



REINVESTMENT
FUND

INVEST HEALTH

Strategies for Healthier Cities

A Project of the *Robert Wood Johnson Foundation*
and *Reinvestment Fund*



Robert Wood Johnson
Foundation

Active Transportation May 14th 12:30-2:30

Attendees

Name	Email	Organization
Katherine Auge	kauge@ci.missoula.mt.us	Missoula In Motion
Robin Neilson-Cerquone	rnelson@missoulacounty.us	MCCHD
Kyle Guathier	kyle@djanda.com	DJ & A P.C.
Heidi West		City Council
Ben Weiss	bweiss@ci.missoula.mt.us	City
Aaron Wilson	awilson@ci.missoula.mt.us	MPO
Karen Sippy	ksippy66@gmail.com	Trees for Missoula
Vickie Meire	Vicki-miere@u	University of Iowa
Peter Walker-Kelher	peter@djanda.com	DJ & A
Donna G		Parks and Recreation
Colin Woodrow	cwoodrow@ci.missoula.mt.us	Housing and Community Development
Jessica Morris		MPO/ Transportation Planning.
Lisa Beczkiewicz		MCCHD
Timmie Lyon		MCCHD

Introductions

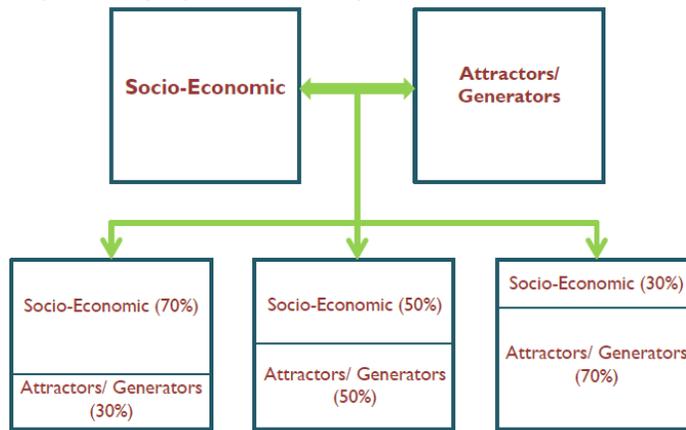
Attendees introduced themselves and Lisa Beczkiewicz welcomed them. The attendees were introduced to the Invest Health work and the three cities.

Pedestrian Facilities Master Plan Presentation

Aaron from Missoula City-County Metropolitan Planning Organization (MPO) presented a project update.

- Project review for the master plan started in July 2017
 - They inventoried existing conditions.
 - From November 2017 to February 2018 they establish priorities of the master plan and developed the plan document.
 - The MPO is currently implementing strategies to improve the way they plan and update active transportation in Missoula.
 - It is the hopes of MPO to adopt the new master plan by July 2018.
- Plans that the MPO utilized to inform the pedestrian master plan was the Missoula City Growth Policy the 2016 Long Range Transportation Plan (LRTP), 2011 Missoula Active Transportation Plan (MATP), and the 2016 Bicycle Facilities Master Plan. These plans influence where they will do work and try to get funding. They are all interconnected and impact the quality of transportation in Missoula.
- Goal 8 in the pedestrian master plan focuses on health equity. It states, “Promote community health and social equity through the transportation system. This is a new way to think about planning and the MPO is trying to ensure they focus on health and equity.

- They began by creating a prioritization system.



- They then gathered social equity data which:
 - Identified areas of higher rates of vulnerable/ affected groups
 - Used data at the census block group or tract geography
 - Scored any block that intersects.
- The data gathered was focused on:
 - Obesity
 - Aging adults
 - People that have disabilities
 - Zero vehicle households
 - Low-moderate income
- MPO then identified attractor locations (ex. High-ridership transit stops)
- MPO applied a ¼ mile buffer
- Then they scored any block that intersected.
- MPO then looked at residential and employment density.
- All the data and criteria were then placed in a score card with a maximum score of 100 and each weighted equally. Once the initial score card was created, the organization held public meetings, polls, and Wikki stick maps.
- After the public input phase, MPO revised scoring base on the data.
- MPO created five data models that highlighted priorities areas in Missoula.
 - Social data model
 - Built environment model
 - 50/50 mix model
 - 30 social/70 built environment mix model
 - 70 social/ 70 built environment mix model
- The organization then presented the models the polls showed support for the 70/30 mix model.
- The organization also wanted to identify safety issues.
 1. Identify barriers/pedestrian risk factors
 - a) Speed
 - b) Volume
 - c)# of lanes
 2. Existing crossing improvements
 - a) Signals
 - b) Roundabouts
 - c)Curb extensions
 - d)Crosswalks
 - e) Traffic circles
 - f) Median refuge
- MPO analyzed the results and included the results in prioritization areas.
- They will select projects based on prioritization areas and funding available.

- The presentation discussed sidewalk cost in the City of Missoula
 - Repair: \$69 per linear foot
 - New: \$68-70 per linear foot
 - ADA upgrade for intersection \$20+
- Currently the city has
 - Subsidy and assessment budget of \$840,000 a year.
- Missoula Redevelopment Agency has:
 - \$600,000, limited to Urban renewal districts.
- There is a need of \$84 million in sidewalks.
- Implantation challenges include:
 - Lack of staff/resources
 - Street & pavement condition
 - Assessment process
 - staff limitations
 - Property owner cost burden
 - ROW/space constraints
 - Lack of labor/contractor capacity
 - Other standards/design (boulevard, trees, lights)
- Next steps include:
 - Virtual open house and wikimaps
 - County facilities
 - Identify funding and implantation opportunities
 - ADA transition plan

Q&A

Is the property owner responsible for sidewalk repair?

- Somewhat, it is a complicated calculation
- Anyone can choose to update, and city pays back over time.

Is new development required?

Yes.

Prioritization heart of Missoula?

- Very few missing sidewalks.

Attendees looked at the summit notes from the active transportation breakout session.

- Prioritize 1 mile of connectivity in each neighborhood.
- Next step for Invest Health: analyze where the next mile should be. Find alternative funding to invest in each neighborhood. There could be possible places for ownership. Connecting all the expertise with each program and agency.

Are residents supportive of new sidewalks?

- For the most part: depending on how far the right away is.
- Community engagement from help breaks down the barriers of communication between developer, city and residents.
- Invest Health had community meeting for residents to express their issues. Had an open and honest conversation that helped improve the relationship.
- Parks and rec has also been instrumental to help contractors and residents learn about why sidewalks and trees are important.
- Sidewalks are a hot button issue in city council.
- Iowa City
 - Complete streets policy
 - It is a working process
 - Bike master plan is in the works
 - Home owners must pay to replace sidewalks.
 - Bike program- where to make bike lanes.
- Eau Claire
 - Most of the city has sidewalks.

- One neighborhood has no sidewalks- residents do not want sidewalk because they prefer the rural feel.
- The city is trying to improve the walkability.
- How is your communication with Department of Transportation in Wisconsin? Here in Montana we seem lack strong communication and shared priorities.
 - Eau Claire has strong communication networks with the Department of Transportation.
- Missoula
 - Missoula plans to continue to engagement residents.
 - Find new sources of funding.
 - Implement health and equity in many different plans and policies.
- Opportunities and Weaknesses for Missoula
 - Have opportunity to be multimodal
 - Many do not look at built infrastructure in the same way.
 - We do not view affordability the same way.
 - What generation was it built in?
 - Changing the perception that no sidewalks, trees and parking do not provide cheaper housing.
 - Identify where cut throughs are and utilize them.
 - Put in lights to make them safer.
 - Health equity where does it live?
 - How does planning for urban core, and zero fair correlate?
 - Insufficiency of infrastructure, what are the steps to operate within the means?
- Future goals:
 - Create common agendas
 - Create shared definitions
 - Change perceptions of affordability and the built environment.

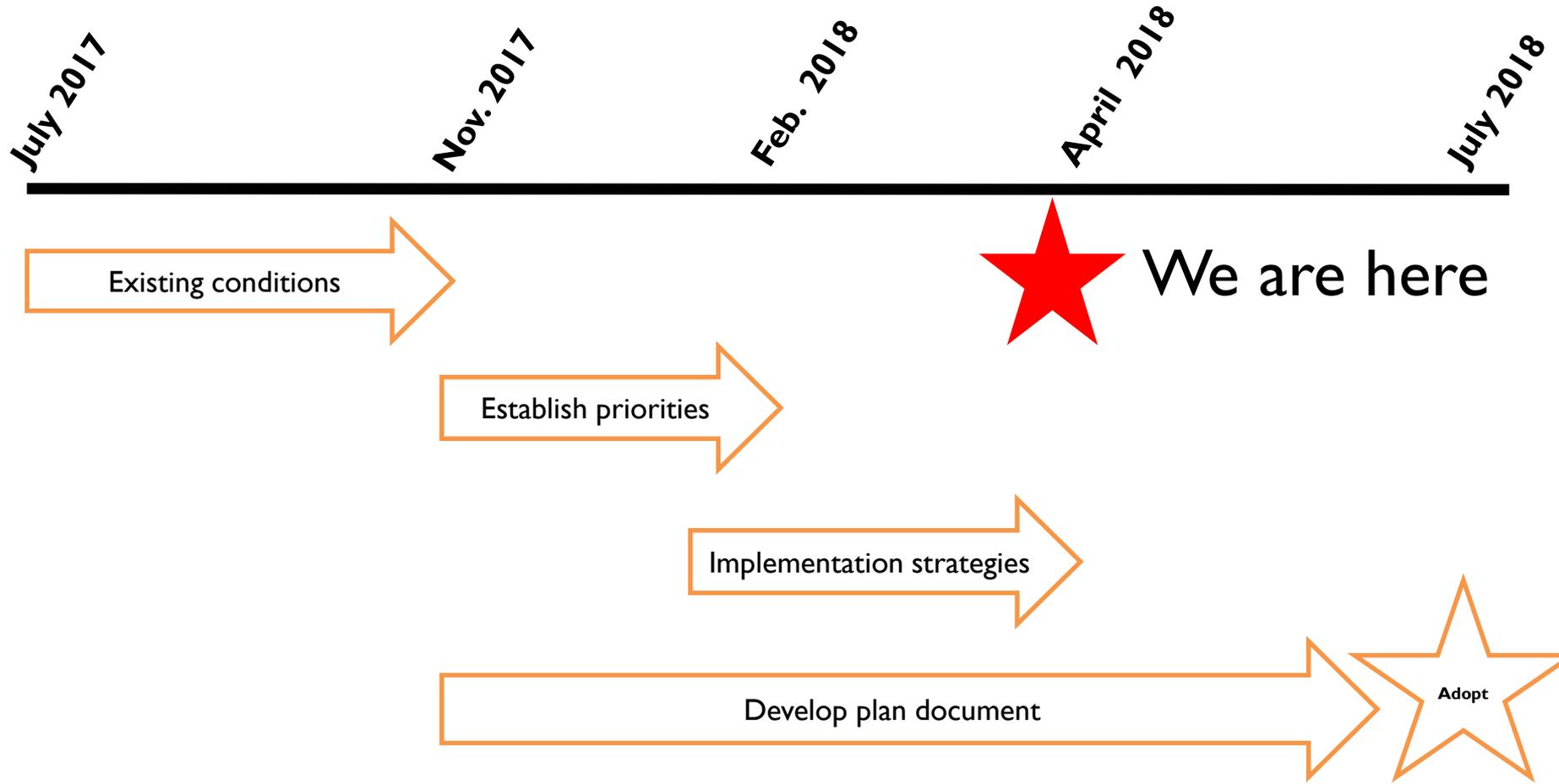
Pedestrian Facilities Master Plan Project Update



*Transportation Technical Advisory Committee
May 3, 2018*



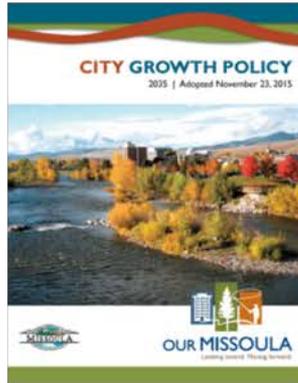
Project schedule



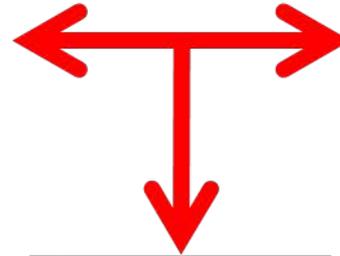
Planning context



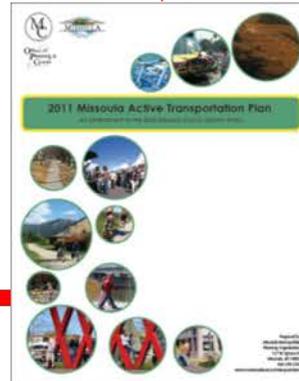
Growth
Policy



2016 LRTP

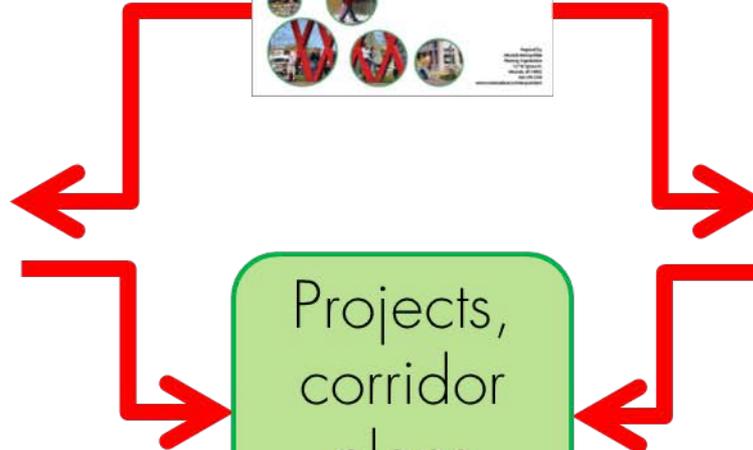


City & County
Policies



2011 MATP

Ped
Master
Plan



Projects,
corridor
plans



2016
BFMP

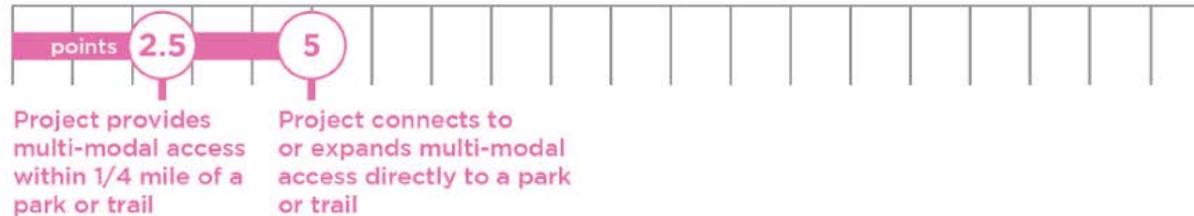
Goal 8: Promote community health and social equity through the transportation system

- Improve multi-modal access to parks and trails to support active and healthy lifestyles.
- Improve multi-modal access to schools, health-care and social services.
- Reduce overall household transportation costs, particularly for typically under-served and/or vulnerable populations by providing safe and affordable transportation options.
- Reduce impacts on neighborhoods and cultural and historic resources through evaluation of assets and involvement of neighbors in the planning process with special attention to areas with typically under-served and/or vulnerable populations.

8. Community health & social equity

20pts

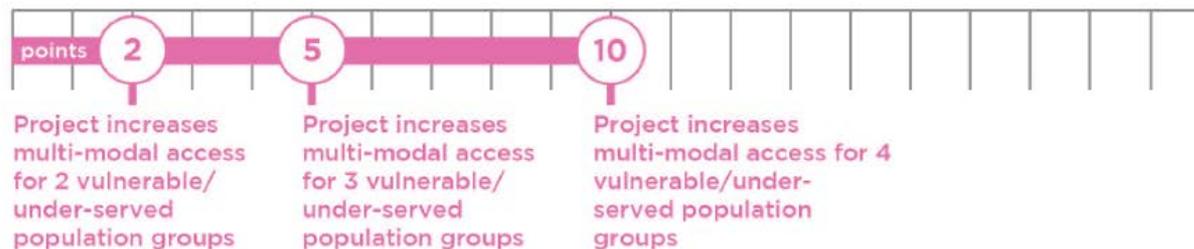
H.1 Access to parks & trails: Increase multi-modal access to parks, trails and open space



H.2 Access to schools, healthcare & social services: Increase multi-modal access to essential community services

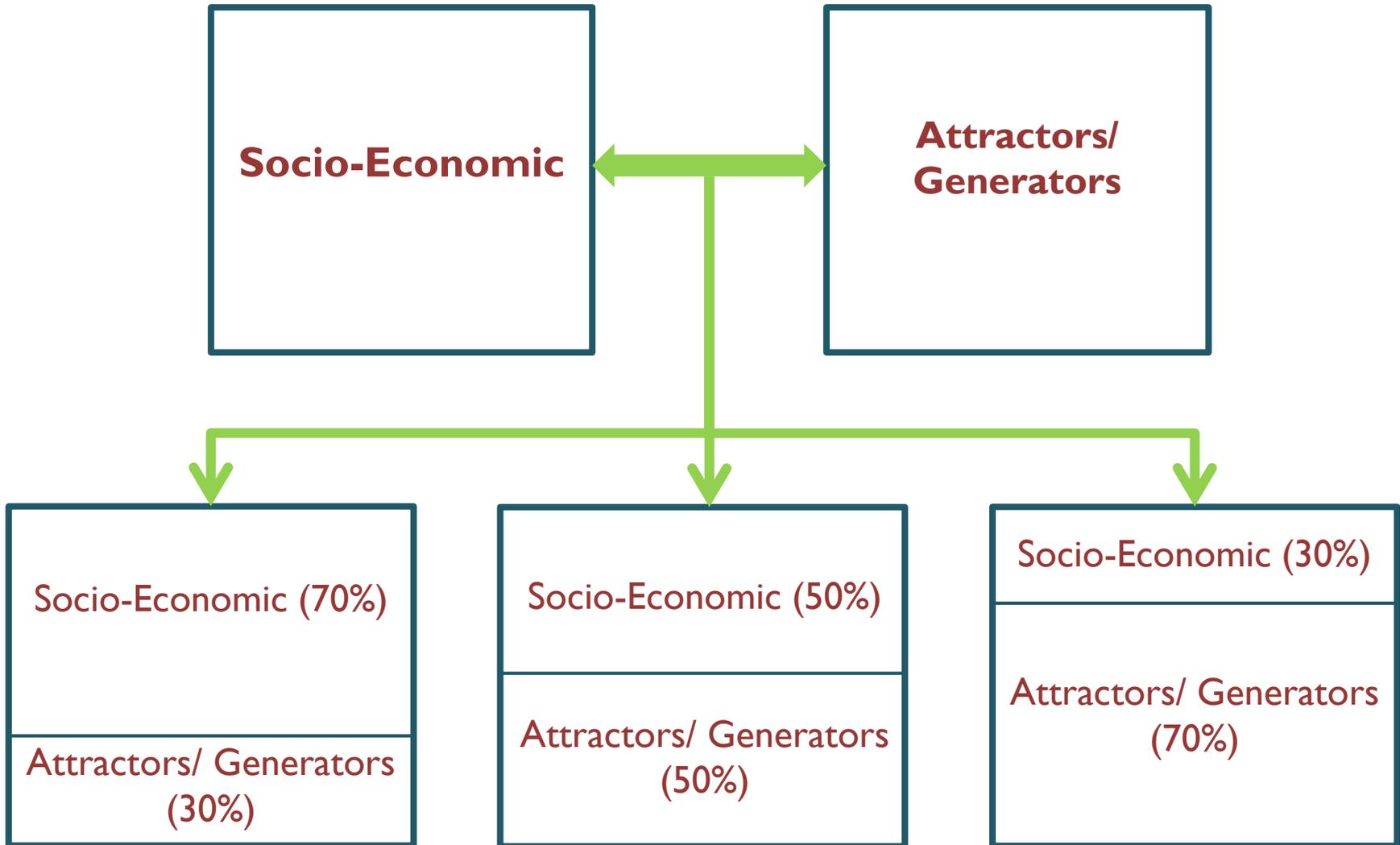


H.3 Transportation Equity: Increase multi-modal transportation options for under-served and vulnerable populations

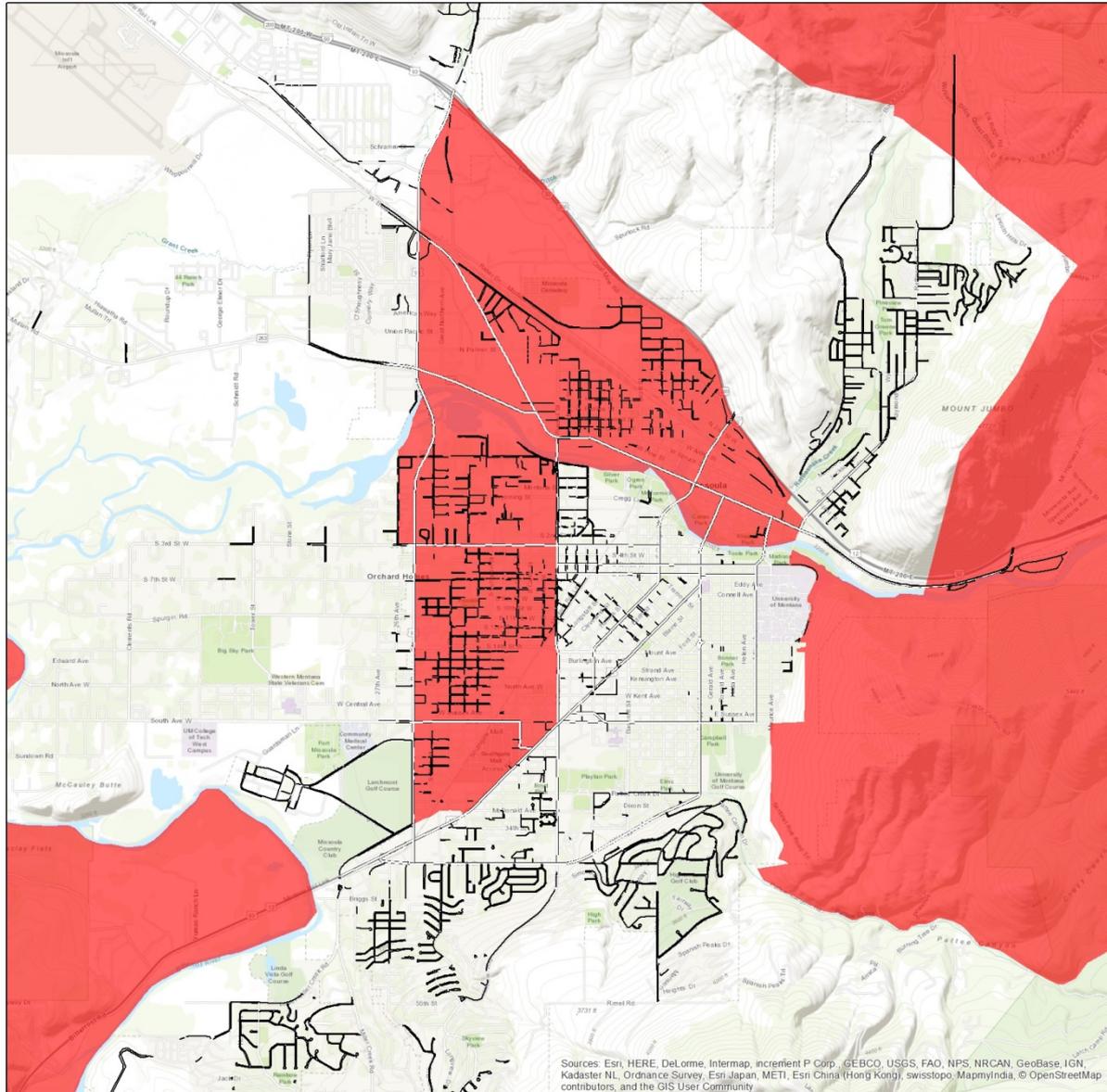


Health & Equity: Encourage people to make healthy, active transportation choices such as walking to work or school by providing safe, accessible, and connected pedestrian facilities, particularly in neighborhoods with persistent poverty and health disparities. Improve pedestrian transportation options to destinations like schools, parks, and jobs to help reduce transportation costs for people in low-income neighborhoods, as well as those who are unable to drive or don't have access to a motor vehicle.

Sidewalk prioritization: 5 options

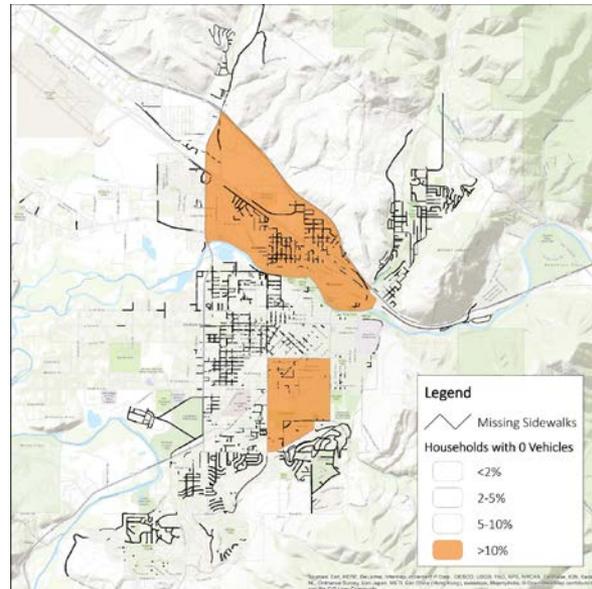
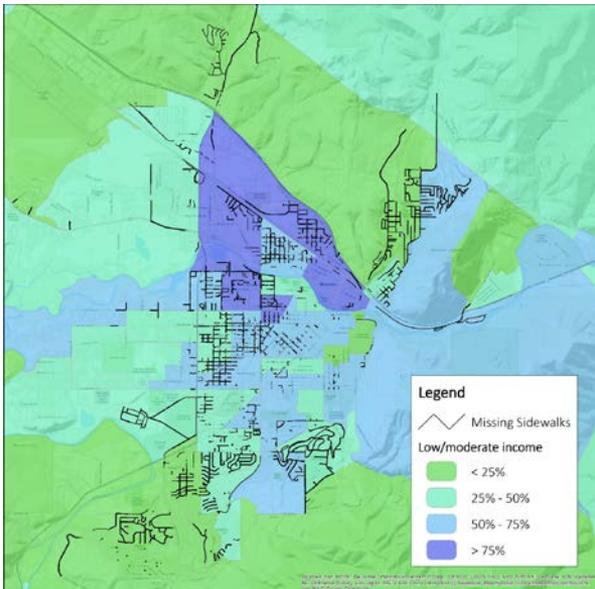
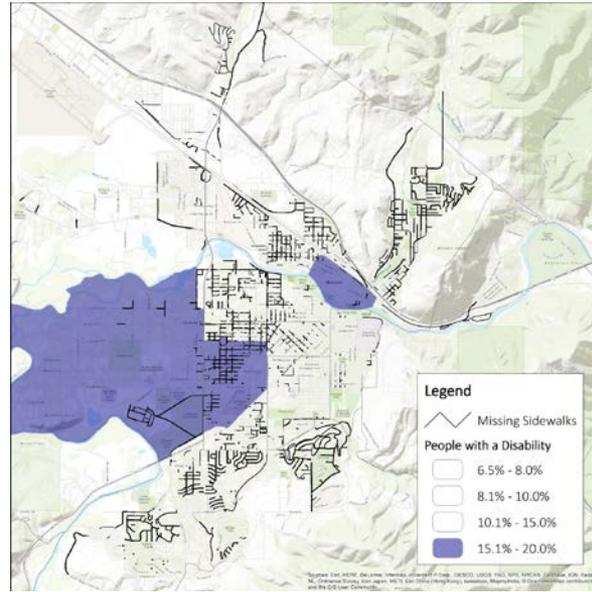
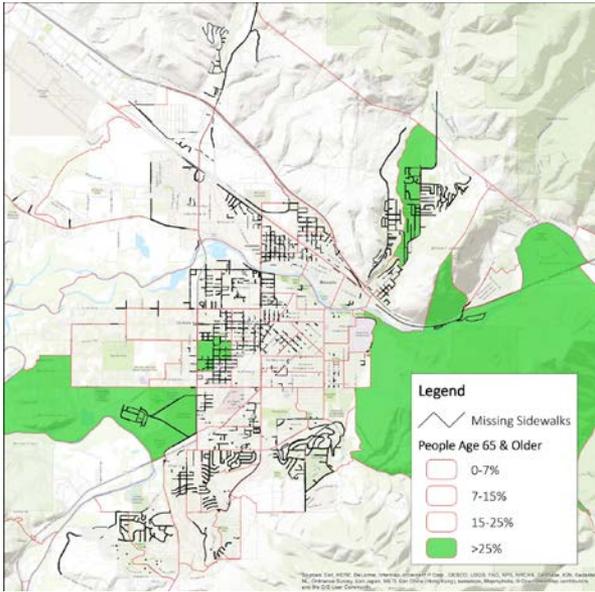


Social equity data



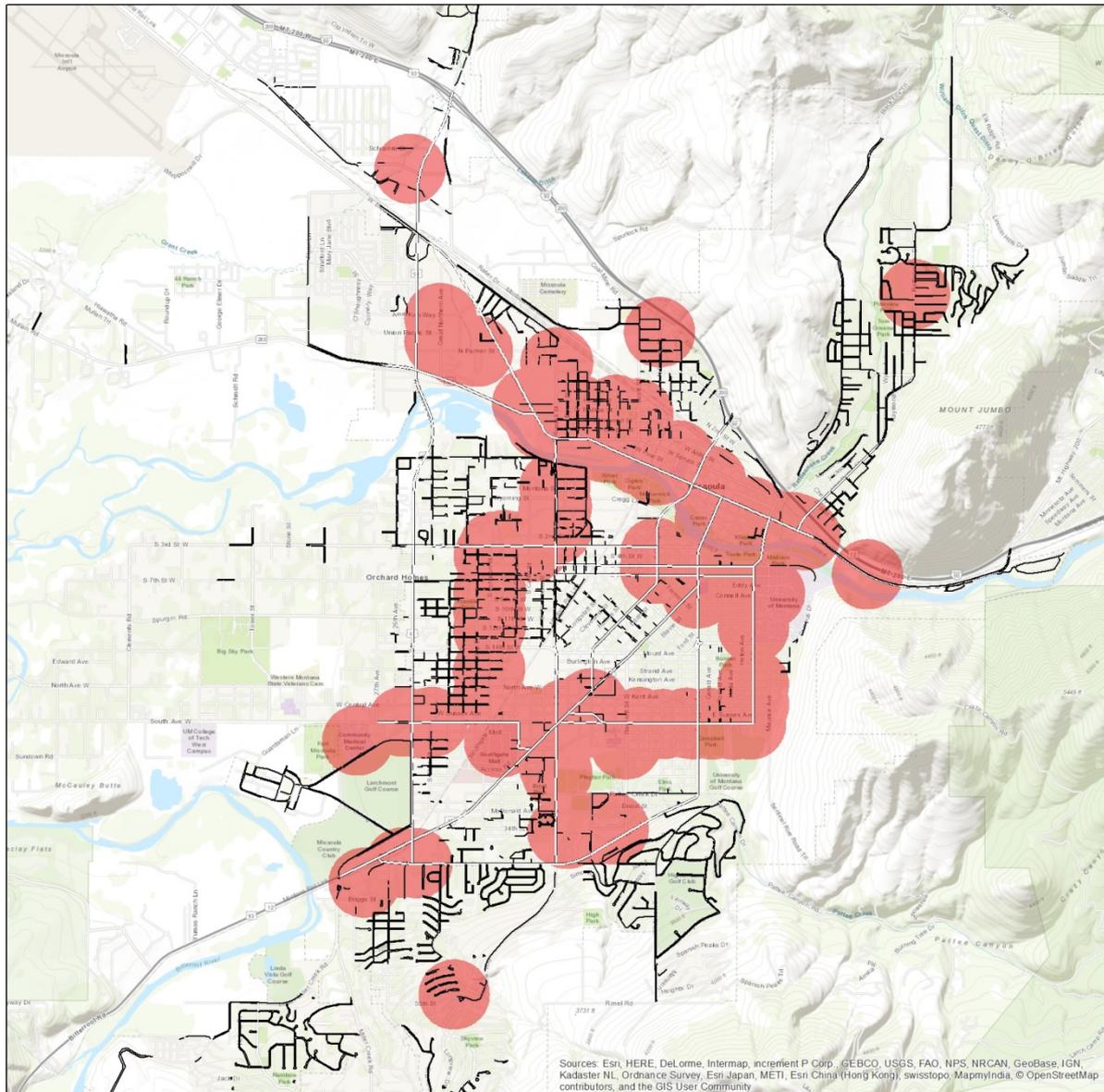
- Identified areas with higher rates of vulnerable/affected groups
- Most data at Census Block Group or Tract geography
- Scored any block that intersects

Social equity data



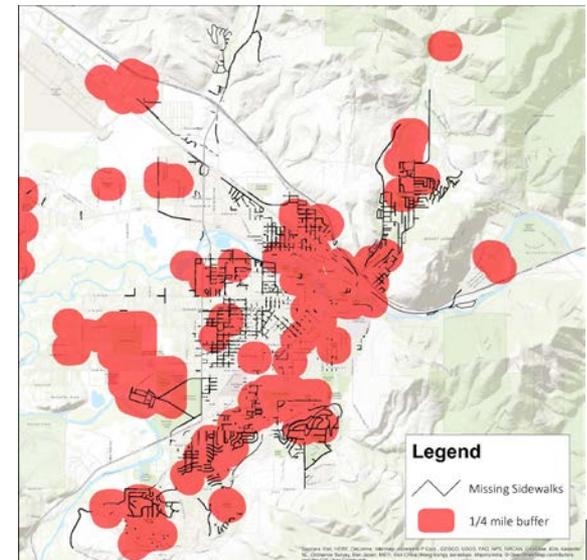
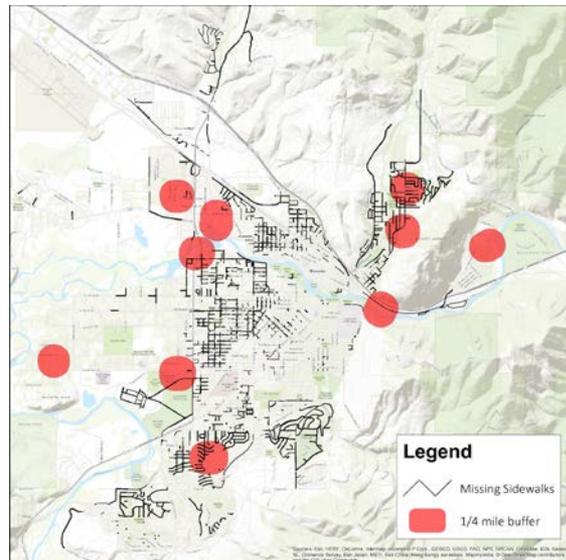
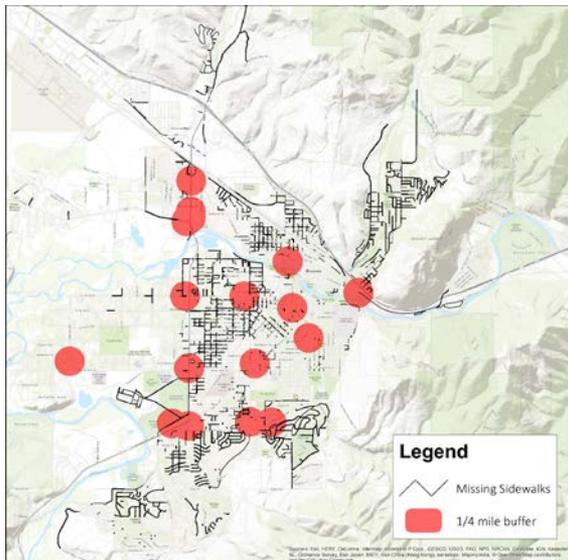
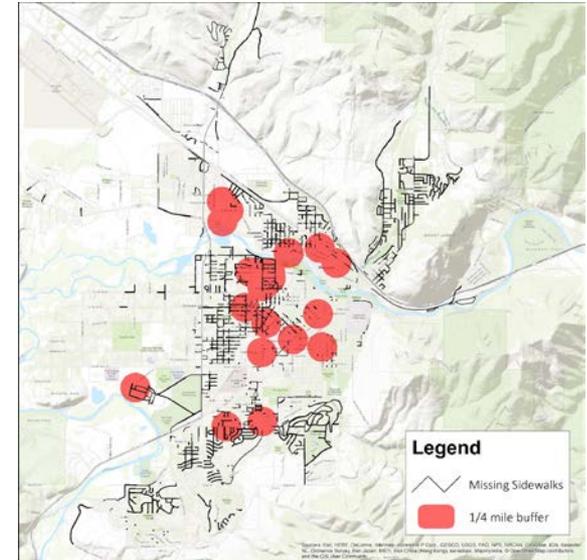
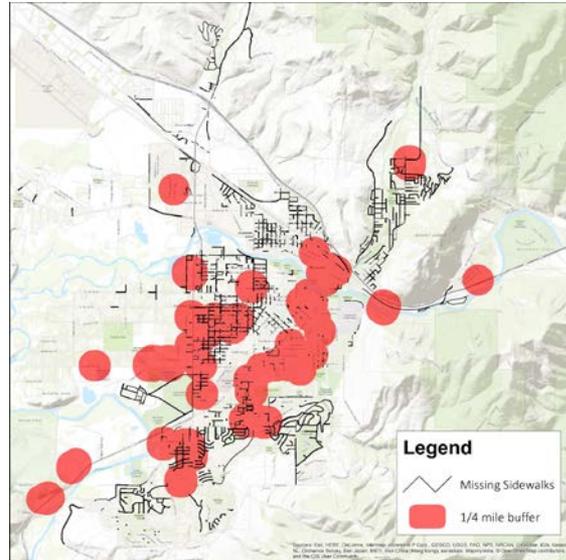
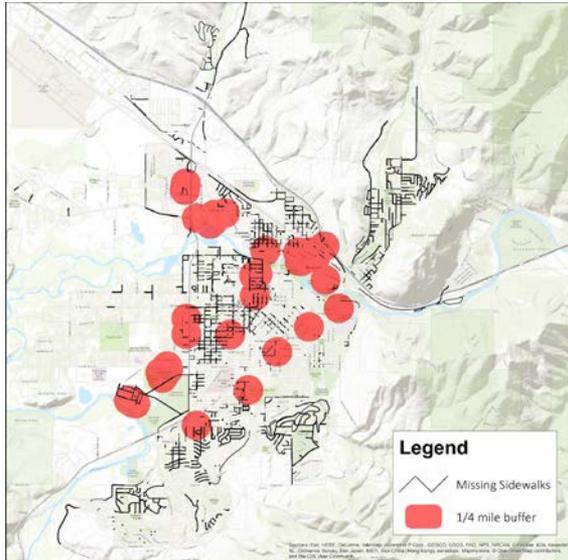
- Obesity
- Aging adults
- People w/ disability
- 0 vehicle households
- Low-moderate income

Attractors & built environment

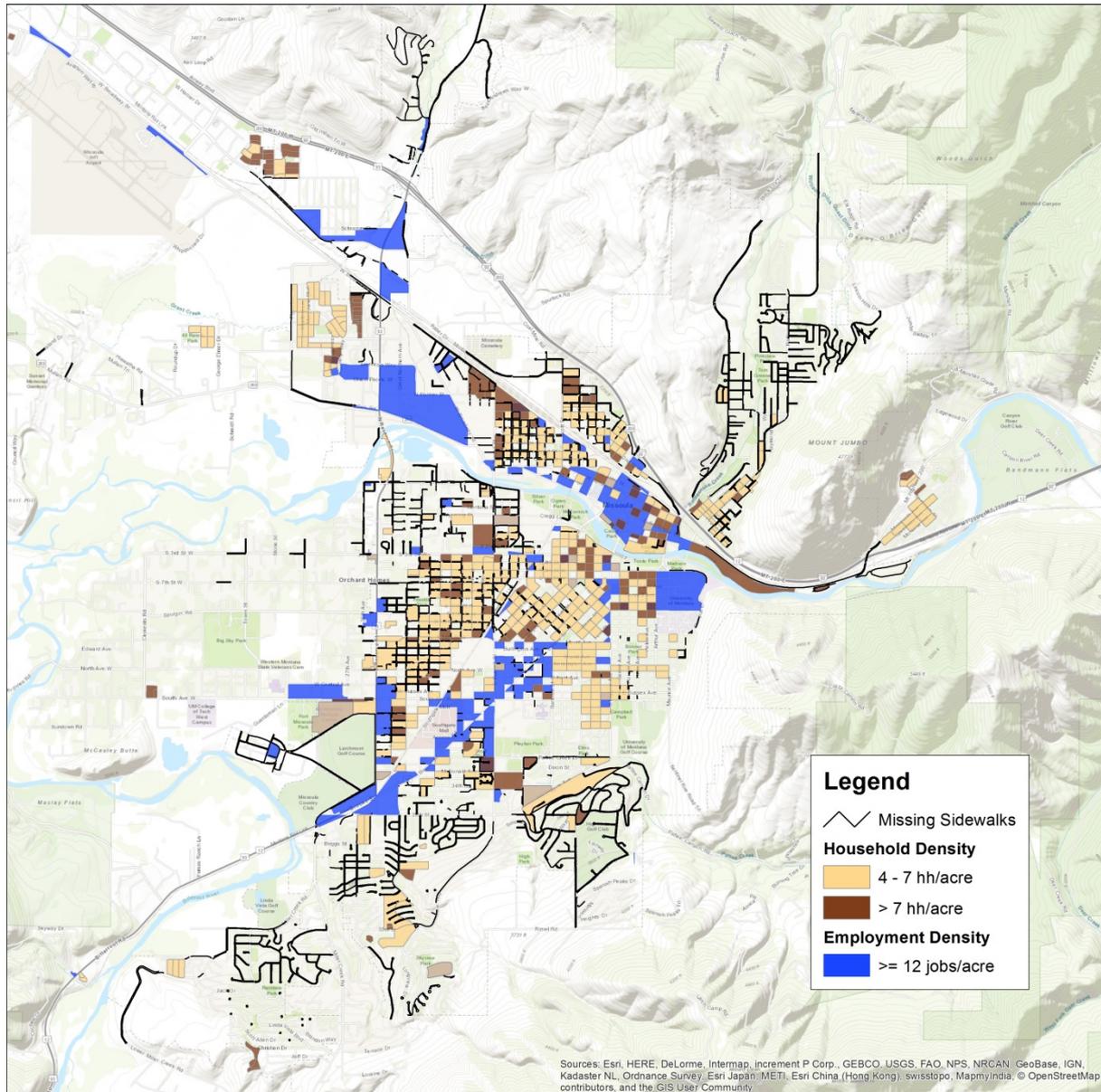


- Identified attractor locations (ex. high-ridership transit stops)
- Applied 1/4 mile buffer
- Scored any block that intersects

Attractors & built environment



Residential/employment density



- Calculated households/acre
- Only scored blocks with more than 7 and between 4-7 hh/acre
- Employment scored for > 12 jobs/acre

- Data broken into “**socio-economic**” & “**attractors/generators**”

Element	Criteria/Data	Points	Total
Socio - Economic	Low/moderate income	20	20*LMI%
	Obesity	20	20
	Zero car HH	20	20
	Disability	20	20
	Age 65+	20	20

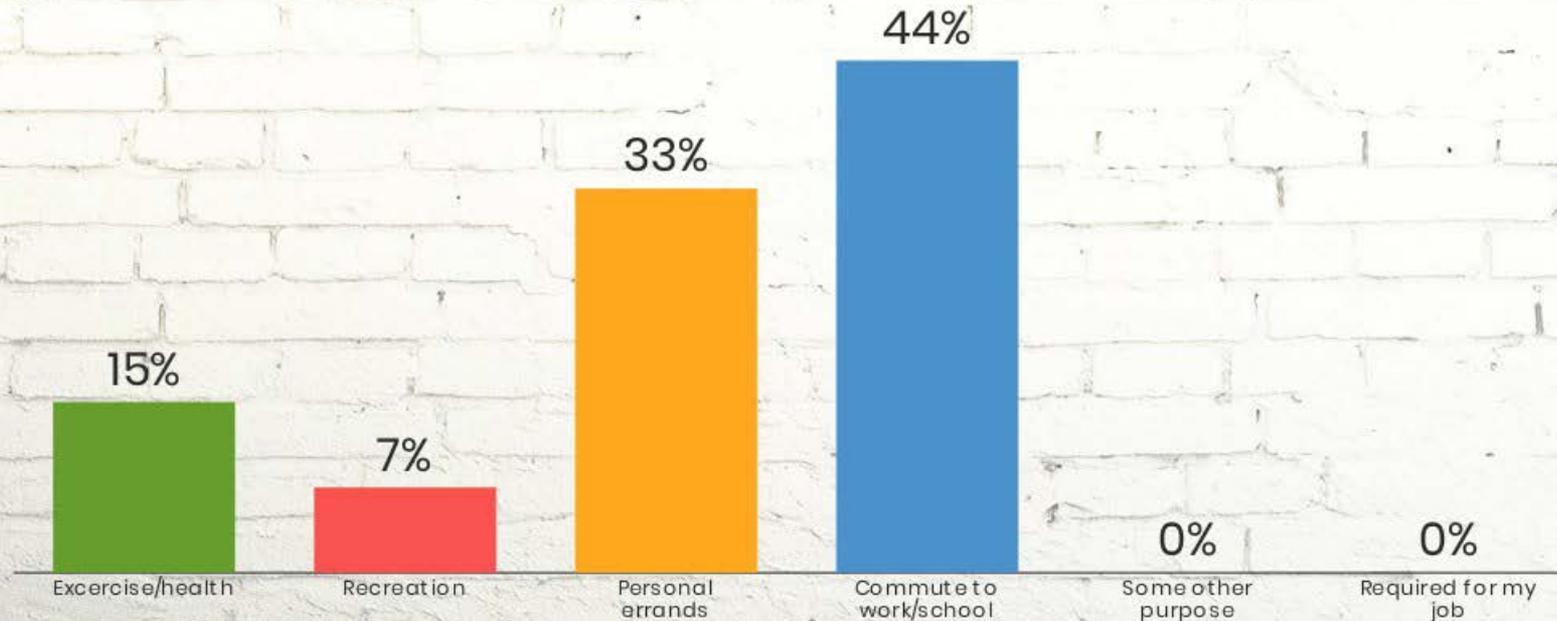
Element	Criteria	Points	Total
Attraction (within 1/4 mile)	Schools	5	50
	Transit stops (high ridership stops)	5	
	Grocery stores	5	
	Parks	5	
	Commuter Paths	5	
	Post offices	5	
	Medical Clinics	5	
	Nursing Homes	5	
	Emergency/support services (food, shelter, substance abuse)	5	
	Religious/Civic	5	
Density (Res/Employ)	Residential (>= 7 households/acre)	25	50
	Employment (>=12 jobs/acre)	25	

- All data sources/criteria weighted equally w/in each category
- Score maximum of **100**

- Mapping exercise
- Presentation & pedestrian priorities polling
- Review of prioritization options
- Vote on preferred option!



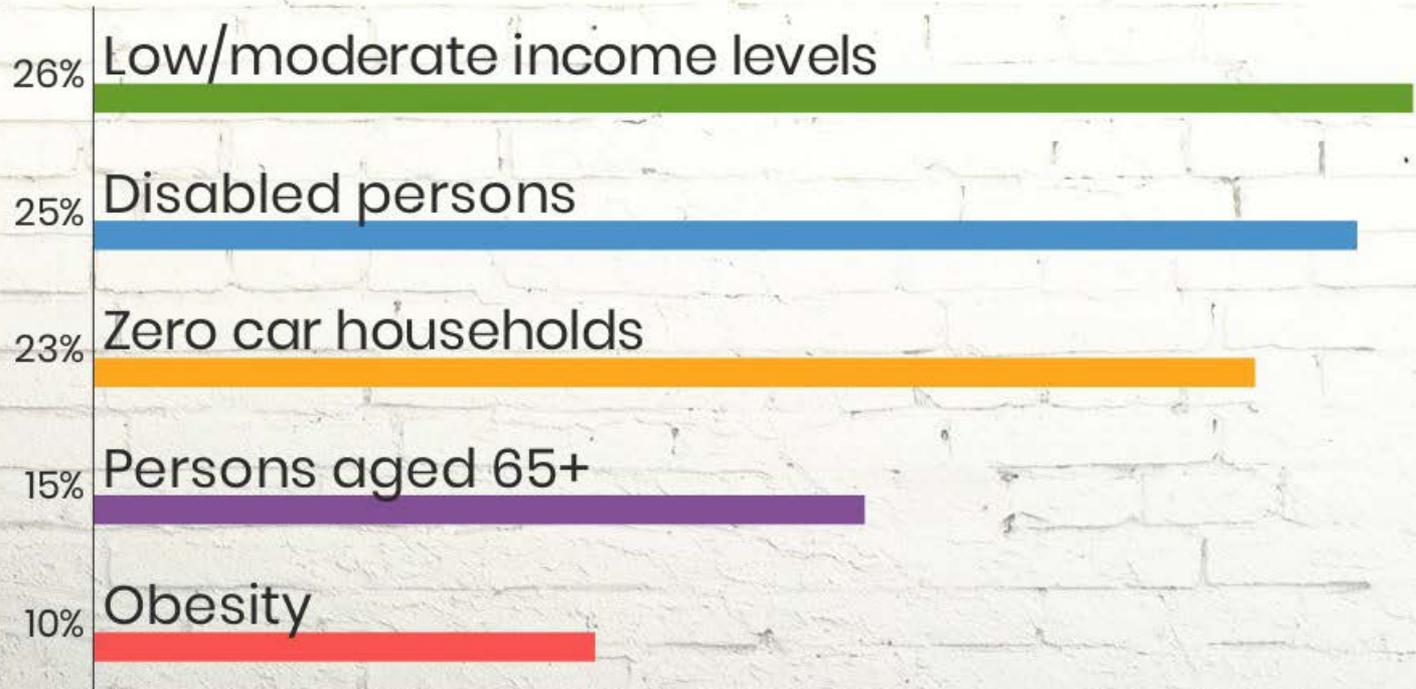
What is the primary reason you use pedestrian facilities in/around Missoula?



Distribute 100 pts based on how you would prioritize pedestrian facilities near the following 10 destination types:



Distribute 100 points based on how you would prioritize the need for pedestrian facilities in areas with high rates of the following:



Data & scoring assumptions



- Revised scoring based on Steering Com & public input

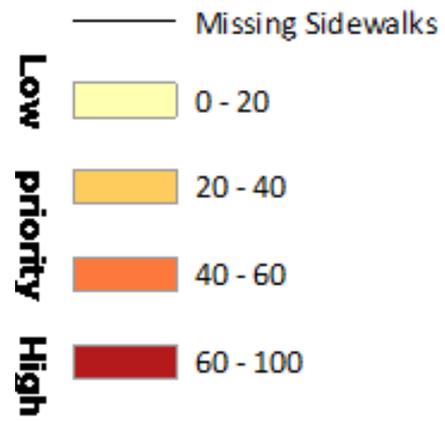
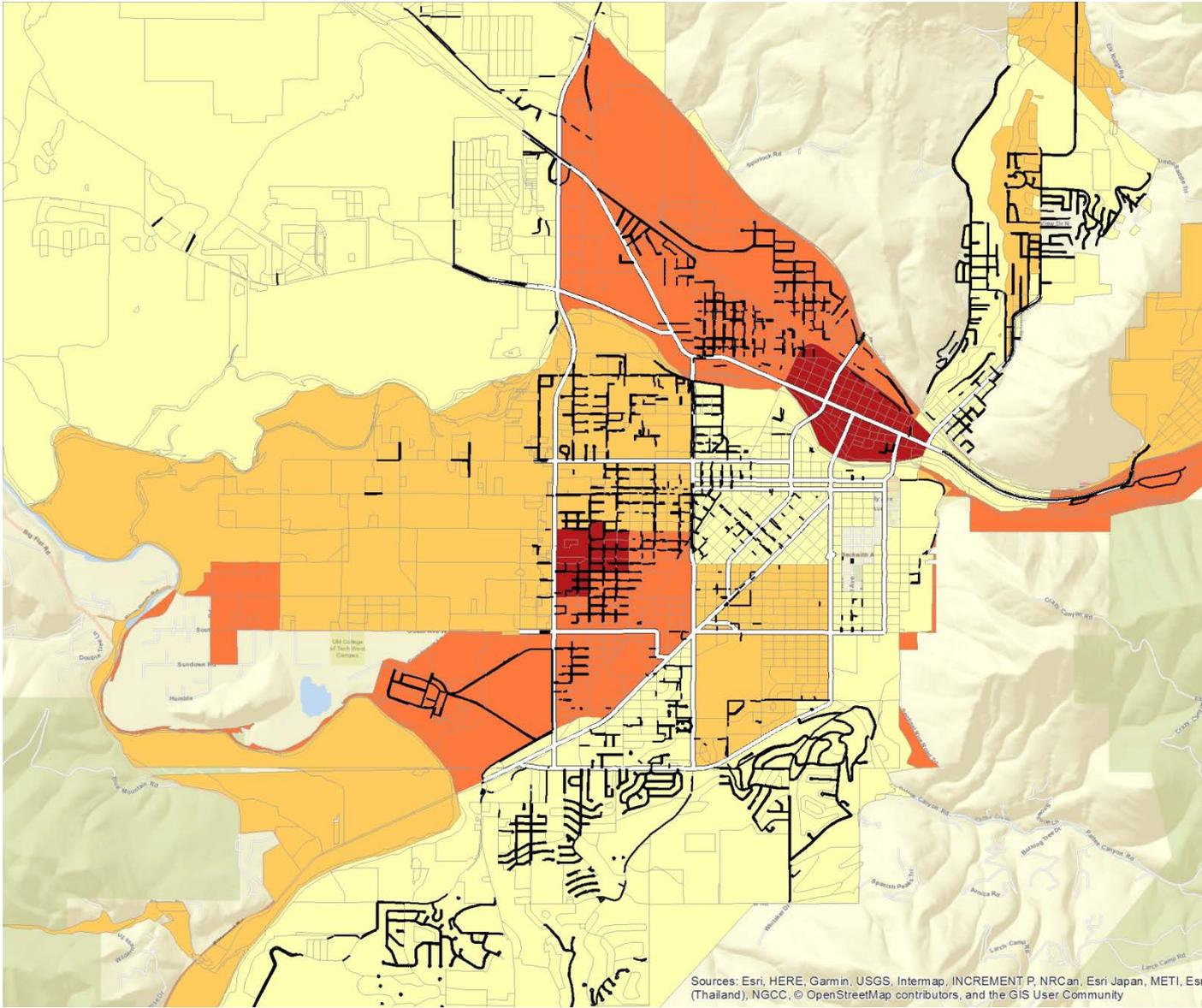
Element	Criteria/Data	Points	Total
Socio - Economic	Low/moderate income	20	20*LMI%
	Obesity	20	20
	Zero car HH	20	20
	Disability	20	20
	Age 65+	20	20

- Increased score for top 5 destinations

Element	Criteria	Points	Total
Attraction (within 1/4 mile)	Schools	7.5	50
	Transit stops (high ridership stops)	7.5	
	Grocery stores	7.5	
	Parks	7.5	
	Commuter Paths	7.5	
	Post offices	2.5	
	Medical Clinics	2.5	
	Senior Services	2.5	
	Emergency/support services (food, shelter, substance abuse)	2.5	
	Religious/Civic	2.5	
Density (Res/Employ)	Residential (up to 90 points)	25	50
	Employment (>=12 jobs/acre)	25	

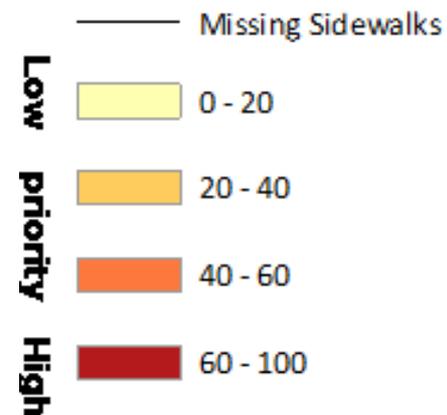
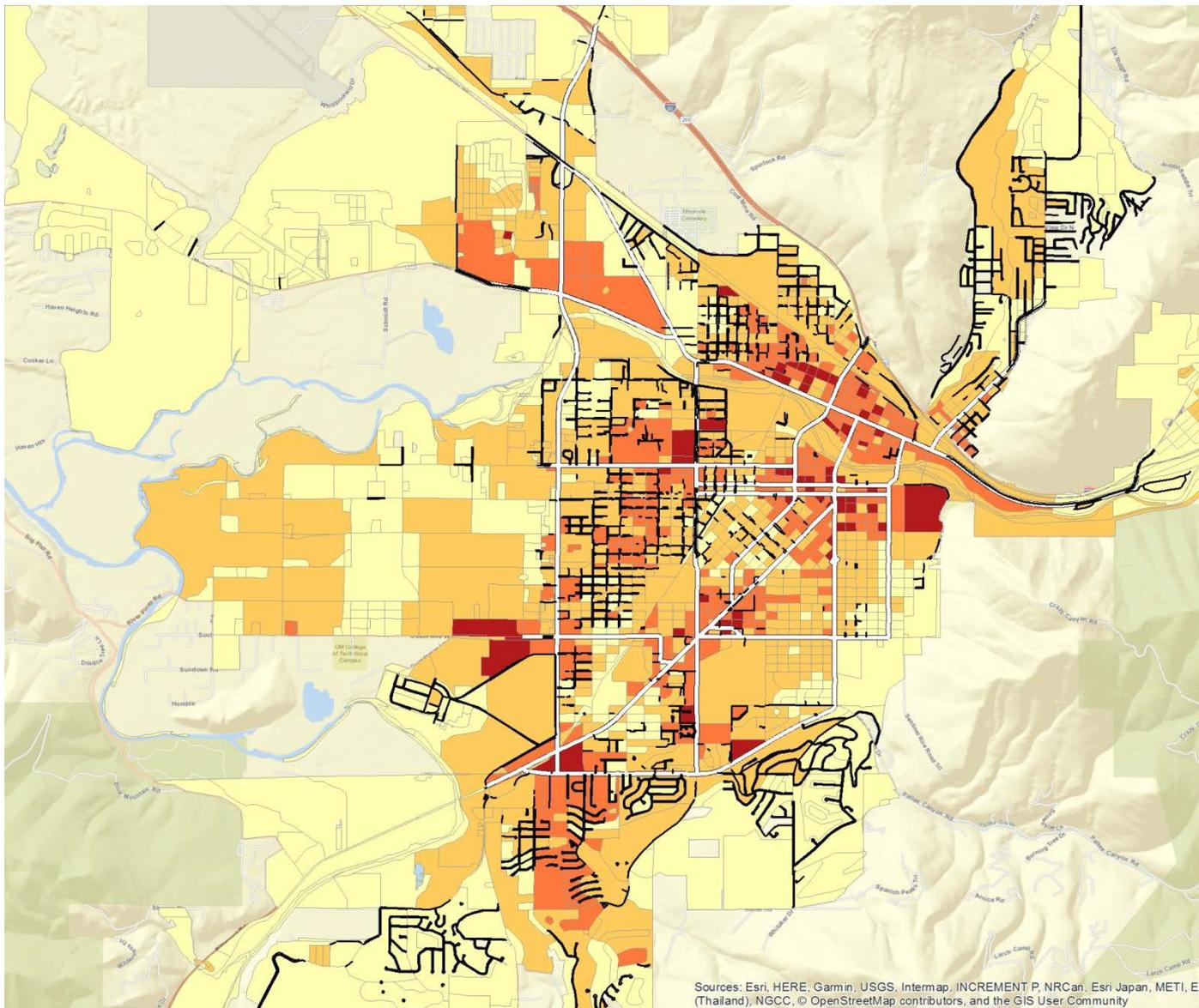
- Added additional “senior services” destinations
- Retained all schools
- Cleaned up data

Social data model – version 2



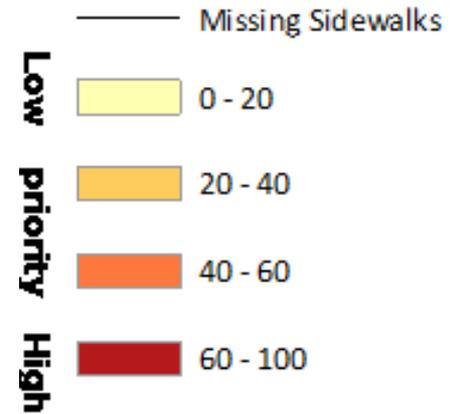
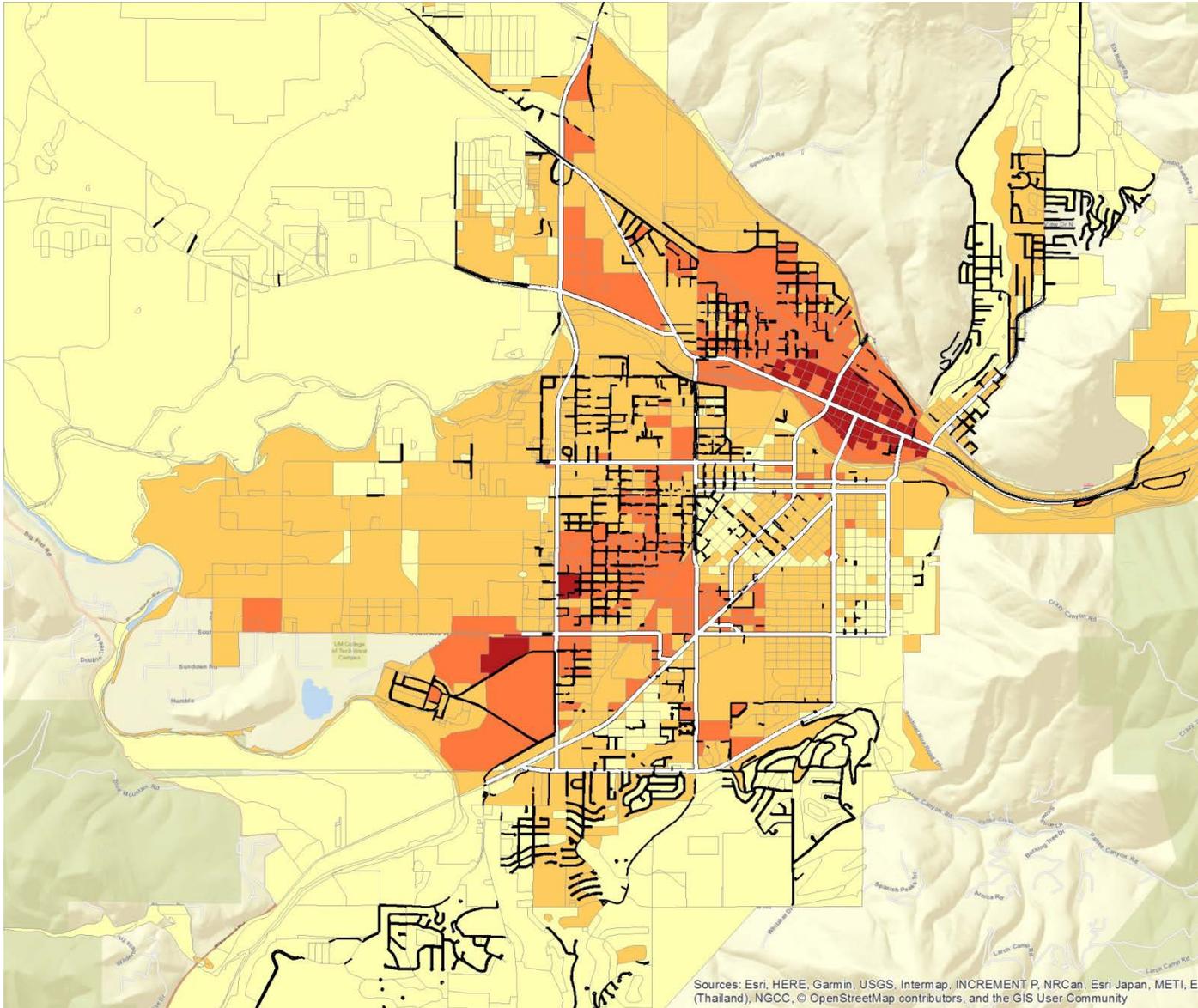
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri (Thailand), NGCC, © OpenStreetMap contributors, and the GIS User Community

Built Environment data model – version 2



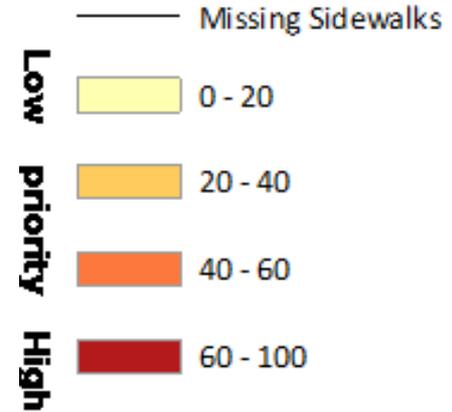
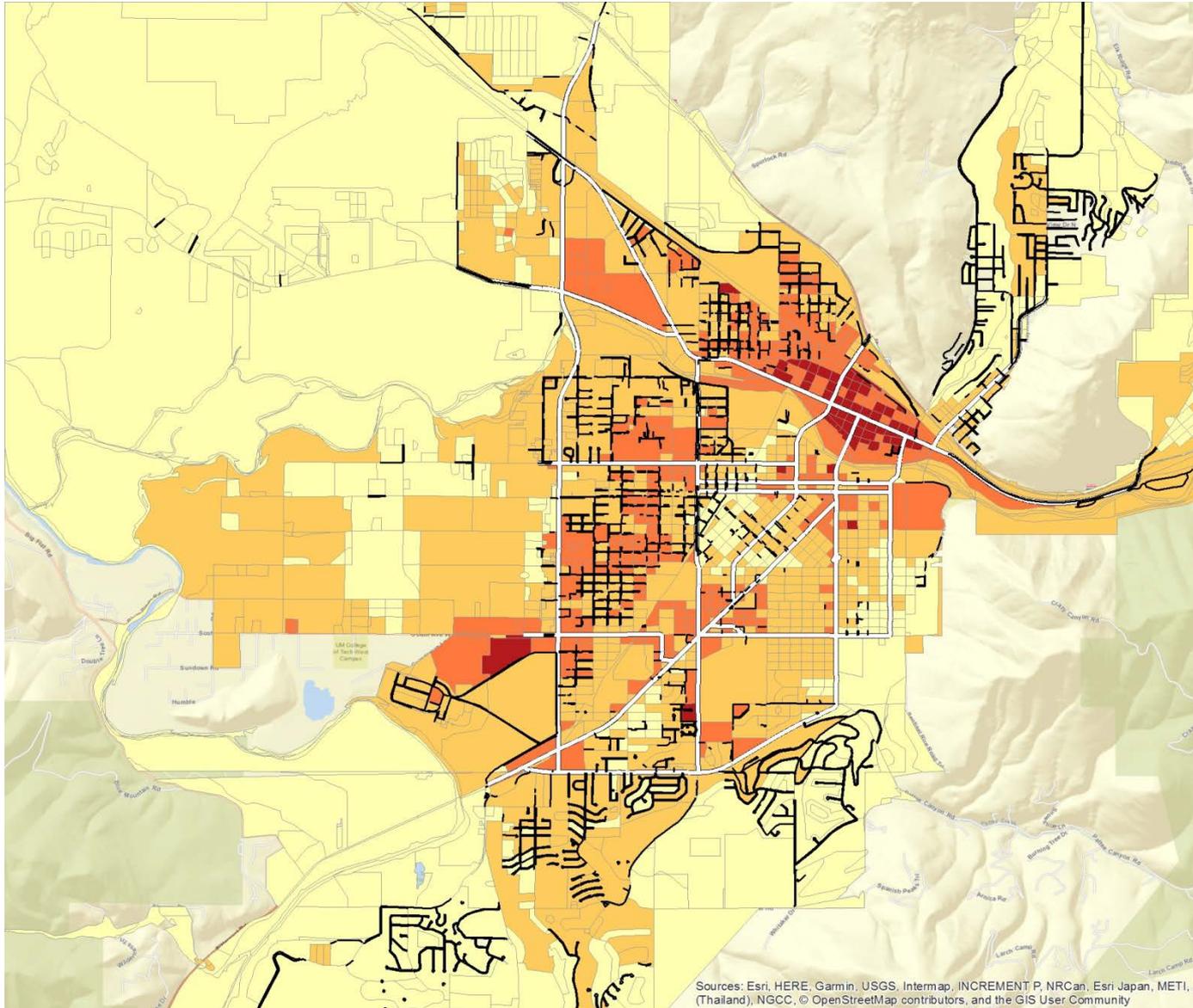
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri (Thailand), NGCC, © OpenStreetMap contributors, and the GIS User Community

Mixed options – 50/50



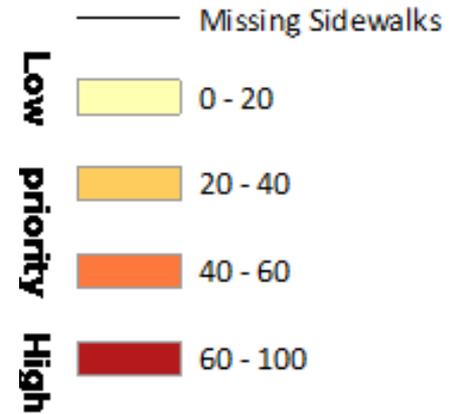
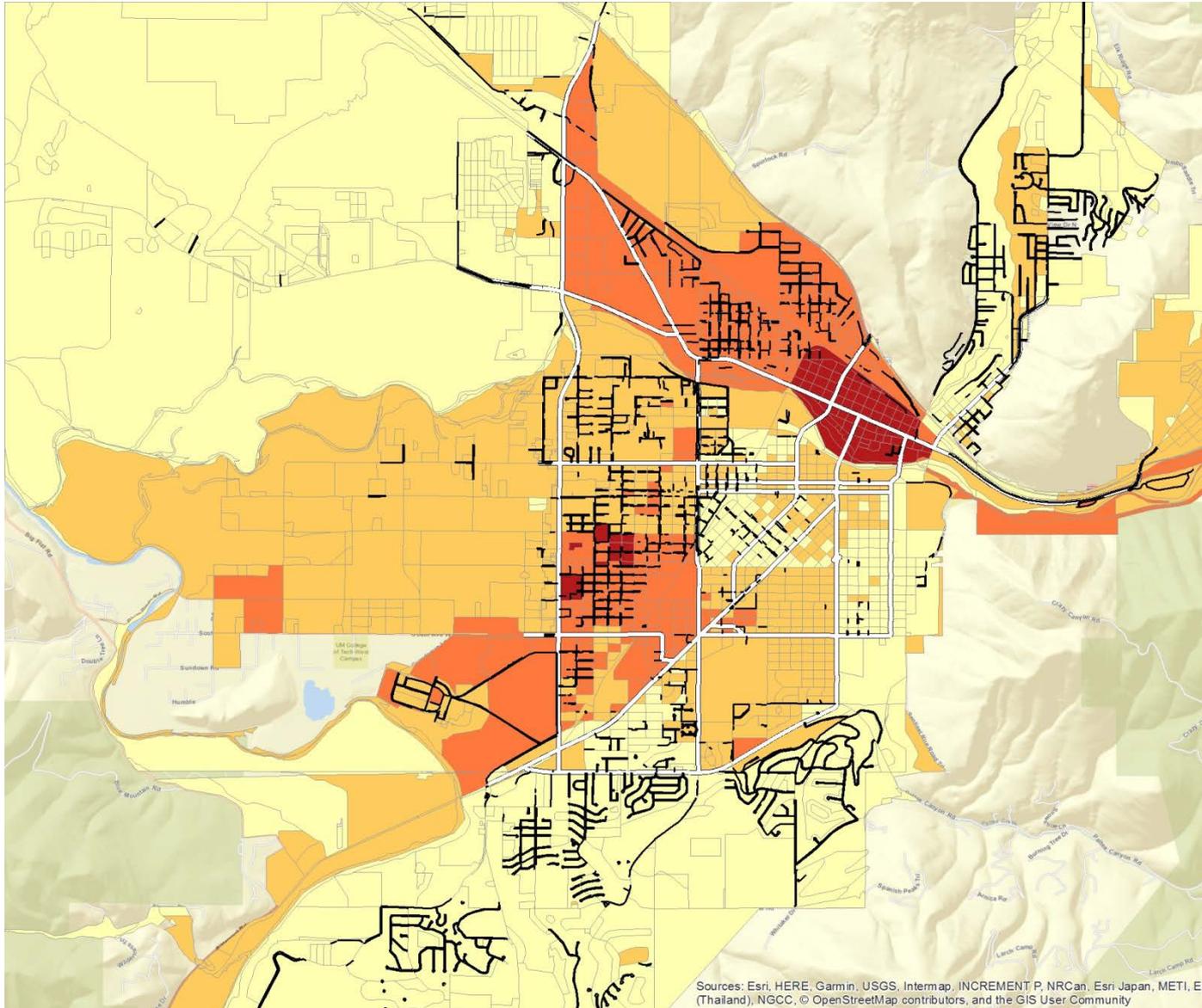
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri (Thailand), NGCC, © OpenStreetMap contributors, and the GIS User Community

Mixed options – 30/70 Built Env



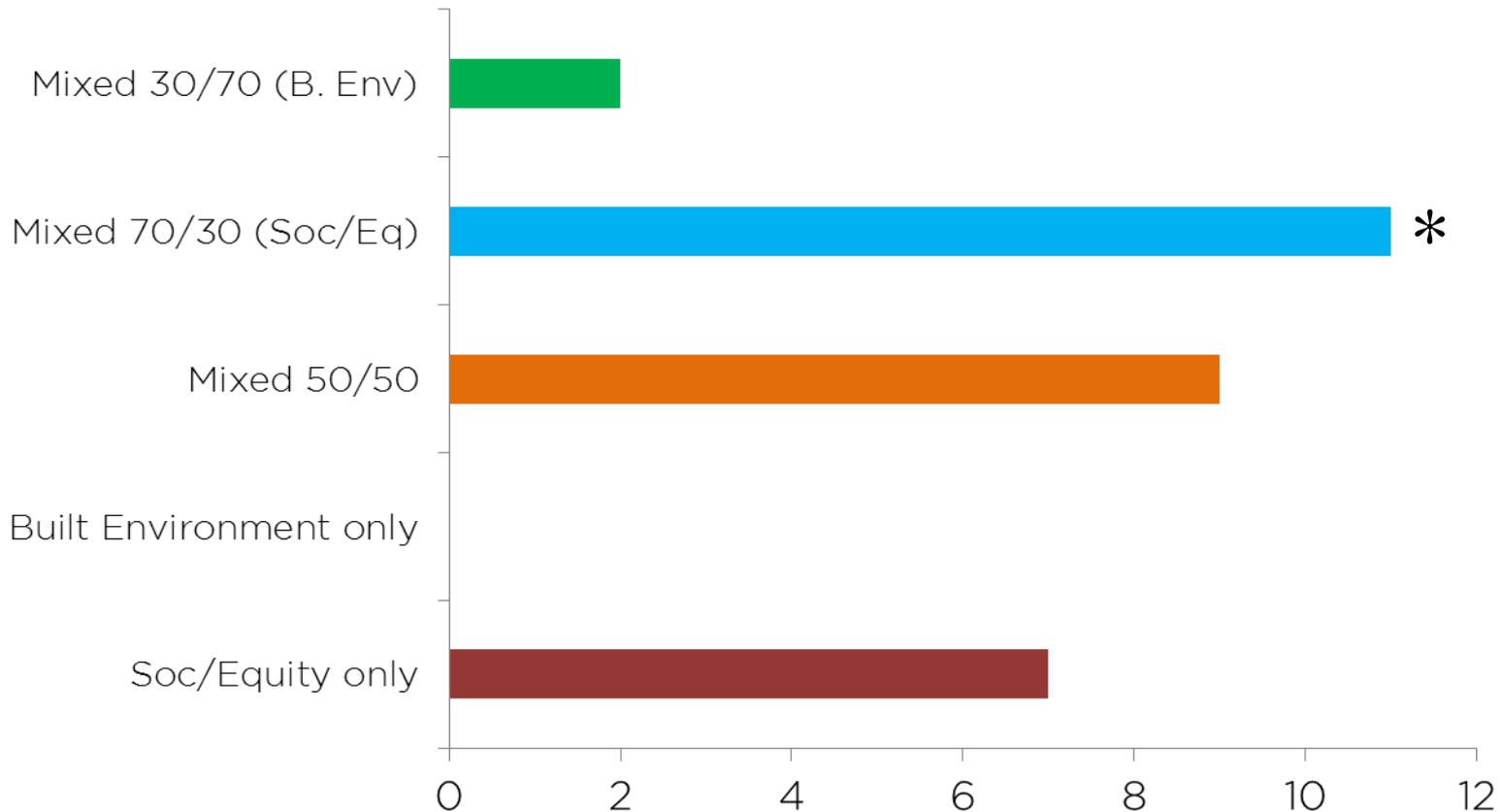
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri (Thailand), NGCC, © OpenStreetMap contributors, and the GIS User Community

Mixed options – 70/30 Soc/Equity



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri (Thailand), NGCC, © OpenStreetMap contributors, and the GIS User Community

Option voting



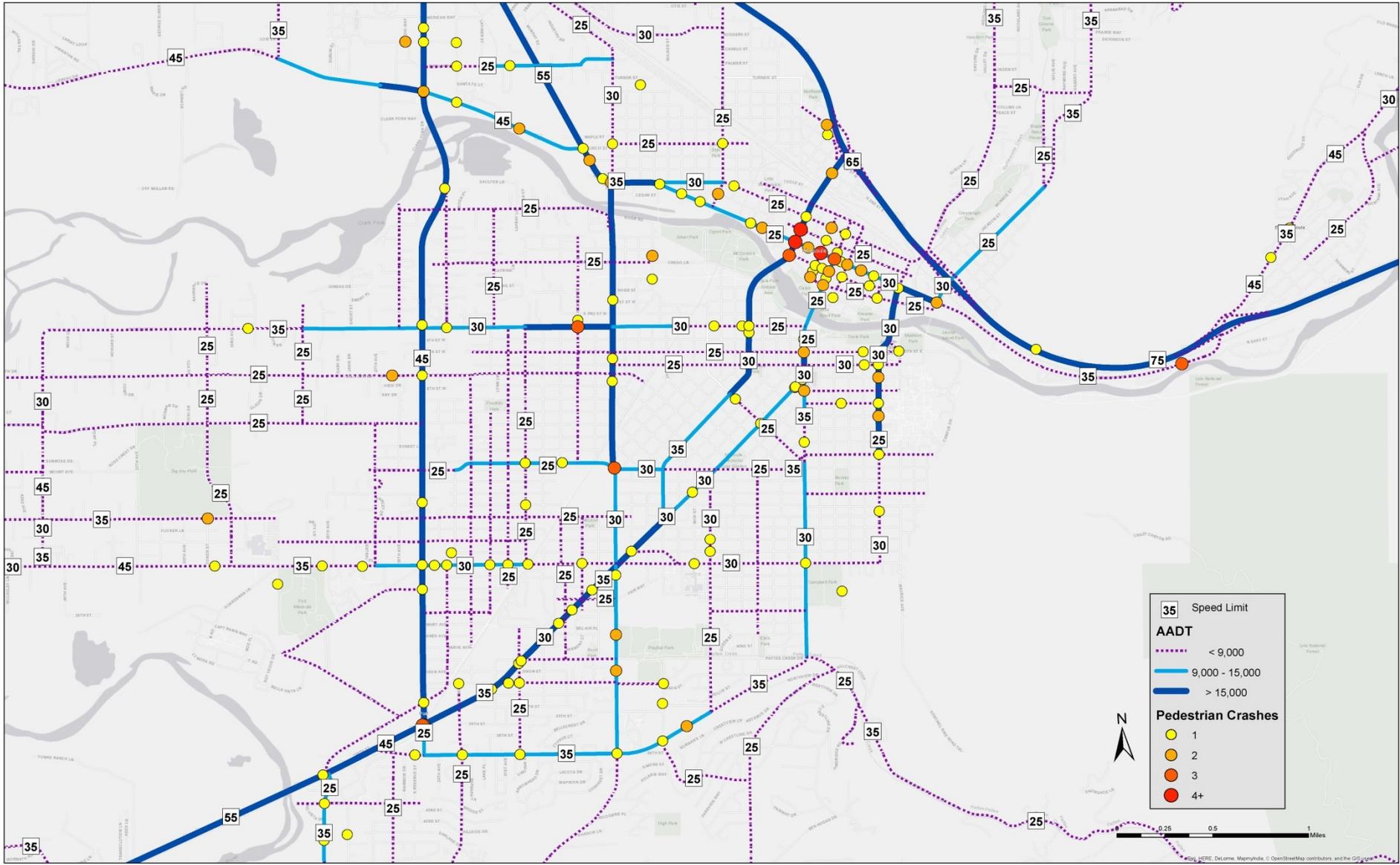
***Also preferred option of Steering Committee**

But what about safety/accessibility?



1. Identify barriers/pedestrian risk factors
 - a) Speed
 - b) Volume
 - c) # of lanes
2. Existing crossing improvements
 - a) Signals
 - b) Roundabouts
 - c) Curb extensions
 - d) Crosswalks
 - e) Traffic circles
 - f) Median refuge

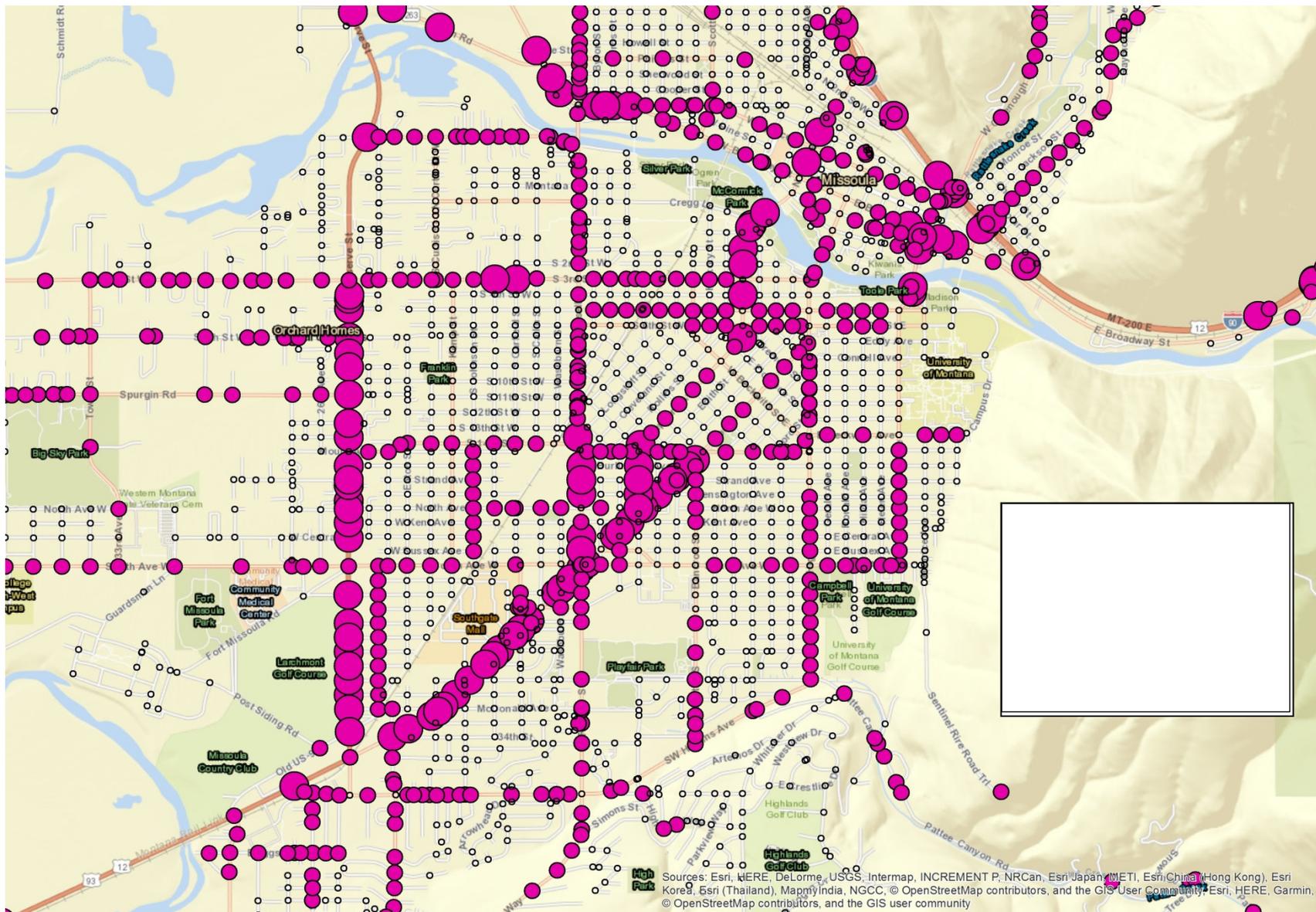
Identifying pedestrian barriers



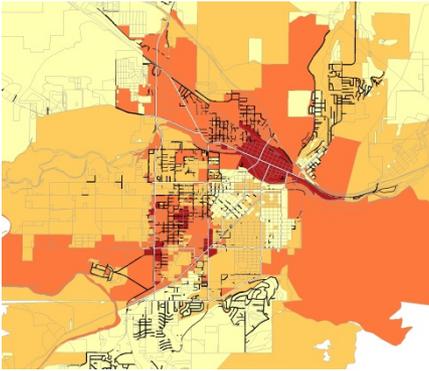
$$(\text{Speed} + \text{Volume} + \text{Lanes}) - (\text{Improvement}) = \text{Score}$$

<u>Speed</u>	<u>Volume (AADT)</u>	<u>Lanes</u>	<u>Improvement type</u>
25mph – 1	0 – 3,000 – 1	2 lanes – 1	Signal – 8
30mph – 2	3,000 – 9,000 – 2	3 lanes – 2	Roundabout – 8
35mph – 3	9,000 – 15,000 – 3	4 lanes – 3	RRFB/Ped signal – 7
40mph – 4	15,000+ – 4	5 lanes – 4	Crosswalk – 3
45mph – 5			Median refuge – 3
			Curb extension – 2
			Traffic circle – 2

Intersection results



I. Prioritize areas



2. Funding

- New sidewalk \$
- Crossing/safety \$
- Sidewalk repair \$
- ADA accessibility \$

3. Select projects

- Connections to schools/parks/transit?
- Arterials vs. collectors for safety projects?

Cost for repair/replace: \$69/linear foot

Cost for new sidewalk: \$68-\$70/linear foot

- Curb & Gutter: 10-20%
- Sidewalk construction: 40-50%
- Design/engineering: 15%
- Other costs (asphalt, landscaping, fill, etc): 15-35%

Cost for ADA upgrade \$20k+/intersection

- Depends on state of intersection (cross-slope, pavement)
- Can vary considerably

City:

- Subsidy + Assessment - \$840,000/yr
 - Authorized by City Council for \$1.2M

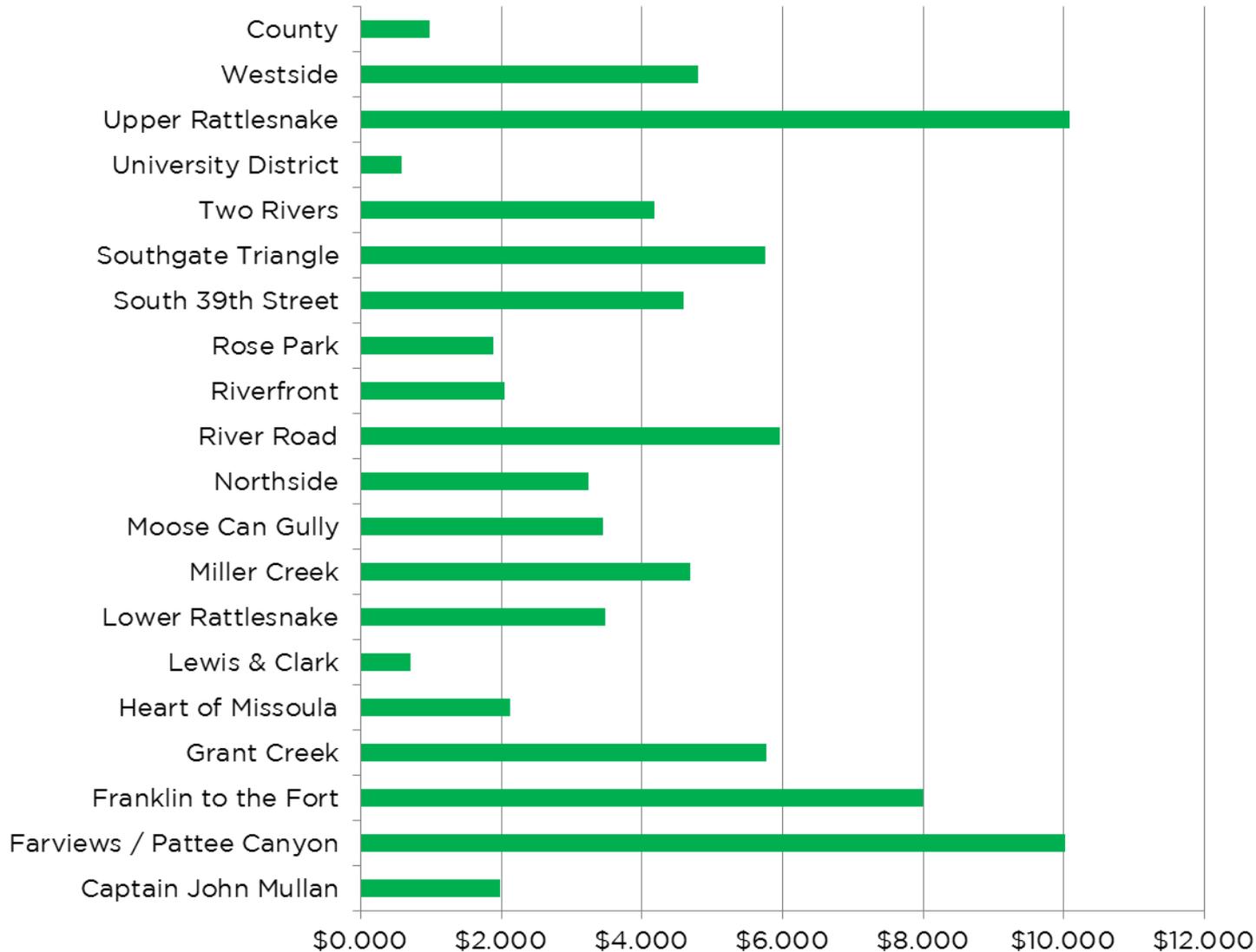
Missoula Redevelopment Agency:

- ~\$600,000/yr
- Limited to Urban Renewal Districts

New sidewalk needs

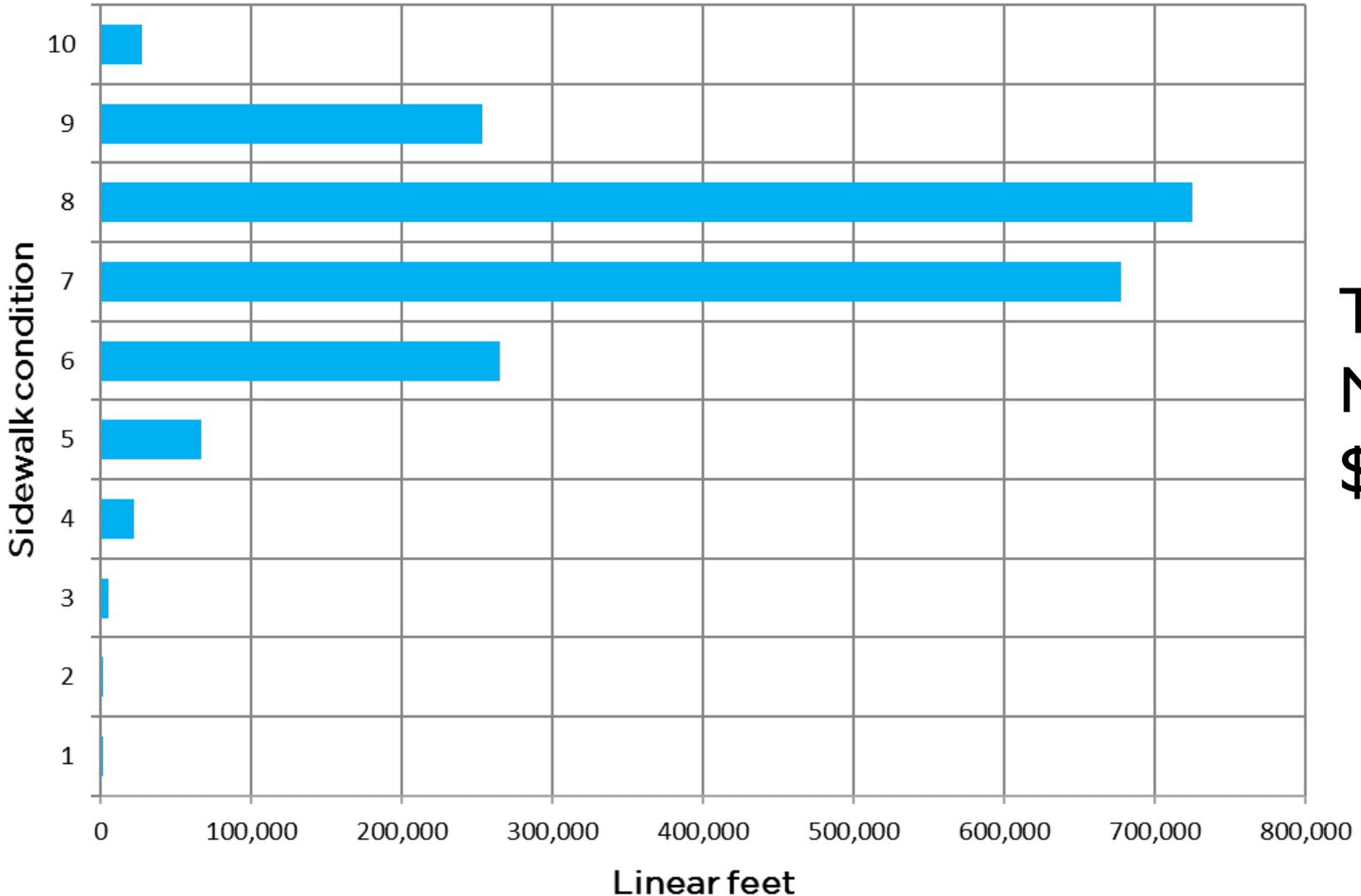


New sidewalk cost (\$M)



Total
Need:
\$84M+

Sidewalk repair (existing)



Total
Need:
\$?? M

- Lack of staff/resources
- Street & pavement condition
- Assessment process
 - staff limitations
 - Property owner cost burden
- ROW/space constraints
- Lack of labor/contractor capacity
- Other standards/design (boulevard, trees, lights)

- www.missoulampo.com - virtual open house and wikimaps
- County facilities
- Identify funding & implementation opportunities
- ADA Transition Plan