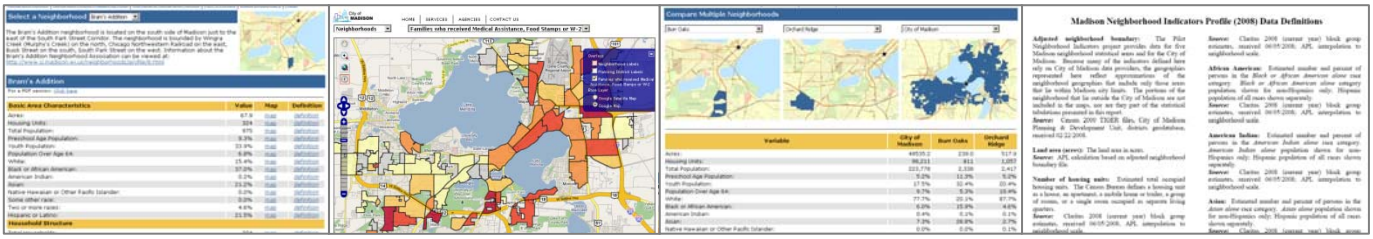
2009 Madison Neighborhood Indicators Report



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Prepared by:
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An Introduction to the 2008-2009 Neighborhood Indicators Project
Mayor Dave Cieslewicz

When developing a new program or allocating funding, we can use data to guide our decisions and better target our limited resources. For the City of Madison, we have a lot of timely data but it's often available only at geographies much larger than the city or its neighborhoods. With the US Census, we have detailed data but it comes along once every ten years and is quickly out of date. What we want is something timely and at the right geography to let us know what Madison's neighborhoods are like and how they're doing.

Indicators as a tool. *The Neighborhood Indicators Project* is a demonstration of key characteristics and various indicators that relate to the quality of life in Madison at the neighborhood level. The goal of the *Neighborhood Indicators Project* is to:

- Give us a better understanding of our neighborhoods;
- Help us tailor solutions to a neighborhood's particular needs or characteristics;
- Over time, help us see emerging trends; and
- Give us early warning signs of stress so that problems can be addressed quickly, effectively and less expensively.

Indicators are not a substitute for local knowledge or the personal experiences of residents, but they will provide us with a more comprehensive view of our neighborhoods. They can help us make data-driven decisions about service delivery. They can provide us with a first-scan for deeper issues, show where to drill down for additional information and flag where to investigate causes. All of this information can become part of our considerations to increase or reallocate funding for programs or pursue new policies.

Public input. Our roster of indicators was developed with over a year of public input that started with the 2006 Neighborhood Conference. The pilot was also featured at the Mayor's Neighborhood Roundtable in 2007 and 2008 and during sessions with the Northside Planning Council, East Isthmus Neighborhoods Planning Council, South Metropolitan Planning Council and Neighborhood Resource Teams. Input from alders and department and division heads was gleaned during project overviews and progress reports. The pilot was presented to several of the Council's standing committees including Public Safety Review Committee, Board of Education-Common Council Liaison Committee, Housing Committee, Community Services Commission, and Community Development Block Grant Commission. The Madison Metropolitan School District offered guidance on which indicators it felt were most relevant. During each of these sessions, suggestions and recommendations were recorded and considered by a work group of City managers and staff for inclusion.

Privacy and confidentiality. *Neighborhood Indicators* will be a useful tool, but we have to balance this desire with the need to ensure confidentiality and privacy for the residents living in our neighborhoods. Accordingly, some neighborhood associations may not be listed because they are too small. In other instances, individual indicators may identify so few or so many people that you would know that everybody living in that neighborhood has certain characteristics. To ensure their privacy, these too have not been added to the neighborhood profiles.

The goal of the *Neighborhood Indicators Project* is to be a useful tool for City staff, citizen committees and members of the general public. Feedback from users like you will help refine and improve the package for years to come.

Please visit the Neighborhood Indicators Project website at www.cityofmadison.com/ni. You can share your thoughts by clicking the "Leave Feedback" link, by sending an email directly to NHIfeedback@cityofmadison.com, or by calling my office at 266-4611.

Table of Contents

Mayor's Letter of Introduction
Table of Contents **1**
About This Report **2**
2009 Executive Summary **3**
Methodology **5**
Tabulation Geographies **5**
Neighborhood Comparisons **5**
Data Quality **6**
Data Dissemination **6**
NI Reporting Tools
PDF Report Sample **7**
Web Profile **9**
Web Comparison **10**
Web Mapping **11**
Appendix A. Descriptive Statistics:
Planning Districts **12**
Neighborhood Associations **13**
Appendix B. 2009 Data Definitions **14**
Appendix C. Citywide Variable Maps for Neighborhood Associations and Planning Districts **18**
Appendix D. Individual Neighborhood and Planning District Reports **19**

About This Report

The Neighborhood Indicators project seeks to quantify and represent visually the diverse and changing social conditions in Madison neighborhoods. The project staff has endeavored to provide neighborhood level characteristics for a single year, bringing together data from a variety of sources and compiling them into suite of variables used to generate neighborhood level reports. It is our hope that these reports will provide insight into some key attributes of each neighborhood; attributes that can help to identify and highlight the presence of neighborhoods' assets and help guide their development when they are lacking.

The project is also an attempt to "democratize," or make readily available, data that have already been collected but might otherwise remain difficult to use and access. In recent years, developments in mapping technology and administrative record-keeping have made it possible to evaluate and monitor conditions on a temporal and geographic scale that is relevant to residents, organizers and planners. These data are no substitute for the lived experience of residents within those neighborhoods but, nonetheless, provide a means of measuring discrete attributes of the neighborhoods that data users often regard as important when making comparisons.

Madison Alder Tim Bruer first proposed the development of a Neighborhood Indicators system in 2007. With the support of the City Council and the Mayor's office, a 2008 pilot study provided sample data for five Madison neighborhoods as a test of the feasibility and utility of a broader citywide undertaking that includes Madison Planning Districts, Census Block Groups and neighborhoods. Currently the project is proceeding with a full scale implementation for 2008 and 2009. City staff members have managed the project's implementation in collaboration with the University of Wisconsin Applied Population Laboratory working under contract with the City.

The project's development has been an exploratory and iterative process, wherein the project staff consulted with data managers, area specialists, residents, and external entities. The thrust of the effort has been to develop indicators that were consistent with the expressed needs of data users, while being available at the temporal and spatial scale that the project required. Still, the neighborhood indicators project is a work in progress. As we move forward, the steering group continues its effort to refine the acquisition, presentation, and distribution of neighborhood level data and to improve the overall quality and utility of indicator data. This 2009 Madison Neighborhood Indicators report, the neighborhood summary reports, and the website referred to herein are available for public consideration, and the project steering group welcomes your feedback.

More information about APL and its involvement with this report is available at the addresses listed below:

Applied Population Laboratory
University of Wisconsin-Madison
1450 Linden Drive, Room 350
Madison, WI 53706
http://www.apl.wisc.edu/

2009 Executive Summary

Developments:

- Several new indicator items were added in 2009, including Voter Turnout, Median Year Built, Transit Stops Access, Available Transit Service, Pavement Condition, and Average Residential Water Use.
- The website and profiles now feature multiyear comparisons.
- Several neighborhood associations had very significant boundary changes, including Capitol View Heights, Eastmoreland, and Capital Neighborhoods Associations, and the recently formed State-Langdon Association is included for first time.

Basic Area and Population Data:

- Please refer to the descriptive statistics in this report and the maps in Appendix C, to get a sense of the wide variation across Madison in residents' age, race and ethnicity, and household characteristics. Demographic data included in the Neighborhood Indicators (NI) project are estimates only and are presented as context to the substantive indicators presented below.

Community Action and Involvement:

- Voting rates among registered voters in 2008 were included for the first time with the release of the 2009 NI. Planning District (PD) turnout rates showed significant differences ranging from 54% to 91% across the city. The overall turnout rate for Madison was 73%.

Housing Quality and Availability:

- The total number of community pride violations declined significantly across the City from just under 5200 in 2008 to less than 4700 in 2009. The mean number of pride violations per PD declined from 90 in 2008 to 80 in 2009.
- Planning districts showed wide variation in the value of single family owner occupied residences. Two PDs had mean values of over $400,000, while 17 had mean values under $200,000. The mean housing unit value declined slightly citywide between 2008 and 2009.
- The lowest owner occupancy rates were among Isthmus PDs. Owner occupancy rates of over 70% prevailed in the several near west PDs and in some east of Lake Monona.
- Another new indicator, the median year of construction for PD housing stock, ranged from 1915 to 2005. The variation in age has implications for home efficiency programs targeted specifically at older housing stock.

Public Safety:

- 2009 Crimes Against Persons and Crimes Against Property were down citywide from 2008 counts. Crimes Against Society, however, were up. Detailed differences across PDs in each of the three types of calls can be discerned from the maps in Appendix C.
- The number of Crashes and Calls for EMS/Fire service each increased slightly from 2008 to 2009. PD level differences in Crashes may be attributable, in part, to poor geocoding accuracy (See Data Definitions).

Health and Family Well Being:

- Indicators of educational attainment and school readiness among Madison Metropolitan School Districts student households varied across the city. Nineteen PDs had Kindergarten Readiness levels of over 80% and six had less than 40%. Levels of Parent Educational Attainment and High Student Mobility among MMSD student households were similarly varied.

- Seven PDs had over 75% of MMSD student households qualifying for Free and Reduced Lunch. Between 2008 and 2009 there was nearly a 2 percentage point increase in Madison MMSD households qualifying for free and reduced lunch overall (41.3% to 43.1%).
- Eighty-five percent of births from 2005-2007 received Appropriate Care (See Data Definitions). This was a decline of 0.2 percentage points from the previous three year interval. Geographic variation in prenatal care was less than with most other indicators; nine PDs had appropriate care rates of over 90% and only three PDs had rates of under 75%. Outcomes were suppressed for nine other PDs to protect confidentiality.
- PDs ranged from just under 90% Full or Near Term Births to 100%. The citywide rate of Full and Near Term Births did not change between the 2005-2007 interval and the previous three year interval.

Economic Vitality Indicators:

- Estimated median household income for Madison increased slightly. PD median incomes ranged from about $17,000 in student residential areas near campus to $109,000.
- Unemployment and Poverty rates were similarly disparate across PDs. Citywide estimated rates remained unchanged from 2008. More recent information about 2009 economic conditions suggests that the earlier estimates used for these items were lower than actual rates at the time.
- The number of PD families that received Medical Assistance, Food Stamps or W-2 assistance in 2009 ranged from zero to 359. Citywide the total number of families receiving assistance increased from 5,391 in 2008 to 6,191 in 2009. Some of this increase may be due to changes in conditions required to qualify.
- Of the 57 PDs, 44 had at least 3 out of 5 basic goods and services (Hospitals, Pharmacies, Banking, Groceries, and Childcare) within a ¼ mile distance of the PD geography.

Transportation Indicators:

- The share of a PD land area within ¼ mile of a bus stop, referred to as Transit Stop Access, is a new item this year. Figures ranged from below 10% in the most outlying PDs to over 90% in more central PDs. Available Transit Service, which reflects the number of bus trips to an area is also new and generally indicates concentration of services in PDs nearer to downtown.
- Only three PDs had household vehicle access rates below 70%, all of them downtown. Twenty-eight PDs had vehicle access rates over 95% or higher.
- Thirteen PDs near the periphery had Bike Path Access rates below 1%. Access rates were over 75% for 16 PDs, all of which lie inside the beltline. Citywide access rates increased by nearly five percentage points since 2008 due to the addition of several new trail segments.
- PD Pavement Condition ratings, also new this year, ranged from 4.9 to 8.5. The citywide average was 6.6.

Conservation & Sustainability Indicators:

- A new category of indicators began this year with the inclusion of average residential water use under the heading of Conservation. Four year averages for PDs ranged from 77 gallons per day per dwelling unit 221. Low usage PDs tended to have smaller lots and more multifamily residences. The citywide average was 135 gallons per day per dwelling unit.

Methodology

To be considered for inclusion the project, potential indicators and population data needed to be available on an annual basis and available, or able to be reliably estimated, for small geographic units. During the pilot phase, the steering group arrived on a suite of 43 variables that appeared to meet the criteria and serve the needs expressed by prospective users. About half of the items were obtained locally through government or other institutional providers. The remainder came from third party data suppliers, most significantly from Nielson Claritas, a widely accepted source for intercensal demographic data estimates for small geographic units. As of the drafting of this report, a few items are still forthcoming. The data definitions in Appendix B provide a brief description and source information for each variable.

Tabulation Geographies

The Neighborhood Indicators project provides data for Madison Planning Districts and Madison Neighborhoods above a threshold estimated population of 100. Indicator data for census block groups and for neighborhoods under the size threshold are suppressed in order to protect the privacy of residents there and due to low reliability of small area attribute estimates.

Most of the geographies presented in this report are consistent with their original boundaries; however, because many of the variables rely on City of Madison data providers, the Planning Districts, neighborhoods and census block groups were in some cases "clipped," retaining only those portions of tabulation geographies that lie within Madison city limits. Additional adjustments to the NH boundaries included removal of neighborhoods that lie within other neighborhoods and the removal of areas of boundary overlap.

Whenever possible, the project relies on data from city and local agencies that are able to provide it at a very fine grain geographic detail. In many cases, the project provides neighborhood level summaries that are aggregates of address, parcel, or dwelling unit data. When address-based data were unavailable, as was the case with several of the age, race, and household composition variables, Nielson Claritas current year estimates for census block group geographies were used. The block group geographies did not generally correspond to neighborhood boundaries, so to adapt these estimates to the neighborhood geographies, the values were interpolated using area and population weights derived from the Census 2000 population.

The use of locally derived neighborhood boundaries in lieu of more standard statistical geographies, such as zip codes or census tracts, poses numerous challenges. Despite these challenges, the project team concluded that the potential benefits of having finer grain data for more socially relevant geographic units justified the additional efforts required.

Neighborhood Comparisons

Because neighborhoods vary considerably in terms of their size, population, and other characteristics, users should be cautious when drawing comparisons across neighborhoods, especially with those indicators that have not been "normalized" as rates or percentages.

In cases where the appropriate base from which to calculate a rate or percentage is not obvious, the reports show only counts. Community Pride Violations is an example of an item that is shown only as

a count. Users might deem it appropriate to calculate a rate for these occurrences using counts per person, per household, or per acre, each of which would produce a different result. In these instances, the exclusion of rates from the report requires users to determine for themselves the appropriate base from which to generate rates.

Data Quality

A degree of error is inherent in each of the tabulation methods employed. For this reason, users should treat the data provided as estimates. Three important sources of error are worth mentioning specifically. First, georeferencing error occurs in the address data when they cannot be matched to an address on the map or when georeferencing systems position them inaccurately. In the crimes against property data reported here, for instance, the georeferencing match rate was 85% meaning 85% of Madison incidents could be matched with confidence to a discrete geographic location and 15% could not and thus are not reflected in the neighborhood level reports. A second significant source of error is missing survey data. An example of this is non-response to Madison Metropolitan School District surveys on parent educational attainment, resulting in a significant omission from MMSD household data provided. The third noteworthy source of error applies to the indicators derived from Nielson Claritas data. The Caritas data are estimates of current year data. Although they reproduce many of the demographic and housing attributes as are collected in the decennial census, the Nielson Claritas estimates do not provide the same degree of accuracy. The geographic interpolation of those data from block group to neighborhood scale, noted above, introduces additional potential for inaccuracy.

While the limitations of the data warrant a measure of caution in the users' interpretation of them, the measures supplied here represent the project staff's best estimate with respect to assigning values to existing neighborhood conditions.

Data Dissemination

The indicator data are accessible via print and web media. This report serves as the project overview and provides links to a citywide overview of all individual neighborhood reports Appendix C. In addition to an Adobe pdf version of this report, the website also serves individual neighborhood profiles in pdf format. The website provides access to much of the same tabular data as shown in individual neighborhood profiles. However, to streamline the neighborhood reports online, the web version shows for each item only a rate *or* a count. Additionally the site provides tools for mapping and tabular data comparisons across neighborhoods.

The interactive web mapping service constitutes a significant portion of the project effort. Like a number of indicator systems, Madison's employs mapping software not only in the collection of data, but also as a tool for its display and dissemination. The web mapping tool allows users to view neighborhood characteristics in the context of other neighborhoods as well as other geophysical attributes of interest, such as lakes and roads.

APL is still in the process of optimized the network, server, and software configurations for the full scale project. Consequently, users will likely encounter delays and glitches as they interact with the system, particularly during periods of high volume web traffic. The APL staff appreciates feedback regarding technical problems with the site; users should direct comments to apl_feedback@dces.wisc.edu.

NI Reporting Tools: PDF Report Sample

Madison Neighborhood Indicators 2009

Allis Planning District

Madison Planning Districts:
Planning districts are delineated by the City of Madison Planning and Development Office. They are designed to provide data at a useful scale with full coverage of the city. The planning districts generally cover several neighborhoods and alder districts but their boundaries originated from census geographies rather than neighborhoods.

Note: In some cases, neighborhood geographies have portions that lie outside the city limits of Madison. The areas of a neighborhood that lie outside the City of Madison are not included in the map or the table below.

Geographic boundary change 2008-09:NO

BASIC AREA & POPULATION PROFILE	Neighborhood				City of Madison	
	2008		2009		2009	
	Number	Percent or Rate	Number	Percent or Rate	Number	Percent or Rate
Land Area (acres)	457	n/a	457	n/a	49,734	n/a
Number of Housing Units	1,051	n/a	1,060	n/a	105,680	n/a
Total Population	2,213	n/a	2,262	n/a	227,226	n/a
Age						
Pre- School-Age Population (Age 0 to 4)	113	5.1%	118	5.2%	11,918	5.2%
Youth Population (Age 0 to 17)	421	19.0%	440	19.5%	40,480	17.8%
Senior Population (Age 65 and Over)	380	17.2%	383	16.9%	22,190	9.8%
Race and Ethnicity						
White	2,013	90.9%	2,047	90.5%	175,352	77.2%
Black or African American	69	3.1%	71	3.1%	13,461	5.9%
Asian	33	1.5%	35	1.6%	16,985	7.5%
Other Races or Multiracial	54	2.4%	63	2.8%	6,752	3.0%
Hispanic or Latino	45	2.0%	46	2.0%	14,676	6.5%
Household Structure						
Total Households	1,017	n/a	1,021	n/a	98,281	n/a
Family Households	614	60.4%	616	60.3%	46,108	46.9%
Families with Children	235	23.1%	236	23.1%	21,332	21.7%
Female Headed Families with children	44	4.3%	44	4.3%	4,727	4.8%

INDICATORS						
COMMUNITY ACTION & INVOLVEMENT						
Registered Voter Turn-out	n/a	n/a	1,538	81.3%	138,791	72.5%
Youth Opportunity Index	1.2	n/a	1.0	n/a	1.6	n/a
HOUSING CHARACTERISTICS						
Community Pride Violations	89	n/a	62	n/a	4,662	n/a
Average House Value	$178,259	n/a	$172,304	n/a	$247,411	n/a
Square Foot Value of Housing	$127	n/a	$123	n/a	$132	n/a
Owner Occupied Homes	864	84.9%	865	84.7%	46,119	46.9%
Median Year Built	n/a	n/a	1951	n/a	1971	n/a

Neighborhood PDF Report Sample (Continued)

INDICATORS	Neighborhood				City of Madison	
	2008		2009		2009	
	Number	Percent or Rate	Number	Percent or Rate	Number	Percent or Rate
HEALTH & FAMILY WELL-BEING *						
Kindergarten Preparedness	119	71.0%	110	68.0%	7,937	65.4%
Parent Education Level: No High School Diploma/G.E.D.	17	10.5%	16	8.5%	1,329	8.1%
Parent Education Level: College Graduate	61	37.5%	68	36.0%	8,316	50.9%
High Mobility Students	15	6.25%	20	8.2%	1,920	9.0%
Free/Reduced Lunch Qualified Students	85	34.6%	87	36.5%	9,170	43.1%
Infant Health: Term or Near Term Births	Spr*	Spr*	Spr*	Spr*	8,431	97.7%
Maternal Health: Appropriate Care	81	79.4%	89	80.9%	7,290	85.3%
ECONOMIC VITALITY						
Median Household Income	$60,740	n/a	$61,699	n/a	$52,794	n/a
Families in Poverty	14	2.2%	14	2.2%	2,659	5.8%
Unemployed	21	1.6%	21	1.6%	6,556	4.7%
Families Receiving Income Qualifying Assistance	54	n/a	60	n/a	6,191	n/a
Basic Goods & Services (Hospitals, Pharmacies, Banking, Groceries, Childcare)	P,B,C	n/a	P,B,C	n/a	H,P,B,G,C	n/a
PUBLIC SAFETY INDICATORS						
Crimes Against Persons	12	n/a	27	n/a	2,495	n/a
Crimes Against Property	99	n/a	63	n/a	10,574	n/a
Crimes Against Society	39	n/a	56	n/a	10,383	n/a
Crashes	64	n/a	76	n/a	14,417	n/a
Calls for EMS/Fire Service	159	n/a	234	n/a	24,636	n/a
TRANSPORTATION						
Transit Stop Access	n/a	n/a	n/a	86.6%	n/a	60.5%
Available Transit Service	n/a	n/a	591	0.5	12,014	0.1
Households with Access to a Vehicle	976	96.0%	978	95.8%	86,944	88.5%
Bike Path Access	509	45.5%	712	62.9%	56,523	52.7%
Pavement Condition	n/a	n/a	4.9	n/a	6.6	n/a
CONSERVATION & SUSTAINABILITY						
Average Residential Water Use (Gallons Per Day)	n/a	n/a	n/a	140	n/a	135

Notes:

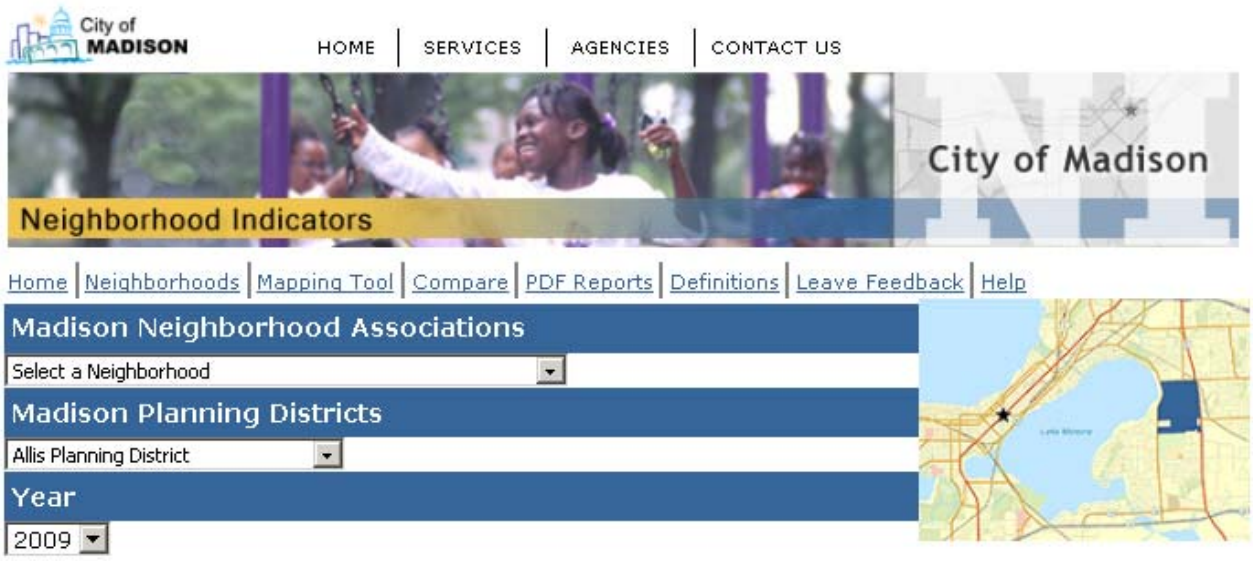
Time series data: *In some instances year to year changes in counts and rates will reflect changes in the variable definition, changes to the neighborhood boundary, or random fluctuations.*

***** Student and education data are from the Madison Metropolitan School District and show figures for MMSD students or students' households as available and are not for the entire population.

n/a Cells containing "n/a" indicate that the rate or figure is not applicable or not available for the reference year.

spr* Cells containing "spr*" indicate that data have been suppressed to protect confidentiality. This means there was a count of five or fewer in the category shown or five of fewer in the counterpart of the category shown, the latter being derivable from the percentage. Correspondence between some neighborhood associations and planning district geographies required suppression of these data for neighborhood geographies.

Web Profile



Allis Planning District

Basic Area & Population Profile	Value	Map	Definition
Acres	457	map	definition
Housing Units	1,060	map	definition
Total Population	2,262	map	definition
Preschool Age Population	5.2%	map	definition
Youth population	19.5%	map	definition
Age 65 and Over	16.9%	map	definition
White	90.5%	map	definition
African American	3.1%	map	definition
Asian	1.6%	map	definition
Other Races or Multiracial	2.8%	map	definition
Hispanic/Latino (of any race)	2.0%	map	definition
Total Households	1,021	map	definition
Family Households	616	map	definition
Families with Children	23.1%	map	definition
Female headed households with children	4.3%	map	definition

Indicators	Value	Map	Definition
Community Action and Involvement			

(image truncated)

Web Comparison

City of MADISON HOME | SERVICES | AGENCIES | CONTACT US

Compare Multiple Geographies and Years

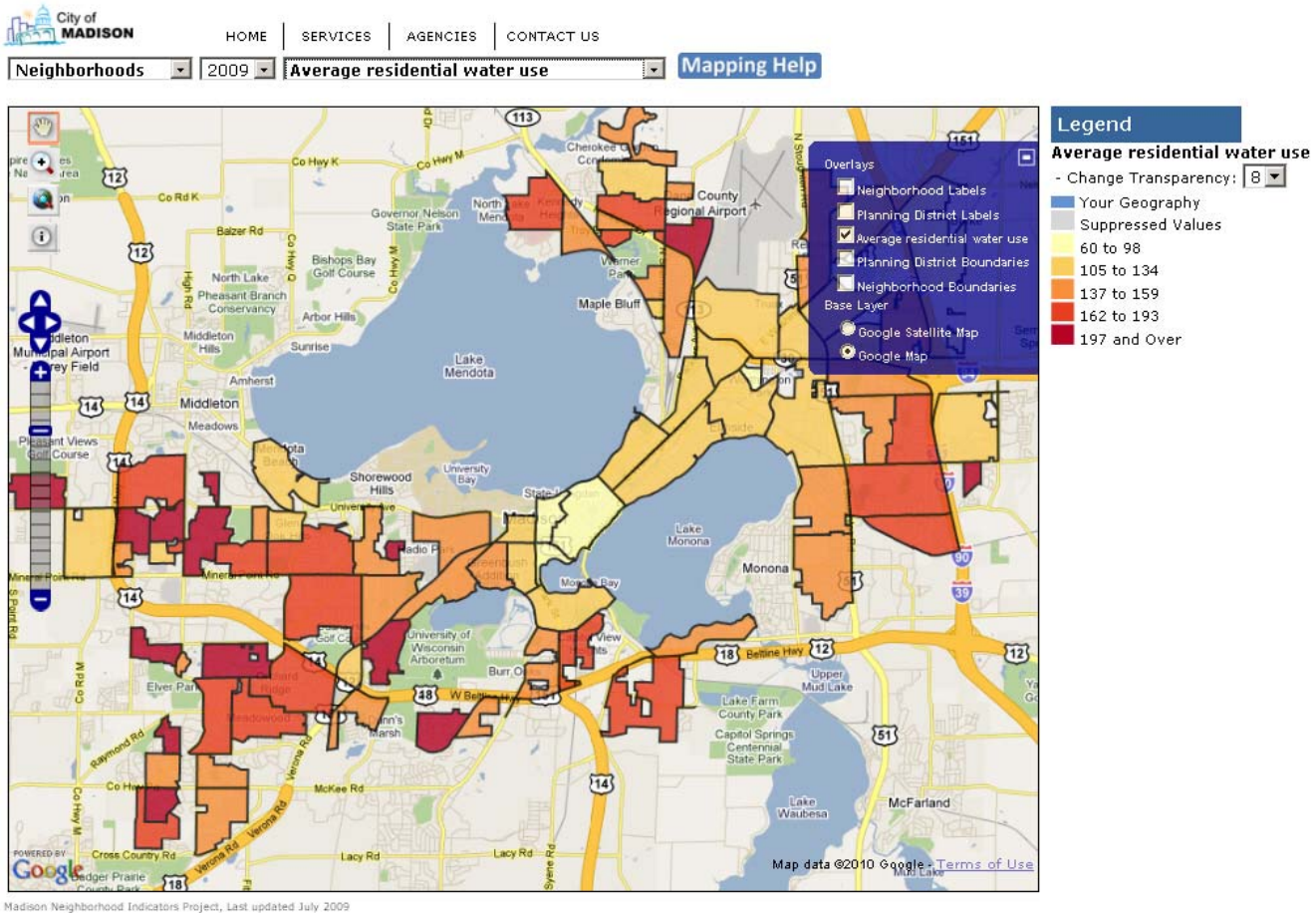
2008 Arbor-McKee Plan District | 2009 Arbor-McKee Planning District | 2009 City of Madison

Basic Area & Population Profile	Arbor-McKee Plan District	Arbor-McKee Planning District	City of Madison 2009
Acres	477	485	49,734
Housing Units	1,533	1,627	105,680
Total Population	3,115	3,334	227,226
Preschool Age Population	6.4%	6.4%	5.2%
Youth population	20.0%	20.7%	17.8%
Age 65 and Over	9.5%	9.3%	9.8%
White	58.2%	56.7%	77.2%
African American	14.6%	14.6%	5.9%
Asian	4.4%	4.6%	7.5%
Other Races or Multiracial	4.5%	5.0%	3.0%
Hispanic/Latino (of any race)	18.2%	19.1%	6.5%
Total Households	1,430	1,508	98,281
Family Households	681	720	46,108
Families with Children	21.4%	21.4%	21.7%
Female headed households with children	6.7%	6.8%	4.8%

Indicators	Value	Value	Value
Community Action and Involvement			
Voter turn-out	n/a	72.4%	72.5%

(image truncated)

Web Mapping


City of MADISON
HOME
SERVICES
AGENCIES
CONTACT US
Neighborhoods
2009
Average residential water use
Mapping Help
Overlays
Neighborhood Labels
Planning District Labels
Average residential water use
Planning District Boundaries
Neighborhood Boundaries
Base Layer
Google Satellite Map
Google Map
Legend
Average residential water use
- Change Transparency: 8
Your Geography
Suppressed Values
60 to 98
105 to 134
137 to 159
162 to 193
197 and Over
Map data ©2010 Google - Terms of Use
Madison Neighborhood Indicators Project, Last updated July 2009

Descriptive Statistics: Planning Districts

	Madison		Planning Districts				
	2008	2009	2008	2009			
			Mean	Mean	Minimum	Maximum	Std. Dev.
Land Area (acres)	49,576	49,734	627	626	250	1,358	264
Number of Housing Units	104,760	105,680	1,787	1,804	78	6,837	1,154
Total Population	223,070	227,226	3,817	3,891	145	17,592	2,697
Preschool Age Population (Age 0 to 4) - Number	11,651	11,918	195	199	9	571	129
Preschool Age Population (Age 0 to 4) - Percent	5.2	5.2	5.6	5.6	0.2	10.4	2.1
Youth Population (Age 0 to 17) - Number	39,215	40,480	662	684	30	1,801	427
Youth Population (Age 0 to 17) - Percent	17.6	17.8	19.2	19.5	0.7	30.8	6.5
Population Age 65 and Over - Number	21,717	22,190	374	382	12	1,359	250
Population Age 65 and Over - Percent	9.7	9.8	11.3	11.3	0.4	26.5	5.6
White - Number	173,354	175,352	2,988	3,023	123	14,425	2,227
White - Percent	77.7	77.2	79.2	78.6	21.2	96.4	14.2
Black or African American - Number	13,445	13,461	231	232	2	826	220
Black or African American - Percent	6.0	5.9	6.2	6.1	0.6	30.5	6.2
Asian -Number	16,352	16,985	258	270	4	1,464	318
Asian - Percent	7.3	7.5	6.0	6.2	0.6	26.7	5.0
Other Race or Multiracial - Number	6,051	6,752	103	115	2	394	77
Other Race or Multiracial - Percent	2.7	3.0	2.7	3.0	0.9	6.1	1.1
Hispanic or Latino - Number	13,867	14,676	236	251	3	1,292	253
Hispanic or Latino - Percent	6.2	6.5	5.9	6.1	1.0	31.8	5.4
Total Housholds	97,964	98,281	1,678	1684	68	6,417	1,096
Family Households - Number	46,050	46,108	781	783	35	1,879	442
Family Households - Percent	47.0	46.9	52.0	52.1	4.2	76.0	16.0
Families with Children - Number	21,340	21,332	360	360	6	1014	231
Families with Children - Percent	21.8	21.7	23.7	23.7	0.4	44.4	9.2
Female headed families with children - Number	4716	4727	80	80	1	193	60
Female headed families with children - Percent	4.8	4.8	5.1	5.1	0.1	15.7	3.4
Registered Voter Turnout - Number	---	138,791	---	2,376	208	11,730	1,764
Registered Voter Turnout - Percent	---	72.5	---	76.8	54.1	90.8	7.0
Youth opportunity index	1.6	1.6	1.3	1.3	0.0	4.9	1.1
Community Pride Violations	5189	4662	90	80	3	682	108
Average house value	$ 247,963	$ 247,411	$ 256,977	$ 256,371	$ 148,462	$ 565,114	$ 79,031
Square foot value of housing	$ 133	$ 132	$ 137	$ 136	$ 63	$ 251	$ 30
Owner occupied homes - Number	46,164	46,119	795	794	13	2,060	487
Owner occupied homes - Percent	47.1	46.9	53.3	53.4	0.9	94.6	23.4
Median year built	---	1971	---	1970	1915	2005	23
Kindergarten Preparedness - Number	8,018	7,937	138	136	0	437	100
Kindergarten Preparedness - Percent	66.5	65.4	69.1	67.5	9.7	100.0	20.0
Parent Education Level: No High School Diploma/G.E.D. - Number	1,198	1,329	20	23	0	142	29
Parent Education Level: Percent No High School Diploma/G.E.D. - Percent	9.5	8.1	8.4	7.0	0.0	28.4	7.5
Parent Education Level: College Graduate - Number	6,459	8,316	109	140	0	490	110
Parent Education Level: Percent College Graduate - Percent	51.5	50.9	52.3	51.4	0.0	100.0	28.3
High mobility students - Number	2,039	1,920	38	32	0	134	29
High mobility students - Percent	9.6	9.0	10.2	8.6	0.0	32.3	6.3
Students qualifying for free/reduced lunch - Number	8,815	9,170	149	154	0	669	160
Students qualifying for free/reduced lunch - Percent	41.3	43.1	37.8	39.3	0.0	100.0	26.6
Infant Health: Term or Near Term Births - Percent	97.7	97.7	97.5	97.5	89.7	100.0	2.1
Maternal Health: Appropriate Care - Percent	85.5	85.3	85.1	85.0	66.7	93.6	5.5
Median houshold income	$51,944	$52,794	$57,616	$58,506	$16,673	$108,960	$17,766
Families in poverty (among families) - Number	2,667	2,659	42	42	0	205	42
Families in poverty (among families) - Percent	5.8	5.8	6.6	6.6	0.0	49.8	8.3
Unemployed - Number	6,440	6,556	111	113	2	1,093	170
Unemployed - Percent	4.7	4.7	3.9	3.9	0.3	16.4	2.8
Families receiving income qualifying assistance (CARES)	5,391	6,191	86	97	0	359	89
Crimes against persons	2,618	2,495	39	36	0	276	45
Crimes against property	11,752	10,574	158	139	2	631	131
Crimes against society	9,578	10,383	138	145	0	1452	233
Crashes	13,892	14,417	107	100	0	404	90
Calls for EMS / fire service	24,546	24,636	354	366	51	1666	308
Transit Stop Access - Percent	---	60.5	---	77.0	0.1	100.0	27.3
Available Transit Service - Trips	---	12,014	---	1,440	0	6,931	1,586
Available Transit Service - Rate	---	0.1	---	0.8	0.0	4.2	0.8
Households with access to a vehicle - Number	86,728	86,944	1,485	1,489	67	3,586	831
Households with access to a vehicle - Percent	88.5	88.5	91.7	91.6	55.9	100.0	8.8
Bike Path Access - Number	50,924	56,523	1,233	1246	7	4,982	1,048
Bike Path Access - Percent	47.9	52.7	57.8	59.7	1.0	100.0	31.7
Pavement Condition	---	6.6	---	6.7	4.9	8.5	0.6
Average Residential Water Use (Gallons Per Day)	---	135	---	140	77	221	28

Descriptive Statistics: Neighborhood Associations

	Madison		Neighborhood Associations				
	2008	2009	2008	2009			
			Mean	Mean	Minimum	Maximum	Std. Dev.
Land Area (acres)	49,576	49,734	273	272	15	720	179
Number of Housing Units	104,760	105,680	974	970	63	7,516	970
Total Population	223,070	227,226	2,082	2,095	116	14,199	2,039
Preschool Age Population (Age 0 to 4) - Number	11,651	11,918	105	107	7	276	74
Preschool Age Population (Age 0 to 4) - Percent	5.2	5.2	6.0	6.0	0.1	12.0	2.3
Youth Population (Age 0 to 17) - Number	39,215	40,480	360	367	23	940	249
Youth Population (Age 0 to 17) - Percent	17.6	17.8	20.5	20.7	0.3	36.8	6.6
Population Age 65 and Over - Number	21,717	22,190	200	202	7	820	175
Population Age 65 and Over - Percent	9.7	9.8	11.1	11.1	0.5	26.5	5.8
White - Number	173,354	175,352	1,640	1,639	82	11,118	1,688
White - Percent	77.7	77.2	76.5	75.9	19.2	96.4	16.3
Black or African American - Number	13,445	13,461	130	129	2	854	153
Black or African American - Percent	6.0	5.9	7.4	7.2	0.3	31.6	6.7
Asian -Number	16,352	16,985	128	132	4	1,045	183
Asian - Percent	7.3	7.5	6.3	6.5	0.6	28.5	5.3
Other Race or Multiracial - Number	6,051	6,752	57	63	2	364	58
Other Race or Multiracial - Percent	2.7	3.0	2.9	3.1	0.9	6.7	1.2
Hispanic or Latino - Number	13,867	14,676	127	133	4	834	152
Hispanic or Latino - Percent	6.2	6.5	7.0	7.2	0.9	35.4	6.7
Total Housholds	97,964	98,281	917	909	56	7,111	922
Family Households - Number	46,050	46,108	424	419	24	1,260	287
Family Households - Percent	47.0	46.9	54.1	53.7	2.7	84.3	15.4
Families with Children - Number	21,340	21,332	195	193	5	549	137
Families with Children - Percent	21.8	21.7	25.3	25.1	0.2	47.1	9.1
Female headed families with children - Number	4716	4727	44	43	1	150	37
Female headed families with children - Percent	4.8	4.8	5.9	5.8	0.1	19.3	3.9
Registered Voter Turnout - Number	---	138,791	---	1,272	146	9,058	1,382
Registered Voter Turnout - Percent	---	72.5	---	76.8	55.2	89.4	7.2
Youth opportunity index	1.6	1.6	1.6	1.6	0.0	6.8	1.5
Community Pride Violations	5189	4662	57	47	0	710	89
Average house value	$ 247,963	$ 247,411	$ 244,192	$ 242,836	$ 134,271	$ 590,231	$ 83,334
Square foot value of housing	$ 133	$ 132	$ 133	$ 132	$ 99	$ 251	$ 27
Owner occupied homes - Number	46,164	46,119	447	440	11	1,389	348
Owner occupied homes - Percent	47.1	46.9	55.9	55.3	0.7	96.0	22.7
Median year built	---	1971	---	1968	1913	2005	22
Kindergarten Preparedness - Number	8,018	7,937	79	76	0	304	67
Kindergarten Preparedness - Percent	66.5	65.4	67.2	66.1	0.0	100.0	20.2
Parent Education Level: No High School Diploma/G.E.D. - Number	1,198	1,329	11	12	0	104	19
Parent Education Level: Percent No High School Diploma/G.E.D. - Percent	9.5	8.1	8.1	7.1	0.0	37.3	8.9
Parent Education Level: College Graduate - Number	6,459	8,316	63	78	0	385	77
Parent Education Level: Percent College Graduate - Percent	51.5	50.9	52.2	52.8	5.8	100.0	28.5
High mobility students - Number	2,039	1,920	18	16	0	74	17
High mobility students - Percent	9.6	9.0	8.9	8.1	0.0	24.4	5.9
Students qualifying for free/reduced lunch - Number	8,815	9,170	79	81	0	468	96
Students qualifying for free/reduced lunch - Percent	41.3	43.1	38.0	40.2	0.0	100.0	29.2
Infant Health: Term or Near Term Births - Percent	97.7	97.7	97.9	98.0	89.7	100.0	2.3
Maternal Health: Appropriate Care - Percent	85.5	85.3	85.0	84.8	50.0	100.0	7.9
Median houshold income	$51,944	$52,794	$57,627	$58,106	$13,853	$108,966	$18,548
Families in poverty (among families) - Number	2,667	2,659	23	23	0	129	26
Families in poverty (among families) - Percent	5.8	5.8	7.0	7.5	0.0	56.3	9.0
Unemployed - Number	6,440	6,556	61	62	2	781	110
Unemployed - Percent	4.7	4.7	4.2	4.2	0.3	22.7	3.4
Families receiving income qualifying assistance (CARES)	5,391	6,191	47	50	0	234	54
Crimes against persons	2,618	2,495	22	20	0	248	36
Crimes against property	11,752	10,574	82	71	0	767	98
Crimes against society	9,578	10,383	81	84	0	1294	178
Crashes	13,892	14,417	54	50	0	539	71
Calls for EMS / fire service	24,546	24,636	182	186	5	2353	281
Transit Stop Access - Percent	---	60.5	---	84.4	1.8	100.0	23.9
Available Transit Service - Trips	---	12,014	---	1,030	0	6,836	1,292
Available Transit Service - Rate	---	0.1	---	1.2	0.0	6.7	1.2
Households with access to a vehicle - Number	86,728	86,944	803	795	54	4,591	671
Households with access to a vehicle - Percent	88.5	88.5	91.9	91.5	47.0	100.0	9.3
Bike Path Access - Number	50,924	56,523	765	718	11	5,872	951
Bike Path Access - Percent	47.9	52.7	63.1	62.2	0.9	100.0	34.3
Pavement Condition	---	6.6	---	6.5	4.5	8.0	0.7
Average Residential Water Use (Gallons Per Day)	---	135	---	155	60	276	38

NHI 2009 Data Definitions

Tabulation geography: The Neighborhood Indicators project provides data for neighborhood associations and planning districts within the City of Madison. Because many of the indicators defined here rely on City of Madison data providers, the geographies represented here include only those areas that lie within Madison city limits. Portions of the planning district and neighborhood boundaries that lie outside the City of Madison are not included in the maps, nor are they part of the statistical tabulations presented in this report.
Source: Neighborhood associoation boundaries: City of Madison Planning & Development Unit, received 01/22/2009; planning districts: City of Madison Planning & Development Unit, received 03/11/2009.

Geographic Boundary Change 2008-09: "Yes" signifies there was a 2% or greater change in the coverage area of the tabulation area boundary. This difference may account for some of the observed differences in indicator values.
Source: APL calculation based on tabulation geography boundary file.

Land area (acres): The land area in acres.
Source: APL calculation based on tabulation geography boundary file.

Number of housing units: Estimated total housing units. The Census Bureau defines a housing unit as a house, an apartment, a mobile home or trailer, a group of rooms, or a single room occupied as separate living quarters, or if vacant, intended for occupancy as separate living quarters.
Source: Nielson Claritas 2009 (current year) block group estimates, received 07/17/2009; APL interpolation to tabulation geography.

Total population: Estimated total population.
Source: Nielson Claritas 2009 (current year) block group estimates, received 07/17/2009; APL interpolation to tabulation geography.

Preschool age population: Estimated number and percent of persons age four and under.
Source: Nielson Claritas 2009 (current year) block group estimates, received 07/17/2009; APL interpolation to tabulation geography.

Youth population: Estimated number and percent of persons age 17 and under.
Source: Nielson Claritas 2009 (current year) block group estimates, received 07/17/2009; APL interpolation to tabulation geography.

Senior population: Estimated number and percent of persons age 65 and over.
Source: Nielson Claritas 2009 (current year) block group estimates, received 07/17/2009; APL interpolation to tabulation geography.

White: Estimated number and percent of persons in the *White alone* race category. *White alone* population shown for non-Hispanics only; Hispanic population of all races shown separately.
Source: Nielson Claritas 2009 (current year) block group estimates, received 07/17/2009; APL interpolation to tabulation geography.

Black or African American: Estimated number and percent of persons in the *Black or African American alone* race category. *Black or African American alone* category population shown for non-Hispanics only; Hispanic population of all races shown separately.
Source: Nielson Claritas 2009 (current year) block group estimates, received 07/17/2009; APL interpolation to tabulation geography.

Asian: Estimated number and percent of persons in the *Asian alone* race category. *Asian alone* population shown for non-Hispanics only; Hispanic population of all races shown separately.
Source: Nielson Claritas 2009 (current year) block group estimates, received 07/17/2009; APL interpolation to tabulation geography.

Other Races or Multiracial: Estimated number and percent of persons in the American Indian alone, Pacific Islander alone, Other Race alone or Two or More Races categories. Other Race or Multiracial population shown for non-Hispanics only; Hispanic population of all races shown separately.
Source: Nielson Claritas 2009 (current year) block group estimates, received 07/17/2009; APL interpolation to tabulation geography.

Hispanic or Latino (of any race): Estimated number and percent of the persons of any race who identify as Hispanic or Latino.
Source: Nielson Claritas 2009 (current year) block group estimates, received 07/17/2009; APL interpolation to tabulation geography.

Total households: Estimated number of households. The Census Bureau defines a household as an occupied housing unit and includes all the people who occupy that housing unit as their usual place of residence.

Source: Nielson Claritas 2009 (current year) block group estimates, received 07/17/2009; APL interpolation to tabulation geography.

Family households: Estimated number of families and families as a percentage of all households. The Census Bureau defines a family as two or more people who reside together and who are related by birth, marriage, or adoption.
Source: Nielson Claritas 2009 (current year) block group estimates, received 07/17/2009; APL interpolation to tabulation geography.

Families with children: Estimated number of families with children and families with children as a percentage of all households.
Source: Nielson Claritas 2009 (current year) block group estimates, received 07/17/2009; APL interpolation to tabulation geography.

Female headed families with children: Estimated number of female headed households with children (no husband present) and percent of all households that are female headed families with own children.
Source: Nielson Claritas 2009 (current year) block group estimates, received 07/17/2009; APL interpolation to tabulation geography.

Registered voter turn-out: Number of voters and voters as a percentage of registered voters. November 2008 election.
Source: City of Madison Information Services, received 3/10/09.

Youth opportunity index: This indicator considers community centers, schools, libraries, and religious institutions as potential sites for youth involvement. This index score represents a weighted average count of youth opportunities within 1/4 mile of each neighborhood dwelling unit. Community centers were given a weight of 3; libraries 2; schools 1 if they had a before or after school program and 2 if they had both; and religious organizations 1. To produce the weighted average opportunity score, the aggregate of weighted "opportunities" for all neighborhood dwellings was divided by the total number of neighborhood dwellings.
Source: Dwelling Units: City of Madison Planning & Development Unit. SITUS database, received 08/24/2009 & Madison Assessor commercial properties database, received 08/24/2009; Community Centers: City of Madison Planning & Development Unit, received 08/24/2009; Libraries & Religious Organizations: Metropolitan Planning Organization, InfoUSA data extract, received 05/20/2009; School Locations: Madison Metropolitan School District, received 09/21/09; School Program Info: MMSD website 07/14/2009; APL proximity calculation.

Community pride violations: Total community pride violations in 2008: These include violations in the following categories: Graffiti; Grass & Weeds; Junk, Trash & Debris; Property Maintenance; and Zoning. Snow and ice related violations are excluded due to weather dependent year-to-year variation.
Source: City of Madison Building Inspection Unit, received 08/25/2009.

Average house value: Average assessed value (land & improvements) among single dwelling unit, owner-occupied housing units.
Source: City of Madison Planning & Development Unit. SITUS database, received 08/24/2009.

Square foot value of housing: Total housing value (land & improvements) among single dwelling unit, owner-occupied housing units divided by the total floor area.
Source: City of Madison Planning & Development Unit: SITUS database, received 08/24/2009; Bldfl and Bldng databases (for floor area), received 04/02/2008.

Owner Occupied Homes: Estimated number and percent of occupied housing units that are owner occupied.
Source: Nielson Claritas 2009 (current year) block group estimates, received 07/17/2009; APL interpolation to tabulation geography.

Median year built: Median year built for dwelling units including both “single family” dwelling units and “multi-family” units.
Source: City of Madison Planning & Development Unit, SITUS database, received 08/24/2009 & Madison Assessor commercial properties database, received 08/24/2009.

Kindergarten preparedness: Number and percent of students identified as kindergarten ready through MMSD kindergarten readiness assessment; limited to students for whom data were available. Data available for 57% of MMSD students in the City of Madison.
Source: Madison Metropolitan School District, received 09/21/2009.

Parent education level: no high school diploma / G.E.D.: Number and percent of MMSD students in households in which highest level of parent educational attainment was less than a High School Diploma or G.E.D; limited to students for which data were available. Data available for 77% of MMSD students in the City of Madison.
Source: Madison Metropolitan School District, received 09/21/2009.

Parent education level: college graduate: Number and percent of MMSD student households in which highest level of parent educational attainment was a bachelor’s, graduate

or professional degree; limited to students for which data were available. Data available for 77% of MMSD students in the City of Madison.
Source: Madison Metropolitan School District, received 09/21/2009.

High mobility students: Number and percent of MMSD students whose number of attendance area moves was greater than one per year in the district. Data available for 100% of MMSD students in the City of Madison.
Source: Madison Metropolitan School District, received 09/21/2009.

Free/reduced lunch students: Number and percent of MMSD students eligible for free or reduced cost lunch. Data available for 100% of MMSD students in the City of Madison.
Source: Madison Metropolitan School District, received 09/21/2009.

Infant health: term or near term: Number and percent of all 2005-2007 births occurring after the complete 32nd week of gestation. Data are limited to incidents successfully geocoded. Overall geocoding match rate for Dane County birth data: 97%.
Source: Public Health Madison & Dane County; Wisconsin Department of Health Services, received 05/05/09.

Maternal health: appropriate care: Number and percent of all 2005-2007 births receiving prenatal care that began by the end of the 4th month of gestation and received 80% or more of the American College of Obstetricians and Gynecologists's recommended visits. Data are limited to incidents successfully geocoded. Overall geocoding match rate for Dane County birth data: 97%.
Source: Public Health Madison & Dane County; Wisconsin Department of Health Services, received 05/05/09.

Median household income: Estimated median household income.
Source: Nielson Claritas 2009 (current year) block group estimates, received 07/17/2009; APL interpolation to tabulation geography.

Families in poverty: Estimated number and percent of families in poverty.
Source: Nielson Claritas 2009 (current year) block group estimates, received 07/17/2009; APL interpolation to tabulation geography.

Unemployed: Estimated number and percent unemployment for civilian labor force population age 16 and over.
Source: Nielson Claritas 2009 (current year) block group estimates, received 07/17/2009; APL interpolation to tabulation geography.

Families receiving income qualifying assistance: Number of families with one or more minor children who received Medical Assistance, Food Stamps and/or W-2 benefits in February 2009.
Source: Dane County Department of Human Services, based on the Wisconsin Department of Children and Families (formerly Health and Family Services) CARES Extract, February 2009.

Basic goods & services: Basic goods and services found within ¼ mile of neighborhood. The presence of businesses is denoted with the corresponding letter: Hospital (H), Pharmacy (P), Credit Union or Bank (B), Grocery Store (G), and Childcare Provider (C).
Source: Metropolitan Planning Organization, InfoUSA data extract, received 05/20/2009; APL proximity calculation.

Crimes against persons: Total previous year crimes against persons (such as robbery, battery, sexual assault) ; data for tabulation geographies other than Madison citywide are limited to incidents successfully geocoded. Overall geocoding match rate for crimes against persons: 87%.
Source: 2008 Incidents Records from Madison Police Department, received 08/11/2009; geocoded by APL.

Crimes against property: Total previous year crimes against property (such as residential burglary, retail burglary, auto theft); data for tabulation geographies other than Madison citywide are limited to incidents successfully geocoded. Overall geocoding match rate for crimes against property: 83%.
Source: 2008 Incidents Records from Madison Police Department, received 08/11/2009; geocoded by APL.

Crimes against society: Total previous year crimes against society (such as disturbances, liquor violations, and drug incidents); data for tabulation geographies other than Madison citywide are limited to incidents successfully geocoded. Overall geocoding match rate for crimes against society: 84%.
Source: 2008 Incidents Records from Madison Police Department, received 08/11/2009; geocoded by APL.

Crashes: Total previous year automobile crashes; data for tabulation geographies other than Madison citywide are limited to incidents successfully geocoded. Overall geocoding match rate for crashes: 45%.
Source: 2008 Incidents Records from Madison Police Department, received 08/11/2009; geocoded by APL.

Calls for EMS/Fire service: Total previous year calls for emergency medical service and fire service; data for tabulation geographies other than Madison citywide are

limited to incidents successfully geocoded. Overall geocoding match rate for EMS/Fire calls: 90%.
Source: Madison Fire Department, received5/14/2009.

Transit stop access: Percent of Neighborhood land area that falls within a 1/4 mile radius of a transit stop location.
Source: City of Madison - Metro Transit, 11/12/2009.

Available transit service: Total number of regularly scheduled transit trips that would permit a passenger boarding, using any of the transit stop locations that are within or adjacent the area, summarized over the course of a typical seven-day week (Monday-Sunday). Rate shown as total trips available in area divided by dwelling units in area.
Source: Trips: City of Madison - Metro Transit, 11/12/2009; Dwelling Units: City of Madison Planning & Development Unit SITUS database, received 08/24/2009 & Madison Assessor commercial properties database, received 08/24/2009.

Households with access to a vehicle: Number and percent of occupied households that have access to a private vehicle at home.
Source: Nielson Claritas 2009 (current year) block group estimates, received 07/17/2009; APL interpolation to tabulation geography.

Bike path access: Number and percent of neighborhood dwelling units that fall within 1/2 mile of a bike path. Does not include segments located within parks.
Source: City of Madison Planning & Development Unit: SITUS database, received 08/24/09 & Commercial properties database, received 08/24/09; City of Madison Engineering Division, received 7/14/2009; APL proximity calculation.

Pavement condition: Average condition rating of City street segments completely contained within the boundary. Scoring is based on UW PASER rating system where 10 is the best condition.
Source: City of Madison Engineering Division, received 7/14/2009; APL summary calculation.

Average residential water use: Average daily water use; 2005 through 2008. Measured in gallons per day per dwelling unit including single (RE) and multi-family (MF) units.
Source: Madison Water Utility, received 01/25/2010; City of Madison Planning & Development Unit: SITUS database, received 08/24/09 & Madison Assessor commercial properties database, received 08/24/09.

Definitions last updated: April 7, 2010

Appendix C. Citywide Variable Maps for Neighborhood Associations and Planning Districts

In order to limit the file size of this 2009 NHI overview report, Appendix C is being made available as a separate file and can be accessed via the link below:
http://madison.apl.wisc.edu/pdfprofiles.html

Appendix D. Individual Neighborhood and Planning District Reports

In order to limit the file size of this 2009 NHI overview report, Appendix D is being made available as a separate file and can be accessed via the link below:
http://madison.apl.wisc.edu/pdfprofiles.html