

INFORMATION ITEM

DATE: July 19, 2018
TO: TAC Funding & Programming Committee
PREPARED BY: Steve Peterson, Highway Planning and TAB/TAC Process Manager
David Burns, Senior Planner (651-602-1887)
SUBJECT: Geographic Balance in the Regional Solicitation

BACKGROUND: The issue of geographic balance, “fair share,” and spreading the funds around the region is a topic that many Metropolitan Planning Organizations (MPOs) throughout the country are exploring with respect to distribution of federal transportation funds. As such, TAB asked Council staff to explore alternative approaches to consider geographic balance in the Regional Solicitation. Geographic balance is not currently used to score projects. Rather, TAB has used it when weighing various funding options or to evaluate funding decisions made over time.

In the past, regional balance has been measured by the amount of funding awarded within each county relative to its proportionate share of the region’s population (e.g., Anoka County has 11% of the region’s population and would expect around 11% of the federal funding, over time). However, this approach may be an overly-simplistic way to assess regional balance. Counties represent large areas that tend to be heterogenous in population density and other characteristics (e.g., Medina and Minneapolis are vastly different, but both are in Hennepin County). Understanding commute patterns, job/recreation centers, and congestion can all play a role in analyzing geographic balance. There is probably no limit to the number of ways that geographic balance can be assessed, but analyzing investments solely based on where people live does not fully capture the regional nature of travel patterns. For example, an investment made in Bloomington, may also benefit Dakota County residents using the improved roadway to get to work or shopping centers.

Figures 1-3 present three alternative approaches to measuring geographic balance of projects selected in the last several funding cycles (2003-2016 Regional Solicitations). It is important to analyze geographic balance with a large enough sample size of projects, since there is some level of variance within each individual funding cycle. The final two figures (Figures 4 and 5) portray the regional nature of two recently funded projects.

The following is a brief summary of the maps:

1. Figure 1-Uses the county boundary as the unit of measurement relative to population, jobs, and vehicle miles travelled (VMT).
2. Figure 2-Shows funding by Thrive MSP 2040-assigned community designations (i.e., land uses) relative to population and jobs.
3. Figure 3- Using major roadways as the dividing lines, splits the region into four quadrants to weigh relative funding, population, and job levels.
4. Figure 4-Depicts the origin of trips passing through one of the funded 2016 Regional Solicitation projects, the Kellogg Bridge, which is adjacent to the RiverCenter in downtown Saint Paul.

5. Figure 5-Represents the origin of trips passing through one of the funded 2016 Regional Solicitation projects, Snelling Avenue just north of Rosedale Mall in Roseville.

Over the coming months, TAB and its technical committees should consider how to determine what constitutes adequate geographic balance and whether any information not shown in these maps can and should be provided.

Figure 1: Location of Awarded 2003 - 2016 Regional Solicitation Funded Projects by County



| County | 2003-2016 Federal Dollars % | Population % | Jobs % | Vehicle Miles Travelled % |
|--------------|-----------------------------|--------------|-------------|---------------------------|
| Anoka | #4 (10%) | #4 (11%) | #4 (7%) | #4 (13%) |
| Carver | #7 (5%) | #7 (3%) | #7 (2%) | #7 (5%) |
| Dakota | #3 (12%) | #3 (14%) | #3 (11%) | #2 (17%) |
| Hennepin | #1 (43%) | #1 (41%) | #1 (53%) | #1 (34%) |
| Ramsey | #2 (17%) | #2 (18%) | #2 (19%) | #3 (14%) |
| Scott | #6 (7%) | #6 (5%) | #6 (3%) | #6 (8%) |
| Washington | #5 (7%) | #5 (8%) | #5 (5%) | #5 (10%) |
| Total | 100% | 100% | 100% | 100% |

Notes: # = Rank
 Notes: Years used in the table (2003-2016) indicate the year of the project selection.
 Funds from 2003-2016 will be expended in approximately 2007-2021.
 Federal Funding refers to Regional Solicitation funds only and includes funds for all three modal categories (Roadways, Transit/Travel Demand Management, and Bicycle/Pedestrian).
 Data for population and employment based on Metropolitan Council 2016 estimates.
 Approximately \$200 million of Regional Solicitation funds are awarded every two years by the Transportation Advisory Board (TAB).

| County | 2003-2013 Federal Funding % | 2014-2016 Federal Funding % |
|--------------|-----------------------------|-----------------------------|
| Anoka | #4 (11%) | #5 (6%) |
| Carver | #7 (6%) | #7 (3%) |
| Dakota | #3 (13%) | #3 (9%) |
| Hennepin | #1 (38%) | #1 (53%) |
| Ramsey | #2 (18%) | #2 (16%) |
| Scott | #6 (7%) | #4 (8%) |
| Washington | #5 (8%) | #6 (5%) |
| Total | 100% | 100% |

Note: A major restructuring of the Regional Solicitation took place prior to the 2014 funding cycle.

County

- Anoka
- Carver
- Dakota
- Hennepin
- Ramsey
- Scott
- Washington
- 2003-2016 Projects
- Interstate Highways
- US, State, and County Highways
- A-Minor Arterials
- County Boundary

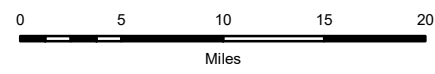
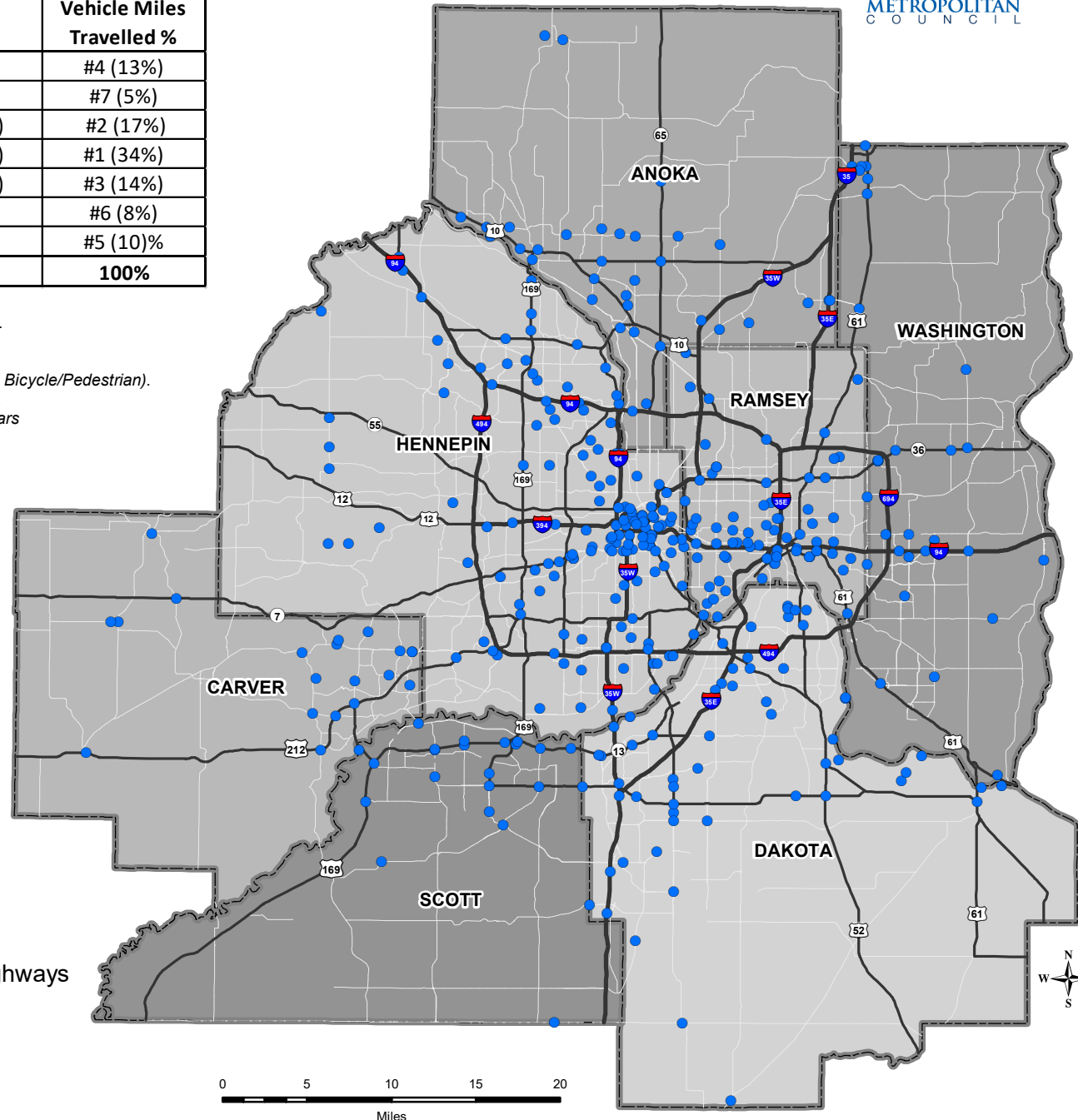


Figure 2: Location of Awarded 2013 - 2016 Regional Solicitation Funded Projects by Land Use Designation



| Region | 2003-2016 Federal Dollars % | Population % | Jobs % |
|--------------------------------------|-----------------------------|--------------|-------------|
| Urban Center/Urban | 47% | 43% | 53% |
| Suburban | 23% | 25% | 23% |
| Suburban Edge/Emerging Suburban Edge | 22% | 26% | 18% |
| Rural/Rural Center | 8% | 6% | 6% |
| Total | 100% | 100% | 100% |

Notes: Years used in the table (2003-2016) indicate the year of the project selection. Funds from 2003-2016 will be expended in approximately 2007-2021. Federal Funding refers to Regional Solicitation funds only and includes funds for all three modal categories (Roadways, Transit/Travel Demand Management, and Bicycle/Pedestrian). Data for population and employment based on Metropolitan Council 2016 estimates. Approximately \$200 million of Regional Solicitation funds are awarded every two years by the Transportation Advisory Board (TAB).

| Designation Summary | 2003-2013 Federal Dollars % | 2014-2016 Federal Dollars % |
|--------------------------------------|-----------------------------|-----------------------------|
| Urban Center/Urban | 42% | 57% |
| Suburban | 22% | 24% |
| Suburban Edge/Emerging Suburban Edge | 26% | 13% |
| Rural/Rural Center | 10% | 6% |
| Total | 100% | 100% |

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Thrive MSP 2040 Community Designations

- Urban Center/Urban
- Suburban
- Suburban Edge/Emerging Suburban Edge
- Rural/Rural Center

- 2003-2016 Projects
- US, State, and County Highways
- Interstate Highway
- A-Minor Arterials

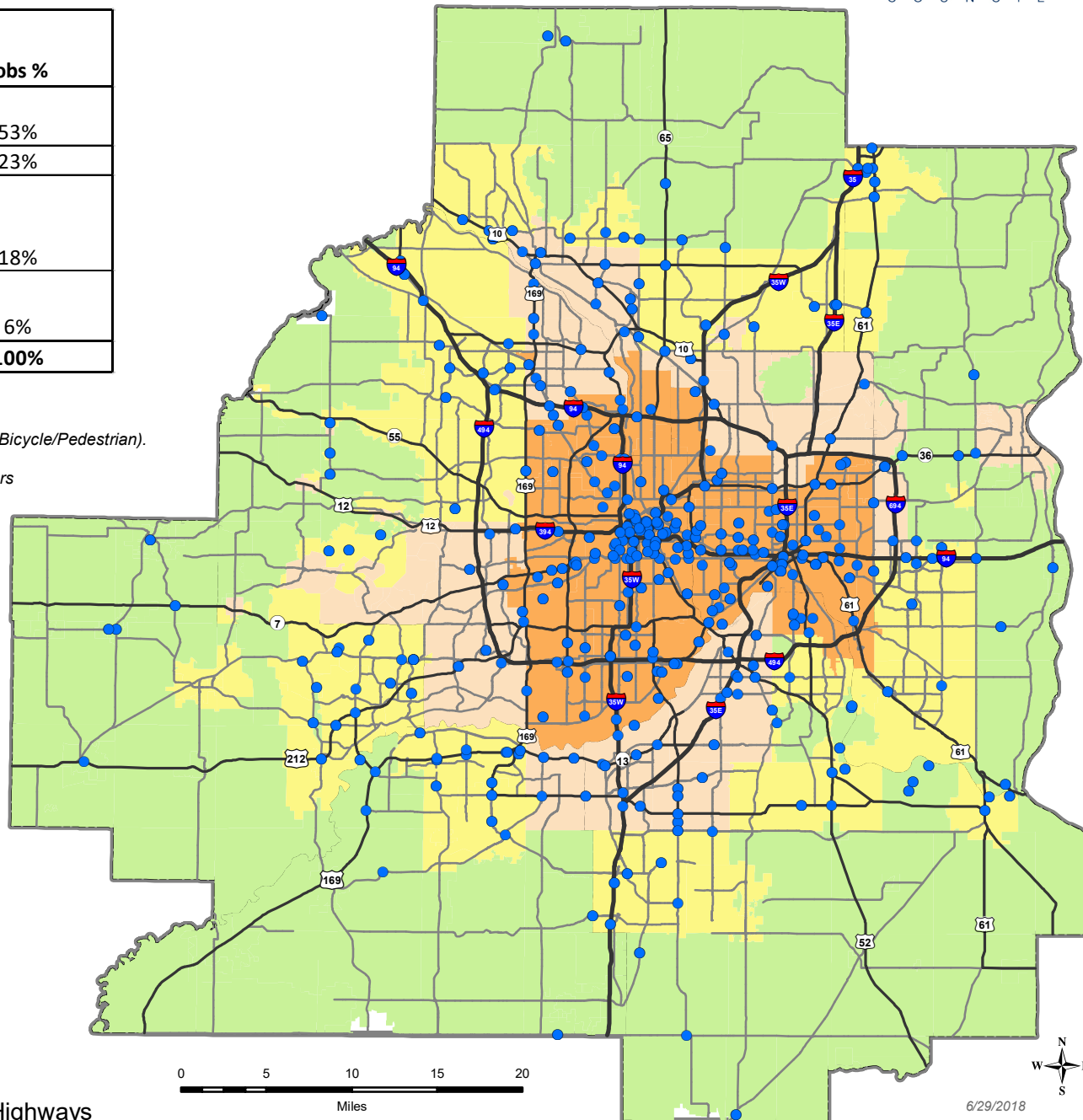
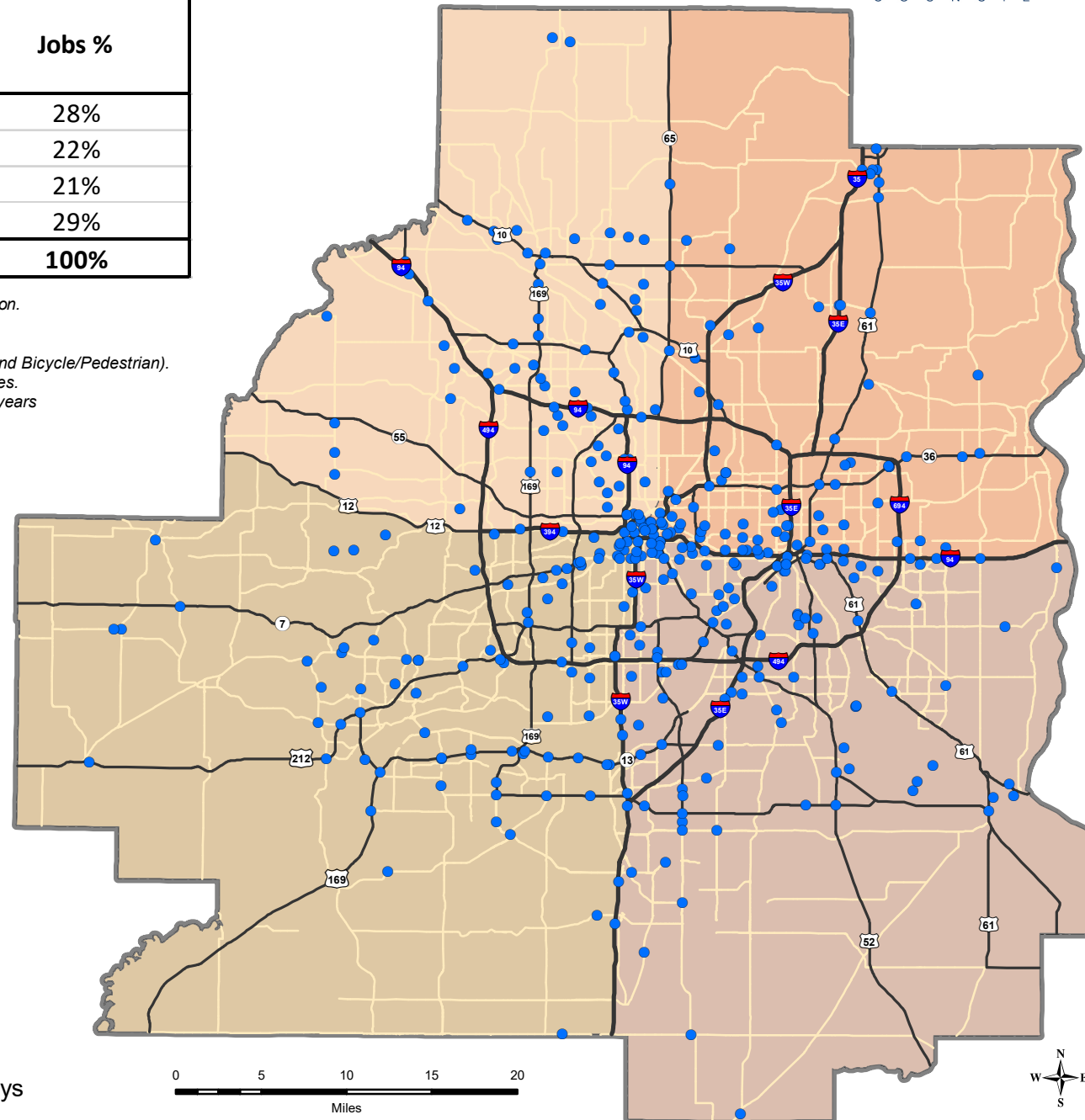


Figure 3: Location of Awarded 2003 - 2016 Regional Solicitation Funded Projects by Quadrant of the Region



| Region | 2003-2016 Federal Dollars % | Population % | Jobs % |
|--------------|-----------------------------|--------------|-------------|
| Northwest | 28% | 25% | 28% |
| Northeast | 19% | 23% | 22% |
| Southeast | 27% | 22% | 21% |
| Southwest | 26% | 30% | 29% |
| Total | 100% | 100% | 100% |

Notes: Years used in the table (2003-2016) indicate the year of the project selection. Funds from 2003-2016 will be expended in approximately 2007-2021. Federal Funding refers to Regional Solicitation funds only and includes funds for all three modal categories (Roadways, Transit/Travel Demand Management, and Bicycle/Pedestrian). Data for population and employment based on Metropolitan Council 2016 estimates. Approximately \$200 million of Regional Solicitation funds are awarded every two years by the Transportation Advisory Board (TAB).



| Region | 2003-2013 Federal Dollars % | 2014-2016 Federal Dollars % |
|--------------|-----------------------------|-----------------------------|
| Northwest | 25% | 34% |
| Northeast | 21% | 15% |
| Southeast | 29% | 23% |
| Southwest | 25% | 28% |
| Total | 100% | 100% |

Note: A major restructuring of the Regional Solicitation took place prior to the 2014 funding cycle.

- Northwest
- Northeast
- Southeast
- Southwest
- 2003-2016 Projects
- Interstate Highway
- US, State, and County Highways
- A-Minor Arterials

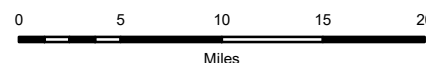
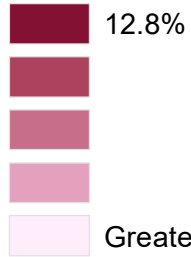


Figure 4: 2016 Regional Solicitation Origin of Traffic: Snelling Avenue in Roseville


Proportion of Traffic




Notes: Percentages are based Location-Based Service Data for Select Months in 2016 and 2017. Data is for weekdays (M-F) and all times of day. Source: StreetLight Insight, Inc.

 Project Location

 Interstate Highway

 US, State, and County Highways

 A Minor Arterials

 County Boundary

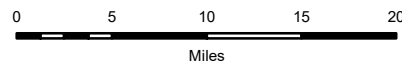
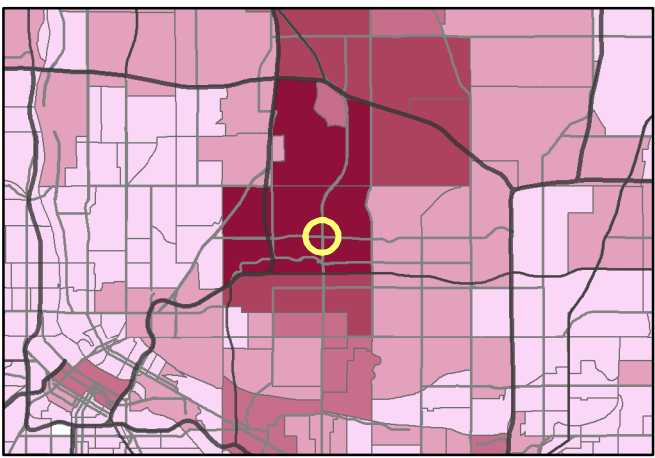
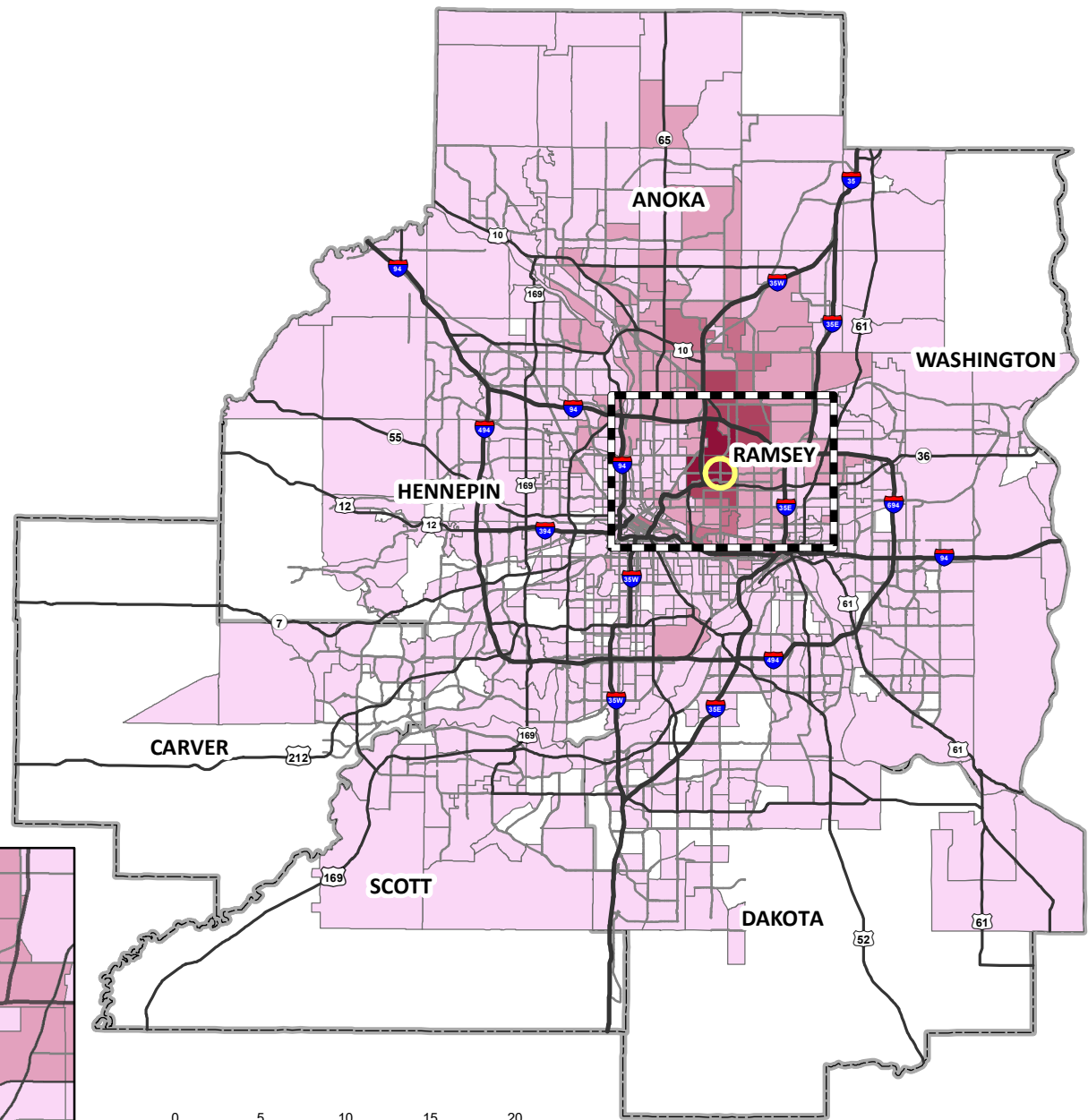
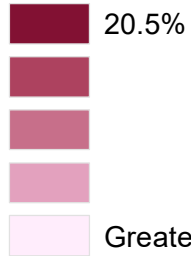


Figure 5: 2016 Regional Solicitation Origin of Traffic: Kellogg Blvd Bridge in St. Paul



Proportion of Traffic



Notes: Percentages are based Location-Based Service Data for Select Months in 2016 and 2017. Data is for weekdays (M-F) and all times of day. Source: StreetLight Insight, Inc.

- Project Location
- Interstate Highway
- US, State, and County Highways
- A Minor Arterials
- County Boundary

