Sustainable Infrastructure and Complete Streets

John Shardlow, Senior Principal
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David Montgomery, Chief Administrative Officer
City of Duluth

League of Minnesota Cities Conference, Duluth, Minnesota
June 24th-25th, 2015
Sustainable Infrastructure and Complete Streets

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Presentation Overview

• 1. Introduction – Framing the Issues
• 2. GreenStep Cities & New Tool for Your Use – Regional Indicators Initiative
• 3. Case Study #1 City of Battle Lake/MnDOT Road Diet
• 4. Case Study #2 City of Duluth, Superior Street Complete Streets project
Presentation Overview

• Break
• 5. Envision Sustainable Infrastructure Rating System
• 6. Panel Questions
• 7. Questions From the Audience
Sustainable Infrastructure and Complete Streets

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Sustainable Infrastructure

- Includes “Complete Streets”, but it isn’t limited to complete streets
- The Wayzata Water Treatment Facility recycles 90% of the backwash water that used to be dumped on the ground or discharged to surface waters
- Peak Energy Use reduces energy use by
Objectives For This Session:

• Expand your thinking about sustainability
• Hopefully frame the issues in ways that aren’t divisive
• Expose you to some excellent and diverse examples
• Introduce you to some new tools
Sustainability

- a requirement of our generation to manage the resource base such that the average quality of life that we ensure ourselves can potentially be shared by all future generations

"non-decreasing quality of life" World Bank 1994
Can we just maintain the Status-quo?

- New ideas have entered the sustainability conversation
  - **Resiliency** – planned steps to provide protection against future hardship or weather events (for example)
  - **Public Health** – in broad and diverse ways from walkability to access to quality food and much more
Framing the Conversation

• All of the content in this session relates to community conversations about sustainability
• Information is power
• “What if we approached it differently”?
• “How can we manage traffic effectively and better support bicycles, pedestrians, improve air quality & more”? 
A Proven Phenomenon

• Any organization, place, campus or community that takes the time to measure its total energy use tends to experience about a 30% reduction in consumption
State of Minnesota has set a goal for reducing Greenhouse gas emissions

• But no implementation strategy or commitment and

• We are not making significant progress toward meeting the goal
Who believes human activity has contributed to climate change?

- 97% of the Scientific community
- The Pentagon
- Every Insurance Company
- The Pope
- The Hague District Court, Netherlands
Despite all of that...

- I strongly recommend that you leave the whole ‘Who’s to blame’ piece out of your community conversation.

- “If the 3 scientists out of 100 are right and human activity doesn’t cause global warming, what’s the worst thing that can happen if we acted as though it does”? - Falcon Heights Mayor, Peter Lindstrom
Results:

- Cleaner air – less respiratory illness
- **Save money**
- Conserve natural resources
- Myriad public health benefits
- Build an economy for the 21st Century
Regional Council of Mayors Healthy & Resilient Communities Committee; ULI Minnesota

- Regional Indicators Initiative
- Done in collaboration with the GreenStep Cities Program, MPCA
- Rick Carter, AIA, Becky Alexander, LHB Architects
Set out to answer the question:

- Can we measure the energy consumption for an entire city?
REGIONAL INDICATORS INITIATIVE

RegionalIndicatorsMN.com
BACKGROUND

Minnesota Pollution Control Agency’s GreenStep Cities Program:

• Choose from 28 best practices

• GreenStep Cities tracks which practices cities have adopted, but does not currently have a method of tracking the effectiveness of these strategies

• GreenStep Cities Pilot

Regional Indicators Initiative Pilot

• Edina
• Falcon Heights
• Saint Louis Park
The Regional Indicators Initiative participants include:

33% of Minnesota's total population, 1,745,441 people

50% of the seven county metropolitan area population, 1,441,250 people
METRICS

ENERGY (IN BTUS): electricity, natural gas, and district energy consumed citywide (subdivided into residential and commercial/industrial)

WATER (IN GALLONS): potable water consumed citywide (subdivided into residential and commercial/industrial)

TRAVEL (IN VEHICLE MILES TRAVELED): on-road distance traveled within city limits

WASTE (IN POUNDS): citywide municipal solid waste managed via recycling, composting, combustion, and landfilling (prorated from countywide data)

COMMON METRICS

GREENHOUSE GAS EMISSIONS (IN TONNES CO₂E): citywide greenhouse gas emissions associated with each of the four indicators

COST (IN DOLLARS): cost estimates associated with each of the four indicators

ADDITIONAL DATA

DEMOGRAPHICS
All data is reported both as a total as well as in units/capita. Residential data is reported in units/household, and Commercial/Industrial data is reported in units/job

AREA
City Area (sf)

WEATHER
Heating Degree Days
Cooling Degree Days
Precipitation (in)
A COMMON METRIC

BREAKDOWN OF GREENHOUSE GAS EMISSIONS - 2012 (22 cities)

RII follows the method outlined in the ICLEI Community Protocol

Many cities have done greenhouse gas inventories, but this is the first state-wide effort of this scale

For RII cities, energy is the largest contributor to emissions

RII’s primary metrics comprise over 90% of all in-boundary emissions

Other emission sources were also calculated, including air travel and wastewater
REGIONAL INDICATORS INITIATIVE

**TOTAL ENERGY USE**
(kBtu/capita/day)
7 YEAR TRENDS
TWENTY-TWO CITIES - WEATHER NORMALIZED ENERGY USE

TOTAL ENERGY

Year: 2007 2008 2009 2010 2011 2012 2013
kBtu/person/day: 267 273 270 264 277 256 259

Commercial/Industrial Energy

Year: 2007 2008 2009 2010 2011 2012 2013
kBtu/job/day: 222 230 234 226 241 221 222
Electricity: 266 230 234 226 241 221 222
Natural Gas: 230 234 226 226 221 222 222
Other: 270 277 267 281 282 281 282

Residential Energy

Year: 2007 2008 2009 2010 2011 2012 2013
kBtu/household/day: 261 266 265 263 270 250 257
Electricity: 266 265 263 270 250 256 257
Natural Gas: 250 257 253 263 263 262 262
Commercial/Industrial: 261 266 265 263 270 250 257
RESIDENTIAL ENERGY USE
KBTU/HOUSEHOLD/DAY - 2012

REGIONAL INDICATORS INITIATIVE

RII AVERAGE, 241

237
222
259
COMMERCIAL/INDUSTRIAL ENERGY USE
KBTU/JOB/DAY - 2012

REGIONAL INDICATORS INITIATIVE
7 YEAR TRENDS
TWENTY-TWO CITIES - WATER USE

TOTAL WATER

Residential | Commercial/Industrial
---|---
2007 | 119 | 70
2008 | 113 | 68
2009 | 110 | 67
2010 | 107 | 71
2011 | 107 | 69
2012 | 115 | 72
2013 | 104 | 66

COM./IND. WATER


RESIDENTIAL WATER

Residential Water Use
Gallons/Capita/Day - 2012

Centrally-located Stand-Alone Cities: 48
Inner-Ring Suburbs: 69
Outer-Ring Suburbs: 91

US Average*: 98
MN Average*: 68
RII Average, 64

*State and national data for 2005 from U.S. Geological Survey
City of Hugo

• Faced with DNR & court ordered “protective elevations” for White Bear Lake
• City pumps 400 M gal/yr. from aquifer
• Golf course conversion from ground to surface water irrigation results in 100-200 M gal/yr recharge
REGIONAL INDICATORS INITIATIVE

ENERGY
BRITISH THERMAL UNITS

WATER
GALLONS

TRAVEL
VEHICLE MILES TRAVELED

WASTE
POUNDS

GHG EMISSIONS
CARBON DIOXIDE EQUIVALENTS

TOTAL VEHICLE MILES TRAVELED
(VMT/capita/day)
VEHICLE MILES TRAVELED INCREASES AT GREATER DISTANCES FROM CENTRAL CITIES
VMT/CAPITA/DAY - 2012

<table>
<thead>
<tr>
<th>City</th>
<th>CENTRAL/STAND-ALONE CITIES</th>
<th>INNER-RING SUBURBS</th>
<th>OUTER-RING SUBURBS</th>
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<tr>
<td>Woodbury</td>
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<tr>
<td>Rosemount</td>
<td>21</td>
<td></td>
<td></td>
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<tr>
<td>Lake Elmo</td>
<td>49</td>
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</table>

MN AVERAGE, 28.9
US AVERAGE, 25.8
RII AVERAGE, 22.7
REGIONAL INDICATORS INITIATIVE

TOTAL GREENHOUSE GAS EMISSIONS (tonnes CO$_2$e/capita/year)

US AVERAGE (2011) - 17.3
WORLD AVERAGE (2011) - 4.9
GREENHOUSE GAS EMISSIONS
TONNES CO2E/CAPITA/DAY - 2012

REGIONAL INDICATORS INITIATIVE

GHG EMISSIONS FROM:
- WASTEWATER
- AIR TRAVEL
- WASTE
- VMT
- ENERGY

CENTRAL/STAND-ALONE CITIES: 74%
INNER-RING SUBURBS: 64%
OUTER-RING SUBURBS: 61%

AVERAGE % OF GHG EMISSIONS FROM ENERGY
Non-travel energy is the largest contributor to emissions (67%).

Per capita emissions decreased 13% from 2007-2013, due primarily to a steadily cleaner grid.
SO WHAT?

TOTAL GREENHOUSE GAS EMISSIONS FROM PRIMARY SOURCES

RII DATA

PROJECTIONS

BIZINESS AS USUAL

TARGETS (NEXT GENERATION ENERGY ACT)
SO WHAT?

WEDGE DIAGRAMMING

Identify city-specific goals and select reduction strategies to commit to. Create a wedge diagram template for use by cities in sustainability planning.

REDUCTION FROM 2005 LEVELS

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<th>BUSINESS-AS-USUAL</th>
<th>TARGET</th>
<th>PLAN</th>
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<td>-87%</td>
<td>62%</td>
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REDUCTION PLAN

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<td></td>
<td>New buildings</td>
<td>20%</td>
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<td></td>
<td>Outdoor lighting</td>
<td>1%</td>
</tr>
<tr>
<td></td>
<td>Water treatment and distribution</td>
<td>1%</td>
</tr>
<tr>
<td>Energy Decarbonization</td>
<td>23%</td>
<td></td>
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<tr>
<td>Decarbonization of grid</td>
<td>18%</td>
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<tr>
<td>Decarbonization of on-site energy</td>
<td>5%</td>
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</table>

Residential Energy

<table>
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<th>Energy Efficiency</th>
<th>29%</th>
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</thead>
<tbody>
<tr>
<td>Existing buildings</td>
<td>4%</td>
</tr>
<tr>
<td>New buildings</td>
<td>25%</td>
</tr>
<tr>
<td>Energy Decarbonization</td>
<td>20%</td>
</tr>
<tr>
<td>Decarbonization of grid</td>
<td>18%</td>
</tr>
<tr>
<td>Decarbonization of on-site energy</td>
<td>2%</td>
</tr>
</tbody>
</table>
REGIONAL INDICATORS INITIATIVE

FIVE-YEAR PLAN

Undergo peer review

Develop automated online database to manage data

Collect and publish data for all metro area cities in time for use in comprehensive planning process

Develop tools to assist cities in comprehensive planning (i.e. summary of city data, wedge diagram template, workshops)

Expand program to be statewide, and incorporate into state’s climate action plan

Continue to track annual data to measure progress toward goals

PlaNYC 2030 (New York City, 2007)

Carleton College Climate Action Plan (2011)
What if the established precedent (30% reduction) held true?

• And every Minnesota City simply had access to this information?

• Effort is underway to provide it to every community in the Metropolitan Area as the next round of Comp Plans (2018) are prepared.
REGIONAL INDICATORS INITIATIVE

CITIES
Bemidji
Bloomington
Burnsville
Coon Rapids
Duluth
Eagan
Eden Prairie
Edina
Elk River
Falcon Heights
Hopkins
Kasson
Lake Elmo
Maplewood
Minneapolis
Minnetonka
Oakdale
Richfield
Rochester
Rosemount
Shoreview
Saint Anthony
St. Cloud
St. Louis Park
St. Paul
White Bear Lake
Woodbury

DATA SOURCES
PUBLIC AND PRIVATE UTILITIES
Anoka Municipal Utility
CenterPoint Energy
Connexus Energy
Dakota Electric Association
Duluth Comfort Systems
Duluth Steam Cooperative
Great River Energy
Hennepin Energy Recovery Center
Minnesota Energy Resources
Minnesota Power
Minnesota Valley Electric Cooperative
NRG Energy
Olmsted County Waste to Energy Facility
Rochester Public Utility
St. Paul District Energy
University of Minnesota (Southeast Steam)
Western Lake Superior Sanitation District
Xcel Energy

STATE AND LOCAL GOVERNMENT
Duluth Port Authority
Hennepin County
Metropolitan Airports Commission
Metropolitan Council of the Twin Cities
Minnesota Department of Administration
Minnesota Department of Employment and Economic Development
Minnesota Department of Natural Resources
Minnesota Department of Transportation
Minnesota Pollution Control Agency
Rochester International Airport
U.S. Energy Information Administration
University of Minnesota

OTHER
Degree Days.net
ICLEI Local Governments for Sustainability

PARTNERS
PartnerSHIP 4 Health

2013 Highway 78 Complete Streets Project

www.partnership4health.org
What are “Complete Streets”?

**Complete Streets** is a transportation policy and design approach that requires streets to be planned, designed, operated, and maintained to enable safe, convenient and comfortable travel and access for users of all ages and abilities regardless of their mode of transportation. Complete Streets allow for safe travel by those walking, bicycling, driving automobiles, riding public transportation, or delivering goods.
Minnesota communities with local CS policies or resolutions!

Battle Lake adopted a Complete Streets Policy and started the Highway 78 planning process on June 14, 2011!
Battle Lake met monthly to plan for MnDOT’s 2013 Highway 78 project!
Battle Lake voted to submit their Concept Plan to MnDOT on Oct. 25, 2011!
Battle Lake’s Concept Plan!
MnDOT Open House for 2013 Highway 78 Project
June 19, 2012, Battle Lake City Hall
Downtown Battle Lake Layout
Challenges and Opportunities continued...

sidewalk widening and organization:
The Battle Lake City Council approved the plan on September 25, 2012!
Highway 78 Complete Streets Project Began Late Summer 2013!
Thank you, City of Battle Lake!
APA-MN Annual Conference, Bemidji, September 23-25, 2015

Special Pre-Conference Session on Planning and Public Health
Wednesday, September 23, 8:00am – 11:30am
Presentation: Complete Streets in Rural Communities
Wednesday, November 4, 2015

Stefanie Seskin, Smart Growth America, Washington, DC
Patrick Hollister, PartnerSHIP 4 Health, Fergus Falls, MN
Contact me for more information!

Patrick Hollister
PartnerSHIP 4 Health
Becker, Clay, Otter Tail, and Wilkin Counties
patrick.hollister@co.clay.mn.us
218-329-1809
CASE STUDY # 2

• A Complete Streets Project in a Much Different Context
Superior Street Reconstruction
Finding Balance in a Multi-Model World
Project Overview
One of Duluth’s oldest streets.

“Superior Street was a mere trail cut through the woods, so rough that sledges and wagons, which constituted traffic, had to wind their way carefully around tree stumps and boulders... Wolves, bears, and deer living in the surrounding woods used to come to the edge of town to peer curiously at the usurping humans, and at night the cries of wild animals could be heard...”

E.A. Silberstein (Duluth, 1870)
Superior Street (1887)

• **The City Grows**
  – What year were Duluth’s current water and sewer systems installed?
Commercial and retail hub

History of transportation challenges

- “Poor old downtown Superior Street. Almost everybody knows it’s overused . . . an 80-ft-wide strip of street and sidewalks that is being used at 20 percent above its carrying capacity . . . used daily by 17,000 vehicles and 13,000 pedestrians” (DNT, 1975)
Superior Street (1985)

1980s
I-35 Extension &
Downtown Renaissance Projects
SUPERIOR STREET UTILITIES PERSPECTIVE

WHAT'S GOING ON UNDERGROUND?
District Heating System - Today

Steam supplies 90% of the thermal energy provided to customers
- No condensate return
- Inefficiencies inherent in steam distribution

Over 90 million gallons of water consumed annually

Coal fueled
Duluth Community Energy System

The Vision

Utilize local energy sources and reduce carbon emissions

Enhance system efficiency

Remain reliable & resilient

Remain cost competitive
Traffic Circulation

Project design will need to address space allocation related to:

Vehicle Traffic
Transit
Parking
Pedestrians
Bicyclist
1. Fewer Millennials Want Cars

2. Complete Streets – For All Users

3. Biking Gaining in Popularity
In Duluth ...
How to connect?
What AMENITIES?

- Public art integrated with streetscape
- Improve accessibility through universal design
- Wayfinding/signage and kiosks
- Food including sidewalk cafes, food trucks, outdoor seating areas
- Seating and comfort stations
- Bike amenities including bike lanes, bike parking and bike sharing

What AMENITIES?

- Recycling and waste receptacles
- Alternate materials and street design including flush curbs, meandering street and new materials
- Pedestrian amenities like mid-block crossings and bump-outs
- More green on street including permanent plantings, trees, and stormwater mediation
SIGNATURE STREET

- Pedestrian/Bike friendly
- Clear wayfinding and signage
- Destination street with clear sense of place and design unity
- Flexible street for festivals/events, street performance, markets or other pedestrian-only activities
- Slow moving automobile traffic
- Pedestrian amenities such as diagonal crosswalks, raised ped zones, ADA/accessibility
THEMES

- Water
- Port City Culture
- Industrial History
- Wilderness/Nature/Trees
- Winter/Seasonal Activities
- Gateway to the North
- Historic Architecture
- Major Duluth Businesses
LANDSCAPE
### Preferred Route

**Downtown Duluth Bikeways Survey**

<table>
<thead>
<tr>
<th>Route</th>
<th>First Choice</th>
<th>2nd Choice</th>
<th>3rd Choice</th>
<th>4th Choice</th>
<th>5th Choice</th>
<th>Last Choice</th>
<th>Total</th>
<th>Score</th>
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<tbody>
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<td>Michigan Street</td>
<td>25.6%</td>
<td>26.6%</td>
<td>12.8%</td>
<td>11.5%</td>
<td>15.1%</td>
<td>8.4%</td>
<td>523</td>
<td>4.11</td>
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<tr>
<td>Superior Street</td>
<td>39.0%</td>
<td>12.6%</td>
<td>10.1%</td>
<td>6.1%</td>
<td>6.3%</td>
<td>25.8%</td>
<td>523</td>
<td>3.94</td>
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<tr>
<td>Superior Street Alley</td>
<td>6.9%</td>
<td>14.3%</td>
<td>22.9%</td>
<td>12.0%</td>
<td>14.3%</td>
<td>29.4%</td>
<td>154</td>
<td>2.99</td>
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<td>1st Street</td>
<td>7.5%</td>
<td>18.0%</td>
<td>28.5%</td>
<td>30.8%</td>
<td>12.2%</td>
<td>3.1%</td>
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<td>10.1%</td>
<td>19.7%</td>
<td>15.1%</td>
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<td>103</td>
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<td>10.9%</td>
<td>8.8%</td>
<td>10.5%</td>
<td>57</td>
<td>46</td>
<td>55</td>
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### Modal Priorities

**Q13 Priority Improvements on Superior Street**

- Pedestrian space: 24.1% (Highest Priority), 25.6%, 21.8%, 28.3%, 8.5%
- On-street parking: 28.7%, 18.8%, 19.4%, 21.3%, 15.9%
- Bike facilities: 16.9%, 18.8%, 11.8%, 18.0%, 34.6%
- Vehicular traffic: 27.3%, 17.5%, 16.3%, 18.3%, 19.8%

- Buses: 11.2%, 19.5%, 36.4%, 22.8%, 16.0%
Public & Stakeholder Involvement

October 2013 thru Summer

Six Public Meetings are planned:

Meeting 1 – Project intent, timing and potential funding

Meeting 2 – Community Workshop to generate ideas

Meetings 3 & 4 – Concept alternatives (street layout, streetscape options and materials)

Meetings 5 & 6 - Preferred layout, design elements, construction phasing and potential funding.

Additional meetings as needed such as individual business and property owner sessions.
June 2015
What Types of Infrastructure Will Envision Rate?

**ENERGY**
- Geothermal
- Hydroelectric
- Nuclear
- Coal
- Natural Gas
- Oil/Refinery
- Wind
- Solar
- Biomass

**WATER**
- Potable water distribution
- Capture/StORAGE
- Water Reuse
- Storm Water Management
- Flood Control

**WASTE**
- Solid waste
- Recycling
- Hazardous Waste Collection & Transfer

**TRANSPORT**
- Airports
- Roads
- Highways
- Bikes
- Pedestrians
- Railways
- Public Transit
- Ports
- Waterways

**LANDSCAPE**
- Public Realm
- Parks
- Ecosystem Services

**INFORMATION**
- Telecommunication
- Internet
- Phones
- Satellites
- Data Centers
- Sensors
60 Credits in 5 Categories

**QUALITY OF LIFE**
- Purpose, Community, Wellbeing

**LEADERSHIP**
- Collaboration, Management, Planning

**RESOURCE ALLOCATION**
- Materials, Energy, Water

**NATURAL WORLD**
- Siting, Land and Water, Biodiversity

**CLIMATE AND RISK**
- Emission, Resilience
Levels of Achievement

QL1.1 IMPROVE COMMUNITY QUALITY OF LIFE

No Negative Impact
### Online Scoresheet

**Projects**
**Assessment Home**

You are the CREATOR and PROJECT LEADER of the following projects:

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<thead>
<tr>
<th>Date</th>
<th>Project Info</th>
<th>Project Users</th>
<th>Action(s)</th>
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<tr>
<td>02/20/2015</td>
<td>test Feb 2015</td>
<td>Nelson, Denise (project leader)</td>
<td>Continue This Project</td>
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<td></td>
<td></td>
<td></td>
<td>Pay Now</td>
</tr>
<tr>
<td>01/26/2015</td>
<td>self assessment</td>
<td>Nelson, Denise (project leader)</td>
<td>Continue This Project</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Edit Project Info</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Delete Project</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Register Project for Verifications</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Invoice</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Pay Now</td>
</tr>
</tbody>
</table>

*Project has not been submitted for Verification.*

Table Continues for All of Your Projects
### Quality of Life

**QL1.1**

**Improve Community Quality of Life.**

Improve the net quality of life of all communities affected by the project and mitigate negative impacts to communities.

**Step 1:**

**ENV SP INITIAL ASSESSMENT**

<table>
<thead>
<tr>
<th>Include</th>
<th>Enhanced</th>
<th>Score</th>
<th>Possible Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>✔️</td>
<td>✔️</td>
<td>5</td>
<td>25</td>
</tr>
</tbody>
</table>

**Upload File for this Credit**

**Notes:**

Table continues for all 60 credits.
### Scoring Summary

<table>
<thead>
<tr>
<th>Credit Category</th>
<th>Applicable Points</th>
<th>Points</th>
<th>Innovation Points</th>
<th>Total Points Pursued</th>
<th>Percentage of Available Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUALITY OF LIFE</td>
<td>165</td>
<td>45</td>
<td>5</td>
<td>50</td>
<td>27%</td>
</tr>
<tr>
<td>LEADERSHIP</td>
<td>107</td>
<td>31</td>
<td>6</td>
<td>37</td>
<td>29%</td>
</tr>
<tr>
<td>RESOURCE ALLOCATION</td>
<td>182</td>
<td>50</td>
<td>0</td>
<td>50</td>
<td>27%</td>
</tr>
<tr>
<td>NATURAL WORLD</td>
<td>182</td>
<td>114</td>
<td>0</td>
<td>114</td>
<td>63%</td>
</tr>
<tr>
<td>CLIMATE AND RISK</td>
<td>122</td>
<td>45</td>
<td>0</td>
<td>45</td>
<td>37%</td>
</tr>
<tr>
<td><strong>Total Workbook Points</strong></td>
<td><strong>758</strong></td>
<td><strong>285</strong></td>
<td><strong>11</strong></td>
<td><strong>296</strong></td>
<td><strong>38%</strong></td>
</tr>
</tbody>
</table>

#### Envision™ Scores

![Bar chart showing points distribution across different categories](chart.png)

- **QL**: Applicable Points = 165, Points Achieved = 107
- **LD**: Applicable Points = 107, Points Achieved = 50
- **RA**: Applicable Points = 182, Points Achieved = 114
- **NW**: Applicable Points = 182, Points Achieved = 122
- **CR**: Applicable Points = 122, Points Achieved = 45
# Award Levels

<table>
<thead>
<tr>
<th>Award</th>
<th>Minimum Applicable Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bronze</td>
<td>20%</td>
</tr>
<tr>
<td>Silver</td>
<td>30%</td>
</tr>
<tr>
<td>Gold</td>
<td>40%</td>
</tr>
<tr>
<td>Platinum</td>
<td>50%</td>
</tr>
</tbody>
</table>
Fee Schedule

1. Registration Fee: $1000

2. Verification Fee:

<table>
<thead>
<tr>
<th>Project Size ($)</th>
<th>Non-Member Price</th>
<th>ISI Member Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 2M</td>
<td>$3000</td>
<td>$2400</td>
</tr>
<tr>
<td>2-5M</td>
<td>$8500</td>
<td>$7000</td>
</tr>
<tr>
<td>5-25M</td>
<td>$17,000</td>
<td>$14,000</td>
</tr>
<tr>
<td>25-100M</td>
<td>$25,000</td>
<td>$21,000</td>
</tr>
<tr>
<td>100-250M</td>
<td>$33,000</td>
<td>$28,000</td>
</tr>
<tr>
<td>Over 250M</td>
<td>$5000 per 100M above base price of $20,000</td>
<td></td>
</tr>
</tbody>
</table>

3. Optional Appeals Fee: $500 per credit
QUESTIONS?