



414 Nicollet Mall  
Minneapolis, Minnesota 55401

August 17, 2020

—Via Electronic Filing—

Will Seuffert  
Executive Secretary  
Minnesota Public Utilities Commission  
121 7th Place East, Suite 350  
St. Paul, MN 55101

RE: COMMENTS  
2019 ANNUAL SERVICE QUALITY REPORT  
DOCKET NO. E002/M-20-406

Dear Mr. Seuffert:

Northern States Power Company, a Minnesota corporation, doing business as Xcel Energy, submits the enclosed Comments in response to the Minnesota Public Utilities Commission's April 20, 2020 Notice of Comment Period in the above-referenced docket.

We have electronically filed this document with the Commission, and copies have been served on the parties on the attached service list. Please contact me at 612-330-6935 or [gail.baranko@xcelenergy.com](mailto:gail.baranko@xcelenergy.com), or Pamela Gibbs at [pamela.k.gibbs@xcelenergy.com](mailto:pamela.k.gibbs@xcelenergy.com) or 612-330-2889 if you have any questions regarding this filing.

Sincerely,

/s/

GAIL A. BARANKO  
REGULATORY MANAGER

Enclosures  
c: Service List

STATE OF MINNESOTA  
BEFORE THE  
MINNESOTA PUBLIC UTILITIES COMMISSION

Katie J. Sieben	Chair
Joseph K. Sullivan	Vice Chair
Valerie Means	Commissioner
Matthew Schuerger	Commissioner
John A. Tuma	Commissioner

IN THE MATTER OF XCEL ENERGY'S  
COMPLIANCE WITH ANNUAL SAFETY,  
RELIABILITY, AND SERVICE QUALITY  
METRICS FOR 2019

DOCKET NO. E002/M-20-406

**COMMENTS**

**INTRODUCTION**

Northern States Power Company, doing business as Xcel Energy (the Company), submits these Comments in response to the Minnesota Public Utilities Commission's April 20, 2020 Notice of Comment Period in the above-referenced docket.

We appreciate the opportunity to provide these Comments, which first briefly discuss the Company's support to benchmark reliability standards based on the IEEE Distribution Reliability Working Group's 2<sup>nd</sup> quartile performance results, instead of the current rolling 5-year historical average for each metric. Minnesota Power and Otter Tail Power Company have indicated to us they also support this transition.

The remainder of these Comments focus on the question how to examine equity in providing reliable electric service and quality customer service. The Company proposes the Commission not adopt specific measures or targets on equity at this time, but rather suggests continuing a more general exploration of meaningful ways to collect and display information on this critical topic. Additionally, since the "metrics" or "measures" related to equity are not necessarily outcome-based, we believe it may be more appropriate to describe them simply as data or information.

As a starting point for discussions, we have prepared three maps that display locational reliability and service quality data by zip code with median income levels.

These illustrative maps are examples of how regional reliability or service quality data can be combined with income (or other relevant) data to examine potential disparities. These types of descriptive maps could be included in our future annual Safety, Reliability and Service Quality Reports (Service Quality Report) to provide more insight on equity, to gauge any areas of concern, and to begin to assess any longer-term trends.

## I. RELIABILITY STANDARDS – IEEE BENCHMARKING DATA

The Commission’s Notice requested the following feedback:

*2. Should the Commission approve Minnesota Power’s, Otter Tail Power’s, and Xcel Energy’s proposed transition from a rolling five year average to set reliability standards to benchmarking to the IEEE Reliability Working Group? Please discuss:*

- a. Time lag of IEEE benchmarking data.*
- b. Xcel’s proposal to use a 5 year average of IEEE 2nd quartile results vs Otter Tail Power and Minnesota Power’s proposals to use the prior year’s benchmarking results, and keeping standards consistent between utilities.*
- c. The move from reporting reliability results for each work center, to the state as a whole, and whether utilities need a variance to Minn. Rules 7826.0500 Subp 1 A-C, and Subp 2.*
- d. The choice of using the IEEE working group vs ELA data for benchmarking.*

As stated in our 2019 Service Quality Report, Xcel Energy supports a transition to benchmarking our performance against the second quartile results from the nationally recognized IEEE Distribution Reliability Working Group survey for the large utility group for setting standards for SAIDI, SAIFI and CAIDI. The IEEE benchmarking results are publicly available and calculated independently and consistently. Instead of setting standards based on the Company’s past performance history, the IEEE benchmarking would provide a broader view of the Company’s reliability performance, by comparing our results to our peers and estimating where the Company stands compared to industry average. We also believe that the IEEE benchmarking data has potential to be a more stable and consistent standard from year-to-year than the current rolling five-year historical average for each Company work center. Impacts of large-scale weather patterns and other similar significant effects can drive random year-to-year fluctuations in thresholds, but these fluctuations are likely to be more prominent for a single utility than a group of utilities.

We agree that the use of IEEE benchmarking data should be consistent among the Minnesota utilities that are subject to reliability performance reporting, although we note that Xcel Energy, Minnesota Power and Otter Tail Power would be compared

against different segments of the IEEE benchmarking data. Xcel Energy performance would be compared to the IEEE Large utility group (1,000,000 customers or more), while Minnesota Power and Otter Tail Power would be compared to the IEEE Medium utility group (greater than 100,000 and less than 1,000,000 customers).

As discussed in our 2019 Service Quality Report, the timing of IEEE data publication poses some challenges, as the IEEE benchmarking data for a given year (for example, 2020) is not available until the third quarter of the following year (third quarter 2021). Our actual performance for the past year (for example, 2020) is provided in an April filing (April 2021), and we do not think it would be practical to supplement that filing with the IEEE performance standards later in the year or to compare performance to a single prior year (e.g., 2019) IEEE benchmarking. For these practical reasons, we proposed the option to use a five-year average of the IEEE benchmarking data.

Since the Commission Notice was issued, we have discussed this timing issue with Minnesota Power and Otter Tail Power, and we all agree on using the five-year average of the IEEE benchmarking data. Minnesota Power also provided in their annual report data that their reliability performance trends closer to the five-year average of IEEE 2<sup>nd</sup> quartile numbers. Utilities submit reliability data to IEEE for their whole service territory. Therefore, we agree with Otter Tail Power Company that it would be more meaningful to use the IEEE benchmarking data at the state-level for our whole Minnesota service territory rather than separately for each of our four work centers. However, as proposed in our 2019 Service Quality Report, the Company is willing to report performance separately for each work center, as required by Minnesota Rules. As typical for large utilities that cover large geographic areas, work centers will have different population densities and environments creating different performance levels, some better and some worse than the overall system performance, with differing degrees of year-to-year performance variability. Although we expect to generally compare favorably to the IEEE benchmark data, it is anticipated that performance in some work centers may not compare favorably some years to the five-year benchmark average.

We believe the IEEE benchmarking data is more robust and better quality than the data provided in the Department of Energy, Energy Information Administration Form EIA-861 reporting. There is no quality control for the data submitted to EIA, and not all utilities comply with the reporting requirements. In addition, the EIA reports do not break performance data to quartiles, which means that, in order to provide such comparison, the Company would need to select comparable utilities, enter their data, and calculate the numbers for each quartile.

It is the Company's view that the IEEE benchmarking data provides a solid data set for the Commission and our stakeholders to understand how the Company's reliability performance in Minnesota compares to that of other large, investor-owned utilities.

## II. EXAMINING EQUITY IN RELIABILITY AND SERVICE QUALITY

### A. Background

The remainder of these Comments focus on the issue of equity in providing reliable electric service and quality customer service. This topic was first addressed in Docket No. E002/CI-17-401 (investigation on performance-based metrics for the Company), where the Commission directed the Company and stakeholders "to determine an appropriate method to measure and report on equity, which could include geography, income, or other benchmarks" relevant to reliability and customer service quality. In the stakeholder process that was facilitated by Great Plains Institute, however, there was no agreement on the appropriate methods to measure equity in reliability or customer service quality. For reliability, the Company had proposed an option to map SAIFI by zip code, and then overlaying this data with U.S. Census Bureau's income data. For service quality, the Company had proposed using the customer satisfaction survey conducted by J.D. Power, which captures a variety of demographic data on respondents, including age, gender, race/ethnicity, languages spoken in household, income within brackets, home ownership status, county, and zip code. There was no consensus in the stakeholder process on these two proposals, and eventually the topic of equity in reliability and service quality was moved from Docket No. 17-401 to the Company's Service Quality docket.

The Commission's April 20, 2020 Notice brings this topic back to active discussion and requests feedback on the following:

1. *Please provide feedback on the staff proposal for locational reliability reporting (Attachment A).*

*Please discuss:*

- a. *Whether the listed reporting requirements will allow for the development of a locational reliability metric*
- b. *Whether any additional information is needed*
- c. *How the information can best be presented to stakeholders and the public*

2. *What are the appropriate pieces of data to collect to gauge locational customer service quality?*

3. *What are the appropriate pieces of information to overlay with reliability and customer service quality data to gauge equity? For example, the Minnesota Pollution Control Agency maintains a map showing areas of environmental concern that could be overlaid with data listed in Attachment A.*

4. *Are there other issues or concerns related to this matter?*

## **B. LOCATIONAL RELIABILITY AND LOCATIONAL CUSTOMER SERVICE QUALITY**

The purpose of providing locational data is to examine how reliability or service quality may differ by geographic area. We believe the best format to present locational information to stakeholders and the public are visual graphs and maps, which can summarize a large amount of data in a user-friendly, easy-to-understand format. That said, the Company is concerned that providing too much information in one map on several reliability metrics will make it difficult to compare locational differences, and therefore proposes that each color-coded map present data on one reliability metric, which can then be overlaid with additional equity variables (e.g., income) for analysis.

For reliability, our annual Service Quality Report provides metrics on SAIDI (System Average Interruption Duration Index), SAIFI (System Average Interruption Frequency Index), CAIDI (Customer Average Interruption Duration Index), CELID (Customers Experiencing Long Interruption Duration), and CEMI (Customers Experiencing Multiple Interruptions). Since this data is already collected by feeder or customer, we have the necessary geographic information readily available for mapping. We note that our 2019 Service Quality Report (p. 8-9 and p. 44-45) presented such maps of 2019 feeder SAIDI and CEMI separately for the Metro area and our total Minnesota service area.

We could present similar SAIDI and CEMI maps in our 2020 Service Quality Report, and welcome stakeholder feedback if any additional maps on other reliability metrics would be useful. We chose SAIDI and CEMI because the combination of these two metrics provides an average system perspective as well as information on the individual customer experience. We propose to prepare color-coded visual maps by zip code or a similar geographic area (e.g., census tract). Each map would provide data on one reliability metric and allow us to share reliability data in a format that does not publicly disclose information we consider not public for grid security or customer privacy, confidentiality, or security reasons. To give an illustrative example of how locational reliability data can be combined with other equity data, we have mapped SAIDI and CEMI data with an income data overlay using data from the U.S. Census Bureau American Community Survey. These two maps and the data used to prepare

them are discussed in more detail below; the maps are included as Attachments A and B respectively.

For customer service quality, we annually report information on various factors, such as meter reading, disconnections, call center response times, and customer complaints. Unlike reliability metrics, many of these service quality metrics either do not have an apparent connection to location or are not tracked using locational information. For example, customer calls are answered in queue order, and response times are not tied to customers' location or other equity factors. For a starting point for discussion, we have prepared a visual map of customer complaints to the Commission's Consumer Affairs Office (CAO), since these complaints provide address information for mapping. We have paired this data with census income data, as discussed in more detail below, and this combined map is included as Attachment E.

We see these locational maps for reliability and service quality as the basis for presenting additional data on equity. When reliability and service quality data is presented in a visual map by zip code, the map can then also be overlaid with additional data components on equity.

### **C. EQUITY MAPS: SAIDA, CEMI, AND CAO COMPLAINTS BY CENSUS ZIP CODE TABULATION AREA AND MEDIAN INCOME**

Overall, the question of how to investigate and present data on equity has been subject to extensive research in other areas of society, such as education, health care, and the criminal justice system. Typically, U.S. Census Bureau data on income and race/ethnicity are the two major variables that are used to examine equity. Were we to apply a similar approach to the energy sector, we believe the goal would be to assess if low-income communities or people of color receive equal electric reliability and quality in service compared to more wealthy communities or white customers, respectively.

For example, the Minnesota Pollution Control Agency's map referenced in the April 20, 2020 Notice uses U.S. census data on income and race/ethnicity.<sup>1</sup> The data is used to identify census tracts where at least 50 percent of residents are people of color and 40 percent of people reported income less than 185 percent of the federal poverty level.

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<sup>1</sup> The data is from a five-year summary of American Community Survey data. The map is located at <https://mpca.maps.arcgis.com/apps/MapSeries/index.html?appid=f5bf57c8dac24404b7f8ef1717f57d00>.

The Company would also need to use U.S. Census Bureau data, since we do not collect information on income or race/ethnicity from our customers. We have prepared three maps that display locational reliability and service quality data by U.S. Census Bureau Zip Code Tabulation Area (zip code) with median income levels. These illustrative maps are examples of how regional reliability or service quality data can be combined with income (or other relevant) data to examine disparities. We have also included two bubble charts that display the same reliability data by income in a different visual format.

### 1. *SAIDI and CEMI Maps and Bubble Charts*

We developed the locational reliability SAIDI and CEMI maps with income (see Attachments A and B) by using zip code boundaries and outage information for each customer within the boundary. For income, we used 2017 median income for each zip code from the U.S. Census Bureau American Community Survey. We also prepared bubble charts with the same data by weighting each zip code based on the number of customers served (bubble size) and including a trend line that illustrates the change in reliability compared to the change in income.

For both SAIDI and CEMI, we used five years of historical data from 2015-2019 to minimize any one-year aberration. We also chose to use data from all days to more closely illustrate the actual customer experience (the maps provided in our 2019 Service Quality Report showed only weather-normalized days). We color-coded each zip code based on the median income of the zip code. The SAIDI for each zip code is designated with a color-coded circle, which is based on the five-year average (2014-2018) of IEEE large customer historical quartiles for the middle categories. Similarly, the CEMI is displayed with color-coded circles and fall along industry results.

$CEMI_6$  is defined as any customer that has had six or more outage events in any one calendar year. For the basis of color-coding the circles, we used the average percentage of customers in the zip code who experienced six or more outage events in a year. We chose  $CEMI_6$  as the metric because six outages is the threshold at which the Company provides annual credits to customers (in this case we included outage events occurring on all days unlike the credits that remove major event days).

Any zip code that is shaded light blue on the SAIDI and CEMI maps has less than 200 NSPM customers, or less than 50 households. We chose not to show data for these zip codes on the maps and bubble charts for several reasons. First, the number of customers in each zip code is based on a 2019 snapshot and used throughout the calculations for each year, regardless of customer changes within the zip code. Second, and relatedly, because the customer count is based on a snapshot, when there



is a small number of customers within a zip code, a very small change in a reliability metric can impact the perspective of reliability when in actuality there has not been any significant changes in reliability. This only affects a small number of our customers; there are 108 zip codes that are shaded blue, comprising only approximately 7,941 customers out of our total 1.29 million customers in Minnesota. We found that small changes in reliability metrics within these zip codes with small customer counts can distract from focusing on the overall perspective.

The bubble charts (see Attachments C (SAIDI) and D (CEMI<sub>6</sub>)) provide additional context to the number of customers in each zip code, and the trend lines for both reliability metrics indicate that income and reliability tend to have an inverse relationship. Income tends to be the highest in the outlying suburbs where long overhead lines dominate along with heavy vegetation, leading to more and lengthier outages. The urban and inner suburbs tend to have easily accessible lines with less vegetation in a more densely populated area, leading to less outages and faster restoration.

The Company is open to presenting reliability information in a variety of visual formats but believes these maps and charts provide most users a clear understanding of reliability, enable easy comparisons between geographic areas, and meet the intent of illustrating equity in reliability.

## 2. *CAO Complaints Map*

We prepared the locational service quality maps with income using the same census data as for the SAIDI and CEMI maps: Census Bureau zip code boundaries and 2017 median income for zip code. We then added data on the 2019 customer complaints to the CAO by mapping the number of customer complaints made from each zip code boundary in 2019. The income levels are color-coded for each zip code based on the median income of that zip code. The actual number of CAO complaints made from each zip code is designated with a color-coded circle.

We chose to use the CAO complaints because it is a service quality measure that could potentially vary by location and because the address of the complainant is available for mapping. Unlike for SAIDI and CEMI maps, we did not exclude zip codes that have less than 200 NSPM customers or less than 50 households, because the smaller customer counts are unlikely to impact this service quality measurement in the same way as the service reliability measurements discussed above.

The map in Attachment E shows no apparent relationship between CAO complaints and income. In fact, most of the zip codes have relatively few customer complaints to

the CAO regardless of median income or location, as indicated by green circles. However, a higher number of customer complaints are concentrated in the metro area zip codes, as indicated by orange and red circles. The explanation for this pattern may be in the size of the zip code population. Many metro area zip codes have more than 40,000 residents and a few have more than 50,000 residents, so it is likely that there are also more complaints from these zip codes compared to ones with significantly fewer residents. In other words, the color-coded dots in Attachment E represent the actual number of complaints that are not adjusted to the zip code population.

We caution that the disadvantage of displaying data in visual maps is that the public may draw simplistic conclusions from a map without understanding the nuances of the data or the characteristics of our electric distribution system. Therefore, it would be important to provide additional context with the maps and discuss any limitations of the data.

Another possibility for providing information on equity in service quality would be to examine potential disparities in customer satisfaction. We report in our annual Service Quality Report customer satisfaction information based on a J.D Power survey, which measures customer satisfaction across six categories or drivers of satisfaction – power quality and reliability, billing & payment, communications, corporate citizenship, customer service, and price. The survey also captures residential respondents’ demographic data, such as age, gender, race/ethnicity, languages spoken in household, income within brackets, home ownership status, county, and ZIP Code. Therefore, we could describe if there are any differences in customer satisfaction in the J.D. Power Survey based on demographics. However, we note that, since the Company cannot publicly disclose any results from the J.D. Power Survey, the actual information we could report to the public would be limited.

### *3. Discussion on Attachment A to the Commission Notice: Reliability Data*

Attachment A to the Commission Notice contains a Staff proposal for reporting requirements on locational reliability (two lists of data in points 1 and 2) and for a publicly available map (point 3). The data proposed includes, among other things, about ten different reliability metrics to be reported separately for each feeder. In general, we do not believe that a long spreadsheet of data components by feeder would be meaningful to most of our customers or stakeholders. On a spreadsheet, it is difficult to evaluate different metrics or to make comparisons by location.

In addition, the reporting requirements proposed in Attachment A to the Commission Notice would involve an enormous amount of data. The list in point 1

requests data for each outage greater than five minutes in length and the list in point 2 for each feeder. In Minnesota, we had over 19,000 outages in 2019 that lasted over five minutes and our distribution system has approximately 1,000 feeders. In our view, the data contemplated in Attachment A to the Commission Notice is an overwhelming amount of data and unlikely to be useful for the public or most of our stakeholders.

We further note that portions of the reporting requirements suggested in Attachment A to the Commission Notice raise significant and complex security, privacy, and confidentiality issues for both the grid and our customers. Specifically, the reporting framework proposed in Attachment A could provide a bad actor the information needed to aid a targeted attack on the grid for maximum impact by providing data elements that could be manipulated or combined with other data to reveal the size or scope of facilities serving our customers. For example, the information listed in Attachment A, point 1 is based on our response to an Information Request we submitted in Docket No. E002/M-17-776 (2017 Biennial Distribution Grid Modernization Report) and the data in that response was marked as not public in its entirety. While we acknowledge that some of the data could be provided publicly, the informational value is reduced once the non-public data is removed.

Many of the same security, privacy, and confidentiality concerns we have expressed in relation to our Hosting Capacity Analysis (HCA), most recently submitted in Docket No. E002/M-19-685, apply to the reporting framework suggested in Attachment A to the Commission Notice. Our 2019 HCA acknowledged the tension between the need to provide information publicly and the need to protect customer privacy, confidentiality, and system security. The HCA filing discussed in detail the reasons why certain data was not disclosed publicly and provided support for our non-public treatment of information on the HCA heat map, which excludes certain feeders entirely and blurs the exact contours of all other feeders. The same considerations that apply to a map of our system for hosting capacity purposes also apply for reliability purposes. If we were to provide reliability data in a map format at the feeder level, it would not be prudent to portray the feeder details that could be manipulated or combined with other information to jeopardize customer or grid confidentiality or security on this map either. Current technological capabilities of combining information from various sources make the protection of customer privacy, confidentiality, and system security an increasingly complex issue.

Attachment A to the Commission Notice also envisioned using a map format to provide information about all reliability metrics included in the same map, with actual values available in pop-ups. We are open to exploring such a map and suggest it would use five-year average data for each reliability metric and be updated annually.

The reliability data could be shown at a more granular level than a zip code, such as 1,000 meters x 1,000 meters, but we note that the demographic census information would not be available at this granular level. We note additionally that more granular level views of the information may also raise similar concerns to the zip codes with small customer counts.

The Staff proposal also contemplated that the map would show reliability metrics for each feeder via pop-ups. Although information by feeder is the easiest method for the Company to provide the reliability metric data, the Company is only willing to indicate the general location of a feeder on the map for security reasons, as explained above. Therefore, the map would have limited value for a customer who would not know which feeder they are on. As a result, we believe showing reliability metrics based on a set area is a better choice.

### **CONCLUSION**

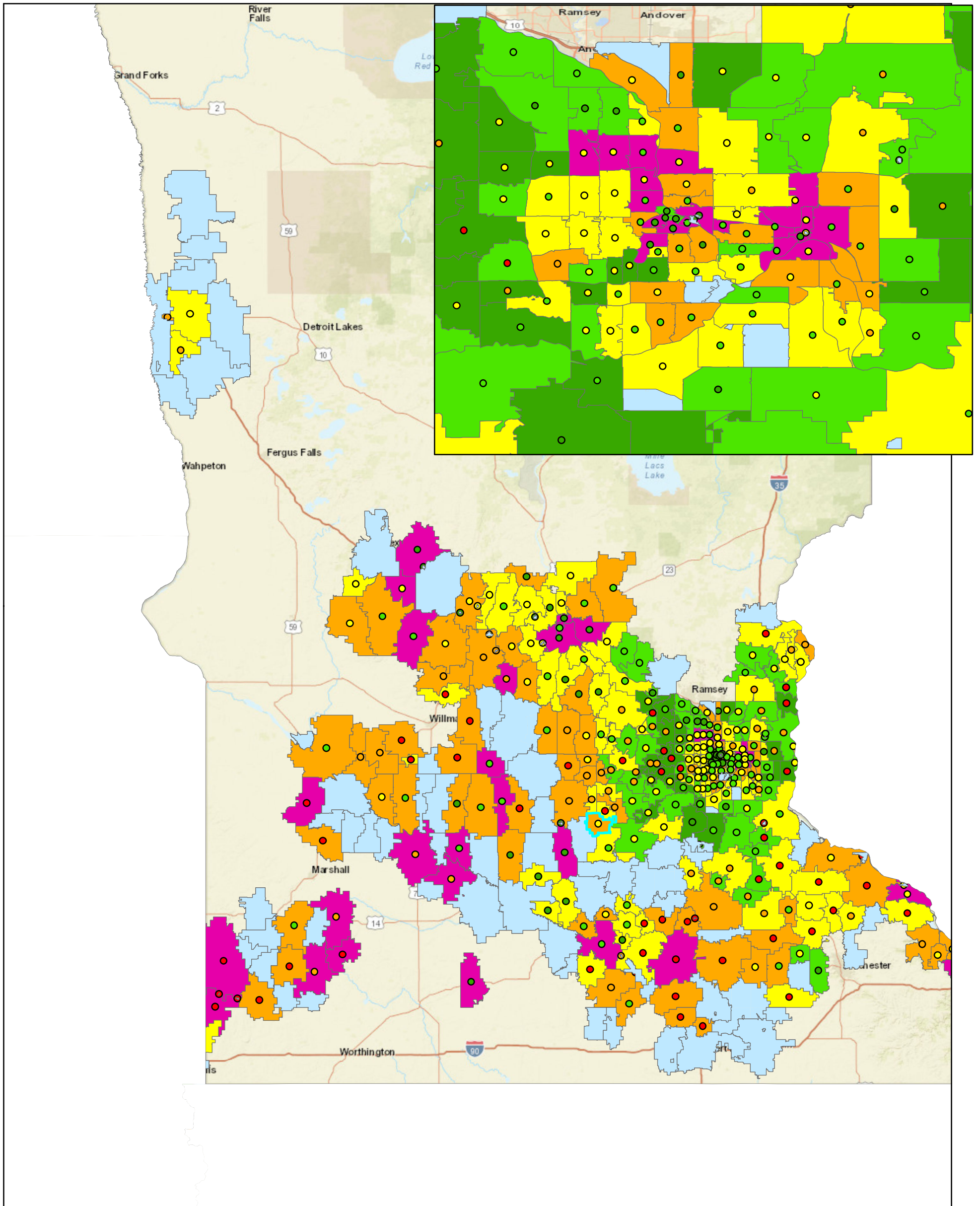
The Company is looking forward to further discussion and feedback from other parties regarding meaningful ways to comply and present information on equity in electric reliability and customer service. We do not believe it is appropriate to develop specific equity measures or targets at this time. Rather, we suggest providing additional information on existing service reliability and customer service metrics – broken down by agreed-upon equity factors – in our future annual Service Quality Reports. With respect to the format of presenting this information, the Company believes a visual map is a more meaningful way to display large amounts of data than a spreadsheet. We especially welcome stakeholder discussion on the three maps that display reliability data (SAIDI and CEMI<sub>6</sub>) and service quality data (CAO complaints) with median income data by zip code. The Company is also open to exploring a reliability map that would show reliability metrics in pop-ups at a similar level to zip code, such as a census tract or a set geographic area.

Dated: August 17, 2020

Northern States Power Company

# 5 Yr Avg SAIDI Compared to Median Income All Days, All Levels (2015-2019)

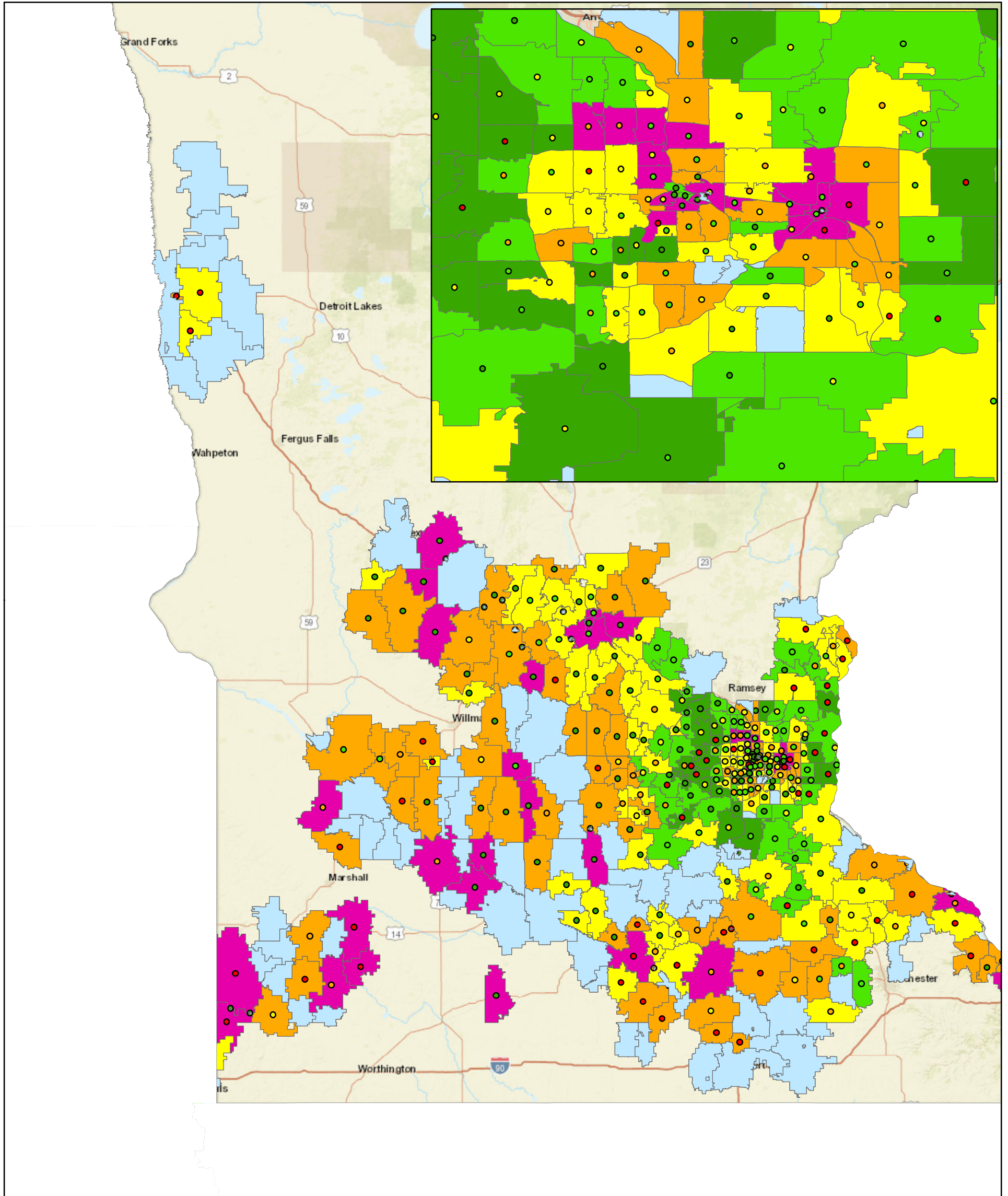
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Median Income		5 Yr Average SAIDI	
\$20K - \$54K	<span style="color: magenta;">■</span>	<span style="color: green;">●</span> 0 - 75	
\$54K - \$65K	<span style="color: orange;">■</span>	<span style="color: lightgreen;">●</span> 76 - 131	
\$65K - \$80K	<span style="color: yellow;">■</span>	<span style="color: yellow;">●</span> 132 - 207	
\$80K - \$100K	<span style="color: limegreen;">■</span>	<span style="color: orange;">●</span> 208 - 334	
> \$100K	<span style="color: green;">■</span>	<span style="color: red;">●</span> > 334	
< 200 Custs or < 50 Households	<span style="color: lightblue;">■</span>		



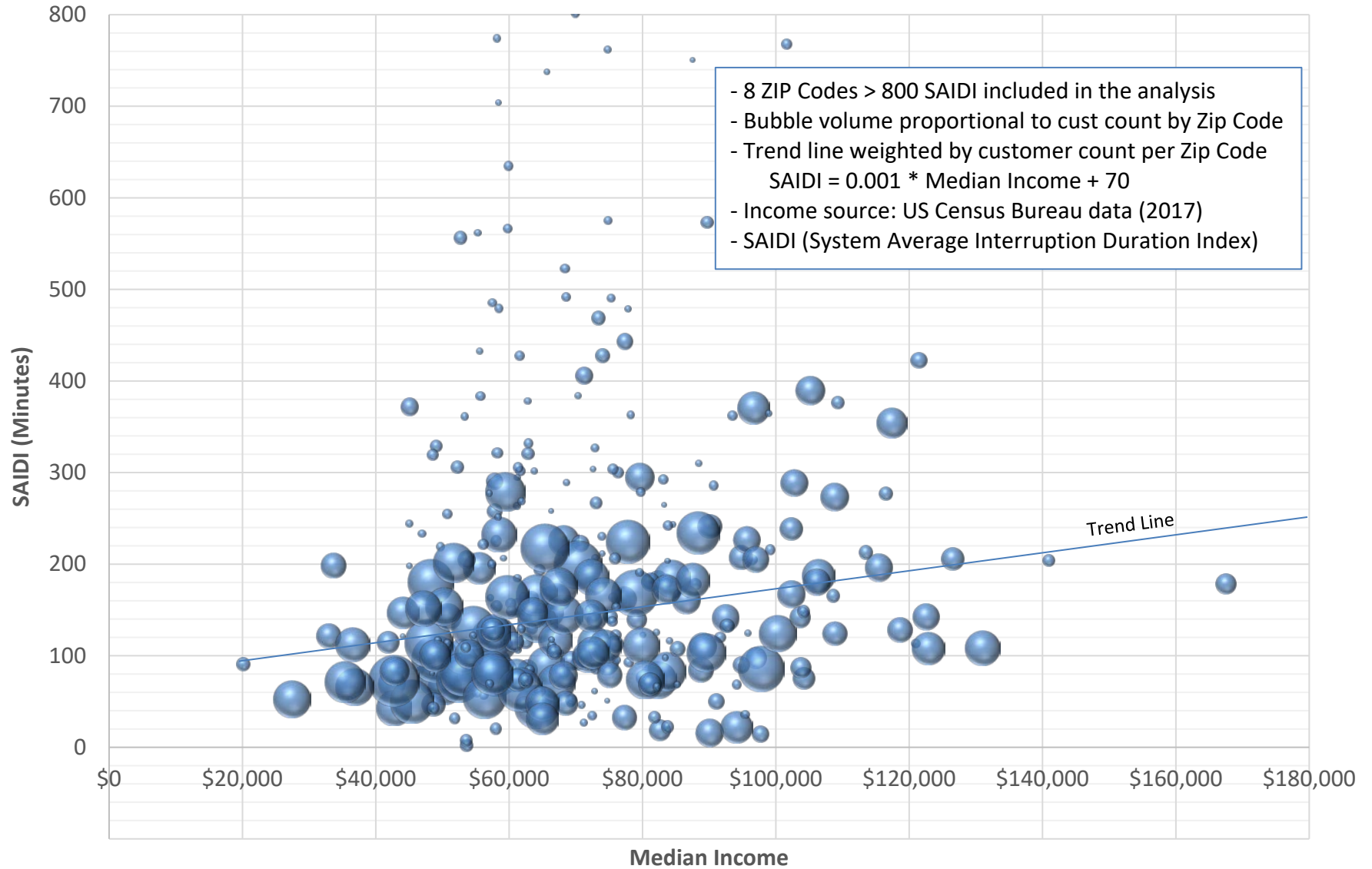
# 5 Yr Avg CEMI 6 Compared to Median Income All Days, All Levels (2015-2019)



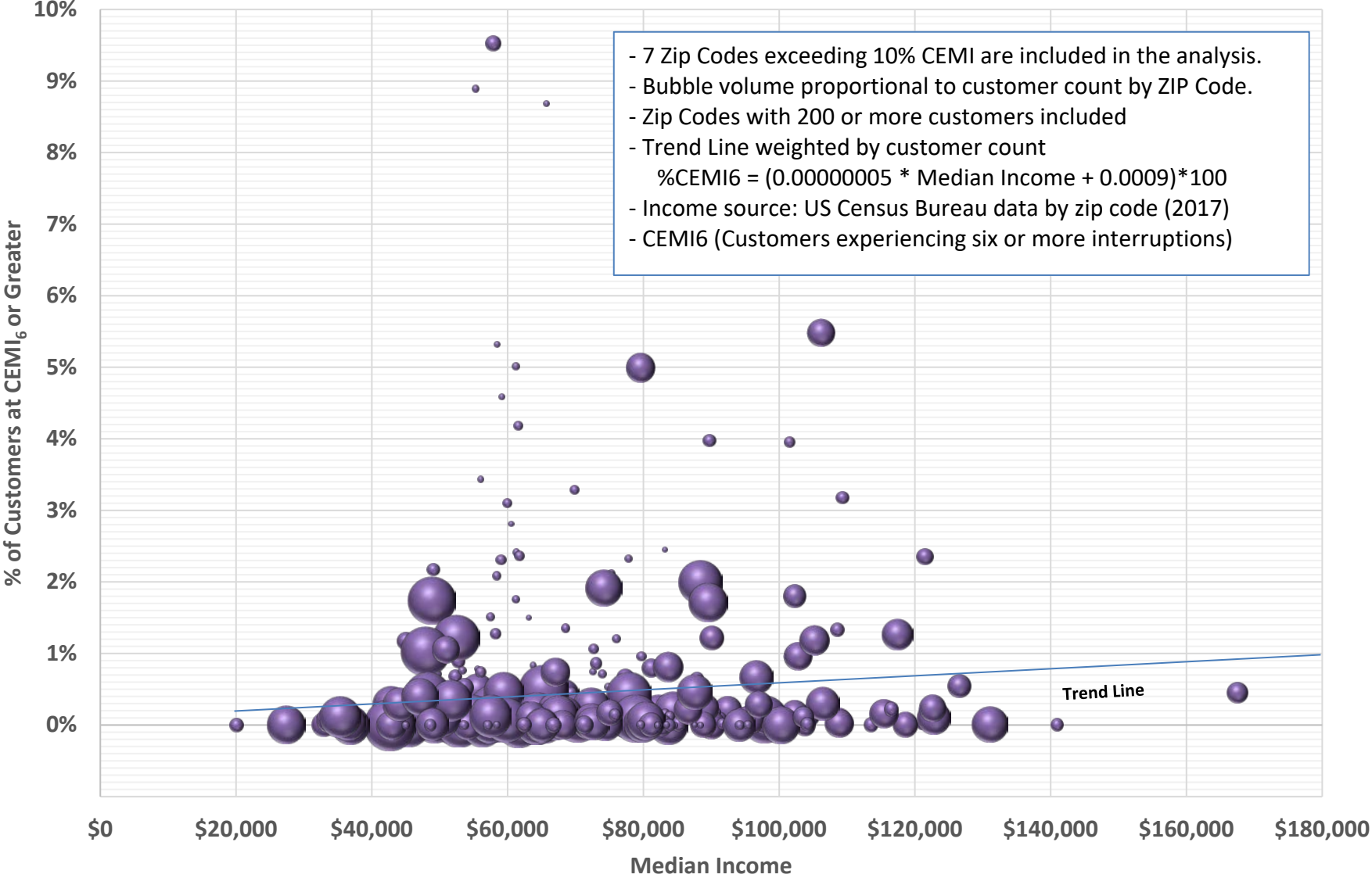
Median Income		5 Yr Average CEMI 6	
\$20K - \$54K	<span style="color: magenta;">■</span>	<span style="color: green;">●</span> 0.00%	<span style="color: orange;">●</span> 0.31% - 0.99%
\$54K - \$65K	<span style="color: orange;">■</span>	<span style="color: lightgreen;">●</span> 0.01% - 0.10%	<span style="color: red;">●</span> > 1.00%
\$65K - \$80K	<span style="color: yellow;">■</span>	<span style="color: yellow;">●</span> 0.11% - 0.30%	
\$80K - \$100K	<span style="color: lightgreen;">■</span>		
> \$100K	<span style="color: green;">■</span>		
< 200 Custs or < 50 Households	<span style="color: lightblue;">■</span>		



### SAIDI Compared to Median Income All Days, All Levels (avg. 2015-2019)

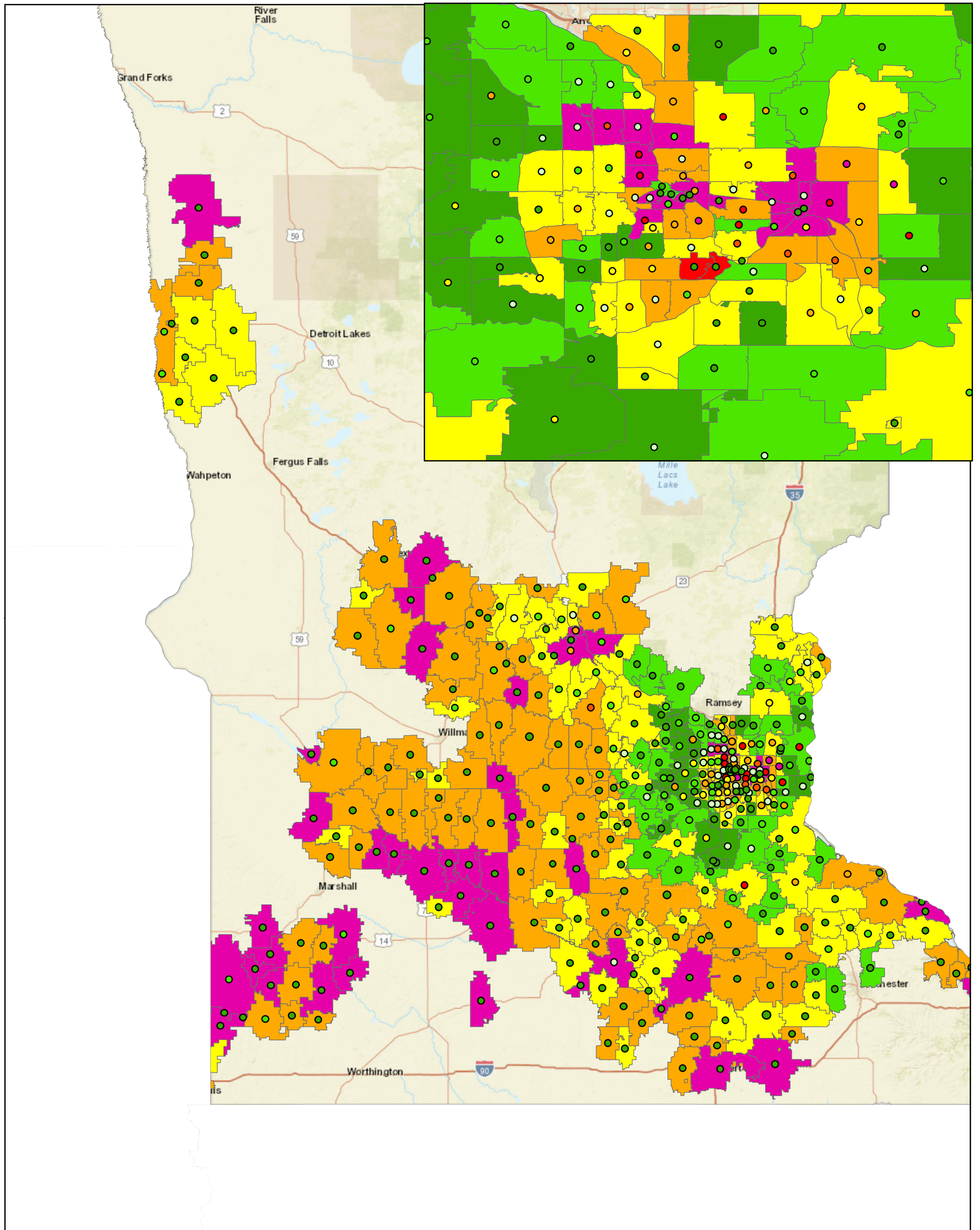


### CEMI<sub>6</sub> Compared to Median Income All Days, All Levels (avg. 2015-2019)





# 2019 CAO Complaints by Zip Code by Median Income



### Median Income

- \$20K - \$54K
- \$54K - \$65K
- \$65K - \$80K
- \$80K - \$100K
- > \$100K

### 2019 # of Complaints

- 0
- 1
- 2
- 3
- 4
- 5
- 6
- > 6



**This map is illustrative based on complaints received by the CAO in 2019.**

Created by: EDSP  
 Date: 8/14/2020  
 Sources: Xcel Energy NMS, US Census Bureau Zip Codes (2017)  
 File Location: S:\LDC-LI\Geospatial\PMSP\Team Working\Carter\NSP\_Complaints\_Map

## CERTIFICATE OF SERVICE

I, Lynnette Sweet, hereby certify that I have this day served copies of the foregoing document on the attached list of persons.

xx by depositing a true and correct copy thereof, properly enveloped with postage paid in the United States mail at Minneapolis, Minnesota; or

xx by electronic filing.

**MPUC Docket No: E002/M-20-406**

Dated this 17th day of August 2020.

/s/

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Lynnette Sweet  
Regulatory Administrator

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Generic Notice	Commerce Attorneys	commerce.attorneys@ag.state.mn.us	Office of the Attorney General-DOC	445 Minnesota Street Suite 1400  St. Paul, MN 55101	Electronic Service	Yes	OFF_SL_20-406_M-20-406
Riley	Conlin	riley.conlin@stoel.com	Stoel Rives LLP	33 S. 6th Street Suite 4200 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_20-406_M-20-406
George	Crocker	gwillc@nawo.org	North American Water Office	PO Box 174  Lake Elmo, MN 55042	Electronic Service	No	OFF_SL_20-406_M-20-406
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