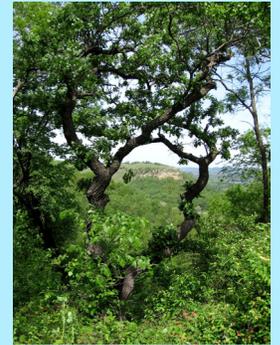


IMAGINE
 Red Wing
 green
 RED WING COMMUNITY
 SUSTAINABILITY REPORT





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| | |
|--------------|---|
| Introduction | 5 |
|--------------|---|

Goal Areas & Indicators



Housing & Economic Development

| | |
|--|----|
| Job Growth | 10 |
| Establishments by Industry | 11 |
| Jobs by Industry | 12 |
| Retail Trade | 13 |
| Tourism | 14 |
| Jobs/Housing Balance | 15 |
| Residents Employed Locally | 16 |
| Median Income and Housing Affordability | 17 |
| Percent of Children Eligible for Free and Reduced School Lunch | 18 |
| Newly Issued Building Permits | 19 |
| Historic Preservation Efforts | 21 |



Transportation & Circulation

| | |
|---|----|
| Walkability: Schools, Parks, Activity Centers | 22 |
| Modal Split | 24 |
| Travel Time to Work | 25 |
| Pedestrian and Bicycle Safety | 26 |
| Mass Transit Ridership | 27 |
| Bike Lanes and Paths | 28 |
| Sidewalk Connectivity | 29 |
| Street and Boulevard Trees | 30 |



Land Use

| | |
|---|----|
| Community Development Pattern | 32 |
| Acres of Cropland Converted to Developable Land | 33 |
| Dwelling Density | 34 |
| Land Use Distribution | 35 |
| Open Space and Parkland | 36 |
| Acreage of Land Used for Streets | 37 |
| Percentage of New Residential Lots outside 1/4 Mile of Services | 38 |



Community Life & Health

| | |
|--|----|
| Population | 40 |
| Diversity: Persons by Race, Minority Residents, Households, Students | 42 |
| Standardized Test Scores | 45 |
| High School Graduation Rates | 46 |
| School Enrollment | 47 |
| Enrollment at Technical College | 48 |

| | |
|--|----|
| Education Attainment | 49 |
| Library Use | 50 |
| Community Gardens | 51 |
| Farmers' Market | 52 |
| Crime Rate | 53 |
| National Night Out Participation | 54 |
| Voter Participation | 55 |
| Health and Wellness: County Level | 56 |
| Insurance Coverage | 57 |
| Volunteer Rates | 58 |
| Percent of Babies Born at Low Birth Weight | 59 |
| Community Access to Waterways | 60 |
| Recreation Opportunities and Facilities | 61 |



Government

| | |
|---|----|
| Municipal Revenue Mix | 62 |
| Alternative Fueled Vehicles: City Fleet | 63 |
| Local Employment of City Staff | 64 |



Environment

| | |
|------------------------------------|----|
| Air Quality | 66 |
| Drinking Water Quality | 68 |
| Solid Waste Generation | 70 |
| Recycling Rate | 72 |
| Composting Programs | 74 |
| Energy Use by Sector and Fuel Type | 75 |
| Impervious Surfaces | 77 |
| Brownfield Sites | 78 |
| Impaired Waters | 80 |
| Stormwater Management | 82 |
| Wetlands Preservation | 83 |

| | |
|------------|----|
| Conclusion | 84 |
| Appendices | 88 |

Introduction

The concept of sustainability is incorporated throughout the City of Red Wing Comprehensive Plan. According to the Comprehensive Plan, Red Wing should always consider the long term impact of decision making with an understanding of the interdependence between our community and the natural ecosystem.

Sustainability is a commonly used term in planning and a “sustainable community” is a guiding principle embraced in the Vision Statement by the City of Red Wing. For the Red Wing Comprehensive Plan, sustainability reflects a quality that is lasting, enduring and infinite. A common definition for sustainable development is a development pattern that accommodates present needs without compromising the ability of future generations to meet their own needs. This is important from a global perspective because of the notion that populations grow exponentially and land and natural resources are finite. Sustainability represents the interdependent relationship “between our community and the natural ecosystem as stated in the guiding principle for Red Wing. Sustainable development is synonymous with green building and green infrastructure. The Urban Land Institute (ULI) is a widely well respected International organization with a focus on real estate development practices. Recent publications show support time and again for green building practices despite high upfront costs because over time, the cost savings from reduced energy consumption, enhanced quality of life, and longer lasting materials outweigh these upfront costs.¹

Sustainability is not limited only to the environment, however. Social, economic, and environmental objectives must all be goals of Red Wing in order to achieve a more sustainable community.

Initiatives in sustainability include Eco-Municipalities, GreenStar Cities, Star Communities Index (created by ICLEI), and others. Eco-Municipalities follow the Natural Step, a book that guides municipalities in sustainability, by Sarah James and Torbjorn Lahti. A municipality that adopts this sustainability framework may pass an Eco-Municipality resolution stating its goals of achieving sustainability. Eco-Municipalities include Ashland, Wisconsin; Lawrence Township, New Jersey; Washburn, Wisconsin; and others. GreenStar Cities is a new program created by the League of Minnesota Cities intended to begin recognizing cities with exceptional work in sustainability with the GreenStar Cities award in 2009. Star Communities is a project of ICLEI, created as a framework for municipalities to plan, track, and measure their sustainability programs. ICLEI (Local Governments for Sustainability, formerly the International Council on Local Environmental Initiatives) is an organization created to build, serve, and drive a movement of local governments to advance deep reductions in greenhouse gas emissions and achieve tangible improvements in local sustainability. Member municipalities include Duluth, Minneapolis, St. Paul, Northfield, and other communities within Minnesota and across the country. These are just a few of the initiatives available to help communities across the U.S. to develop sustainability plans.

1 City of Red Wing Comprehensive Plan

Sustainability in Red Wing

There are many active citizens and City departments that have been involved in sustainability efforts throughout the community. For the past few years Sustainability Study Circles, a Sustainability Film Festival, numerous Earth Day activities, and other initiatives have been led by the City and concerned citizens. The City of Red Wing has been working to increase efficiency in several areas within City services, including City fleet, green cleaning practices, green purchasing, and energy conservation. The Public Works Department is the largest energy user of City services, but is working to decrease their impact.

In 1999 a report on 39 best practice sustainable community projects titled A Community Learning Toolkit was prepared for the Red Wing Sustainable Community Project. This report laid the groundwork for sustainability in Red Wing and presented information on communities that Red Wing may look to for examples in future sustainability endeavors.

In 2006 an Environmental Committee consisting of seven mayor-appointed members was created to focus public awareness on the environmental health of our town and river and to work with citizens, government, businesses and local community groups to protect and preserve the ecological diversity, cultural, historic, recreational and economic resources of our river and land for generations to come. The goals of the Committee included: advise and make recommendations; educate community members, businesses, and government; and establish and address public environmental concerns regarding sustainability. Issues addressed by the Committee include: erosion of the Mississippi riverbank, waste management, wildlife management, bluff development, and pesticide use. In April 2007 Mayor Dummer registered the City of Red Wing as a member of the Climate Protection Agreement. The Climate Protection Agreement is a proclamation by U.S. mayors to address climate change locally and nationally. There has not been any further action regarding the Climate Protection Agreement to date.

Most recent actions include an environmental stewardship subcommittee of Red Wing 2020 formed in 2007 to address sustainability issues. The Planning Commission held a workshop in early 2008, resulting in the reorganization of the Environmental Committee. Sustain Red Wing is another group that was informally created out of the original Committee that helped spur citizen interest in sustainability initiatives and events, such as the sustainability study circles.

Indicators

Sustainability indicators give Red Wing a way to measure the progress of their sustainability goals. Each indicator is chosen with the intention of answering the question *is Red Wing moving toward or away from sustainability?* However, this is not an easy question to answer and not every indicator has enough information to adequately assess its trend line. In fact, some indicators raise more questions.

Indicators were chosen based on a number of criteria, including data accessibility, relevance to Red Wing, and best practices from other community sustainability plans. Communities whose plans were studied as best practices include the following U.S. municipalities: New York City, New York; Santa Monica, California, Minneapolis, Minnesota; Chicago, Illinois; and Green Bay, Wisconsin. Many of these cities differ in size and location in comparison to Red Wing but have offered useful examples and guidance in formulating a sustainability report (smaller municipalities throughout the U.S. may have sustainability initiatives, but do not have the resources to publish sustainability plans accessible through the public domain). Canadian municipalities studied include: Whistler, British Columbia and Vancouver, British Columbia.

The Community Sustainability Report indicators are organized by goal area: Housing and Economic Development, Transportation and Circulation, Land Use, Community Life and Health, Government, and Environment. Some indicators may fall under several goal categories rather than just one, as there is much crossover in the areas of sustainability. For example, Street and Boulevard trees is listed under Transportation and Circulation but also applies to the Environment goal area. Within the report each indicator has a summary or short description explaining why the indicator was chosen, followed by a summary explanation on its findings.

Acknowledgements

This report was compiled through the help of various City departments, staff, and State organizations. The following individuals were particularly helpful in the creation of this document:

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Rose Hanson, Secretary, City of Red Wing Public Works
Tim Bohmach, Community Service Officer, Red Wing Police Department
Timothy Sletten, Chief of Police, Red Wing Police Department

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HOUSING & ECONOMIC DEVELOPMENT

Job Growth

Why was this indicator chosen?

To measure economic growth in Red Wing via jobs.

What does it mean?

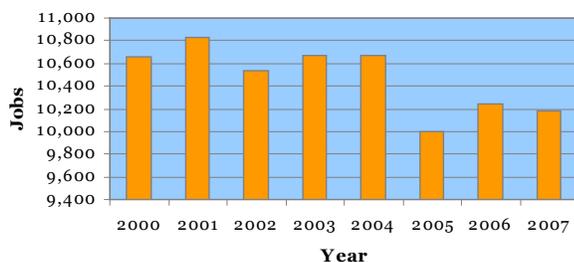
There has been a 4.5% decrease in jobs between 2000 and 2007, but have increased 22% from 2005 to 2007.

Sources:

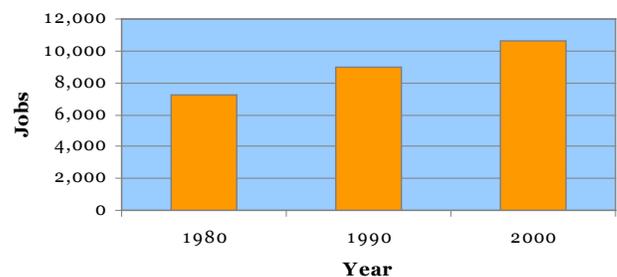
Minnesota Department of Employment and Economic Development

Economic Development Plan for the City of Red Wing, 2002. Red Wing Port Authority, Red Wing Planning Department

Job Growth 2000-2007



Job Growth 1980-2000



Establishments by Industry

Why was this indicator chosen?

To assess whether Red Wing's economy is diverse or dependent on only a few major industries.

What does it mean?

The number of establishments in manufacturing remained steady while jobs in manufacturing declined. Financial activities, education and health services, and leisure and hospitality establishments all increased; professional and business services decreased while the remaining industries stayed somewhat steady.

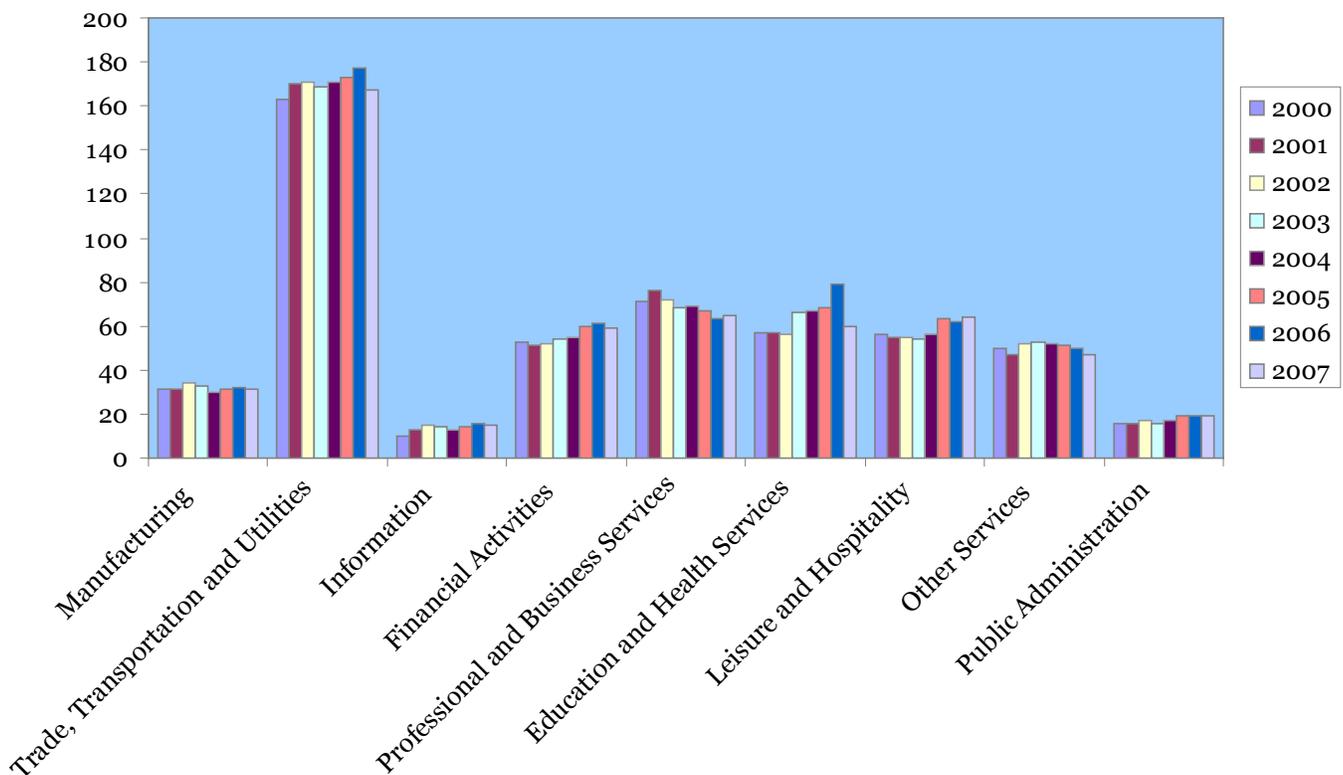
Sources:

Minnesota Department of Employment and Economic Development: Quarterly census of employment and wages by industry

<http://www.deed.state.mn.us/lmi/tools.htm>

Economic Development Plan for the City of Red Wing, 2002. Red Wing Port Authority, Red Wing Planning Department

Establishments by Industry



Jobs by Industry

Why was this indicator chosen?

As a measure of stability in Red Wing job sectors.

What does it mean?

As noted in the job growth indicator, there was a 4.5% decrease in jobs between 2000 and 2007. Manufacturing jobs decreased by 26% between 2000 and 2007 while manufacturing establishments varied only slightly. Information establishments grew by 50% while information jobs only increased by 3.6%. Overall there has been a trend of more volatility in jobs than establishments.

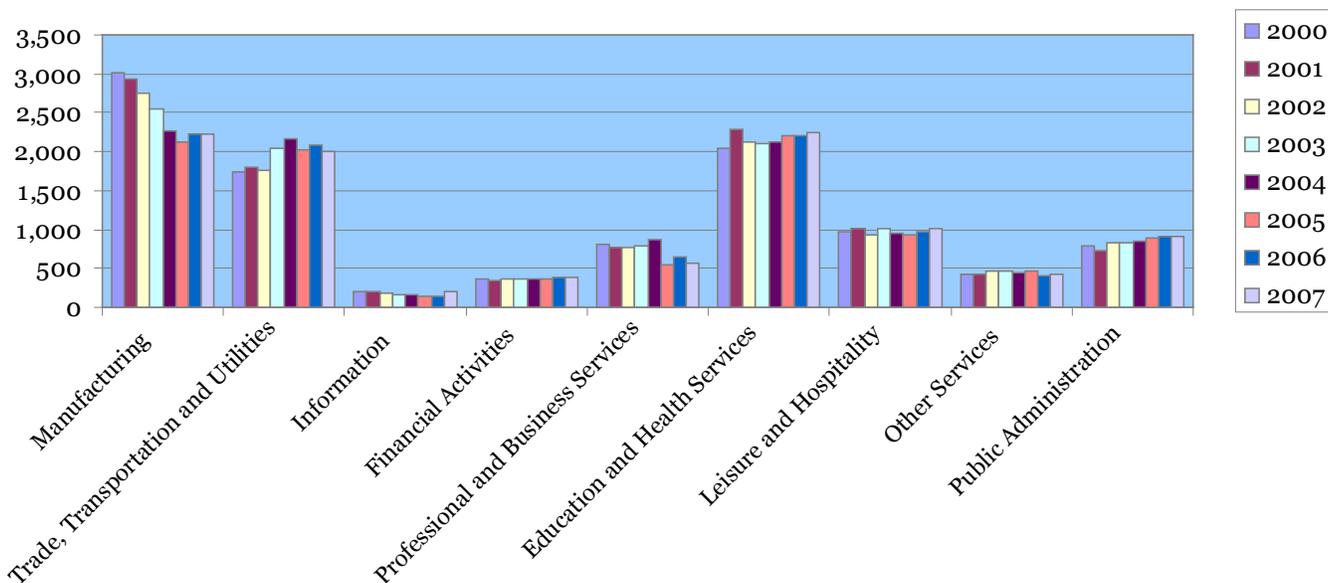
Sources:

Minnesota Department of Employment and Economic Development: Quarterly census of employment and wages by industry

<http://www.deed.state.mn.us/lmi/tools.htm>

Economic Development Plan for the City of Red Wing, 2002. Red Wing Port Authority, Red Wing Planning Department

Jobs by Industry



Retail Trade

Why was this indicator chosen?

To measure growth in the retail trade in Red Wing as an aspect of tourism, economic strength, and Red Wing's role as a regional center.

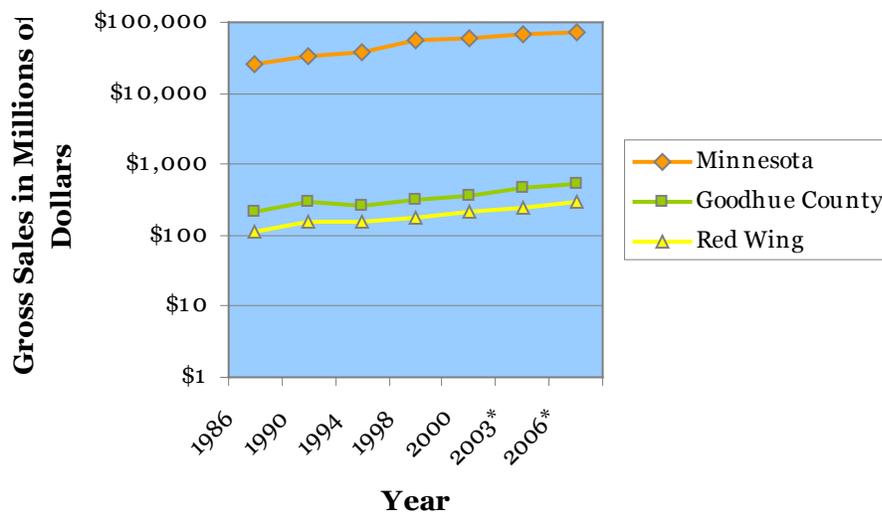
What does it mean?

To measure growth in the retail trade in Red Wing as an aspect of tourism, economic strength, and Red Wing's role as a regional center.

Sources:

Economic Development Plan for the City of Red Wing, 2002. Red Wing Port Authority, Red Wing Planning Department
Minnesota Department of Revenue

Total Retail Sales in Millions of Dollars



| Total Retail Sales in Millions of Dollars, 1986 - 2006 | | | | | | | |
|--|----------|----------|----------|----------|----------|----------|----------|
| | 1986 | 1990 | 1994 | 1998 | 2000 | 2003* | 2006* |
| Minnesota | \$25,444 | \$33,095 | \$38,433 | \$54,124 | \$61,149 | \$70,064 | \$73,860 |
| Red Wing | \$112 | \$159 | \$156 | \$182 | \$209 | \$240 | \$301 |

| Percent Change, 1990 - 2006 | | | | | | |
|-----------------------------|---------|---------|---------|---------|---------|---------|
| | 1990 | 1994 | 1998 | 2000 | 2003* | 2006* |
| Minnesota | +30.07% | +16.13% | +41.06% | +12.79% | +14.58% | +5.14% |
| Red Wing | +41.96% | -1.89% | +16.67% | +14.84% | +14.83% | +20.27% |

*Not directly comparable to previous years due to new classification system adopted by State of Minnesota. 2003 state and county data include item 446 (Health, Personal); Red Wing does not



Tourism

Why was this indicator chosen?

The municipal lodging tax may be used to measure tourism in Red Wing since the tax is added to all hotel/motel stays in Red Wing to support the Visitors and Convention Bureau of Red Wing (5% administration fee goes to the City of Red Wing), though this does not include other aspects of tourism such as restaurants, gas and convenience stores, and attractions. To follow rates of hotel and motel stays over time, the total tax amount per year is compared to the rate of inflation.

What does it mean?

Tourism in Red Wing decreased slightly in 2007, but has shown slow growth overall since 1995. Compared to the rate of inflation (average yearly Consumer Price Index), the only years that went up with the rate of inflation or exceeded it were: 1998, 1999, 2000, 2002, and 2006. Changes may be attributed to the opening or closing of motels and/or bed and breakfasts, longer stays due to sporting events, or hotel stays longer than a month in duration that are exempt from the tax.

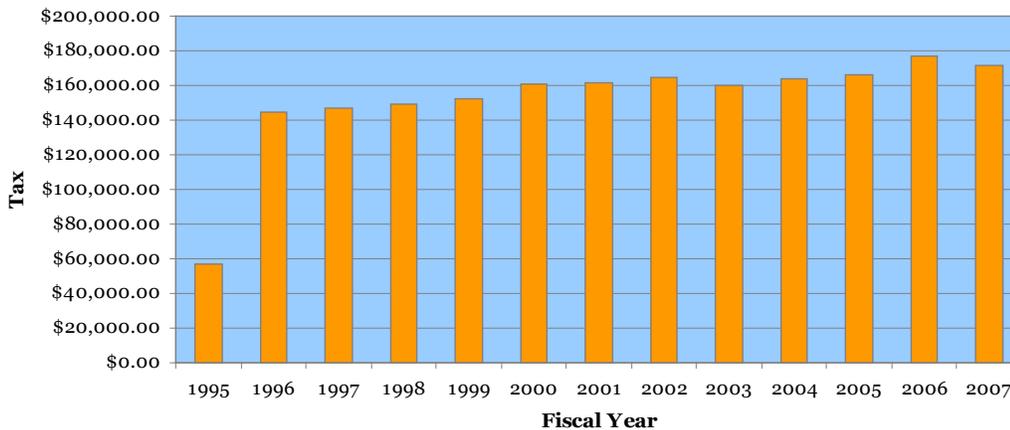
Sources:

City of Red Wing Finance Department

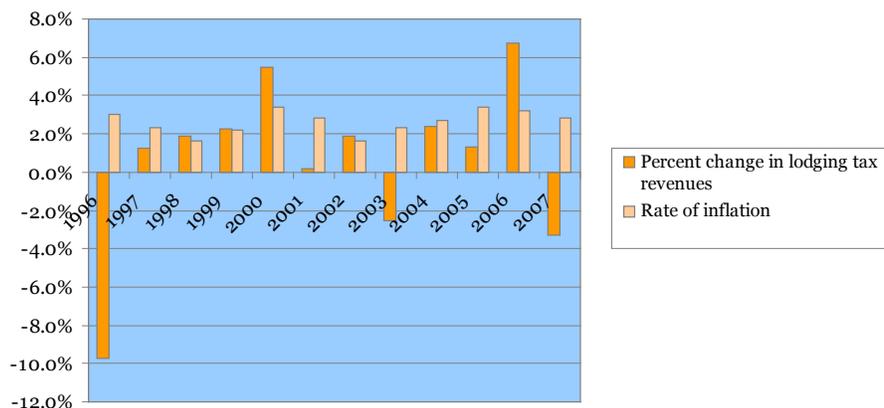
Red Wing Visitors and Convention Bureau

U.S. Department of Labor: Bureau of Labor Statistics, <<http://www.bls.gov/CPI/>>

Hotel/Motel Lodging Tax



Rate of Inflation Compared to Lodging Tax Revenues



Jobs/Housing Balance

Why was this indicator chosen?

The jobs/housing balance indicates the ratio of housing to jobs in the community. There is adequate housing to accommodate the labor market in the city when this ratio is closer to 1.0.

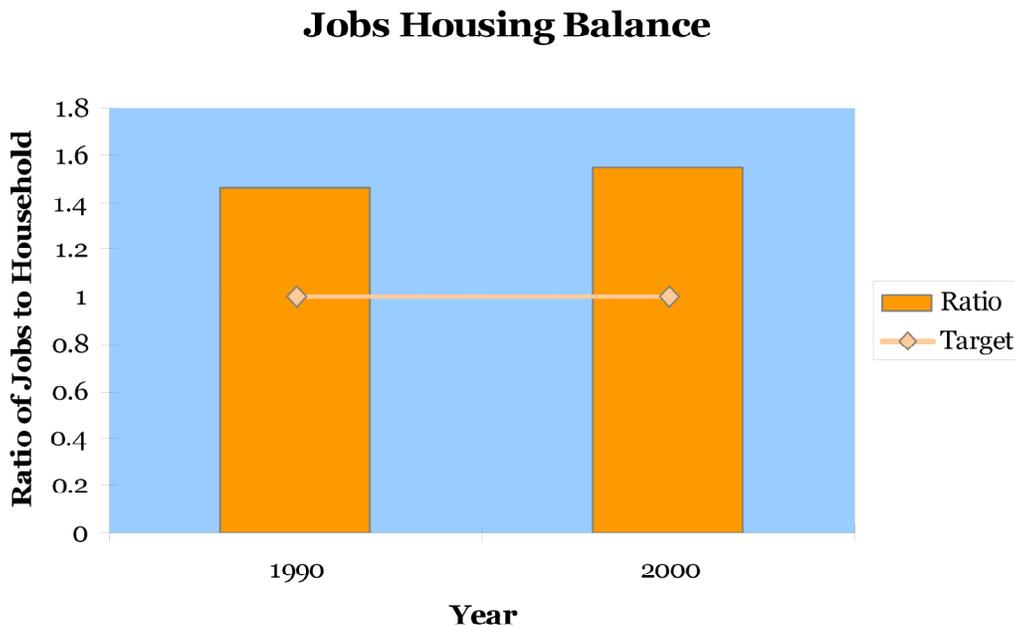
What does it mean?

In 1990 the jobs/housing balance was 1.46 jobs to each housing unit. The ratio moved to 1.55 in 2000, indicating that Red Wing has more jobs than housing. This may demonstrate a need for more housing within Red Wing to accommodate this workforce.

Sources:

U.S. Census Bureau, www.census.gov

Minnesota Department of Employment and Economic Development, <http://www.deed.state.mn.us/>



Residents Employed Locally

Why was this indicator chosen?

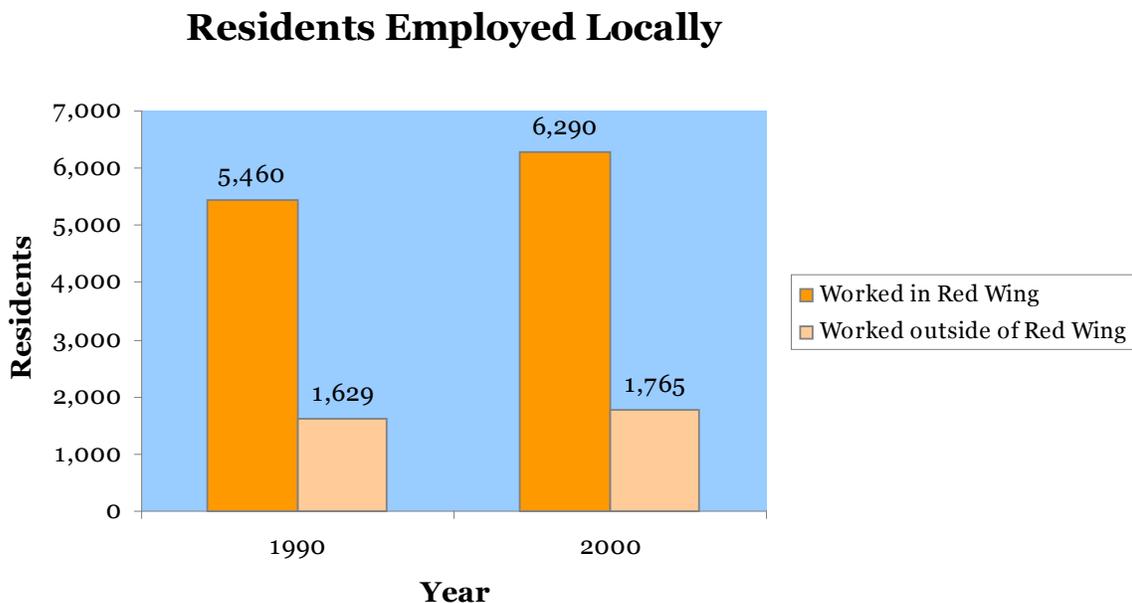
Residents that work within Red Wing generally have a shorter commute than those that work in other cities or counties, thus reducing emissions, auto dependency, and increasing quality of life.

What does it mean?

The total number of residents leaving Red Wing to work is increasing while the percentage of residents leaving to work is decreasing. The percentage of Red Wing residents that work outside of Red Wing has slightly decreased from 17.94% in 1990 to 17.55% in 2000, moving in a positive direction toward sustainability.

Sources:

U.S. Census Bureau, www.census.gov



Median Income and Housing Affordability

Why was this indicator chosen?

Housing affordability is important for quality of life of Red Wing residents.

What does it mean?

Using the commonly accepted standard that 30% of gross income can be applied to housing expenses without experiencing a cost burden, a median income household in Red Wing could afford approximately \$1,092 per month for ownership or rental housing in 2000, and a median income family could afford \$1,366 per month in 2000.

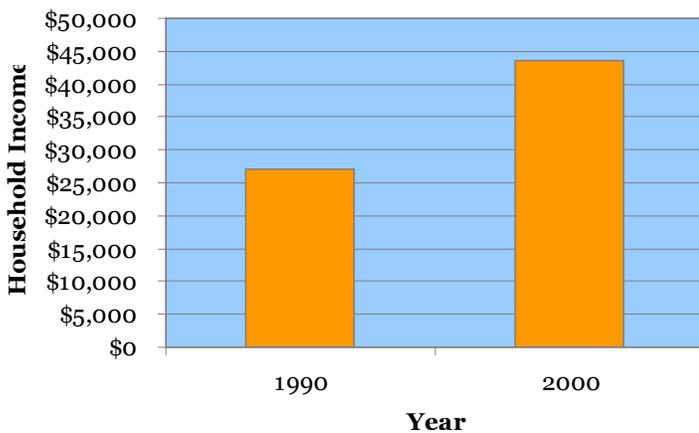
Household income estimates for 2000 indicate that 42.9% of all households in Red Wing had an annual income above \$50,000. Households at or above this income level can afford \$1,250 or more per month for housing, which is generally sufficient for the costs associated with new housing construction.

Approximately 14.6% of Red Wing Households reported an annual income of less than \$15,000. This translates into housing affordability of \$375 per month or less¹.

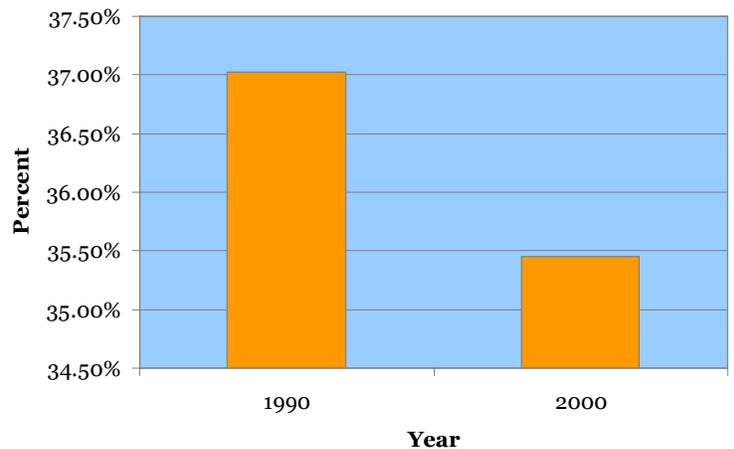
Sources:

U.S. Census Bureau, www.census.gov

Median Household Income



Share of Households with Gross Rent/Income Ratio Over 30%



¹ Red Wing Housing Study, Short Elliot Hendrickson 2003.



Percent of Children Eligible for Free and Reduced School Lunch

Why was this indicator chosen?

This can be used as a measure of adult income levels between census years. Students whose families earn at or less than 185 percent of the poverty level are eligible for free school lunches.

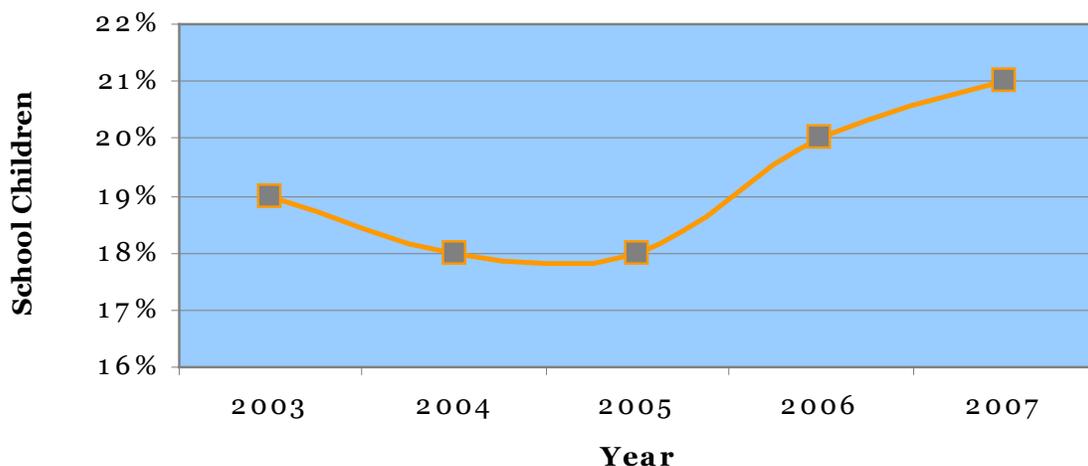
What does it mean?

The percentage of Red Wing school children eligible for free and reduced lunches is increasing, but only slightly from 19% to 21% in the last four years.

Sources:

Minnesota Department of Education School Report Card <http://education.state.mn.us/mde/Data/Data_Downloads/Accountability_Data/NCLB_AYP/index.html>

Red Wing School Children Eligible for Free or Reduced School Lunch



Newly Issued Building Permits

Why was this indicator chosen?

This indicator measures investment in Red Wing via new construction in residential, civic and institutional, commercial, and industrial.

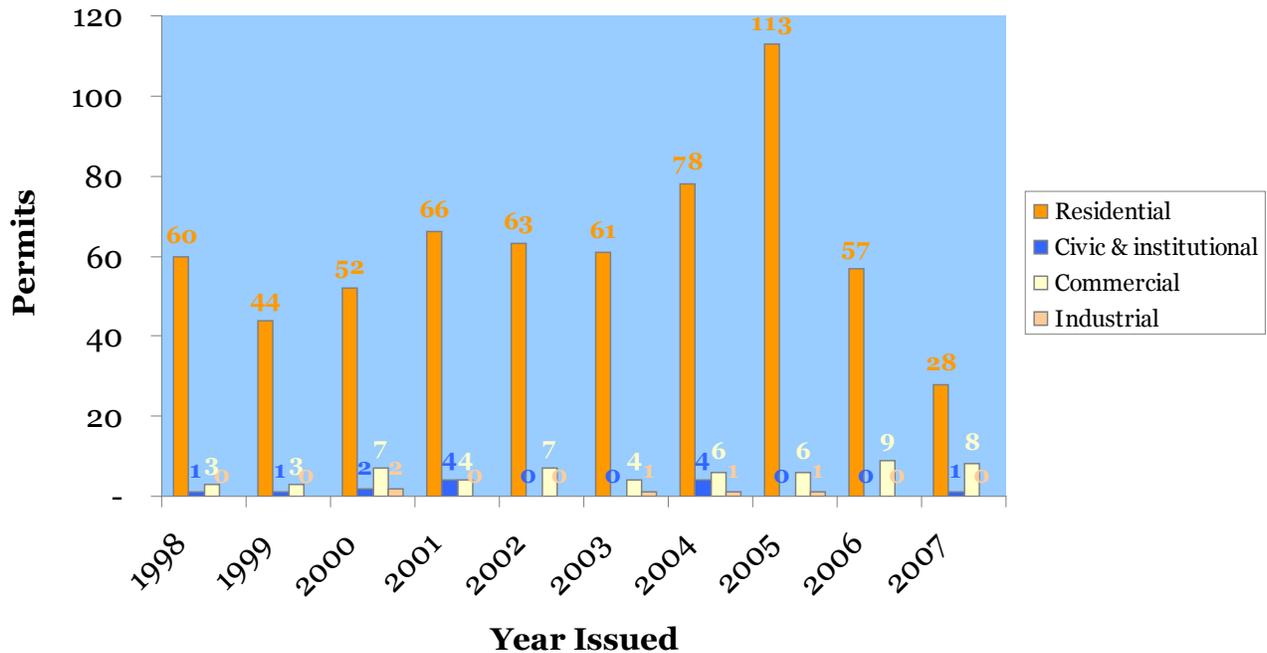
What does it mean?

Residential new construction spiked in 2004 and 2005 (totaling \$19 million in 2005), following the national trend. This trailed off in 2007 (decreasing to \$5 million in 2007) along with the national trend as well. Aside from national trends, this may also be attributed to smaller households, multi-unit assisted living to accommodate the aging population, and in migration of retirees to Red Wing.

Sources:

City of Red Wing Finance Department
City of Red Wing Planning Department

Newly Issued Building Permits



| | 2003 | 2004 | 2005 | 2006 | 2007 |
|--|--------------|--------------|--------------|--------------|-------------|
| Building Permits | | | | | |
| Newly issued residential permits | 61 | 78 | 113 | 57 | 28 |
| Total valuation of residential permits | \$10,719,472 | \$15,783,053 | \$19,808,975 | \$16,722,013 | \$5,057,064 |
| Newly issued civic & institutional permits | 0 | 4 | 0 | 0 | 1 |
| Total valuation of civic & institutional permits | \$0 | \$4,987,135 | \$0 | \$0 | \$25,000 |
| Newly issued commercial permits | 4 | 6 | 6 | 9 | 8 |
| Total valuation of commercial permits | \$2,072,527 | \$4,462,135 | \$1,477,125 | \$879,398 | \$5,496,073 |
| Newly issued industrial permits | 1 | 1 | 1 | 0 | 0 |
| Total valuation of industrial permits | \$65,400 | \$328,000 | \$1,427,000 | \$0 | \$0 |



Historic Preservation

Why was this indicator chosen?

Red Wing's historic buildings and homes contribute to a sense of place and make Red Wing a great location for tourism.

What does it mean?

Residences shown on the map are featured on Red Wing's *Three Walking Tours of Red Wing's Historic Architecture*, and are not individually designated as local historic places though they are within each of the historic districts. See Appendix A for the Historic Preservation map.

Sources:

City of Red Wing Planning Department





TRANSPORTATION & CIRCULATION

Walkability: Parks, Schools, Activity Centers

Why was this indicator chosen?

Neighborhood amenities located within walking distance of households increases health and wellness, builds community, and decreases auto dependency.

What does it mean?

Approximately 21% of existing Red Wing households have been identified as being walkable to city schools. These households are all located within a half-mile walking distance of schools at all grade levels (but not post-secondary institutions) and most are connected by sidewalks. An estimated 45% of Red Wing households are within walking distance of a public neighborhood park. These households are within a quarter-mile distance from a park and most are connected by sidewalks.

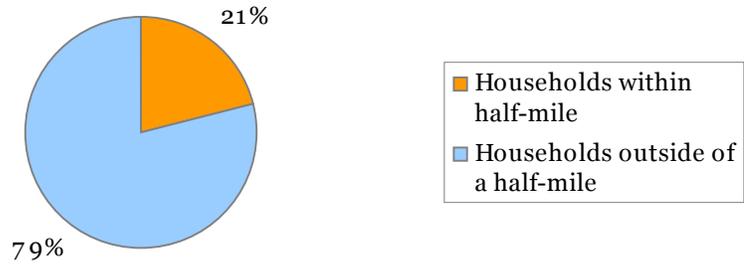
Approximately 50% of the city's households are considered walkable to at least one intensity zone or attraction. These residences are located within a half-mile distance and connected by sidewalks.

Sources:

City of Red Wing Comprehensive Plan, 2007.



Households Walkable to Schools, 2007



Households Walkable to Neighborhood Parks, 2007



Modal Split

Why was this indicator chosen?

Modal split measures the mode of transportation that residents take to work, indicating residents' auto dependency.

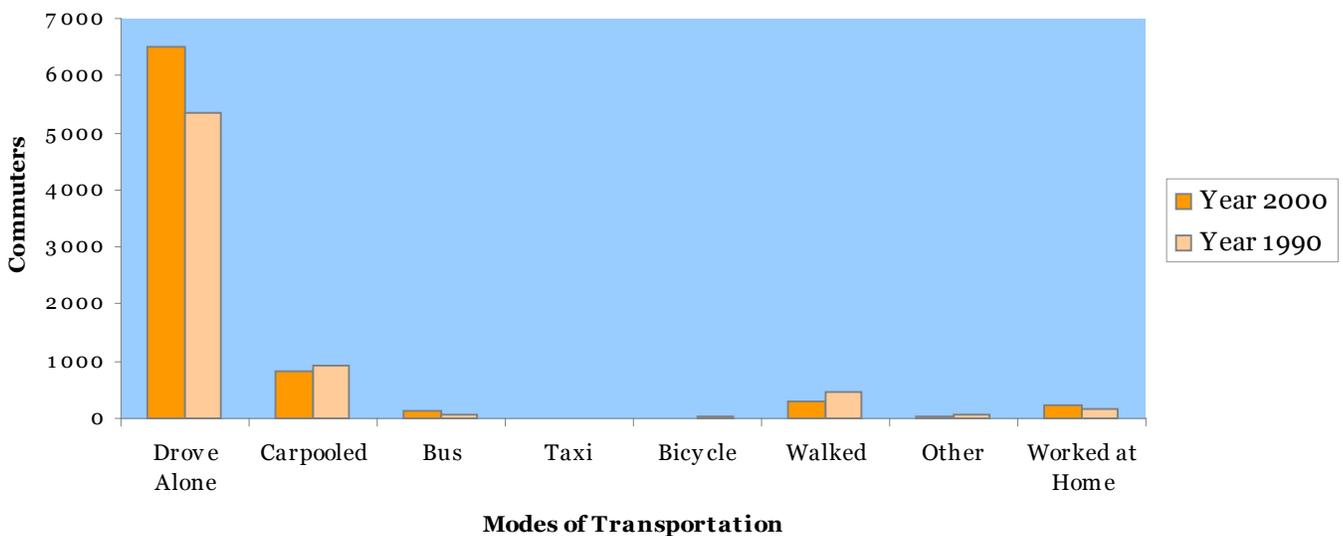
What does it mean?

An overwhelming majority of residents drive alone to work. In 1990, 5,364 residents drove to work alone and in 2000, 6,515 residents drove to work alone. The number of residents that car-pooled, rode a bike, and walked to work all decreased while the total number of residents that took the bus to work increased in 2000 as compared to 1990. Bicycling only made up for 0.16% of transit mode to work in 2000 (down from only 0.17% in 1990).

Sources:

U.S. Census Bureau, www.census.gov

Modal Split



Travel Time to Work

Why was this indicator chosen?

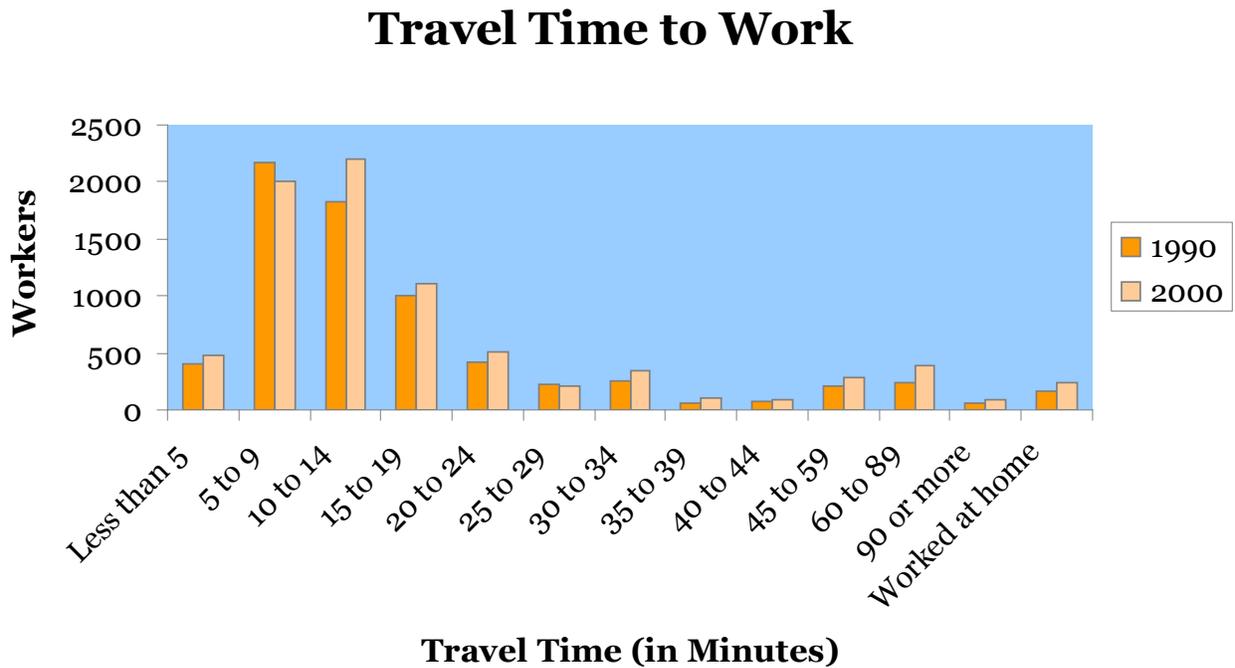
Long commute times decrease quality of life, increase pollution, and attribute to a reduction in wellness and community life.

What does it mean?

Most residents of Red Wing travel between five and fourteen minutes to work. Longer commute times increased from 1990 to 2000.

Sources:

U.S. Census Bureau, www.census.gov



Pedestrian and Bicycle Safety

Why was this indicator chosen?

Creating a safe environment for pedestrians and bicyclists promotes sustainable modes of transit and the health and wellness of residents.

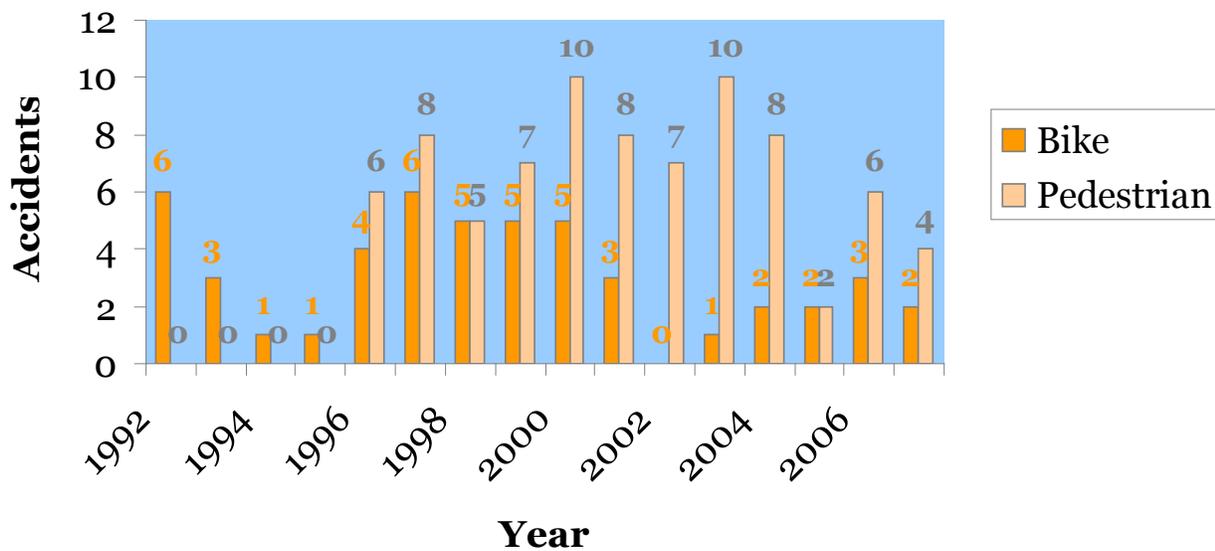
What does it mean?

Most accidents between 1996 and 2007 occurred in downtown Red Wing. The intersections with the most accidents were: Plum Street and 3rd Street (6 accidents), Hill Street and Main Street (3 accidents), Bush Street and 3rd Street (3 accidents), and Bush Street and Main Street (3 accidents), and the 300 block of 7th Street (6 accidents). The Red Wing Police Department holds the Annual Bike Rodeo to increase bicycle safety among children throughout Red Wing. See Appendix B for Pedestrian and Bicycle Accidents map. The Red Wing Police Department holds the Annual Bike Rodeo every year in an attempt to increase bicycle safety among children throughout Red Wing. See Appendix B for Pedestrian and Bicycle Accidents map.

Sources:

City of Red Wing Police Department

Pedestrian and Bicycle Accidents



Transit Options and Mass Transit Ridership

Why was this indicator chosen?

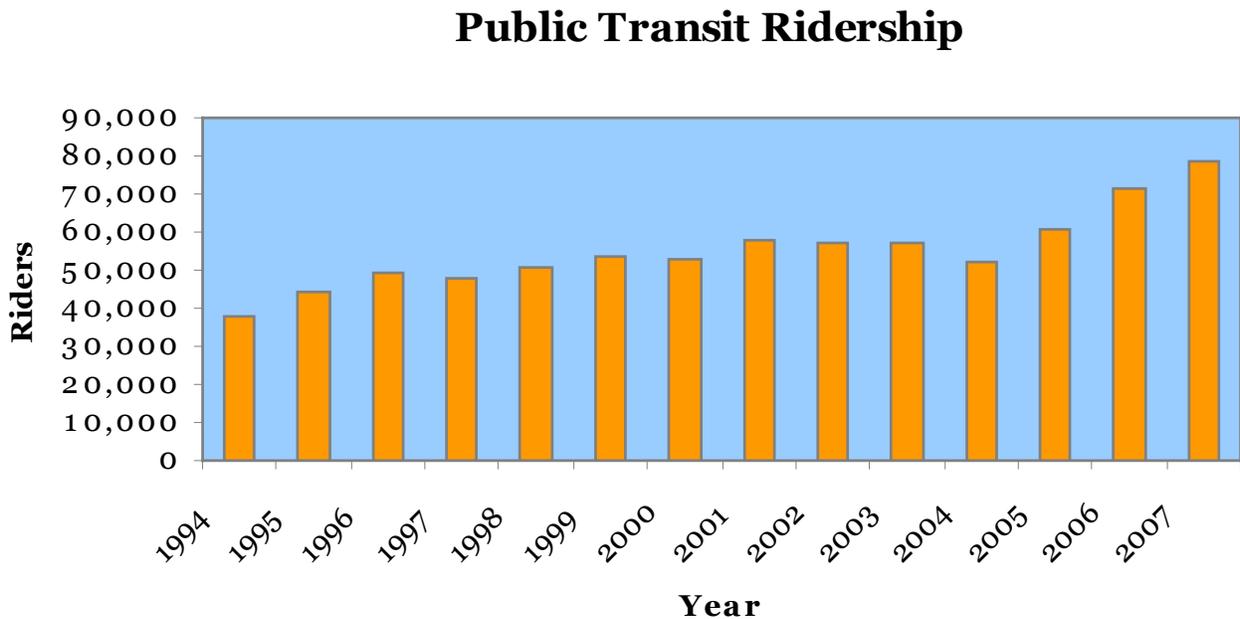
Public transit options increase resident interaction, cut costs, and are better on the environment than a single occupancy vehicle. Ideally, residences should be located within a five minute walk (generally a quarter of a mile) of bus stops to make transit more accessible. Red Wing *Ride the Bus* has two routes with a total of 16 stops and includes Dial-A-Ride (curb-to-curb) service.

What does it mean?

A regional partnership was created in 2005 between Hiawathaland Transit and the City of Red Wing. Formerly *The Ride*, bus ridership on *Ride the Bus* went from 52,179 riders in 2004 to 78,873 in 2007, due to route expansion and other improvements; a 51% increase.

Sources:

City of Red Wing Public Works
Hiawathaland Transit



Bike Lanes and Paths

Why was this indicator chosen?

Bike lanes and paths provide options for bicyclists to travel safely throughout Red Wing for transportation, recreation, and health purposes.

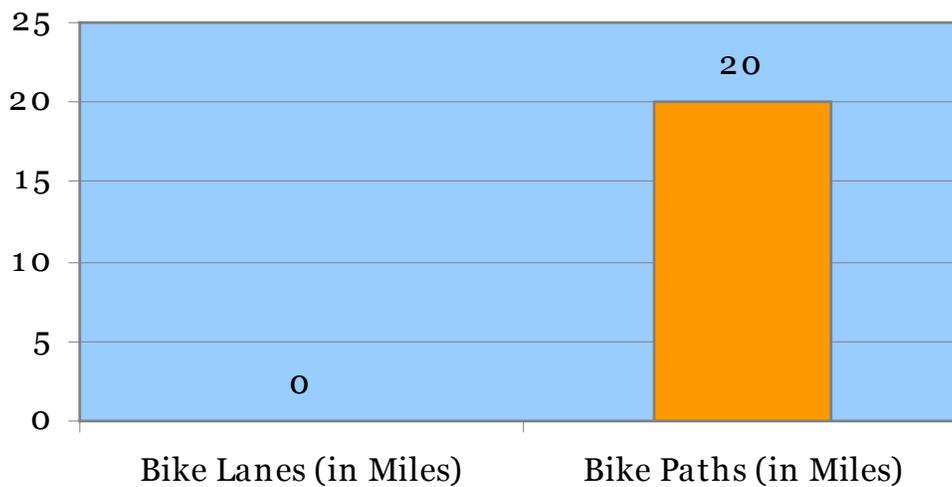
What does it mean?

There are currently 20 miles of bicycle paths in Red Wing, but no marked and designated bicycle lanes on Red Wing roadways.

Sources:

City of Red Wing Planning Department

Bike Lanes and Paths, 2007



Sidewalk Connectivity

Why was this indicator chosen?

Sidewalks provide a safe way for residents and children to move throughout the community. Walking provides a healthier alternative to residents as well as a cleaner option for the environment.

What does it mean?

There are currently 66.5 miles of sidewalks in Red Wing as well as 20 miles of bicycle and pedestrian paths. The 2005 Community Survey of Red Wing residents found that 54% supported the installation of sidewalks on all Red Wing streets and 32% did not. The support of sidewalk installation had gone down 7% from 2001 to 2005. Future updates to this indicator may include measuring sidewalk connectivity by percentage of streets that have sidewalks on both sides. See Appendix C for the Sidewalk Connectivity map.

Sources:

2005 City of Red Wing Community Survey, Decision Resources, Ltd.



Street and Boulevard Trees

Why was this indicator chosen?

Street trees create a pedestrian friendly community, encourage walking and beautify the city.

What does it mean?

Not enough data to create a trend line. There are currently 5,690 street and boulevard trees in Red Wing. See Appendix D for Street and Boulevard Trees map.

Sources:

City of Red Wing Planning Department



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LAND USE

Community Development Pattern

Why was this indicator chosen?

Future land use patterns should encourage walkability and a sense of place.

What does it mean?

The City of Red Wing has designated future land use districts, termed Activity Centers, to guide future development. Activity Centers are located in the community where large numbers of people are drawn together and a variety of activities occur with an emphasis mostly on commercial retail and service uses, institutions and higher density residential. They are intended to provide a mix of uses that offer great places to do business, learn, play, shop or simply enjoy a unique cultural experience. These centers typically will occur along key transportation corridors and at key crossroads. Activity Centers identified include: Downtown, Old West Main, Anderson Center / Gateway, Midtown, Business Park, Southtown / Hi Park, East End, Prairie Island, and the Airport. Increasing mobility by connecting Activity Centers with adjacent residential neighborhoods and parks is vital in establishing the city as a livable community. Each Activity Center should have its own design character, focusing on streetscape, landscape and urban design features that are unique to the district's identity and creates a sense of place. Redevelopment and in-fill should be focused here to maximize the use of existing infrastructure systems¹. See Appendix E for Community Development Patterns map and Appendix F for Land Use map.

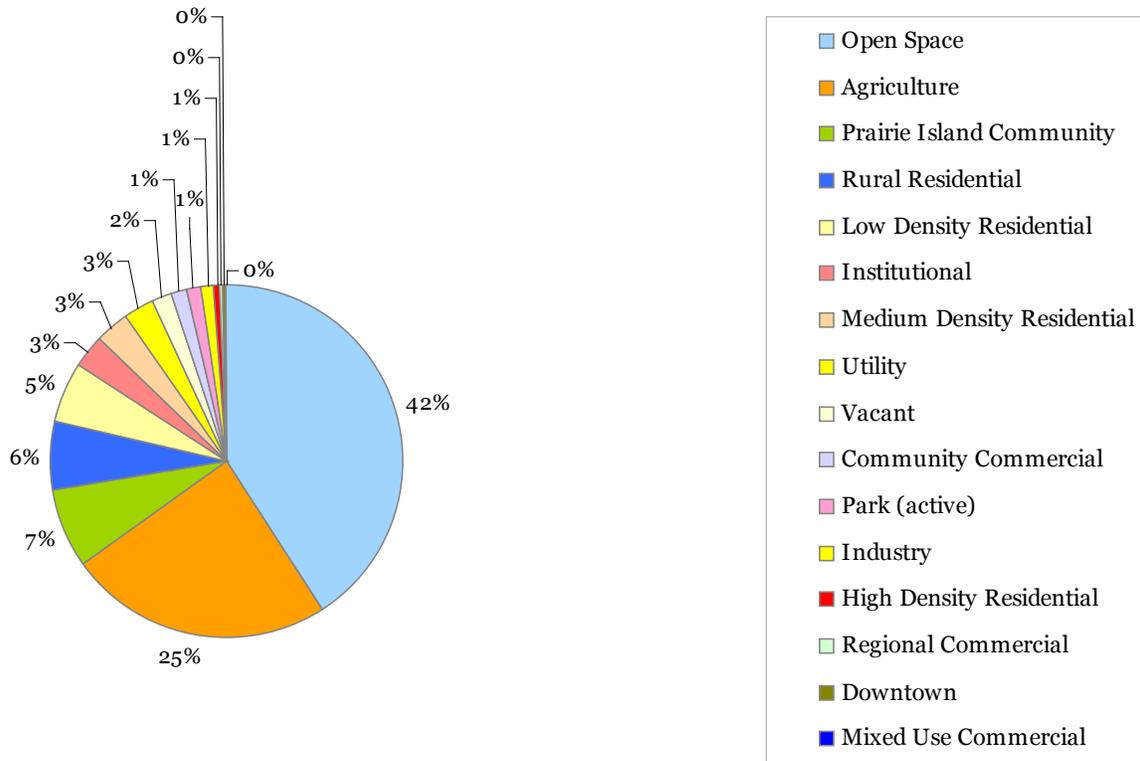
Sources:

Red Wing Comprehensive Plan
City of Red Wing Planning Department

¹ City of Red Wing Comprehensive Plan: Settlement Patterns, 2007



Red Wing Land Use Patterns



Land Use (in Acres)

| | |
|----------------------------|-------|
| Open Space | 9,260 |
| Agriculture | 5,500 |
| Prairie Island Community | 1,669 |
| Rural Residential | 1,433 |
| Low Density Residential | 1,246 |
| Institutional | 704 |
| Medium Density Residential | 700 |
| Utility | 636 |
| Vacant | 445 |
| Community Commercial | 322 |
| Park (active) | 314 |
| Industry | 228 |
| High Density Residential | 165 |
| Regional Commercial | 60 |
| Downtown | 34 |
| Mixed Use Commercial | 5 |



Acres of Cropland that Have Been Converted to Developed Land

Why was this indicator chosen?

Red Wing’s recent land use patterns of sprawl have created a more auto-dependent community. Concentrating new development within the core of the city will help to mitigate issues associated with sprawl.

What does it mean?

Since 1990, 560 acres of cropland have been converted into developable land.

Sources:

City of Red Wing Planning Department

| Years | 1990-1999 | 2000-2007 |
|------------------------|------------------|------------------|
| Acres Converted | 195 | 365 |



Dwelling Density

Why was this indicator chosen?

Dwelling density is a measure of sprawl – a recent land use pattern of communities across the county. Smart growth practices are more sustainable development and conservation strategies that help protect our natural environment and make our communities more attractive, economically stronger, and more socially diverse .¹

What does it mean?

Compared to the Community Development Pattern map of Red Wing, most recent development is less dense than the older and more compact development patterns of the City. It would be more sustainable for Red Wing to stop this sprawl pattern. See Appendix G for Dwelling Density map.

Sources:

City of Red Wing Planning Department

1 Environmental Protection Agency, <http://www.epa.gov/dced/basic_info.htm>



Open Space and Parkland

Why was this indicator chosen?

Parkland and open space provide recreation opportunities, control stormwater runoff, decrease crime, increase frequency of exercise, as well as resident interaction and property values .¹

What does it mean?

Since 1990, 560 acres of cropland have been converted into developable land.

Sources:

City of Red Wing Planning Department

| | 2008 |
|----------------------------|-------------|
| Parkland (in Acres) | 1,152 |

| | 2008 |
|--|-------------|
| Open Space Preserved (in Acres) | 9,265 |

¹ The Trust for Public Land: The Benefits of Parks, 2003. <http://lda.ucdavis.edu/LDA180.181L/parks_for_people_Jul2005.pdf>



Acreage of Land Used for Streets

Why was this indicator chosen?

Streets are impermeable surfaces which do not allow stormwater run-off to be filtered through the ground and natural environment. Too much impermeable surface creates flooding and does not allow stormwater to be filtered before entering the Mississippi River and other tributaries – thus increasing pollution levels in our waterways.

What does it mean?

There are currently 1,200 acres of land in Red Wing used for streets. This is 5.28% of total land area in Red Wing. It would be more sustainable for Red Wing for this number to increase minimally. Future development should be concentrated in areas with existing infrastructure.

Sources:

City of Red Wing Planning Department



Percentage of New Residential Lots outside ¼ Mile of City Services

Why was this indicator chosen?

New development located outside of city services increases infrastructure costs for the City to extend services and creates a sprawling development pattern that moves away from sustainability.

What does it mean?

There are 70 parcels outside of City services (measured by sewer mains) that have been platted since 1990, of which 38 single family homes currently reside. In order to support a more sustainable growth pattern, future development should be concentrated in existing areas where infrastructure exists. See Appendix H for Percentage of New Residential Lots outside ¼ Mile of Services map.

Sources:

City of Red Wing Planning Department



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COMMUNITY LIFE & HEALTH

Population

Why was this indicator chosen?

This indicator helps to assess community growth patterns.

What does it mean?

Red Wing is steadily growing, but slowly. The City annexed Burnside Township in 1970, accounting for a portion of the population growth from 1970 to 1980 shown in the graph below. Over the last decade there were some large percentage changes in the age make-up of the population in the City of Red Wing. The largest numeric and percentage gain occurred among people age 45 to 54 years old. This age group increased by 927 people, or more than 68%. An increase of 12.8% occurred among people age 35 to 44 years old, and an increase of 15.8% occurred in people age 55 to 64 years old. While the City experienced population growth among several of the defined age ranges, three age groups did experience a loss. The largest numeric loss occurred among people age 25 to 34 years old. This age cohort declined by more than 500 people, or nearly 21%. Smaller losses were also experienced in people age 20 to 24, and age 75 to 84.¹

Sources:

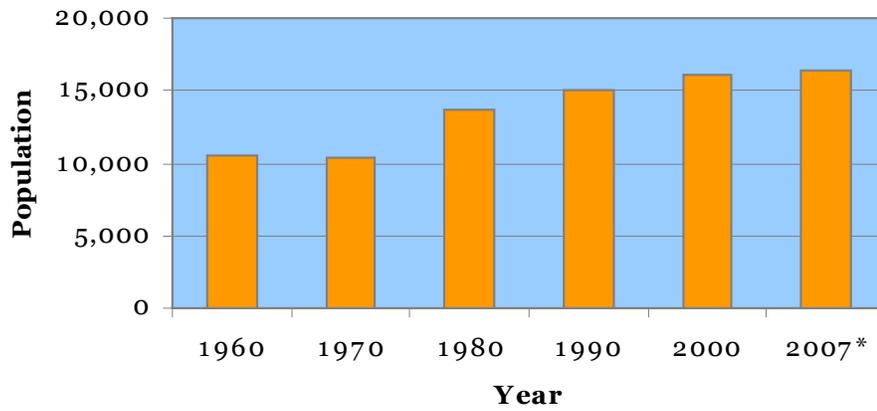
U.S. Census Bureau, www.census.gov

Minnesota State Demographic Center, <<http://www.demography.state.mn.us/>>

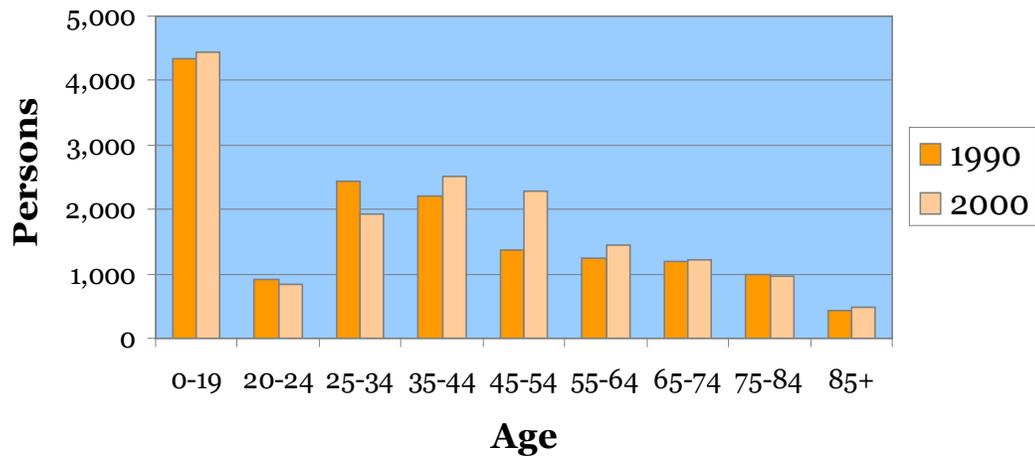
¹ Red Wing Housing Study, Short Elliot Hendrickson, 2003.



Red Wing Population



Population by Age



*Year 2007 is a population projection



Diversity

Why was this indicator chosen?

This indicator measures Red Wing's demographics in order to better accommodate Red Wing residents.

What does it mean?

According to the 2000 Census, around 6% of Red Wing's population was Non-white or Hispanic, though this population grew the fastest; the percentage doubled from 2.8% in 1990 to 6% in 2000. Half of Red Wing's population increase between 1990 and 2000 was Non-white or Hispanic and this trend is expected to continue. Minority households and minority students are steadily growing. This indicates Red Wing's need to accommodate a growing minority population.

Sources:

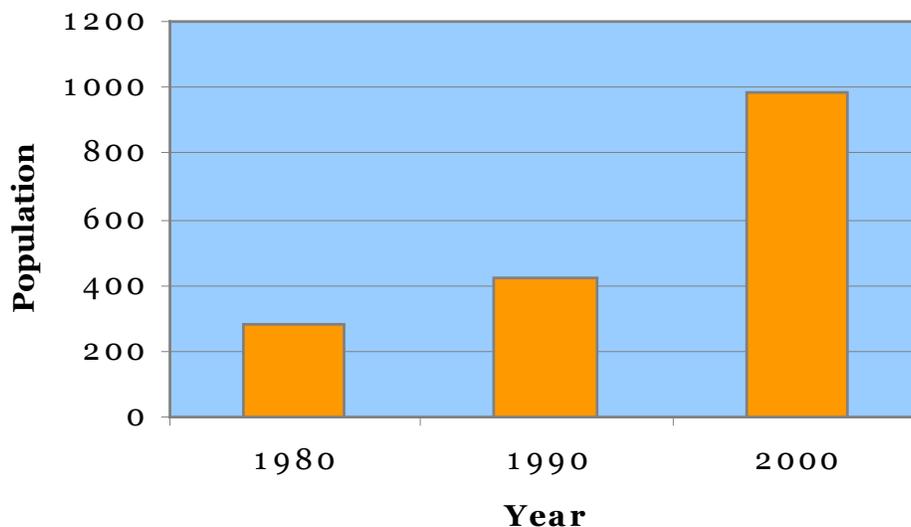
Children's Report Card: Measuring Minnesota's Progress. Minnesota Department of Administration. <<http://www.mnplan.state.mn.us/children/>>

U.S. Census Bureau, www.census.gov

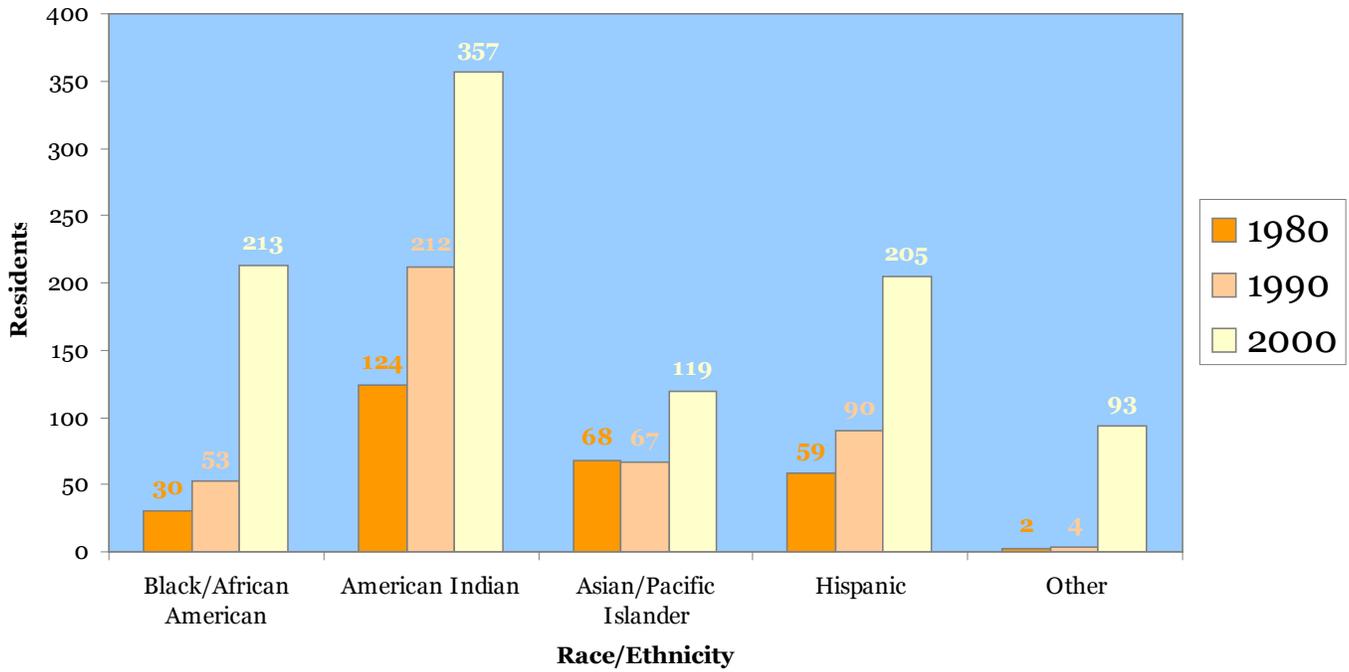
Red Wing Housing Study, Short Elliot Hendrickson 2003.

City of Red Wing Planning Department: Imagine Red Wing Community Trends, 2006.

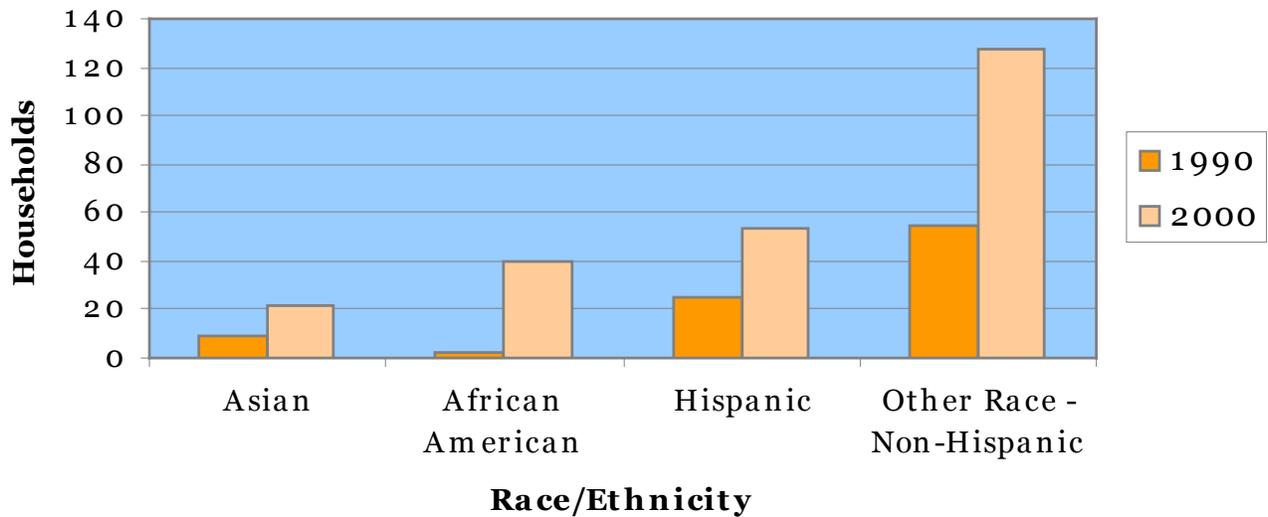
Total Minority Population



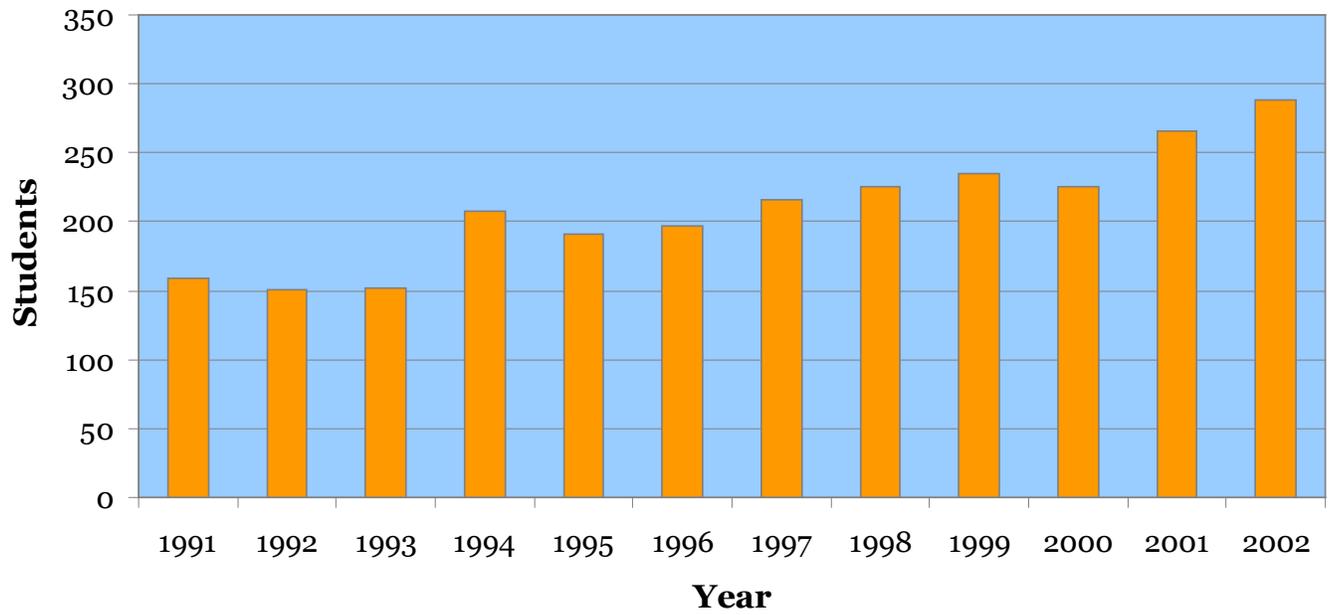
Minority Residents of Red Wing



Minority Households



Minority Students



Standardized Test Scores

Why was this indicator chosen?

Test scores measure students' proficiency in math and reading, an indication of how our students are doing in school.

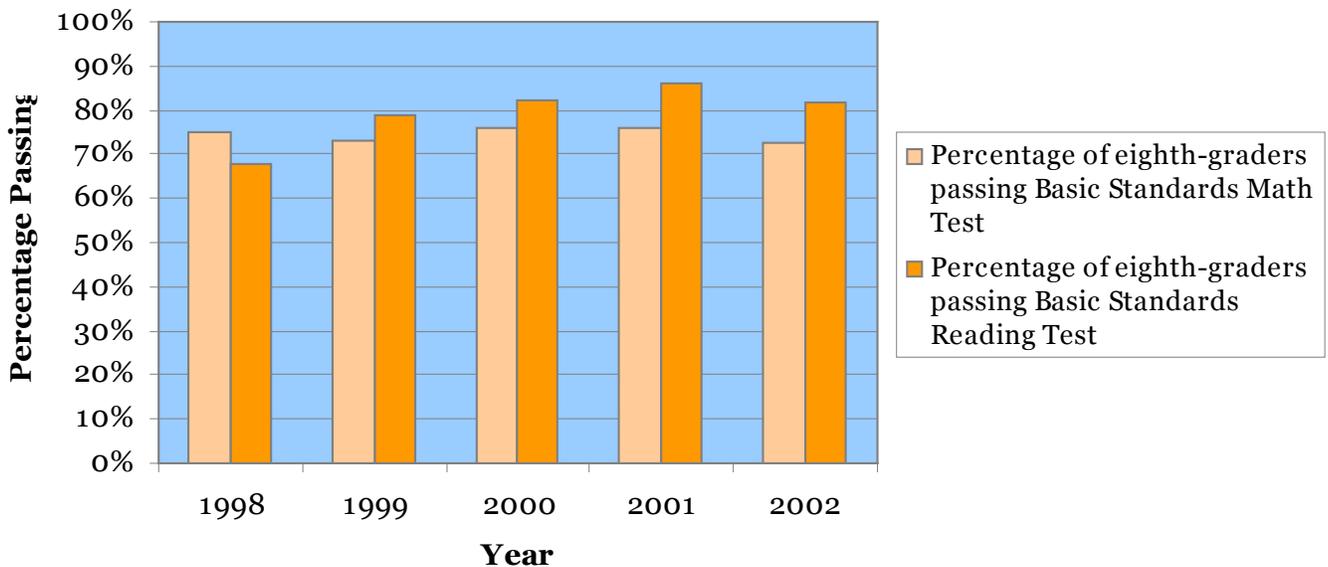
What does it mean?

The Red Wing School District basic standards testing indicates that math testing has remained steady from 1998 - 2002 (varied between three percentage points), while reading test scores increased 13.9% over the five year period.

Sources:

Children's Report Card: Measuring Minnesota's Progress. Minnesota Department of Administration. <<http://www.mnplan.state.mn.us/children/>>

Basic Standards Testing



High School Graduation Rates

Why was this indicator chosen?

A high school degree increases economic opportunity and prosperity.

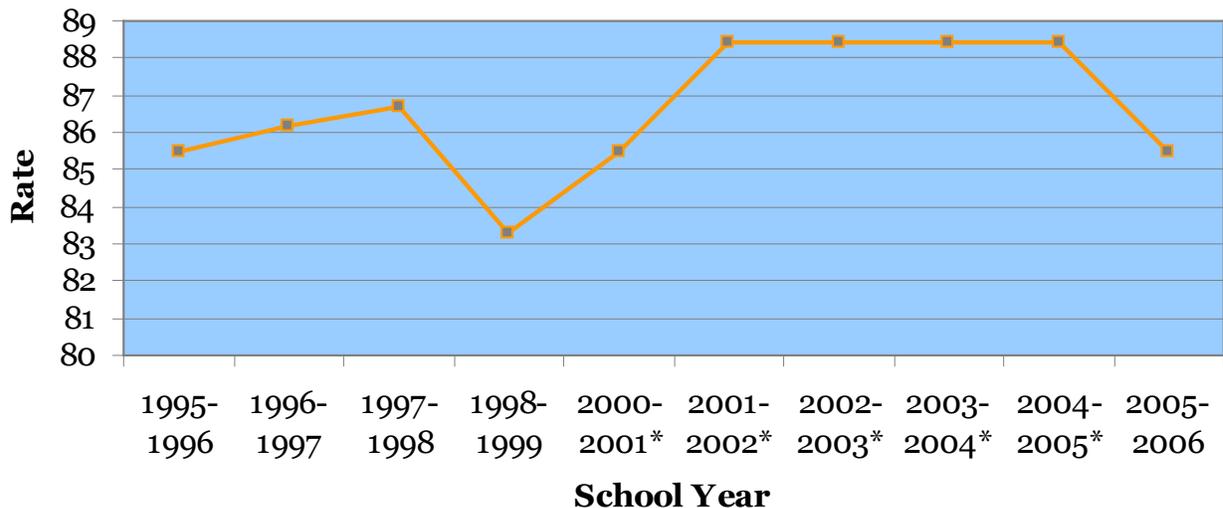
What does it mean?

Overall, Red Wing Senior High graduation rates are decreasing; between 1996 and 2006 graduation rates varied by five percentage points.

Sources:

Minnesota Department of Education, "Graduation Rates (and Completion Studies)". <http://education.state.mn.us/MDE/Data/Data_Downloads/Student/Graduation_Rates/index.html>

Red Wing School District High School Graduation Rates



*Years 2001–2005 are the averages from years 2000 – 2005, as they have been combined by the Minnesota Department of Education



School Enrollment

Why was this indicator chosen?

School funding depends largely upon student enrollment. Decreasing enrollments reduce funding for schools, which may have consequences on education quality by affecting class sizes and school supplies.

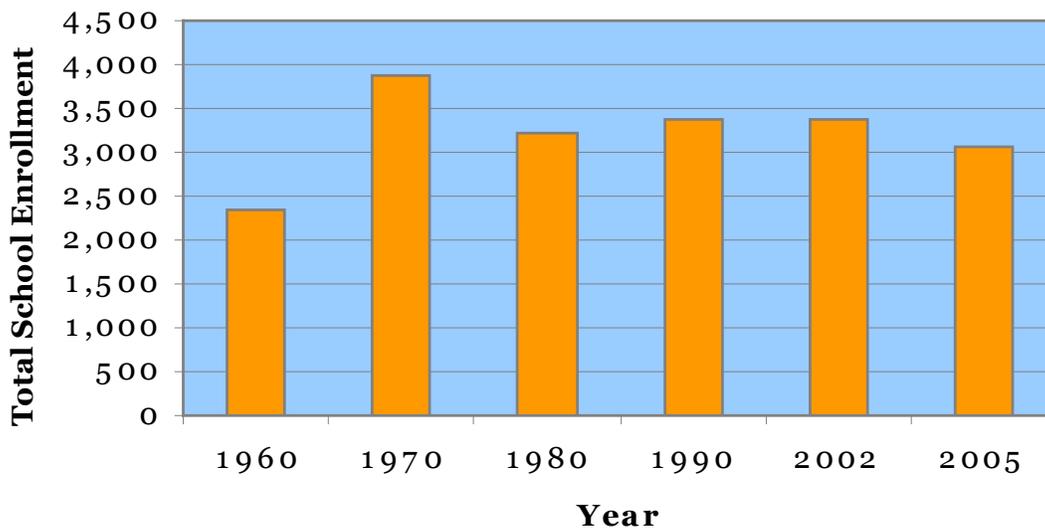
What does it mean?

School enrollment in the Red Wing School District¹ has been declining, causing serious school financing challenges due to the State of Minnesota funding formula that heavily weighs student population. These enrollment losses have recently leveled, allowing class sizes to be reduced at the elementary school, though class sizes are still too large at the secondary level.²

Sources:

City of Red Wing Planning Department: Imagine Red Wing Community Trends, 2006.

School Enrollment in the City of Red Wing



¹ Red Wing School District includes: Burnside Elementary, Colvill Family Education Center, Red Wing Area Learning Center, Red Wing HS ALC Day Program, Red Wing Middle Level Day ALC, Red Wing Senior High, Sunnyside Elementary, Tower View Opportunity Program ALC, and Twin Bluff Middle School

² Imagine Red Wing Community Trends, 2006.



Enrollment at Minnesota State College Southeast Technical – Red Wing Campus

Why was this indicator chosen?

Education levels are often associated with increased economic opportunity and prosperity. Community colleges offer affordable education to nearby residents and provide a well-trained workforce to the community and surrounding region.

What does it mean?

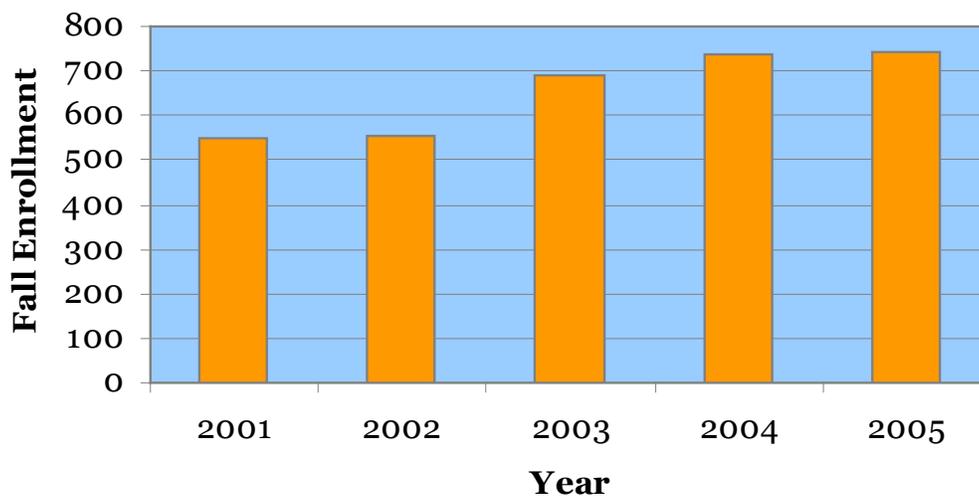
Enrollment has been steadily increasing from 2001 to 2005. There were 243 graduates in 2007. Between the Red Wing and Winona campus, 94% of graduates find jobs in their chosen field and 80% stay in the region.

Sources:

City of Red Wing Planning Department: Imagine Red Wing Community Trends, 2006.

Minnesota State College Southeast Technical 2007 Annual Report < <http://www.southeastmn.edu/pdfs/AnnualReport07.pdf>>

Enrollment at Minnesota State College Southeast Technical - Red Wing Campus



Education Attainment

Why was this indicator chosen?

Education levels are often associated with increased economic opportunity and prosperity.

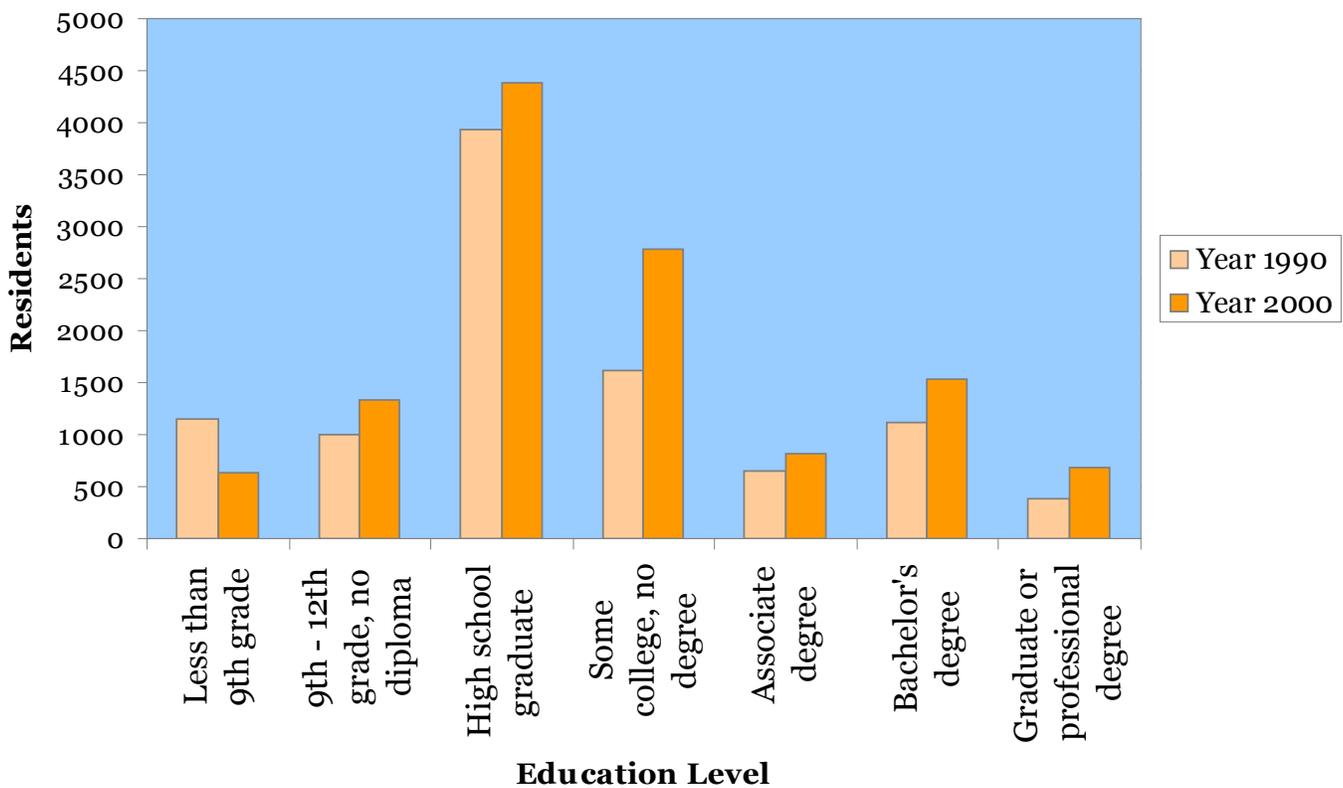
What does it mean?

Education attainment of Red Wing residents has increased in all levels of education.

Sources:

U.S. Census Bureau, www.census.gov

Education Attainment



Library Use

Why was this indicator chosen?

Public libraries provide access to information and technology while promoting literacy and life long learning to residents.

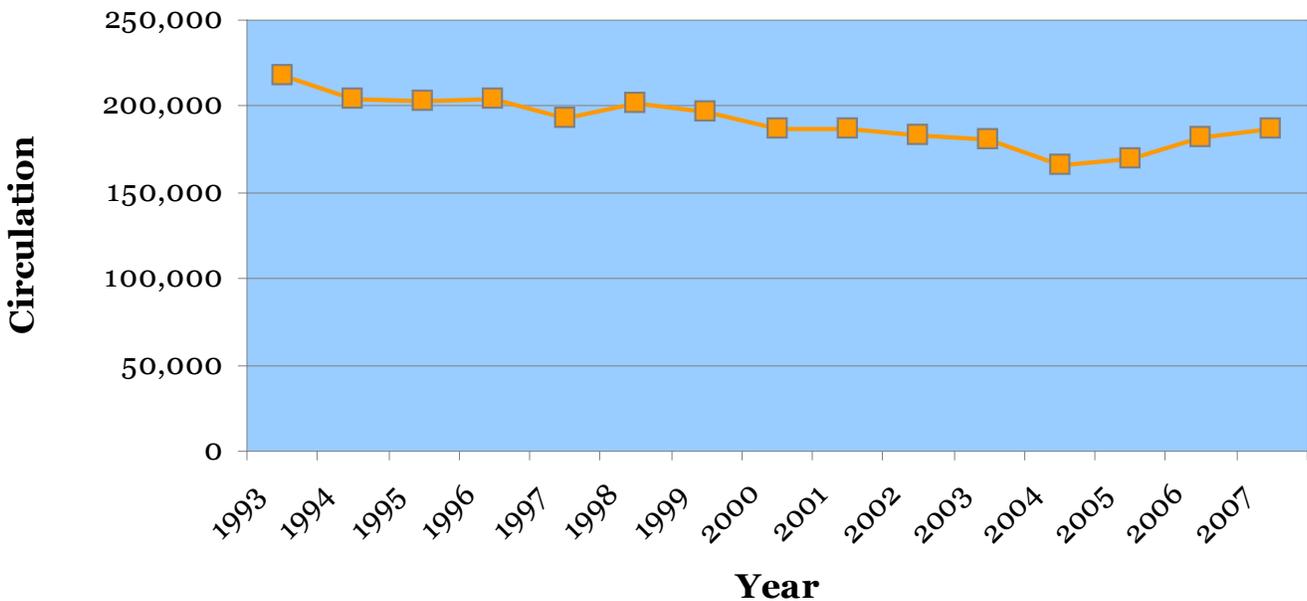
What does it mean?

Library book circulation fluctuates, but overall has stayed between 165,000 and 220,000 books in the past fifteen years. Circulation is down 13.9% since 1993, but has been increasing since 2004. These fluctuations may be attributed to a reduction in library hours (for a short duration around 2000) and changes in technology in the past decade.

Sources:

Red Wing Public Library

Library Circulation



Community Gardens

Why was this indicator chosen?

Community gardens provide fresh produce, increase resident interaction, reduce crime, and beautify the community .¹

What does it mean?

Not enough data to create a trend line. The Red Wing Community Garden Program is a recent initiative. The first Red Wing Community Garden was created in 2008.

Sources:

Red Wing Community Garden, <<http://rwcommgarden.freewebsite.org/>>

| Red Wing Community Garden Program | |
|--|-------------|
| | 2008 |
| Gardens | 1 |
| Plots | 50 |

1 The Green Institute, 2006 < http://www.gardenworksmn.org/Resources/multiple_benefits.pdf>



Farmers' Market

Why was this indicator chosen?

On May 11, 2007, the Red Wing Farmers Market Association was incorporated and on June 25 the City Council approved an agreement making the Association the manager of the Market with the City as a supervisory role. The Association has 36 members.¹

Buying locally is good for you, your community, and the environment. Locally grown products taste better and are more nutritious; since these foods do not travel very far, farmers can choose varieties based on flavor rather than on their ability to withstand a long journey to the market. Local farmers can offer more choices that are not likely to be mass marketed. Knowing who's growing your food is a powerful thing as it allows you to ask questions, and to make choices about how the products you purchase are grown or raised. Purchasing products from local farmers also keeps more money in the community. The average American dinner travels 1,500 miles before reaching the dinner plate and eating local food greatly reduces the consumption of fossil fuels and wasteful packing materials.²

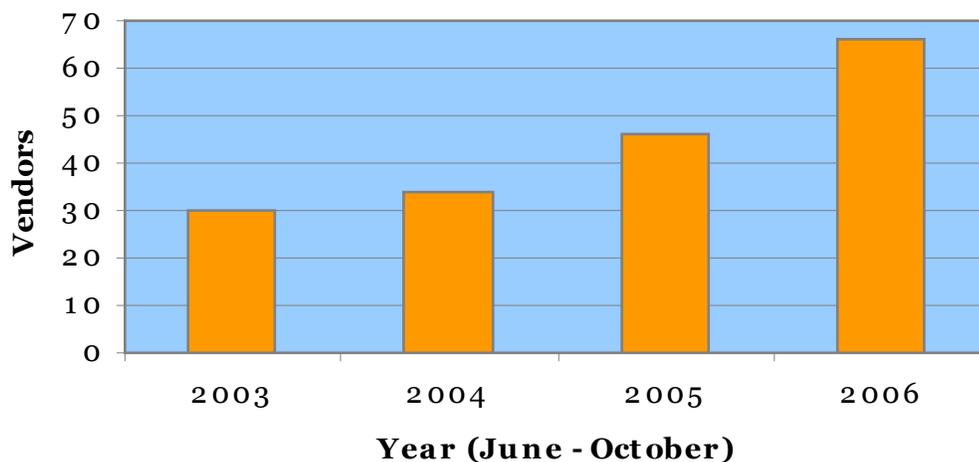
What does it mean?

The number of vendors participating in the Red Wing Farmers' Market has been steadily increasing from 2003 - 2006.

Sources:

Red Wing Farmers Market Association Market Report Summary 2007

Number of Individual Vendors Selling, 2003 - 2006



1 Red Wing Farmers Market Association Market Report Summary 2007

2 Minnesota Department of Agriculture: Minnesota Grown < <http://www.mda.state.mn.us/food/minnesotagrown/>>



Crime Rate

Why was this indicator chosen?

Public safety is vital to the health of a community.

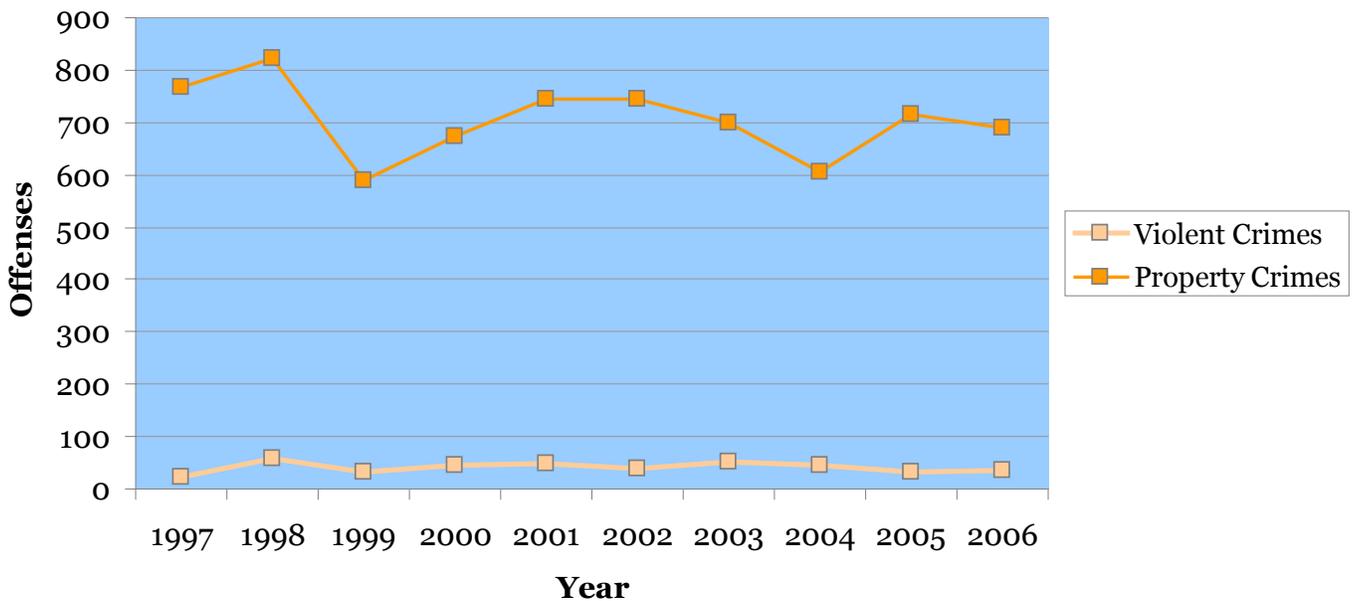
What does it mean?

Violent crimes include murder, rape, robbery, and aggravated assault (there is no data on murder rates from years 1997, 2000, 2002, 2003, and 2004; murder offenses for the remaining years stayed between 1 and 3). Property crimes include burglary, larceny, motor vehicle theft, and arson. Property crime has decreased since its peak in 1998, which had some of the highest cases of larceny and motor vehicle theft in that ten year period. Violent crimes have stayed relatively low and consistent.

Sources:

Minnesota Department of Public Safety: Uniform Crime Report, Bureau of Criminal Apprehension.
<<http://www.dps.state.mn.us/bca/CJIS/documents/Page-15-02.html>>

Crime Rates



National Night Out Participation

Why was this indicator chosen?

National Night Out is a national crime and drug prevention event with the intention of bringing residents together to increase crime and drug awareness, generate support for local crime prevention programs, and to strengthen police–community partnerships.¹

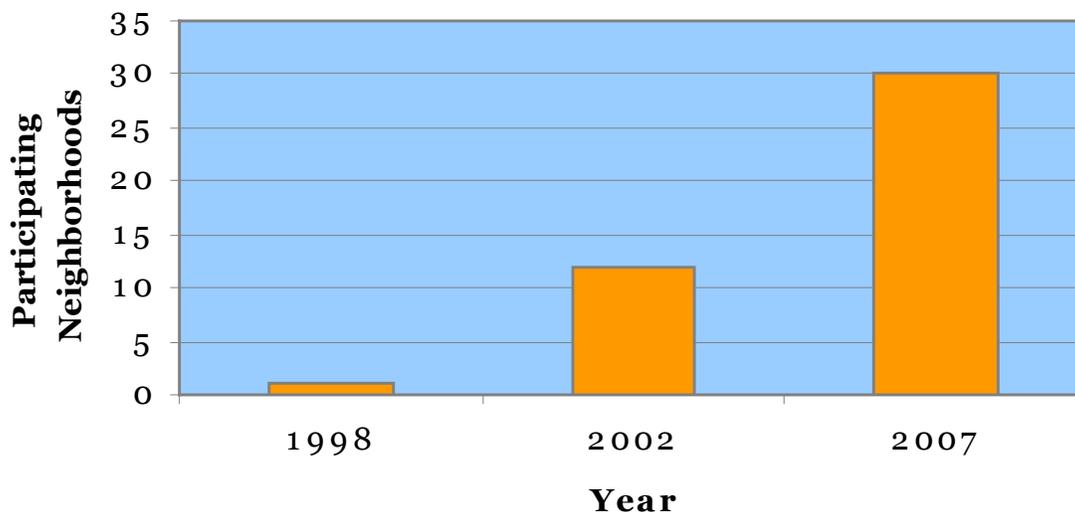
What does it mean?

Each year, more neighborhoods participate in Red Wing’s annual National Night Out Against Crime activities. The event began with just one neighborhood in 1998 and in 2007 had 30 participating neighborhoods. In 2008 there were 27 participating neighborhoods due to two neighborhoods that combined activities and one that dropped out.

Sources:

Red Wing Police Department

National Night Out



¹ National Night Out <www.nationaltownwatch.org>



Voter Participation

Why was this indicator chosen?

Voter participation is a measure of citizen involvement and political engagement in the community.

What does it mean?

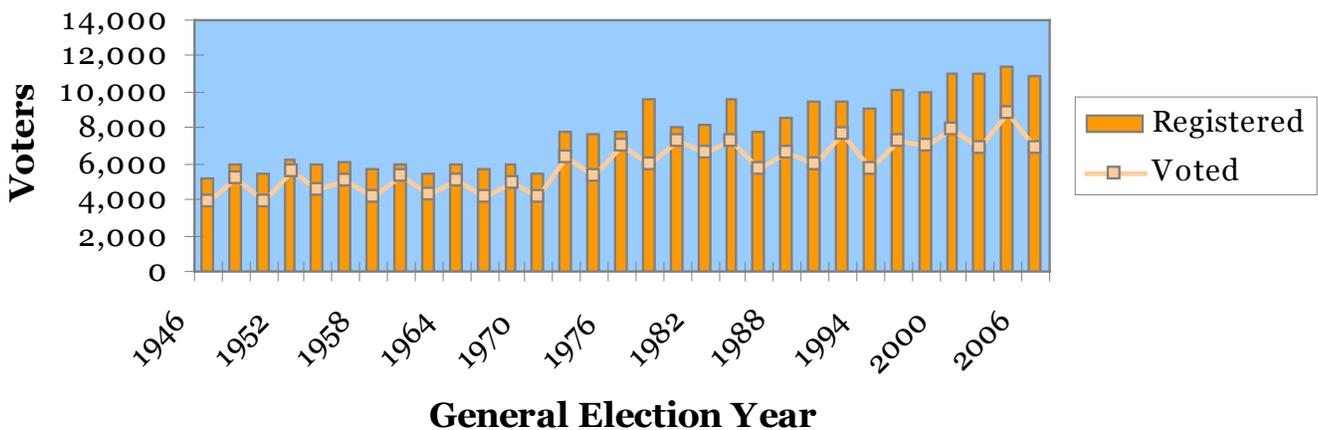
The first graph indicates the total number of registered voters as well as the number of registered voters that voted in scheduled elections; the second graph is the percent of registered Red Wing voters who vote in scheduled elections. The highest share of voters that voted in an election occurred in 1980 with 90.9%. In 2006 this share was only 63%. Turnout is typically higher during presidential election years. In 2000, 75% of registered voters voted in general elections in the state of Minnesota compared to 63% in Red Wing (the state measures most elections by voting-age, not registered voters). The state of Minnesota had the highest voter participation in the nation in 2004.

Sources:

City of Red Wing Administration Department

Minnesota Department of Administration: Minnesota Milestones <<http://www.mnplan.state.mn.us/mm/indicator.html?Id=34&G=34&CI=34>>

Voter Participation in General Elections



Health and Wellness: County Level

Why was this indicator chosen?

Health and wellness of residents is vital to community health.

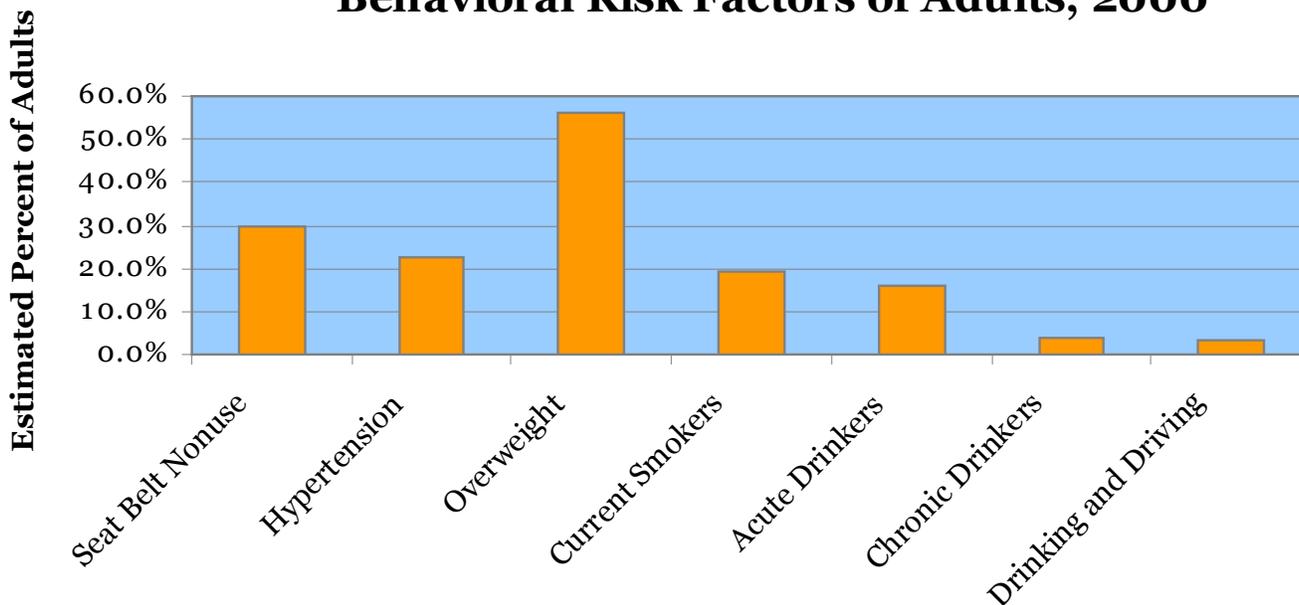
What does it mean?

Not enough data to create a trend line. The Community Health Council of Goodhue County has been working to better understand health issues and behavior risk factors for residents of the county. Red Wing has an older population (in 2000, 16.5% of the population was over the age of 65 compared to 12.2% for the State of Minnesota). It is difficult to obtain a measure of how much exercise residents are getting but one positive trend is that the Red Wing YMCA has increased its membership by 42% from 2000 to 2005. Although Red Wing's older age structure does have implications related to health risk, other factors are starting to be measured.¹

Sources:

City of Red Wing Planning Department Imagine Red Wing Community Trends, 2006.

Goodhue County: Morbidity and Utilization Behavioral Risk Factors of Adults, 2000



¹ Imagine Red Wing Community Trends, 2006.



Insurance Coverage

Why was this indicator chosen?

Adequate health care coverage is vital to the health of residents of a community.

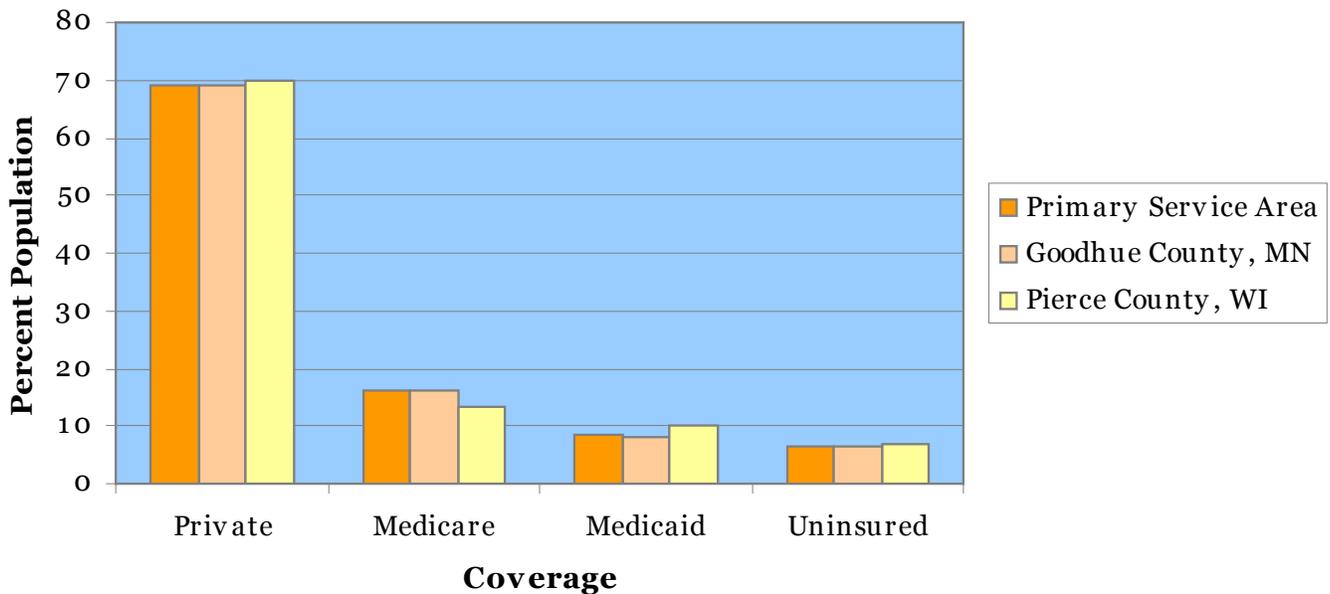
What does it mean?

Not enough data to create a trend line. The Fairview Red Wing Medical Center's Primary Service Area includes all of Red Wing and areas within Goodhue County of Minnesota and Pierce County of Wisconsin. About 6.5% of each service area was uninsured in 2007.

Sources:

Fairview Red Wing Medical Center

Insurance Coverage, Percent, 2007



Volunteer Rates

Why was this indicator chosen?

Volunteering builds community relationships and strengthens the community.

What does it mean?

Not enough data. The Goodhue County United Way has recently begun tracking volunteer rates (by numbers, agencies, and geography) and opportunities; this data will be available for future use.

Sources:

Goodhue County United Way



Percent of Babies Born at Low Birth Weight

Why was this indicator chosen?

An infant's weight at birth is one of the most important predictors of health and survival in the first year of life. Low birth weight is defined as less than 5 lbs 8 oz. Low birth weight infants are at least 20 times more likely to die than heavier babies and those who survive are more likely to suffer long-term illnesses, neurological and development disabilities.¹

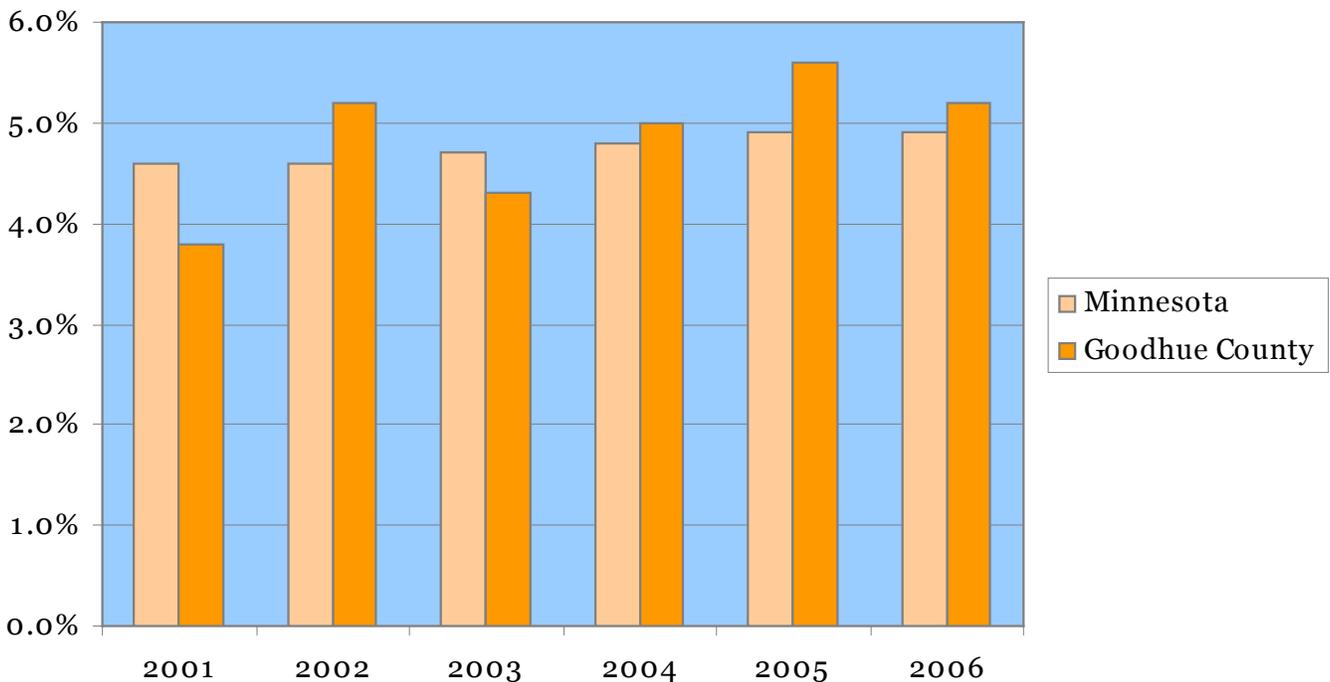
What does it mean?

Goodhue County has a similar percentage of babies born at low birth weight as the state (the county was only 0.3% higher than the state in 2006). The percent rose from under 4% in 2001 to over 5% in 2006. The State's goal is to have no more than 5% of all births at low birth weight annually.

Sources:

Minnesota Department of Health: Minnesota County Health Tables <<http://www.health.state.mn.us/divs/chs/countytables/>>

Percent of Babies Born at Low Birth Weight



1 Minnesota Department of Health



Community Access to Waterways

Why was this indicator chosen?

Community access to Red Wing waterways increases recreation opportunities and takes advantage of the aesthetics of the Mississippi riverfront.

What does it mean?

Not enough data to create a trend line. See Appendix I for Community Access to Waterways map.

Sources:

City of Red Wing Planning Department



Recreational Opportunities and Facilities

Why was this indicator chosen?

Recreation opportunities contribute to quality of life and the health and wellness of residents, beautify the community, and increase tourism in Red Wing.

What does it mean?

Not enough data to create a trend line. See Appendix J for Recreational Opportunities and Facilities map.

Sources:

City of Red Wing Planning Department





GOVERNMENT

Municipal Revenue Mix

Why was this indicator chosen?

Measuring municipal revenue sources shows the municipality's dependence on funding sources.

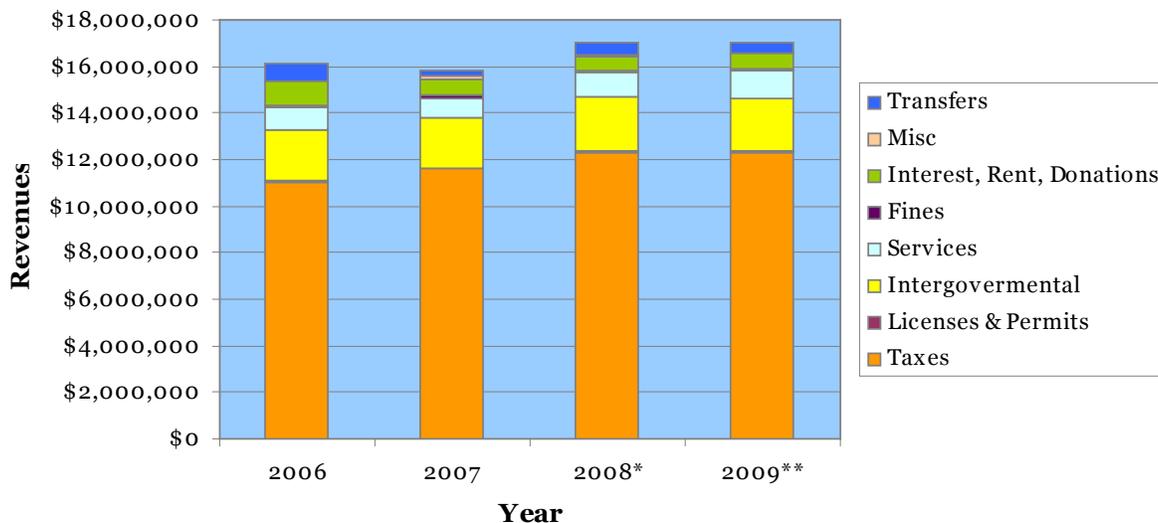
What does it mean?

The largest portion of municipal revenues comes from taxes. Taxes made up 68.6% of the total revenue mix in 2006 and are estimated to compose of 72.2% in 2009. Taxes were most recently 73.2% in 2007.

Sources:

City of Red Wing Finance Department, general fund only

Municipal Revenue Mix



Alternative Fueled Vehicles: City Fleet

Why was this indicator chosen?

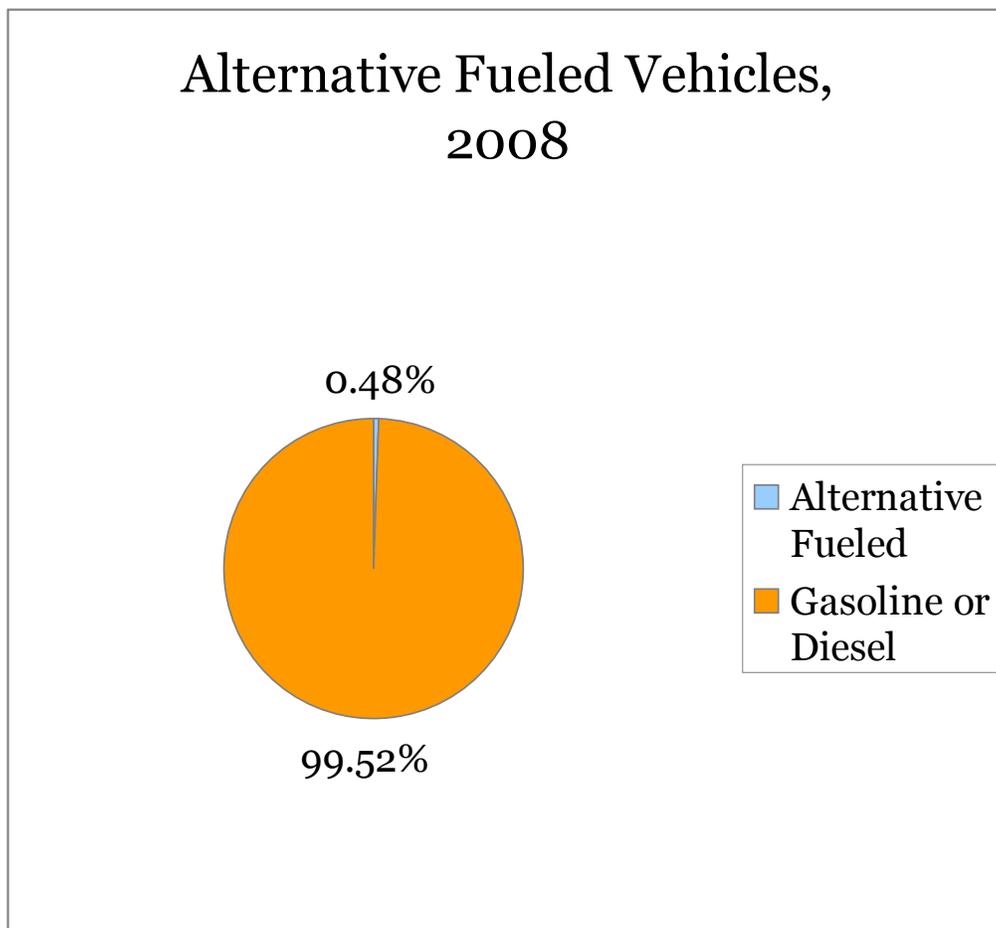
The City of Red Wing is making many efforts to become a more sustainable community by working to increase efficiency in many areas, including using more energy efficient vehicles in the City fleet.

What does it mean?

One hybrid car was purchased in 2008 (0.36% of the City fleet). Public Works hopes to purchase more in the future, including electric city vehicles and electric lawn mowers.

Sources:

Red Wing Public Works Department



Local Employment of City Staff

Why was this indicator chosen?

Residents that work in Red Wing generally have a shorter commute than those that work in other cities or counties, thus reducing emissions, auto dependency, and increasing quality of life.

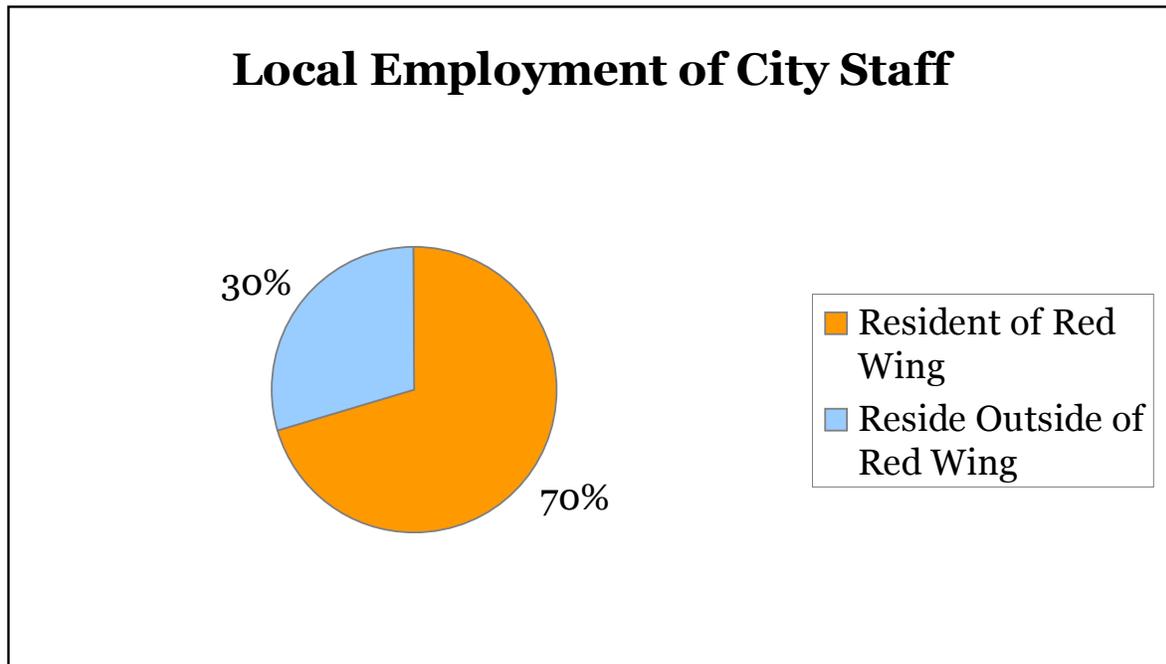
What does it mean?

Not enough data to create a trend line. This includes the City of Red Wing, Port Authority and Sheldon Auditorium employees and it does not include Paid-on-Call, Reserve or City Council people. In 2007 70% of City staff were local residents.

Sources:

City of Red Wing Employee Services

| | 2007 |
|---------------------------------|-----------------|
| City Staff Residing in Red Wing | 162 of 231: 70% |



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ENVIRONMENT

Air Quality

Why was this indicator chosen?

Air quality is important for all Minnesotans. The Minnesota Pollution Control Agency (MPCA) helps protect our air by monitoring and compiling emission inventories for air pollutants, making and enforcing laws to maintain air quality, and issuing permits to facilities to control air pollution.¹

What does it mean?

There are 17 emission sources located near the Solid Waste Boiler Facility². The steep decrease in emissions is attributed to pollution control equipment installation.

Sources:

Minnesota Pollution Control Agency

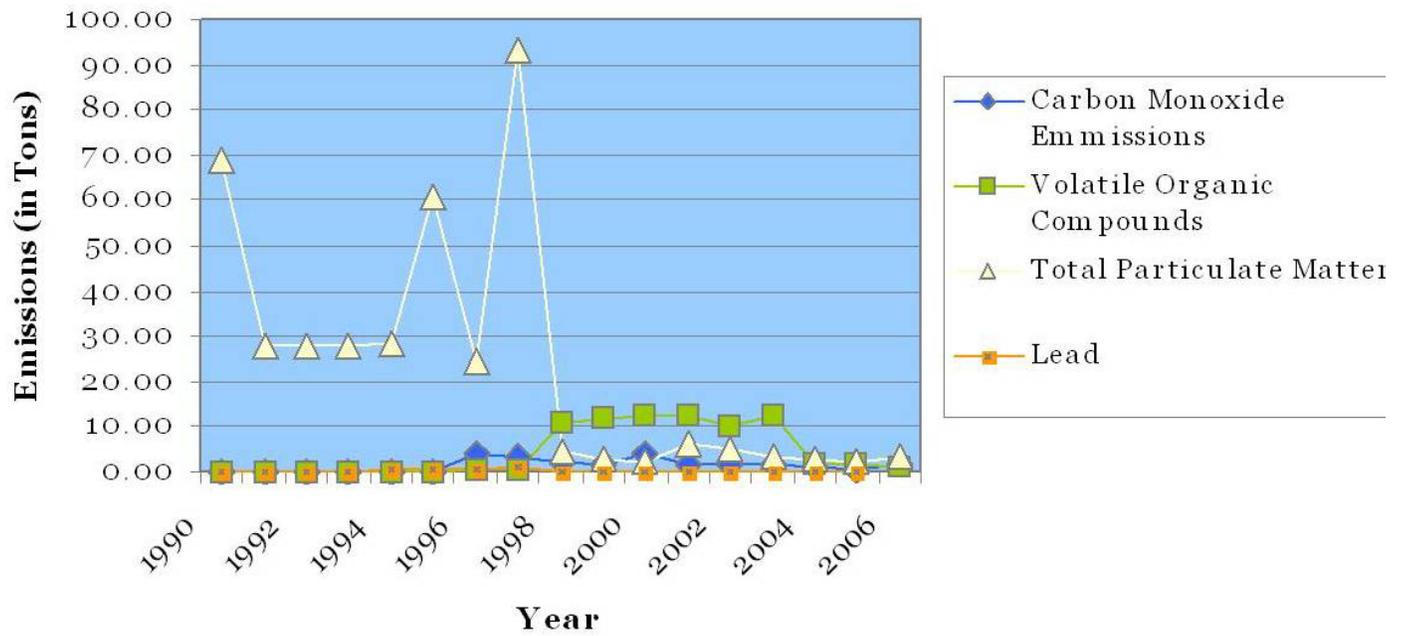
<<http://www.pca.state.mn.us/data/edaAir/pointResults.cfm?siteID=04900038&year=2005>>

1 Minnesota Pollution Control Agency <<http://proteus.pca.state.mn.us/air/index.html>>

2 They include: Archer-Daniels-Midland – Red Wing (ADM), Carlisle Power Transmission Products Inc., Cemstone Products – Red Wing, Eischen Cabinet Co., Froedtert Malt – Red Wing, Industrial Hardwood Products Inc., Jostens Inc. – Red Wing, Minnesota Correctional Facility, Minnesota Malting Company, Minnesota State College – SE Technical, NSP dba Xcel Energy – Red Wing, Red Wing Grain LLC, Red Wing Shoe Co. Inc. – Plant 1, Red Wing Shoe Co. Inc. Plant 2, Riviera Cabinets, SB Foot Tanning Co., and Xcel Energy – Prairie Island Nuclear.



Air Quality, Solid Waste Boiler Facility



Drinking Water Quality

Why was this indicator chosen?

Clean drinking water is a basic necessity of Red Wing residents.

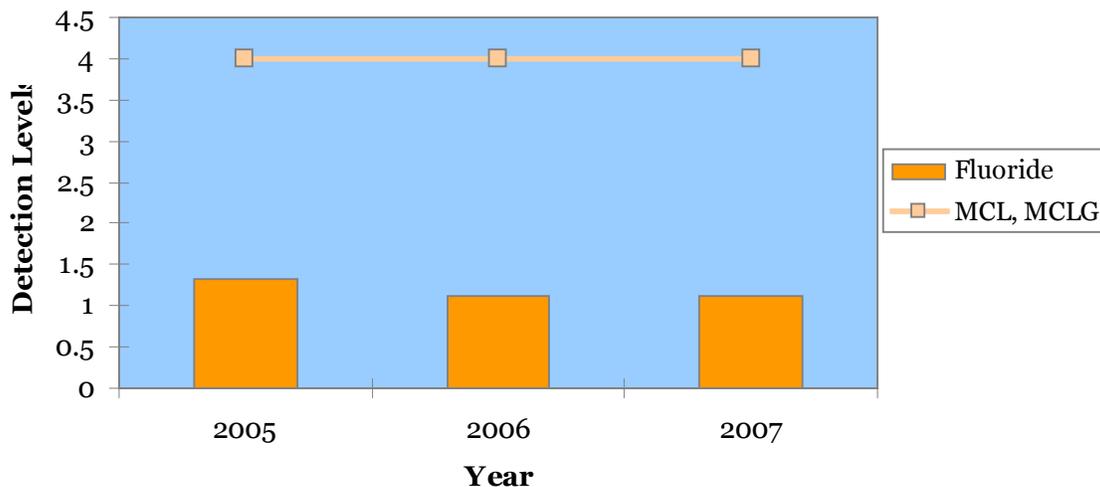
What does it mean?

Not enough data to create a trend line. Between 2005 and 2007 there were no unsafe levels of contaminants in Red Wing drinking water. Below are a few of the measures of water quality. Maximum Contaminant Level Goal (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health, MCLGs allow for a margin of safety, and Maximum Contaminant Level (MCL) is the highest level of a contaminant that is allowed in drinking water (MCLs are set as close to the MCLGs as feasible using the best available treatment technology).

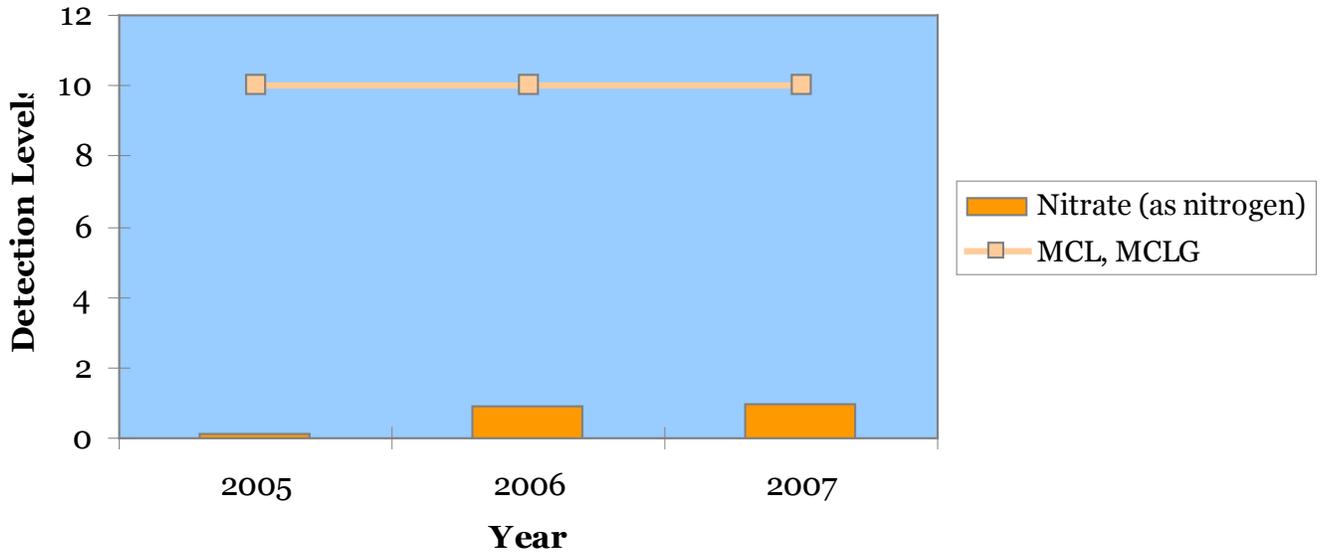
Sources:

City of Red Wing Report, The Current. June 2008, 2007, 2006

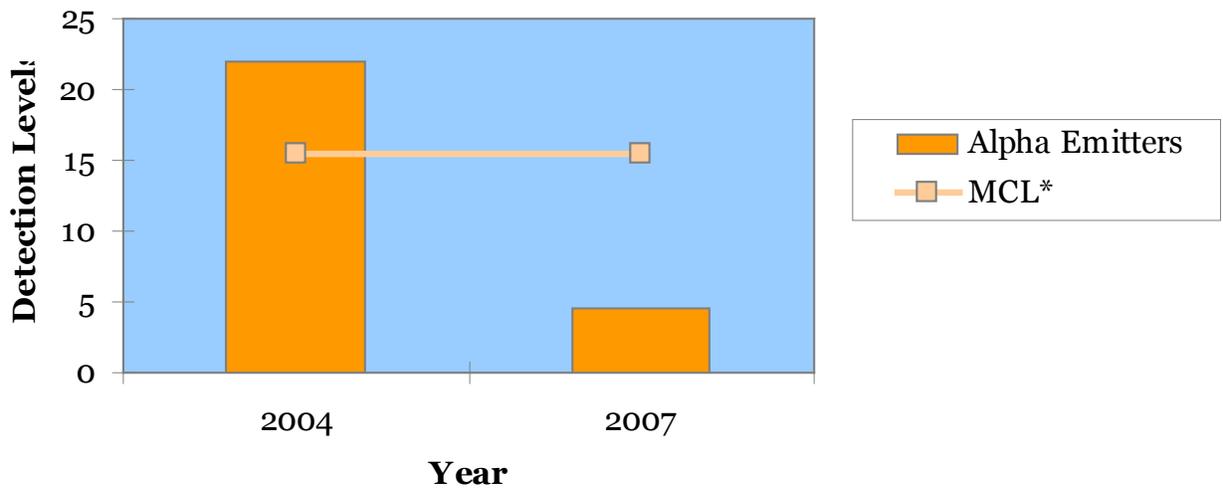
Fluoride Levels in Drinking Water



Nitrate Levels in Drinking Water



Alpha Emitters Levels in Drinking Water



Solid Waste Generation

Why was this indicator chosen?

Municipal solid waste management practices, such as source reduction, recycling, and composting, prevent or divert materials from the wastestream. The U.S. Environmental Protection Agency ranks environmentally sound strategies for municipal solid waste. Source reduction and reuse is the most preferred method, followed by recycling and composting, and, lastly, disposal in combustion facilities and landfills. Currently in the U.S., 32.5% is recovered and recycled or composted, 12.5% is burned at combustion facilities, and the remaining 55% is disposed of in landfills.¹

What does it mean?

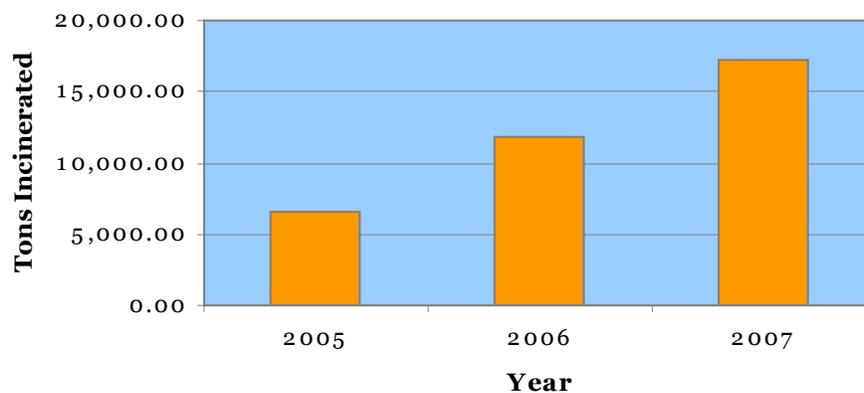
The solid waste management system serving Red Wing, and other areas of Goodhue County, is made up of several different facilities and involves the participation of several units of government as well as private commercial haulers serving the area. These facilities include a recycling center, a series of drop-off facilities, yard waste compost drop-off sites, a mobile household hazardous waste collection program, a waste-to-energy facility, and landfills for managing by-pass and reject wastes and incinerator ash.²

The Solid Waste Boiler Facility is a waste-to-energy facility that provides steam by-product to an adjacent company. The ash by-product created is then landfilled. Waste incineration of municipal solid waste can generate energy while reducing the amount of waste by up to 90% in volume and 75% in weight.³

Sources:

City of Red Wing Solid Waste Department

Solid Waste Incineration



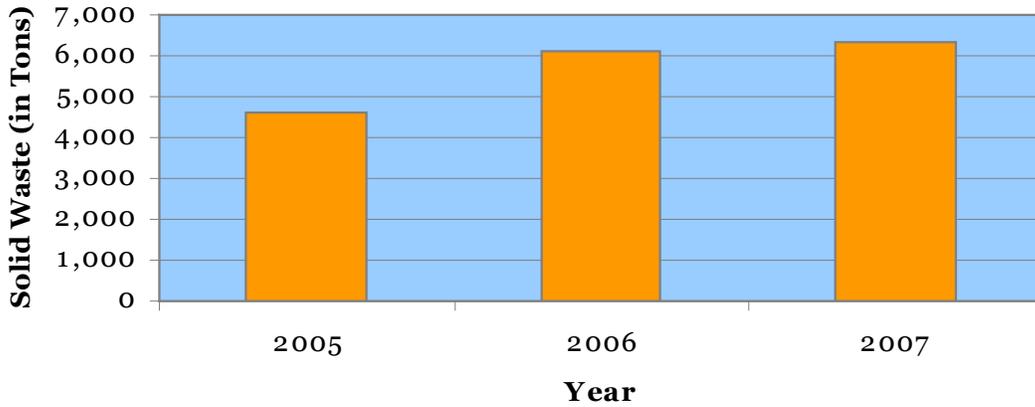
1 U.S. Environmental Protection Agency < <http://www.epa.gov/msw/facts.htm>>

2 Front End Processing Facility Feasibility Study for the City of Red Wing, 2001.

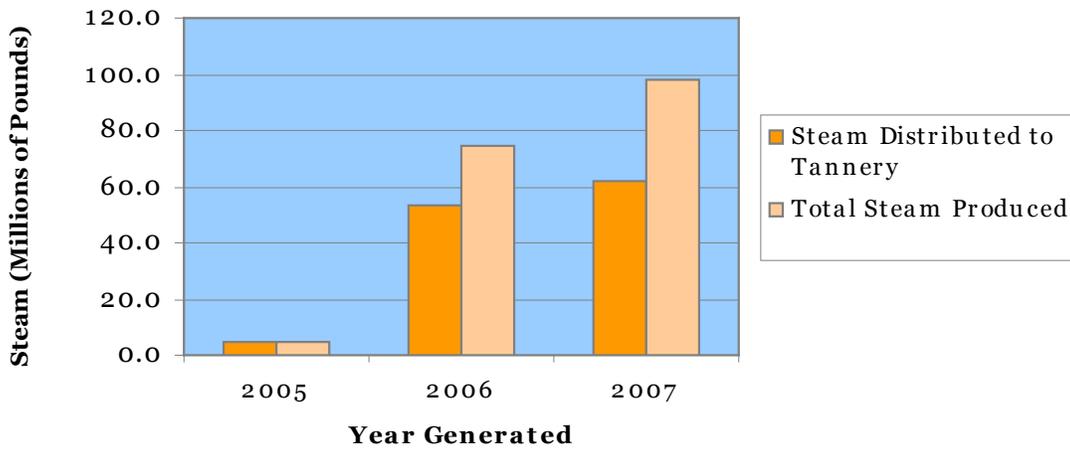
3 U.S. Environmental Protection Agency < <http://www.epa.gov/msw/facts.htm>>



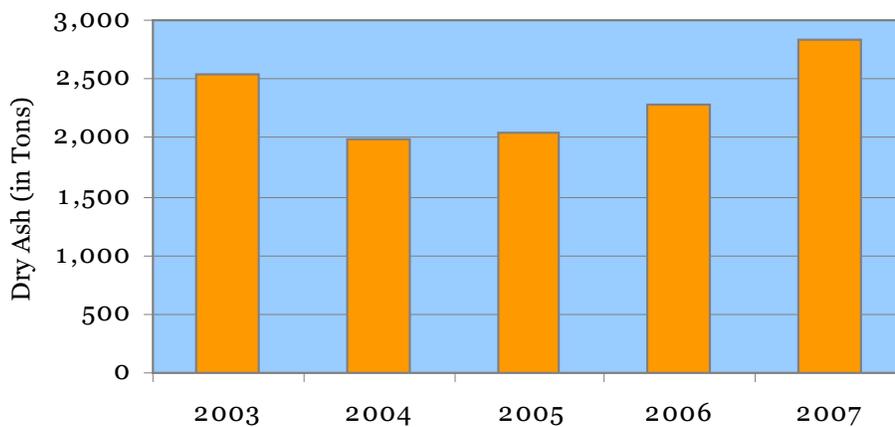
Red Wing Municipal Solid Waste Incineration



Steam Generated by Solid Waste Boiler Facility



Dry Ash By-Product from Waste Boiler Facility



Recycling Rate

Why was this indicator chosen?

Recycling reduces the amount of waste in landfills, reduces energy, and saves natural resources.

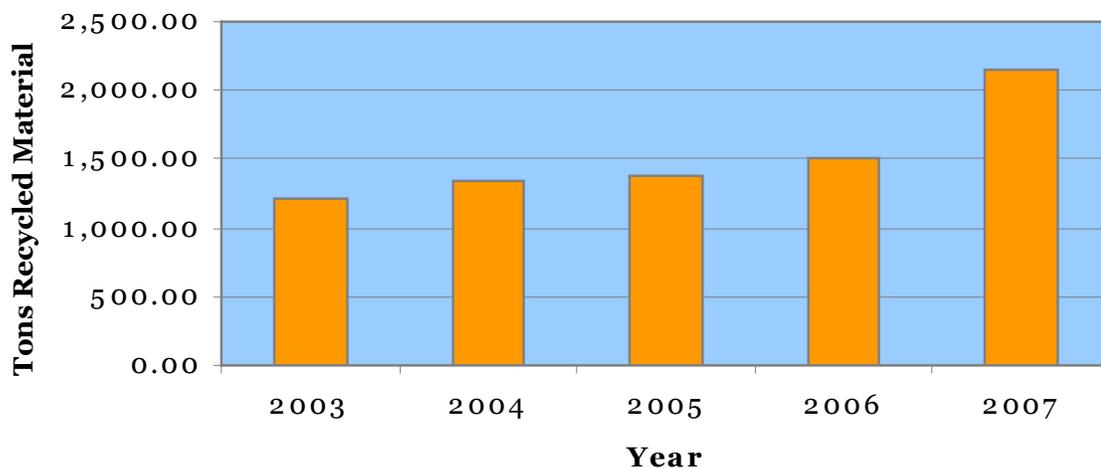
What does it mean?

Private haulers and the City of Red Wing provide curbside collection of recyclables. Materials collected include several grades of paper, aluminum cans, steel cans, glass, and plastics.¹ Both recycling and incineration of solid waste are increasing. A two-week study by the City of Red Wing Public Works Department found that 50% of Red Wing households recycle. This meets the Department's goal for 2008.

Sources:

City of Red Wing Solid Waste Department
City of Red Wing Public Works Department

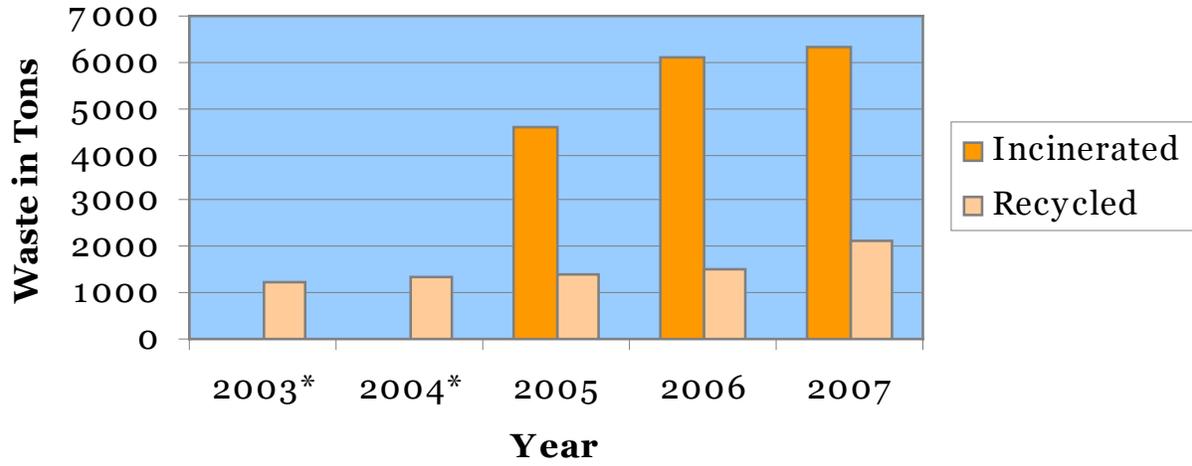
Recycling Rates



1 Front End Processing Facility Feasibility Study for the City of Red Wing, 2001.



Solid Waste



* No data on incinerated materials in 2003 and 2004



Composting Programs

Why was this indicator chosen?

The City of Red Wing provides a community yard waste compost site. The quality of incoming material and the entire composting process is monitored. The resulting compost is available to residents.¹ Composting keeps yard waste out of landfills and enriches soil.

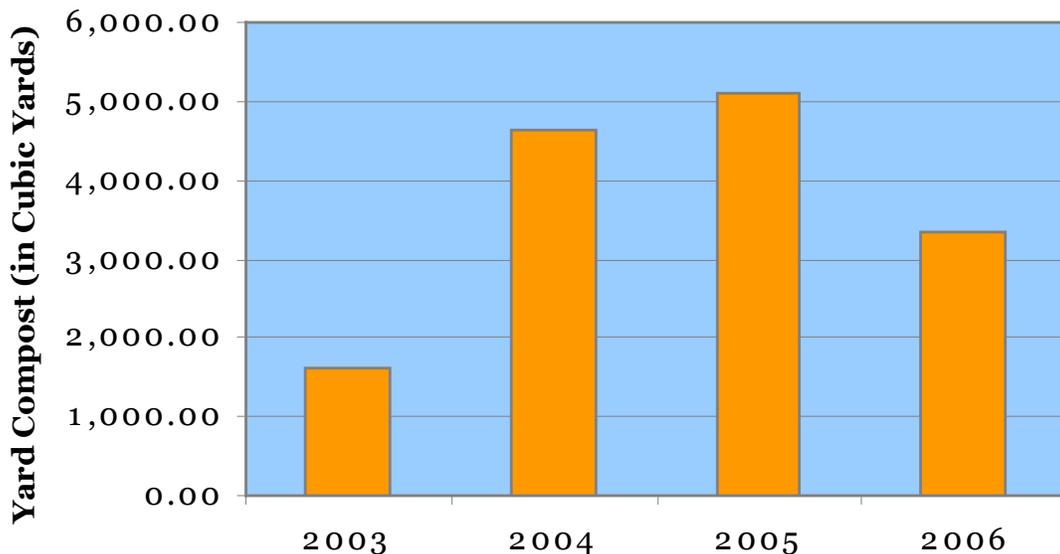
What does it mean?

Composting has varied from 1,500 cubic yards to over 5,000. Total yard waste composted peaked in 2005 at 5,091 cubic yards to 3,336 cubic yards in 2006. Variations may be due to inconsistencies in data collection.

Sources:

City of Red Wing Public Works Department

City of Red Wing Yard Compost



¹ Front End Processing Facility Feasibility Study for the City of Red Wing, 2001.



Energy Use by Sector and Fuel Type

Why was this indicator chosen?

Energy use depletes natural resources. It would be more sustainable for Red Wing to decrease its total energy use and increase the use of renewable energy sources.

What does it mean?

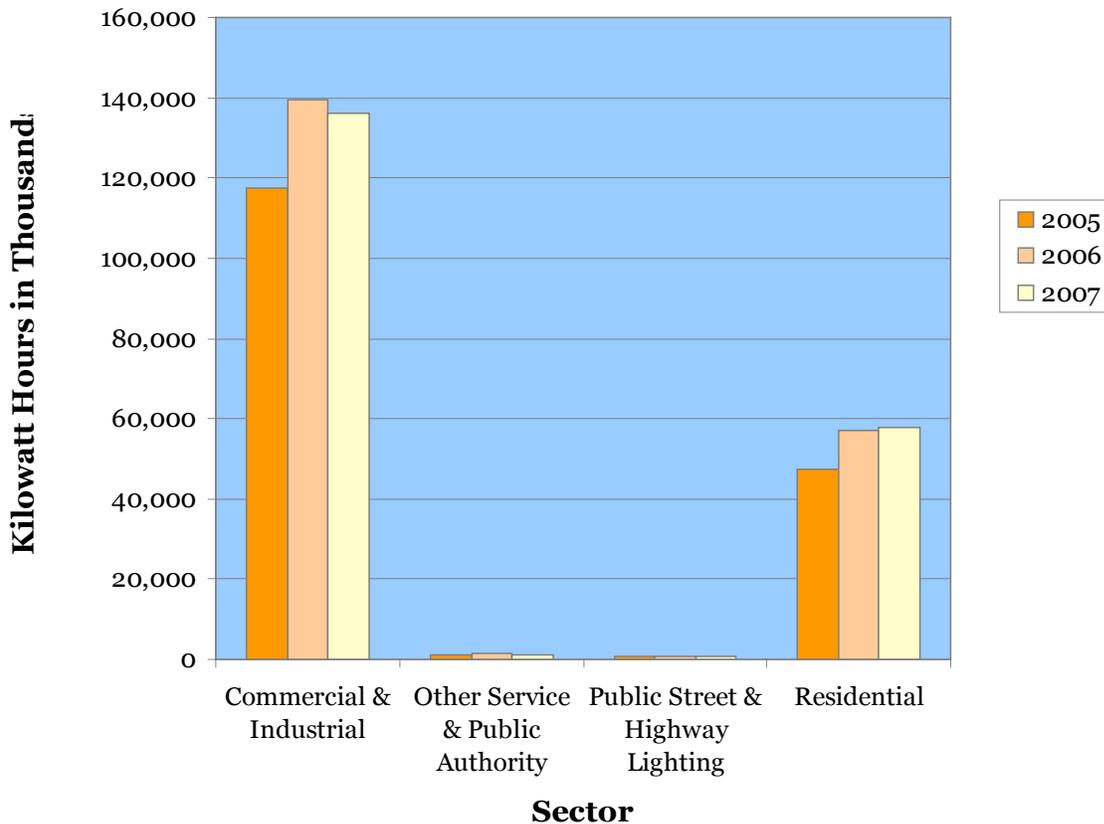
It is difficult to obtain a trend line for energy use due to only three years of data available, as Xcel Energy data prior to 2005 is incomplete. However, in June 2008 there were 54 residential customers participating in the Windsource Program, a clean renewable wind energy generated from Minnesota wind farms. A proposed indicator for future data collection is the comparison of renewable energy use to non-renewable.

Sources:

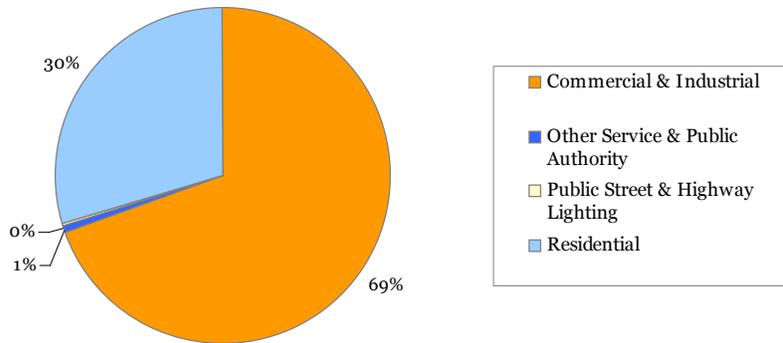
Xcel Energy, Red Wing

For more information on Xcel Energy's Windsource Program: http://www.xcelenergy.com/XLWEB/CDA/0,3080,1-1-2_41004_11612-3320-5_502_924-0,00.html

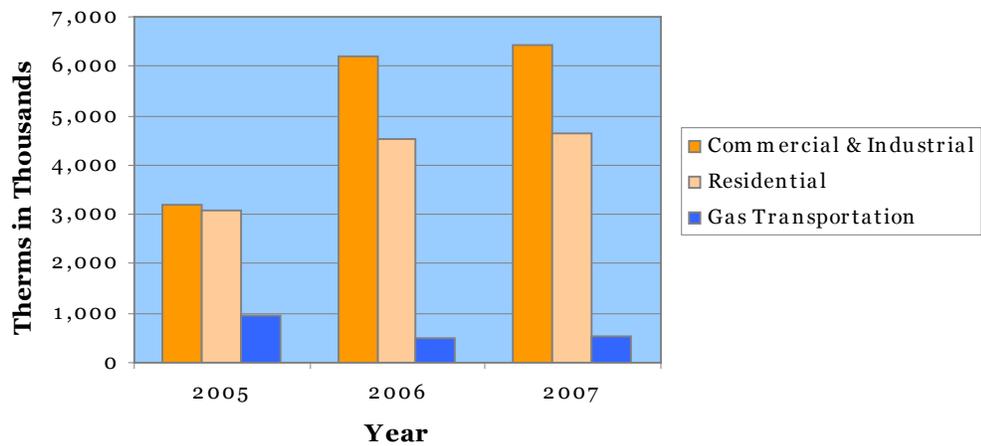
Electricity Consumption in Red Wing



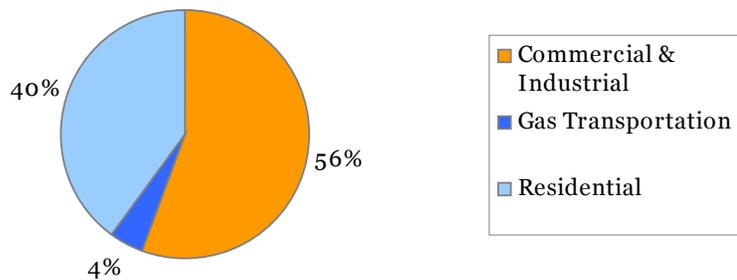
2007 Electric Energy Consumption in Red Wing



Natural Gas Consumption in Red Wing



2007 Natural Gasoline Consumption in Red Wing



Impervious Surfaces

Why was this indicator chosen?

Impervious surfaces such as roads, parking lots, and driveways increase stormwater runoff. This increases the speed of runoff, not allowing water to be absorbed into the ground while polluting waterways and increasing erosion.

What does it mean?

Not enough data to create a trend line. The 462 acres of pavement and gravel make up 2% of Red Wing's total land area. In increase in impervious surface would be a trend away from sustainability.

Sources:

City of Red Wing Planning Department

| | 2007 |
|----------------------------|-------------|
| Pavement (in Acres) | 326 |
| Gravel (in Acres) | 136 |



Brownfield Sites

Why was this indicator chosen?

Brownfield sites are known and potential sources of soil and ground water contamination.

What does it mean?

Not enough data to create a trend line. There are 19 brownfield sites in Red Wing. This includes five Permitted Solid Waste, nine Voluntary Investigation and Cleanup, one State Superfund, two Unpermitted Dump, and two NRAP¹. These sites are listed in the table below. See Appendix K for a map of Brownfield Sites.

Sources:

Minnesota Pollution Control Agency

¹ Permitted Solid Waste (SW) sites include facilities that manage solid waste (household or business garbage). Among the types of facilities included are landfills, transfer stations, demolition landfills, composting facilities and solid waste incinerators. For more information about SW permits, call the MPCA at 218-846-0470.

The Voluntary Investigation and Cleanup (VIC) Program allows buyers, sellers, developers or local governments to voluntarily investigate and, if necessary, clean up contaminated land to facilitate its sale, financing or redevelopment. Voluntary parties that complete investigation and/or cleanup activities under MPCA oversight can receive liability assurances that protect them from future Superfund liability. In some cases, the MPCA may use Institutional Controls as part of the overall site remedy and to notify interested parties of any property use conditions or restrictions. For more information, visit the VIC Program page. Or, contact the MPCA VIC Program at 651-296-7212.

State Superfund sites, also referred to as or Permanent List of Priorities (PLP) sites, are those the state intends to investigate and cleanup under the Minnesota Superfund Program. Known or suspected environmental contamination threatens public health, welfare or the environment at PLP sites. These sites include those addressed by the MPCA, as well as sites with agricultural chemical contamination which are addressed by the Minnesota Department of Agriculture. For more information, visit the MPCA Superfund Program page.

The list of Unpermitted Dump Sites was created in the 1980's and was originally called the Open Dump Inventory (ODI). Sites maintained in this list were later referred to as Outstate Dump Inventory (ODI) and Metro Dump Inventory (MDI) sites. Because these sites are no longer open the name has been changed to Unpermitted Dump Sites and contains dump sites for the entire state. Included in the list are abandoned dumps, demolition sites, tree disposal sites, industrial dumps and other dumps. Most of these sites existed prior to the creation of the MPCA in 1967, and detailed information about them is not generally available. When these sites are investigated and found to present a risk to human health or the environment, they are moved into the appropriate cleanup program. For more information, contact the MPCA at 651-297-5177, or toll-free at 1-800-657-3864.

NFRAP, or "No Further Remedial Action Planned" sites, are the sites that have been removed from the CERCLIS list by the U.S. Environmental Protection Agency. These sites are no longer considered a federal concern, and most are also a low priority for the state. For more information, contact the MPCA at 651-296-6139, or toll-free at 800-657-3864.

Minnesota Pollution Control Agency <<http://www.pca.state.mn.us/backyard/neighborhood.html#data>>



Permitted Solid Waste

NSP - Prairie Island Resin Disposal Site, NSP - Red Wing Ash Disposal Facility, Fluegar Transfer & Recovery, USG Interiors Corp, USG Interiors Inc - Red Wing

Voluntary Investigation & Cleanup

Central Research Lab - Highway 19, Target - Red Wing, River Town Publishing Group, Hay Creek Site, Plaas Sheet Metal - Opportunity Services, River Bluff Cleaners, CPR - Red Wing, Red Wing Gas Mfg Site, Red Wing Block 23 & 24

State Superfund

SB Foot Tanning Company

Unpermitted Dump

City of Red Wing Dump, Red Wing Concrete Dump

NFRAP

Industrial Harbor San Landfill, Red Wing Land Disposal Facility



Impaired Waters

Why was this indicator chosen?

All of the land of Red Wing eventually drains to the Mississippi River. Three major streams drain the Red Wing area in a southwesterly to northwesterly direction: the Cannon River, Hay Creek, and Spring Creek.¹

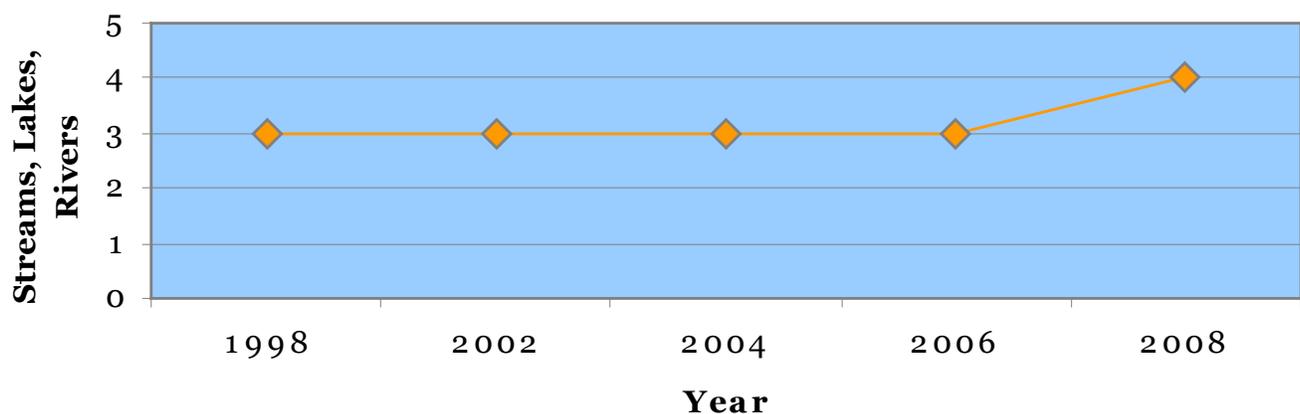
What does it mean?

In 2008 there were three streams or rivers near or within Red Wing assessed by the Minnesota Pollution Control Agency as impaired due to turbidity. These include Hay Creek, Spring Creek, the Cannon River, and portions of the Mississippi River north, south, and within Red Wing. For all years listed by the MPCA (1998, 2002, 2004, 2006, and 2008), Lake Pepin has been listed as impaired for all of them. There was a peak of four impaired waters in or near Red Wing in 2008, compared to three in previous years. See Appendix L for Impaired Waters map from the Minnesota Pollution Control Agency.

Sources:

Minnesota Pollution Control Agency. Total Maximum Daily Loads (TMDL) Archived Information. Rivers and Streams – Conventional Impairments: Lower Mississippi River Basin, Eutrophic Lakes: Lower Mississippi River Basin. <<http://www.pca.state.mn.us/water/tmdl/tmdl-archives.html#2008>>

Impaired Waters in or Near Red Wing



1 City of Red Wing Watershed Management Plan, 2003. Barr Engineering Company.



| 1998 | 2002 | 2004 | 2006 | 2008* |
|--|--|---|--|---|
| Lake Pepin (eutrophic - impaired by excessive nutrients) | Lake Pepin (eutrophic - impaired by excessive nutrients) | Lake Pepin (eutrophic - impaired by excessive nutrients) | Lake Pepin (eutrophic - impaired by excessive nutrients) | Lake Pepin (eutrophic - impaired by excessive nutrients) |
| Areas of the Mississippi River north and south of Red Wing, as well as portions within Red Wing (ammonia, turbidity) | Areas of the Mississippi River north and south of Red Wing, as well as portions within Red Wing (ammonia, turbidity) | Areas of the Mississippi River north and south of Red Wing, as well as portions within Red Wing (Turbidity) | Areas of the Mississippi River north and south of Red Wing (Turbidity) | Areas of the Mississippi River north and south of Red Wing, as well as portions within Red Wing (Turbidity) |
| Cannon River north of Red Wing (Fecal Coliforms, Turbidity) | Cannon River north of Red Wing (turbidity) | Cannon River north of Red Wing (Turbidity) | Cannon River north of Red Wing (Turbidity) | Hay Creek (Turbidity) |
| | | | | Spring Creek (Turbidity) |

*2008 draft



Stormwater Management

Why was this indicator chosen?

Stormwater management regulations provide the City of Red Wing with the authority and tools to promote, preserve, and enhance Red Wing's natural resources and protect them from the adverse effects of poorly sited developments or incompatible activities. The regulations' required runoff, erosion, and sediment controls attempt to prevent negative flooding, water quality, nuisance and other impacts.¹

What does it mean?

Not enough data.

Sources:

City of Red Wing Watershed Management Plan, 2003. Barr Engineering Company.

1 City of Red Wing Watershed Management Plan, 2003. Barr Engineering Company.



Wetlands Preservation

Why was this indicator chosen?

Wetlands provide recreation opportunities, improve water quality by stopping pollutants from entering receiving waters, and help control floods.¹

What does it mean?

Not enough data. See Appendix M for Wetlands Inventory map.

Sources:

City of Red Wing Planning Department

¹ U.S. Environmental Protection Agency: Wetlands <<http://www.epa.gov/OWOW/wetlands/facts/fact4.html>>



Conclusion

Summary of Sustainability in Red Wing

Is Red Wing moving toward or away from sustainability? To answer this question, below is a list of indicators that are moving in a positive direction or a negative direction in regards to sustainability. Not every indicator has yet established a trend line due to data limitations. It will also be easier to establish a trend when a target is defined to measure each indicator's status.

Moving toward sustainability:

Retail Trade

Pedestrian and Bike Accidents

Transit Ridership

Farmers' Market

Education Attainment

Crime

National Night Out Participation

Recycling Rates

Moving away from sustainability:

Jobs by Industry (Manufacturing)

Modal Split

Travel Time to Work

Voter Trends

Low Birth Weight

Land Use Trends

Impaired Waters

Interesting trend that is neutral in regards to sustainability:

Diversity (increasing)

Next Steps/Recommendations

To continue Red Wing's initiative toward a sustainable community, it is imperative that the indicators in this report are updated on a continuous basis to monitor success and answer the question is Red Wing moving toward or away from sustainability? It is recommended that the City of Red Wing consider the formation of a Sustainability Commission as the leading entity of sustainability in Red Wing. The Commission should be responsible for the development of a sustainability plan with goals, actions, strategies, and targets as steps to follow in working towards sustainability. Below is a proposal for the formation of a Sustainability Commission as well as information regarding an in-depth sustainability plan.

Sustainability Commission

PROPOSAL FOR A CITY OF RED WING SUSTAINABILITY COMMISSION 8-18-08

SEC. 2.43. SUSTAINABILTY COMMISSION.

Subd. 1. Establishment and Composition. A Sustainability Commission is hereby established. The Commission shall be composed of nine (9) members.

Subd. 2. Purpose. The purpose of the Sustainability Commission is to provide advice to the City Council concerning environmental issues and initiatives confronting the City. The Commission shall focus public awareness on the environmental health of Red Wing and to work with citizens, government, businesses and local community organizations to protect and preserve the ecological resources of the community so that they are in balance with the cultural, historic, recreational, and economic resources of our river and land for generations to come.

Subd. 3. Powers and Duties.

- A. Draft and recommend a sustainability action plan for City Council consideration and approval.
- B. Assist and advise the City Council, Advisory Planning Commission and other city staff in assessing the environmental impact of proposed undertakings that fall in part or in total under the City's jurisdiction and recommend changes that would lesson or eliminate the environmentally detrimental effects of such undertakings.
- C. Recommend to the City Council additional environmental policy provisions and ordinances for enactment, as well as actions and programs that will maintain or improve environmental quality and conservation of natural resources.
- D. Request that the City Council authorize studies on matters pertaining to environmental quality and natural resources and recommend when necessary, the employment of professional qualified persons to carry out such studies.
- E. Establish educational programs and public forums that provide information to community residents, businesses, and other institutions about environmental issues and initiatives.
- F. Establish Environmental programs, volunteer opportunities and initiatives that community residents can take part in.

Goals, Actions, Strategies, Targets

This report is intended to measure Red Wing's efforts toward sustainability. A potential next step would be to create a follow-up report with Red Wing's goals, intended actions and strategies toward those goals, and set targets for each goal. Below are examples of such.

Goal: Sustainable Environment

Indicator: Recycling Rates

Action: Promote recycling in residential, commercial, and municipal government

Strategy: Utilize mascot Rubin the Blue Bin at schools and community events to promote recycling

Target: 50% in 2008

Status: Target met

Goal: Sustainable Transportation and Circulation

Indicator: Mass Transit Ridership

Action: Not yet determined

Strategy: Not yet determined

Target: Not yet determined

Status: Increasing

Appendices

| | |
|---|-----|
| Appendix A: Historic Preservation Map | 88a |
| Appendix B: Pedestrian and Bike Accidents | 88b |
| Appendix C: Sidewalk Connectivity | 88c |
| Appendix D: Street and Boulevard Trees | 88d |
| Appendix E: Community Development Patterns | 88e |
| Appendix F: Land Use | 88f |
| Appendix G: Dwelling Density | 88g |
| Appendix H: Percentage of New Residential Lots outside ¼ Mile of Services | 88h |
| Appendix I: Community Access to Waterways | 88i |
| Appendix J: Recreation Opportunities and Facilities | 88j |
| Appendix K: Brownfield Sites | 88k |
| Appendix L: Impaired Waters | 88l |
| Appendix M: Wetlands Inventory | 88m |

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