breathe

EDMONTON'S GREEN NETWORK STRATEGY

Strategic Plan

August 2017

Edmonton

4

POLICY ACTIONS 79

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Providing
Open Space

3.1 The Challenge of Open Space Provision

Edmonton, along with many other cities, is challenged with providing open space that meets the needs of a growing and changing population. Determining how much is "enough" open space involves more than a measurement of land area alone. Rather, the value of the green network depends on multiple factors, including the way open spaces are used, the benefits they provide and the quantity available for use. In order to incorporate a comprehensive understanding of the green network, *BREATHE* examines open space provision and establishes strategies that consider measures of:

» **Distribution:** The arrangement of, and access to, open spaces across the landscape.
» **Quality:** The functionality of an open space, considering the condition of its infrastructure/ amenities and the value of the functions it provides.
» **Diversity:** The range of different open space types and functions within the landscape.
» **Supply:** The physical amount of open space.

Each measure is an uniquely important element of an integrated, multifunctional green network. They are also interrelated; ensuring provision of one element usually influences provision of another. Improving the supply of open spaces in a neighbourhood also expands opportunities for higher quality or more diverse experiences for its residents. Targeting an appropriate distribution of open spaces across the City enables residents to access a sufficient and diverse supply of open spaces nearby.

The current range of funding and acquisition tools in Edmonton are only effective for a portion of open space needs. They fail to accommodate the diverse and evolving circumstances of a growing metropolitan area. Variations in location, history and population mean that neighbourhoods of different ages and densities have different needs and opportunities for future open space development and ongoing support.
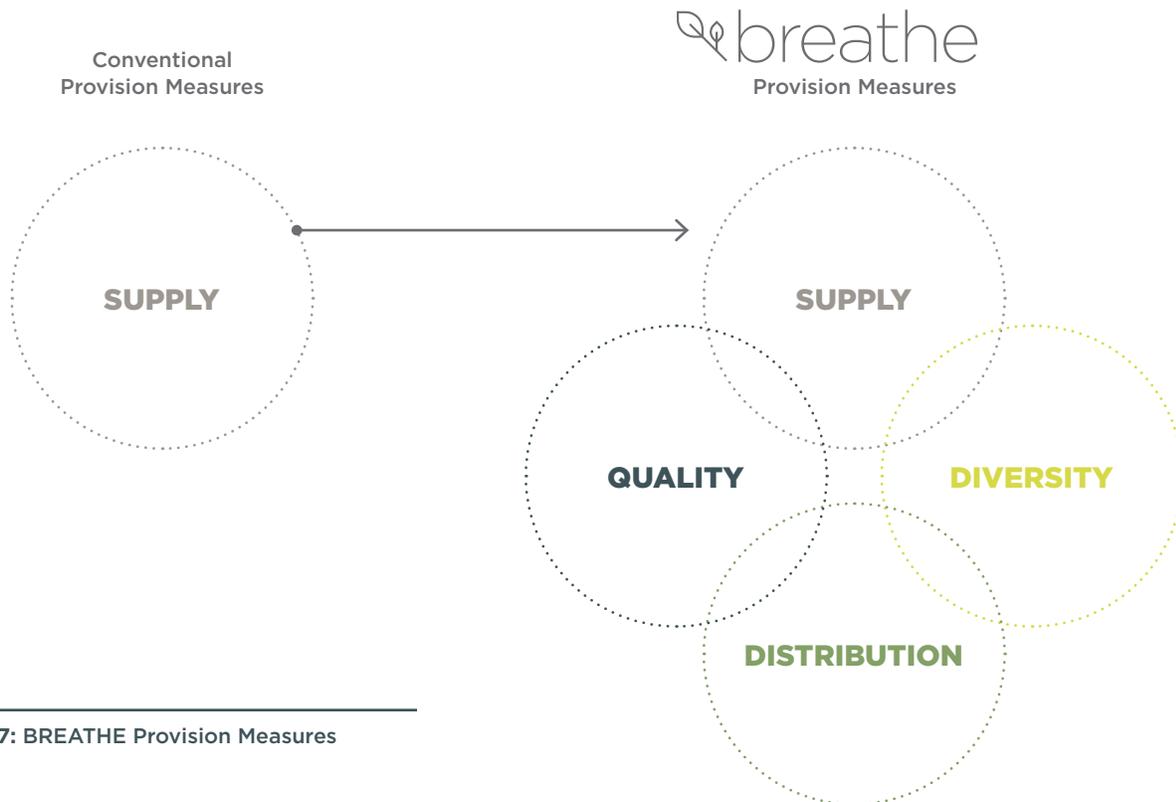
FIG. 7: BREATHE Provision Measures

3.2 Provisioning

» In new communities, the lands provided by developers through the subdivision process are allocated to many different civic uses, so innovative strategies may be required to accommodate open space programming requirements.

» In mature and existing neighbourhoods, there are fewer opportunities to acquire suitable lands for new open space development to supply population growth and provision must focus on quality and diversity instead. In neighbourhoods where the population has declined or stagnated, underused or surplus open spaces present an opportunity for repurposing or a resource to support future intensification.

Recognizing the fundamental differences in existing conditions and future opportunities among different parts of Edmonton, the following sections describe current and recommended provision for its Central Core and Mature, Established, Developing, Urban Growth and Industrial neighbourhoods. Provision strategies consider budgetary constraints and corporate priorities related to growth and multifunctionality in relation to each area, but also a general acknowledgment that land is a valuable civic resource that is more readily preserved than acquired. Specific directions regarding when, what and how to implement these strategies, along with which areas should be prioritized for action, are included in the Implementation Plan.

The Provisioning section examines 2017 baseline and projected provision levels in greater detail, and establishes strategies designed to achieve an integrated, multifunctional green network as the city grows. This level of detail is shown in three ways:

» A breakdown of provision into elements of supply, distribution, quality and diversity.

» A breakdown of provision into different types of open space, according to the Open Space Classification System (see **APPENDIX B**).

» A breakdown of provision into the different neighbourhood classes of Edmonton (see **FIG. 8**):
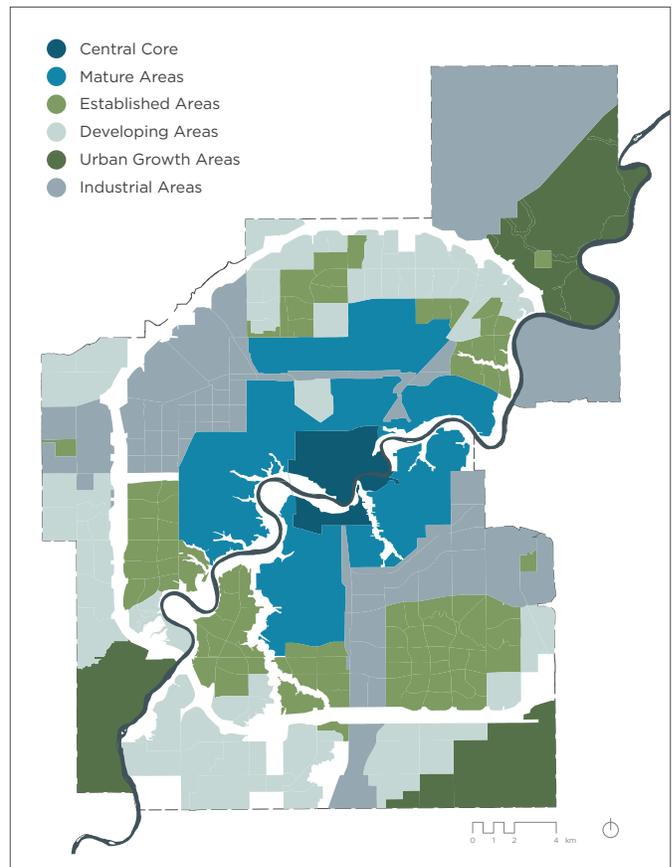
FIG. 8: Edmonton Neighbourhood Classes

3.2.1 OPEN SPACE ACCESSIBILITY

Access to open space is assessed using a servicing area catchment analysis; these catchments are visible on **MAP 4** and **MAP 5**. A catchment represents the area surrounding an open space that corresponds to a reasonable traveling distance to that open space. This is similar in principle to a school catchment area, which uses a geographic circumference around each school (together with capacity and travel factors) to identify the neighbourhoods where children should attend that particular school.

400 metres, or approximately 10 minutes' walking distance, was selected as an appropriate walkable distance to open space, based on best practice research and route analysis. To define the 400-metre walkable catchment surrounding each open space, the road network dataset was refined to include only roads that have sidewalks alongside them. These "walkable" roads were combined with shared-use pathways and off-street pedestrian paths and trails to form the city's walkable network. Each open space has a catchment based on the proximity to the walkable network. Most residential areas (94%) are within a 400-metre walking distance (along walkable roads and paths) of at least one open space.

WHAT DID WE MEASURE?
The figures you read on this and subsequent pages are based on measurements of different types of open spaces. Noting the difference among the metrics is important for understanding provision across the city.

Any metrics for "open space" or "all open space" include all the different kinds of spaces described in Section 3.3 Open Space Classification System, like parks, civic spaces, roadway greens, campuses, cemeteries and golf courses.

Any metrics for "municipal parks" include only those City-owned spaces used as parkland, like community parks, greenways and ecological parks.

		Population			Provision (All Open Space)			
		Total population (x 1000)	Planned population increase	Population density (people/ hectare)	Total Number ***	Total hectares within neighbourhood class ***	Percent of all open spaces (by area) ***	Hectares (accessible) per 1,000 people
Citywide	2017 Baseline*	899	—	13.1	1,889	9,582	100%	7.6
	Future**	1,799	100%	26.1	—	—	—	3.8
River Valley + Ravine	2017 Baseline*	—	—	—	36	2,616	27%	—
Central Core	2017 Baseline*	77	—	47.8	157	304	3%	7.0
	Future**	248	222%	154.2	—	—	—	2.2
Mature Areas	2017 Baseline*	285	—	26.2	575	1,433	15%	8.0
	Future**	361	27%	33.2	—	—	—	6.3
Established Areas	2017 Baseline*	295	—	30.6	323	1,623	17%	7.5
	Future**	369	25%	38.3	—	—	—	6.0
Developing Areas	2017 Baseline*	239	—	16.8	588	2,195	23%	10.8
	Future**	595	149%	41.9	—	—	—	4.3
Urban Growth Areas	2017 Baseline*	1.5	—	0.2	131	595	6%	423.7
	Future**	209	13.4%	29.7	—	—	—	3.1
Industrial Areas	2017 Baseline*	1.5	—	—	78	767	8%	215.9
	Future**	15	905%	—	—	—	—	71.9

* 2017 baseline population from Edmonton Municipal Census 2016

** Approximated from approved (re)development plans and citywide projections

*** Citywide totals include Transportation Utility Corridor (not shown)

FIG. 9: Open Space Provision Summary

3.2.2 CITY-WIDE PROVISIONING

The supply of open spaces and municipal parks is presented on **MAP 7 – MAP 10**, and summarized in **FIG. 9** (facing page). Although the provision of these spaces is shown by neighbourhood, the amount of space available also includes open spaces or municipal parks accessible within walking distance (400 m) of the neighbourhood. For example, many neighbourhoods adjacent to the River Valley and Ravine System have a moderate amount of open space within their boundaries, but in reality their residents have access to a much larger amount of open space just beyond the neighbourhood borders. In this way, open space planners can account for all the open spaces that can be reasonably accessed by the residents of a neighbourhood (both within and adjacent to neighbourhood boundaries), providing a much more holistic picture of provisioning overall.

The 2017 baseline amount of open space per 1,000 residents in the City of Edmonton averages around 7.6 ha/1,000 citywide, and ranges from 7.0 ha/1,000 in the Central Core to 423.7 ha/1,000 in the sparsely populated Urban Growth Area. However, since the City's incorporation, Edmonton's population has grown at nearly an exponential rate, with total population doubling every 20 to 25 years. As a result, urban development is expected to change these values as neighbourhoods are (re)developed and more residents move into new homes.

Based on projected population increases and areas of parkland proposed in the area development and redevelopment plans approved by Council, future open space supply is estimated to be 2.2 ha/1,000 residents in the Central Core, 6.3 ha/1,000 in Mature areas, 6.0 ha/1,000 in Established areas, 4.3 ha/1,000 in Developing areas, and 3.1 ha/1,000 in Urban Growth Areas (within existing City boundaries and once buildout is complete). These findings show that the city is anticipated to remain well-served in the future with regards to open space supply, with exceptions in some Mature neighbourhoods and Downtown. However, ongoing monitoring, and a focus on open space quality, diversity and distribution, will be required as the city grows.
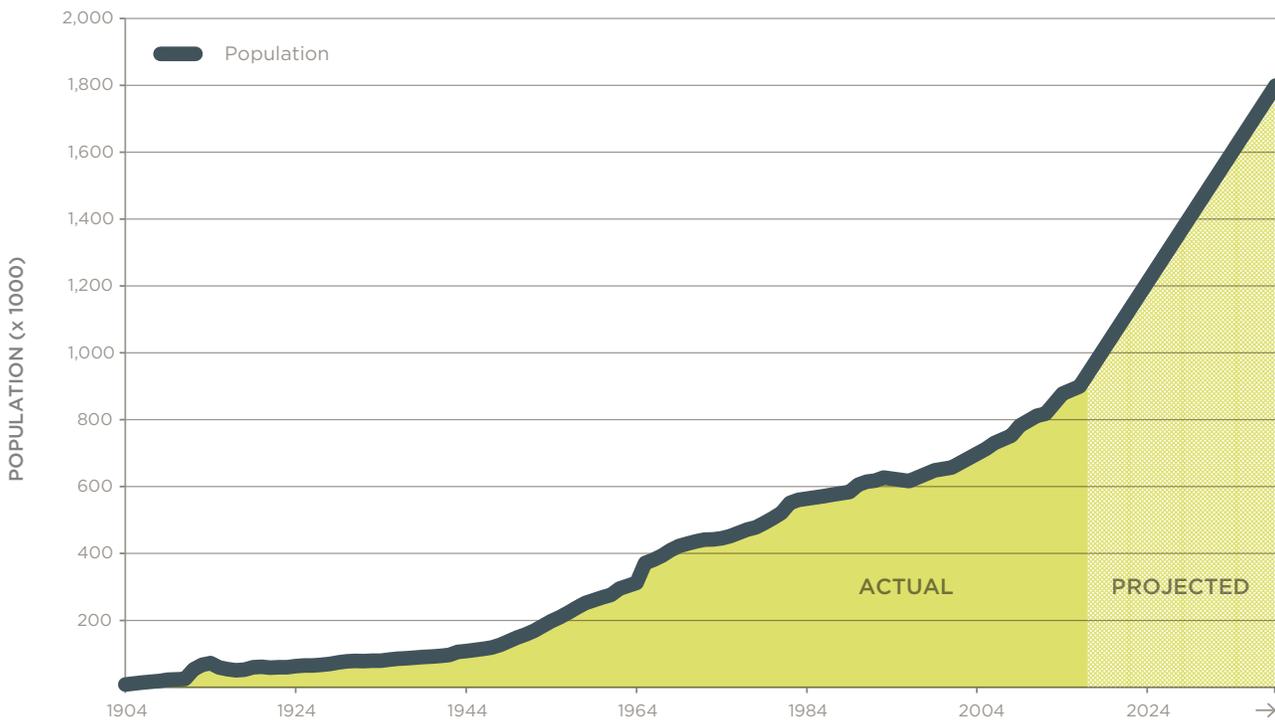
FIG. 10: Edmonton Population 1904 to future

3.2.3 CENTRAL CORE

3.2.3.1 NEIGHBOURHOOD OVERVIEW

The Central Core has a wide diversity of open spaces including municipal parks, plazas, promenades, streetscapes and the Provincial Legislature grounds. The adjacent River Valley is easily accessible to those living near its access points, which provides connections to extensive green space and multiple amenities. Walking trails and sidewalks, combined with the street grid structure, contribute to the high walkability and ease of access to existing open space. However, the total amount of both municipal parks and other publicly-accessible open space within the Central Core is limited. Residential populations will rise considerably in the future, making improvements in amount, quality and functionality of open space increasingly important. Access to private open space is also limited within higher-density areas. This, combined with the expected substantial increase in the residential population, supports the need to provide increased high-quality, multifunctional and publicly accessible open space.

While the figures supplied in approved Area Redevelopment Plans indicate that the general population of the Central Core is expected to more than double, a 2016 report to the Edmonton Public School Board shows that projected growth among school-aged children and youth is more modest. This growth accounts for a small fraction (under 1%) of the growth in school-aged population citywide. With the City of Edmonton's goal to provide a more family-friendly Central Core, additional recreational opportunities will be required in the medium and long-term to address deficits in child-oriented amenities (e.g. minor sports fields, playgrounds, nature-based play) and attract families.

The current supply of open space in the Central Core provides limited Wellness functions in terms of active spaces, trails and areas for passive relaxation.

< 2 ha per 1000 **2-4 ha** per 1000 **4-6 ha** per 1000 **6-8 ha** per 1000 **8-10 ha** per 1000 **> 10 ha** per 1000
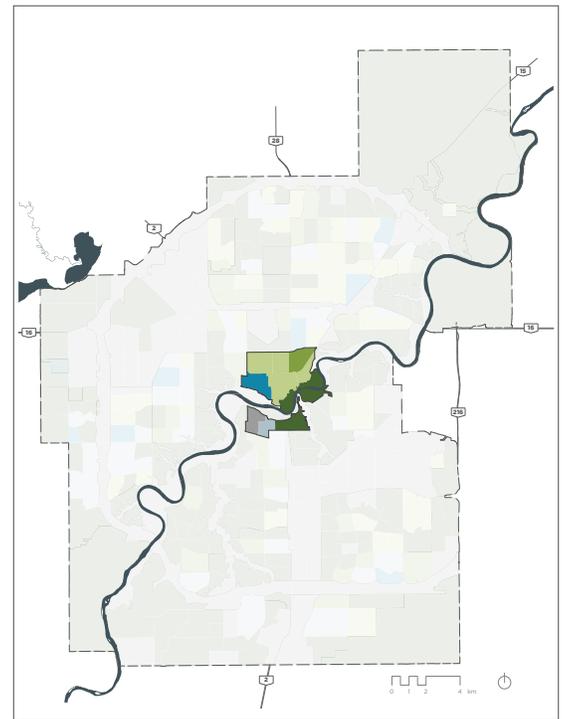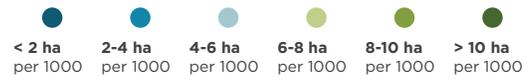
MAP 11: Central Core: Current Conditions (All Open Spaces)
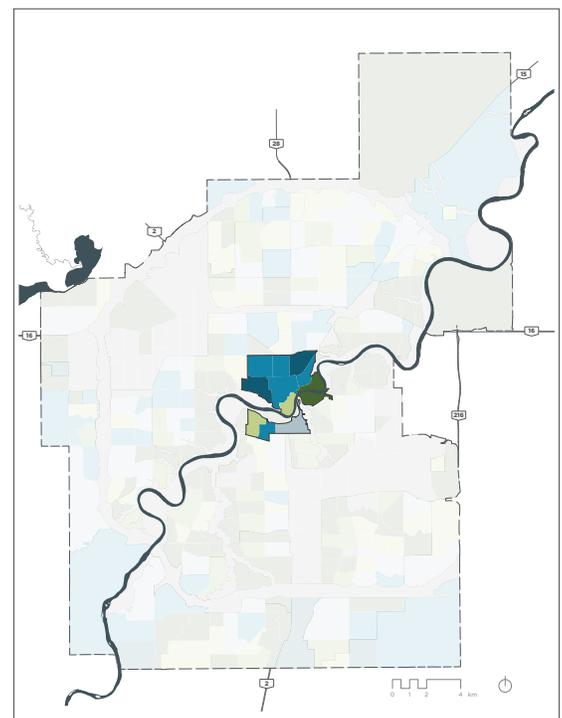
MAP 12: Central Core: Future Developments (All Open Spaces)

3.2.3.2 ISSUES

Amount and Access to Open Space

1 Population in the Central Core is expected to more than double in the future. Currently, there are 157 open spaces within the Core itself, providing 7.0 hectares of open space (within and accessible to the Core) per 1,000 people. If no additional open spaces are provided, 2.2 hectares per 1,000 people will be available in the future.

2 Over 84% of the current population is within walking distance of a municipal park of some kind. However, some of the projected population growth will occur in areas that have limited open space access. Additional parks will be needed in those areas.

3 Additional accessible parkland in the adjacent River Valley is available to those living within 400 metres of River Valley access points. Currently, if accessible parkland adjacent to the Core is included, 4.5 hectares of municipal parkland per 1,000 people (1.4 ha/1,000 in the future) is available to those living in the Core. However, this is disproportionately distributed, favouring those living near the River Valley.

4 Access to the River Valley from Downtown, Strathcona and Garneau should be improved.

5 Civic space for those living in the Core is reasonably distributed and provides approximately 0.4 hectares of civic space per 1,000 people.

6 Pedestrian connectivity of parks, greenways, enhanced streetscapes and plazas is incomplete in many areas.

7 The Legislature grounds are a highly used and recently refurbished destination space that would benefit from better pedestrian connection to the river; however, 105 St. and River Valley Rd. pose significant barriers.

METRIC	2017 Baseline*	Future**
Total Population	76,800	247,700
Provision — All Open Space		
Total number	157	—
Hectares (accessible) per 1,000 people	7.0	2.2
Provision — Municipal Parkland		
Total number	105	—
Hectares (accessible) per 1,000 people	4.5	1.4
High Function Open Spaces		
% of open spaces providing high **Ecology** function	28.9%	—
% of open spaces providing high **Celebration** function	48.1%	—
% of open spaces providing high **Wellness** function	6.4%	—
Access to High Function Open Spaces		
% of population within walking distance to high function **Ecology** spaces	55.3	—
% of population within walking distance to high function **Celebration** spaces	81.9	—
% of population within walking distance to high function **Wellness** spaces	30.2	—
Multifunctionality		
Total number providing high functionality for **3 themes**	2	—
Total number providing high functionality for **2 themes**	26	—
Total number providing high functionality for **1 theme**	72	—

* 2017 baseline population from Edmonton Municipal Census 2016

** Approximated from approved (re)development plans and citywide projections

FIG. 11: Open Space Provision (Central Core)

Quality and Functionality of Open Space

8 Among all open spaces, 6.4% provide a high level of Wellness function. Conversely, 48.1% of open spaces provide high Celebration function and 28.9% provide high Ecology function.

9 While 107 St., 104 St. and 96 St. have undergone significant streetscape improvements, other streetscapes would benefit from refurbishment.

10 Some parks in the Central Core require full redesign while many others require additional maintenance to mitigate infrastructure deterioration and to improve user satisfaction.

11 Open spaces that promote active living and relaxation are limited in the central core. With changing lifestyles and a diversifying population, this deficiency must be addressed.

12 Some open spaces are not designed for multifunction or year-round use and require additional or retrofitted amenities.

13 Seventy-three per cent of open spaces in the Central Core provide high function for either Ecology, Celebration or Wellness. Nearly 27% of open spaces do not provide high functionality for any theme. Just over 1% have high functionality for all three themes, emphasizing the need for multifunctionality as a means to support residential intensification.

Acquisition of Open Space

14 Open space acquisition in the Central Core is limited by land availability and high cost. In addition:
> Smaller parcels with diverse ownership make land assembly difficult.
> Reserve funds for land acquisition in the downtown are financed through cash in lieu collected in other parts of the city. The amount collected is based on the market value of land throughout the city, making it difficult to acquire an equivalent area of land in the downtown.
> Land values in the Central Core are appreciating faster than the accumulated value of reserve funds.
> The City must compete with other parties to acquire land in the Central Core.

3.2.3.3 PROVISION STRATEGIES

Amount and Access to Open Space

a) Provide increased delivery of currently undersupplied open space functions, particularly wellness, recreation, active living, and child friendly spaces, by providing new multifunctional parks, plazas, promenades, pathways and complete streets.

b) Increase the supply of open space in undersupplied areas of the Central Core by expanding existing open spaces when suitable opportunities arise (e.g. expand into adjacent available lands and street or lane rights-of-way). When valuable open spaces are privately owned, acquire land through opportunity purchase mechanisms.

c) Negotiate improvements and additions to publicly-owned open space and public access to privately-owned open space through:
> Cash in lieu of open space provision and density bonusing directed to Central Core open space improvements.

- For publicly accessible, but privately-owned open space, ensure design, functionality and connections are complementary to the public open space system.
- Build capacity to encourage public-private collaboration to co-create or co-produce publicly accessible open space.
- Explore creative means to cluster or combine the contributions of multiple landowners (as land or cash in lieu) to supply larger, higher quality or more functional spaces that can either be physically connected or functionally connected.

d) Design buildings, streets and alleyways to provide additional public, pedestrian-oriented open space and commercial frontage. In addition, alleyways in the Central Core should provide multiple functions for emergency, servicing, residential and commercial vehicular access, stormwater management and safe non-motorized movement.

e) Create new multifunctional open spaces through the following means:
- Convert appropriate, strategically located, vacant public parcels into parkland or civic spaces.
- Close select public roads and alleys to traffic seasonally to create temporary open spaces.
- Redesign and convert strategically located public road or lane right-of-ways to shared vehicular/pedestrian oriented open space accompanied by investment in landscape, public art and creatively-designed amenities.
- Consider creating elevated open space above laneways, rail corridors and roadways where other options are unavailable or have been exhausted.
- Encourage the use of publicly-accessible green roofs. Consider a linked system of public green roofs.

f) Connecting new and existing spaces through complete streets and strategic land acquisition or conversion of adjacent lands.

g) Enhance the Central Core's network of promenades, greenways and pedestrian-oriented streets.

h) Improve physical access to, and activation of, the River Valley and Ravine System. Expand Victoria Promenade and consider a continuous top-of-bank promenade along the River Valley edge, including the south bank in the Strathcona neighbourhood.

i) Expand and enhance the Ribbon of Steel/Railtown Greenway.

j) Use laneways, on-street bikeways and dedicated cycle routes to enhance non-motorized circulation.

Quality and Functionality of Open Space

k) Improve existing spaces by increasing design quality and providing greater multifunctionality.

l) Improve existing asset condition, through replacement, refurbishment and improved maintenance regimes.

m) Create new designed ecological space(s) in the Central Core. This may be achieved by:
- Daylighting buried watercourses (e.g. Mill Creek).
- Conversion of all, or part of, select existing parks to more ecologically-supportive species.
- Establishment of a community based "Green Streets" program to provide enhanced ecological plantings in roadway greens.

n) Maintain and enhance the urban forest of the Central Core.

o) Retrofit or upgrade aging stormwater infrastructure with more multifunctional open space amenities, where appropriate.

3.2.4 MATURE NEIGHBOURHOODS

3.2.4.1 NEIGHBOURHOOD OVERVIEW

Mature neighbourhoods comprise older, primarily low-density neighbourhoods developed in the post-war era. There has been a significant population decline in some mature neighbourhoods over the past 40 years, resulting in some school sites being declared surplus and redeveloped. However, according to the figures provided in approved Area Redevelopment Plans and resulting from significant City infill initiatives, total populations are expected to increase by approximately 27%. A 2016 report to the Edmonton Public School Board projects that school-aged children and youth are projected to increase by around 10% (from 2014 populations) by 2029, although that growth is unevenly spread among different areas; some neighbourhoods are expected to grow significantly (e.g. Griesbach and Inglewood – the former targeted for transit-oriented redevelopment) while others continue to decline, leading to further potential school closures or surplus site declarations.

The demographic profile and economic status of the neighbourhoods vary considerably. Some Mature neighbourhoods comprise the lower end of the economic distribution of the city, leading to reduced capacity of community organizations to provide matching infrastructure and park development funds. Access to programs and amenities by youth and lower income families is therefore problematic, and City-led initiatives provide real benefit for increasing broad access to recreation and educational opportunities.

The area contains a small fraction of Civic Spaces but the highest number of the city's District Parks (27%). In general, multifunctional gathering spaces are rare, and the open space inventory is dominated by Pocket and Community Parks.

| < 2 ha per 1000 | 2-4 ha per 1000 | 4-6 ha per 1000 | 6-8 ha per 1000 | 8-10 ha per 1000 | > 10 ha per 1000 |
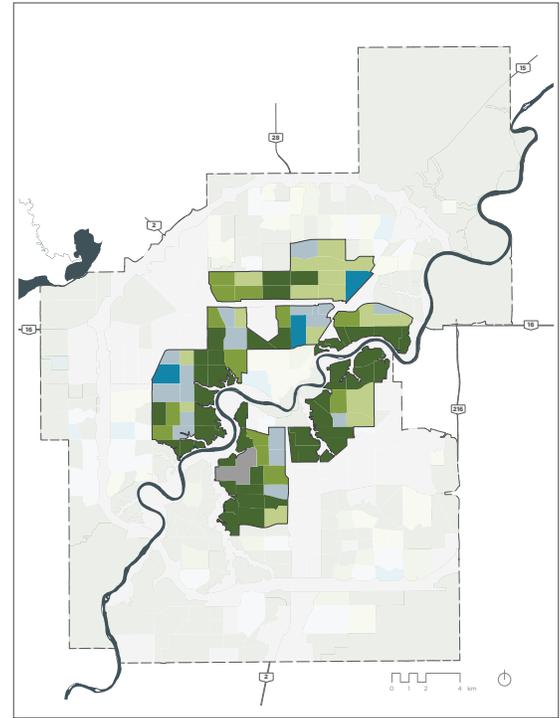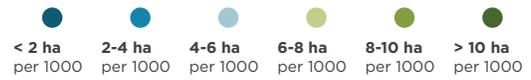
MAP 13: Mature Areas: 2017 Baseline (All Open Spaces)
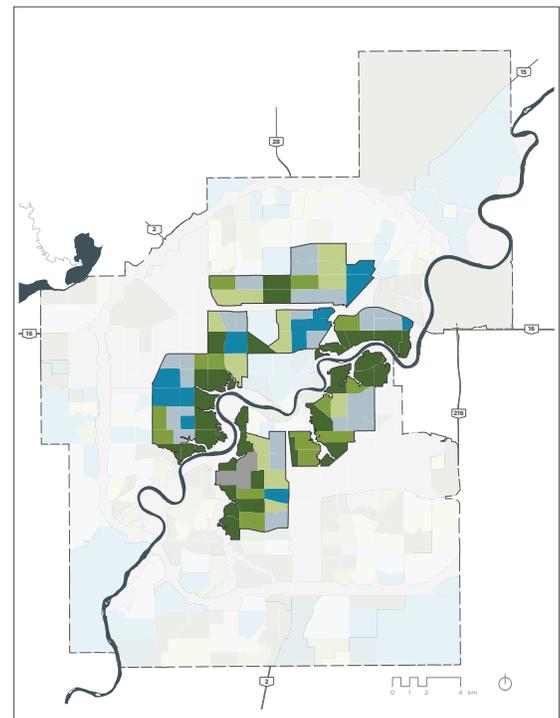
MAP 14: Mature Areas: Future Developments (All Open Spaces)

3.2.4.2 ISSUES

Amount and Access to Open Space

1 Currently, there are 575 open spaces within the area, providing 8.0 hectares of accessible open space per 1,000 people.

2 Over 87% of the current population is within walking distance of a municipal park of some kind.

3 Additional accessible parkland in the adjacent River Valley is available to those living within 400 metres of River Valley access points. Currently, if accessible parkland adjacent to Mature neighbourhoods is included, 6.3 hectares of municipal parkland per 1,000 people is available. However, this is disproportionately distributed, favouring those living near the River Valley and Ravine System.

4 Few greenways are available across this area and although 118 Ave is a vibrant cultural destination, the pedestrian connectivity of parks, greenways and enhanced streetscapes is incomplete.

5 Access across the Yellowhead Corridor partitions these areas from the communities to the north, limiting commuter travel and reducing route options for active recreation.

6 High functioning Ecology spaces make up just 13.9% of all open spaces in Mature areas. Access to natural settings is scarce for residents of these neighbourhoods (only 32.4% of the population is within walking distance of these open spaces).

Quality and Functionality of Open Space

7 Only 2.6% of open spaces provide high function for all three themes.

8 Many parks in Mature areas were developed decades ago, and there are concerns regarding the quality and safety of the amenities they provide. As many are located within lower-income

METRIC	2017 Baseline*	Future**
Total Population	284,700	360,900
Provision — All Open Space		
Total number	575	—
Hectares (accessible) per 1,000 people	8.0	6.3
Provision — Municipal Parkland		
Total number	523	—
Hectares (accessible) per 1,000 people	6.3	5.0
High Function Open Spaces		
% of open spaces providing high **Ecology** function	13.9%	—
% of open spaces providing high **Celebration** function	12.9%	—
% of open spaces providing high **Wellness** function	12.5%	—
Access to High Function Open Spaces		
% of population within walking distance to high function **Ecology** spaces	32.4	—
% of population within walking distance to high function **Celebration** spaces	33.6	—
% of population within walking distance to high function **Wellness** spaces	38.0	—
Multifunctionality		
Total number providing high functionality for **3 themes**	15	—
Total number providing high functionality for **2 themes**	29	—
Total number providing high functionality for **1 theme**	123	—

* 2017 baseline population from Edmonton Municipal Census 2016

** Approximated from approved (re)development plans and citywide projections

FIG. 12: Open Space Provision (Mature Areas)

neighbourhoods with high social vulnerability, long-term community funding of upkeep and maintenance poses challenges.

9   While the area hosts a wide variety of park types, the functionality of many of them is poor and provides limited options for activities within any given open space.

10   In some open spaces, aging infrastructure has surpassed its life cycle, requiring replacement. Other open spaces require more preventative maintenance to mitigate rapid deterioration.

11   Existing infrastructure is typically designed to accommodate neither year-round use nor diverse demographics and abilities. Such infrastructure requires adaptation and seasonal alterations.

12   Large, outdoor community gathering space is rare, and few opportunities for picnic and festival spaces exist, apart from larger, higher profile parks such as Borden or Coronation Park.

13   As demographics shift, the need for school sites has decreased, causing a need to repurpose these spaces into more functional forms.

Acquisition of Open Space

14   As the area currently has an adequate amount of open space, blanket acquisition of new lands throughout the ring of Mature neighbourhoods is not an appropriate provision strategy.

15   Targeted acquisition in underserved neighbourhoods may be necessary in cases where provision objectives are not being met.

3.2.4.3 PROVISION STRATEGIES

a)   Improve the quality and multifunctionality of parks. Many existing open spaces provide low functionality in all themes, and improvements may have great impact on the communities they serve. Improved active living and child-friendly spaces, community plazas, small designed ecological spaces, and co-location with community and recreation facilities should be considered for some parks.

b)   Retain existing public open spaces, parkland or otherwise. As the City implements infill initiatives to promote densification and as demographic regeneration occurs, a per capita provision may decrease. Sale or conversion to other land uses may appear desirable in the short term, but the long-term consequences are the permanent loss of open space from the City inventory.

c)   Land sale, together with swap or purchase of other strategic lands may be considered in some instances to rationalize the size and location of some open spaces.

d)   Select surplus school sites and other underused spaces may be repurposed into new community gathering, community garden or ecological spaces, with a focus on providing broader functionality to neighbourhoods.

e)   Encourage naturalization and Low Impact Development initiatives in underused open spaces to increase ecological functionality and mitigate flooding in Mature neighbourhoods.

f)   Improve green network connections throughout Mature neighbourhoods, especially to and from the River Valley and Ravine System.

g)   Maintain and expand multipurpose corridors along existing and future LRT lines, providing an ecological Greenway trail alignment together with transit.

h) Improve connections to the south for communities situated north of the Yellowhead Corridor, and connect to the greenways that run to the east of Inglewood and Westmount. Pedestrian and active transportation routes through this area should be prioritized, to bolster the connection from the downtown core. In addition, there is potential for a well designed multifunctional ecological park in this area.

CASE STUDY: MATURE NEIGHBOURHOODS
Work to establish better connections into the River Valley parks, and improve community walkability by increased focus on pedestrian priority streets, plazas and community gathering spaces.
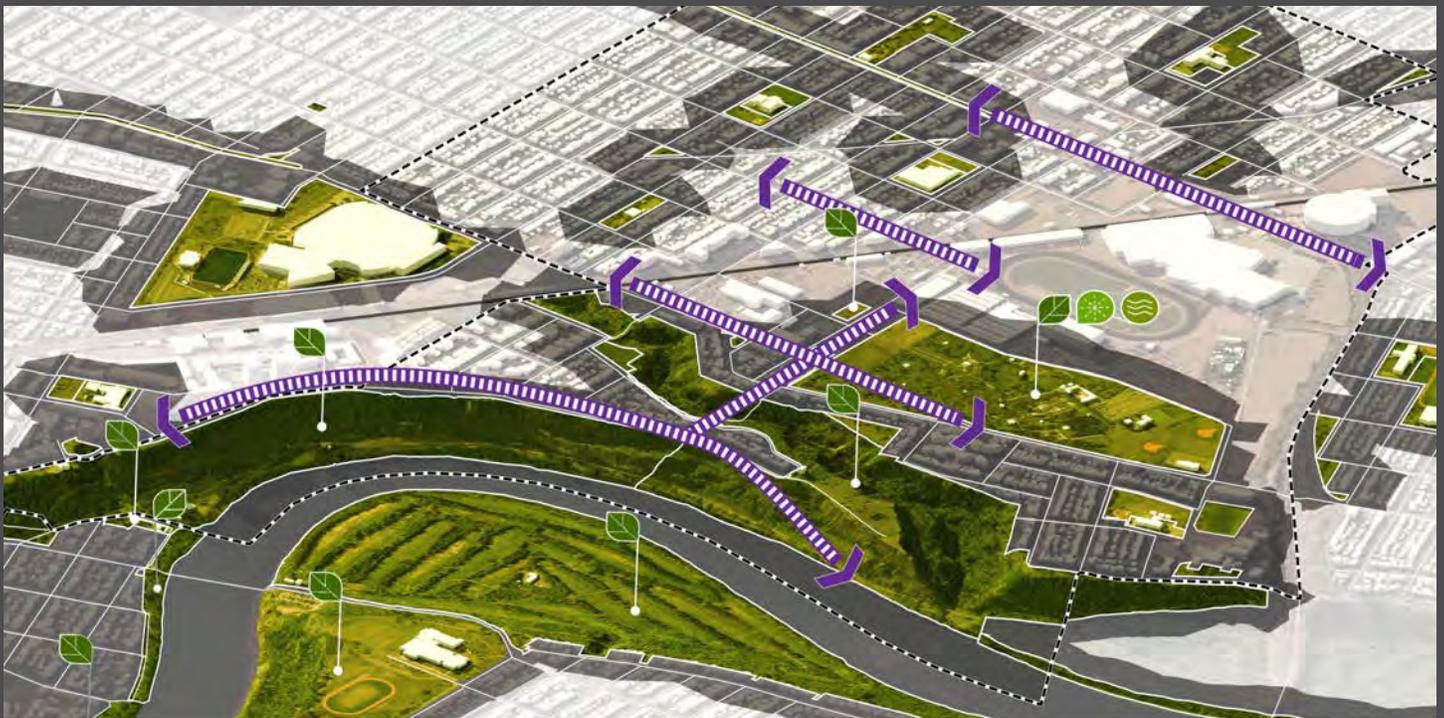
3.2.5 ESTABLISHED NEIGHBOURHOODS

3.2.5.1 NEIGHBOURHOOD OVERVIEW

Generally located between the older Mature areas and Anthony Henday Drive, Established neighbourhoods encompass development from the 1970s through to around 2000. While boasting a higher population density than most Mature neighbourhoods, Established neighbourhoods are spacious, with an overall density of 30.6 people per hectare.

A projected increase in population of 25% will bring this value up to 38.3 people per hectare. By contrast, one 2016 report to the Edmonton School Board projects that school-aged children and youth are expected to decline by over 8% (from 2014 populations) by 2029, at which point the population should stablilize. While some neighbourhoods are expected to increase in population (e.g. Beaumaris, Dunluce and Callingwood — the former two adjacent to proposed LRT extensions), other areas are expected to decline.

The 323 open spaces found in these neighbourhoods comprise 17.1% of all open spaces in the city, 235 of which are Municipal Parks. Many neighbourhoods have easy access to the River Valley and Ravine system, however neighbourhoods further from these natural features lack ready access to large natural settings.

| < 2 ha per 1000 | 2-4 ha per 1000 | 4-6 ha per 1000 | 6-8 ha per 1000 | 8-10 ha per 1000 | > 10 ha per 1000 |
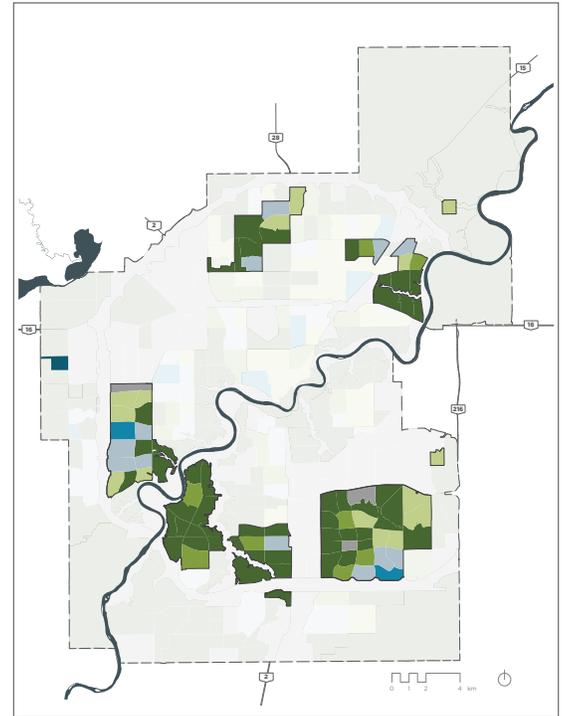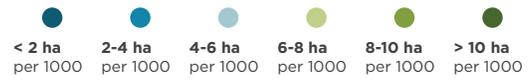
MAP 15: Established Areas: 2017 Baseline (All Open Spaces)
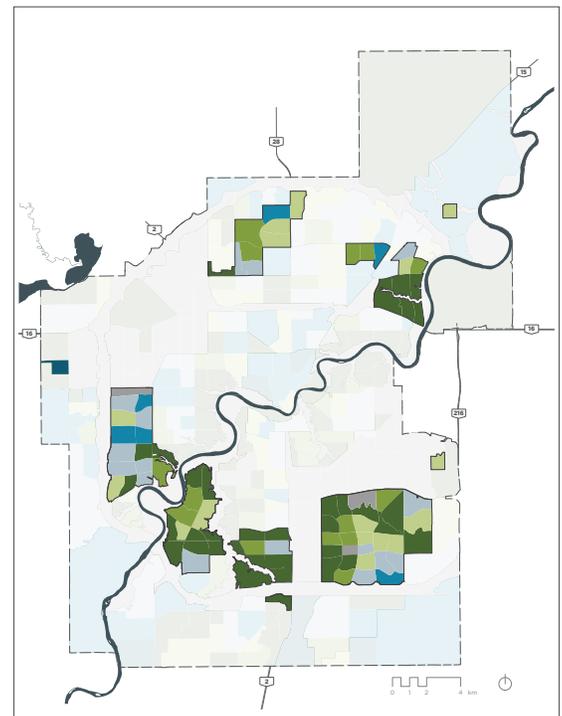
MAP 16: Established Areas: Future Developments (All Open Spaces)

3.2.5.2 ISSUES

Amount and Access to Open Space

1   The population of Established neighbourhoods will see an overall increase of approximately 25% in the future. Currently, there are 323 open spaces providing 7.5 hectares of accessible open spaces per 1,000 people.

2   Over 80% of the current population is within walking distance of a municipal park.

3   Additional accessible parkland in the adjacent River Valley is available to those living within 400 metres of River Valley access points. Currently, if accessible parkland adjacent to Established neighbourhoods is included, 6.3 hectares of municipal parkland per 1,000 people is available. However, this is disproportionately distributed, favouring those living near the River Valley.

4   Linear pipeline rights-of-way penetrate many neighbourhoods, providing long sight-lines and easy travel across long distances. Thirty per cent of the population is within walking distance of a greenway. However, these greenways and corridors are not well developed and are not presently serving as commuter or recreation spaces. Narrow, winding connectors and under-developed greenways provide connectivity between the neighbourhoods and nearby parks. When absent, adjacent neighbourhoods are poorly linked.

5   The Yellowhead Corridor partitions the Established communities in the north from the open spaces to the south, limiting commuter travel and reducing route options for active recreation. Residents in these areas tend to use and focus on parks closer to home, more than is typical in other areas of the city.

METRIC	2017 Baseline*	Future**
Total Population	295,200	369,300
Provision — All Open Space		
Total number	323	—
Hectares (accessible) per 1,000 people	7.5	6.0
Provision — Municipal Parkland		
Total number	235	—
Hectares (accessible) per 1,000 people	6.3	5.0
High Function Open Spaces		
% of open spaces providing high **Ecology** function	15.2%	—
% of open spaces providing high **Celebration** function	5.9%	—
% of open spaces providing high **Wellness** function	10.5%	—
Access to High Function Open Spaces		
% of population within walking distance to high function **Ecology** spaces	28.2	—
% of population within walking distance to high function **Celebration** spaces	16.0	—
% of population within walking distance to high function **Wellness** spaces	26.2	—
Multifunctionality		
Total number providing high functionality for **3 themes**	2	—
Total number providing high functionality for **2 themes**	11	—
Total number providing high functionality for **1 theme**	74	—

* 2017 baseline population from Edmonton Municipal Census 2016

** Approximated from approved (re)development plans and citywide projections

FIG. 13: Open Space Provision (Established Areas)

6   Similarly, the Mill Woods neighbourhoods in the southeast are isolated from the rest of the city, cut off by the industrial lands to the north and west of the residential areas. Commuter travel towards downtown via active transportation is limited. Travel routes between the east and west have few cycle routes, and heavily used arterial roads pose barriers.

7   The extensive ravine system borders many of these neighbourhoods, providing easy access to natural experiences for those who live nearby. However, a more developed pedestrian and cycle network is needed to provide a more complete connection into and along the ravine system, and into the River Valley and the Central Core.

Quality and Functionality of Open Space

8   The area hosts a wide variety of park classes of relatively large size. However, only 26.9% of these open spaces provide high function for either Ecology, Celebration or Wellness and only 0.6% provide high functionality for all three. There is a need to provide more comprehensive programming and amenities.

9   Only 16% of the population in these neighbourhoods has walkable access to Celebration spaces. There is a need for a more distributed system of gathering spaces.

10   Only 26% of the population has walkable access to high-functioning Wellness spaces and 28% has access to high functioning Ecology spaces. Neighbourhoods further from the ravine systems have less opportunity for relaxation, outdoor recreation and nature enjoyment.

11   Some aging infrastructure has surpassed its life cycle, requiring replacement and others require more preventative maintenance to mitigate rapid deterioration.

12   Older existing infrastructure is not designed for year-round use and requires adaptation and seasonal alterations.

13   As demographics shift, the need for school sites has decreased, causing a need to repurpose these spaces into more functional forms.

14   A wide variety of ethnic backgrounds are found in these areas, which may benefit from more direct community involvement in the programming of open spaces in their neighbourhoods.

3.2.5.3 PROVISION STRATEGIES

a)   Improve linkages between parks and neighbourhoods through a connected walking and cycling greenway network.

b)   Examine opportunities on select streets to transform portions of wide roadway pavements and greens to provide additional greenway pathway corridors, connecting parks and communities.

c)   Improve connections from communities to and between the River Valley and ravines.

d) Improve east-west connections between communities across industrial areas.

e) Examine the use of some parks for potential repurposing and increased functionality.

f) Examine the potential of transmission rights-of-way for other recreational or ecological spaces.

g) Revegetate roadway greens with low-maintenance species.

h) Consider revisions to vegetation and facilities in Parks to match actual use. Link maintenance regimes to type and intensity of use.

i) Refurbish sports open spaces to create high-quality spaces that encourage more people to actively use existing amenities for wellness activities, and promote co-location of recreation facilities and buildings..

j) In consultation with communities, examine the potential for the creation of ecological spaces in some parks and school yards.

CASE STUDY: ESTABLISHED NEIGHBOURHOODS
Daylighting creeks, programming linear corridors, and improving connections across industrial areas will improve the overall connectivity of these areas, providing more direct access to high functioning ecological spaces, and increase the walkable connections between neighbourhoods.
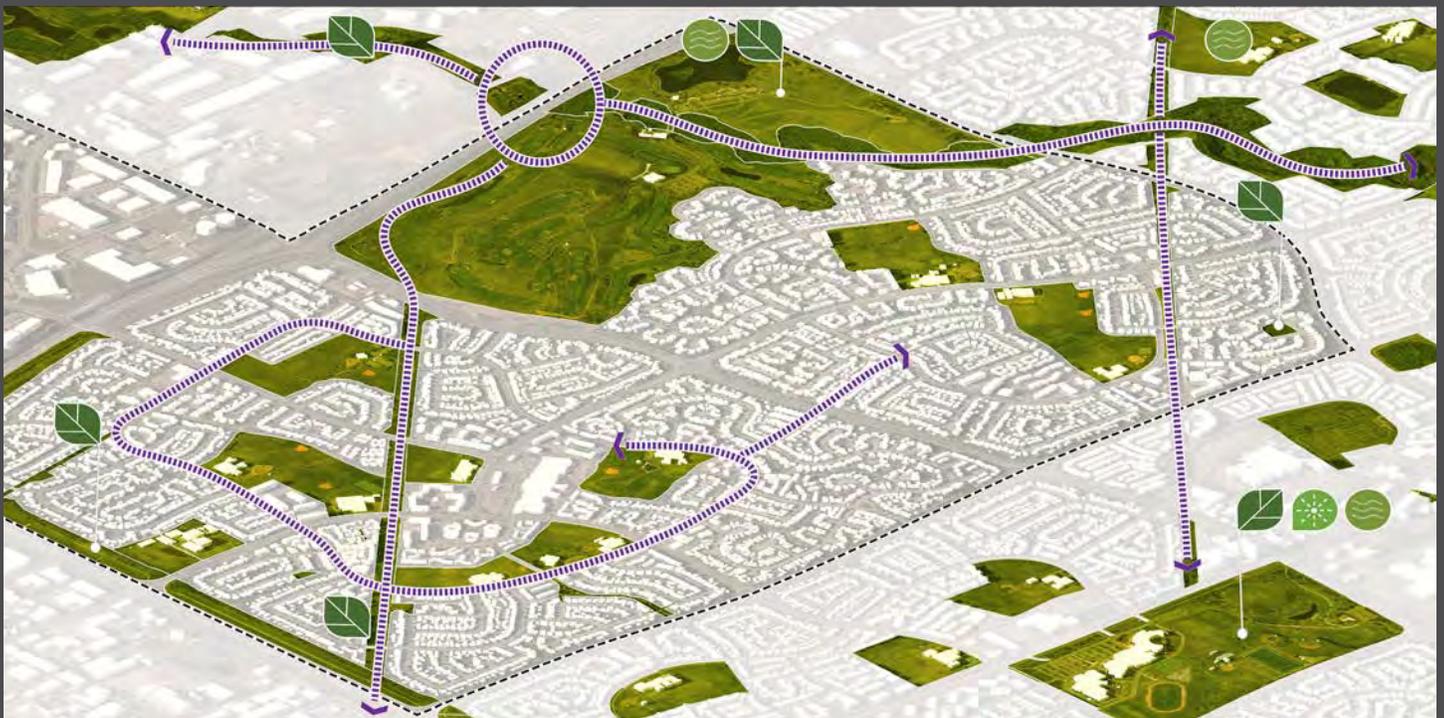
3.2.6 DEVELOPING NEIGHBOURHOODS

3.2.6.1 NEIGHBOURHOOD OVERVIEW

Developing neighbourhoods are the principal sites of Edmonton's current growth and development, located in the periphery of the City, predominantly in the central north, southwest and southeast. While many of these areas are already built, extensive near-term development is ongoing, and the current population is expected to see an increase of 149% based on the figures provided in approved (re)development and strategic plans. In particular, developing areas are projected by a 2016 report to the Edmonton Public School Board to account for almost 90% of the growth in school-aged children and youth by 2029, placing further pressure on Reserve dedications to supply land for school and joint use sites.

Most developments in the south of the city occur outside the Anthony Henday Drive, posing significant access challenges for residents seeking to use active transportation. As these areas are currently under development, much planned parkland has not been constructed or programmed, and may be subject to change as the communities they serve form around them. Currently, a high proportion of the population in these areas has walkable access to high-functioning Ecology open spaces. However, it remains to be seen how this functionality is impacted as populations increase and subdivision development continues.

Few residents have walkable access to high-functioning Wellness or Celebration spaces, but as programming and amenities are developed, better access may be realized. Similarly, it remains to be seen what challenges these areas will bring to the City with regards to their long-term upkeep, maintenance and programming, and the funding provisions that sustain them.

● < 2 ha per 1000	● 2-4 ha per 1000	● 4-6 ha per 1000	● 6-8 ha per 1000	● 8-10 ha per 1000	● > 10 ha per 1000
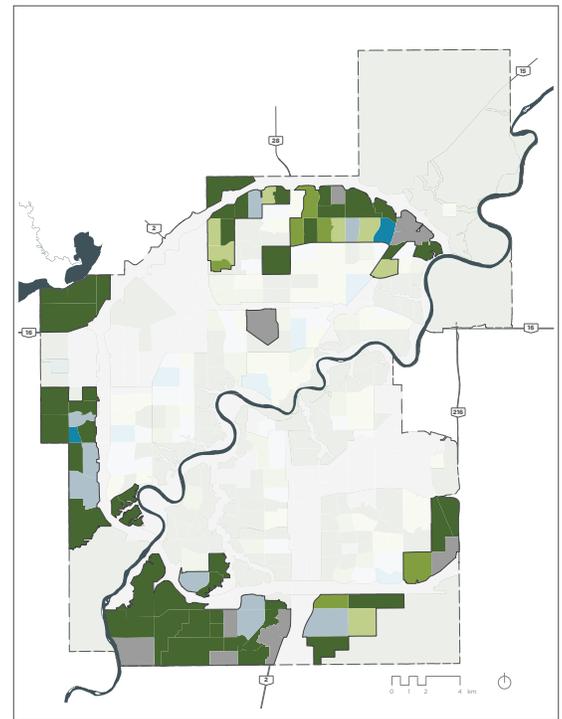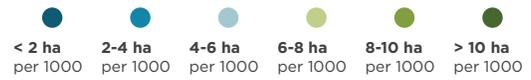
MAP 17: Developing Areas: 2017 Baseline
(All Open Spaces)
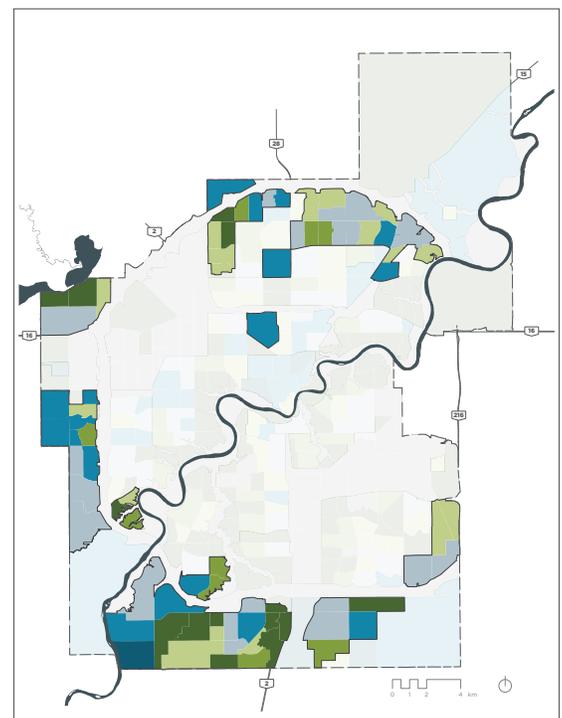
MAP 18: Developing Areas: Future Developments
(All Open Spaces)

3.2.6.2 ISSUES

Amount and Access to Open Space

1 Developing neighbourhoods will see an overall population increase of approximately 149% in the future. Including built and approved open spaces, there are 588 open spaces within the area, providing 10.8 hectares per 1,000 people (including the accessible parks surrounding these neighbourhoods).

2 Over 80% of the current population is within walking distance of a municipal park of some kind.

3 Limited access across Anthony Henday Drive partitions the Developing communities in the west and south from the communities and ravine system in the metropolitan core, limiting commuter travel and reducing route options for active recreation. Residents in these areas must rely on automobiles and transit to access the bulk of the City's open spaces.

4 There are no Main Streets or Pedestrian Priority Streets in Developing neighbourhoods. Connector pathways are commonplace, but lack programming, wayfinding or other amenities to encourage their use.

Quality and Functionality of Open Space

5 Multifunctionality in these areas is currently limited. Only 17.7% of these open spaces provide high function for Ecology, Celebration or Wellness, and only 1% provides high functionality for two. No open spaces in this area provide high functionality for all three themes. More comprehensive programming and amenities are needed as these neighbourhoods develop.

METRIC	2017 Baseline*	Future**
Total Population	238,900	594,600
Provision — All Open Space		
Total number	588	—
Hectares (accessible) per 1,000 people	10.8	4.3
Provision — Municipal Parkland		
Total number	451	—
Hectares (accessible) per 1,000 people	9.4	3.8
High Function Open Spaces		
% of open spaces providing high **Ecology** function	16.7%	—
% of open spaces providing high **Celebration** function	2%	—
% of open spaces providing high **Wellness** function	1%	—
Access to High Function Open Spaces		
% of population within walking distance to high function **Ecology** spaces	32.5	—
% of population within walking distance to high function **Celebration** spaces	4.5	—
% of population within walking distance to high function **Wellness** spaces	2.7	—
Multifunctionality		
Total number providing high functionality for **3 themes**	0	—
Total number providing high functionality for **2 themes**	6	—
Total number providing high functionality for **1 theme**	104	—

* 2017 baseline population from Edmonton Municipal Census 2016

** Approximated from approved (re)development plans and citywide projections

FIG. 14: Open Space Provision (Developing Areas)

6 Only 4.5% of the population in these neighbourhoods has walkable access to Celebration and community spaces. There is a need for a more distributed system of gathering spaces and associated community facilities.

7 Only 2.7% of the population has walkable access to high-functioning Wellness spaces, but 70% has access to high-functioning Ecology spaces. Further development may provide increased access to Wellness functions as parks are further assembled and developed over time. Future park development should not compromise existing ecological functions.

8 Currently, the high fraction of children and youth make school sites a high demand use of open spaces. However, there is a need to ensure that these spaces provide broader multifunctionality to serve the entire community.

9 A diversity of ethnic backgrounds are found in these areas, dominated by young families who may benefit from more direct community involvement in the programming of their neighbourhoods' open spaces.

3.2.6.3 PROVISION STRATEGIES

a) Ensure linkages between parks and neighbourhoods are secured through a connected walking and cycling greenway network, including connecting structures over or under Anthony Henday Drive and Whitemud Drive where appropriate.

b) Examine opportunities on select streets to transform portions of wide roadway pavements and boulevards to provide additional greenway or pathway corridors, connecting parks and communities.

c) Improve connections from communities to and between the River Valley and ravines.

d) Ensure that proposed park developments contain amenities and infrastructure that can be practically maintained over the long term.

e) Ensure new and existing parks are designed and programmed to increase the multifunctionality of the space. Consider the need for multi-generational and culturally appropriate activities in response to more diverse ethnic populations.

f) Examine the potential of transmission rights-of-way for other recreational or ecological spaces, where possible.

g) Vegetate roadway greens with low-maintenance species.

h) Consider revisions to vegetation and facilities in parks to match actual use. Link maintenance regimes to type and intensity of use.

i) Develop sports open spaces to create high-quality spaces that encourage more people to actively use facilities for wellness activities, and promote co-location of recreation facilities and buildings.

j) In consultation with communities, examine the potential for the creation of ecological spaces in some parks and school yards

CASE STUDY: DEVELOPING NEIGHBOURHOODS

Improving the multifunctionality of parks and open spaces will provide better opportunities for provision as these areas are further developed. Increased programming and use of the linear spaces in these neighbourhoods will help to foster community connections.
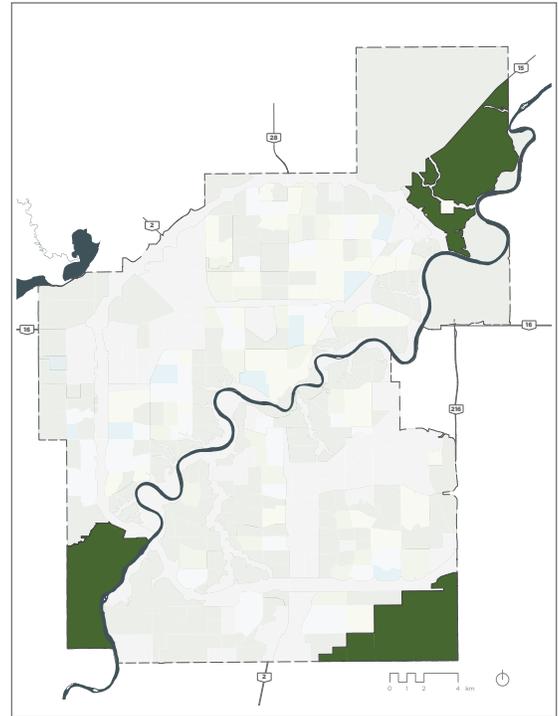
3.2.7 URBAN GROWTH AREAS
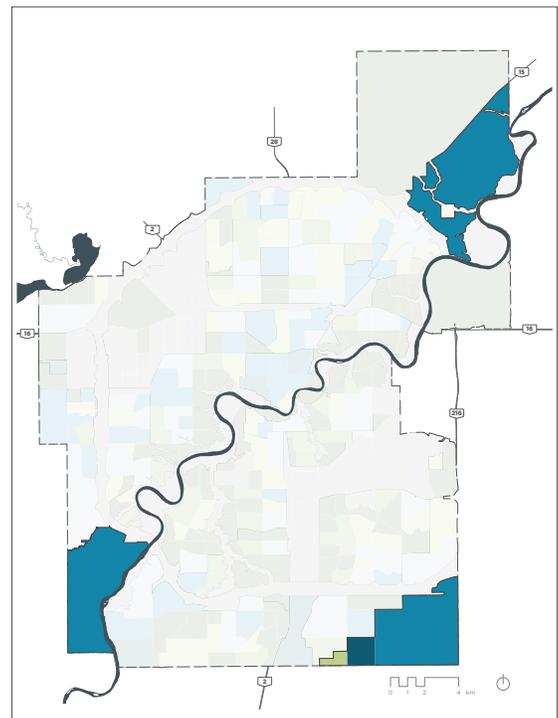
3.2.7.1 NEIGHBOURHOOD OVERVIEW

The Urban Growth Areas are large regions of planned greenfield development in the northeast, southwest and southeast of the city. Currently, these areas have sparse rural dwellings, interspersed with agricultural lands and stretches of undisturbed native forest, rolling hills and wetlands. However, over the coming decades, an increase of approximately 200,000 individuals has been approved in varying densities across this area, bringing a wholesale transformation of this landscape. In particular, a report to the Edmonton Public School Board indicates that these areas are projected to account for almost 90% of the growth in school-aged children and youth by 2029, which places pressure on Municipal Reserve dedications to supply land for school and joint use sites.

Approximately 470 hectares distributed across over 118 planned parkland sites are identified as part of the approval for these developments, presenting the City with an opportunity for the concerted development of a green network in these areas. At the same time, their large anticipated population makes the provisioning of highly multifunctional spaces a high priority. Planned open spaces provide an estimated future 3.0 hectares of municipal parkland per 1,000 people, in accordance to the 2.0 hectares/1000 provision standard under which they were planned and approved.

The relatively undisturbed nature of the landscape in these areas provides the opportunity to ensure that significant natural, heritage and agricultural features are maintained during development. The City must work to ensure developers are aware of the value of the lands they intend to develop. Additionally, the City must work to deliver comprehensive programming for parkland in this area, to ensure that new developments offer a sense of place and community. As these areas are far removed from the metropolitan core, a strategy to ensure the provision of transit and active transportation linkages from these peripheral regions will help to keep the city connected.

< 2 ha per 1000	2-4 ha per 1000	4-6 ha per 1000	6-8 ha per 1000	8-10 ha per 1000	> 10 ha per 1000

MAP 20: Urban Growth Areas: 2017 Baseline (All Open Spaces)

MAP 19: Urban Growth Areas: Future Developments (All Open Spaces)

3.2.7.2 ISSUES

Amount and Access to Open Space

1 The population of Urban Growth Areas will see an overall increase in the future. There are 131 existing and approved open spaces within the area, providing 423.7 hectares per 1,000 people (including open spaces within walking distance of these neighbourhoods). Based on projected population growth, this figure settles at 3.1 ha/1,000 in the future.

2 Only 57% of the potential future population will be within walking distance of a municipal park of some kind. Planning for transit, cycle connections and vehicular access will be critical to ensure that parks are well attended once developed.

3 Limited access across Anthony Henday Drive may pose a challenge to commuters and park-users. Although the eventual LRT extension in the northeast and south will offer flexible commuting options, many may rely on automobiles to access the bulk of the city's other open spaces.

4 Reliance on collector roads that have high traffic volumes and restricted access points via "estate entries" may result in a limited number of neighbourhood access points.

5 Current plans highlight a lack of accessible civic spaces and pedestrian priority streets.

6 Metropolitan Parks and the core of the River Valley will be poorly accessible.

METRIC	2017 Baseline*	Future**
Total Population	1,500	209,100
Provision — All Open Space		
Total number	131	—
Hectares (accessible) per 1,000 people	423.7	3.1
Provision — Municipal Parkland		
Total number	108	—
Hectares (accessible) per 1,000 people	401.4	3.0
High Function Open Spaces		
% of open spaces providing high **Ecology** function	30.7%	—
% of open spaces providing high **Celebration** function	6.6%	—
% of open spaces providing high **Wellness** function	0	—
Access to High Function Open Spaces		
% of population within walking distance to high function **Ecology** spaces	30.7	—
% of population within walking distance to high function **Celebration** spaces	6.6	—
% of population within walking distance to high function **Wellness** spaces	0	—
Multifunctionality		
Total number providing high functionality for **3 themes**	0	—
Total number providing high functionality for **2 themes**	5	—
Total number providing high functionality for **1 theme**	44	—

* 2017 baseline population from Edmonton Municipal Census 2016

** Approximated from approved (re)development plans and citywide projections

FIG. 15: Open Space Provision (Urban Growth Areas)

7   Recently approved area structure plans include densities approaching 35-40 units per hectare. The allowable Municipal Reserve (MR) dedication amount has been sufficient to provide for existing provision standards (2.0ha/1,000) in recent ASPs (e.g. Decoteau, Riverview). However, increasing the area per population standard or increasing population densities may prove taxing on the fixed MR availability.

Quality and Functionality of Open Space

8   As open spaces in these neighbourhoods are planned and programmed over time, high functioning spaces must be maintained and park plans implemented to highlight existing and increase overall functionality of these and other spaces.

9   The natural connections provided by the existing River Valley and Ravine System in these areas must be preserved and their characteristics more closely studied to ensure that natural functioning in these lands is not unduly disturbed or disrupted.

3.2.7.3 PROVISION STRATEGIES

a) Adopt a "No Net Loss" strategy for preserving existing high functioning lands, and mitigate potential disturbances as these areas are developed.

b) Design new open spaces in Urban Growth Areas that are multifunctional and support active/passive recreation so that spaces are flexible, visible, accessible and functional.

c) As these areas are predicted to see high proportions of children and youth, park amenities should reflect this to provide a range of attractive recreational and social elements (e.g. skateboard park, sports courts, social gathering spaces), while ensuring they remain attractive and functional over time, for a variety of ages and abilities.

d) Ensure that neighbourhoods are well-connected and provide multi-modal transportation linkages between residential areas and destinations, including connecting structures over or under Anthony Henday Drive and Whitemud Drive where appropriate.

e) Cluster compatible and complementary services to create activity centres or neighbourhood hubs that serve the greatest number of residents.

f) Plan for weather and all seasons through enhanced open space design.

CASE STUDY: URBAN GROWTH AREAS
Planned development in greenfield areas must take advantage of existing natural features to ensure the provisioning of high functioning ecological spaces. Connections between the new areas and existing developments will require planning to prevent these areas from being isolated from the rest of the city.

3.2.8 INDUSTRIAL NEIGHBOURHOODS

3.2.8.1 NEIGHBOURHOOD OVERVIEW

The Industrial areas of Edmonton are distributed predominantly in the northwest, the northeast and the southeast. While few people reside in these areas, they are the site of employment for many in the city. They also contain a variety of open spaces, providing recreation, relaxation and access to nature for those working in this area.

However, the industrial focus of these lands poses serious challenges to the connectivity and functioning of the green network. Fifty per cent of the open spaces in Industrial areas do not provide any high functionality, and of the remainder, 44.9% provide only a single high function (predominantly Ecology, although a handful of sites have Celebration functionality).

The primary challenges of open space management in these areas include the maintenance of ecological connectivity between open spaces, the provision of better Wellness functionality in parks near industrial campuses, and the access challenges posed by large industrial lots and high traffic roads.

● < 2 ha per 1000	● 2-4 ha per 1000	● 4-6 ha per 1000	● 6-8 ha per 1000	● 8-10 ha per 1000	● > 10 ha per 1000
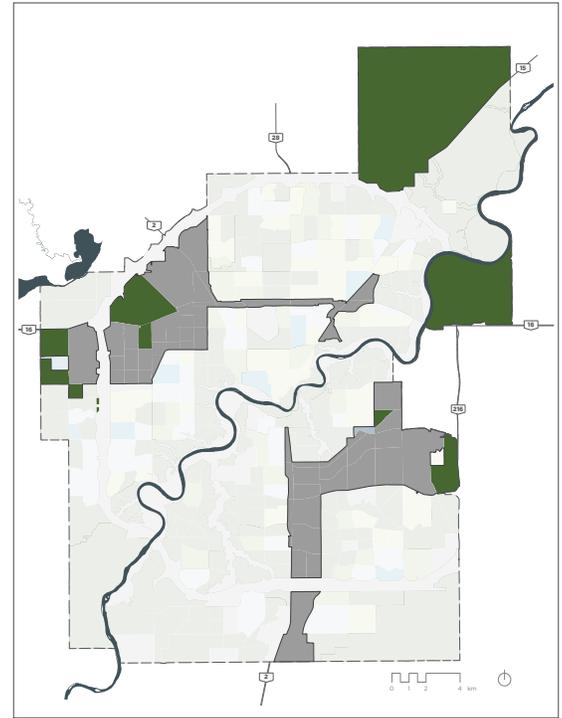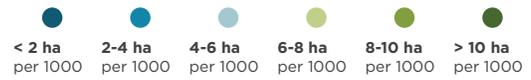
MAP 21: IndustrialAreas: 2017 Baseline (All Open Spaces)
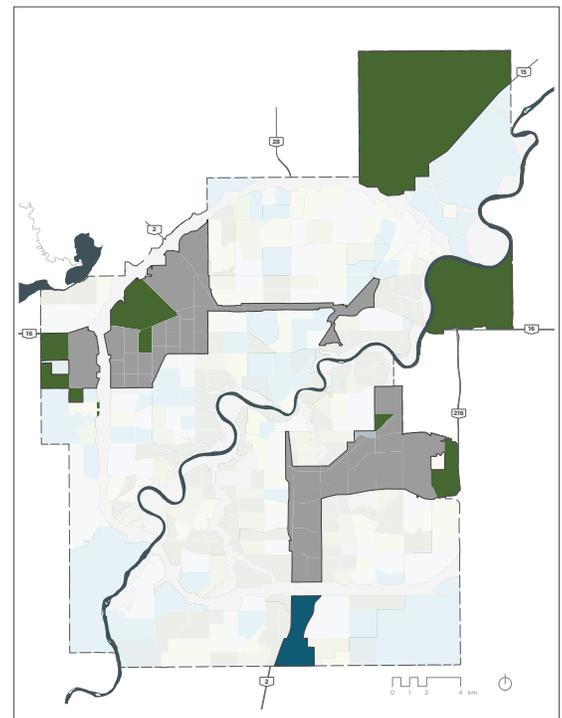
MAP 22: Industrial Areas: Future Developments (All Open Spaces)

3.2.8.2 ISSUES

Amount and Access to Open Space

1   A total of 78 open spaces are found in the Industrial areas, of which 82% are municipal parks. Access to and use of these parks by those working in the area is a challenge, as lack of sidewalk infrastructure, fencing and large block sizes make pedestrian or active transportation access problematic.

2   The industrial lands to the north and west of Mill Woods pose a major hurdle to recreational and commuter-based active transportation, as the Mill Creek ravine is disrupted by industrial yards and railway lines.

3   From an ecological perspective, the highly transformed landscape of Industrial areas makes an inhospitable matrix, even when surrounding high-functioning open spaces.

Quality and Functionality of Open Space

4   Since the industrial matrix poses challenges to natural processes in less disturbed landscapes, it is remarkable that 46% of the open spaces in these areas display high Ecology functionality. It is important to preserve and expand this functionality. However, it is also imperative that these areas do not act as population sinks for wildlife in the surrounding lands. Attractive natural areas, surrounded by a highly inhospitable matrix, can draw wildlife into areas in which they are likely to experience high mortality. Connectivity into the surrounding lands should, therefore, be carefully managed.

5   The Industrial areas are not presently described in terms of the nature of the industrial use found within them. This makes it difficult to identify the nature of the disturbances that wildlife will experience in these areas.

METRIC	2017 Baseline*	Future**
Total Population	5,100	15,400
Provision — All Open Space		
Total number	78	—
Hectares (accessible) per 1,000 people	215.9	71.9
Provision — Municipal Parkland		
Total number	61	—
Hectares (accessible) per 1,000 people	575.6	57.3
High Function Open Spaces		
% of open spaces providing high **Ecology** function	46.5%	—
% of open spaces providing high **Celebration** function	9%	—
% of open spaces providing high **Wellness** function	1.3%	—
Access to High Function Open Spaces		
% of population within walking distance to high function **Ecology** spaces	11.2	—
% of population within walking distance to high function **Celebration** spaces	2.7	—
% of population within walking distance to high function **Wellness** spaces	0.5	—
Multifunctionality		
Total number providing high functionality for **3 themes**	0	—
Total number providing high functionality for **2 themes**	4	—
Total number providing high functionality for **1 theme**	36	—

* 2017 baseline population from Edmonton Municipal Census 2016

** Approximated from approved (re)development plans and citywide projections

FIG. 16: Open Space Provision (Industrial Areas)

6 The extensively graded nature of industrial lots has highly disturbed the natural watercourses of these areas. Stormwater management and runoff from industry are significant issues that must be jointly managed across City operations.

3.2.8.3 PROVISION STRATEGIES

a) Where feasible, daylighting disturbed watercourses, coupled with connections to pathway networks in surrounding neighbourhoods, will help to lessen the barrier effect of these Industrial areas.

b) Explore the potential of Industrial areas to supply lands for district or metropolitan level parks, or for specialty community or recreational facilities, where land assembly in residential areas is unfeasible or undesirable. Location of parkland or facilities should be encouraged in Industrial areas where such uses would not create nuisance noise, lighting, traffic or parking for neighbouring residential areas (e.g. large sports tournament sites). Agreements with area business owners should be encouraged to supply shared parking, where usage of the parkland or facility occurs primarily outside business hours. Appropriate site access, including transit and safe active transportation connections, must be maintained.

c) Residential development, mixed-use development or live-work development within industrial neighbourhood types must be supplied with open space.

d) Acquire lands for green buffers between incompatible uses where setbacks are insufficient to mitigate nuisance or hazard.

e) Use Environmental Reserve dedications to protect existing wetlands and watercourses.

f) Where appropriate, industrial redevelopment should ensure more diverse industrial campuses, complete streets, bioswales, constructed wetlands (including public access pathways for area employees) and active transportation greenways as part of the 30% required public utilities/ROW dedication.

3.3 Open Space Classification System

Edmonton's open spaces provide a wide range of functions through a variety of hardscaped, landscaped and natural spaces. This can include small pocket parks where children gather to play; large natural areas with extensive trail systems; public plazas that host music concerts, farmers' markets and festivals; and community parks where schools, sports fields and community spaces are located.

Although municipal parkland forms the core of any green network, the *Green Network Strategy* is designed to consider open spaces from a holistic perspective. This means that open spaces like road boulevards, utility corridors and pathways are valued for their important role in connecting different parts of the network. Ecological parks provide wildlife habitat and climate regulation services, even though they might not have many amenities for humans. Main streets are useful for transportation purposes, but they also provide opportunities for social interaction on the sidewalk or patio, and for celebration during special events.

A classification system is useful to characterize different types of open space for the purposes of management and strategic implementation. The *BREATHE* classification system encompasses the many ways that Edmontonians use and benefit from open spaces. The *Green Network Strategy* considers City-owned parks, civic spaces, campuses, other public lands and the connections among them.

Distinguishing among these categories enables the City and its community partners to tailor their planning and management activities to the amenities, objectives and service guidelines specific to each open space type. For example, most people will drive or take transit to destination spaces, such as festival grounds, stadiums or metropolitan parks, but will walk to their local playground or community park. Transportation-mode characteristics such as these could help planners decide which types of open spaces need more parking, and which need better pedestrian or cycling access.

Open space classes represent the different types of open space, such as community parks, greenways, school sites, main streets, etc. All classes are organized into **thematic groups** based on the roles that different open spaces play in the green network. The classes within each group typically have a similar managing entity, amenities, access or purpose, making these groups a convenient basis for developing planning objectives in the remainder of this Strategy.

The open space classification system is illustrated in **APPENDIX B,** along with a complete description of the classification system.

Municipal Parks are the "backbone" of the green network. Collectively, they are intended to provide comprehensive open space multifunctionality to their respective catchment areas, including opportunities for recreation, relaxation and introspection, social and spiritual fulfillment, nature appreciation, heritage appreciation, learning and events. They also support ecological functions such as water management, climate regulation and wildlife habitat. Municipal parks include:

» Metropolitan parks (e.g. Borden Park)
» District parks (e.g. The Meadows District Park)
» Community parks (e.g. Giovanni Caboto Park)
» Pocket parks (e.g. Michael Phair Park)
» Ecological parks (e.g. Poplar Lake)
» Greenways (e.g. Hazeldean Greenway)

Civic Spaces are City-owned gathering places that are largely hard landscaped and are associated with more commercial, institutional or mixed land-uses. They typically support good urban design, and ideally perform social or celebratory functions in the network. Civic spaces include:

» Squares, plazas and promenades (e.g. Sir Winston Churchill Square)
» Main streets (e.g. Jasper Avenue)
» Pedestrian-priority streets (e.g. the Armature)

Corridors are vegetated spaces that feature a trail, pathway, maintained grass (turf) or naturalized vegetation connecting adjacent neighbourhoods, roads or core open spaces. Corridors may or may not be located in association with roadways or utility corridors. Corridors include:

» Connectors (e.g. neighbourhood pathway corridors)
» Roadway greens
» Utility corridors (e.g. Hodgson Altalink Utility Corridor)

Other Jurisdictional Parkland. Many important cultural, social, natural or recreational parks are managed by other jurisdictions (e.g. the Government of Alberta). These spaces are often developed and/or maintained in partnership with the City, and provide valuable open space functions at the community and city level. Other jurisdictional parkland includes:

» Campuses (e.g. University of Alberta)
» Provincial parkland (Provincial Legislature grounds)
» Federal parkland (none currently existing)

Other Public Open Space. There are several types of "other" open spaces that are part of the green network from a functional perspective, but are not "parks." Some of these lands are not currently formally managed as open spaces, but still function as open spaces by providing green cover, acting as gathering spaces or otherwise contributing to the functions of open space. Some of these open spaces may eventually be developed into other land uses (e.g. select vacant city holdings). Other public open space include:

» Special purpose facilities (e.g. River Valley Zoo)
» School sites
» Municipal cemeteries (e.g. South Haven Cemetery)
» Municipal golf courses (e.g. Riverside Golf Course)
» Select vacant City holdings
» Utility lots

Because of implementation challenges, this Strategy does not contain a separate category for River Valley and Ravine parks. The *Green Network Strategy* considers the open spaces of the River Valley and Ravine system within the categories of the classification system (e.g. metropolitan parks, municipal golf courses, special purpose facilities, etc.).

Several other documents are available to help the City plan the River Valley and Ravine system in a cohesive manner, such as the Ribbon of Green and North Saskatchewan River Valley Area Redevelopment Plan. These documents and others should be consulted in concert with the *Green Network Strategy* to address the unique preservation and connectivity issues in these spaces.

breathe

EDMONTON'S GREEN NETWORK STRATEGY