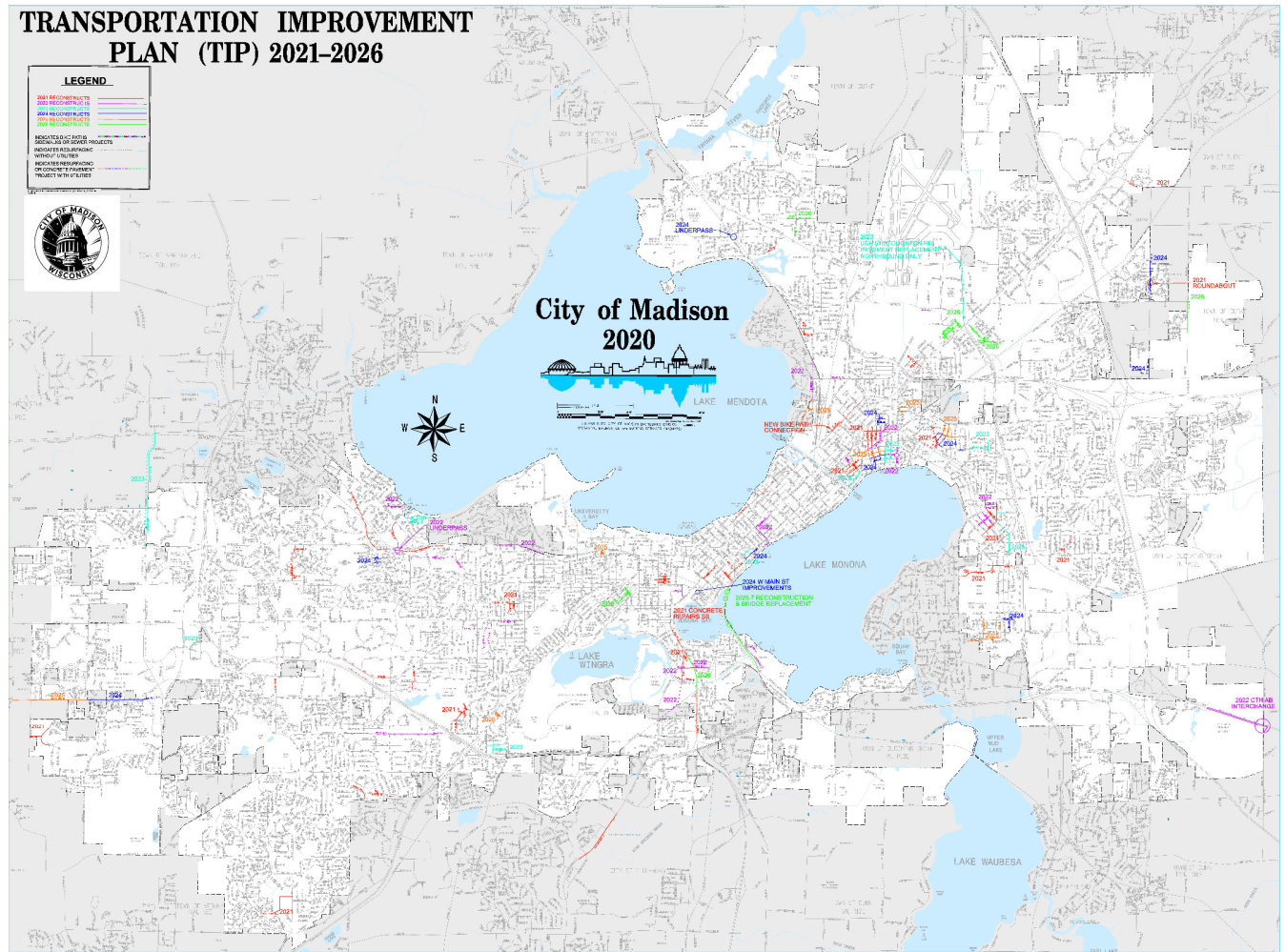# Transportation Project Scoring

Public Works Information Meeting
City of Madison Engineering Division
Feb 4, 2021

Project Scoring

- How does a project get in the TIP
- Scoring based upon broad group of categories
- Well rounded Improvement Program

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Inputs

- Categories
  - Pavement Rating
  - Safety
  - Racial Equity & Social Justice
  - Bicycle Facilities
  - Pedestrian Facilities
  - Failing Underground Utilities
  - Green Infrastructure/Flooding
  - Transit

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Pavement Ratings

- Pavement rated 1-10, every 2 years
- 10 is new street
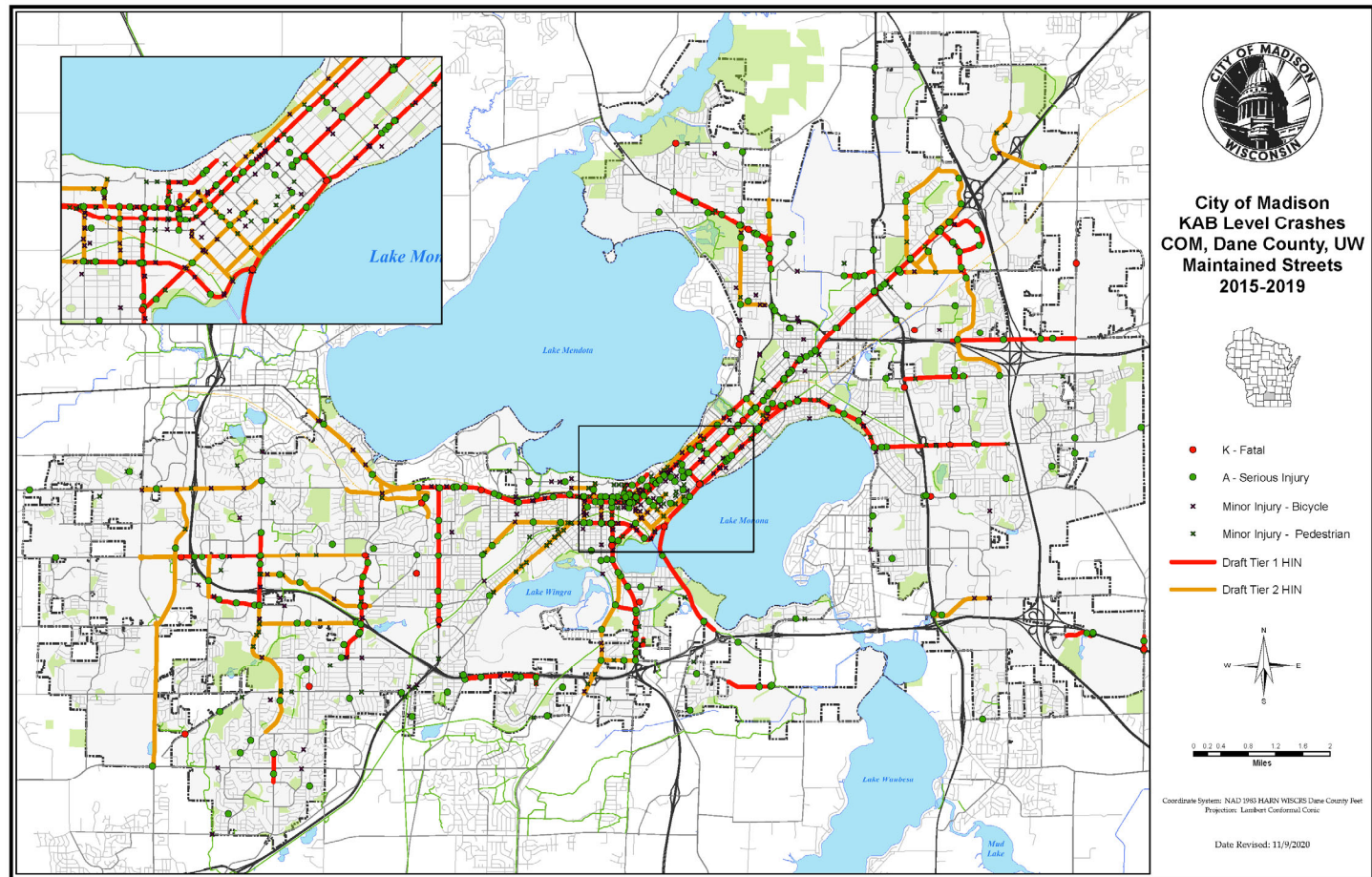- 3 is worst condition
- Missing Facility is 10 points

Street Rating	Points
3	10
4	9
5	8
6	7
7	5
8	0
9	0
10	0

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Safety

- Vision Zero High Injury Network

City of Madison
KAB Level Crashes
COM, Dane County, UW
Maintained Streets
2015-2019

- K - Fatal
- A - Serious Injury
- Minor Injury - Bicycle
- Minor Injury - Pedestrian
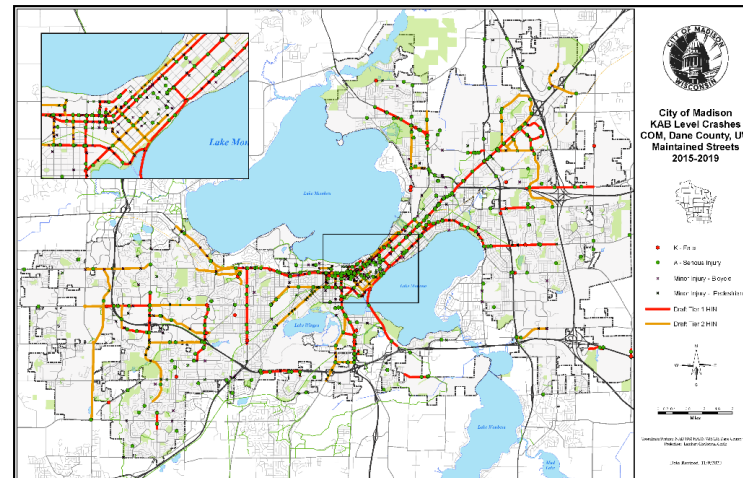- Draft Tier 1 HIN
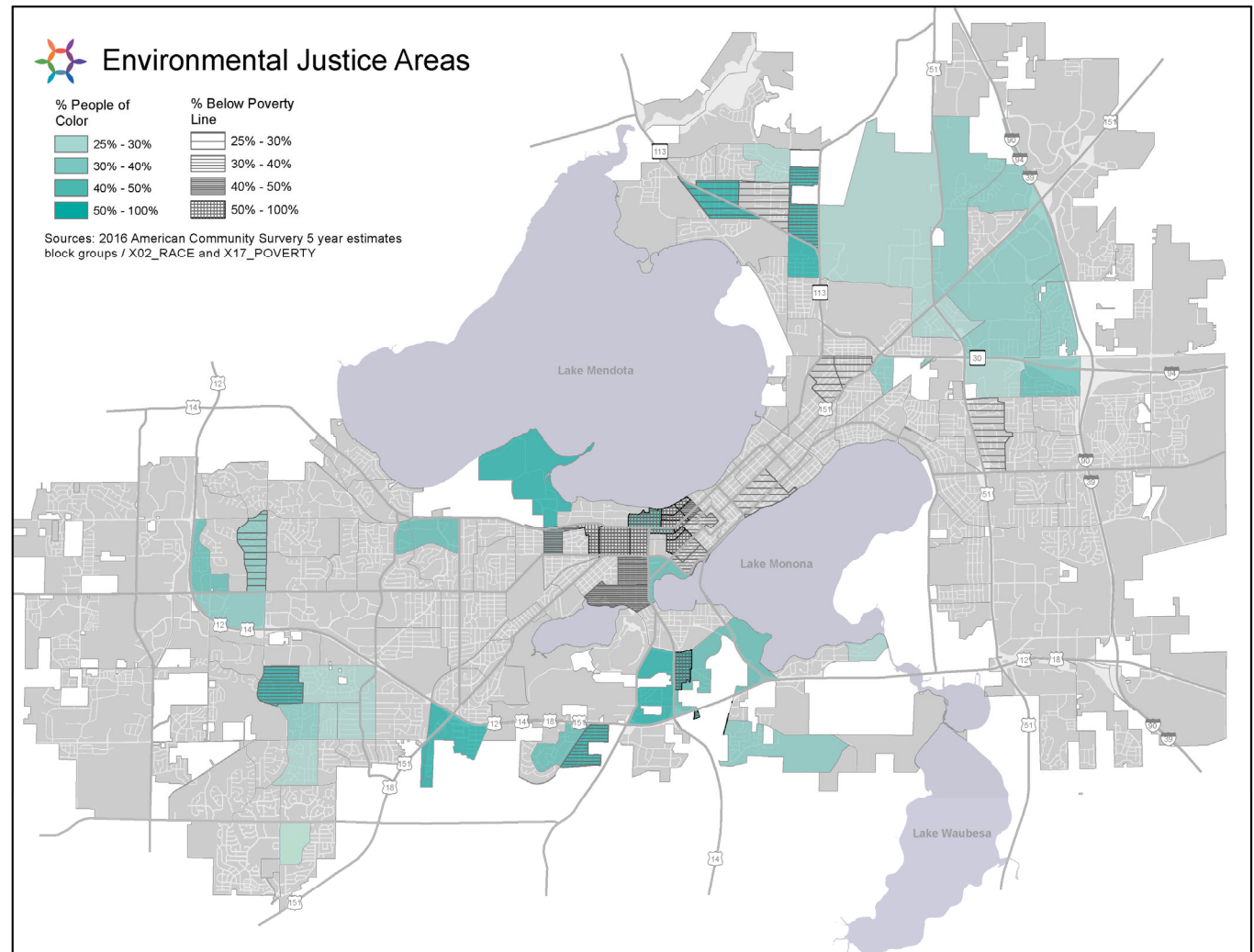- Draft Tier 2 HIN

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Safety

➤ Use Vision Zero High Injury Network Map, Traffic Engineering reports

➤ Only receive points if we feel we can improve upon the current condition

HIN	Points
Tier 1	10
Fatality	10
Tier 2	7
Create Alternate Route to Tier	5
Serious Injury	5
Minor Injury	3
No Improvement	0

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Equity

- Use American Coummunity Survey Data
- Neighborhood Resource Team Input

Environmental Justice Areas

% People of Color
- 25% - 30%
- 30% - 40%
- 40% - 50%
- 50% - 100%

% Below Poverty Line
- 25% - 30%
- 30% - 40%
- 40% - 50%
- 50% - 100%

Sources: 2016 American Community Survery 5 year estimates block groups / X02_RACE and X17_POVERTY

Lake Mendota

Lake Monona

Lake Waubesa

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Equity

- ➢ % POC, %PBL
- ➢ NRT requested projects
- ➢ If Project occurs in these neighborhoods, points are scored
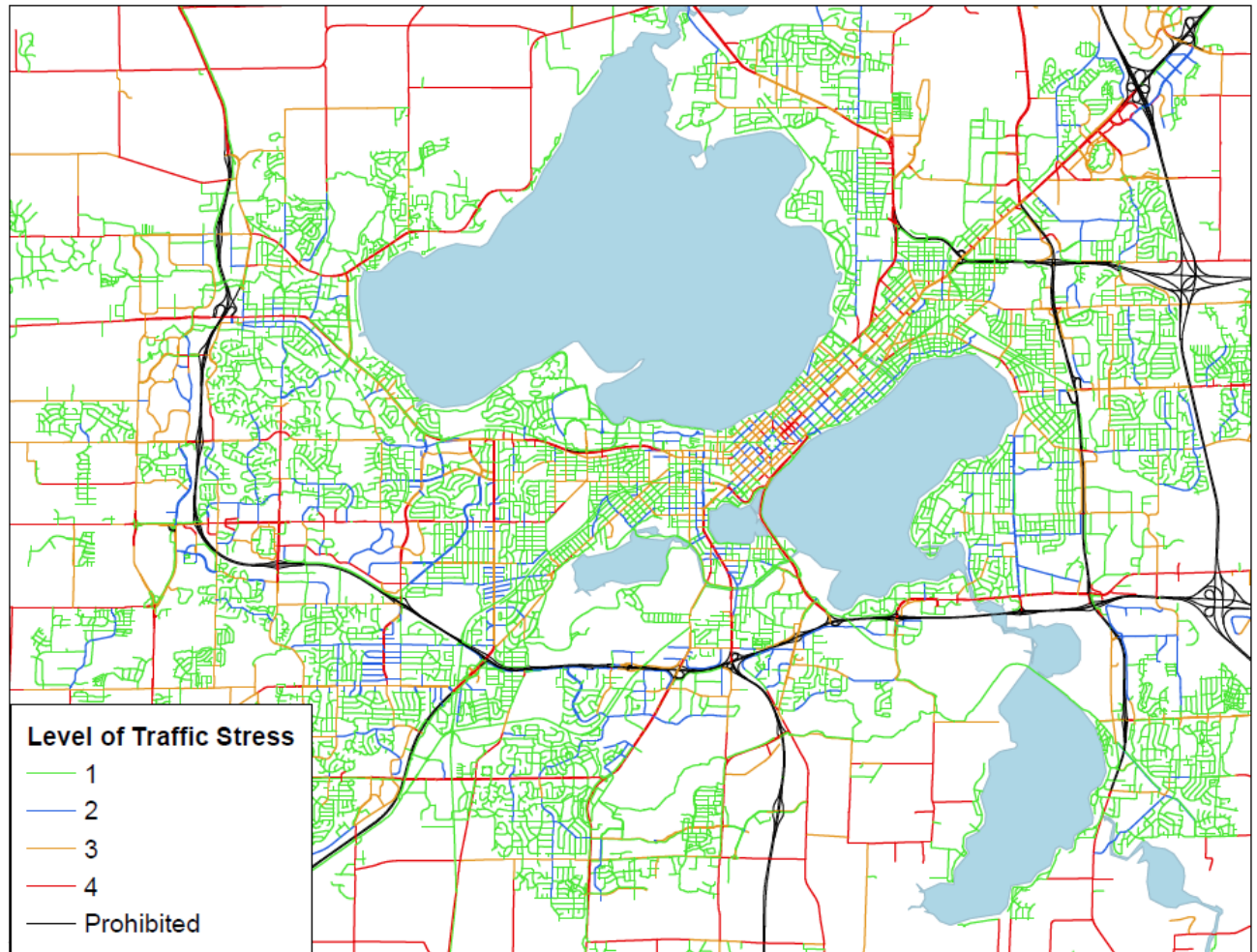- ➢ Keep an eye on assessments, our Rural to Urban program has highest assessments

% POC, %PBL	Points
> 25	10
< 25	0

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Bike Facilities

➢ Use Resident requests, Alder requests, MPO Bike Network Plan, Low Stress Report to identify priorities

Figure 3 Level of Traffic Stress

Level of Traffic Stress
- 1
- 2
- 3
- 4
- Prohibited

MPO Low Stress Report

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Bike Facilities

➤ Project Scores more with creating low stress, protected facilities

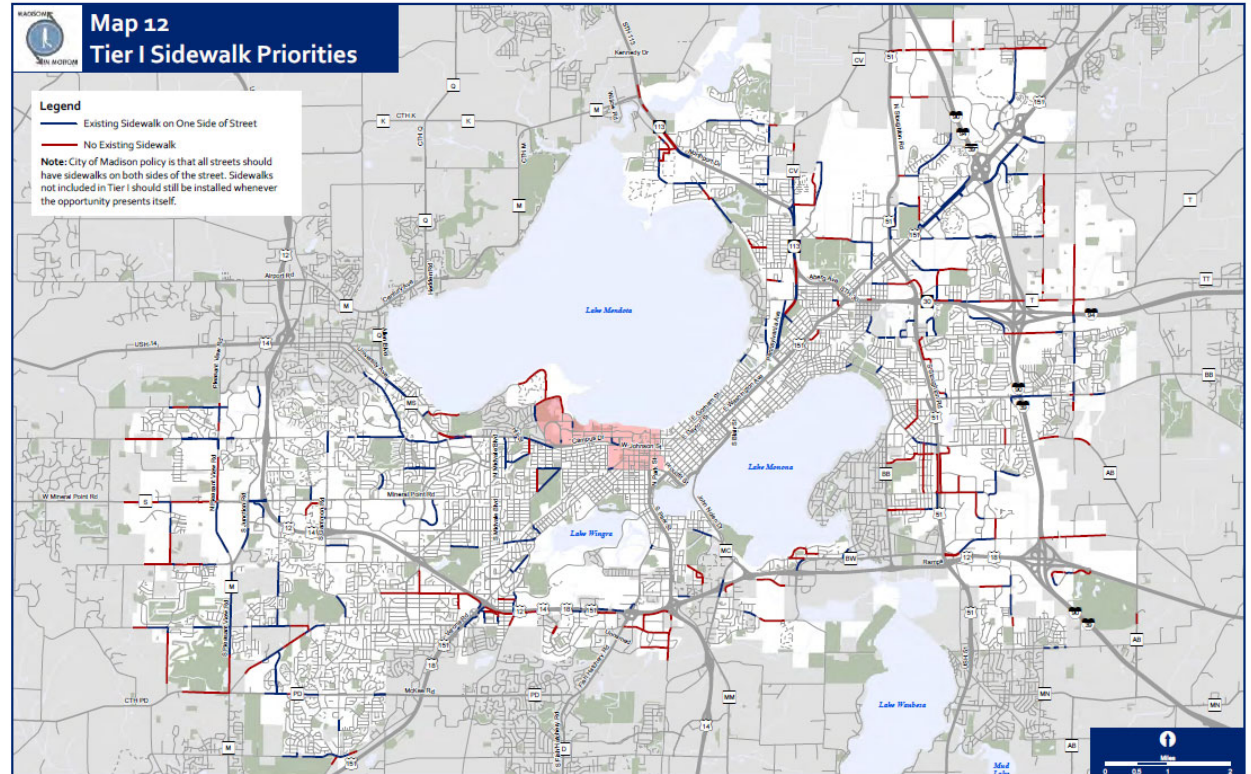| Bike Facilities	Points
Level of Stress 4	10
Level of Stress 3	8
Level of Stress 2	6
Level of Stress 1	0

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Pedestrian Facilities

➢ **Resident Requests, Alder Requests, MIM Priorities**

MPO Low Stress Report

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Pedestrian Facilities

➢ Project Scores more with creating new facilities, adjusting grades for ADA access

Pedestrian Facilities	Points
No Sidewalk	10
Sidewalk	3
Reconstructed Sidewalk with ADA compliant Ramps	0

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Failing Underground Utilities

- Want to coordinate failing utility replacement and watershed study solutions with street projects.
- Project Scores more with replacing underground failing facilities
- Project requiring Urgent action scores extra 10

Failing Underground Utilities	Points
Urgent Action Required	10
Failing utility / Flood Issue	7
All good condition utilities	0

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Green Infrastructure

➤ Prioritize projects that include green infrastructure potential

Green Infrastructure	Points
No Infrastructure but has potential for Rain Garden, Infiltration, TSS	10
Catch Basin	3
Nothing	0

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Transit

➤ Projects that include Transit improvements gain points

Transit	Points
Project adds Priority Feature or Bus Lane	10
On Route, pavement replaced, install ADA compliant Pads	8
Project adds new sidewalk connection to route	7
Project doesn't affect Transit	0

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Point System

- ➤ 1-10 points max
- ➤ Categories weighted differently
- ➤ Bonus Points for areas of Urgent Need

Pie chart categories:
- Facility Rating, 30%
- Safety, 20%
- Equity, 10%
- Bike Facility, 5%
- Pedestrian Facility, 5%
- Underground Utility, 20%
- Green Infrastructure, 5%
- Transit, 5%

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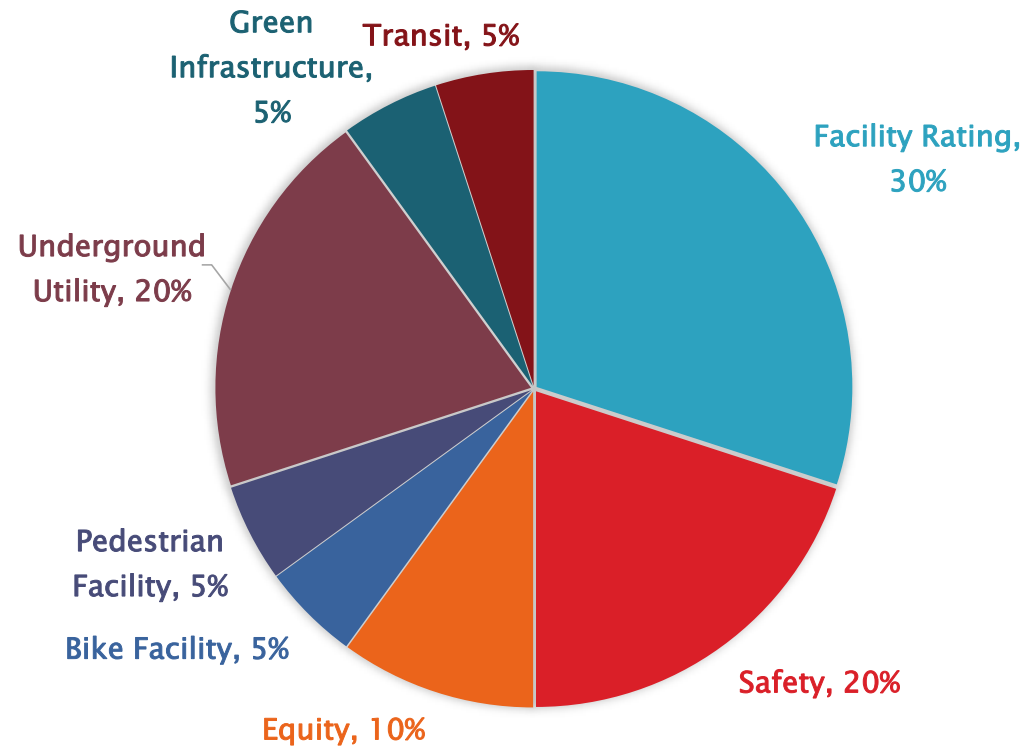
Sample

Project	Weight	Blair St, S.		Blair/John Nolen Intersection		Bridge Repair		CTH AB Interchange		John Nolen Dr		Neighborhood Traffic Man		Outer Capitol Loop Southe		Park St	
		Project need	Improvement	Project need	Improvement	Project need	Improvement	Project need	Improvement	Project need	Improvement	Project need	Improvement	Project need	Improvement	Project need	Improvement
Facilty Rating	30	10	excellent	9	excellent	4	good	10	NA	20	excellent	5	NA	9	excellent	9	excellent
Safety	20	10	fair	10	excellent	5	excellent	20	excellent	10	good	7	excellent	0	same	10	good
Equity	10	10	in area > 25%	10	in area > 25%	10	in area > 25%	0	in area < 25%	10	in area > 25%	10	in area > 25%	0	in area < 25%	10	in area > 25%
Bike Facility	5	10	fair	10	excellent	0	excellent	10	excellent	0	excellent	5	NA	10	good	10	good
Pedestrian Facility	5	3	excellent	3	excellent	0	excellent	10	excellent	3	excellent	3	excellent	3	excellent	3	excellent
Underground Utility	20	7	excellent	7	excellent	5	NA	5	NA	5	NA	5	NA	7	excellent	7	excellent
Green Infrastructure	5	3	fair	3	fair	5	NA	10	excellent	10	good	5	NA	3	fair	3	fair
Transit	5	8	good	8	good	0	NA	0	NA	8	good	5	NA	8	good	8	good
Total	100	86		83		44.5		95		110.5		58		53		83	

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Initial Thoughts

- Still Draft, Through A few iterations

- A few nuances to work out - Project needs, vs Improvement

- Some outliers – Bridge Repair program, Railroad Crossings

- Some score low in this system, but are still very important – Traffic Calming, Ped Bike Enhancements

- Some projects have Urgent requirements

- Time consuming, would like to streamline

- Pretty Well Rounded Program – many reds/high scores in all categories

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