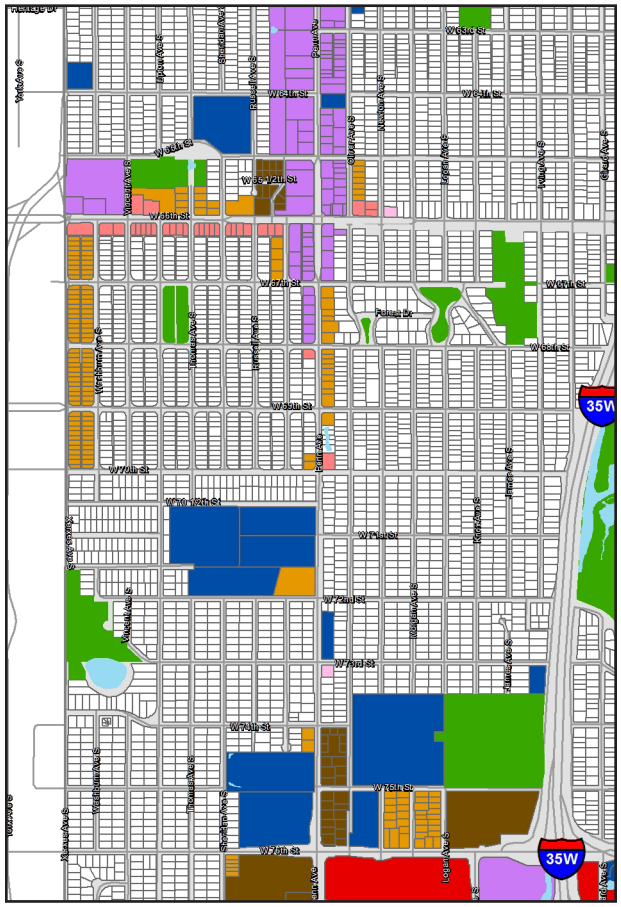
Areas of Potential Change

There are two areas in the community (see Figure 5-3) that the City has identified as potential areas of change. Adjacent or future land uses, roadways, and transportation options make these areas attractive for higher intensity land uses; however, land assembly would make the redevelopment of these sites extremely difficult.

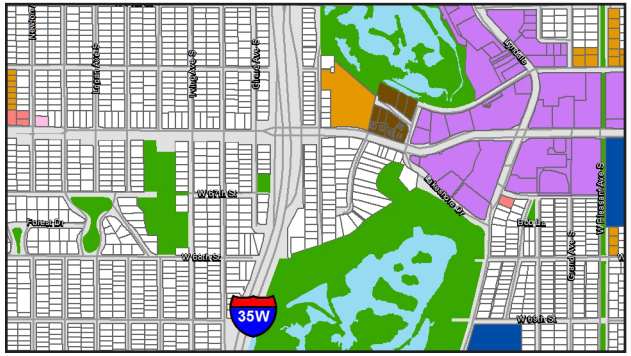
- Richfield's Western Border: The previous comprehensive plan (2030) guided portions of Richfield's western border as Medium-Density Residential. This land use designation would serve as a land use buffer between Richfield's single-family neighborhoods and the higher intensity land uses occurring along the Edina border. A similar approach could be considered along the entire Xerxes Avenue corridor. The City will remain open to changing the land use designation along the corridor, but will for the time being carryforward the land use designations (i.e., Low-Density Residential and Medium-Density Residential) identified in the previous comprehensive plan.

Figure 5-3. Future Land Use

Western Border



66th Street and I-35W



» 66th Street and I-35W: Higher intensity land uses are typically planned in proximity to high frequency transit routes. In this case, the future Orange Line BRT stations at 66th Street and I-35W is located near well-established single-family neighborhoods. At this time, it is unlikely these neighborhoods would redevelop. The City will remain open to land use designation changes in this area, but will for the time being designate this area as Low-Density Residential.

Land Use Categories

The 2040 Land Use Plan contains a range of categories that address residential, commercial, office and public uses. A number of the categories accommodate a range of residential and commercial uses in a mixed-use format.

Low Density Residential (LDR)

The majority of Richfield's existing housing stock falls within the Low Density Residential (LDR) category. The LDR category has been derived from the Single-family Residential category dating back to the 1997 Comprehensive Plan. The LDR category allows for the mixture of single-family detached and attached units, such as duplexes and lower density townhomes. LDR development ranges from 1 to 7 units per acre.

Medium Density Residential (MDR)

The Medium Density Residential (MDR) land use category was derived from the MDR and the Medium-High Density Residential (MHD) category included in the 2008 Comprehensive Plan. These two categories have been combined to better clarify development patterns and the intent to allow for higher density housing, such as townhomes or condominiums ranging from 8 to 34 units per acre. The allowed density would be limited to no more than 4 stories. The MDR category also includes manufactured homes and some presence of office use.

High Density Residential (HDR)

High Density Residential (HDR) includes multi-unit and multi-building developments at a more intense scale. HDR development ranges from 35 to 100 units per acre. HDR uses are primarily located in areas convenient to transportation, shopping and social services in order to support higher concentration of people. Development greater than 100 units per acre can be achieved through the PUD approval process.

The appropriate building height will vary by development and depends upon the characteristics of the development and its surroundings. The HDR category would also allow for some presence of office use.

Neighborhood Commercial (NC)

The Neighborhood Commercial (NC) land use category provides the opportunity for retail goods and services that directly cater to a limited geographic area or neighborhood in Richfield. The intent of this category is to provide space to allow for goods or services that neighborhood residents need on a frequent basis. For example, neighborhood uses may include a convenience store, coffee shop, drug store, hardware store or dry cleaner. Neighborhood commercial uses must fit within the character and scale of a residential neighborhood and should be accessible by foot and bicycle. The size of neighborhood commercial is limited to 5,000 square feet (Floor Area Ratio of 0.5 to 1.0).

Community Commercial (CC)

Community Commercial (CC) accommodates a wide variety of retail goods and services that are more intense than neighborhood scale commercial, but generally not uses that attract customers from throughout the Twin Citites metropolitan area. CC uses are intended to serve residents

Floor Area Rations

The FARs were created to demonstrate the City's ability to accommodate the socioeconomic forecasts generated by the Metropolitan Council. Please note that the Floor Area Ratios (FARs) used for this planning exercise should not be used to dictate the size of development. Instead, the City's Zoning Code should be referenced to determine the size of development in a particular area. The City's Zoning Code is the official document that prescribes the size of development.

of Richfield and the immediate vicinity around Richfield. CC uses are primarily located along major local corridors, such as 66th Street, Penn Avenue, Nicollet Avenue, and Portland Avenue. Office uses would preferable be located above retail uses or situated in stand-alone building developments. Overall developments could be up to a total building size of 150,000 square feet (Floor Area Ratio of 0.5 to 1.0).

Regional Commercial

Regional Commercial (RC) uses are primarily, if not exclusively located along regional corridors that provide visibility and accessibility, such as Interstate 35, Interstate 494, US Highway 77 and US Highway 62. These commercial land uses are larger in scale and attract users throughout the Twin Cities metropolitan area. Primary uses would include large anchor retail tenants fashioned in lifestyle centers, shopping malls or large stand-along buildings. Office uses would preferably be located above retail uses or situated in stand-alone building developments. Regional Commercial development is generally expected to exceed 150,000+ square feet. (Floor Area Ratio of 0.5 to 2.0)

Mixed Use (MU)

Mixed Use (MU) was a new land use category in the 2008 Comprehensive Plan. The category was intended to clarify planned land use patterns near 66th Street and Lyndale Avenue, and the Penn Avenue corridor from 68th Street to Highway 62. Since that time, the MU category has been expanded to include planned land use changes along the Cedar Avenue Corridor. An increase in the density ranges are allowable through the Planned Unit Development (PUD) process.

» Lyndale/Nicollett & 66th Street: The intent of the MU category in this area is to create a city center in Richfield that would serve as a downtown. The city center is expected to include a mix of residential (50%), shopping, recreational and business uses (50%) (Floor Area Ratio of 0.5 to 2.0). The area at 66th Street and Lyndale has been developing for the past decade as Richfield's city center; the intent is to continue the expansion of the city center area by incorporating residential housing at 50 to 150 units per acre and providing commercial, office and recreational opportunities. Lower densities (25-75 units per acre) would be allowed at the edges of this district if needed to appropriately transition to adjacent single-family areas.

» Penn Avenue Corridor: The intent of the MU category is to create a traditional neighborhood corridor that is vibrant and pedestrian-oriented. This area would accommodate residential (60%), shopping, recreational and businesses uses (40%) (Floor Area Ratio of 0.5 to 1.0) in a flexible arrangement that captures the spirit and intent of the Penn Avenue Revitalization Master Plan. Densities will generally range from 25 to 100 dwelling units per acre.

» Cedar Avenue Corridor: The intent of the land-use plan for the Cedar Avenue Corridor redevelopment is to stabilize and revitalize the existing LDR by introducing mixed-use development that accommodates the density necessary to support neighborhood-commercial type goods and services. Mixed-use development refers to the integration of residential, commercial, retail, employment, civic, recreation and educational uses in a way that not only supports and enhances each element in the development, but provides residents in the surrounding neighborhood

a rich and diverse environment in which to live, work, shop, play and learn. The Cedar Avenue is expected to include a mix of residential (40%) and commercial uses (60%) (Floor Area Ratio of 0.5 to 2.0). Residential densities will generally range from 25 to 75 dwelling units per acre.

» I-494 Corridor: In the I-494 Corridor, the MU category is used to denote areas where high density residential or high intensity commercial development could be appropriate. The corridor is intended to be redeveloped with multi-story buildings that front on 77th Street and increase pedestrian and bicycle connections throughout the corridor. Development in this area should also prioritize an attractive frontage along I-494. It is expected that the land guided by the Comprehensive Plan as MU will achieve a mix of residential (30%) and commercial uses (70%) (Floor Area Ratio of 0.5 to 2.0); with residential densities ranging from 50 to 150 dwelling units per acre.

Public and Quasi-Public

Public and Quasi-public uses include all civic, county and state facilities (excluding parks); religious facilities, schools and other similar non-profit uses.

Park

The park designation includes all public parks, public playgrounds and trail corridors. There are no regional parks or park reserves located within Richfield.

Right-of-Way

Right-of-way includes all public land that is under the jurisdiction of Richfield, Hennepin County or the State of Minnesota that is generally devoted to transportation/and or utilities.

Water/Wetlands

Water/wetlands includes large water bodies or wetlands identified as part of the National Wetland Inventory (NWI).

Community Facilities

Community facilities are non-commercial uses that are intended to provide a public benefit or service. Richfield community facilities include schools, the Hennepin County library, churches, police, fire, and other civic buildings. Community facilities are discussed throughout the Comprehensive Plan. The intent of this section is to highlight key community facilities, particularly those that are not featured in other sections of the plan.

Municipal Center

The Richfield Municipal Center is a $23 million facility that was completed in June 2011, which replaced City Hall that was built in 1965. The building is 101,394 square feet, including a 21,921 square feet underground Public Safety parking garage and firing range.

The facility houses the detention facilities, police station and full-time fire station, licensing/deputy registrar facilities, administrative offices, Council Chambers and public conference rooms. Located at 6700 Portland Avenue South adjacent to Heredia Park, the municipal Center serves as a civic hub of activity in the community.

Public Works

The public works department is responsible for overseeing the maintenance of public buildings and local infrastructure including public roads, sidewalks, City sewer, the water storage and distribution system, storm drainage system, etc. A new public works facility was completed in June of 2008. The new facility is located at East 66th Street and Cedar Avenue. The northern half of the old facility located

Richfield Public Works Facility

Centennial Elementary School

Richfield City Hall

at 7700 Pillsbury Avenue South has been redeveloped as multi-family housing. The southern half is similarly guided for redevelopment.

Schools

Over the years, Richfield residents have been committed to the success of their schools. Strong support for investments through bonding and levies demonstrate the commitment of the community to its schools. In 1993, residents passed a $36.9 million bond referendum for school renovation, remodeling and technology improvements. In 2002, residents passed a $1.4 million operating levy, and in 2003, residents passed a $1 million technology bond.

Finally, in 2017 residents approved two referendums authorizing a property tax increase and additional funding for Richfield Public Schools (ISD #280). The first referendum authorized the renewal of existing levies, increasing local funding from $450 per student. This will increase property taxes at approximately $7.67 per month on a $210,000 home in Richfield. The second referendum authorized capital bonds to maintain school buildings, while improving safety, security, traffic flow, and classroom spaces.

This commitment has promoted quality schools and a level of excellence in educational programming. The boundary of the Richfield School District (ISD #280) includes all of Richfield as well as a small portion extending into the City of Edina. Richfield also is the home of several significant private institutions such as the Academy of the Holly Angels.

The Comprehensive Plan recognizes the importance of maintaining the overall quality and reputation of the Richfield public schools. In fact, the quality of schools in a community can play a vital role on a home buyer's decision to move or stay in an area. Recognizing this importance, the following planning efforts have been identified to support the continuing successes of the schools:

- Safe Routes: In recent years there has been a stronger effort to provide safe routes to schools. For example, the Federal Safe Routes to School (SRTS) program was created through legislation in 2005 under the Safe, Accountable, Flexible, Efficient Transportation Equity Act (SAFETEA-LU) and has continued in some form through the reauthorization of transportation legislation. In 2012, the federal SRTS program was replaced with the Transportation Alternatives Program, a program which SRTS projects are eligible for funding. The Metropolitan Council administers this program for the seven-county metropolitan area.

The Comprehensive Plan has identified potential pedestrian routes that would offer safe routes to schools via greenways, sidewalks or bikeways. The City should continue to work towards improving safe connections identified in the transportation and parks/trails chapter. In addition, explore funding mechanisms, such as SRTS to support those infrastructure improvements.

- Housing Balance: Attracting and retaining families in Richfield is important to maintain high levels of school enrollment. In order to do so, the City needs to continue to emphasize a well-balanced housing stock. Programs that encourage remodeling and the construction of new homes with modern floorplans and amenities will offer existing and new residents the housing options that today's buyers are seeking. The housing chapter discusses the existing and future housing needs of Richfield in further detail.
- Coordination: Land use, transportation, housing and other planning efforts can have an impact on individual school sites as well as the system as a whole. The City of Richfield will continue to coordinate and collaborate with Richfield Schools to maintain the infrastructure necessary for the continuation of high-quality public education.

AGGREGATE RESOURCES

Richfield is fully developed. Therefore, the City is not impacted by aggregate resources nor are there any opportunities for mining within the community.

HISTORIC RESOURCES

The Metropolitan Land Planning Act (Minnesota Statutes 473.859, Subd. 2) also requires that comprehensive plans include an historic preservation element. Currently there is one site in Richfield that is listed on the National Register of Historic Places. The Bartholomew House, located at 6901 Lyndale Avenue South, was constructed in 1852. The Richfield Historical Society, Inc. was formed in 1967 in an effort to restore the home of General Riles Bartholomew.

SOLAR ACCESS

Minnesota Statutes Section require that local governments in the Metropolitan Area include an element for protection and development of access to direct sunlight for solar energy systems in the Comprehensive Plan. The rationale for including a solar access protection element in the Comprehensive Plan is to assure the availability of direct sunlight to solar energy systems. According to the Metropolitan Council, "a major share of energy consumed in Minnesota is used for purposes that solar energy could well serve such as space heating and cooling, domestic hot water heating and low-temperature industrial processes."

Collection of solar energy requires protection of a solar collector's skyspace. Solar skyspace is the portion of the sky that must be free of intervening trees or structures for a collector to receive unobstructed sunlight." According to the Minnesota Energy Agency, "simple flatplate collectors have the potential to supply one-half of Minnesota's space heating, cooling, water heating and low-temperature industrial process heat requirements."

As shown in Table 5-6, most of Richfield does not have solar potential that exceeds 900,000 watt-hours per year. The areas (see Figure 5-4) that have some potential are those rooftops of Richfield's existing commercial and retail buildings located along major transportation corridors.

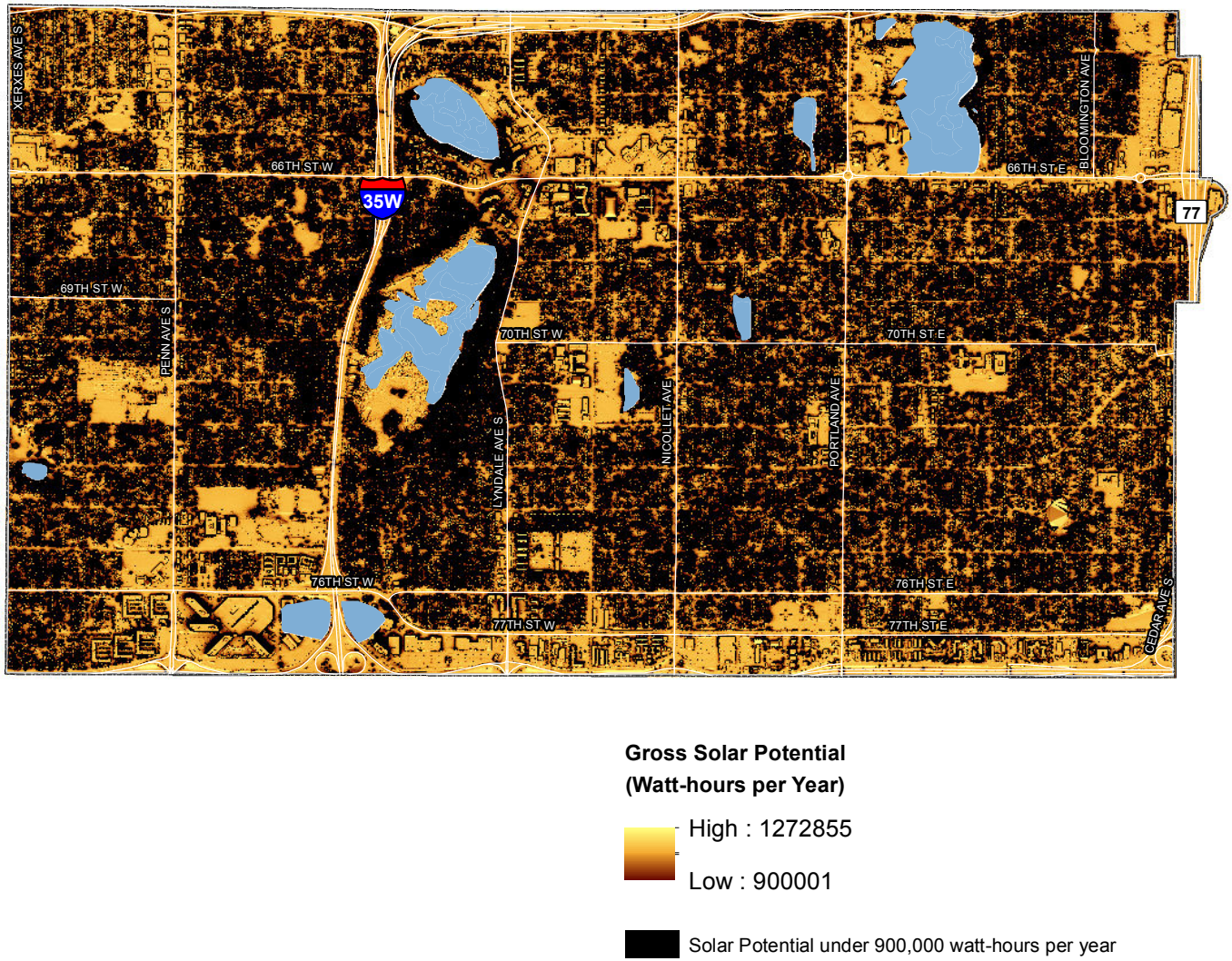
The City of Richfield will protect such access by requiring minimum standards for lot sizes, amounts of open space, yard setbacks, and maximum height of buildings for urban residents. Land uses should not preclude the possible use of solar energy systems. The City will review and revise, as necessary, the Zoning and Subdivision Ordinances to ensure protection of solar access.

Table 5-6. Gross & Rooftop Solar Resource Calculations

Community	Gross Potential (Mwh/yr)	Rooftop Potential (Mwh/yr)	Gross Generation Potential (Meh/yr)2	Rooftop Generation Potential (Meh/yr)2
Richfield	8,497,886	1,340,850	849,768	134,085

Source: Metropolitan Council, 2017

Figure 5-4. Gross Solar Potential (Source: Met Council)



This page intentionally left blank