Regional Benchmarks
Measuring Our Progress

Between 2000 and 2030, the seven-county metropolitan area is projected to grow by nearly one million people. The 2030 Regional Development Framework, adopted in 2004, provides a plan for how the Metropolitan Council—in partnership with local communities and others—can guide our region’s growth and shape our future.

The 2030 Regional Development Framework organized the Council’s strategies around four policies:

1. Accommodating growth in a flexible, connected and efficient manner.
2. Slowing the growth in traffic congestion and improving mobility.
3. Encouraging expanded choices in housing locations and types.
4. Working to conserve, protect and enhance the region’s vital natural resources.

Many of the goals and objectives established in the Regional Development Framework are ambitious. Our success will hinge on the efforts of not only the Metropolitan Council but also local communities and our other regional partners. They will also require the commitment of additional resources—particularly in the areas of highways and transit—in the coming years.

To measure the progress of our region toward achieving the Framework goals, the Council established a series of benchmarks and directed staff to provide annual updates. This report is the seventh such update.

UPDATED: September 12, 2011
1. Accommodating Growth

- Housing Construction

2000 Baseline: 1,047,240 housing units
2030 Target: 1,537,000 housing units
2010 Actual: 1,186,986 housing units

To house the forecasted population and household growth, the region will need to add nearly 490,000 housing units between 2000 and 2030. The original benchmark anticipated that 18,000 units per year would be necessary in the 2000-10 decade while slowing growth rates by the 2020-2030 decade would make 16,000 units per year sufficient.

In the first half of this decade, housing stock gains surpassed the annual benchmark, reaching a peak with 2004’s units permitted and 2005’s net growth. Though the slowdown in permitting began in 2005, average net housing production from 2001 to 2006 was nearly 18,500 units per year. Over the last four years, however, average net housing production fell by more than half to 7,448 units per year with 2010 at 5,250 units, just 24 percent of 2005’s production. New housing units permitted rose slightly to 5,761 units in 2010, the third lowest in the 40 years the Council has monitored building permits in the region.

On average, 13,502 housing units were added annually over the period, below the long-range goal of 16,000 to 18,000 units. Had housing growth remained at the torrid pace seen earlier in the first half of the decade, the region would have added an additional 33,000 units over the last four years.

Note: Net growth estimates reflect: estimated completions of the previous year’s permitted units; conversions of non-residential structures into housing; units moved in or out of a community; units annexed in and out of a community; housing demolitions; and housing units converted into non-residential structures.

Source: Metropolitan Council Research
• Location of New Housing

2030 Targets:
- Developed Area: 133,000 units net growth, 2000-30 (27 percent or 4,400 units per year)
- Developing Area: 285,000 units net growth, 2000-30 (59 percent or 9,500 units per year)
- Rural Centers: 27,000 units of net growth, 2000-30 (6 percent or 900 units per year)
- Remaining Rural Area: no more than 40,000 units net growth, 2000-30 (8 percent or less than 1,300 units per year)

The geographic distribution of housing development from 2000 to 2010 is in line with benchmark expectations: the central cities and developed suburbs accounted for 31 percent of the region’s net housing growth; the developing suburbs, 59 percent; the rural centers, 5 percent; and the remaining rural areas, 5 percent. Relative to the growth targets, slightly more of the growth has occurred in the developed area and slightly less in rural areas which represents a more efficient use of regional infrastructure.

2010 Actuals:
- Developed Area: 42,853 units net growth, 2000-10 (31 percent)
- Developing Area: 83,484 units net growth, 2000-10 (59 percent)
- Rural Centers: 6,891 units of net growth, 2000-10 (5 percent)
- Remaining Rural Area: 7,102 units net growth, 2000-10 (5 percent)

The amount of development occurring in the developing areas as a percentage of the region’s total growth has increased over the last several years. In 2001, 67 percent of the growth was in the developing areas. This decreased to 54 percent in 2007, but increased to 65 percent in 2010, which is above the 59 percent desired in the growth targets.

Source: Metropolitan Council Research
Regional Employment Growth

- 2000 Baseline: 1,607,916 jobs
- 2030 Target: 2,126,000 jobs or, on average, 17,300 jobs added per year
- 2010 Actual: 1,542,000 jobs or, on average, -6,600 jobs lost per year

Two recessions over the last decade dragged regional employment trends below the benchmark growth rate. The 2030 employment forecasts ventured an increase of 518,000 jobs between 2000 and 2030. To meet this forecasted growth, regional employment must grow an annual average of 17,300 jobs from 2000 to 2030. So far, from 2000 to 2010, regional employment has shrunk by an average of 6,600 jobs per year. Most of these job losses followed the Great Recession (2007-08); however, the 2001 recession and its subsequent jobless recovery also dampened annual job growth rates. Even before the Great Recession, regional employment grew at an annual rate of 3,400 jobs from 2000-2007 (20% of the annual benchmark rate).

Relative to the largest metropolitan areas, Twin Cities’ job growth over the last decade fell within the bottom half. The Minneapolis-St. Paul Metropolitan Statistical Area (MSA) ranked 18th among the 25 largest U.S. metropolitan areas on job growth from 2000 to 2010. Minneapolis-St. Paul MSA job growth during this period was more typical when compared with the largest metropolitan areas in the Midwest and Northeast—the Twin Cities ranked 5th among the largest Midwestern and Northeastern metropolitan areas.


Employment Distribution – 2030 Net Growth
2000-30 Target:
- Developed Area: 286,561 jobs (55 percent or 9,600 jobs per year)
- Developing Area: 215,712 jobs (41 percent or 7,200 jobs per year)
- Rural Growth Centers: 7,443 jobs (1 percent or 250 jobs per year)
- Remaining Rural Area: 11,579 jobs (2 percent or 390 jobs per year)

2000-10 Actual:
- Developed Area: -102,815 jobs (-10,282 jobs per year)
- Developing Area: 36,078 jobs (3,608 jobs per year)
- Rural Growth Centers: -69 jobs (-7 jobs per year)
- Remaining Rural Area: 1,876 jobs (188 jobs per year)

The Great Recession deflated employment growth in communities across various development stages, from the central cities to suburbs and rural areas. Both of the last decade’s recessions hit the region’s developed core hardest. The developed areas—i.e., Minneapolis, St. Paul, and surrounding fully developed suburbs—suffered considerable job losses during the 2001 recession, and never regained 2000-level employment before the Great Recession hit in 2007. With an annual average loss of over 10,300 total jobs, the developed area lags far behind its benchmark growth rate of 9,600 jobs per year. While the developing area as a whole experienced continuous job growth from 2000 to 2008, its employment began to fall in 2006. The developed communities are currently at 50 percent of their annual benchmark job growth rate of 7,200 jobs per year. Rural area employment levels advanced more moderately from 2000 to 2008, and suffered more modest job losses between 2008 and 2010. The annual average growth in rural areas is more in line with the growth forecasted for these areas.

Note: While the Metropolitan Council adjusted the designations of eight communities from Developing to Developed with the 2008 Comprehensive Plan Updates, this analysis used the prior categorization to maintain continuity.

2. Improving Transportation

- **Highway Capacity**

  2000 Baseline: 1,485 lane-miles of freeway
  2030 Trend Line: 300 additional lane-miles of freeway
  2030 Target: 1,786 lane miles of freeway

  Almost 30 additional lane-miles were added to the system in 2010. I-35W added 17.08 lane miles; Highway 62 added 7.95 lane miles; and I-494 added 4.69 lane miles.

  Lane-miles added has averaged 18.4 annually over the measurement period—84 percent above the long-term target of 10 miles per year.

  Source: Minnesota Department of Transportation

- **Daily Roadway Usage**

  2000 Baseline: 25.9 vehicle miles per capita
  2030 Target: 25.9 vehicle miles per capita
  2010 Actual: 25.6 vehicle miles per capita

  Vehicle miles traveled (VMT) tracks the total amount of travel on the region's roadways. Since the first travel behavior survey in 1949, both the average number of trips taken daily by each individual and the average length of trips have grown. As a result, the amount of travel on the region's roadways has grown substantially faster than population. However, with higher gasoline prices, increased environmental awareness and high unemployment continuing through 2010, these trends seem to be stabilizing. Daily travel per capita in 2010 was the same (25.6 miles) on average as 2009, the lowest level since the Council started monitoring this indicator.

  Source: Minnesota Department of Transportation
### Roadway Congestion

2000 Baseline: 48 hours per peak-hour traveler spent in congestion per year  
2030 Target: 64 hours  
Annual Indicator: No more than 1 percent growth per year  

2009 Actual: 43 hours

The goal is to keep the increase in delay below 1 percent a year. The estimated time a peak-hour traveler spent in congestion was at least equal or higher than the 2000 baseline until 2009. Throughout this time series, the number of hours per peak-hour traveler spent in congestion has been near the baseline of 48 hours, with only two years above 50 hours, suggesting relative stability in this measure. Overall regional performance continues to be well below the target of increasing no more than 1 percent growth per year. 2009's low figure reflects that year's high unemployment rate. Looking ahead, the continued economic slump is likely to keep congestion low through 2011. 2010 data will be available later in 2011.

Note: The Texas Transportation Institute updated their historical time series with their 2009 data release. Their previous time series had a 2000 value of 41 hours, serving as a baseline for a 2030 target of 55 hours. This Benchmarks update incorporates the new methodology and increases the 2030 target to 64 hours, maintaining a constant increase from the previous methodology.

Source: Texas Transportation Institute, 2010 Urban Mobility Study
• **Transit Service**

2002 Baseline: 42.4 million vehicle revenue miles per year
2030 Trend Line: 42 million vehicle revenue miles (assuming no growth)
2030 Target: 89 million vehicle revenue miles

2010 Actual: 48.1 million vehicle revenue miles

Since the 2002 baseline, service has expanded by 13.4 percent with 2010 the highest service year over the measurement period at 48.1 million vehicle revenue miles. The growth from 2009 to 2010 resulted primarily from the addition of Northstar commuter rail service, restructuring of the Council’s general public dial-a-ride program, and an increase in demand for Metro Mobility services.

The target since 2006 is 3 percent annual growth. Stable 3 percent annual growth from 2006 through 2010 would represent 52.5 million vehicle revenue miles, about 4 million miles above the 2010 actual.

Note: This is a system-wide measure, including Metro Transit, Metro Mobility, contracted services, suburban transit providers, intercampus service at the University of Minnesota, and the vanpool program.

Source: Metro Transit and Metropolitan Transportation Services, Metropolitan Council.
Regional transit ridership has grown over 21 percent since 2002 with the 2004 addition of University of Minnesota service to the regional public transit system (about 3.5 million riders) and overall expansion. Annual growth had been above the target of building ridership 3 percent annually since 2006 until 2009 when high unemployment led to a 6 percent drop in ridership. Upwardly trending gasoline prices, an improved economy, and ridership to Twins games at the newly-opened Target Field in 2010 helped transit ridership grow 2 percent over 2009.

Source: Metro Transit and Metropolitan Transportation Services, Metropolitan Council.

- **Peak Period Transit Capacity**

  - 2000 Baseline: 2.28 million peak-period seat miles
  - 2030 Trend Line: 2.28 million peak-period seat miles (assuming no growth)
  - 2030 Target: 4.56 million peak-period seat miles
  - 2010 Actual: 2.89 million peak-period seat miles

  The goal is to increase peak-period transit capacity by 3 percent annually, beginning in 2006, and ultimately double peak-period transit capacity by 2030. Peak seat miles increased from 2.84 million in December 2009 to 2.89 million in December 2010. This
increase was the result of incremental growth in core local and express service to meet growing ridership, introduction of service to new park and rides in Eagan and Maple Grove, expansion of park and ride service in Shakopee and new service in the Rush Line corridor between Forest Lake and downtown Saint Paul. Metro Transit began use of three-car trains on the Hiawatha Line, increasing peak seat miles but decreasing overall service hours.

Source: Metro Transit and Metropolitan Transportation Services, Metropolitan Council.

- Minneapolis-St. Paul International Airport Runway Congestion

  2002 Baseline: 7.1 minutes average annual aircraft delay
  2030 Trend Line: 9.8 minutes
  2030 Target: 7.1 minutes

  2010 Actual: 5.1 minutes

The 2010 average annual delay per aircraft operation was 5.1 minutes, down 0.5 minutes from 2009. In 2010, the Minneapolis-St. Paul International Airport (MSP) served 32 million passengers, 15th highest among airports in North America.

Aircraft activity at the airport edged up by 0.02 percent from 2009 to 437,075 landings and takeoffs in 2010 to be the 12th busiest airfield in the United States. This is the first year that operations have increased since 2004. After years of a depressed global economy and high fuel costs, operations increased in 2010 as a result of expanded air freight, general aviation and military operations. Operations are forecast to be flat with a gradual increase in the next five years. Delta completed its merger with Northwest Airlines on January 31, 2010 and reduced the integrated flight schedule through 2010.

Delay levels at the Minneapolis-St. Paul International Airport this year are likely to remain close to 2010 levels, but aviation forecasts indicate about a 40 percent increase in aircraft operations by 2030. New runway capacity was not included in the recently approved MSP 2030 development plan, but future delay is to be addressed through application of the Federal Aviation Administration’s NextGen aircraft and airspace management program.

Source: Federal Aviation Administration and Metropolitan Airports Commission.
3. Housing Choices

- Single Family Housing Units

  2030 Growth Target: 242,500 units added
  2000-10 Actual: 57,430 units added

  The target for single-family detached housing production acknowledges that roughly half of the overall housing unit target of 16,000 to 18,000 units per year is likely to be single-family detached housing. For context, 58 percent of the existing housing stock is single-family detached, so the goal recognizes that demand for attached housing is increasing relative to historic norms.

  2010 marked a new high in the share of net growth in single-family housing, with 56 percent of the total growth. Since 2001, 41 percent of the net growth in housing has been single-family detached, varying from a high of 56 percent in 2010 to a low of 34 percent in 2005—a peak of attached housing construction.

  Source: Metropolitan Council Research.

- Townhouse/Multifamily units

  2030 Growth Target: 242,500 units added
  2000-10 Actual: 83,255 units added

  The target of 8,000-10,000 new townhouse/multifamily housing permits per year, on average, reflects the objective of providing the region’s residents with a range of life-cycle and affordable housing options. An evolving demographic mix and emerging generational preferences have led to significant construction of attached units, peaking at over 14,000 added in 2005 and representing two-thirds of net growth in housing units. While...
townhouse and attached housing growth remains at 59 percent of overall housing growth since 2001, it was only 44 percent in 2010, indicating a continued reversal of this decade’s trend of significant attached housing construction.

Source: Metropolitan Council Research,

- **Affordable Housing – 2010 Needs**
  
  Affordable Owner Target: 84,981 units added 1996-2010  
  Affordable Renter Target: 15,840 units added 1996-2010
  
  Affordable Owner Actual: 40,168 units added 1996-2010  
  Affordable Renter Actual: 11,873 units added 1996-2010

The production of affordable owner-occupied housing has fallen far short of the goals set for the fifteen-year period of 1996 to 2010. Looking just at the units built in the last decade, an era of overall intense housing production, average annual production of affordable owner-occupied housing, 2,371 units, has been less than half (42 percent) of the target of 5,665 units per year.

Housing costs are considered affordable if they consume no more than 30 percent of household income. For the 1996 to 2010 period, the Council defined annual affordability thresholds based on the housing budget of households earning 80 percent of the area median family income for owner-occupied housing and 50 percent of median for rental housing.

From 1996-2010, the region fell short of its goal of nearly 85,000 owner-occupied affordable units by almost 45,000 units, adding only 40,168 units.

Similarly, the production of affordable rental housing has fallen short of the goals set for the fifteen-year period of 1996 to 2010 though far less than for owner-occupied housing. Looking just at the units built in the last decade, an era of overall intense housing production, average annual
production of affordable rental housing, 864 units, has been almost 82 percent of the target of 1,056 units per year.

From 1996-2010, the region fell short of its targeted goal of nearly 16,000 affordable rental units by almost 4,000 units, adding only 11,873 units.

Housing costs are considered affordable if they consume no more than 30 percent of household income. For the 1996 to 2010 period, the Council defined annual affordability thresholds based on the housing budget of households earning 80 percent of the area median family income for owner-occupied housing and 50 percent of median for rental housing.

Source: Metropolitan Council Research

- **Housing Affordability: Homes sold at prices affordable to median income family**

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage Affordable</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000 Baseline</td>
<td>75.0 in metro area (vs. 59.7 national average)</td>
</tr>
<tr>
<td>2030 Target</td>
<td>75.0 in metro area</td>
</tr>
<tr>
<td>2010 Actual</td>
<td>85.2 in metro area</td>
</tr>
</tbody>
</table>

  **Annual indicator:**

<table>
<thead>
<tr>
<th>Year</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010 Actual</td>
<td>Region’s housing affordability should remain 15 points ahead of the national average</td>
</tr>
</tbody>
</table>

Changes in regional housing affordability generally have followed national trends, but the differences are getting closer according to the National Association of Home Builders / Wells Fargo Housing Opportunity Index. The Index dropped in the middle of this decade as housing prices outpaced income growth. As the housing boom ended and home prices began to fall, the index increased to show a near historic high level of affordability in 2010 for the Minneapolis-St. Paul MSA and a historic high for the U.S. (note that the NAHB did not calculate the index from the 2nd quarter of 2002 through the 3rd quarter of 2003).

The percentage of affordable homes sold in the 13-county Minneapolis-St. Paul area continues to be higher than the national average, but the gap has shrunk steadily from 2006 (19.5 percent difference) to 2010 (12.6 percent difference). The 2010 levels have remained above the overall target that 75 percent of the homes be affordable to the median income, but the region failed to meet the goal of maintaining a 15-point spread between the metro and the U.S. index in both 2009 and 2010.

4. Environment

- Water Quality

Goal: The quality of the water leaving the metro area is as good as the water’s quality entering the metro area and in compliance with federal and state regulations.

<table>
<thead>
<tr>
<th>Baseline and Targets</th>
<th>Total Phosphorus</th>
<th>Total Nitrogen</th>
<th>Total Suspended Solids</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000 Baseline Input (in tons per year)</td>
<td>4,380</td>
<td>80,800</td>
<td>1,320,000</td>
</tr>
<tr>
<td>2000 Baseline Output (in tons per year)</td>
<td>3,840</td>
<td>80,900</td>
<td>956,000</td>
</tr>
<tr>
<td>2000 Baseline Difference (in tons per year)</td>
<td>-540 (-12 percent)</td>
<td>100 (0 percent)</td>
<td>-364,000 (-28 percent)</td>
</tr>
<tr>
<td>2030 Target</td>
<td>Output is no more than in 2000 and output-input difference is held to 0.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Due to the Twin Cities’ location at the northern end of the Mississippi River, Metropolitan Council wastewater treatment plants must meet stringent Environmental Protection Agency (EPA) operating standards. The Council’s treatment plants continue to have a near-perfect compliance record, while maintaining rates that are lower than the average for similar-sized sanitary districts. Wastewater treatment plants in the region and regulations on industrial wastewater are succeeding at removing pollution from the wastewater stream. However, water quality is also affected by nonpoint pollution sources (both urban and agricultural) and year-to-year climate variations.

The indicators for phosphorus, nitrogen, and suspended solids are determined by taking the sum of the loads from the Minnesota River at Jordan, the Rum River in Anoka, the Mississippi River in Anoka, and the St. Croix River in Stillwater, and comparing them to the load at the Mississippi River near Red Wing. Optimally, the difference between the output and input mass would be zero or less. However, there is a statistical uncertainty of about ±10 percent on both the input and output mass, and pollutant loading varies from year to year. Use of a 10-year median as an indicator helps to minimize, though not eliminate, variability from annual climate differences and other natural sources.
The output levels of the studied pollutants, with the exception of nitrogen, remained stable in 2010 and improved compared to 2000. Some variability from year to year is expected due to weather conditions and sampling error. Despite variability, the general trend for phosphorus and suspended solids over 2000-10 has been downward (improving). The output level of nitrogen remains higher than the input level, although both are significantly lower compared to 2000.

### Total Nitrogen

<table>
<thead>
<tr>
<th>Year</th>
<th>Input (in Thousands)</th>
<th>Output (in Thousands)</th>
<th>Target Load</th>
<th>% Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>880</td>
<td>809</td>
<td>800</td>
<td>-9.1%</td>
</tr>
<tr>
<td>2003</td>
<td>749</td>
<td>714</td>
<td>800</td>
<td>-7.0%</td>
</tr>
<tr>
<td>2004</td>
<td>684</td>
<td>694</td>
<td>800</td>
<td>1.4%</td>
</tr>
<tr>
<td>2005</td>
<td>623</td>
<td>636</td>
<td>800</td>
<td>13.9%</td>
</tr>
<tr>
<td>2006</td>
<td>694</td>
<td>694</td>
<td>800</td>
<td>0.0%</td>
</tr>
<tr>
<td>2007</td>
<td>714</td>
<td>708</td>
<td>800</td>
<td>-1.2%</td>
</tr>
<tr>
<td>2008</td>
<td>668</td>
<td>675</td>
<td>800</td>
<td>16.0%</td>
</tr>
<tr>
<td>2009</td>
<td>684</td>
<td>684</td>
<td>800</td>
<td>0.0%</td>
</tr>
<tr>
<td>2010</td>
<td>643</td>
<td>643</td>
<td>800</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

### Total Suspended Solid Load

<table>
<thead>
<tr>
<th>Year</th>
<th>Input (in Thousands)</th>
<th>Output (in Thousands)</th>
<th>Target Load</th>
<th>% Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>980</td>
<td>950</td>
<td>900</td>
<td>-7.8%</td>
</tr>
<tr>
<td>2003</td>
<td>910</td>
<td>910</td>
<td>900</td>
<td>0.0%</td>
</tr>
<tr>
<td>2004</td>
<td>1,370</td>
<td>1,100</td>
<td>900</td>
<td>-30.0%</td>
</tr>
<tr>
<td>2005</td>
<td>920</td>
<td>820</td>
<td>900</td>
<td>-11.1%</td>
</tr>
<tr>
<td>2006</td>
<td>1,220</td>
<td>850</td>
<td>900</td>
<td>-25.6%</td>
</tr>
<tr>
<td>2007</td>
<td>1,260</td>
<td>850</td>
<td>900</td>
<td>-25.6%</td>
</tr>
<tr>
<td>2008</td>
<td>1,260</td>
<td>850</td>
<td>900</td>
<td>-25.6%</td>
</tr>
<tr>
<td>2009</td>
<td>1,260</td>
<td>850</td>
<td>900</td>
<td>-25.6%</td>
</tr>
<tr>
<td>2010</td>
<td>1,260</td>
<td>850</td>
<td>900</td>
<td>-25.6%</td>
</tr>
</tbody>
</table>

Source: Metropolitan Council Environmental Services.
• **Water Supply**

Goal: To ensure the metropolitan area’s water resources are adequate to supply future water demands without adverse impacts.

Baseline Input: The Master Water Supply Plan projects future water use based on past water use and identifies water supply sources available to each community.

Rainfall in 2010 was above normal for the first time in four years. However, low precipitation during the summer months still resulted in relatively high demand for outdoor watering and an overall municipal water use of 127 gallons per day per capita.

Another measure of water availability is a comparison of groundwater recharge to groundwater withdrawals. In 2010, approximately 99,033 million gallons of groundwater were withdrawn from aquifers in the region. This is approximately 25 percent of the estimated annual groundwater recharge. This measure does not consider the local impact of withdrawals or needs for groundwater discharge to surface water features, nor does it consider that much of the water being withdrawn recharged decades earlier, but it does give a general sense of how much of the annual input is being used.

Source: Metropolitan Council analysis of data from Minnesota Department of Natural Resources, Metropolitan Council.
Air Quality – Pollutants

Goal: Maintain federal ambient air quality standards for carbon monoxide, ground-level ozone and fine particulates.

2002 Baseline: Zero violations
2030 Target: Zero violations
2003-2009: Zero violations
2010: Two violations

The pollutant of greatest concern at the time of the adoption of the Framework was carbon monoxide (CO). Although maintenance of attainment status in the region is still a priority, today’s greatest threat to attainment of National Ambient Air Quality Standards (NAAQS) is fine particulate matter (PM2.5). The federal standard for fine particulate matter is that the 98th percentile of the 24-hour PM2.5 concentrations in a year, averaged over three years, needs to be less than 35 \( \mu g/m^3 \). This standard was violated at two monitors in the region in the 2008-2010 reporting period.

Source: Minnesota Pollution Control Agency.

Air Quality Index

Number of days that air quality was above 100 (unhealthy for sensitive groups)

In planning for improvements to the transportation system, Metropolitan Council conforms to 1990 Clean Air Act Amendments for attaining federal air quality standards. Prior to 1999, the region was classified as not in attainment for carbon monoxide.

An area can be in compliance with federal air quality standards and yet have some days when its air quality is rated “unhealthy” by the EPA’s uniform index. Repeated alert days for a pollutant may be an indicator of a rising risk. Hot summers provide conditions for higher ozone levels and more alert days.

In 2010, there were seventeen air quality alerts for fine particulate matter. No alerts were issued for ozone.

The region has had fine particulate levels near the federal standard for some time. The Minnesota Pollution Control Agency attributes the violation in 2008-10 and the unusually high number of air quality alters related to fine particulates in 2009 and 2010 to meteorological conditions caused by a strong El Niño from November 2009 through March 2010.

Source: Minnesota Pollution Control Agency.