

The logo features a stylized black 'S' shape with a white outline, resembling a winding path or a drain.

Sterling Relief Drain

Macomb County – Sterling Heights City Council 2.6.2018



CURRENT CONDITIONS



5.1 Miles

Approximate length of the Sterling Relief Drain Corridor.

140 Acres

Area of the Sterling Relief Drain Corridor

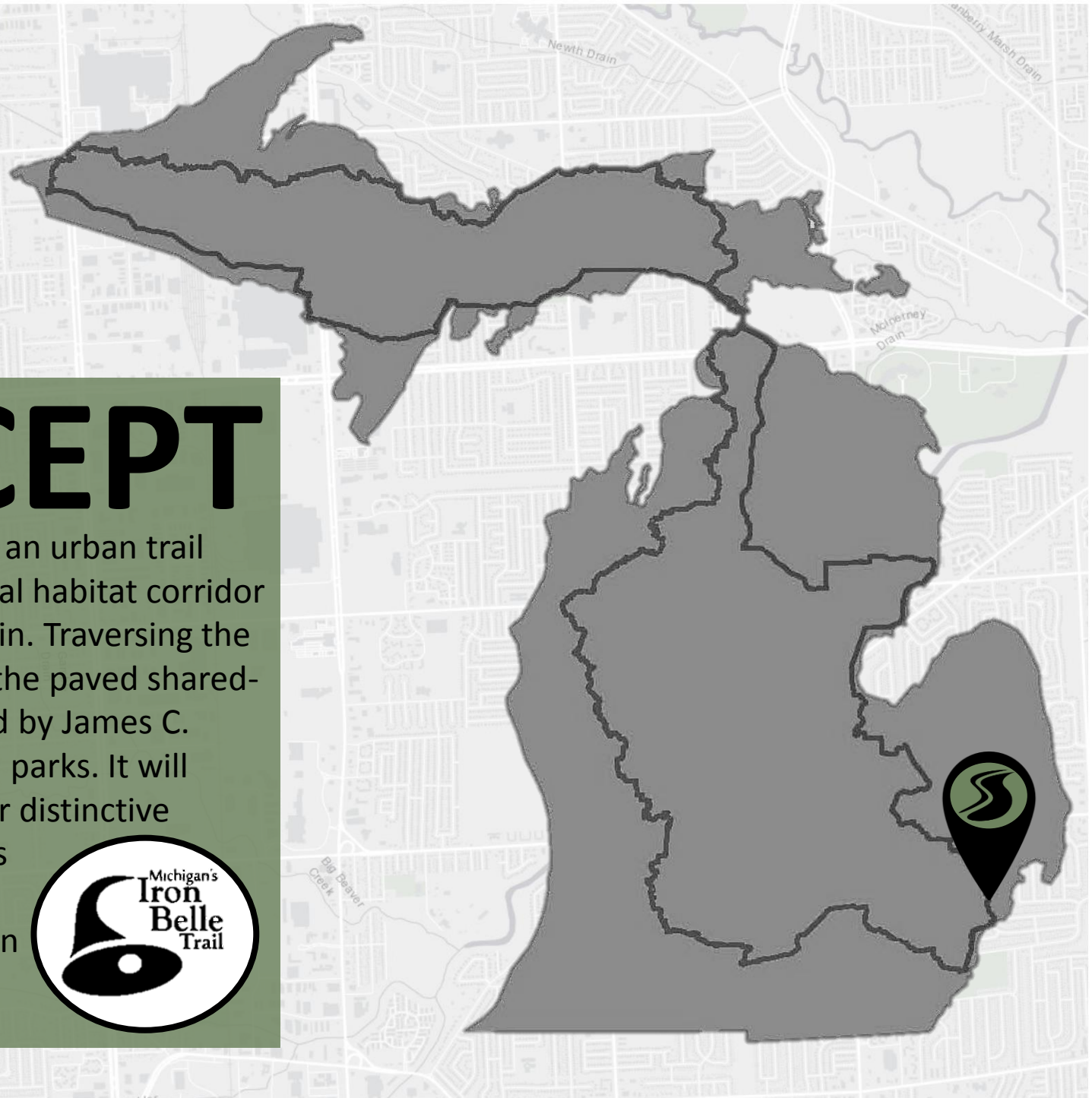
25,452 People

Population living within ½ mile of the Sterling Relief Drain.



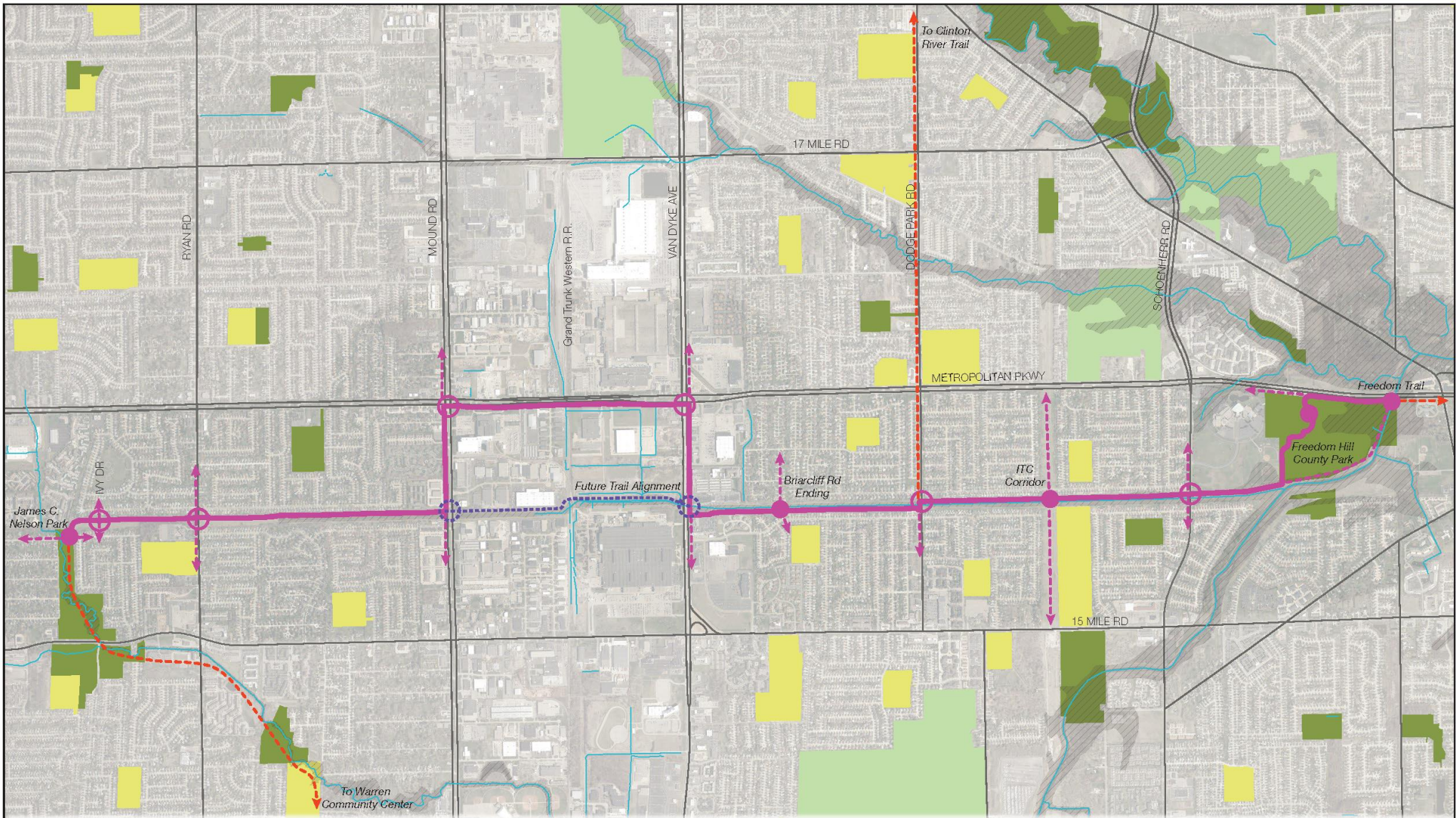
CONCEPT

This project will develop an urban trail along the restored natural habitat corridor of the Sterling Relief Drain. Traversing the City of Sterling Heights, the paved shared-use trail will be anchored by James C. Nelson and Freedom Hill parks. It will provide opportunities for distinctive pocket parks at all access points and fill priority gaps in the statewide Iron Belle Trail Network.



STERLING RELIEF VISION

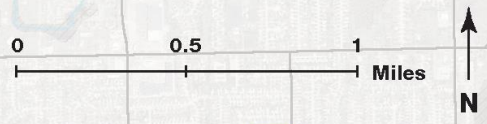




Trail Connectivity Sterling Relief Drain
Sterling Heights, MI




- Access Point - Non-Road
- Access Point - Road Crossing
- Schools
- Parks
- Golf Courses
- Future Trail Alignment
- Potential Connections
- 100 yr Floodplain
- Trail Route

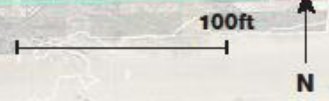


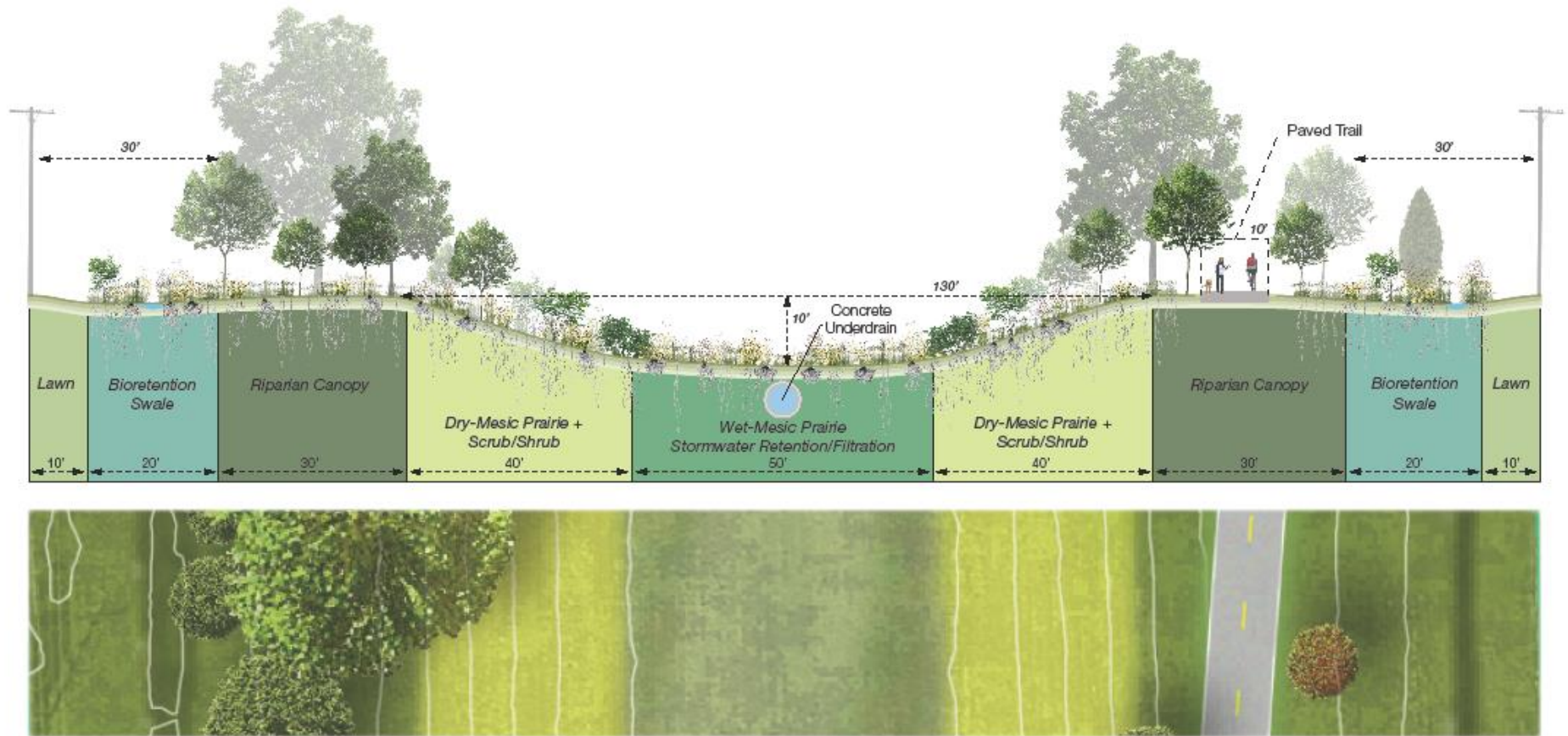


Typical Configuration on the Sterling Relief Drain

Dodge Park Road Crossing - Sterling Heights 

Conceptual Site Plan





Typical Configuration on the Sterling Relief Drain
 Dodge Park Road Crossing - Sterling Heights



Conceptual Drain Section



Drawing not to scale



Trailhead Park Freedom Trail + Sterling Relief Drain Trail
 Freedom Hill County Park - Sterling Heights



Conceptual Site Plan

50ft 100ft



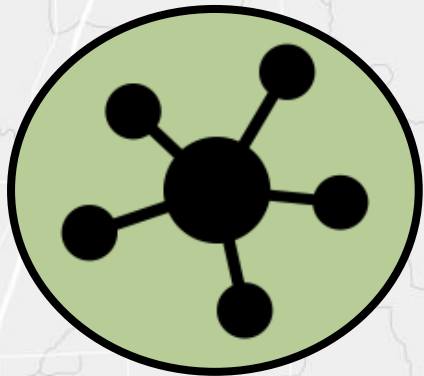
OVERVIEW



- Recreational use along the drain has been a community aspiration in municipal plans since the City of Sterling Heights was incorporated 50 years ago.
- This project achieves many objectives in the City of Sterling Heights current Master Plan, including creation of new open space corridors and amenities along waterways, new bike paths and trails, and better transportation options.
- Tree planting and landscaping along the drain will create a natural park-like habitat corridor to further enhance the environmental, quality of life, and economic benefits from the non-motorized trail.
- The Sterling Relief Drain trail design principles and best practices are established through the four guiding objectives of **community, connectivity, sustainability, and accessibility.**

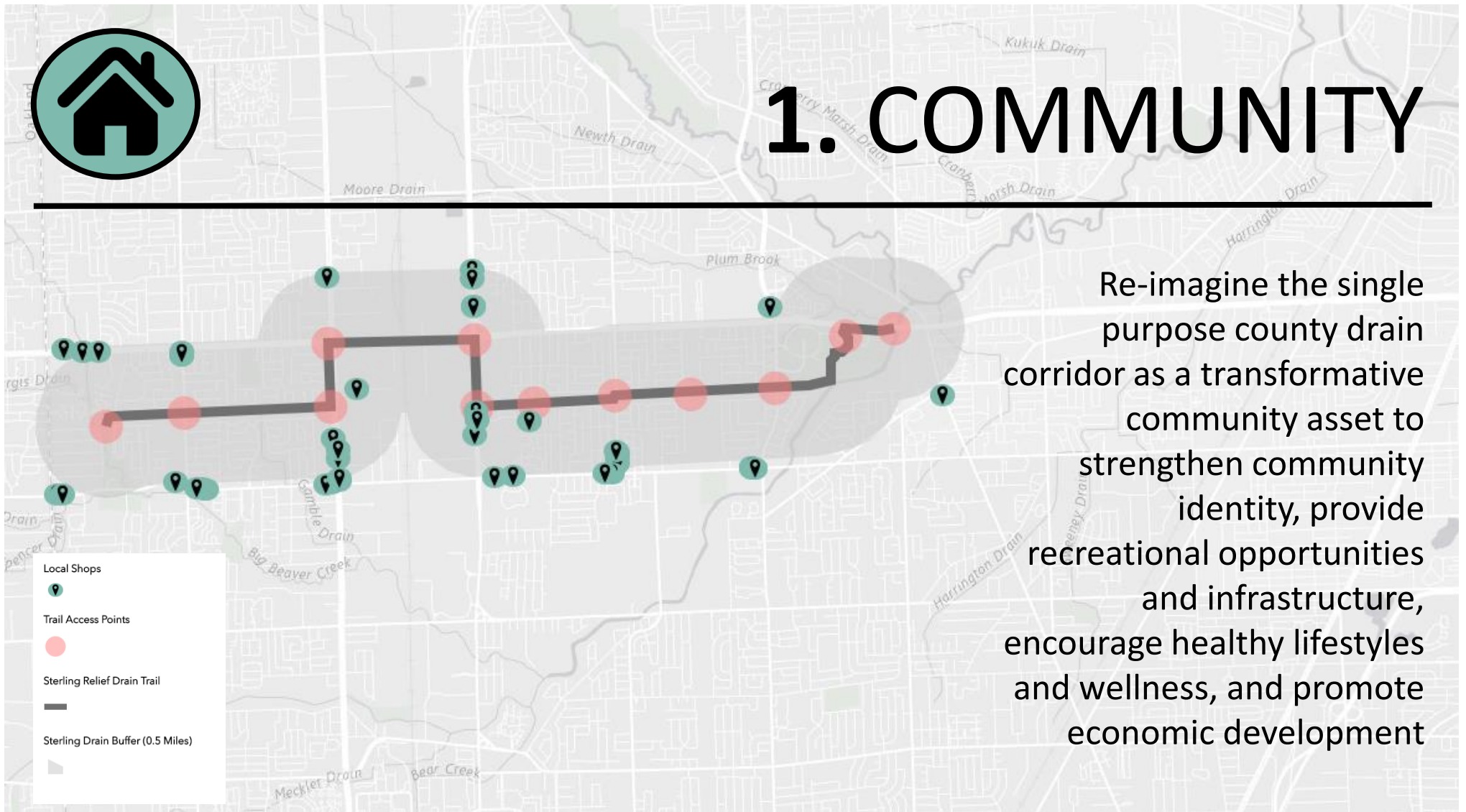


FOUR MAIN OBJECTIVES





1. COMMUNITY



Re-imagine the single purpose county drain corridor as a transformative community asset to strengthen community identity, provide recreational opportunities and infrastructure, encourage healthy lifestyles and wellness, and promote economic development

25,452

Population

**Within 2014–2016 & 0.5 miles of the Drain*

\$60,444

Avg. Household Income

**Within 0.5 miles of the Sterling Relief Drain*

13,526

Employees

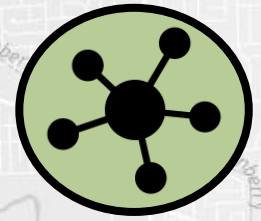
**Within 0.5 miles of the Sterling Relief Drain*

798

Businesses

**Within 0.5 miles of the Sterling Relief Drain*

2. CONNECTIVITY



Expand and enhance connections to parks, schools, neighborhoods, attractions, businesses, community services and other destinations through frequent access points and linkages to the existing pedestrian transportation network. Ensure regional connections to countywide non-motorized trail routes and City of Troy's proposed trail network. Additionally, this route would fill a gap in the Iron Belle Trail network by connecting the City of Warren to the City of Sterling Heights and Shelby Township.



7

Attractions / Parks

**Within 0.5 miles of the Sterling Relief Drain*

12

Access Points

**Potential along the Drain Trail*

11

Schools

**Within 0.5 miles of the Sterling Relief Drain*

123 (Miles)

Trail Network

**Macomb County*



3. SUSTAINABILITY

Capitalize on storm-water infrastructure and recreational opportunities to enhance community, the economy, and environmental vitality. Improve water quality and storage, as well as support native pollinators and ecosystems through restoration of a natural habitat corridor. Provide an alternative transportation network option with linkages to local and regional non-motorized trail networks.

- Parks
- Trail Access Points
- Tree Canopy
- Sterling Relief Drain Trail
- Sterling Drain Buffer (0.5 Miles)

140 (AC)

Habitat Restoration

**Approximate area of Sterling Relief Drain*

19%

Tree Canopy

**Tree canopy cover for Sterling Heights*

6.5 (Miles)

Drain Trail

**Length of potential trail along the Drain*

4

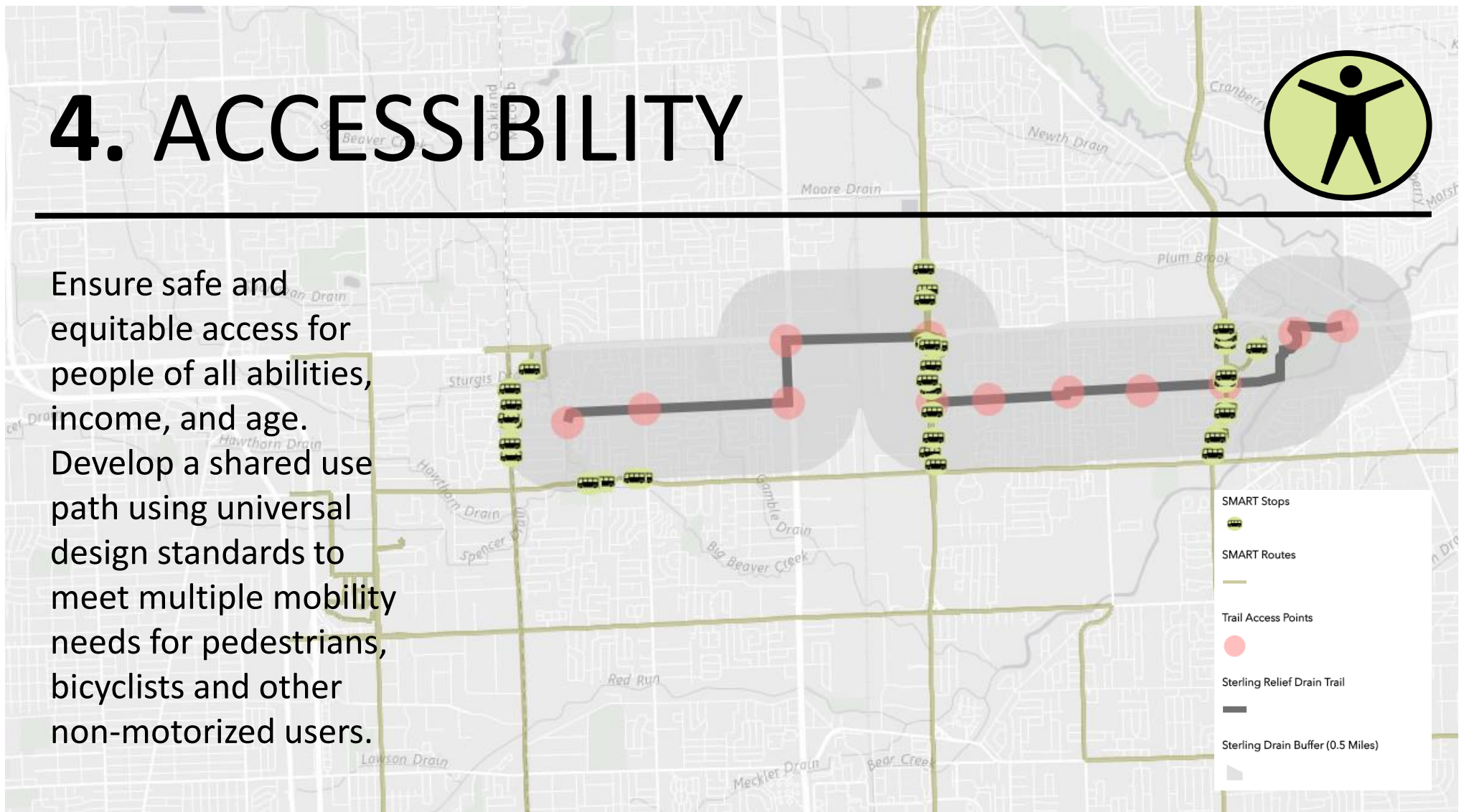
River Corridors

**Within 0.5 miles of the Sterling Relief Drain*

4. ACCESSIBILITY



Ensure safe and equitable access for people of all abilities, income, and age. Develop a shared use path using universal design standards to meet multiple mobility needs for pedestrians, bicyclists and other non-motorized users.



55

Bus Stops

**Within 0.5 miles of the Sterling Relief Drain*

5.5%

Without Vehicle

**Within 0.5 miles of the Sterling Relief Drain*

3,552

K-12 Population

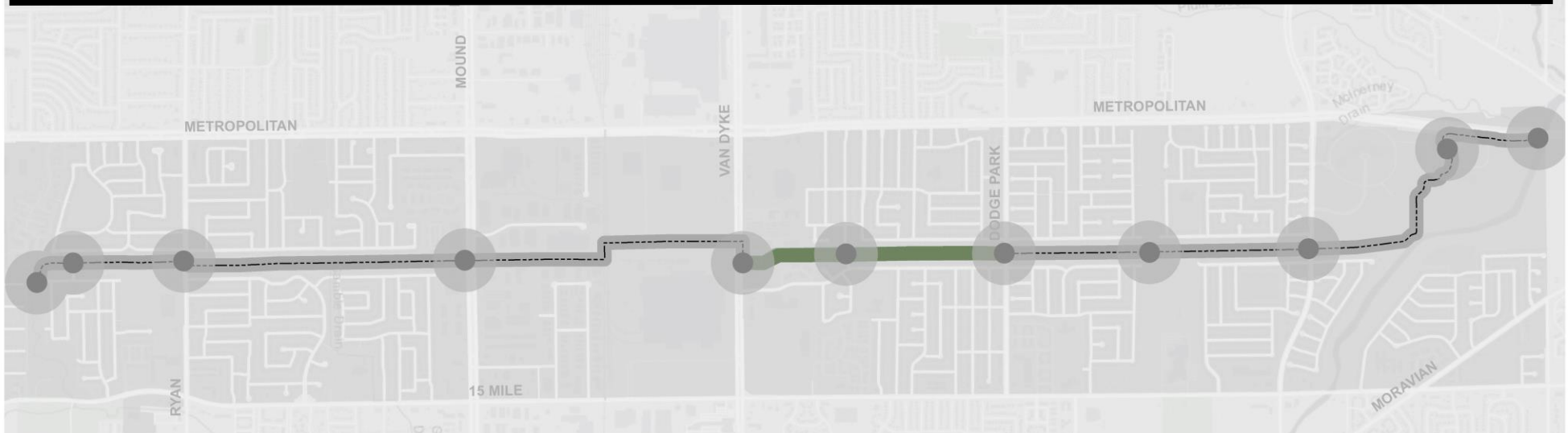
**Within 0.5 miles of the Sterling Relief Drain*

11.2%

Below Poverty Level

**Within 0.5 miles of the Sterling Relief Drain*

ENVIORNMENTAL IMPACT: Phase I



1 mile
Approximate length of Sterling Relief Drain to be retrofitted

96.5 million gallons / year
of reduced urban runoff

1.77 sq mile
Urban drainage area improved by this project

Legend

- Access Points
- Phase I
- Potential Trail
- All Parcels (Within 0.5 Miles)



ECONOMIC IMPACTS



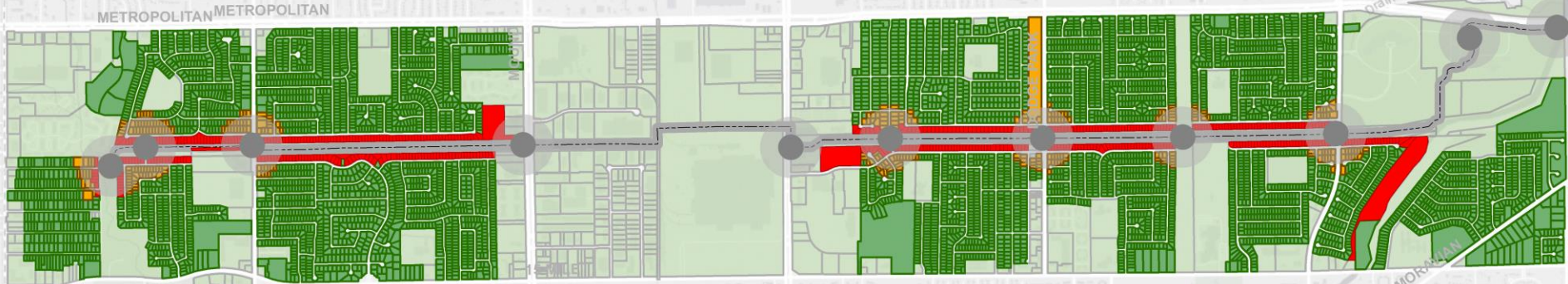
Parks provide intrinsic environmental, aesthetic, and recreational benefits to communities but they are also a source of positive economic benefits as well. This makes parks and trails a good financial investment for a community.



Key Impacts:

- Property values are positively affected.
 - The proximate principle is the phenomenon that shows the positive impact parks have on adjacent and nearby residential property values.
- Municipal revenues have the potential to increase over time.
- Attract homebuyers and workers to the area due to increased amenities and value.









ECONOMIC IMPACT: Property Analysis



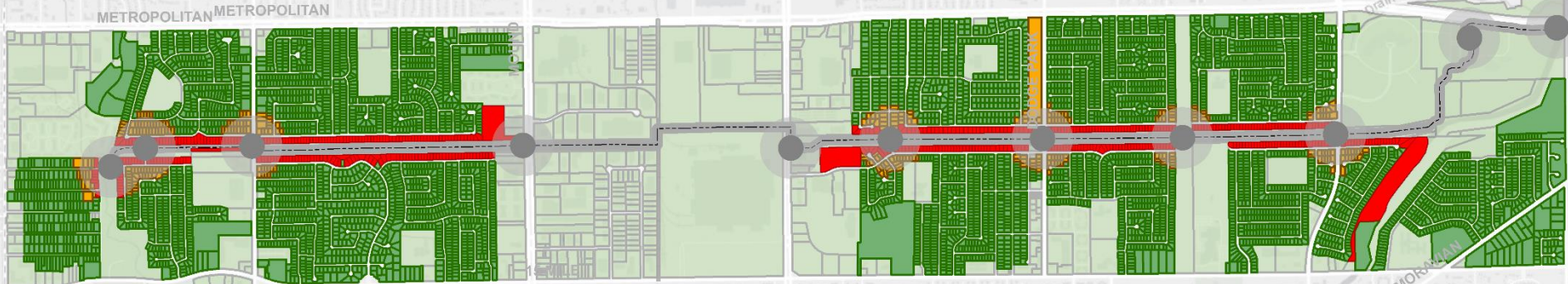
	<p>6,441</p> <p>Properties within 0.5 miles</p>	<p>335</p> <p>Properties within 625 feet</p>	<p>649</p> <p>Properties adjacent to trail</p>
	<p>3.5%</p> <p>Potential Market Value Increase</p>	<p>10%</p> <p>Potential Market Value Increase</p>	<p>15%</p> <p>Potential Market Value Increase</p>

Legend

-  Access Points
-  Sterling Relief Drain Path
-  Residential Properties Adjacent to Drain
-  Residential Properties Near Access Points (625 feet)
-  Residential Properties (Within 0.5 miles)
-  All Properties (Within 0.5 miles)



ECONOMIC IMPACT: Property Analysis



7,425
Properties

Residential Properties
Within 0.5 miles



\$60
Million

Estimated Total Market
Home Value Increase



\$1.2
Million

Potential Property Tax
Revenue Increase

ESTIMATED BUDGET



\$6 - \$8 Million

Key Items in Budget:

- Trail development along the Sterling Relief Drain corridor.
- Stormwater retrofit for the Sterling Relief Drain.
- Landscaping along the whole corridor, roadways, and trail.
- Park amenities to increase neighborhood value and community assets.



FUNDING OPPURTINITES



Sustain Our Great Lakes



- Applications due April 2018
- Funds stream/riparian habitat & green storm-water infrastructure
- 50% match encouraged

\$100,000 - \$1 Million

Transportation Alternative Program (TAP)



- Applications accepted year-round
- Funds pedestrian and bicycle infrastructure & safety programs
- 20% match required

\$88,000 - \$1.2 Million

MDNR Trust Fund

Michigan Dept. of Natural Resources



- Applications due April 2018
- Funds non-motorized trails, parks and recreation
- 50% match required

\$15,000 - \$300,000

319 NPS Grant

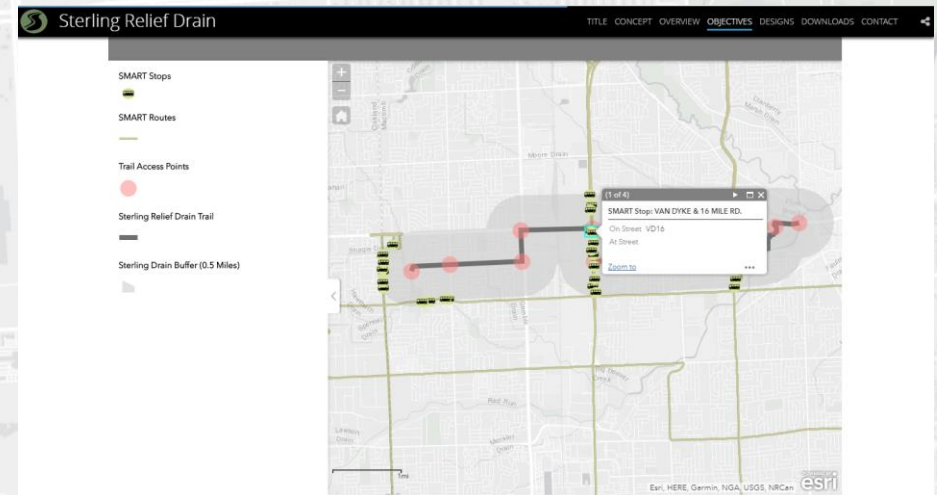
Michigan Dept. of Environmental Quality



- Applications due July 2018
- Funds water quality and habitat restoration initiatives
- 25% match required

\$25,000 - \$4.3 Million

Visit the Sterling Relief Drain interactive tool!
GIS.MACOMBGOV.ORG/GO/STERLING_RELIEF



Questions, comments, or concerns?

Email: **PLANNING@MACOMBGOV.ORG**

SOURCES & PARTNERS



Data for Property Analysis

- Macomb County Planning & Economic Development
 - URL: <https://GIS.MacombGov.Org>
- Macomb County Equalization
 - Property information on parcels, including 2017 SEV.
- Michigan Department of Treasury
 - Michigan property tax estimator 2016.
 - URL: <https://treas-secure.state.mi.us/ptestimator/PTEstimator.asp>



Trail Property Analysis Research

- *"The Relative Impacts of Trails and Greenbelts on Home Price"* – Paul K. Asabere
- *"Greenways and Greenbacks: The Impact of the Catawba Regional Trail on Property Values in Charlotte, North Carolina"* – Harrison Campbell JR
- *"Understanding the Impact of Trails on Residential Property Values in the Presence of Spatial Dependence"* – Oliver Parent
- *"The Proximate Principle: The Impact of Parks, Open Space and Water Features on Residential Property Values and the Property Tax Base"* – John L. Crompton
- *"Real Estate Impact Review of Parks and Recreation"* – Economics Research Associates



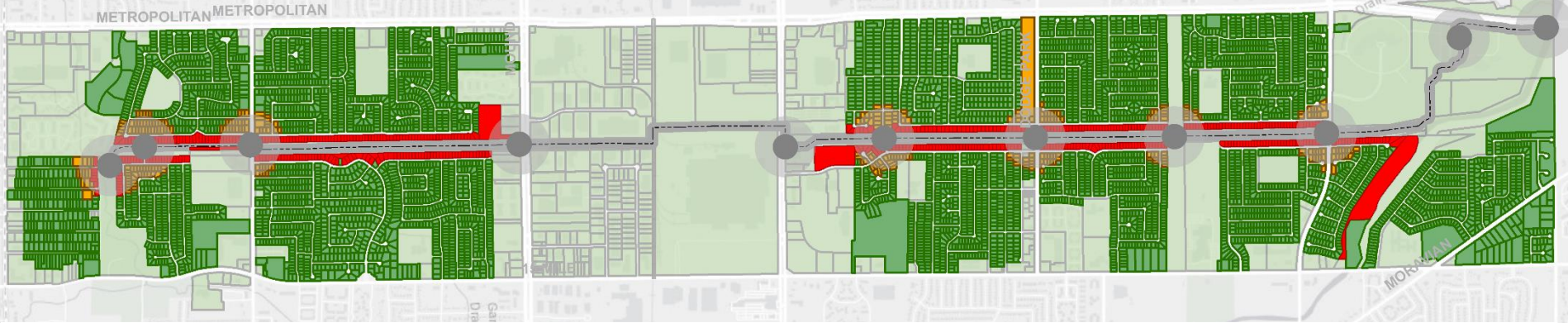
PROPERTY ANALYSIS METADATA



Terms and Equations

- Residential Properties
 - Based on property classifications of parcels from Macomb County Equalization, classes of 401 – 407 are considered as residential.
- State Equalized Value (SEV)
 - Average of all the SEV values for the group of parcels in that property distance.
- Estimated Market Property Value
 - Doubling the SEV is the standard to get the actual assessed value for a property.
- Estimated Increase Percentage With Trail / Park
 - Based on research on how linear trails and parks increase nearby property values, for more information see the sources page.
- Estimated Total SEV Increase
 - Equation = $(SEV * Total\ Amount\ of\ Parcels) * Estimated\ Increase\ Percentage$
- Estimated Total Market Property Value Increase
 - Equation = $((SEV * 2) * Total\ Amount\ of\ Parcels) * Estimated\ Increase\ Percentage$
- Estimated Property Tax Increase
 - Based on 2016 millage rates for the city of Sterling Heights in Macomb County and Warren Consolidated School District.

PROPERTY ANALYSIS METADATA



Property Distance Classifications	Residential	Residential Access Points	Residential Adjacent
Distance from Drain or Access Points	0.5 Miles	625 Feet	Nearest to drain
Total Parcels / Properties	6,441	335	649
Total SEV (2017)	\$548,740,995	\$31,245,785	\$51,005,559
Estimated Total Market Value (2017)	\$1,097,481,990	\$62,491,570	\$102,011,118
Estimated Increase Percentage With Trail / Park	3.5%	10%	15%
Estimated Total SEV Increase	\$19,205,935	\$3,124,579	\$7,650,834
Estimated Total Market Value Increase	\$38,411,870	\$6,249,157	\$15,301,668
Estimated Total Property Tax Revenue Increase for Warren Consolidated School District	\$615,546	\$84,816	\$177,927
Estimated Total Property Tax Revenue Increase for Utica Community School District	\$173,722	\$42,848	\$128,519