# **2010 Madison Neighborhood Indicators Report**





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### **About This Report**

The Madison 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 up to date neighborhood level characteristics each 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 these 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 Mayor's office and the City Council, 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 would include Madison Planning districts, and neighborhood associations and census block Groups. Currently the project is proceeding with a full scale implementation that began in 2008. City staff members have managed the project's development 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 requisite temporal and spatial scale. Still, the neighborhood indicators project remains 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 2010 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/

#### **2010 Executive Summary**

#### **Developments:**

- Two new indicator items were added in 2010. Both are reflective of concerns related to housing
  affordability and the current recession. Assisted housing units, which include a variety of
  assistance forms are now tabulated at all geographic scales and will be updated biennially
  because changes in this item tend to happen slowly. Property foreclosures, tabulated annually,
  were also added to the list of items.
- The website now features a user friendly graphing tool that allows for side by side comparison of multiple geographies across time.
- Also new to the website is a geography lookup that allows users to select their address and be directed to the corresponding planning district or neighborhood association profile report.
- Several planning districts (PDs) underwent very significant boundary changes, most notably East
  Washington and Cherokee. The Truax Field Planning District is included this year for the first
  time. Several neighborhood associations also experienced very significant boundary changes,
  including Berkley Oaks, Marquette, and Schenk-Atwood-Starkweather-Yahara Neighborhood
  Associations. These changes are best illustrated using the web mapping tool referred to below.

### **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 including poverty and income are sourced from Nielson
Claritas, a third party provider. They are estimates only and are presented in the reports as
context to the substantive indicators described below.

#### **Community Action and Involvement:**

- The youth opportunity index remained stable for the city as a whole.
- Voter turnout is not included as a 2010 indicator.

#### **Housing Quality and Availability:**

- The total number of community pride violations continued to decline significantly across the City from 4,662 in 2009 to under 4,400 in 2010. The highest violation counts among planning districts were on the isthmus and in the Greentree Planning District.
- Foreclosure counts were highest in Madison's peripheral PDs, particularly those in the southwest.
- Assisted Housing is dispersed throughout the city, though there are 15 PDs with less than 10
  units with some form of assistance. Conversely, Capitol Square, Greentree and Wingra Park PDs
  all contained more than 400 assisted units.
- 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 single family owner occupied housing unit value declined citywide by over \$4,000 between 2009 and 2010.

 The lowest owner occupancy rates were among Isthmus and campus area PDs. Owner occupancy rates of over 70% prevailed in the several near west PDs and in some east of Lake Monona.

### **Public Safety:**

- 2009 Counts of Crimes Against Persons and Crimes Against Property continued citywide declines
  observed in the previous year. Crimes Against Society also declined in 2009 reversing a slight
  increase seen in the previous year. Geographic differences across PDs in each of the three types
  of calls can be discerned from the maps in Appendix C. Differences between PD counts are
  dependent, in part, on georeferencing accuracy (See Data Quality below).
- The number of Automobile Crashes and Calls for EMS/Fire service both declined from the prior year's tally, reversing a previously upward trend in each case. Crashes have especially poor georeferencing success rates (48%), so changes in counts at the PD and neighborhood levels should be interpreted with caution.

### Health and Family Well Being:

- Citywide Kindergarten preparedness is just under 65% which represents a slight decline from the
  previous year. The number of PDs with Kindergarten Readiness levels of over 80% slipped from
  19 to 16. The number of PDs with less than 40% readiness remained constant at six. Citywide
  the number of students in households with parents who have less than a high school diploma
  continued to decline. These data should be interpreted with caution as they are not available
  for all students.
- The number of PDs with over 75% of MMSD student households qualifying for Free and Reduced Lunch grew last year from seven to 11. Citywide the percentage of students qualifying for free and reduced lunch, grow from 43.1% to 45.5%.
- The percent of births from 2006-2008 that met the Appropriate Care criteria (See Data Definitions) remained constant at 85%. Geographic variation in prenatal care was less than most other indicators; only three PDs had rates of under 75% and the number of PDs with Appropriate Care rates of over 90% grew from 9 to 14. Nine PDs had rates below 80%.
- PDs ranged from just under 91% Full or Near Term Births to 100%. The citywide rate of Full and Near Term Births did not change significantly between the 2006-2008 interval and the previous three year interval.

#### **Economic Vitality Indicators:**

- Estimated median household income for Madison increased slightly. PD median incomes ranged from about \$18,000 in student residential areas near campus to \$109,000.
- Unemployment and Poverty rates were similarly disparate across PDs. Citywide estimated unemployment grew from 4.7% to 5.3% and the number of families in poverty grew to 3,157 with an increase of nearly 500 families.
- The number of PD families that received Medical Assistance (MA), Food Stamps or W-2 assistance in 2009 ranged from one to 410. Citywide the total number of families receiving assistance increased from 6,191 in 2009 to 8,135 in 2010. Note that MA has steadily expanded

- over time due to Healthy Start, Badger Care and Badger Care Plus. This growth is a product of both rising numbers of low-income families and expanded financial eligibility limits.
- Of the 58 PDs, 45 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, 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. Citywide the over 350 trips per week were added bringing the total to 12,365.
- Only three PDs had household vehicle access rates below 70%, all of them downtown. The number of PDs with own vehicle access rates over 95% or higher increased from 28 to 34.
- Thirteen PDs near the periphery had Bike Path Access rates below 10%. Access rates were over 75% for 16 PDs, all of which lie inside the beltline. The citywide access rate increased by one percentage point to 54%.
- PD Pavement Condition ratings ranged from 4.5 to 8.6. The citywide average increased from 6.7 to 6.8.

### **Conservation & Sustainability Indicators:**

• The five year average residential water use averages for PDs ranged from 72 to 242 gallons per day per dwelling unit. Low usage PDs tended to have smaller lots and more multifamily residences. The citywide average was 142 gallons per day per dwelling unit which was a 7 gallon per day reduction from last year's average.

### **Corrections and Updates:**

The neighborhood indicator system is a work in progress. In three years of data production we
have found ways to make our indicator tabulations more accurate and reliable. Notes regarding
data revisions and year to year inconsistencies will appear on the "definitions" link of the
website.

#### Methodology

To be considered for inclusion in the project, potential indicators and population data needed to be obtainable on an annual basis and available, or reliably estimated, for small geographic units. To serve the needs expressed by prospective users, the steering group has assembled a suite of 47 variables that meet these criteria. Most of the items were obtained locally, through government and other institutional providers. The remainder came from third party data sources, most significantly from Nielson Claritas, a widely used source for intercensal demographic data estimates for small geographic areas. The data definitions in Appendix B provide a brief description and source information for each item.

#### **Tabulation Geographies**

The Neighborhood Indicators project provides data for Madison planning districts and Madison neighborhood associations with estimated population and dwelling unit counts of 100 or greater. Indicator data for areas under the size threshold are suppressed both in order to protect the privacy of residents and due to poor reliability of estimates for very small areas.

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 neighborhood association boundaries included removal of neighborhood association boundaries located within other associations.

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, APL derived planning district and neighborhood association area estimates based on current year Nielson Claritas estimates provided at census block group geographic scale. Because the block group geographies do not generally correspond to neighborhood boundaries, APL interpolated these estimates to the neighborhood geographies using area and population weights derived from the Census 2000 population.

The use of local planning district and neighborhood association 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 and administratively relevant geographic units justified the additional effort involved.

#### **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 self-evident, 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 the appropriate base from which to derive rates according to their particular needs.

#### **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 address matching systems position them inaccurately. In the *Crimes Against Property* data reported here, for instance, the georeferencing match rate was 91%, meaning 91% of Madison incidents could be matched with confidence to a discrete geographic location and 9% 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. These data are estimates of current year data and although they reproduce many of the same 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 estimates from block group to neighborhood scale based on Census 2000 population weights, noted above, introduces an additional source of inaccuracy.

While the limitations of the data warrant 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 Corrections and Versioning**

In three years of data production we have found ways to make our indicator tabulations more accurate and reliable. In order to improve the validity of the figures and maximize their year to year comparability, the neighborhood indicators steering group has elected to revise previously published counts as needed whenever it is feasible. Although the previously released static documents (pdfs) may not always reflect these changes, the online system will include the most up to date figures available. Notes regarding these revisions and year to year inconsistencies will appear on the "definitions" link of the website.

#### **Data Dissemination**

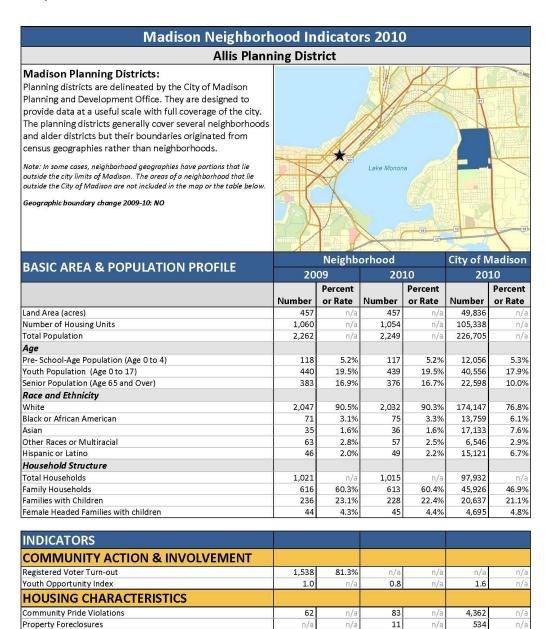
This report serves as the project overview and provides a link to a citywide summary of all individual neighborhoods; however the website is intended to serve as the principal means by which users access indicator data. In addition to an Adobe pdf version of this report, the website also serves as a source for individual print ready neighborhood profiles in pdf format. More importantly, the site provides tools for tabular data comparisons, time-series graphing, and mapping of neighborhood characteristics.

The *Compare* tool allows users to make comparisons in the tabular data across time or across geographies. The *Chart* tool is designed to display changes over time and a maximum of three neighborhood geographies. The *Map* tool allows users to view neighborhood characteristics in the context of other neighborhoods as well as other geophysical attributes of interest, such as roads, lakes, and parks.

APL works to optimize the network, server, and software configurations for the system on an ongoing basis. 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 such technical problems with the site; users should direct comments to apl\_feedback@dces.wisc.edu.

### **NI Reporting Tools:**

### PDF Profile Sample



Assisted Housing Units

Owner Occupied Homes

Square Foot Value of Housing

Average House Value

Median Year Built

6,211

\$131

51,336

1971

\$242,962

n/

52.4%

n/a

n/a

88.5%

n/a

n/a

84.7%

\$171,377

\$122

898

1951

\$172,304

\$123

865

# **PDF Profile Sample (Continued)**

INDICATORS		Neighb		City of Madison		
INDICATORS	20	09	2010		2010	
		Percent		Percent		Percent
	Number	or Rate	Number	or Rate	Number	or Rate
HEALTH & FAMILY WELL-BEING *						
Kindergarten Preparedness	110	68.0%	97	64.0%	7,994	64.9%
Parent Education Level: No High School Diploma/G.E.D.	16	8.5%	12	6.8%	1,288	7.6%
Parent Education Level: College Graduate	68	36.0%	62	34.9%	8,638	50.7%
High Mobility Students	20	8.2%	16	7.0%	1,839	8.6%
Free/Reduced Lunch Qualified Students	87	36.5%	97	43.6%	9,711	45.5%
Infant Health: Term or Near Term Births	Spr*	Spr*	Spr*	Spr*	8,413	97.8%
Maternal Health: Appropriate Care	89	80.9%	91	83.5%	7,220	85.4%
ECONOMIC VITALITY						
Median Household Income	\$61,699	n/a	\$63,962	n/a	\$54,242	n/a
Families in Poverty	14	2.2%	21	3.4%	3,157	6.9%
Unemployed	21	1.6%	26	2.0%	7,381	5.3%
Families Receiving Income Qualifying Assistance	60	n/a	58	n/a	8,135	n/a
Basic Goods & Services (Hospitals, Pharmacies, Banking, Groceries,						
Childcare)	P,B,C	n/a	P,B,G,C	n/a	H,P,B,G,C	n/a
PUBLIC SAFETY INDICATORS						
Crimes Against Persons	27	n/a	12	n/a	2,281	n/a
Crimes Against Property	89	n/a	49	n/a	9,679	n/a
Crimes Against Society	58	n/a	45	n/a	9,743	n/a
Crashes	82	n/a	56	n/a	12,598	n/a
Calls for EMS/Fire Service	242	n/a	184	n/a	22,999	n/a
TRANSPORTATION						
Transit Stop Access	n/a	86.6%	n/a	86.3%	n/a	60.5%
Available Transit Service	591	0.5	586	0.5	12,365	0.1
Households with Access to a Vehicle	978	95.8%	983	96.8%	87,674	89.5%
Bike Path Access	712	62.9%	703	62.8%	59,973	55.4%
Pavement Condition	5	n/a	5.1	n/a	6.8	n/a
CONSERVATION & SUSTAINABILITY						
Average Residential Water Use (Gallons Per Day)	n/a	156	n/a	152	n/a	142

#### Notes:

**Time series data:** In some instances year to year variation in counts and rates will reflect changes in the variable definition, geocoding success, or neighborhood boundaries.

\* 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.

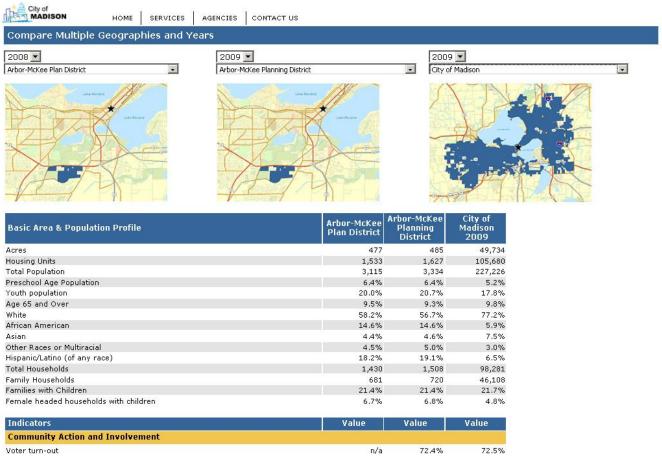
spr\* Cells containing "spr\*" indicate that data have been suppressed to protect confidentiality. This means there was a count of five or fewer in the category shown or five of fewer in the counterpart of the category shown, the latter being derivable from the percentage. Correspondence between some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

# Web Profile



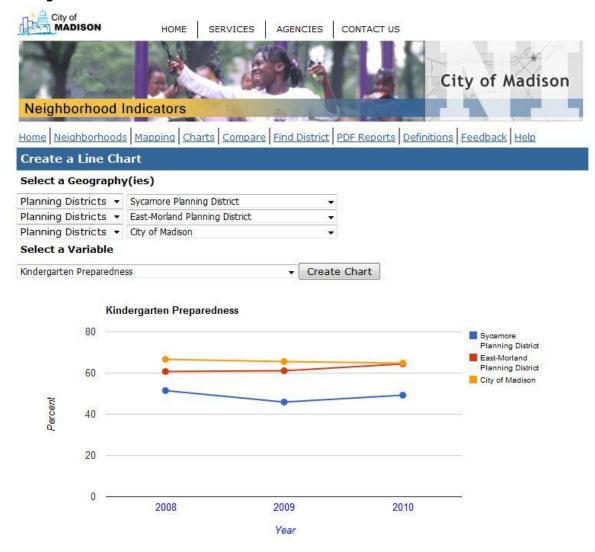
Basic Area & Population Profile	Value	Мар	Chart	Definition
Acres	457	map	chart	definition
Housing Units	1,054	map	chart	definition
Total Population	2,249	map	chart	definition
Preschool Age Population	5.2%	map	chart	definition
Youth population	19.5%	map	chart	definition
Age 65 and Over	16.7%	map	chart	definition
White	90.3%	map	chart	definition
African American	3.3%	map	chart	definition
Asian	1.6%	map	chart	definition
Other Races or Multiracial	2.5%	map	chart	definition
Hispanic/Latino (of any race)	2.2%	map	chart	definition
Total Households	1,015	map	chart	definition
Family Households	613	map	chart	definition
Families with Children	22.4%	map	chart	definition
Female headed households with children	4.4%	map	chart	definition
Indicators	Value	Мар	Chart	Definitio
Community Action and Involvement				
Voter turn-out	575	map	The same	a contact to
voter turn-out	n/a	map	chart	definition
	n/a 0.8	map	chart	
		100000000		
Youth opportunity index Housing Quality and Availability		100000000		definition
Youth opportunity index  Housing Quality and Availability  Community Pride violations	0.8	map	chart	definition definition
Youth opportunity index  Housing Quality and Availability  Community Pride violations  Property Foreclosures	0.8	map map	<u>chart</u>	definition definition definition
Youth opportunity index  Housing Quality and Availability  Community Pride violations  Property Foreclosures  Assisted Housing Units	0.8 83 11	map map map	chart chart chart	definition definition definition
Youth opportunity index  Housing Quality and Availability  Community Pride violations  Property Foreclosures  Assisted Housing Units  Average house value	83 11 5	map map map	chart chart chart chart	definition  definition  definition  definition  definition
Youth opportunity index  Housing Quality and Availability  Community Pride violations  Property Foreclosures  Assisted Housing Units  Average house value  Square foot value of housing	83 11 5 \$171,377	map map map map map	chart chart chart chart chart	definition  definition  definition  definition  definition  definition
Youth opportunity index Housing Quality and Availability Community Pride violations Property Foreclosures Assisted Housing Units Average house value Square foot value of housing Owner occupied homes	83 11 5 \$171,377 \$122	map map map map map map	chart chart chart chart chart chart chart	definition  definition  definition  definition  definition  definition  definition
Youth opportunity index Housing Quality and Availability Community Pride violations Property Foreclosures Assisted Housing Units Average house value Square foot value of housing Owner occupied homes Median year built	83 11 5 \$171,377 \$122 88.5%	map map map map map map	chart chart chart chart chart chart chart chart	definition  definition  definition  definition  definition  definition  definition
Youth opportunity index Housing Quality and Availability Community Pride violations Property Foreclosures Assisted Housing Units Average house value Square foot value of housing Owner occupied homes Median year built Public Safety	83 11 5 \$171,377 \$122 88.5%	map map map map map map	chart chart chart chart chart chart chart chart	definition definition definition definition definition definition definition
Youth opportunity index	83 11 5 \$171,377 \$122 88.5% 1951	map map map map map map map	chart	definition  definition  definition  definition  definition  definition  definition  definition  definition  definition

## Web Comparison



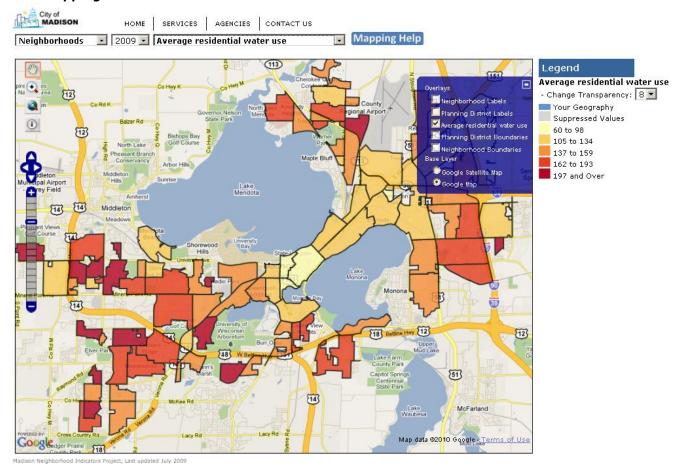
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### Web Charting



(image truncated)

# Web Mapping



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# **Descriptive Statistics: Planning Districts**

	Mad	ison	Planning Districts				
	2009	2010	2009		201	.0	
			Mean	Mean	Minimum	Maximum	Std. Dev.
Land Area (acres)	49,734	49,836	626	654	250	2,351	348
Number of Housing Units	105,680	105,338	1,804	1,779	75	6,768	1,138
Total Population	227,226	226,705	3,891	3,832	139	17,575	2,683
Preschool Age Population (Age 0 to 4) - Number	11,918	12,056	199	200	9	560	128
Preschool Age Population (Age 0 to 4) - Percent	5.2	5.3	5.6	5.8	0.2	10.6	2.2
Youth Population (Age 0 to 17) - Number	40,480	40,556	684	678	29	1,776	421
Youth Population (Age 0 to 17) - Percent	17.8	17.9	19.5	19.7	0.7	30.9	6.6
Population Age 65 and Over - Number	22,190	22,598	382	385	12	1,351	248
Population Age 65 and Over - Percent	9.8	10.0	11.3	11.6	0.5	27.2	5.5
White - Number	175,352	174,147	3,023	2,962	116	14,392	2,213
White - Percent	77.2	76.8	78.6	78.1	20.7	96.5	14.4
Black or African American - Number	13,461	13,759	232	235	2	869	223
Black or African American - Percent	5.9	6.1	6.1	6.4	0.6	31.2	6.5
Asian -Number	16,985	17,133	270	269	5	1,469	321
Asian - Percent	7.5	7.6	6.2	6.2	0.6	27.6	5.1
Other Race or Multiracial - Number	6,752	6,546	115	111	2	382	75
Other Race or Multiracial - Percent	3.0	2.9	3.0	2.9	0.9	5.8	1.1
Hispanic or Latino - Number	14,676	15,121	251	255	4	1,339	261
Hispanic or Latino - Percent	6.5	6.7	6.1	6.3	1.2	32.7	5.6
Total Housholds	98,281	97,932	1,684	1,659	65	6,345	1,081
Family Households - Number	46,108	45,926	783	770	34	1,864	436
Family Households - Percent	46.9	46.9	52.1	51.9	4.2	75.9	15.9
Families with Children - Number	21,332	20,637	360	344	4	965	221
Families with Children - Percent	21.7	21.1	23.7	23.0	0.3	42.8	8.8
Female headed families with children - Number	4,727	4,695	80	79	1	191	58
Female headed families with children - Percent	4.8	4.8	5.1	5.1	0.1	15.6	3.4

(table continued below)

# **Descriptive Statistics: Planning Districts (Continued)**

	Madison		Planning Districts					
	2009	2010	2009		201	0		
			Mean	Mean	Minimum	Maximum	Std. Dev.	
Youth opportunity index	1.6	1.6	1.3	1.2	0.0	4.8	1.1	
Community Pride Violations	4,662	4,362	80	74	1	448	89	
Property Foreclosures		534		9	0	35	8	
Assisted Housing Units		6,211		107	0	609	133	
Average house value	\$ 247,411	\$ 242,962	\$ 256,371	\$ 248,983	\$ 141,100	\$ 525,168	\$ 76,982	
Square foot value of housing	\$ 132	\$ 131	\$ 136	\$ 132	\$ 98	\$ 190	\$ 24	
Owner occupied homes - Number	46,119	51,336	794	875	19	2,154	517	
Owner occupied homes - Percent	46.9	52.4	53.4	59.3	1.3	96.1	23.0	
Median year built	1971	1971	1970	1970	1916	2005	23	
Kindergarten Preparedness - Number	7,937	7,994	136	135	0	427	101	
Kindergarten Preparedness - Percent	65.4	64.9	67.5	65.2	25.1	100.0	18.6	
Parent Education Level: No High School Diploma/G.E.D Number	1,329	1,288	23	22	0	141	27	
Parent Education Level: Percent No High School Diploma/G.E.D Percent	8.1	7.6	7.0	6.9	0.0	33.2	7.2	
Parent Education Level: College Graduate - Number	8,316	8,638	140	142	0	506	116	
Parent Education Level: College Graduate - Percent	50.9	50.7	51.4	53.6	0.0	100.0	28.0	
High mobility students - Number	1,920	1,839	32	30	0	140	30	
High mobility students - Percent	9.0	8.6	8.6			55.6	8.1	
Students qualifying for free/reduced lunch - Number	9,170	9,711	154	163	0	679	162	
Students qualifying for free/reduced lunch - Percent	43.1	45.5	39.3	43.1	0.0	100.0	28.0	
Infant Health: Term or Near Term Births - Percent	97.7	97.8	97.5	98.0	90.9	100.0	1.8	
Maternal Health: Appropriate Care - Percent	85.3	85.4	85.0	85.3	71.7	94.3	5.6	
Median houshold income	\$52,794	\$54,242	\$58,506	\$59,753	\$18,009	\$110,447	\$17,970	
Families in poverty (among families) - Number	2,659	3,157	42	51	0	213	51	
Families in poverty (among families) - Percent	5.8	6.9	6.6		0.0	42.5	8.8	
Unemployed - Number	6,556	7,381	113	126	3	1,203	187	
Unemployed - Percent	4.7	5.3	3.9	4.6	0.3	18.5	3.3	
Families receiving income qualifying assistance	6,191	8,135	97	119	1	410	106	
Crimes against persons	2,440	2,281	37	36	0	238	41	
Crimes against property	10,407	9,679	151	142	2	747	148	
Crimes against society	10,202	9,743	151	147	0	1,337	218	
Crashes	14,011	12,598	107	97	4	336	84	
Calls for EMS / fire service	24,159	22,999	379	362	64	1,613	298	
Transit Stop Access - Percent	60.5	60.5	77.0	76.5	0.2	100.0	27.5	
Available Transit Service - Trips	12,014	12,365	1,440	1,449	0	7,287	1,600	
Available Transit Service - Rate	0.1	0.1	1	0.8	0.0	4.0	0.9	
Households with access to a vehicle - Number	86,944	87,674	1,489		64	3,579	832	
Households with access to a vehicle - Percent	88.5	89.5	91.6	*	56.4	99.9	8.7	
Bike Path Access - Number	56,523	58,573	1,246		0	5,015	1,050	
Bike Path Access - Percent	52.7	54.2	59.7	49.5	0.0	100.0	36.7	
Pavement Condition	6.7	6.8	6.7	6.8	5.1	8.2	0.6	
Average Residential Water Use (Gallons Per Day)	147.9	142	151	147	72	241	35	

# **Descriptive Statistics: Neighborhood Associations**

	Mac	lison		Neighb	orhood Associ	ations	
	2009	2010	2009		201	0	
			Mean	Mean	Minimum	Maximum	Std. Dev.
Land Area (acres)	49,734	49,836	272	273	15	720	178
Number of Housing Units	105,680	105,338	970	972	104	7,424	955
Total Population	227,226	226,705	2,095	2,108	217	14,087	2,020
Preschool Age Population (Age 0 to 4) - Number	11,918	12,056	107	110	11	280	75
Preschool Age Population (Age 0 to 4) - Percent	5.2	5.3	6.0	6.2	0.1	12.4	2.4
Youth Population (Age 0 to 17) - Number	40,480	40,556	367	374	35	986	250
Youth Population (Age 0 to 17) - Percent	17.8	17.9	20.7	21.0	0.3	37.2	6.9
Population Age 65 and Over - Number	22,190	22,598	202	205	18	826	176
Population Age 65 and Over - Percent	9.8	10.0	11.1	11.2	0.5	27.2	5.8
White - Number	175,352	174,147	1,639	1,627	116	10,981	1,671
White - Percent	77.2	76.8	75.9	74.9	18.2	96.5	17.2
Black or African American - Number	13,461	13,759	129	140	2	870	169
Black or African American - Percent	5.9	6.1	7.2	7.8	0.3	32.4	7.4
Asian -Number	16,985	17,133	132	137	4	1,053	186
Asian - Percent	7.5	7.6	6.5	6.6	0.6	29.6	5.3
Other Race or Multiracial - Number	6,752	6,546	63	62	3	350	57
Other Race or Multiracial - Percent	3.0	2.9	3.1	3.1	0.9	6.5	1.2
Hispanic or Latino - Number	14,676	15,121	133	140	4	867	158
Hispanic or Latino - Percent	6.5	6.7	7.2	7.5	0.9	36.4	7.0
Total Housholds	98,281	97,932	909	910	101	7,025	907
Family Households - Number	46,108	45,926	419	421	63	1,253	284
Family Households - Percent	46.9	46.9	53.7	53.9	2.7	84.3	15.4
Families with Children - Number	21,332	20,637	193	190	4	562	133
Families with Children - Percent	21.7	21.1	25.1	24.7	0.2	46.1	9.1
Female headed families with children - Number	4,727	4,695	43	45	1	165	38
Female headed families with children - Percent	4.8	4.8	5.8	6.0	0.1	19.2	4.1

(table continued below)

# **Descriptive Statistics: Neighborhood Associations (Continued)**

	Ma	dison		Neighb	orhood Assoc	iations	-
	2009 2010		2009		2010		
			Mean	Mean	Minimum	Maximum	Std. Dev.
Youth opportunity index	1.0	1.6	1.6	1.4	0.0	6.8	1.4
Community Pride Violations	4,66	4,362	47	45	0	581	75
Property Foreclosures		534		5	0	31	5
Assisted Housing Units	-	6,211		58	0	758	116
Average house value	\$ 247,411	\$ 242,962	\$ 242,836	\$ 235,688	\$ 127,662	\$ 544,428	\$ 81,010
Square foot value of housing	\$ 132	\$ 131	\$ 132	\$ 128	\$ 98	\$ 193	\$ 23
Owner occupied homes - Number	46,11	51,336	440	487	16	1,822	373
Owner occupied homes - Percent	46.	52.4	55.3	61.3	0.9	97.0	22.2
Median year built	197	1971	1968	1967	1913	2005	21
Kindergarten Preparedness - Number	7,93	7,994	76	77	0	312	68
Kindergarten Preparedness - Percent	65.4	64.9	66.1	64.2	0.0	100.0	20.6
Parent Education Level: No High School Diploma/G.E.D Number	1,32	1,288	12	12	0	80	18
Parent Education Level: Percent No High School Diploma/G.E.D Percent	8.	7.6	7.1	6.5	0.0	39.2	7.7
Parent Education Level: College Graduate - Number	8,31	8,638	78	81	0	396	79
Parent Education Level: College Graduate - Percent	50.	50.7	52.8	51.4	0.0	100.0	29.5
High mobility students - Number	1,92	1,839	16	17	0	90	19
High mobility students - Percent	9.0	8.6	8.1	7.8	0.0	22.2	5.7
Students qualifying for free/reduced lunch - Number	9,170	9,711	81	90	0	469	105
Students qualifying for free/reduced lunch - Percent	43.	45.5	40.2	43.5	0.0	100.0	30.5
Infant Health: Term or Near Term Births - Percent	97.	97.8	98.0	98.2	90.3	100.0	2.0
Maternal Health: Appropriate Care - Percent	85.	85.4	84.8	84.7	50.0	100.0	8.0
Median houshold income	\$52,79	\$54,242	\$58,106	\$59,254	\$15,019	\$110,452	\$18,970
Families in poverty (among families) - Number	2,65	3,157	23	29	0	125	31
Families in poverty (among families) - Percent	5.	6.9	7.5	8.9	0.0	36.7	9.2
Unemployed - Number	6,55	7,381	62	71	2	864	121
Unemployed - Percent	4.	5.3	4.2	5.0	0.3	25.4	4.0
Families receiving income qualifying assistance	6,19	8,135	50	65	0	293	69
Crimes against persons	2,44	2,281	21	21	0	212	32
Crimes against property	10,40	9,679	75	71	0	779	100
Crimes against society	10,20	9,743	87	91	0	1,204	177
Crashes	14,01	12,598	53	50	0	483	66
Calls for EMS / fire service	24,15	22,999	192	187	5	2,283	271
Transit Stop Access - Percent	60.	60.5	84.4	84.5	1.8	100.0	23.9
Available Transit Service - Trips	12,01	12,365	1,030	1,045	0	7,192	1,311
Available Transit Service - Rate	0.	0.1	1	1.2	0.0	6.7	1.1
Households with access to a vehicle - Number	86,94	87,674	795	806	99	4,609	672
Households with access to a vehicle - Percent	88.	89.5	91.5	92.5	47.1	100.0	8.9
Bike Path Access - Number	56,52	58,573	718	543	0	5,956	865
Bike Path Access - Percent	52.	54.2	62.2	47.0	0.0	100.0	39.4
Pavement Condition	6.	6.8	6.6	6.7	4.5	8.6	0.8
Average Residential Water Use (Gallons Per Day)	147.	142	181	174	72	515	64

#### **NHI 2010 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 association boundaries: City of Madison Planning & Development Unit, received 05/24/2010; Planning districts: City of Madison Planning & Development Unit, received 05/24/2010.

**Geographic Boundary Change 2009-10:** "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 files.

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 2010 (current year) block group estimates, received 06/21/2010; APL interpolation to tabulation geography.

**Total population:** Estimated total population.

**Source:** Nielsen Claritas 2010 (current year) block group estimates, received 06/21/2010; APL interpolation to tabulation geography.

**Preschool age population:** Estimated number and percent of persons age four and under.

**Source:** Nielsen Claritas 2010 (current year) block group estimates, received 06/21/2010; APL interpolation to tabulation geography.

**Youth population:** Estimated number and percent of persons age 17 and under.

**Source:** Nielsen Claritas 2010 (current year) block group estimates, received 06/21/2010; APL interpolation to tabulation geography.

**Senior population:** Estimated number and percent of persons age 65 and over.

**Source:** Nielsen Claritas 2010 (current year) block group estimates, received 06/21/2010; 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:** Nielsen Claritas 2010 (current year) block group estimates, received 06/21/2010; 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:** Nielsen Claritas 2010 (current year) block group estimates, received 06/21/2010; 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:** Nielsen Claritas 2010 (current year) block group estimates, received 06/21/2010; 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:** Nielsen Claritas 2010 (current year) block group estimates, received 06/21/2010; 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:** Nielsen Claritas 2010 (current year) block group estimates, received 06/21/2010; 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:** Nielsen Claritas 2010 (current year) block group estimates, received 06/21/2010; 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:** Nielsen Claritas 2010 (current year) block group estimates, received 06/21/2010; 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:** Nielsen Claritas 2010 (current year) block group estimates, received 06/21/2010; 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:** Nielsen Claritas 2010 (current year) block group estimates, received 06/21/2010; APL interpolation to tabulation geography.

**Registered voter turn-out:** Not available as a 2010 indicator. For 2009: 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 05/26/2010 & Madison Assessor commercial properties database, received 05/26/2010; Community Centers: City of Madison Planning & Development Unit, received 05/26/2010; Libraries & Religious Organizations: Metropolitan Planning Organization, InfoUSA data extract, received 06/30/2010; School Locations: Madison Metropolitan School District, received 09/21/09; School

Program Info: MMSD website 05/10/2010; APL proximity calculation.

Community pride violations: Total community pride violations in 2009: These include violations in the following categories: Graffiti; Grass & Weeds; Junk, Trash & Debris; Property Maintenance; and Zoning. Violations that originated from City of Madison agency referrals and planned surveys are included. Snow and ice related violations are excluded due to weather dependent year-to-year variation.

**Source:** City of Madison Building Inspection Unit, received 09/24/2010.

Property foreclosers: Total foreclosure cases in 2009 based on unique properties reported in the Consolidated Court Automation Programs case management system. Only a share of these cases go all the way through the foreclosure process to a sheriff sale. Some foreclosure actions against a property owner may actually reflect numerous properties (i.e. in the case of a landlord who owns several rental properties); these duplicate properties will not be found in the dataset. There are 75 foreclosure cases in Dane County that were not reconciled with a physical property location. Data for tabulation geographies other than Madison citywide are limited to incidents successfully geocoded at a small area geographic scale. Overall geocoding match rate for Dane County foreclosures: 90%.

**Source:** Dr. Russ Kashian, Fiscal and Economic Research Center - University of Wisconsin-Whitewater and Matt Kures UW-Extension Center for Community Economic Development, received 04/24/2010.

**Assisted Housing Units:** Housing units to which any of the following assistance categories apply: Public Housing CDA (Community Development Authority), Private Projects - Section 8 Project Subsidies, Section 8 Tenant Based Vouchers, or Section 42 Tax Credits.

**Source:** City of Madison Planning & Development Unit, received 09/03/2010.

**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 05/26/2010.

**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 05/26/2010; Bldfoor database (for floor area), received 06/07/2010.

**Owner Occupied Homes:** Estimated number and percent of occupied housing units that are owner occupied.

**Source:** Nielsen Claritas 2010 (current year) block group estimates, received 06/21/2010; APL interpolation to tabulation geography.

**Median year built:** Median year built for dwelling units including both "single family" dwelling units and "multifamily" units.

**Source:** City of Madison Planning & Development Unit, SITUS database, received 05/26/2010 & Madison Assessor commercial properties database, received 05/26/2010.

**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 58% of MMSD students in the City of Madison.

**Source:** Madison Metropolitan School District, received 05/05/2010.

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 80% of MMSD students in the City of Madison.

**Source:** Madison Metropolitan School District, received 05/05/2010.

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 80% of MMSD students in the City of Madison.

**Source:** Madison Metropolitan School District, received 05/05/2010.

**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 05/05/2010.

**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 05/05/2010.

Infant health: term or near term: Number and percent of all 2006-2008 births occurring after the complete 32nd week of gestation. Data for tabulation geographies other than Madison citywide 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 04/21/2010.

Maternal health: appropriate care: Number and percent of all 2006-2008 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 Gynecologist's recommended visits. Data for tabulation geographies other than Madison citywide 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 04/21/2010.

**Median household income:** Estimated median household income.

**Source:** Nielsen Claritas 2010 (current year) block group estimates, received 06/21/2010; APL interpolation to tabulation geography.

**Families in poverty:** Estimated number and percent of families in poverty.

**Source:** Nielsen Claritas 2010 (current year) block group estimates, received 06/21/2010; APL interpolation to tabulation geography.

**Unemployed:** Estimated number and percent unemployment for civilian labor force population age 16 and over.

**Source:** Nielsen Claritas 2010 (current year) block group estimates, received 06/21/2010; 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 October 2010. Data for tabulation geographies other than Madison citywide are limited to incidents successfully geocoded. Families whose address of record was the Dane County Job Center are included only in the citywide tabulation.

**Source:** Dane County Department of Human Services, based on the Wisconsin Department of Children and Families (formerly Health and Family Services) CARES Extract, received 10/21/2010; geocoded by APL.

**Basic goods & services:** Basic goods and services found within ¼ mile of tabulation geography. 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 06/30/2010; 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: 93%.

**Source:** 2009 Incidents Records from Madison Police Department, received 05/19/2010; 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: 92%.

**Source:** 2009 Incidents Records from Madison Police Department, received 05/19/2010; 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: 90%.

**Source:** 2009 Incidents Records from Madison Police Department, received 05/19/2010; 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: 48%.

**Source:** 2009 Incidents Records from Madison Police Department, received 05/19/2010; 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: 95%.

Source: Madison Fire Department, received 5/13/2010.

**Transit stop access:** Percent of tabulation geography land area that falls within a 1/4 mile radius of a transit stop location.

**Source:** City of Madison - Metro Transit, 08/24/2010; APL land area calculation based on tabulation geography boundary file.

**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, 08/24/2010; Dwelling Units: City of Madison Planning & Development Unit, SITUS database, received 05/26/2010 & Madison Assessor commercial properties database, received 05/26/2010.

**Households with access to a vehicle:** Number and percent of occupied households that have access to a private vehicle at home.

**Source:** Nielsen Claritas 2010 (current year) block group estimates, received 06/21/2010; APL interpolation to tabulation geography.

**Bike path access:** Percent of recent tabulation geography dwelling units that fall within 1/2 mile of a bike path. Bike path segments located within parks are excluded.

**Source:** Dwelling Units: City of Madison Planning & Development Unit, SITUS database, received 05/26/2010 & Madison Assessor commercial properties database, received 05/26/2010; Bike Paths: City of Madison Engineering Division, received 08/19/2010; APL proximity calculation.

**Pavement condition:** Average condition rating of City of Madison maintained street segments within or immediately adjacent to tabulation area. Scoring is based on UW PASER rating system where 10 is the best condition.

**Source:** City of Madison Engineering Division, received 08/19/2010; APL summary calculation.

Average residential water use: Average daily water use; 2005 through 2009. Measured in gallons per day per dwelling unit including single (RE) and multi-family (MF) accounts. Dwelling units counts used for averaging are from 2010, therefore areas with recent increases in dwelling units will have downwardly biased usage figures.

**Source:** Madison Water Utility, received 11/01/2010; Dwelling Units: City of Madison Planning & Development Unit, SITUS database, received 05/26/2010 & Madison Assessor commercial properties database, received 05/26/2010.

Definitions last updated: November 22, 2010

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

In order to limit the file size of this 2010 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 2010 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