

ENVISIONING THE AREA NORTHEAST OF SASKATOON – WHAT DOES IT LOOK LIKE IN 2041?



PSI 2016

PROJECT ORIGINS

- **Project Objective:**
 - A sustainability focus 25+ year aspirational development plan to help guide the development of communities in the Northeast region of Saskatoon.
- **Reasoning behind our grand objective:**
 - To gain valuable real world skills
 - To explore a current and a relevant challenge our region: a balance between ecological preservation and urban development
 - To create a document which could be utilized in the future by members of the community or the City of Saskatoon.
- **Project Principles**
 - Cultural and Heritage Preservation
 - Collaborative Governance
 - Ecological Stewardship
 - Social equity

PROJECT PLAN

PHASE 1: RESEARCH

Objective: To gather all pertinent information within the community.



PHASE 2: COMMUNITY ENGAGEMENT

Objective: To gather information from the community members.



PHASE 3: ANALYSIS OF FINDINGS

Objective: To synthesizing all data collected from the community engagement and the research collected.



PHASE 4: RECOMMENDATIONS

Objective: To complete a final report and present findings to you!!!

ACKNOWLEDGEMENTS

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Dr. Ernie Walker

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Prairie Wild Consulting: Samantha Mark, Danny Roy, John Gyepi-Garbrah

Office of Sustainability

Office of Community Engagement and Outreach

Geography Department

MOMENTUM 2016

PRESENTATION OVERVIEW

Background and Context

- Current state of area

Community Engagement

- Insight into the process of collecting community feedback

Project Focus Areas

- Culture and Heritage
- Ecological Sensitivity
- Land Use
- Transportation Active and Motorized
- Utilities, Infrastructure, and Waste Management

Presentation Conclusion

- Project Learnings

BACKGROUND AND CONTEXT

- Current lay of the land
 - Demography
 - Existing Plans and Policies
 - Future Plans: Where is the Region Going?
 - Challenges of Cross Administrative Boundaries and Sustainable Governance

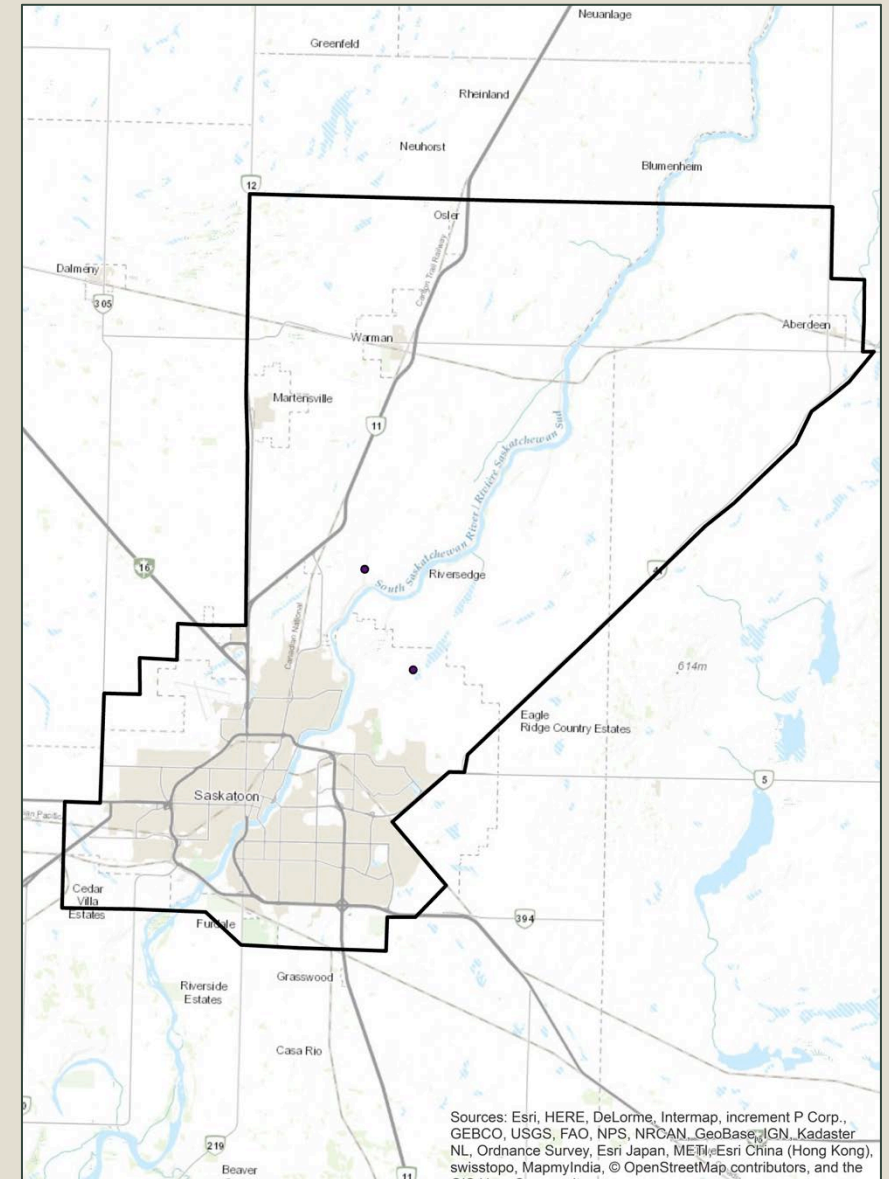


PSI Study Area Current Demography	
Population Total:	275,689
Declared First Nations Total:	25,627

Source: Esri ArcGIS 2016

MAP OF STUDY AREA

- Inclusion of the entire length of the Northeast Swale
- Wanuskewin Heritage Park
- First Nations Urban and Rural Lands and Land Holdings
- 2 R.Ms
- Various Country-Residential Divisions
- 2 Townships
- 3 Cities



Plans and Policies: Existing Governance Structures

Category	Name	Year	Life
Legislation:	Planning and Development Act	2007	-
	Municipalities Act	2005	-
Watershed Plans	South Saskatchewan River Watershed: Source Water Protection Plan	2007	Ongoing
Regional Plans:	The Meewasin Valley Project: 100 Year Concept Plan	1979	100 Years
	The Meewasin Valley Authority Strategic Plan	2014	2014-2024
	The Meewasin Valley Trail System Plan	1990	-
	The Meewasin Northeast Swale Master Plan	2015	-
Official Community Plans:	RM of Aberdeen	-	-
	The RM of Corman Park OCP	2015	-
	The Corman Park - Saskatoon Planning District OCP	2010	-
	The Town of Aberdeen OCP	2014	-
	The Town of Osler OCP	2013	20 Years
	The Town of Martensville OCP	2008	20 Years
	The City of Warman OCP	2015	20 Years
The City of Saskatoon OCP	2015	Strategic Plan 2012-2022	
Forthcoming Plans:	Saskatoon North Partnership For Growth	-	60 Years

COMMUNITY ENGAGEMENT

COMMUNITY ENGAGEMENT

Process

- Communications

- Municipal offices, health regions, community organizations, institutions and community leaders

- Facilitation

- Originally youth focused
- Survey

- Majority of engagement

- 73 total; a combination of self-administered online and written responses, as well as field-conducted case studies

- Raised awareness, reached wide audience, and stimulate community involvement

5. We are very interested in your thoughts regarding **Wanuskewin Heritage Park's** efforts to expand the park as they seek to become a designated UNESCO World Heritage Site. How may this fit in with your vision for the region in 25+ years?

Type here

6. We have identified the naturalized area and wetlands across from Wanuskewin, known as the **Northeast Swale**, as an important ecological area. How may this fit with your vision for the region in 25+ years?

Type here

COMMUNITY ENGAGEMENT

Challenges

- Time
 - Plans of this magnitude may take years to complete
 - Able to accomplish much in 4 months
- Ethics approval
 - Forced the team to reconsider our approach mid-term
 - Overcame by adaptation
- Weather
 - Scheduled field surveys took place in poor weather
 - Enabled greater face-to-face communication
- Survey
 - Length and style of survey
 - Lack of map for some participants may discourage and encourage aspirations



COMMUNITY ENGAGEMENT

CE was a collaborative process that went beyond the community and PSI.

Prairie Wild Consulting - Samantha Mark & Danny Roy

Office of Community Engagement and Outreach

Office of Research Services & Ethics

MOMENTUM 2016

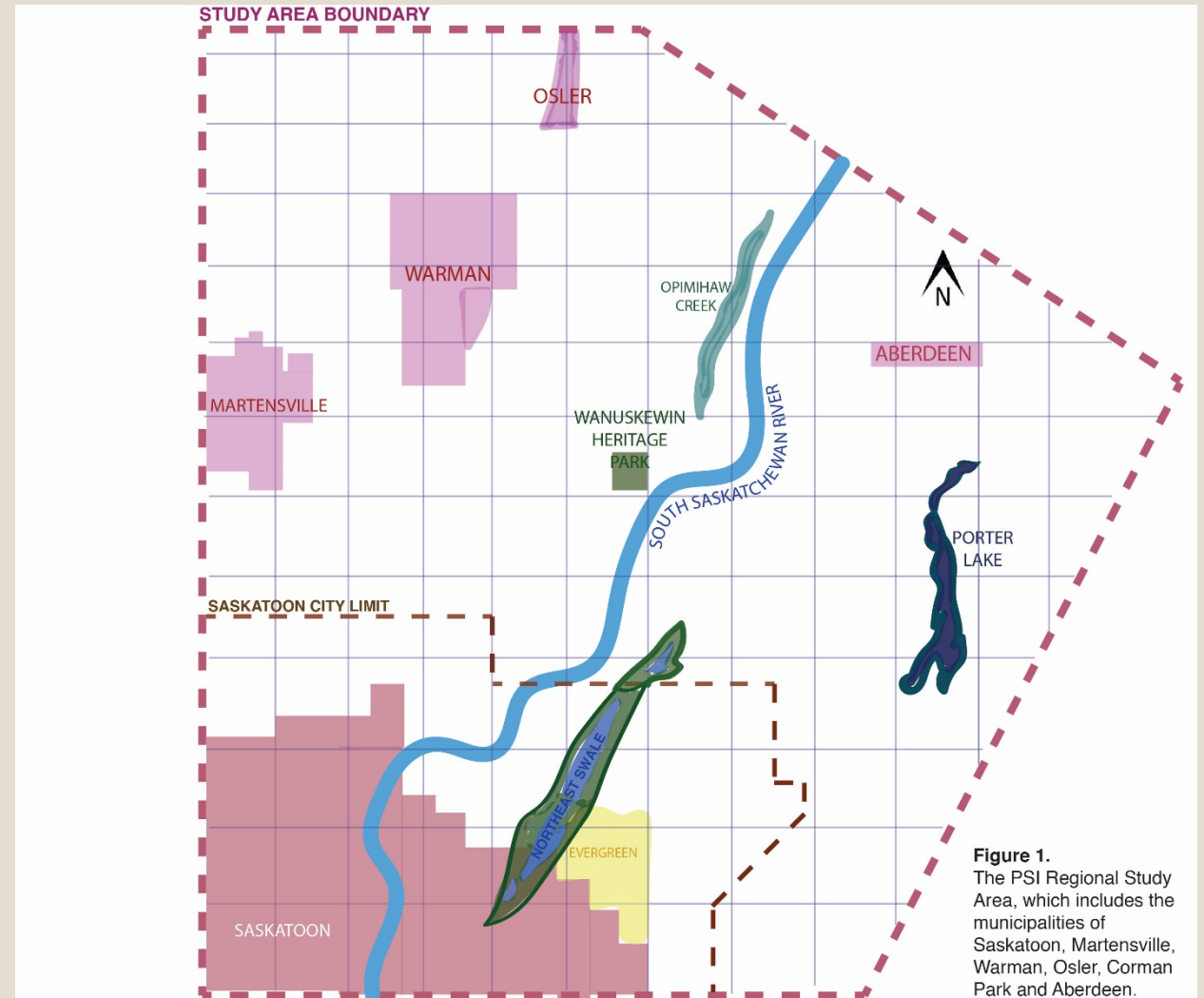
Prairie Spirit School Division

Saskatoon Public & Catholic School Divisions

HERITAGE AND CULTURE

HERITAGE & CULTURE: CURRENT STATE

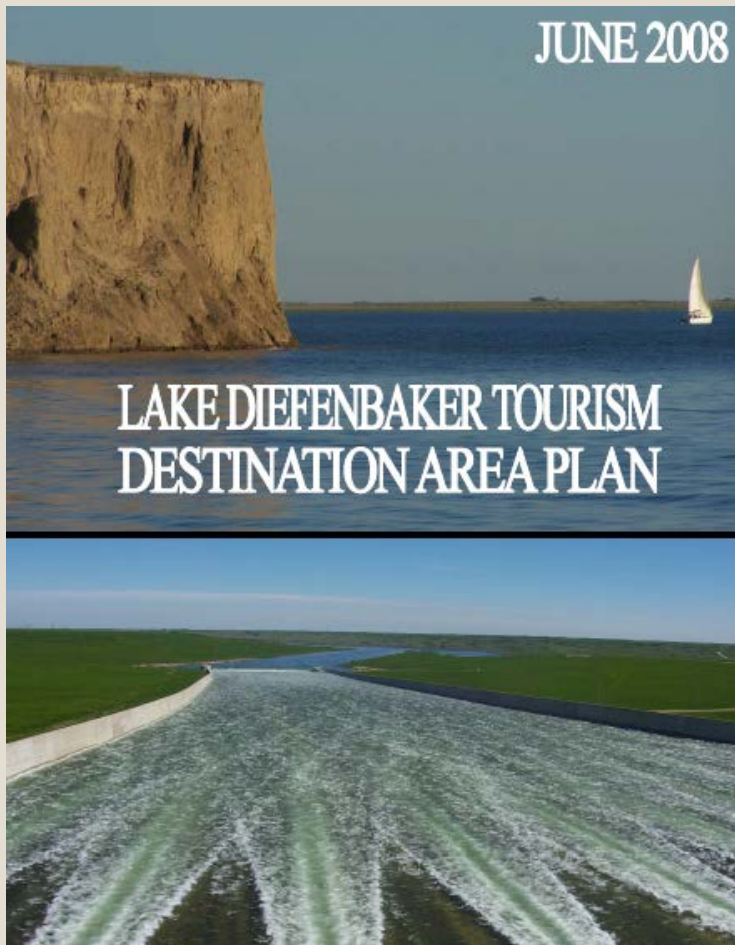
- Study falls within Treaty 6 Territory
- Wanuskewin Heritage Park: longest archeological dig in Canada
- Development right up to the Northeast Swale (Evergreen, Saskatoon)
- Very few recognized heritage sites in the area



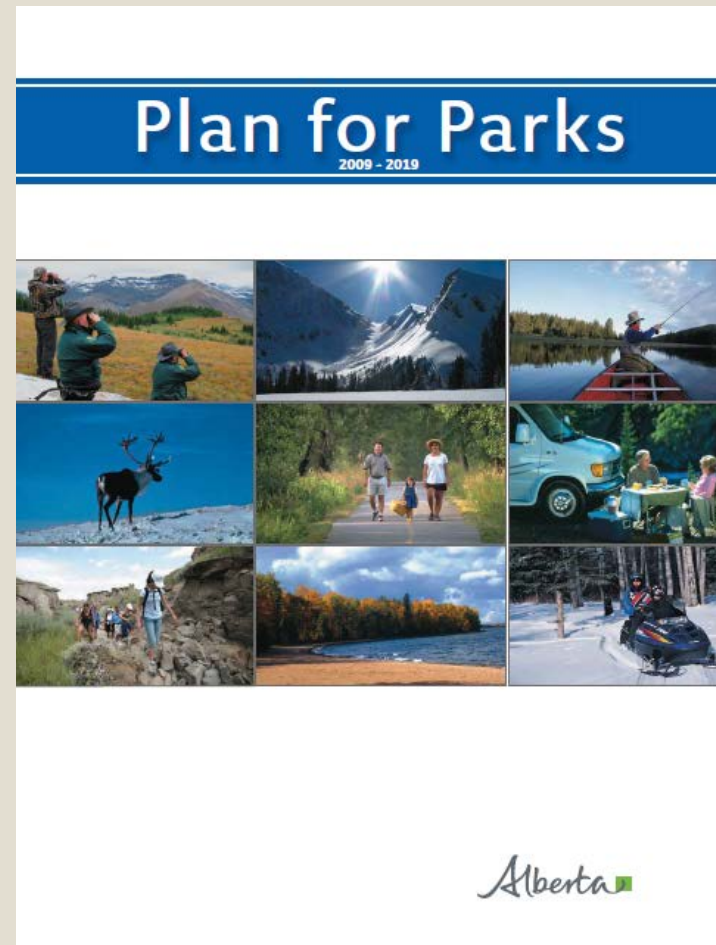
Study Area

Source: PSI – Chantal Bethune (2016)

HERITAGE & CULTURE: BEST PRACTICES



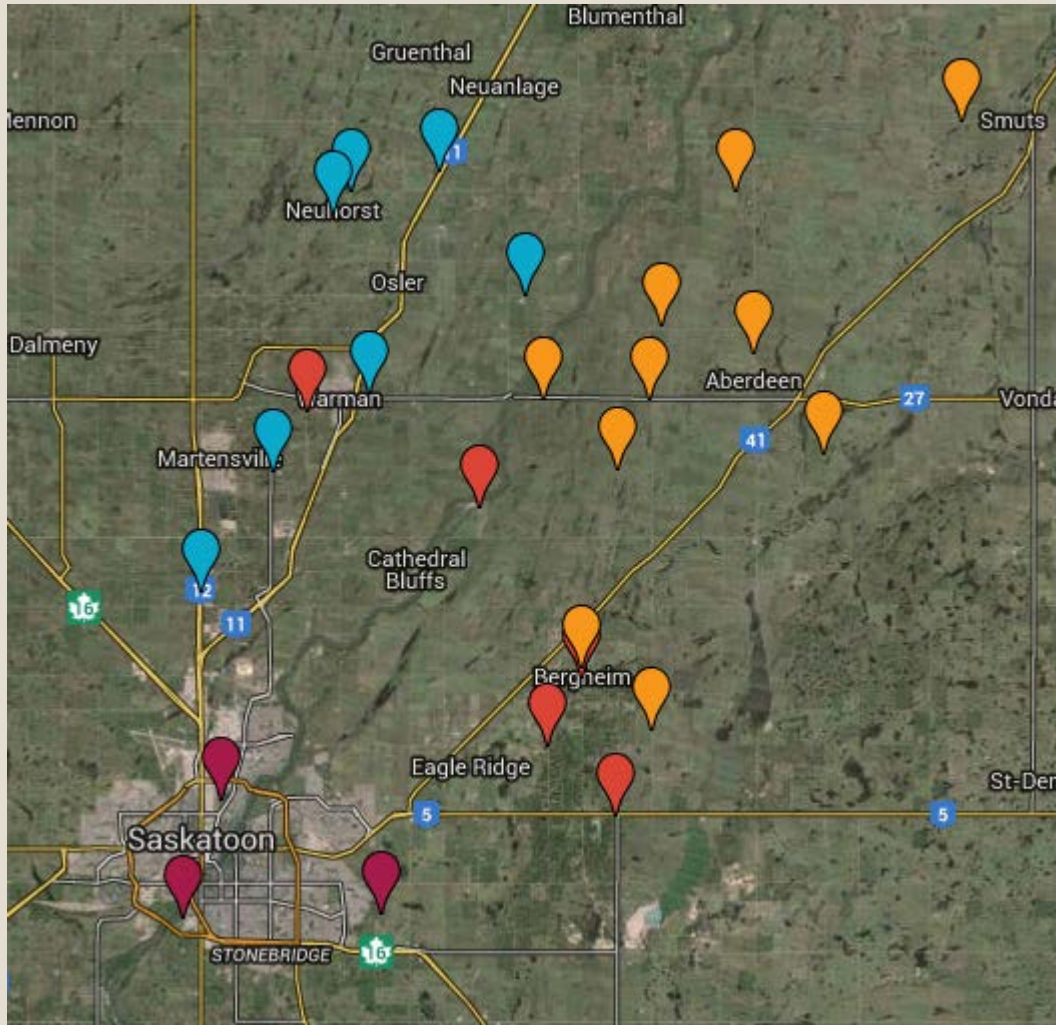
Source: WaterWolf District Planning Commission (2008)



Source: Government of Alberta (2009)

- Variety of reports and plans including tourism and parks planning
- *Indigenizing City Planning Processes in Saskatoon, Canada* by R. Ben Fawcett

HERITAGE & CULTURE: ANALYSIS



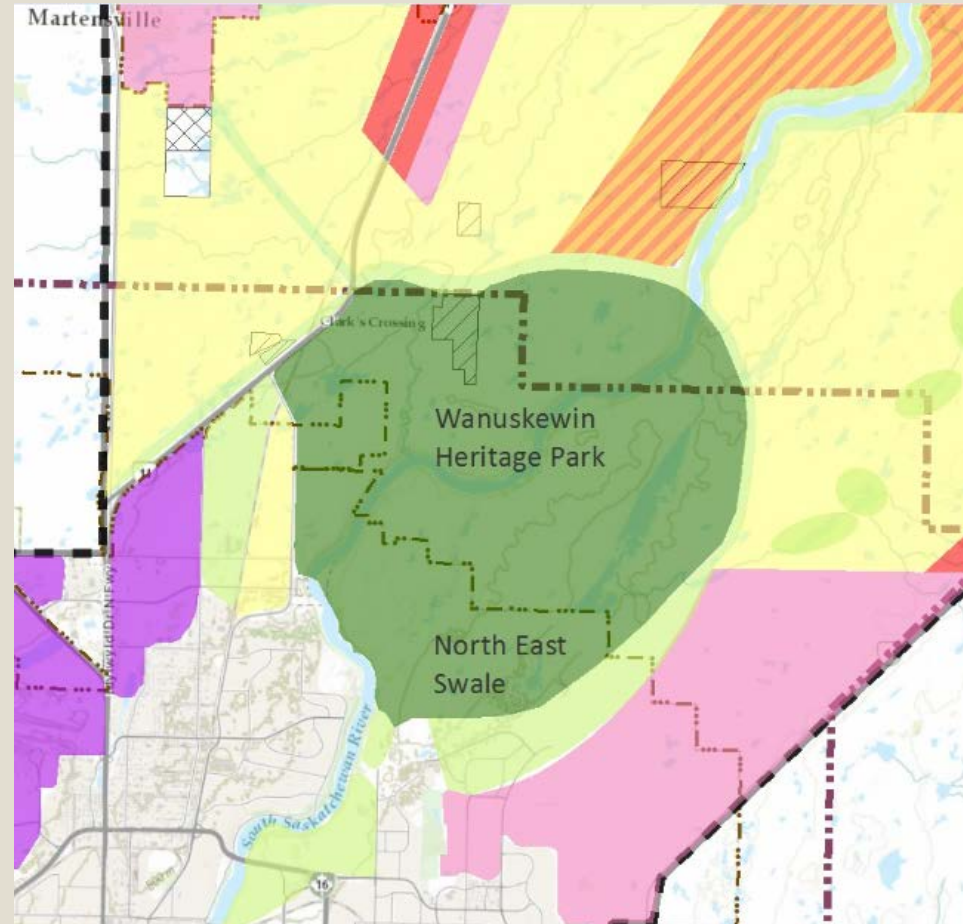
Cemetery Inventory Map

Source: PSI – Sahar Khelifa, in Google Maps

- Major support for Wanuskewin in efforts to achieve UNESCO World Heritage Site designation
- Support for more parks and recreation space
- Support for preservation of heritage and significant sites
- Positive attitudes towards inclusion of Indigenous art, history, stories, and dance

HERITAGE & CULTURE: RECOMMENDATIONS

- Support Wanuskewin for UNESCO World Heritage Site
- Creation of Northeast Regional Park Area and regional tourism plan
- Build heritage and cultural capacity, and conduct formal heritage inventory
- Create regional Aboriginal Advisory Council with representative from each municipality



Proposed Regional Park Boundary

Source: PWC – JGG

ECOLOGICAL SENSITIVITIES

CURRENT STATE

- The Northeast Swale
- Wanuskewin Heritage Park
- Goals

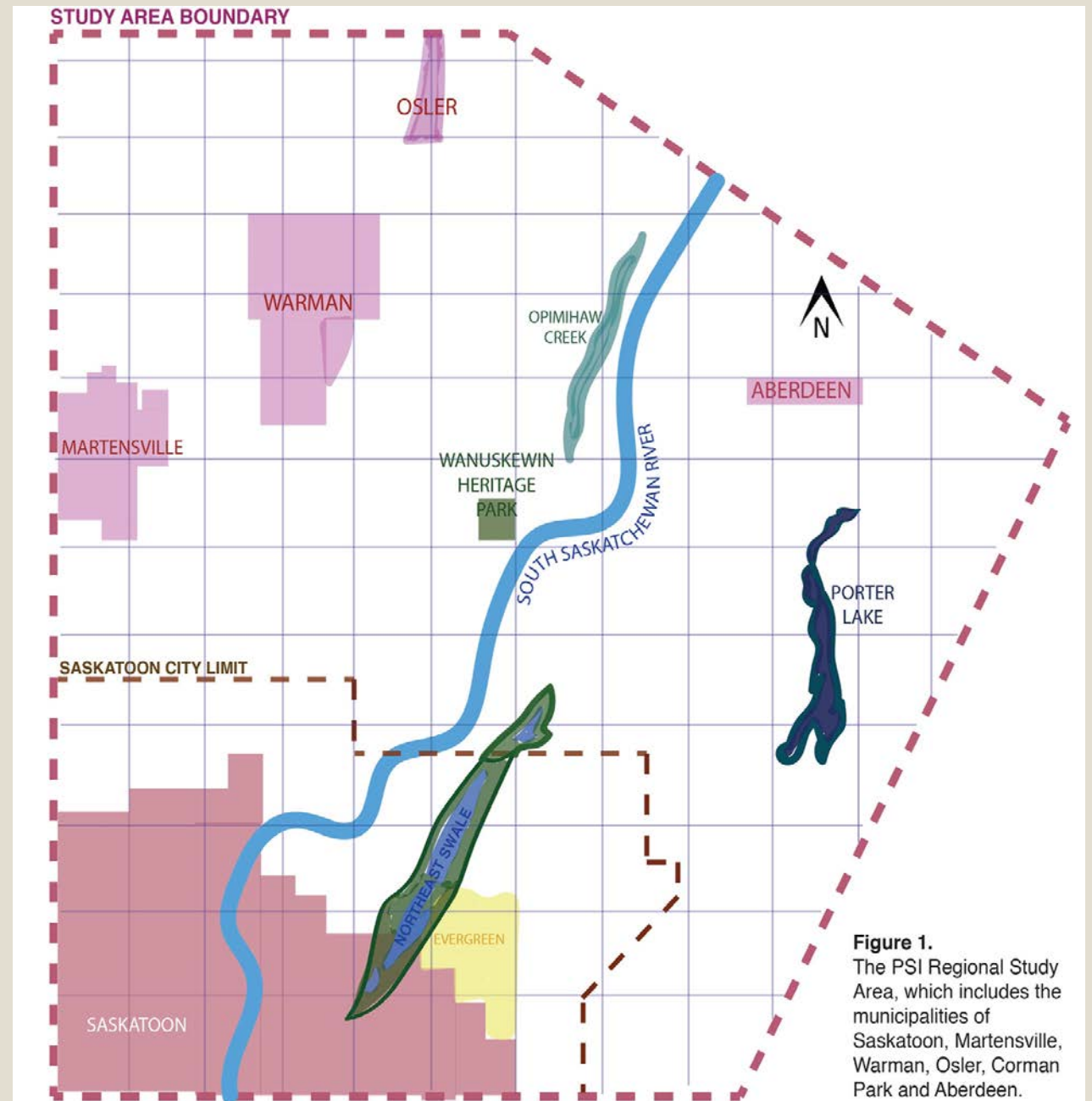
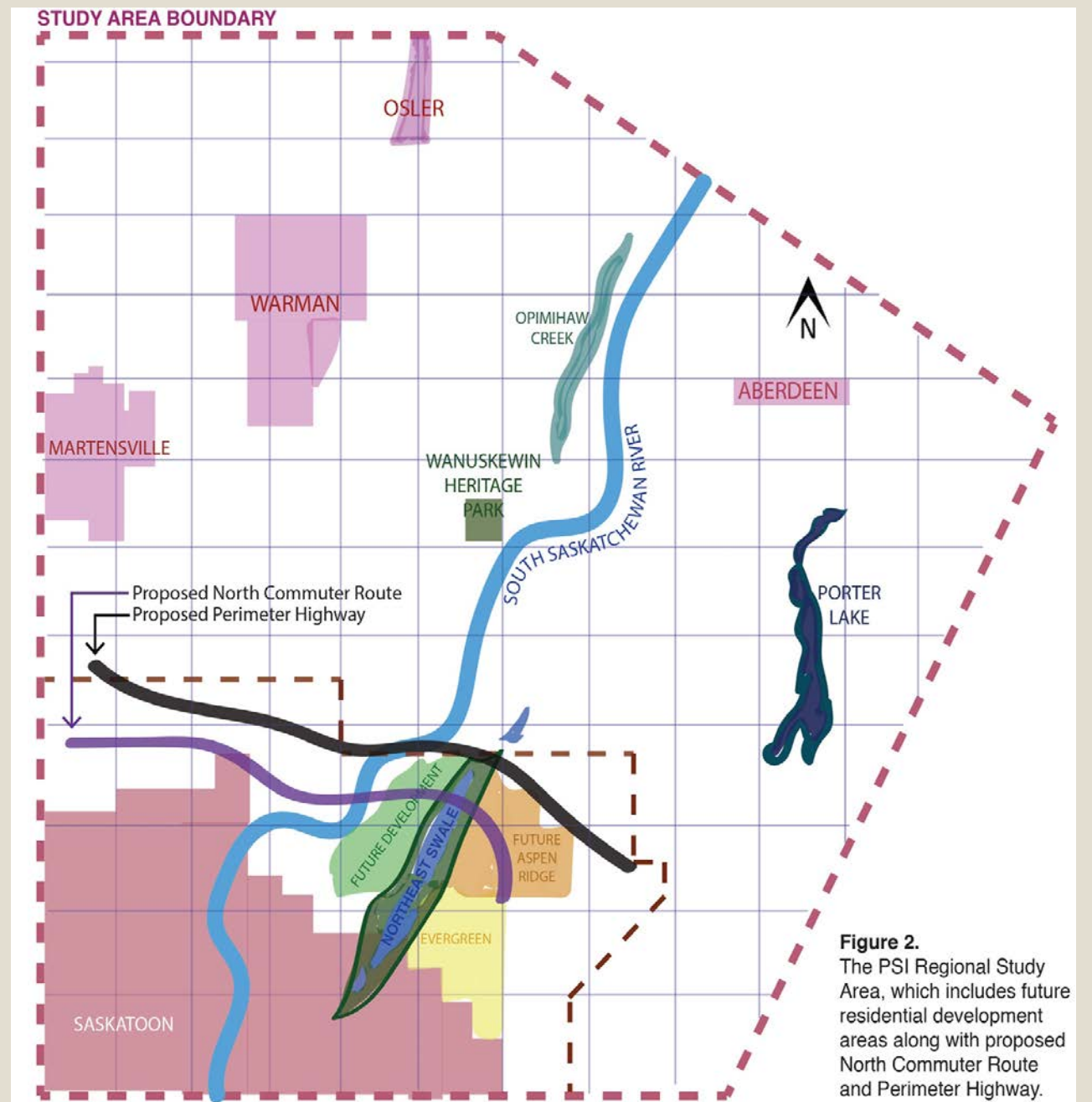


Figure 1. The PSI Regional Study Area, which includes the municipalities of Saskatoon, Martensville, Warman, Osler, Corman Park and Aberdeen.

CURRENT PLANS

- Proposed North Commuter Route
- Proposed Perimeter Highway
- Fragmenting ecologically sensitive areas



BEST PRACTICES

- Banff wildlife passage structures
- Waterloo Region's Environmentally Sensitive Policy Areas
- Ontario's "Greenbelt Plan"



Image 1: highwaywilding.org

ANALYSIS

- 81% identified the Northeast Swale as important
- 76% stated Wanuskewin should be preserved
- 20% believe education of natural environments should be a priority
- 62% believe conservation of wildlife and native prairie is crucial

Statistics via PSI community engagement survey results

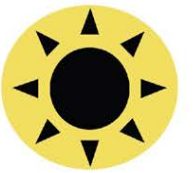
(Images via uAlberta.ca, NatureConservancy.ca, CatherineAndGraham.ca, Meewasin.com)

What Do the Community Members Think?



"Public access to use the river in ecologically conscious ways."

"Establish the prolonged health of the river valley and delicate ecosystems."



"Keep the riverbank free from development."



"Maintain natural light and darkness."

"The Swale and its buffer and other native habitats must be preserved."



"More attention to given amenities such as the Swale, the river, star gazing, trails and sunrise/sunset spots."

"Any plan must consider green house gas reduction first and foremost."

"Create large, nice dog parks."

"Wanuskewin must be protected from urban sound pollution as the site is a means of 'seeking peace of mind.'"



"Ensure Wanuskewin's natural state is protected."

"Biodiversity is more important than the development of suburbs."



"The cars, large vehicles and highways tend to trump the preservation of wetland and wildlife corridors."

"I would like to see the proper consideration of wildlife pathways."

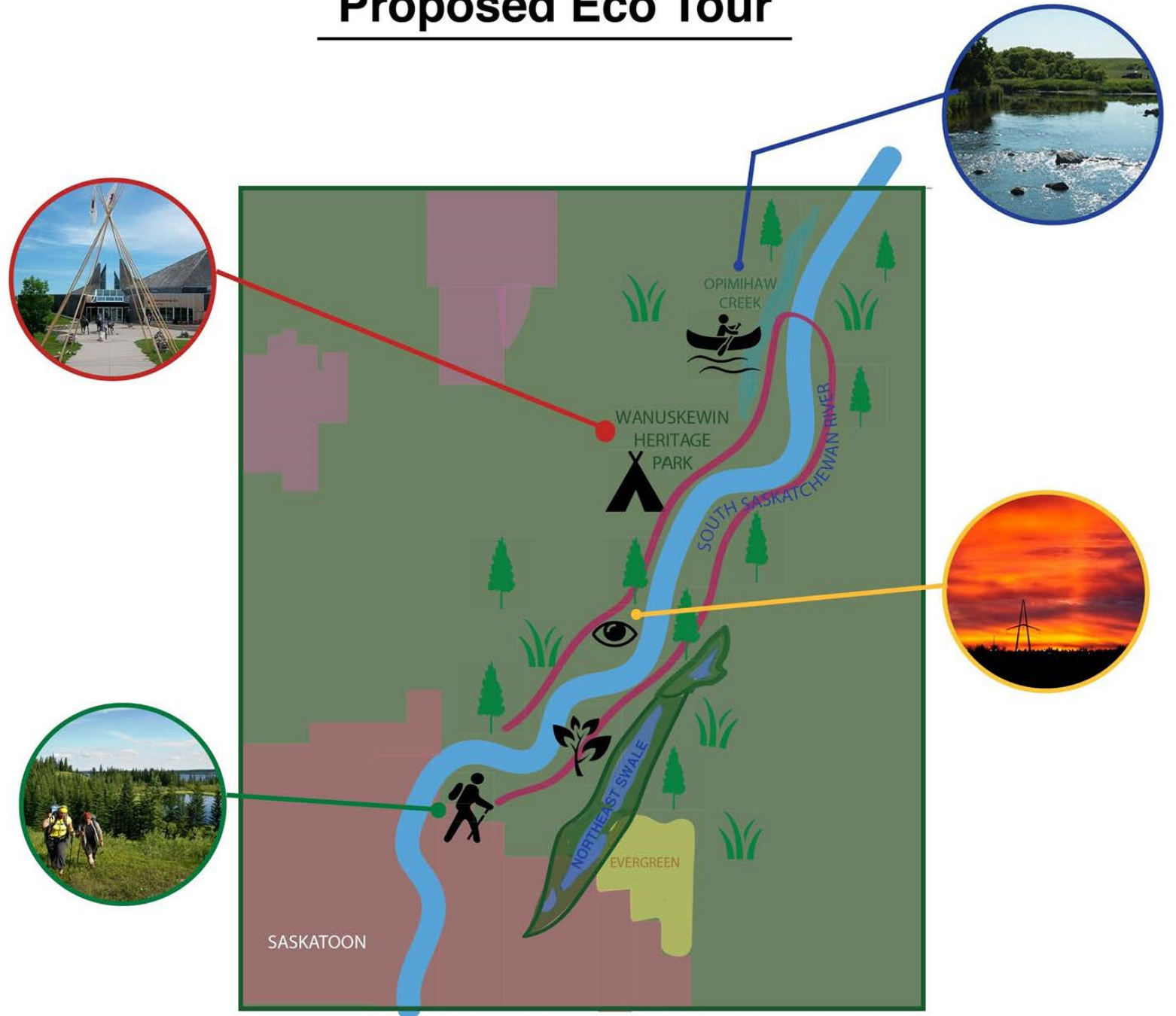


"The Northeast Swale may be at great risk as it will essentially be a huge backyard for two neighbourhoods."



Proposed Eco Tour

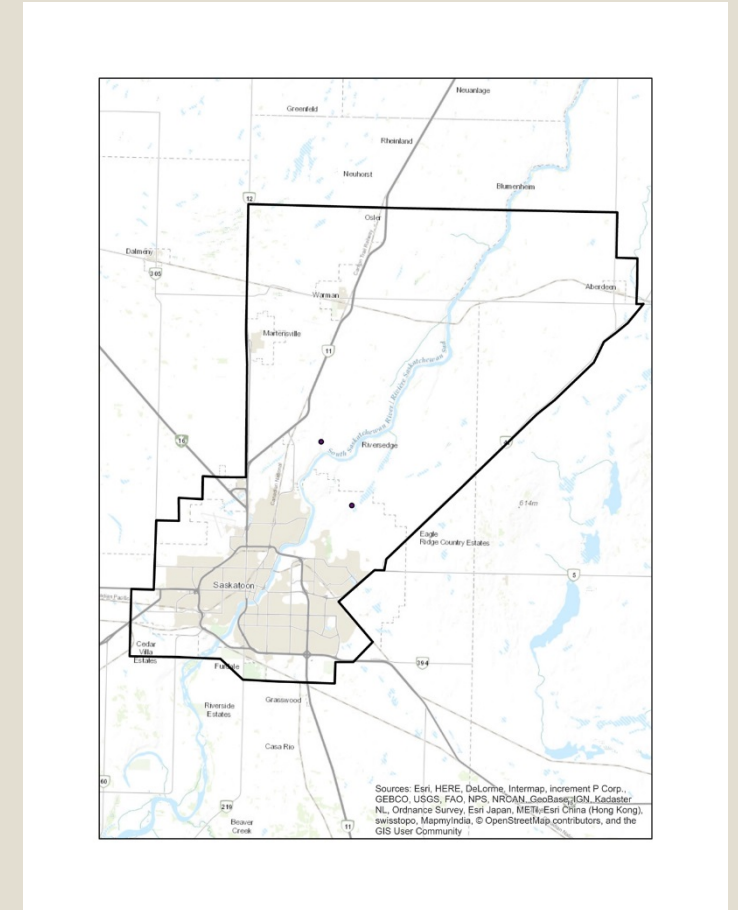
- Educational 'Eco Tour' of the region
- Low impact forms of travel
- Opportunity for Meewasin Valley Authority



LAND USE

LAND USE: CURRENT STATE

- Current Planning Initiatives:
 - Saskatoon's *Growing Forward Plan*
 - Municipality's Official Community Plans
- Ecological Sensitivities:
 - Wanuskewin Heritage Park
 - The Northeast Swale
 - The River Valley
- Considerations Moving Forward:
 - How can development work around ecological opportunities?
 - How many people will be living in this area?
 - How much priority does environmental stewardship receive?



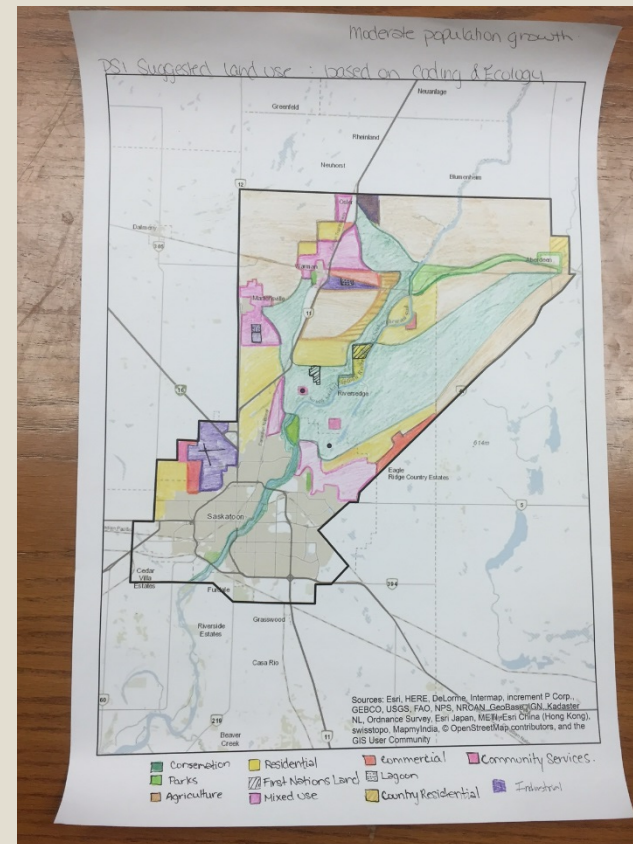
PSI Study Area

LAND USE: BEST PRACTICES

- For Development:
 - New Urbanism
 - Public engagement and consultation
 - Reflecting community identities
- For Regional Cohesion:
 - Accessibility and Connectivity
 - Cross-Jurisdictional Communications
 - Stakeholder and Rightsholder involvement in entire planning process
 - Sharing of services
- Randall Arendt: Design for Conservation and Development

LAND USE: FINDINGS

- Survey data was coded according to land-use categories
- Major Categories:
 - Conservation
 - Parks
 - Residential
 - Commercial
 - Mixed-Use
 - Industrial
 - Community Services

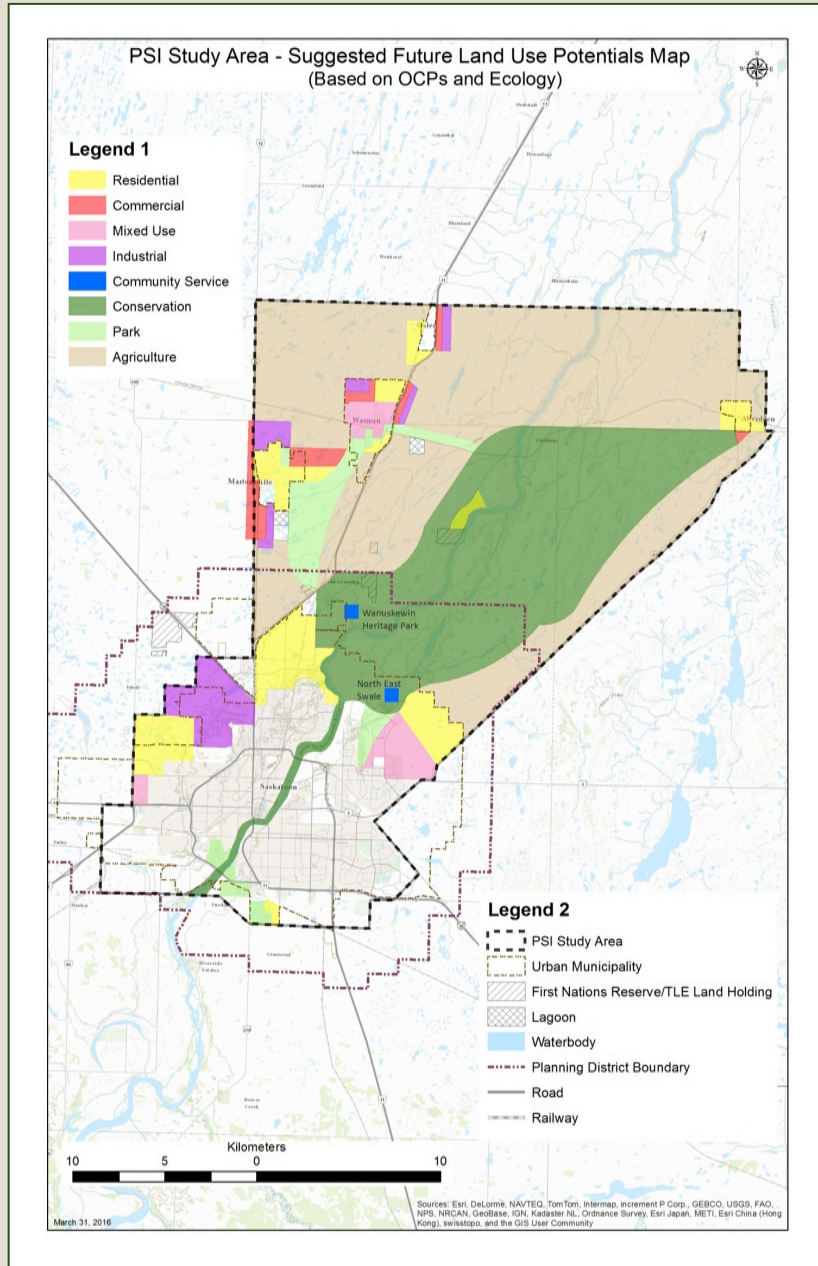


PSI Initial Land-Use Sketch

ANALYSIS

- Participants identified protecting Wanuskewin and the Northeast Swale as key priorities for the region
- Most development responses indicated a shift towards New Urbanist principles of mixed-use development patterns
- In an addition to conservation spaces, a network of green spaces for recreation and connectivity was identified as a priority
- Based on our research, findings, and survey responses we generated three different options that reflect different levels of development

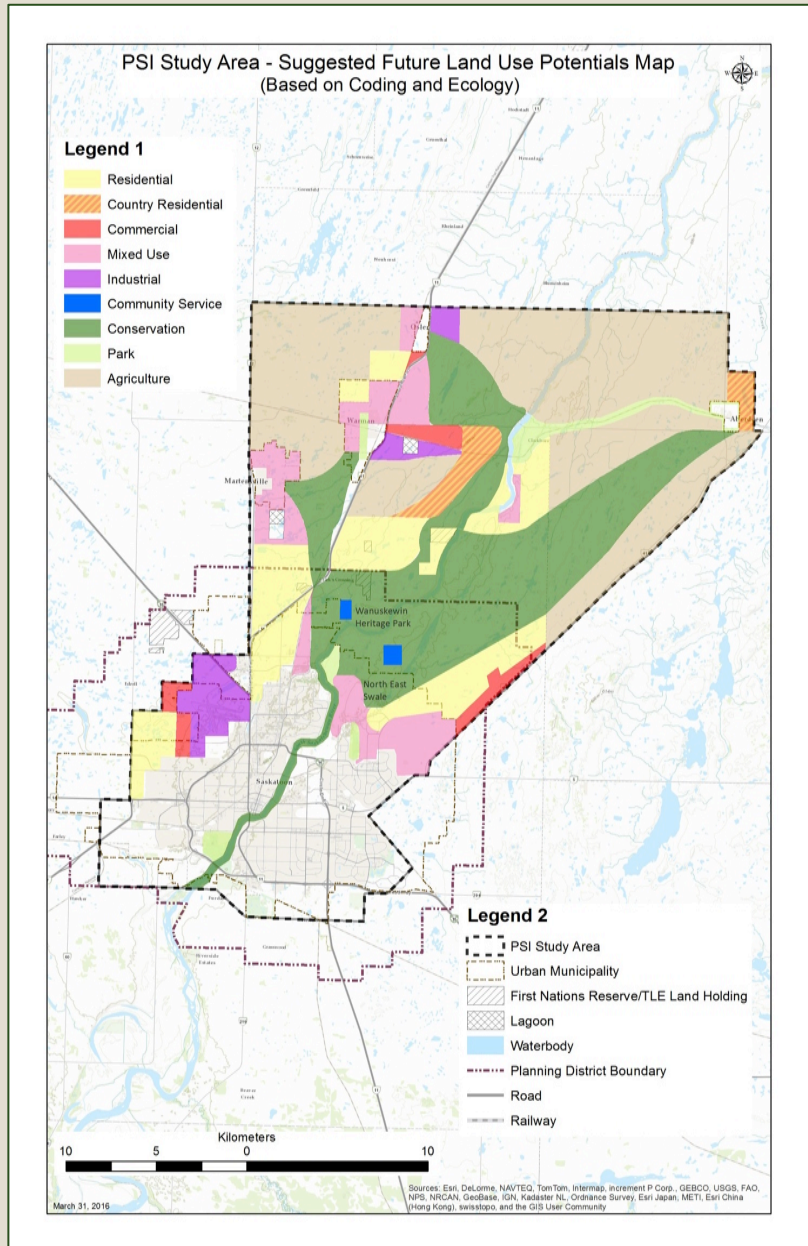
OPTION 1: LOW POPULATION, BASED ON OFFICIAL COMMUNITY PLANS AND ECOLOGICAL CONCERNS



Approximate Population: 330,000

Source: PWC-JGG

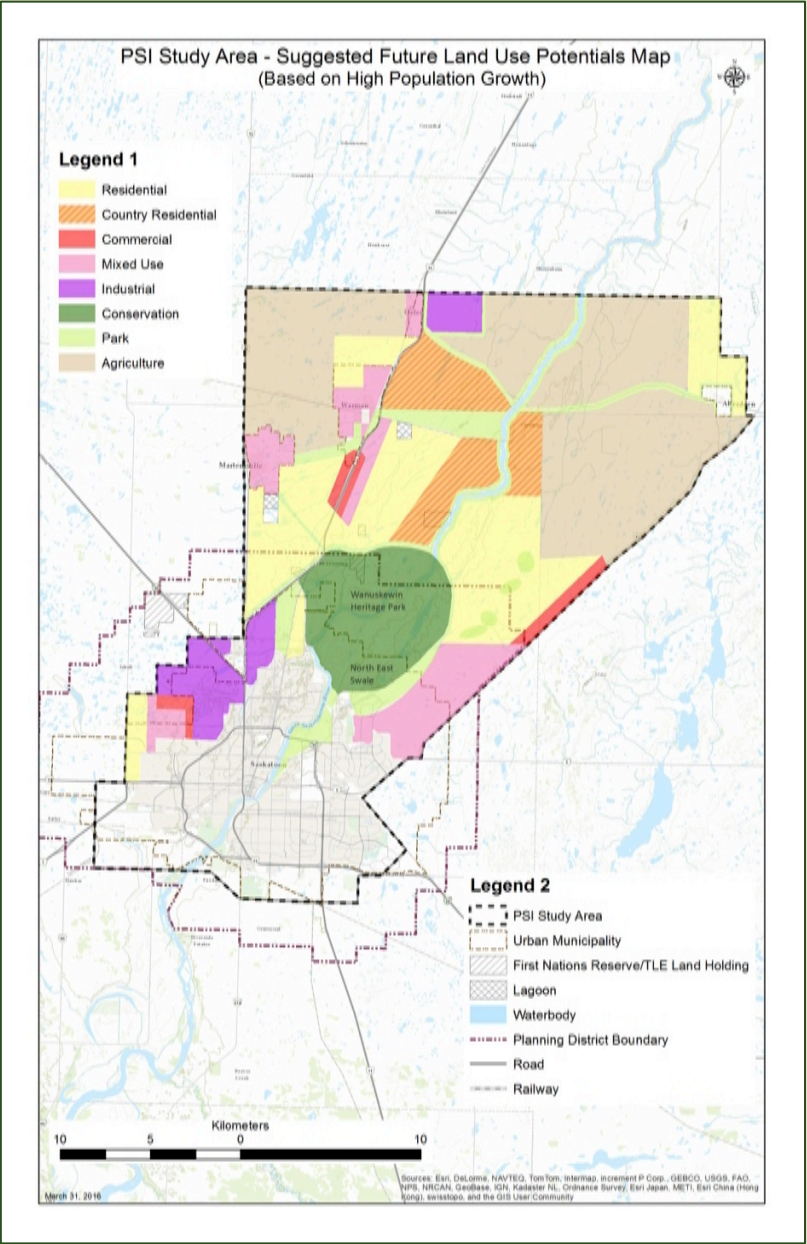
OPTION 2: MEDIUM POPULATION, BASED ON CODING AND ECOLOGICAL CONCERNS



Approximate Population: 420,000

Source: PWC-JGG

OPTION 3: HIGH POPULATION, MINIMAL CONSERVATION AREA



Approx. Population: 550,000
Source: PWC-JGG

LAND USE: RECOMMENDATIONS

- Saskatoon redirects city expansion to the North-West or South-East Sector, avoiding the ecological sensitive areas
- Legislation on the Provincial and Federal level made to protect Wanuskewin, the Northeast Swale, and the River Valley's ecological integrity
- Do not generalize the region, make considerations to protect unique identities of each individual community
- Conduct a Sustainability Impact Assessment (SIA) for all new developments, evaluating Social, Economic, and Environmental effects of the region

ACTIVE TRANSPORTATION

ACTIVE TRANSPORT: CURRENT STATE

Walking, running, cycling, any human powered modes of transportation is active transportation.

Active transportation needs more attention!

Benefits include Health, economic advantages, sustainability

Very limited efforts have been placed for active transportation within the region.

Very few trails available, very few satisfactory bike lanes available (Saskatoon).

Some cities (Osler, Aberdeen) have no active transportation infrastructures.



Retrieved from <http://www.activeelgin.ca/>



Retrieved from Babin: Saskatoon has its first bike lane, but it's so bad I can't imagine ever using it



Retrieved from Babin: Saskatoon has its first bike lane, but it's so bad I can't imagine ever using it

ACTIVE TRANSPORT: BEST PRACTICES

Learn from examples!
Copenhagen, Paris, (Old)
Montreal, Edmonton,
Netherlands are a few leaders
in Active transportation!

Dedicated Bike Lanes

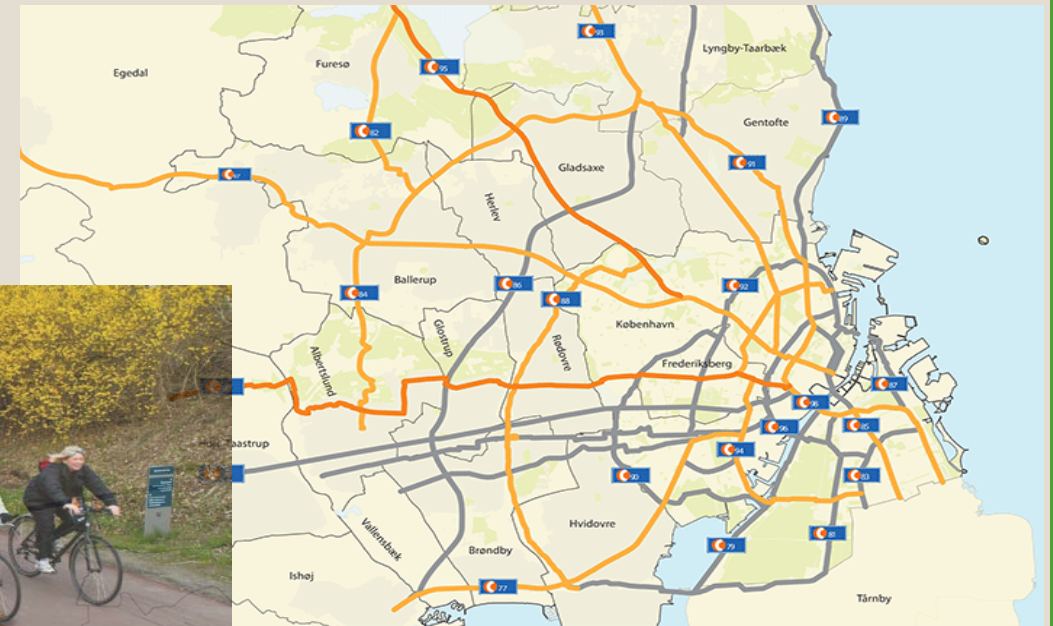
Back alleys that are functional

Long versatile network of trails

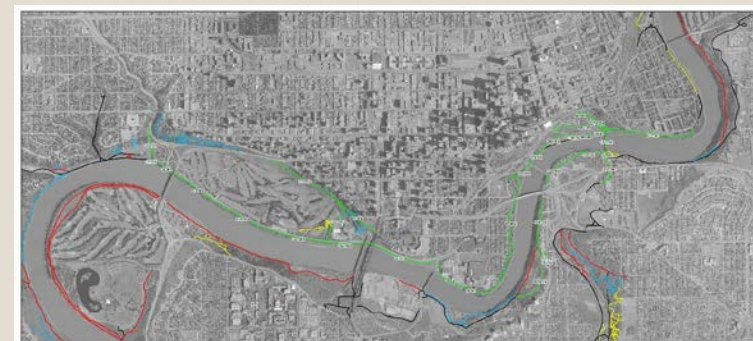
Accessibility



A picture of cycle superhighway of Copenhagen



The Regional route of cycle superhighway, Copenhagen



RV Jogging Loop
Legend
Jogging Loop

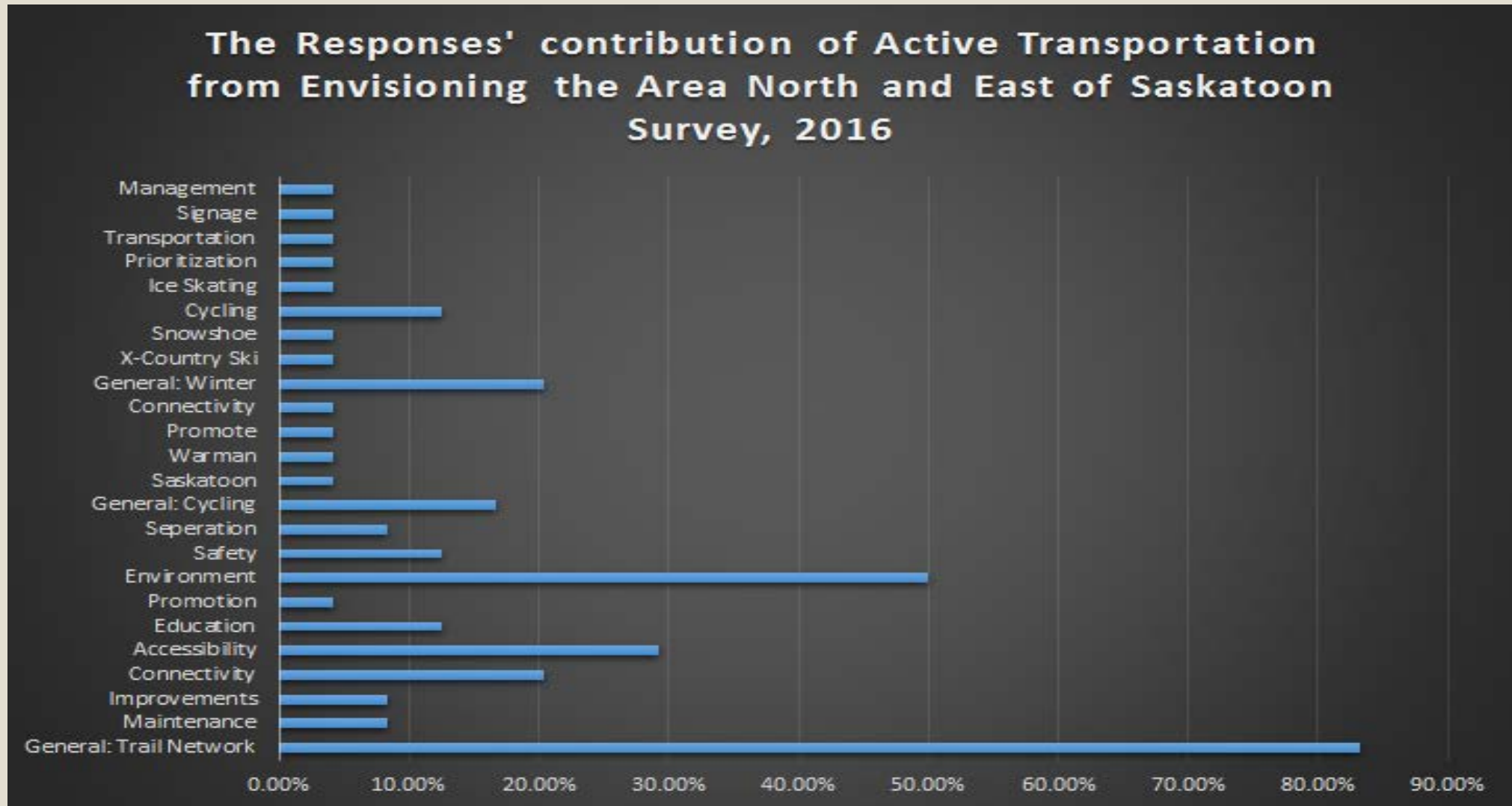


November 2008

Edmonton's River Valley Trail
map



SURVEY RESULT



ACTIVE TRANSPORT: RECOMMENDATIONS

A proper relationship between motorized and active transportation, needs a balance.

Plant the seeds now so that it is not forgotten later.

More infrastructures that can be used to host modes of active transportation

Winterizing our current infrastructures for winter active transportation

A regionally connected network of trails that are safe, ecological, sustainable and accessible

To fix and to make better use of our biking lanes

More funding is the biggest issue for active transportation



PSI generated images



<http://www.blogto.com/>



www.tentree.com



www.ajax.ca/



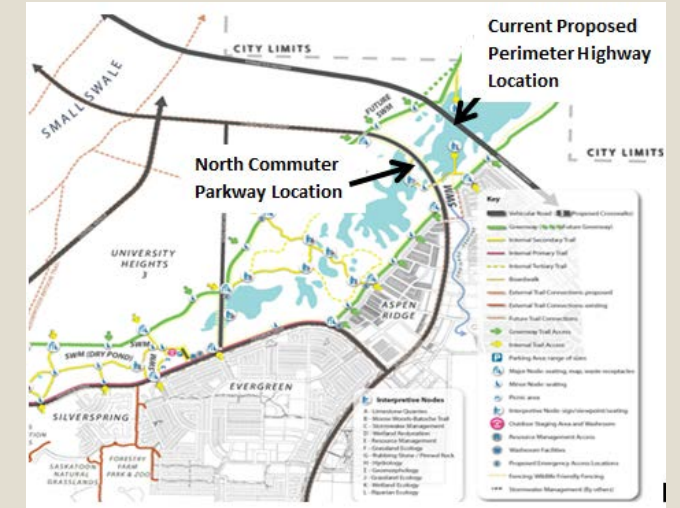
www.ajax.ca/

MOTORIZED TRANSPORTATION

MOTORIZED TRANSPORT: CURRENT STATE

- Major Highways: 11,12,21 and 41
- Various secondary roads, grid roads and seasonal roads
- Other Transportation Infrastructure:
 - Railways
 - 1 water ferry
 - 3 airports in or near study region

- Projects:
 - North Commuter Parkway Project
 - Proposed overpass on Highway 11 at Warman
 - Proposed overpass on Highway 12 at Martensville
 - Perimeter Highway



Meewasin Northeast Swale Master Plan



PWC-JGG

MOTORIZED TRANSPORT: BEST PRACTICES

- Bus Rapid Transit
 - Regional Bus System, Calgary
 - Intercity express bus systems
 - Eventual LRT expansion
 - VIVA Transit System, York Region
 - vast BRT system
- Water Taxi
 - River Spirit, Winnipeg
 - False Creek Ferries, Vancouver
- Designated lanes for driverless cars
 - Tampa Hillsborough Expressway Authority
 - Preparations for driverless cars

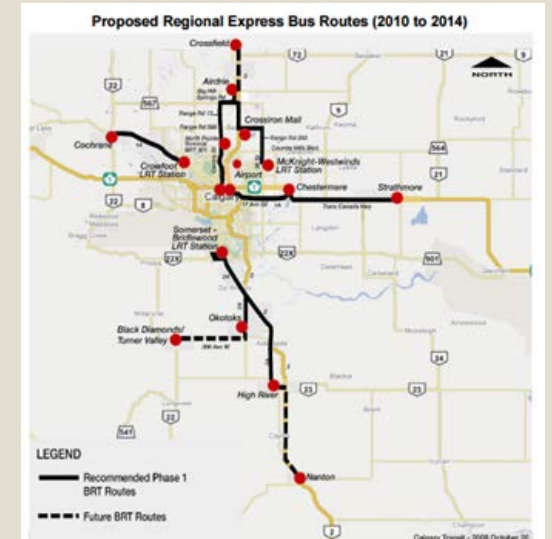
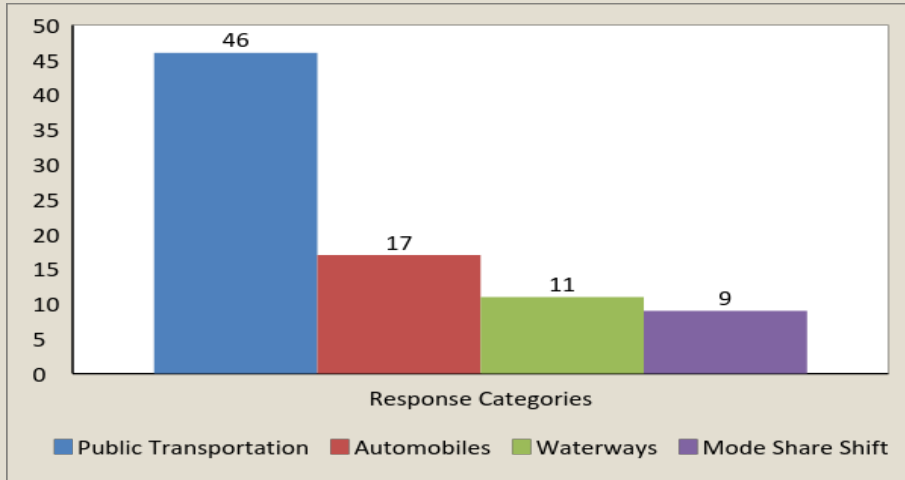


Image Source: Calgary Regional Transit Plan



<http://www.splashdash.ca/riverspirit.htm>

MOTORIZED TRANSPORT: ANALYSIS

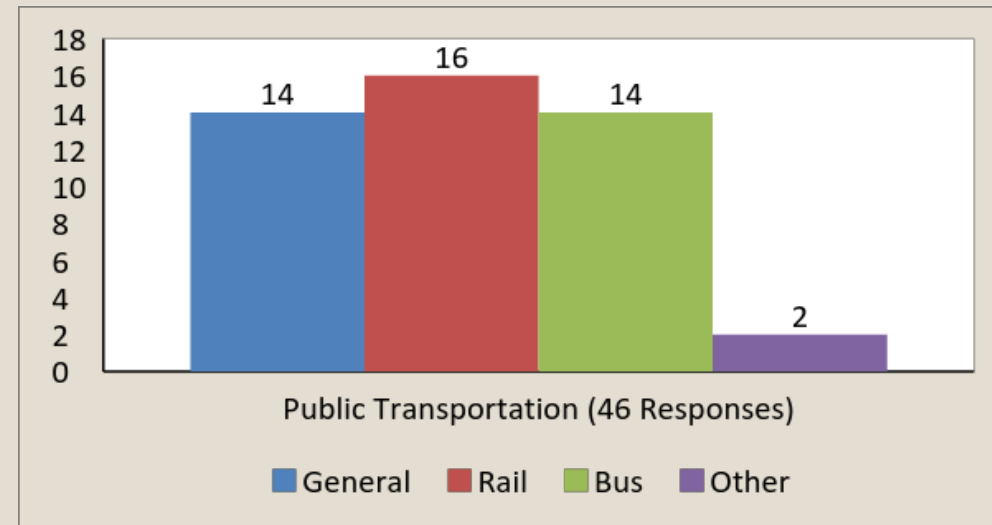


Statistics via PSI community engagement survey results

Survey Results

- Waterways
 - Water as Transportation System
 - Ferries
- Mode Share Shift
 - Mode Share
 - Car Pool

- Public Transportation
 - Bus
 - Rail
- Automobiles
 - Design
 - Safety
 - Existing Infrastructure
 - Car Pool



Statistics via PSI community engagement survey results

Survey Results

MOTORIZED TRANSPORT: RECOMMENDATIONS

- Implementation of a regional BRT system
 - connecting City of Warman, City of Martensville, and the City of Saskatoon.
- Implementation of waterway transportation networks on the south Saskatchewan river.
 - including water taxis and docks for canoes and small boats.
- No further road capacity expansion projects.
 - focus on maintenance of road repairs and intersection safety.
- The locations of the North Commuter bridge and the Perimeter Highway to be moved further north to the Clarkboro Ferry Crossing
 - build on off ramps to Wanuskewin.



<http://www.yorkregiontransit.com>

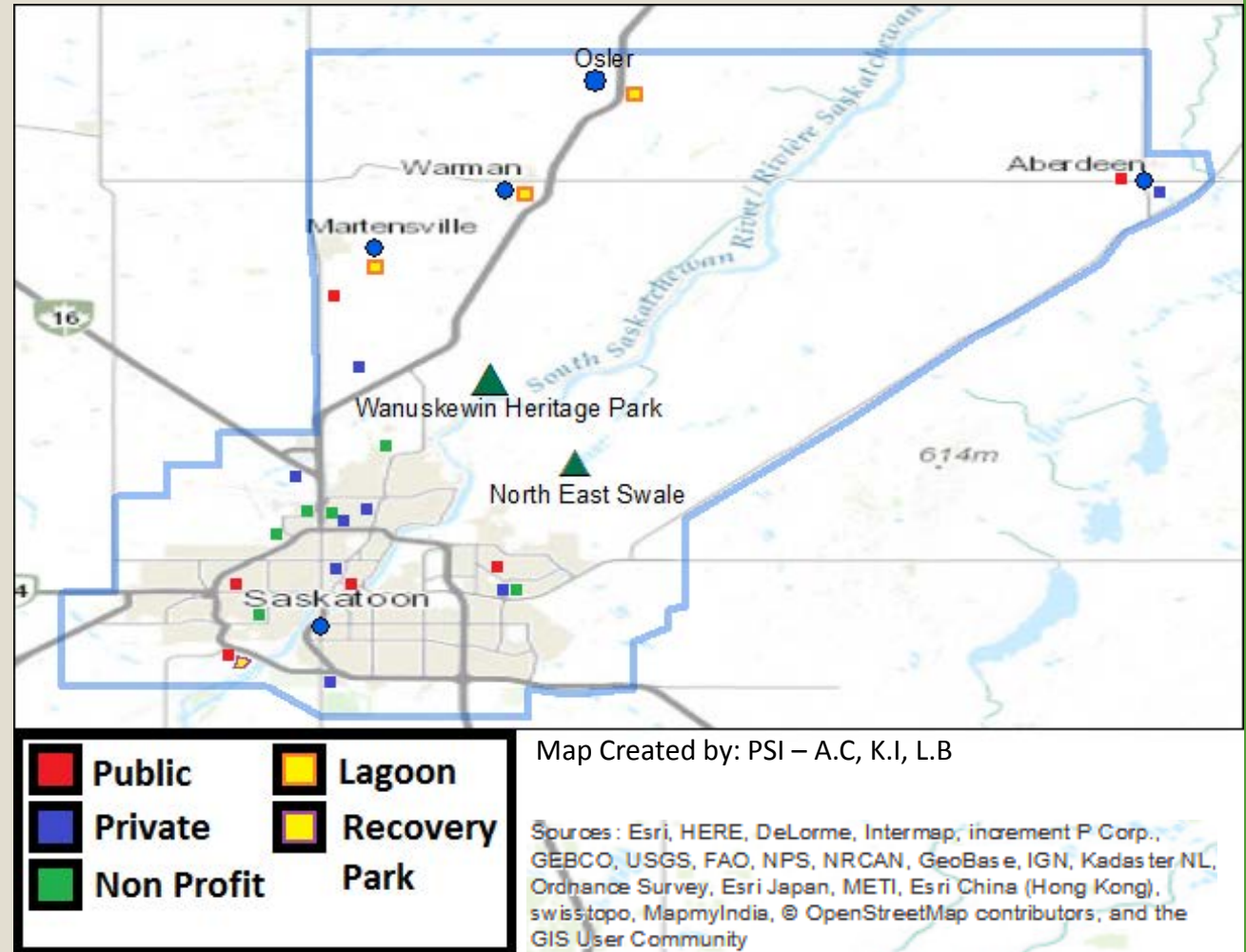


False Creek Ferries,
<http://www.granvilleislandferries.bc.ca>

UTILITIES,
INFRASTRUCTURE, AND
WASTE MANAGEMENT

CURRENT STATE

- Regional landfill
- **Recovery Park**
- Recycling options
- SaskPower
- SaskTel
- SaskEnergy
- Intensive Livestock Operations (ILO)
- **Potential**



BEST PRACTICES



- **Recycling**

- Edmonton

- Converts 140,000 tonnes of municipal solid waste into 38 million litres of biofuels. (Blended with gas at 5 % rate, fuels 400,000 cars)
 - Landfill Gas Collection “It is a mixture of approximately 50% methane and 50% carbon dioxide and other trace gases. One tonne of organic waste can produce 125 cubic metres of methane, the energy equivalent of one barrel of oil.” (Edmonton – Waste Management Centre)

- **Solar Energy**

- Germany (World Leader)

- In process of reaching 100% renewable energy by 2050
 - Roughly half the geographic size of Saskatchewan, with around 80 times the population

- **Wind Energy**

- Ontario

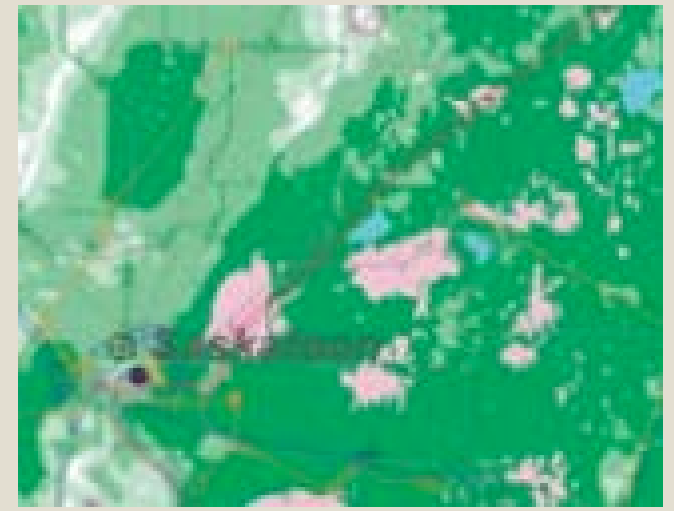
- Produce enough energy to service 70,000 homes.

- North West Territories

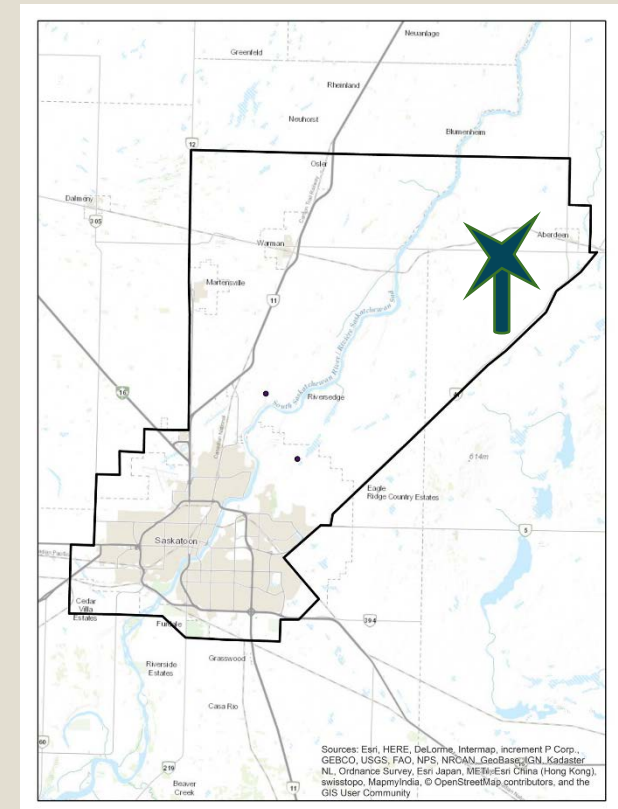
- Built to withstand temperatures as low as minus 40 degrees Celsius.

RECOMMENDATIONS

- More recycling and waste management opportunities for the region
 - Model after Edmonton's program
- Add composting depots to surrounding region and provide more information and education
- Provide incentives for renewable energy developments
 - Wind Energy & Solar Energy
- Allow for renewable energy developments
 - Proposed wind farm in study region
- Upgrade current infrastructure rather than new development while considering population growth



Source: SaskWind



G O V E R N A N C E

SUSTAINABLE GOVERNANCE AND CHALLENGES

Policy recommendations to bridge different planning districts?

How can the region achieve sustainable governance?

- Clearly define “Sustainable” in terms of governing practices
- Balance of power and influence between each municipality.
 - No Municipality has a greater voice than any other
- Put Checks and Balances in Place
- Representative of community and regional values as identified by meaningful community engagements

SUSTAINABLE GOVERNANCE AND CHALLENGES

1. Decisions by consensus and dialogue may take more time but will promote healthier collaboration
2. Development of Regional Communications plan
3. Comprehensive list of goals each community is hoping to accomplish and goals communities hope to accomplish together on a regional basis
4. Regional Advisory Board of representatives
5. Adhere to Statements of Provincial Interests as required by the Planning and Development Act
6. Promote community cohesion and collaboration
7. Conflict resolution seminars and workshops for the governing members
8. Create regional Aboriginal Advisory Council with representative from each municipality

PROJECT LEARNINGS

PROJECT LEARNINGS

Northeast

Strategy

Time

PROJECT LEARNINGS

**Trust &
Transparency**

**Academic
Cloud**

Space

**Remain
Aspirational**



THANK YOU