

# Transportation Improvement Program Process

MADISON DEPARTMENT



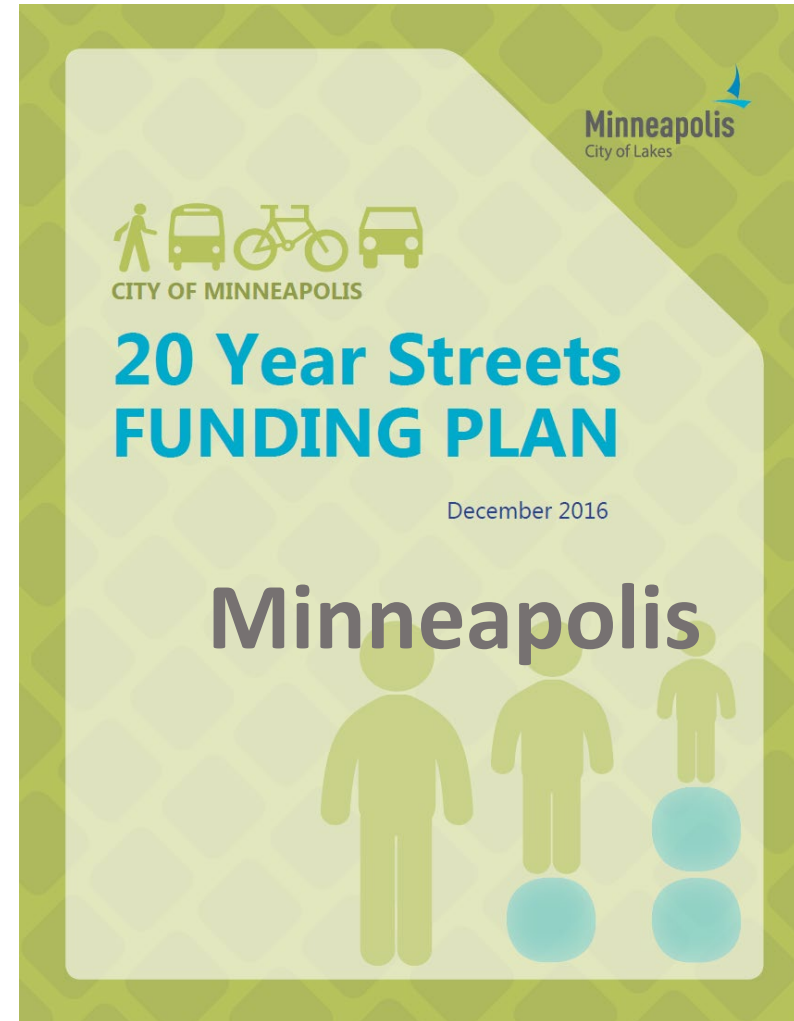
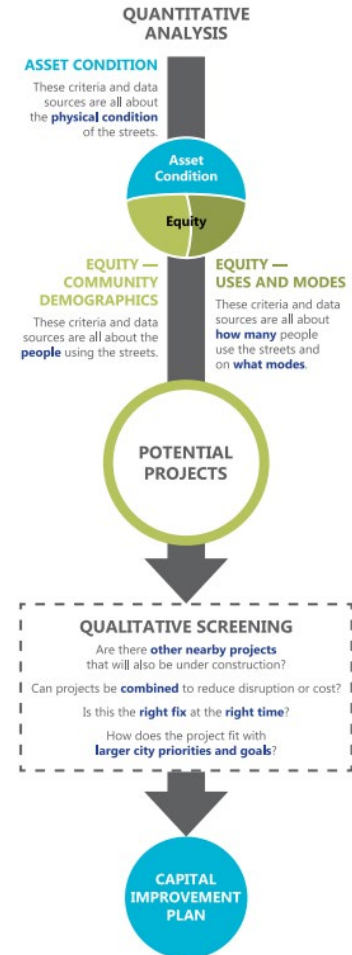
OF TRANSPORTATION



# Early Desire to Document TIP Selection Process

## 4. Capital Project Prioritization

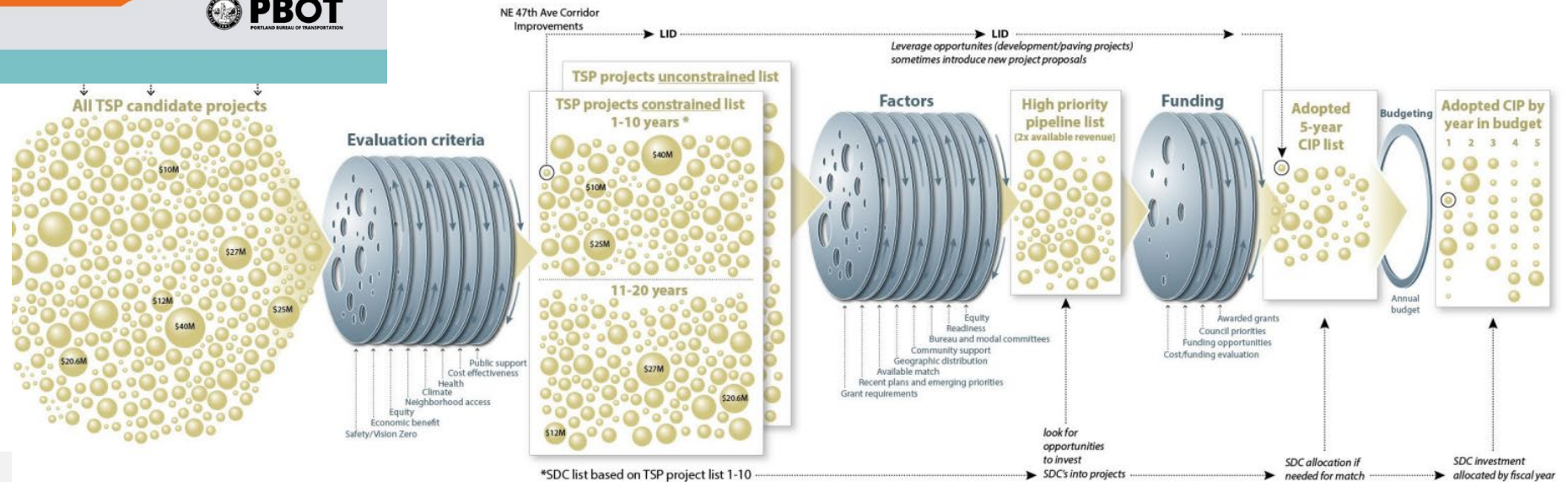
Figure 4-2: The project selection process for street paving projects is illustrated as a multi-step system, including both quantitative and qualitative analysis.



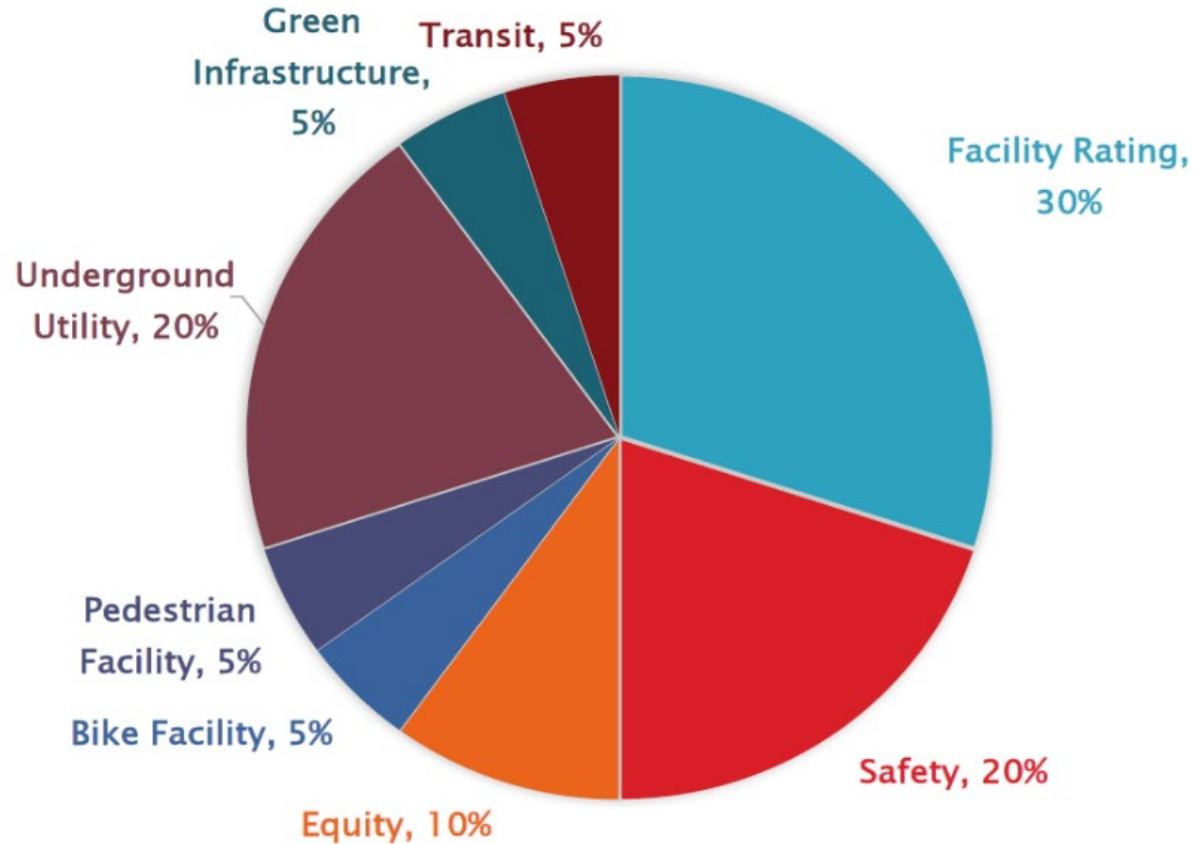
# Early Desire to Document TIP Selection Process



## Portland



# City Engineering Proposal 2020 & 2021



- Similar to one used by Minneapolis's 20-year Capital Improvement Program.
- Created multiple factors to evaluate capital projects

# Challenges

- Weighting categories allowed streets without a reconstruction need to score higher than streets with a reconstruction need.
  - Defeats key objective of reconstruction program.
- Difficult to incorporate Utility reconstruction needs and utility funding ability.
- Difficult to score some categories – such as “green infrastructure”
- **Doesn't consider development opportunities**
- Submittal of Capital Projects to Finance is due two months earlier in 2022

# Proposal

## 2023 TIP

- Provide scores for projects already in TIP with a few modifications
  - Pavement Cond
  - Equity
  - Safety
  - Utilities
- Submit to Finance 4/22

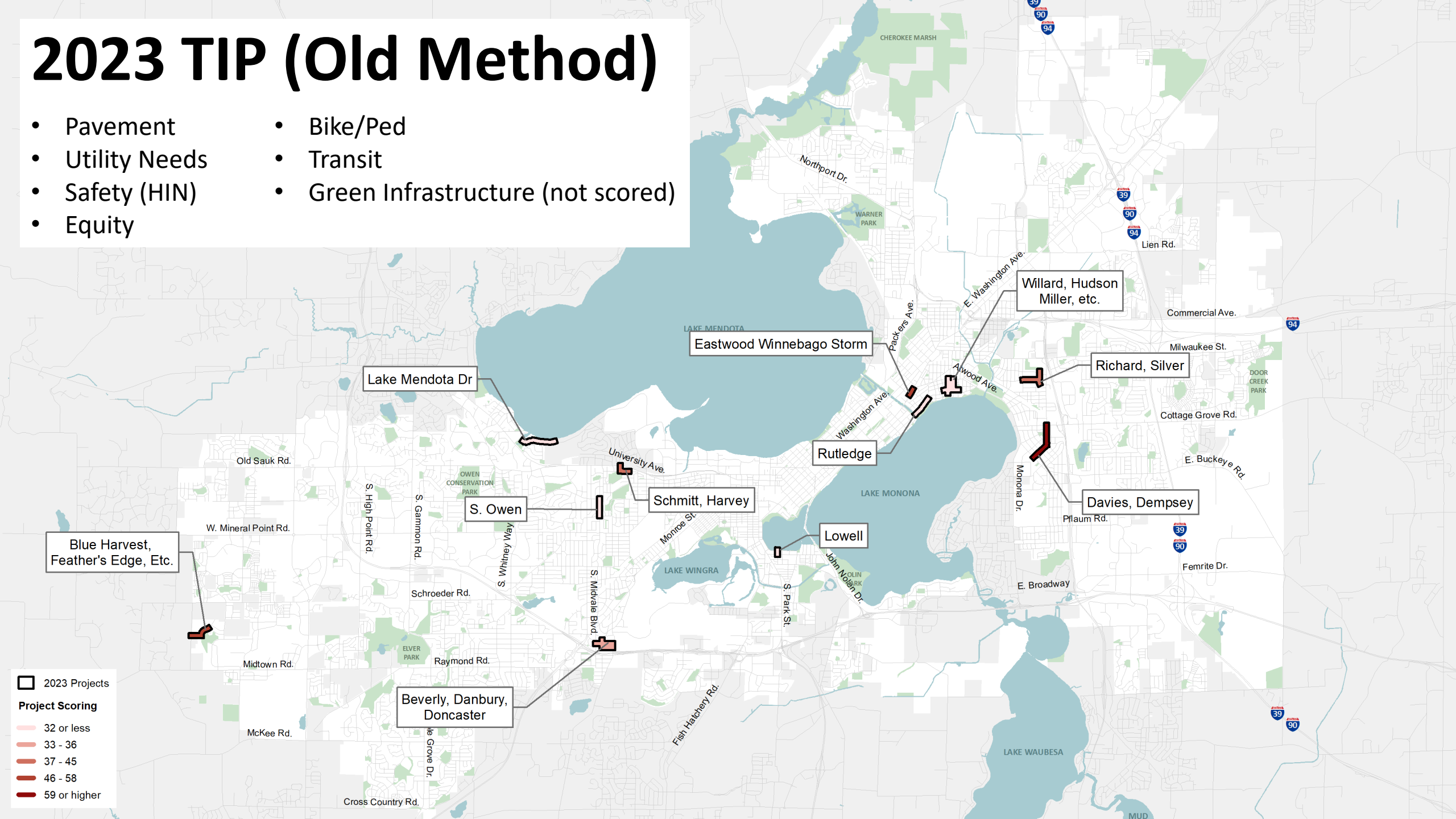
## Refining criteria

## 2024-2028 TIP

- Pilot a multi-stage process
- Provide interim results to policymakers in spring/summer
- Use for TIP submittal in 2023

# 2023 TIP (Old Method)

- Pavement
- Utility Needs
- Safety (HIN)
- Equity
- Bike/Ped
- Transit
- Green Infrastructure (not scored)




2023 Projects

**Project Scoring**







- 32 - 36
- 33 - 36
- 37 - 45
- 46 - 58
- 59 or higher

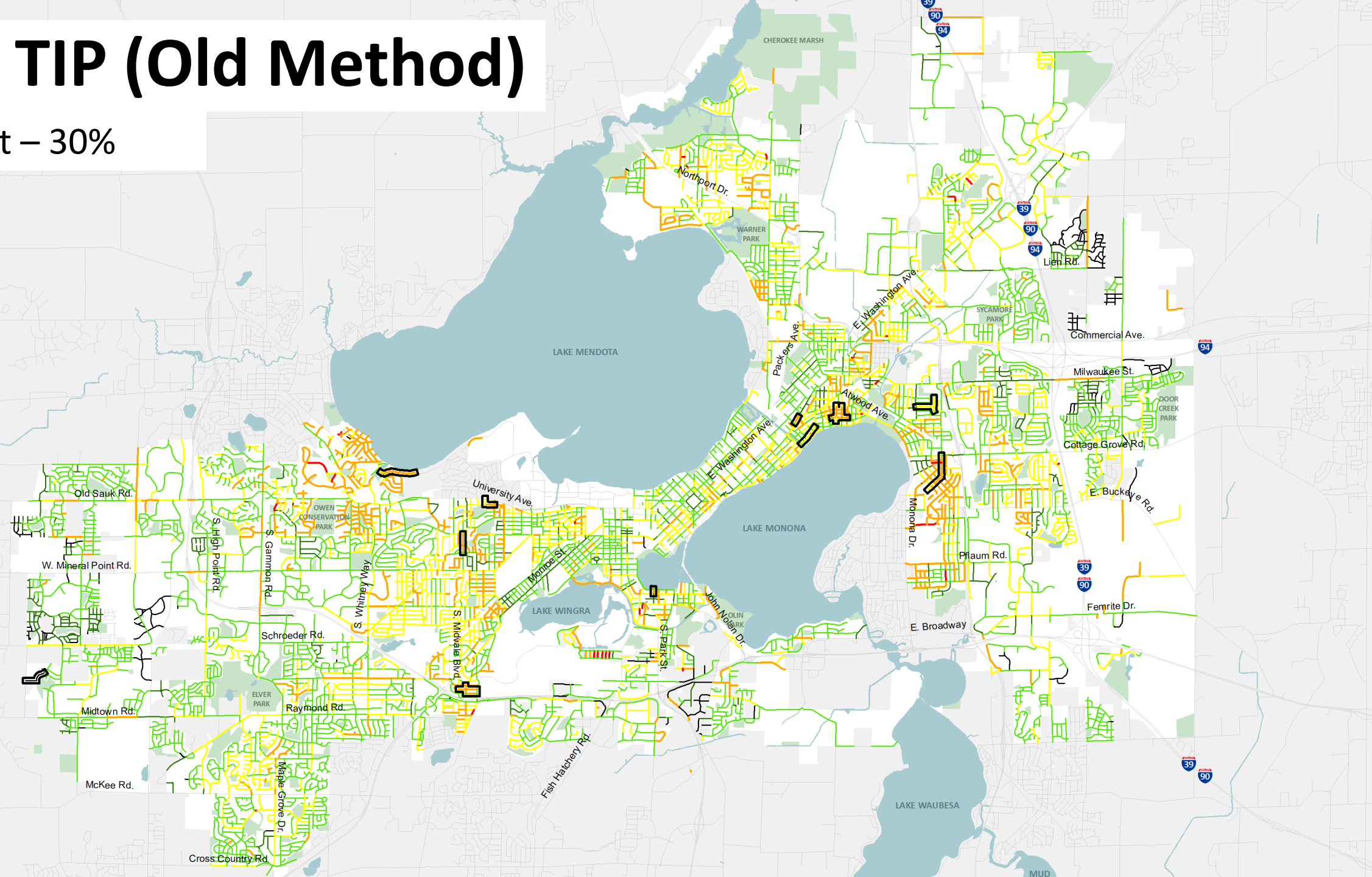
# 2023 TIP (Old Method)

Pavement – 30%

 2023 Projects

**Pavement Ratings**

-  Platted Roads
-  1 - 2
-  3 - 4
-  5 - 6
-  7 - 8
-  9 - 10

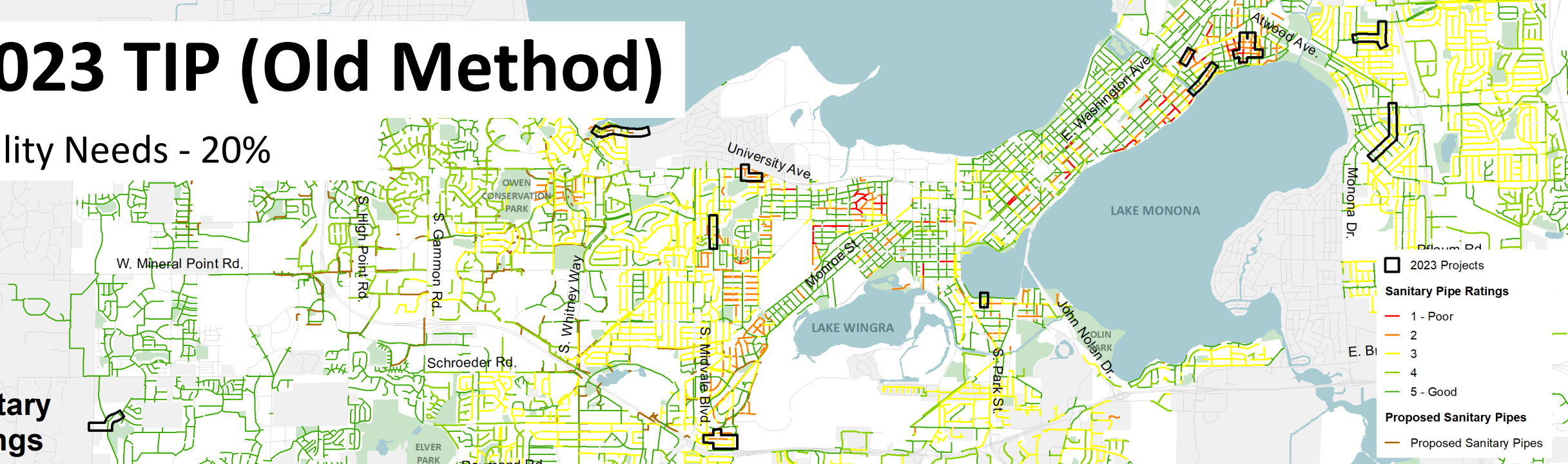




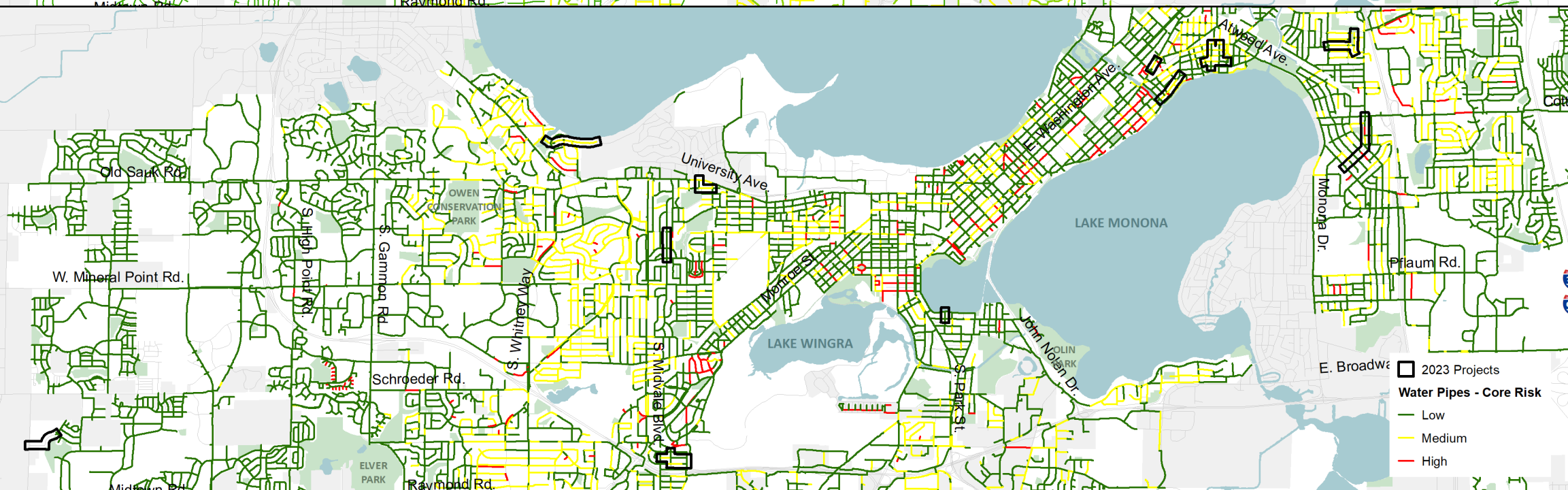
# 2023 TIP (Old Method)

Utility Needs - 20%

## Sanitary Ratings

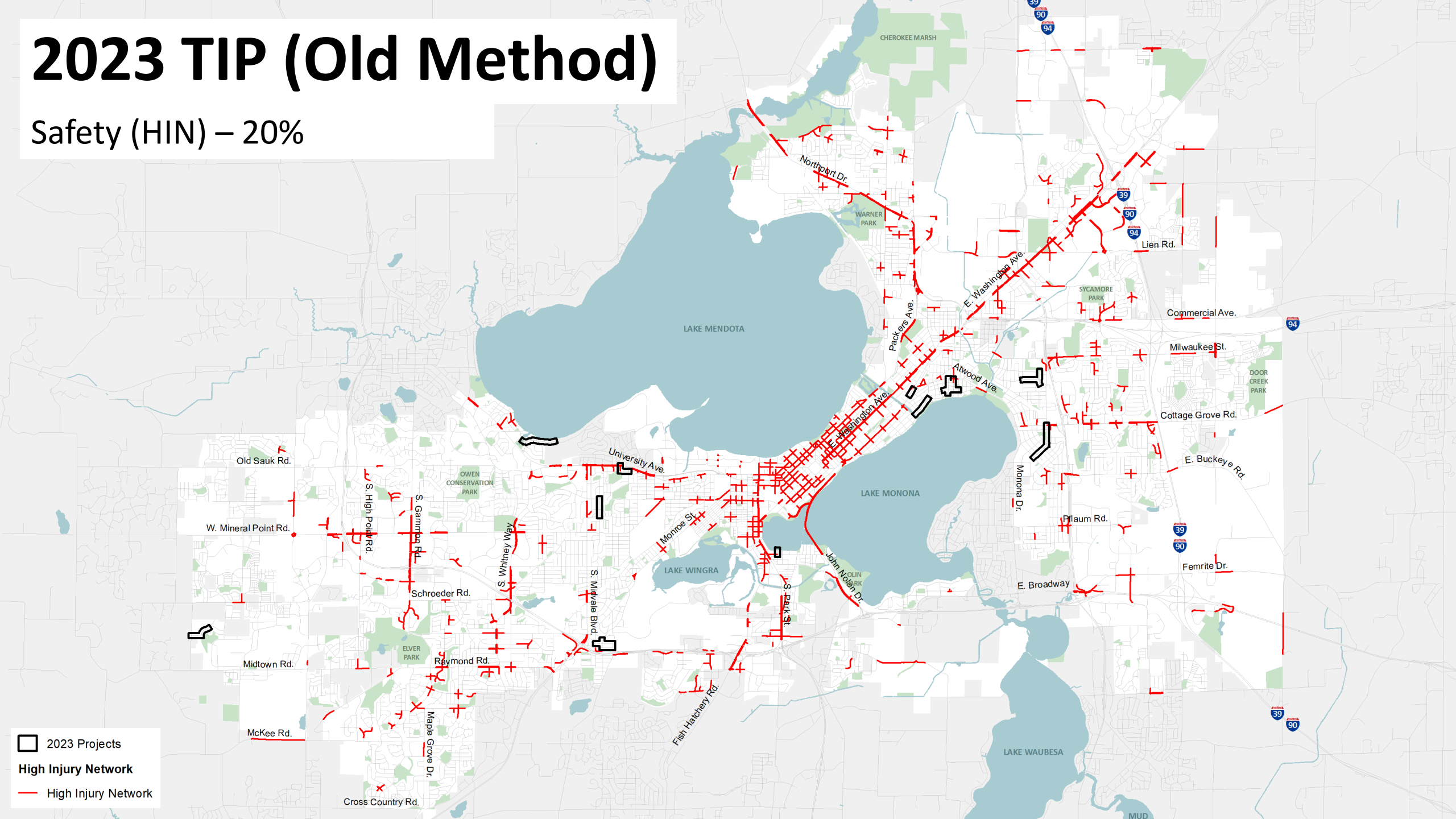



## Water Ratings




# 2023 TIP (Old Method)

Safety (HIN) – 20%






 2023 Projects

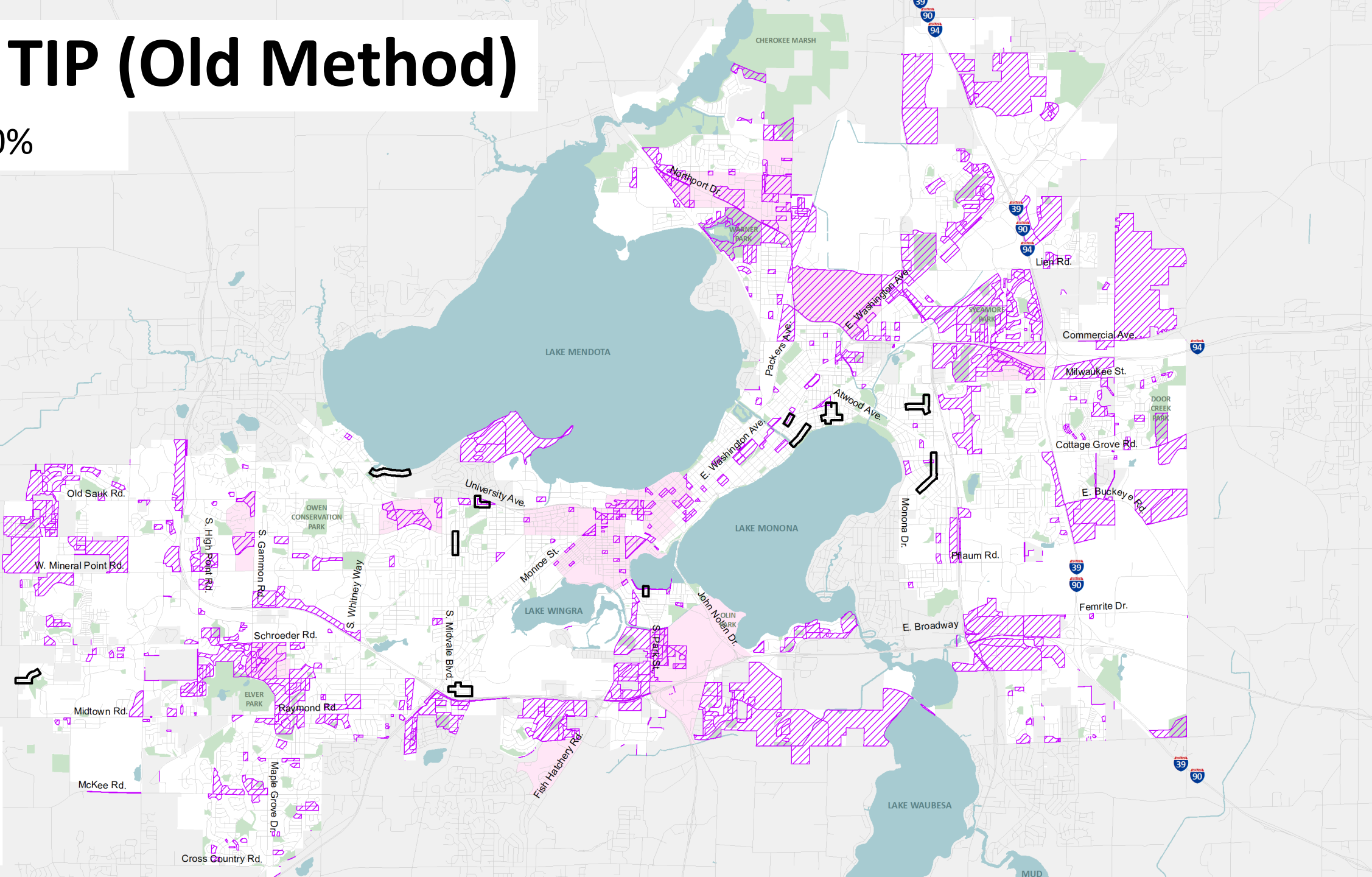
**High Injury Network**

 High Injury Network

# 2023 TIP (Old Method)



Equity- 10%

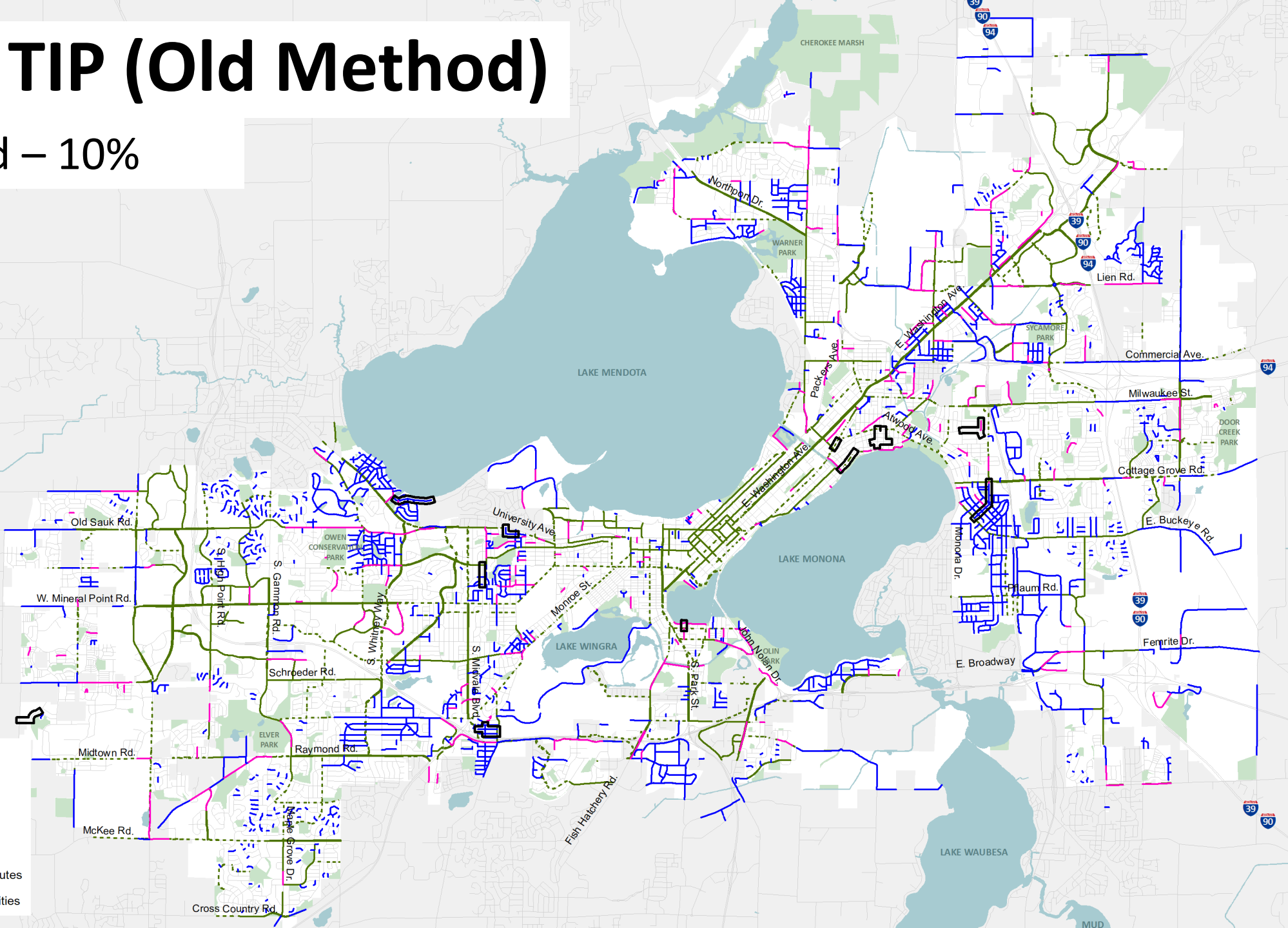
-  2023 Projects
- Minority Concentrations**
  -  40+ % Minority
- Low Income Communities**
  -  25%+ Low Income



# 2023 TIP (Old Method)

Bike/Ped – 10%

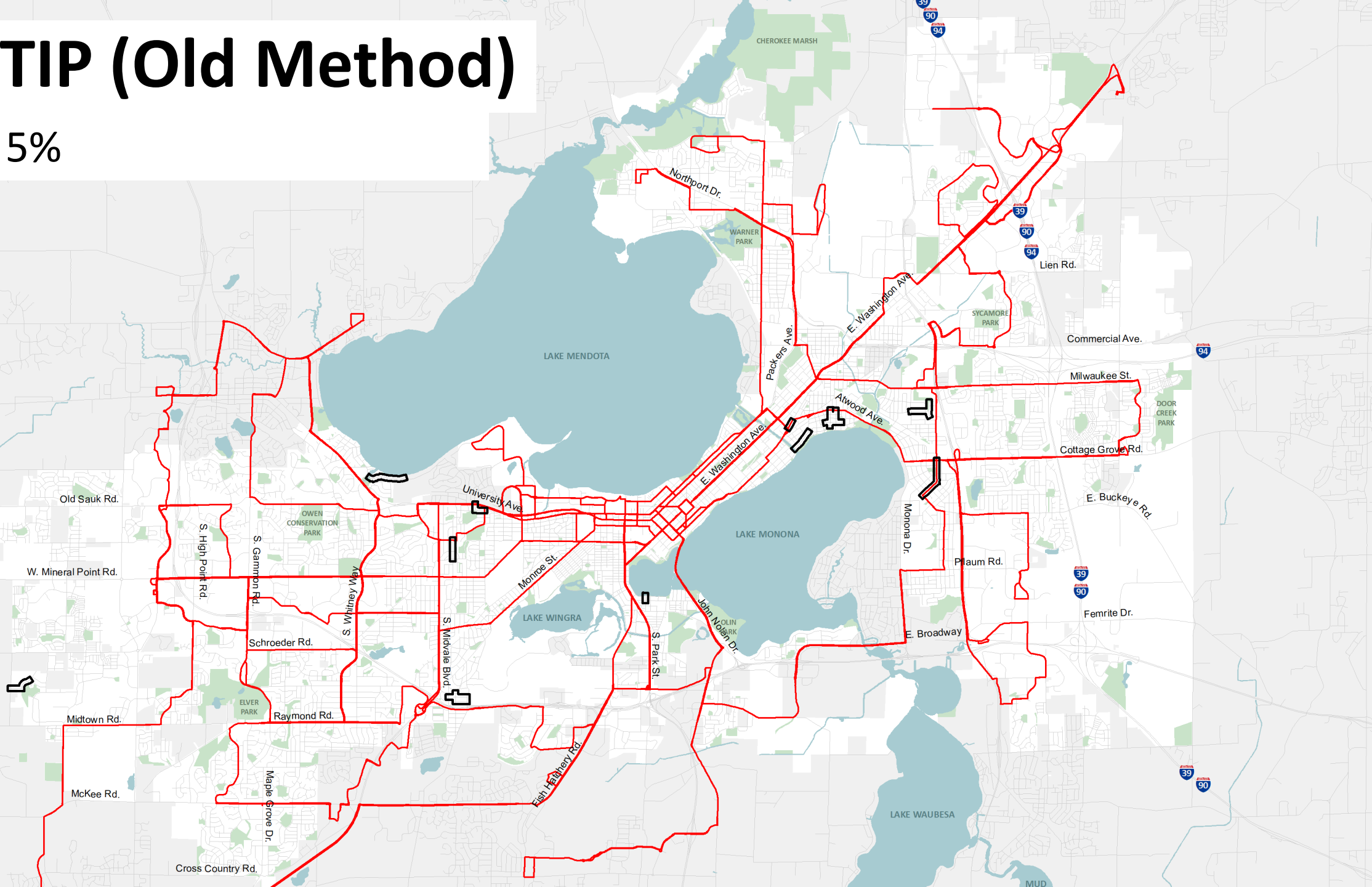
-  2023 Projects
- Sidewalk Needs**
  -  No Sidewalks (Examine)
  -  Missing on One Side
- Bike Needs**
  -  Existing & Planned Bike Routes
  -  Future On-Street Bike Facilities



# 2023 TIP (Old Method)

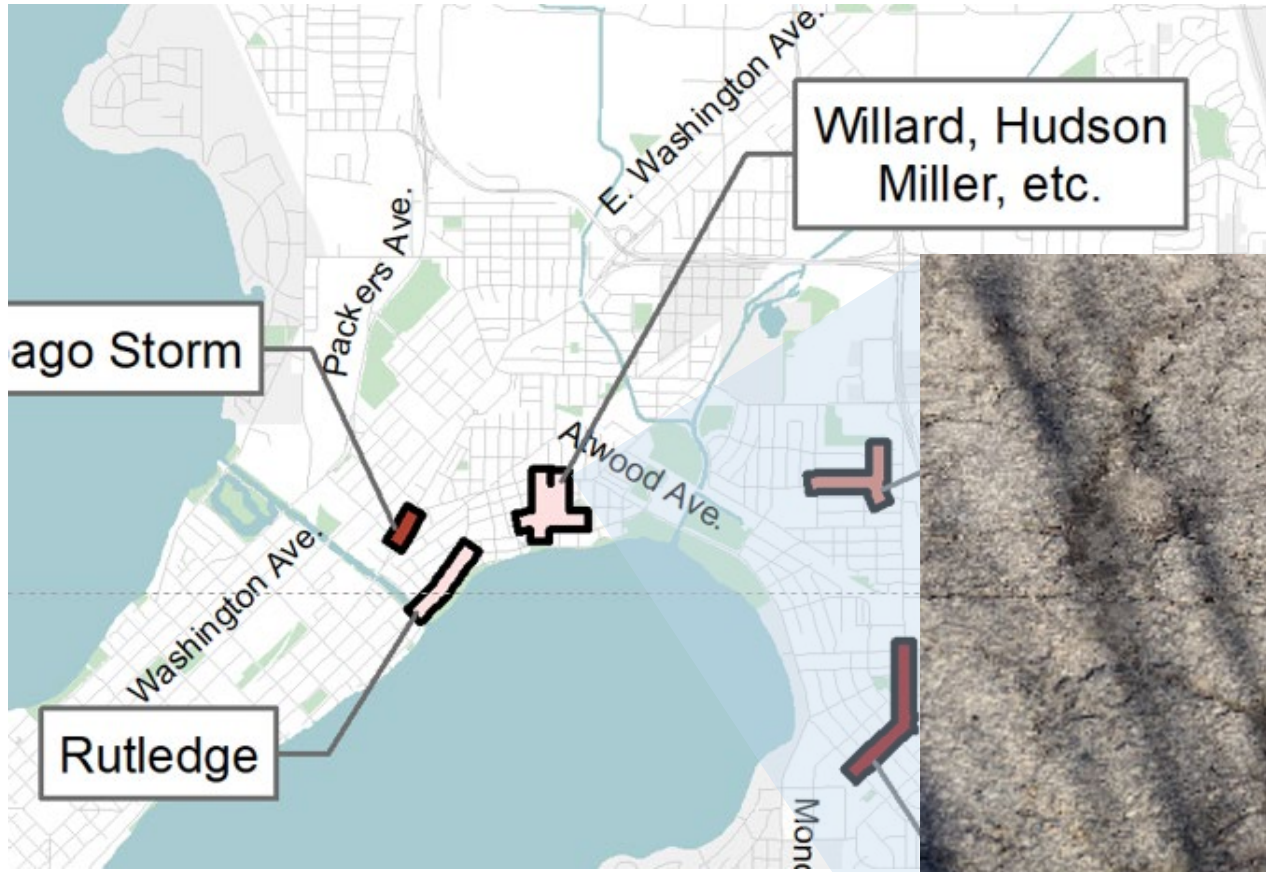
Transit – 5%

- 2023 Projects
- Draft Transit Network



# Challenges

- Weighting categories allowed streets without a reconstruction need to score higher than streets with a reconstruction need.
  - Defeats key objective of reconstruction program.
- Difficult to incorporate Utility reconstruction needs and utility funding ability.
- Difficult to score some categories – such as “green infrastructure”
- Submittal of Capital Projects to Finance is due two months earlier in 2022



We want to reconstruct streets that have a reconstruction need (Pavement and Utilities). But once these have been identified, we want to advance projects with a equity, safety, bike/ped need.





# TIP Process Being Explored

## RECONSTRUCTS

Pavements and  
Utilities with Critical  
Needs

**NON-  
RECONSTRUCTS**  
Pavements without  
critical needs

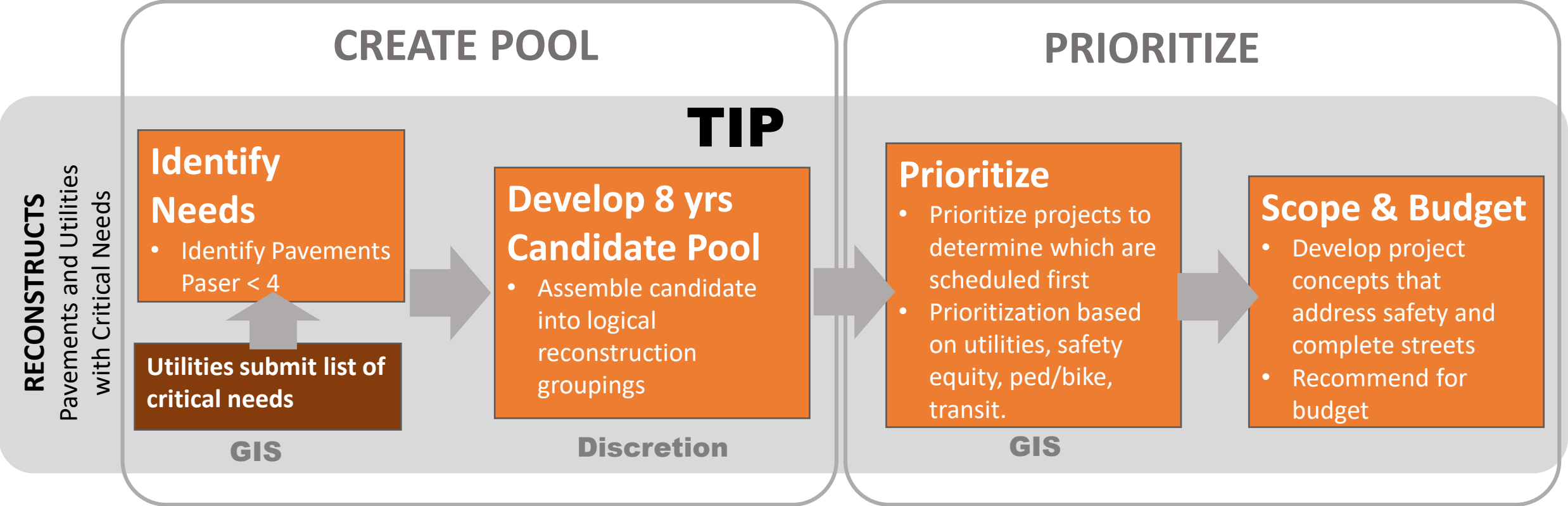
## TIP

Safety and Complete Green  
Streets met within context of TIP  
reconstructions

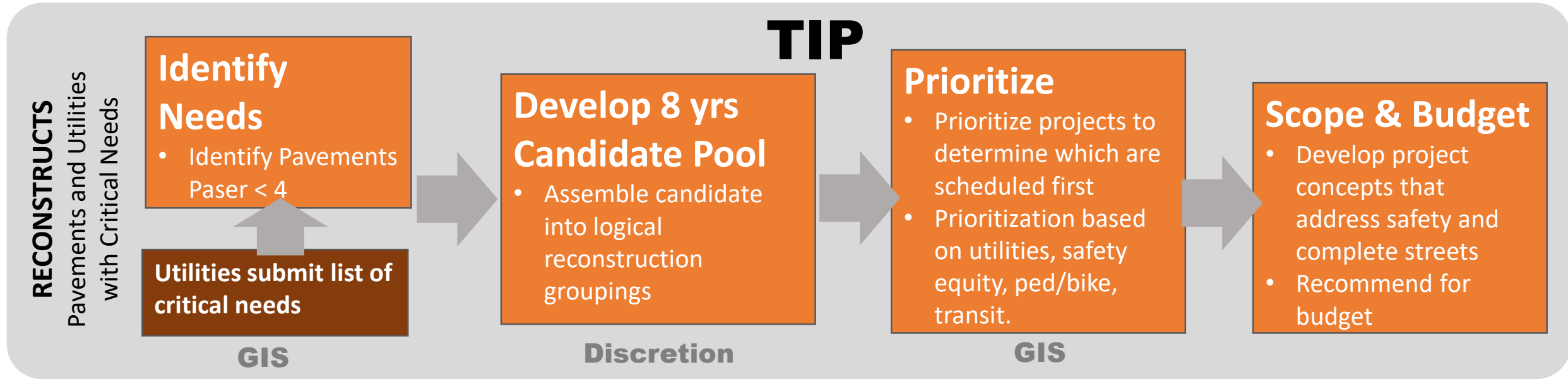
## SAFE STREETS

Safety and Complete Green  
Streets met within context of  
Safe Streets Program

# Revised TIP Process Being Explored



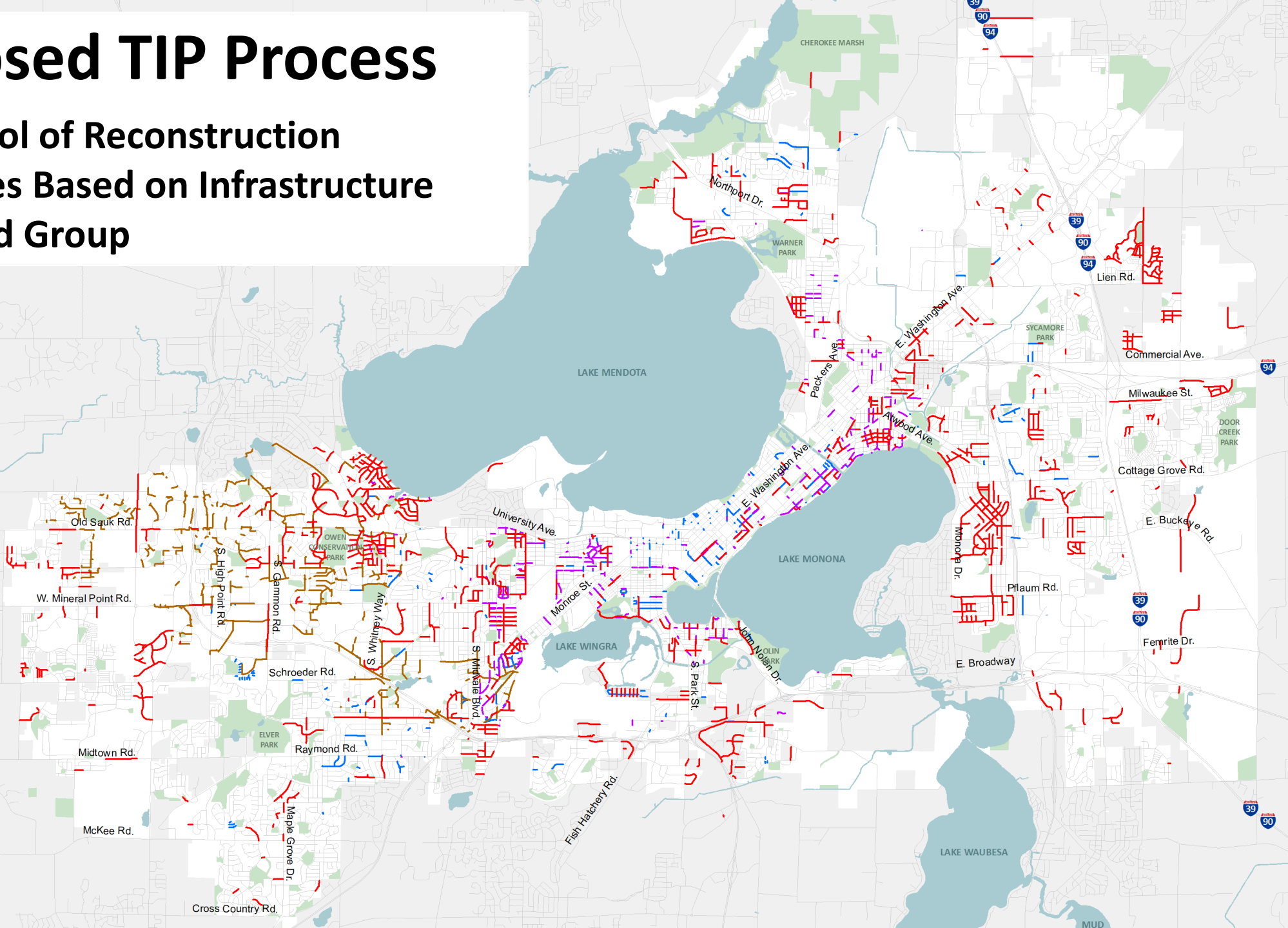
# TIP Process w/ Safe Streets Process



# Proposed TIP Process

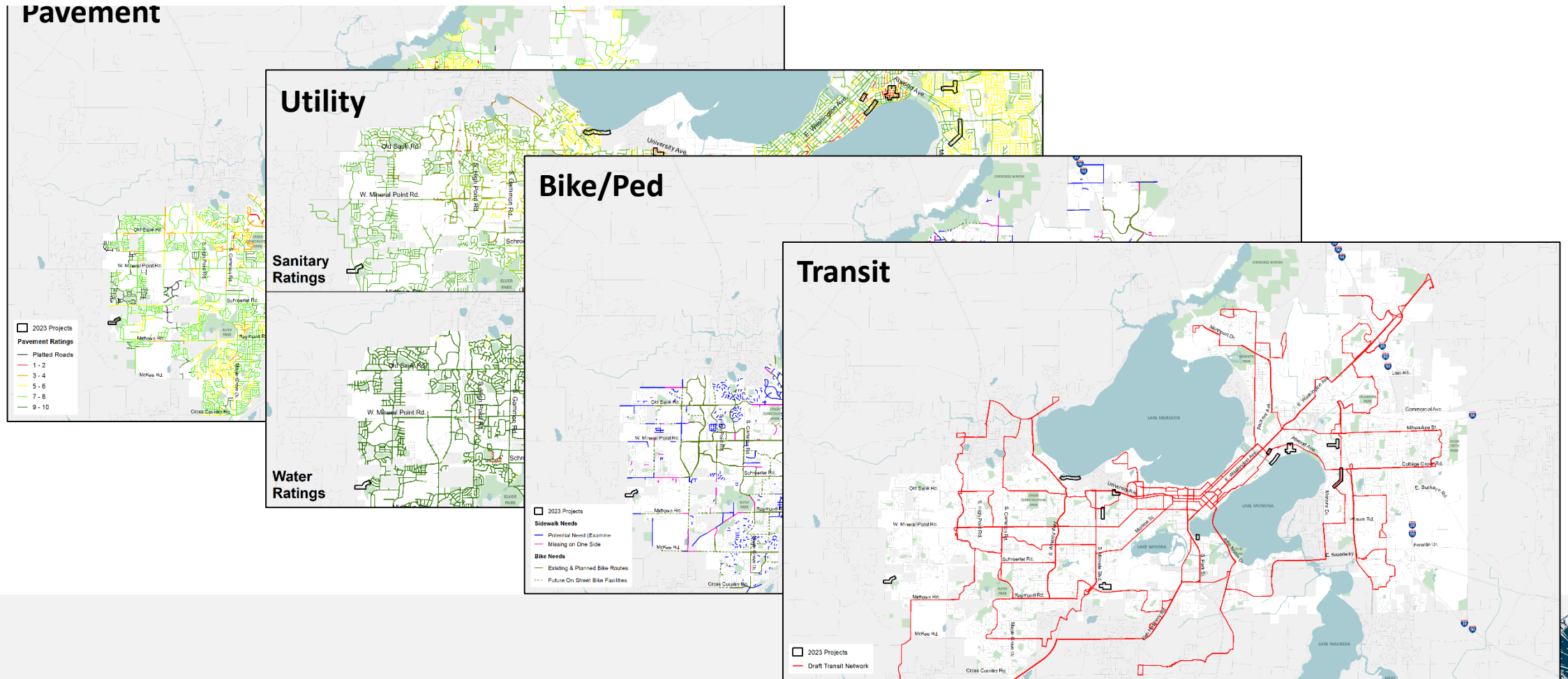
Create Pool of Reconstruction Candidates Based on Infrastructure Needs and Group

- Pavement Cond. - Poor
- Sanitary Pipe - Poor
- Future storm
- Water Pipe - Poor



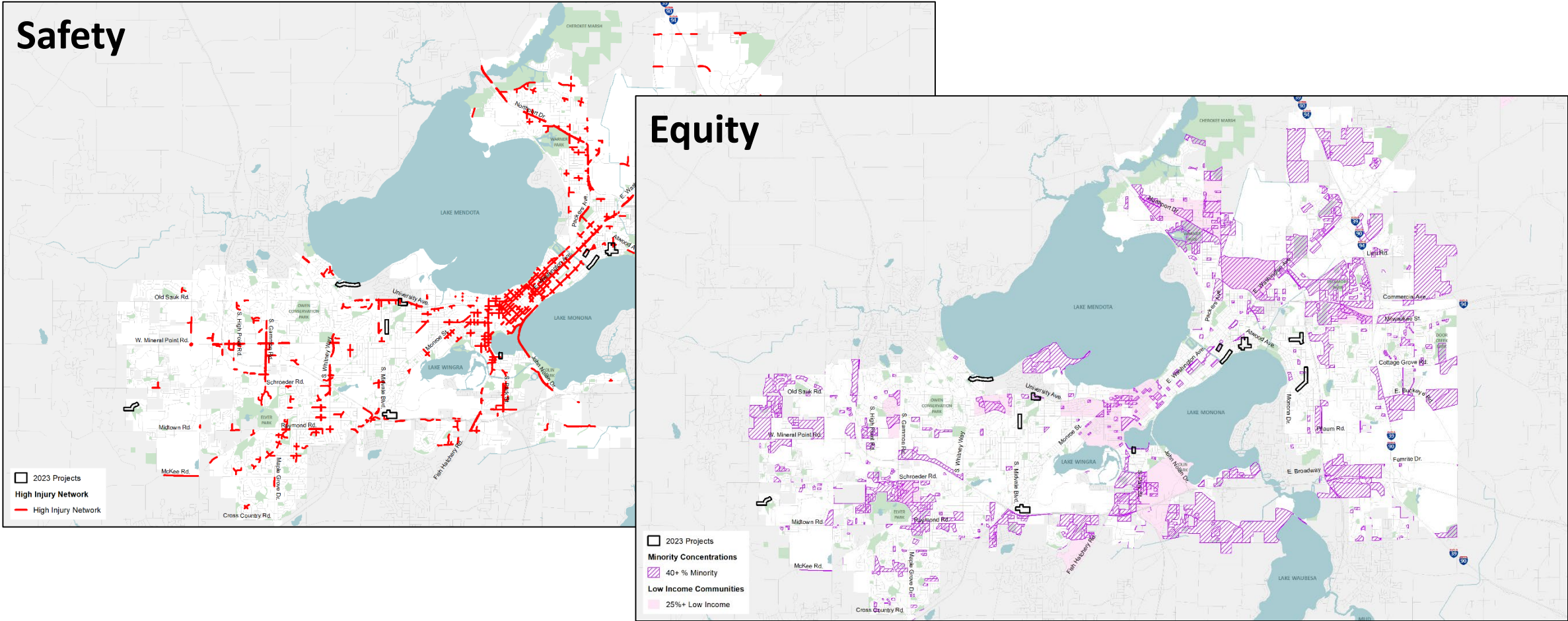
# Proposed TIP Process

After candidate pool is established, Prioritize Based on Safety, Equity, Bike, Ped, and Transit (with consideration for eminent utility and pavement risks)



# Proposed TIP Process

## Weight Scores Based Safety & Equity



# Proposed TIP Process – Next Steps

- Determine appropriate scoring for Pavement Condition, Utility Needs, Bike, Ped, and Transit
- Determine appropriate weighting for safety and equity
- Run process on and prioritize approximately 8 years of projects
- Report Results to TPPB in April/May 2022



# **2023 TIP Slides**