

Regional Solicitation Before & After Study Phase II

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**BOLTON
& MENK**



**METROPOLITAN
COUNCIL**

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Study Objectives

- Refine the approach for monitoring “after” conditions of projects that have received federal transportation funds
- Research Ways to Streamline the Application Process
 - Focus Groups
 - Bicycle and Pedestrian Usage Measure
 - Projects Not Funded by Regional Solicitation
 - Risk Assessment
 - Best Practices for Crash Modification Factors (CMFs)



Combined, the 2014, 2016, 2018, and 2020 Regional Solicitations have garnered over 538 grant applications



\$1.87 Billion

totaling over \$1.87 billion in federal funding requests



\$782 Million

Regional Solicitation process has awarded nearly half (42%) of these requests granting over \$782 million over the four cycles

Before/After Database Development

Database includes after conditions for:

- Congestion
- Crashes
- RBTN changes
- Transit Ridership
- Connections to
 - Populations
 - Jobs
 - Activity Centers

Congestion Measure: Use of StreetLight Data

Travel Time Reduction

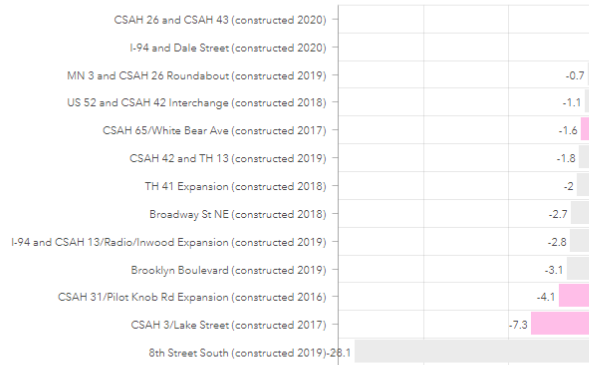
| 2014 Regional Solicitation: Funded Roadway Expansion Projects | AM | PM | All Day |
|--|-----|-----|---------|
| TH 41 Expansion (Carver County) | 14% | 29% | 20% |
| 70th St and Robert Trail Roundabout (Dakota County) | 6% | 15% | 7% |
| CSAH 42/52 Interchange (Rosemount) | 5% | 6% | 16% |

Safety: Crash Analysis Tool

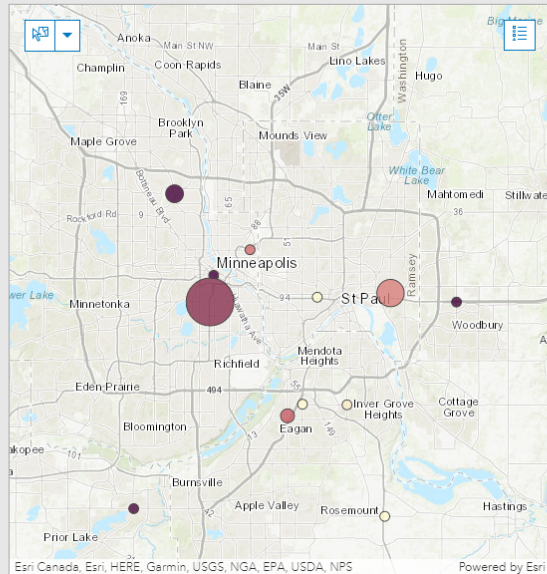
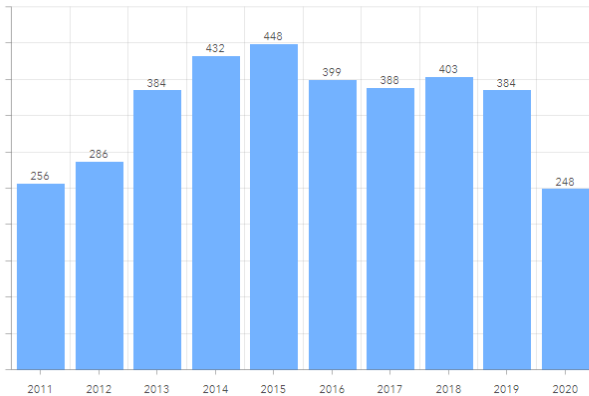
2014 Regional Solicitation Projects - Before & After Analysis

Project: All Projects

Change in Crash Rate After Reconstruction



Total Crashes By Year



Crash Rates

Total Crashes Difference



Total Crashes After



8th Street South Reconstruction (Construction Finished 2019)

| | Before | After | Difference |
|----------------|--------------|-------------|--------------|
| Total Crashes | 232 | 24 | -208 |
| Crash Cost | \$10,259,800 | \$1,390,400 | -\$8,869,400 |
| Total K&A | 1 | 0 | -1 |
| Total Ped&Bike | 25 | 3 | -22 |
| Crash Rate | 32.08 | 4.01 | -28.07 |
| K&A Crash Rate | 13.83 | 0.00 | -13.83 |

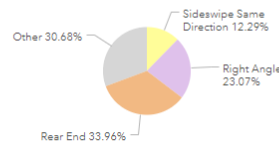
Broadway St NE Reconstruction (Construction Finished 2018)

| | Before | After | Difference |
|----------------|-------------|-----------|--------------|
| Total Crashes | 44 | 16 | -28 |
| Crash Cost | \$2,456,800 | \$524,600 | -\$1,932,200 |
| Total K&A | 1 | 0 | -1 |
| Total Ped&Bike | 1 | 0 | -1 |
| Crash Rate | 4.24 | 1.52 | -2.73 |
| K&A Crash Rate | 9.64 | 0.00 | -9.64 |

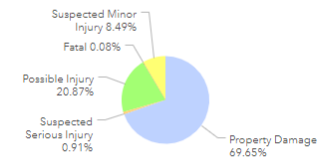
Brooklyn Boulevard Reconstruction (Construction Finished 2019)

| | Before | After | Difference |
|----------------|--------------|-------------|--------------|
| Total Crashes | 158 | 53 | -105 |
| Crash Cost | \$11,565,400 | \$2,420,000 | -\$9,145,400 |
| Total K&A | 6 | 0 | -6 |
| Total Ped&Bike | 10 | 0 | -10 |

Crash Types



Crash Severity



Safety: Crash Analysis Summary

| 2014 Regional Solicitation: Funded Expansion & Modernization Projects | Total Crashes | Crash Cost | Total K & A | Total Ped & Bike | Crash Rate* | K & A Crash Rate** |
|---|------------------|---------------|----------------|------------------------|----------------|--------------------------|
| CSAH 3/Lake Street Reconstruction (Hennepin County) | -40 | -\$2.5M | -2 | -2 | -7.31 | -32.61 |
| CSAH 31/Pilot Knob Road (City of Eagan) | -31 | -\$400K | 0 | +1 | -4.07 | 0 |
| CSAH 65/White Bear Ave Reconstruction (Ramsey County) | -26 | -\$97K | 0 | +1 | -1.55 | 0 |

*Crash rate is per million vehicle miles traveled

**K&A is per 100M vehicle miles traveled

Projects Not Awarded RS Funds

- **42%** of the funding requests fulfilled over past four cycles; amounting to **\$782** million
- **313** projects remain unfunded
- Some projects move forward without Regional Solicitation funding, often projects are being scaled back (e.g., fewer amenities/enhancements) or delayed until funding is secured
- Applications that did not receive funding for a given solicitation but re-submitted at a future Solicitation had varying success in their resubmittal efforts, with approximately **29%** eventually receiving funding.

Non-Motorized Summary

- Total of 74.4 miles of RBTN bikeway miles have been built or programmed using RS funds
- Region could consider changing the bicycle/pedestrian measures by incorporating a scoring criterion that considers the project's design and its ability to improve one's comfort level and safety
- This approach is used by other MPOs (e.g., Dallas and St. Louis)

Risk Assessment Summary

- Since 2014, **25** projects have been delayed or not built
 - **14** program year extensions
 - **11** withdrawals
 - Total includes HSIP funded projects
- Program year extensions are requested to better align awarded projects with other projects.
 - **50%** of the program year extensions were requested to help align a project's delivery/construction schedule with other programmed projects in the area
- There is no need to eliminate the risk assessment measure

Key Takeaways

- Provide clarity on the goals of the Regional Solicitation program
- Funding is being spread across too many funding categories, which may make it unclear as to what the Regional Solicitation process is trying to accomplish
- It is also unclear how some of the measures relate to the funding categories
- There may be a need for greater transparency on how projects are scored and selected
- Continue to reevaluate the process to ensure funds are going towards projects with the greatest regional benefit

Questions?

