

REGIONAL DEVELOPMENT FRAMEWORK

Trends Report

Summer 2021



Introduction

A BASELINE ASSESSMENT

This report analyzes demographic, economic, housing, land use, and transportation data to characterize existing conditions, patterns, and trends and project future changes out to 2050.

Such an analysis provides a basis for understanding recent and anticipated changes in order to envision the future needs of the region as CARPC prepares the 2050 Regional Development Framework.

What Does It Include?

This report includes trends and projections in the following areas:

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2020 COVID-19 Pandemic

The 2020 COVID-19 pandemic brought about sudden changes in the way we work, live, and move. While communities are sure to face many lasting impacts, it remains to be seen just how the effects of the pandemic will alter our physical spaces and inform how communities plan their centers, streets, transportation systems, and neighborhoods.

As the impacts of the pandemic are still being felt and assessed, the projections and trends found in this report do not reflect the “new normal” of the post-pandemic world, nor does it make projections based on these changes.

While we have many questions about how the pandemic will shape our communities, like so many things, we will have to wait to understand how future trends and projections will be adjusted.

DATA SOURCES

Demographics – US Census, Wisconsin Dept. of Administration, UrbanFootprint scenario modeling software, CARPC Projections

Housing – US Census, US Dept. of Housing and Urban Development, UrbanFootprint

Transportation – WI Dept. of Transportation, Greater Madison MPO, Madison Metro, US Census

Economy – Bureau of Labor Statistics, CARPC Projections, EMSI, UrbanFootprint

Land Use – Dane County Land Information Office, CARPC staff analysis and Land Demand Projections

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Trends Overview

| WHERE WE'VE BEEN | | WHERE WE'RE GOING |
|--|---|---|
| Overall Growth  | <p>Dane County added 61,547 residents between 2000 and 2010; 58,622 more residents were added from 2010 to 2019.</p> <p>The strongest growth has occurred in villages and cities adjacent to the Central Urban Area.</p> | <p>Dane County's population will increase by 192,718 by 2050, a 35% increase from 2019.</p> <p>In keeping with past trends, future growth is expected to occur most rapidly in communities adjacent to the Central Urban Area.</p> |
| Demographics  | <p>The region's population has aged: just over 20% of Dane County's population was over the age of 60 in 2020, up from 15% in 2010.</p> <p>The population has also diversified: People of color accounted for 45% of Dane County's population growth from 2010 to 2019.</p> | <p>By 2040, 25% of the population in Dane County will be aged 60 and over.</p> <p>Trends toward greater diversity are expected to continue in the coming decades, though the rate of change may be slower.</p> |
| Housing  | <p>In 2020, Dane County had an estimated 232,079 households. Households are smaller today than in previous decades, averaging 2.33 persons in 2020.</p> <p>Between 1990 and 1999, 52% of new housing units added were single-family homes and 41% were multi-family. From 2010 to 2018, that distribution shifted to 36% single-family and 62% multi-family.</p> | <p>Dane County will likely add over 88,000 new households by 2050. The average household size is projected to stay at an average of 2.36.</p> <p>An estimated 40% of new housing units added between 2020 and 2050 will be single-family units and 56% will be multi-family.</p> |
| Transportation  | <p>13% of the 2020 labor force commutes from outside of the County.</p> <p>The number of people working from home grew 2% from 1990 to 2019.</p> <p>More commuters now drive alone and take transit than in 2010. Biking and carpooling are down, while walking remains steady.</p> | <p>The total share of the County's labor force commuting from neighboring counties is projected to increase to 15% by 2035 and 16% by 2050.</p> <p>In June 2020, 79% of respondents to the Greater Madison MPO's telework survey indicated they would like to continue working from home at least one day per week.</p> |

| WHERE WE'VE BEEN | | WHERE WE'RE GOING |
|--|---|---|
| Economy  | <p>41,000 jobs added between 2000 and 2010; an additional 10,300 jobs were added from 2010 to 2020.</p> <p>Healthcare, retail, and accomodation/food service are Dane County's top industries in 2020, employing 27% of the total workforce.</p> <p>People of prime working age represent 45% of the 2020 population, down from 49% in 1990.</p> <p>The labor force participation rate fell from 72% in 2000 to 63% in 2020.</p> | <p>The region is expected to add another 98,000 jobs between 2020 and 2050.</p> <p>The healthcare industries will experience the most job growth, followed by professional and technical services. The utilities and finance sectors are projected to decline at rates of -8% and -3%, respectively.</p> <p>The proportion of people of prime working age will continue to decline, representing about 43% of the population by 2040.</p> <p>Labor force participation rates are projected to continue dipping through 2050.</p> |
| Equity & Quality of Life  | <p>Unequal access to opportunity remains, despite modest improvements in education and employment.</p> <p>Some poverty measures have improved: the number of children living in poverty in Dane County decreased from 9,289 to 6,013 since 2014.</p> <p>Transit accessibility has declined in the Greater Madison area and continues to be a barrier to opportunity. Only about 1/3 of jobs are accessible within a 45-minute walk or transit ride.</p> | <p>Without intervention, past and present inequities will most likely continue into the future. The current focus on social justice issues presents an opportunity to create meaningful change by explicitly incorporating equity into future plans and projects.</p> |
| Land Use  | <p>Since 1981, the adoption of over 280 urban service area amendments has increased the supply of developable land on the edges of cities and villages.</p> | <p>Future land use maps show growth occurring increasingly within urban centers and along corridors connecting the region.</p> |

Demographics

HOW MANY PEOPLE?

Population

In 2019, Dane County had an estimated population of 546,695.

The County has grown by 58,622 people from 2010 to 2019, and by 120,169 people from 2000 to 2019.

Dane County is projected to increase its population by 192,718 by 2050, a 35% increase from 2019.

Where are we growing?

Consistent with past observed trends, population growth is most rapid in communities adjacent to the central urban areas of Dane County, followed by growth in the Central Urban Area.

Since 2000, growth in the cities and vilalges has increased by 46%, with growth in the central urban area at 25%. Population growth in rural areas has increased at a slower rate.

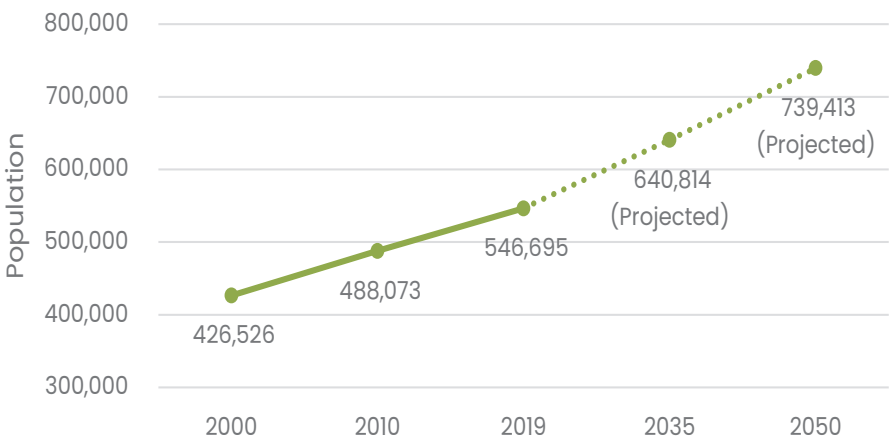
Future growth is projected to follow a similar pattern.

The central urban area is projected to grow by 118,544 people by 2050, a 36% increase from 2020.

The outlying cities and villages are projected to grow by 73,680 people by 2050, a 53% increase from 2020.

Dane County Population Growth

Total Population



Sources: CARPC Population Projections; US Census; 2019 ACS 1-year estimates

Central Urban Area

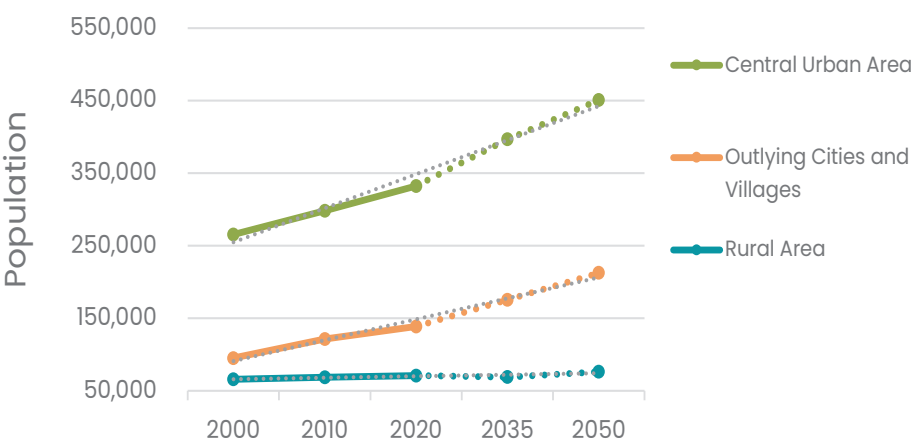
Fitchburg
Madison
Maple Bluff
McFarland
Middleton
Monona
Shorewood Hills
Westport

Outlying Cities & Villages

| | | |
|---------------|-------------|-------------|
| Belleville | De Forest | Stoughton |
| Black Earth | Deerfield | Sun Prairie |
| Blue Mounds | Edgerton | Verona |
| Brooklyn | Marshall | Waunakee |
| Cambridge | Mazomanie | Windsor |
| Cottage Grove | Mount Horeb | |
| Cross Plains | Oregon | |
| Dane | Rockdale | |

Dane County Population Growth

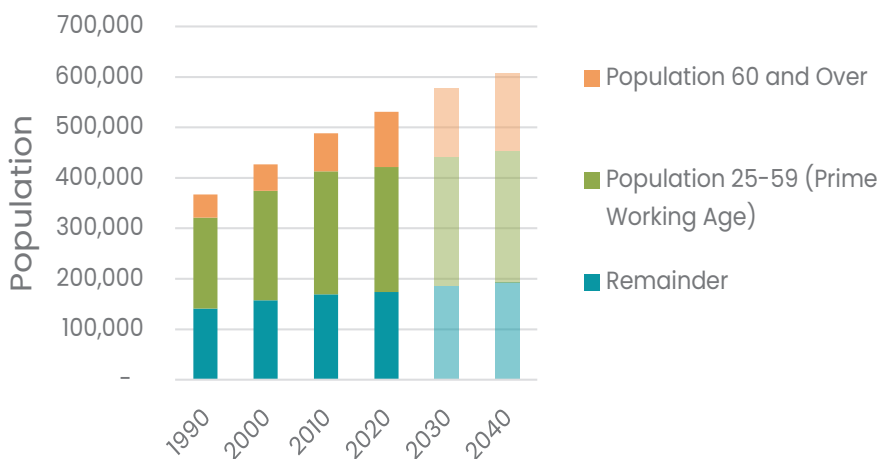
Geographic Area



Sources: 2000 and 2010 Census; CARPC Population Projections

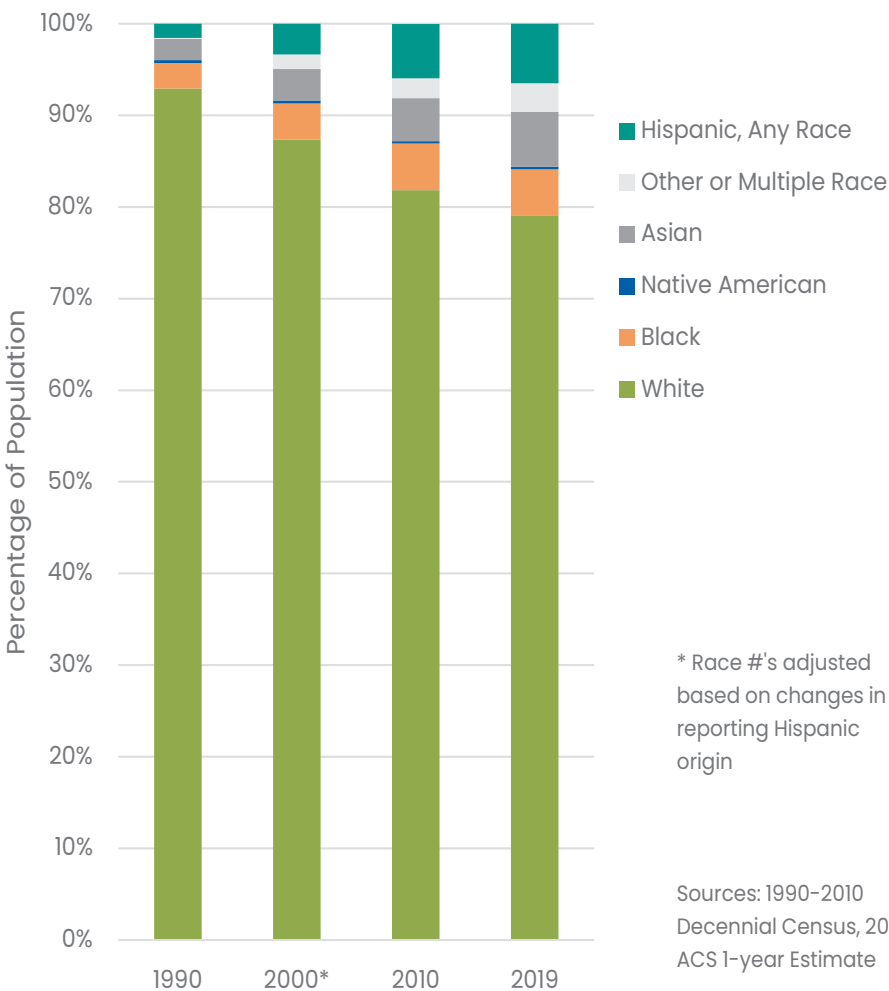
Dane County Population Growth, 1990-2040

Age



Sources: WI DOA Population Projections

Race and Ethnicity in Dane County, 1990-2019



* Race #'s adjusted based on changes in reporting Hispanic origin

Sources: 1990-2010 Decennial Census, 2019 ACS 1-year Estimate

WHO WILL LIVE HERE?

Age

Like many areas in Wisconsin and around the country, the region is getting older. In 1990, about 13% of Dane County's population was aged 60 and over. By 2020, that proportion grew to about 22%. From 2020 to 2040, Dane County's 60 and over population will grow by another 44,150 people, over a 40% increase.

By 2040, 25% of the population in Dane County will be aged 60 and over.

Comparatively, the county is only projected to gain 13,100 people of prime working age by 2040, a 5% increase.

People of prime working age will account for 43% of the population by 2040, down from 49% in 1990.

Race & Ethnicity

Diversity continues to grow across the region. In 1990, white residents accounted for 93% of the population; in 2019 the percentage was 79%.

People of color accounted for 45% of Dane County's population growth since 2010.

Black residents accounted for 5% of the population in 2019, up 2% since 1990; Asian residents accounted for 6% of the population in 2019, up from 2% in 1990; Hispanic residents accounted for nearly 7% in 2019, up from 2% in 1990.

Housing

HOW MANY NEW HOMES WILL WE NEED?

In 2020, Dane County had an estimated 232,079 households, with an average household size of 2.33.

By 2050, there will be an estimated 88,632 additional households in Dane County.

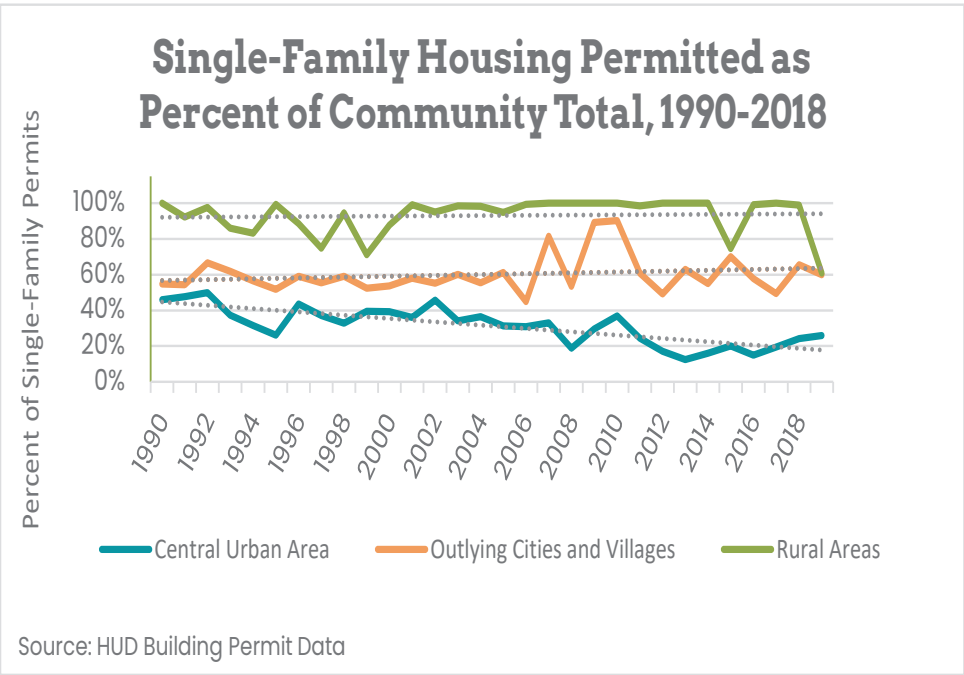
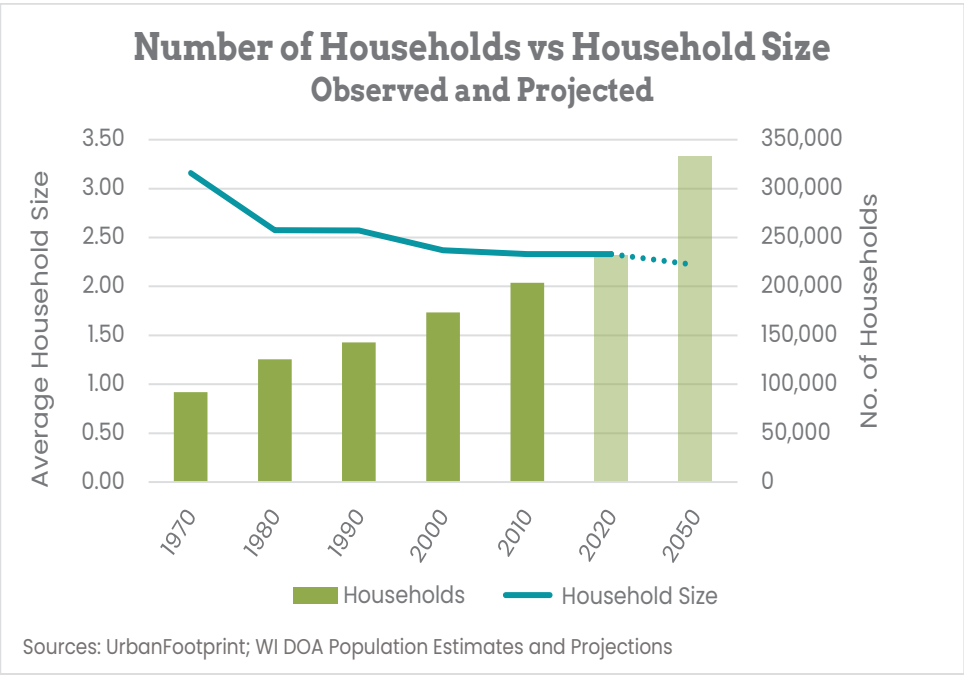
The average household size is projected to continue dropping to an average of 2.36 by 2050.

WHAT KINDS OF HOMES ARE WE BUILDING?

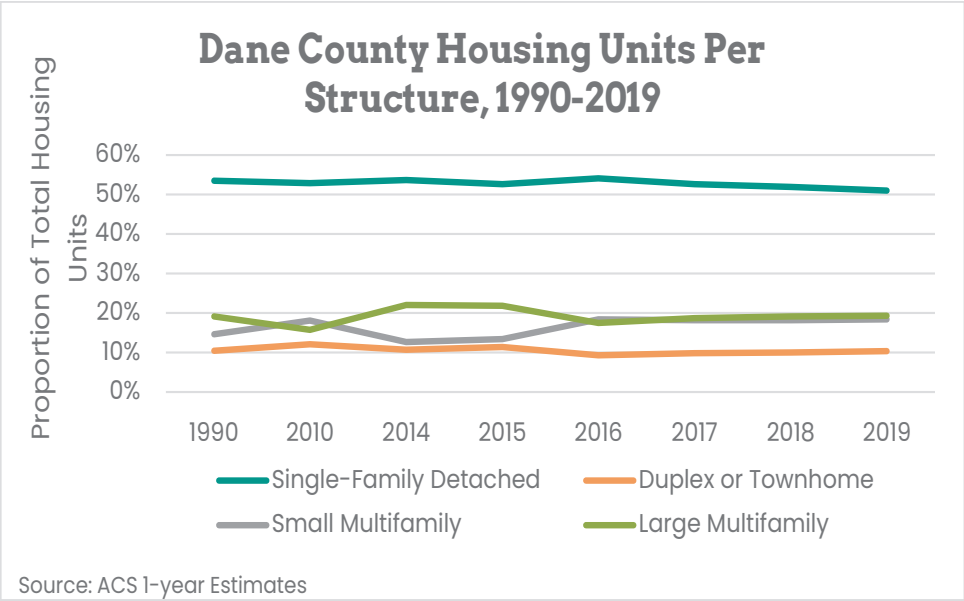
New Housing Permits

In Dane County, permits for single-family homes accounted for 38% of all housing permits in 2019. In the communities outside the Central Urban Area, single-family homes accounted for 60% of new permits, down from 70% in 2015. In Central Urban Area communities, single-family homes represented 26% of new permits, up from 20% in 2015.

Multi-family housing is on the rise in areas outside the Central Urban Area and rose sharply rural areas in 2019. In contrast, the share has declined slightly in the Central Urban Area since 2015. Multi-family housing permits accounted for 74% of 2019 permits in the Central Urban Area and 40% of new permits in the adjacent areas. In rural areas, multi-family housing accounted for 39% of new permits in 2019.



In rural areas, permits for single-family homes were 61% of the community total in 2019, the lowest percentage in over 30 years.



Housing Units per Structure

The majority of housing units are in single-family detached homes, but the percentage of multi-family housing units is steadily rising.

In 2018, single-family detached housing units accounted for 52% of total housing units, down nearly 2% from 1990.

Multi-family units accounted for 37% of housing units in 2018, up from 34% in 1990.

Duplexes and townhomes remain steady at 10% in 2018, nearly unchanged since 1990.

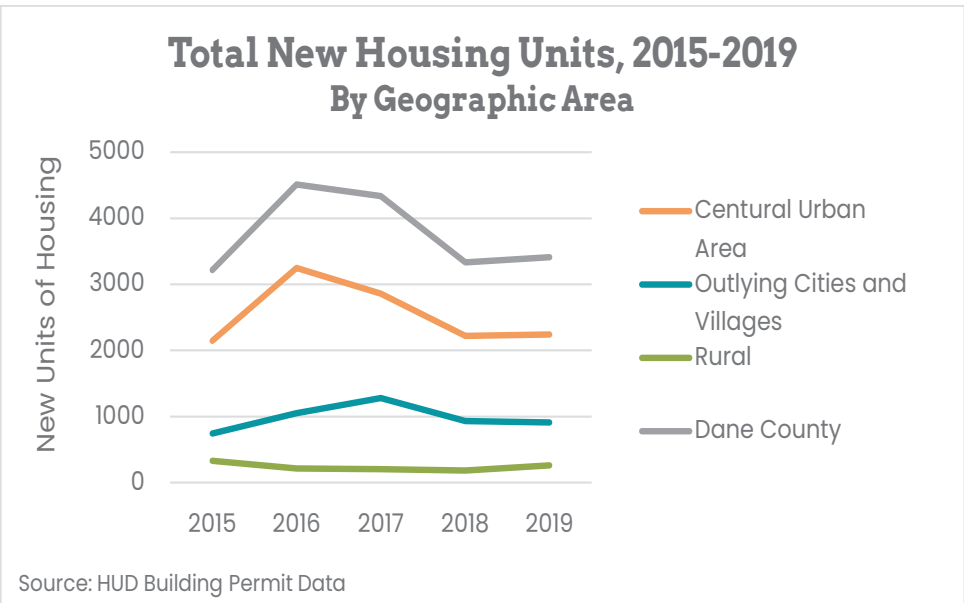
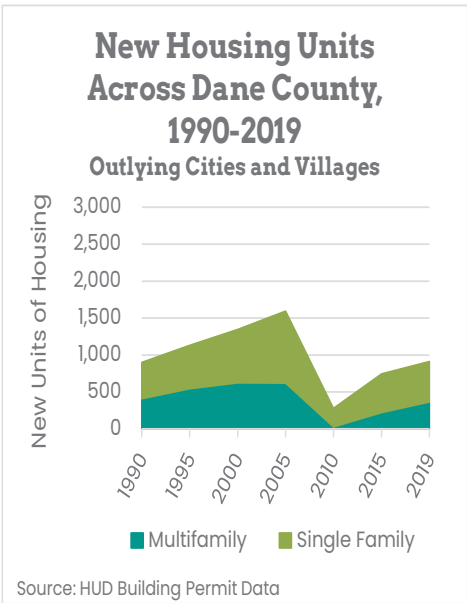
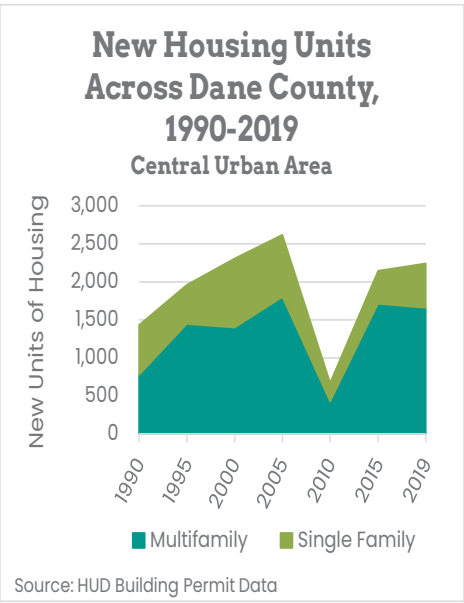
WHERE WILL THESE HOMES BE LOCATED?

While the share of housing units in the Central Urban Area is trending slightly downwards, central communities still account for the majority of new housing units. In 2019, 66% of new housing units were located in the central urban area, down 1% from 2015.

In 2019, the Central Urban Area harbored 2,240 of Dane County's 3,409 new housing units.

This slight downward trend corresponds to the upward trend in areas outside of the Central Area. In 2019, adjacent areas contained 27% of new housing units, up from 23% in 2015.

Rural areas had 8% of housing units in 2019, down from 10% in 2015.



Transportation

WHO IS COMMUTING?

Dane County Commuters

In 2015, 67,623 workers from other Dane County communities commuted to Madison, an increase of 7,860 from 2000.

Commuters from Beyond Dane County

Dane County can expect an increase of commuters from neighboring counties over the next 30 years. The total share of the labor force commuting from neighboring counties is projected to increase to 15% by 2035 and 16% by 2050.

From neighboring counties, the highest number of commuters currently comes from Rock and Columbia Counties, followed by Jefferson and Green Counties. Rock County is projected to increase its share of commuters to 5% by 2050, where Columbia County is projected to slightly decrease its share of commuters.

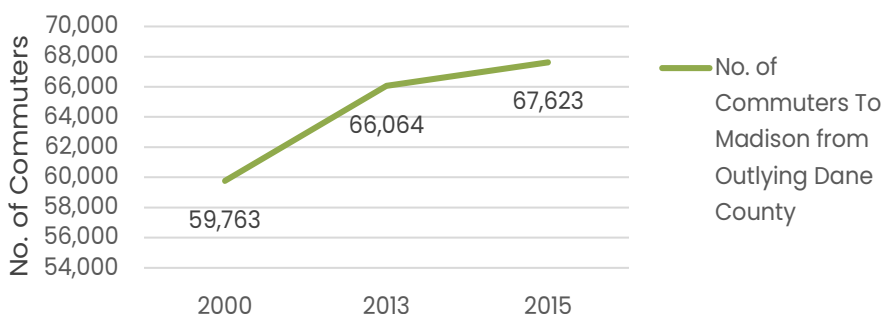
HOW WILL WE GET AROUND?

Commute Mode

Driving alone remains the dominant mode of transportation to work, with rates up slightly since 2010. In 2019, 73% of commuters drove alone to work; in 2010 73% drove alone.

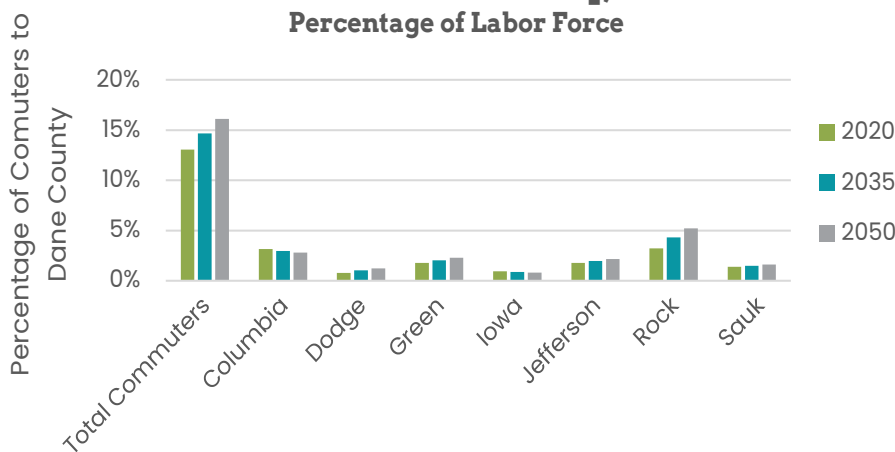
Carpooling is the second most common commuter preference, though rates declined 6% from 1990 to 2019.

Commuting to Madison from Within Dane County, 2000-2015



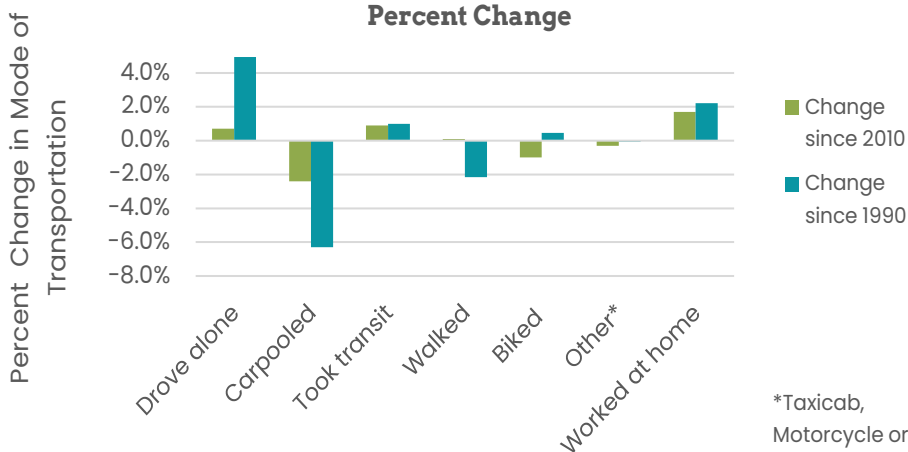
Source: US Census; Commuter Flows 2009-2013, 2011-2015 ACS 5-year estimates.

Commuters to Dane County, 2020-2050
Percentage of Labor Force



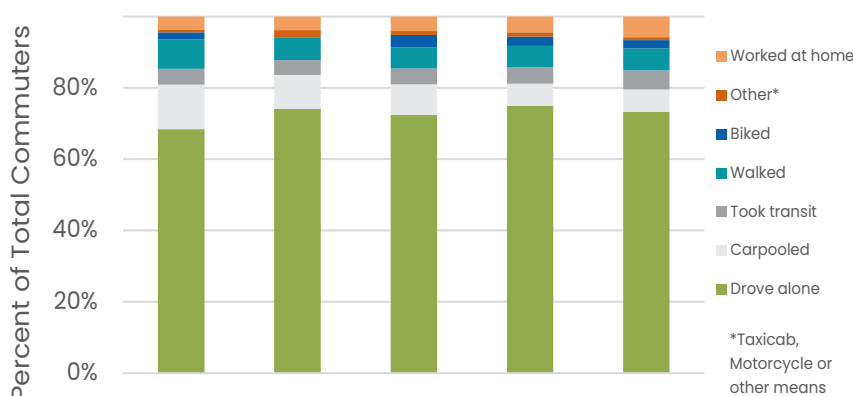
Source: CARPC

Dane County Commute Mode Share
Percent Change



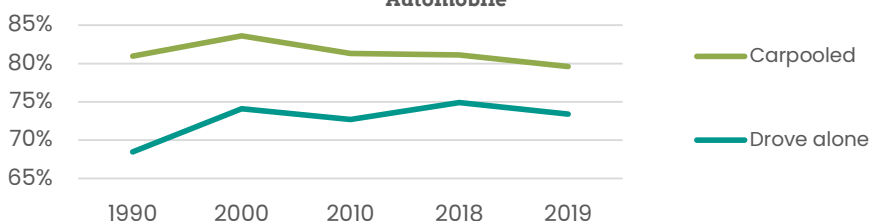
Source: US 1990, 2000, and 2010 Census; 2018-19 ACS 1-Year Estimate

Dane County Commute Mode Share, 1990-2019



Source: US 1990, 2000, and 2010 Census; 2018-19 ACS 1-Year Estimate

Dane County Commute Mode Share, 1990-2019
Automobile



Source: US 1990, 2000, and 2010 Census; 2018-19 ACS 1-Year Estimate

Walking rates have remained the same since 2010. Biking rates are down slightly since 2010, but up overall from 1990.

While the COVID-19 pandemic has certainly increased the rate of working from home, this trend was already on the rise, with an increase of 2% from 1990 to 2019.

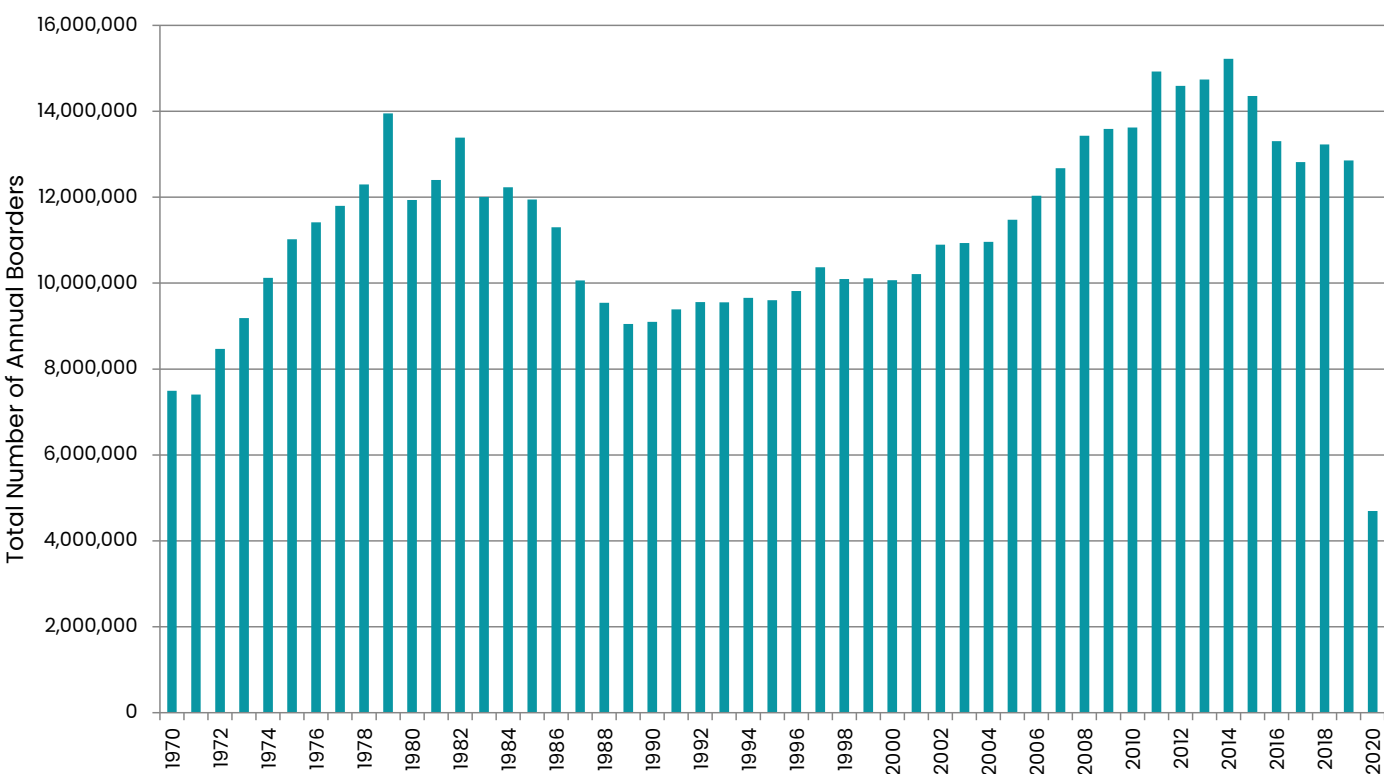
Transit

Slightly more people commute by transit compared to 2010, but transit ridership has roughly stayed steady since 1990.

In 2019, Madison Metro ridership was 12.8 million, down slightly from the previous year, but above the 20-year ridership average of 12.5 million.



Annual Fixed Route Ridership
1970-2020



Source: Madison Metro

Economy

WHERE WILL WE WORK?

Total Jobs

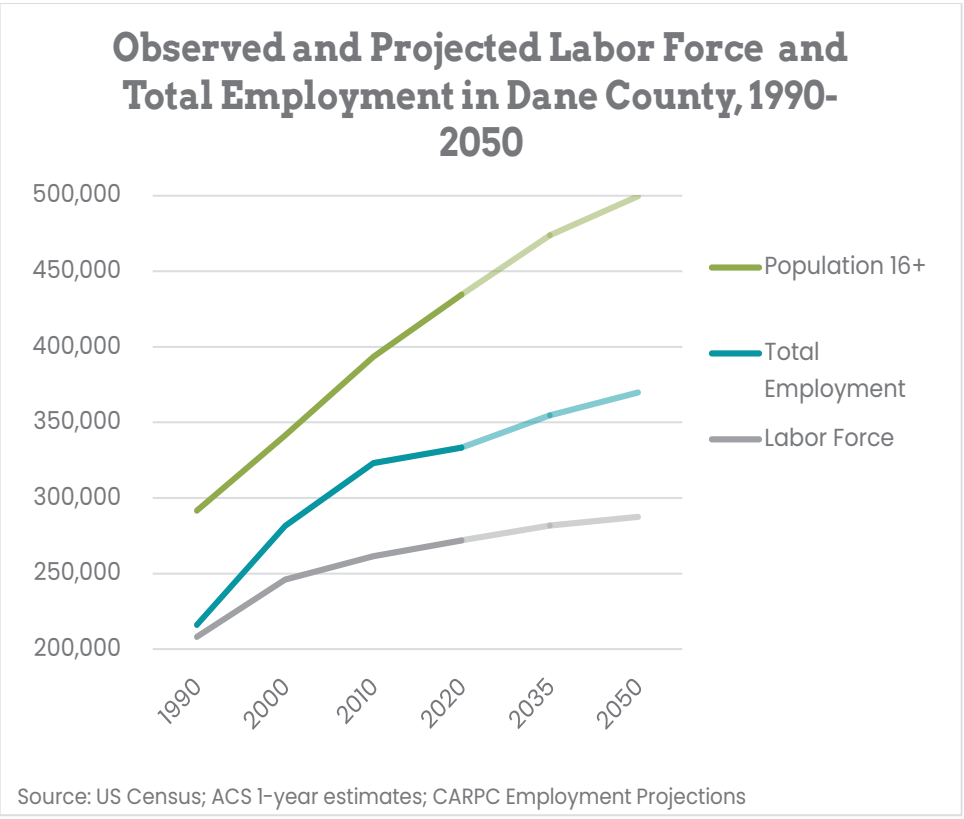
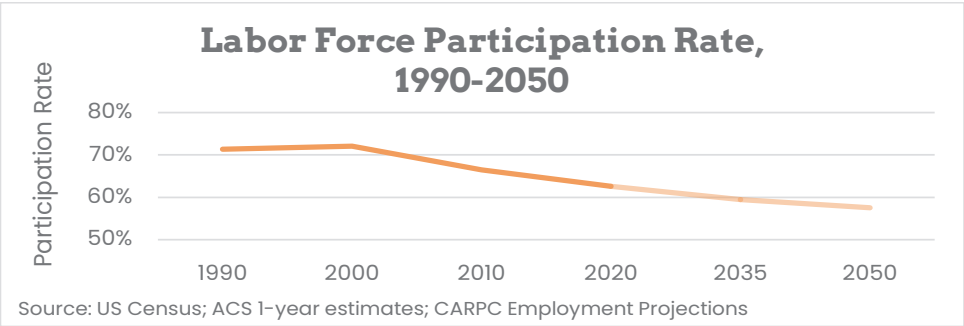
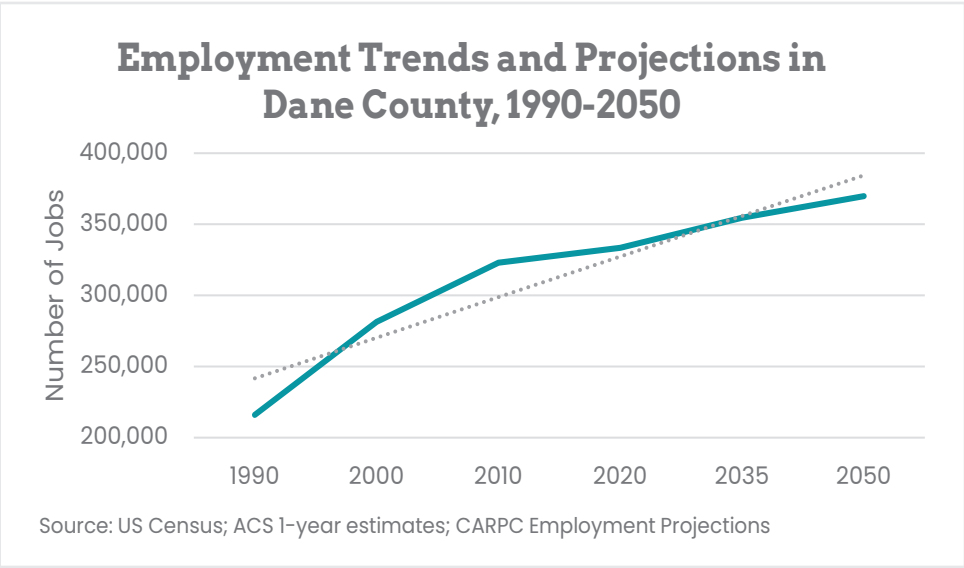
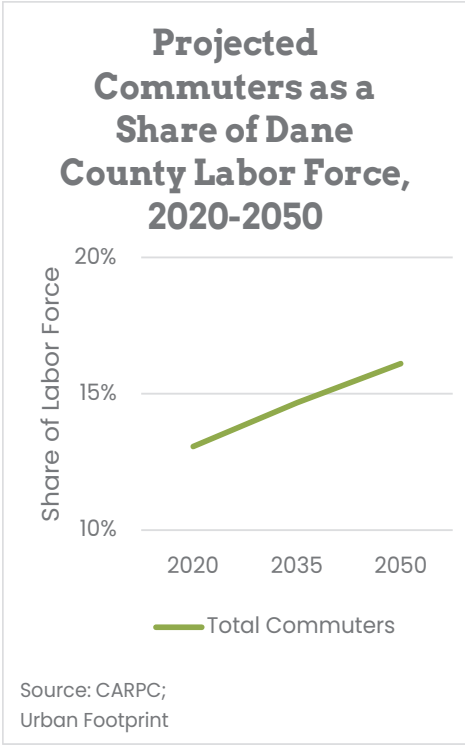
The region added more than 41,000 jobs between 2000 and 2010, and nearly another 10,300 from 2010 to 2020.

The region is expected to add 98,000 additional jobs by 2050.

Labor Force

As Dane County's population ages, labor force participation rates have fallen from 72% in 2000 to 63% in 2020. This trend is projected to continue through 2050.

With fewer residents participating in the labor force, commuters from outside Dane County are projected to make up a larger share of the labor force, jumping from 13% in 2020 to 16% by 2050.



Industry Changes

Health care, retail, and food service are projected to remain the top industries in Dane County in 2025, providing around 28% of the County's total jobs.

Over the next several years, the industry expected to grow the fastest is health care and social assistance, with growth around 11%. This is followed by 9% growth in professional and technical services, 8% growth in

the construction and information industries, and 7% growth in both educational services and entertainment.

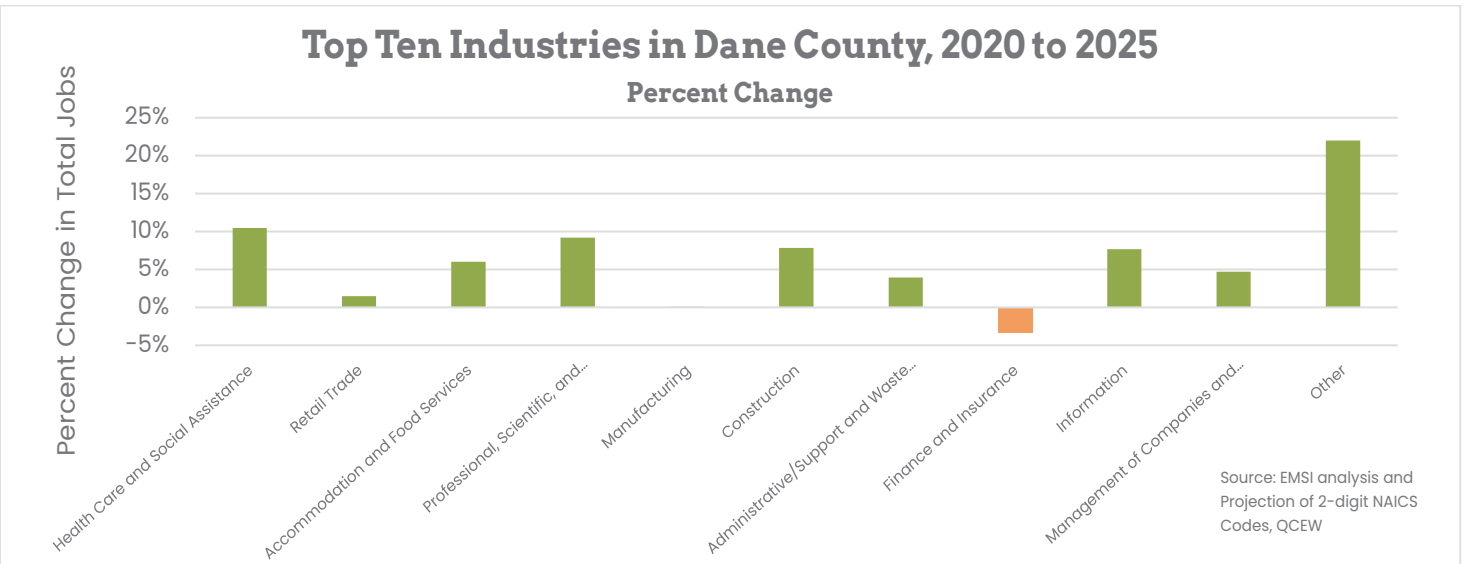
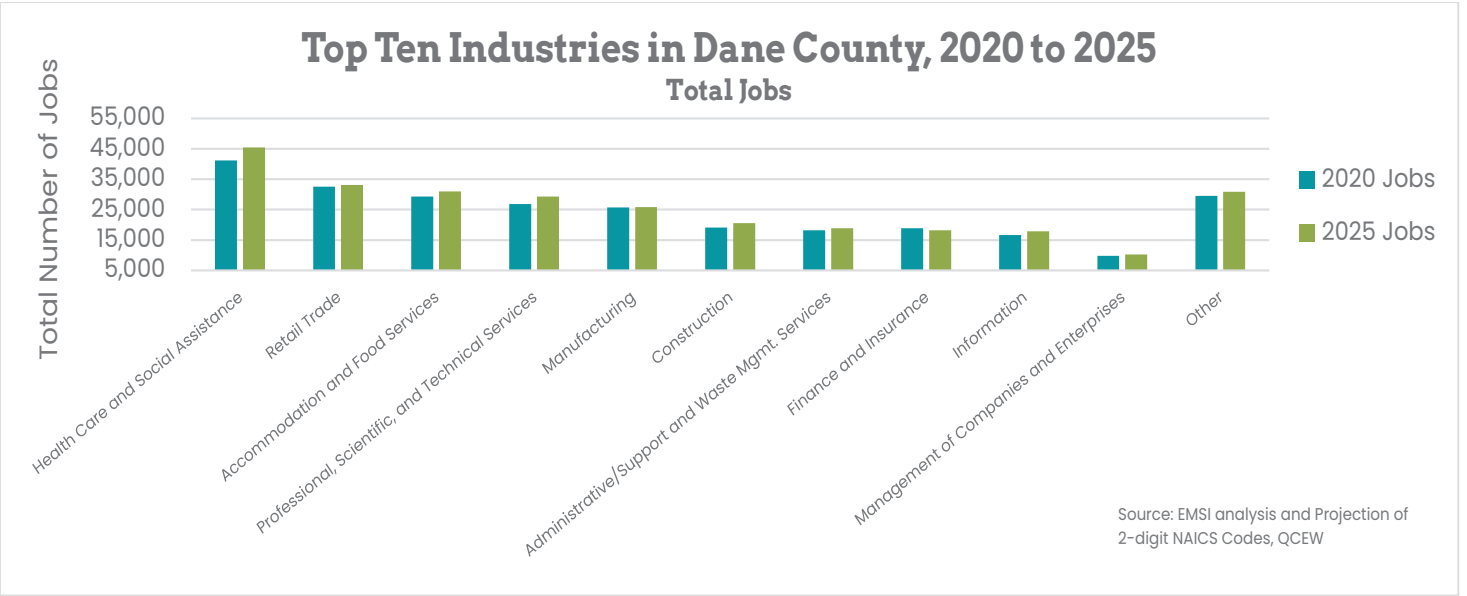
Manufacturing is projected to remain steady, adding only 16 jobs between 2020 and 2025.

The utilities and finance industries are expected to decline by -8% and -3%, respectively.

The health services industry is expected to add around 4,300 jobs from 2020 to 2025, growing by 11%.

Professional Services will grow by 9%, adding around 2,500 jobs from 2020 to 2025.

Manufacturing will grow at a snail's pace, at about 0.1%, from 2020 to 2025.



Equity & Quality of Life

ACCESS TO OPPORTUNITY

From 2014 to 2019, Dane County saw steady improvements in both quality-of-life and equity measures. Unemployment rates, child poverty rates, median household income, and high school graduation rates have all improved over the last 5 years.

Equity in Education

From 2015 to 2019, high school graduation rates among the region's largest school districts improved overall. Disparities in graduation rates between racial and ethnic groups have also improved, though inequity persists.

Income & Poverty

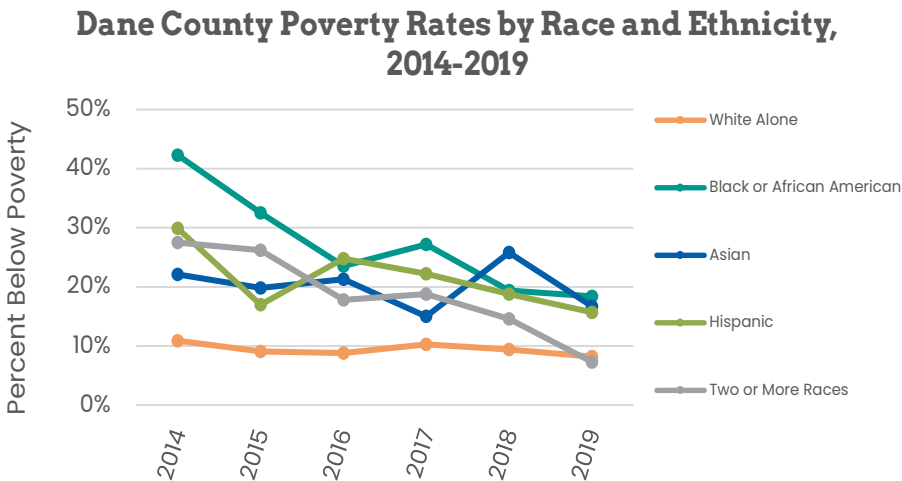
Child poverty has been declining in the past decade in Dane County and statewide.

From 2018-2019, the total estimated number of children living in poverty in Dane County decreased sharply, from 9,289 to 6,013.

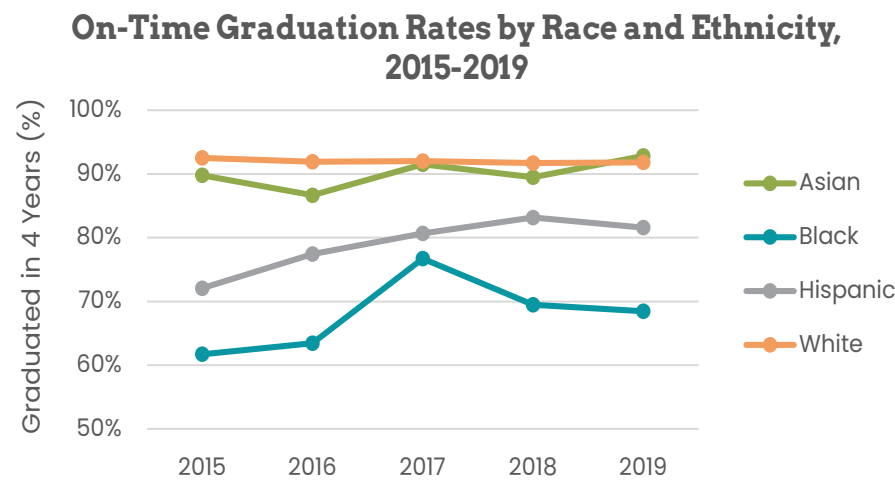
Real Median Household Income has also improved. Since 2014, household income in Dane County has increased by \$15,922, a 26% increase since 2014. By comparison, household income in Wisconsin has risen by \$11,546 since 2014, an increase of 22%.

Jobs

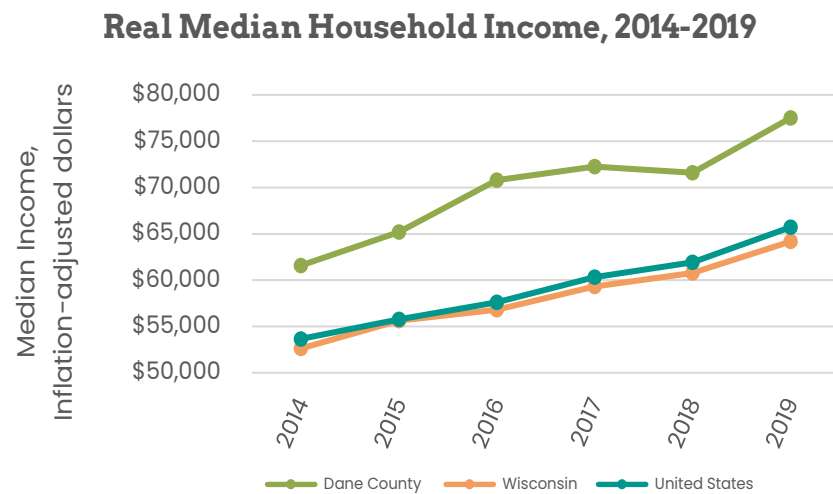
The unemployment rate in Dane County has improved across



Sources: ACS 1-year Estimates

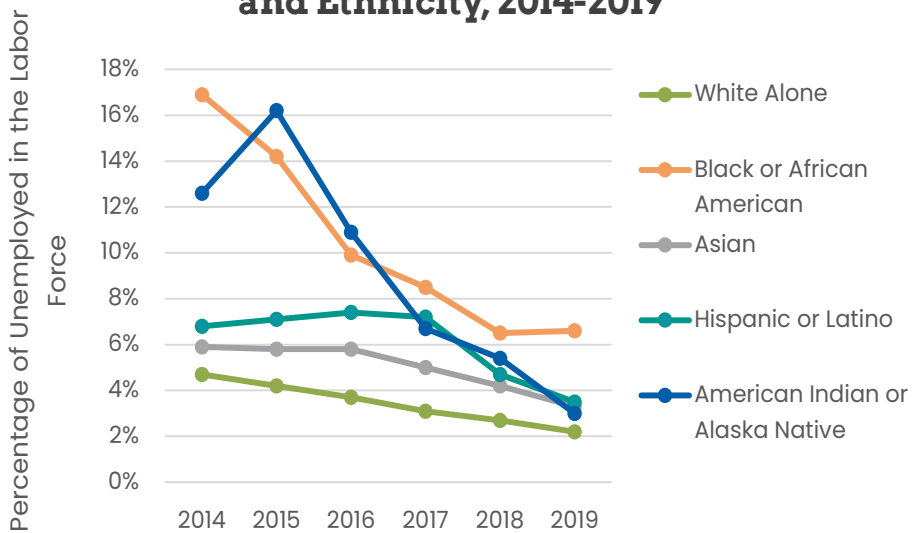


Sources: WI Department of Public Instruction



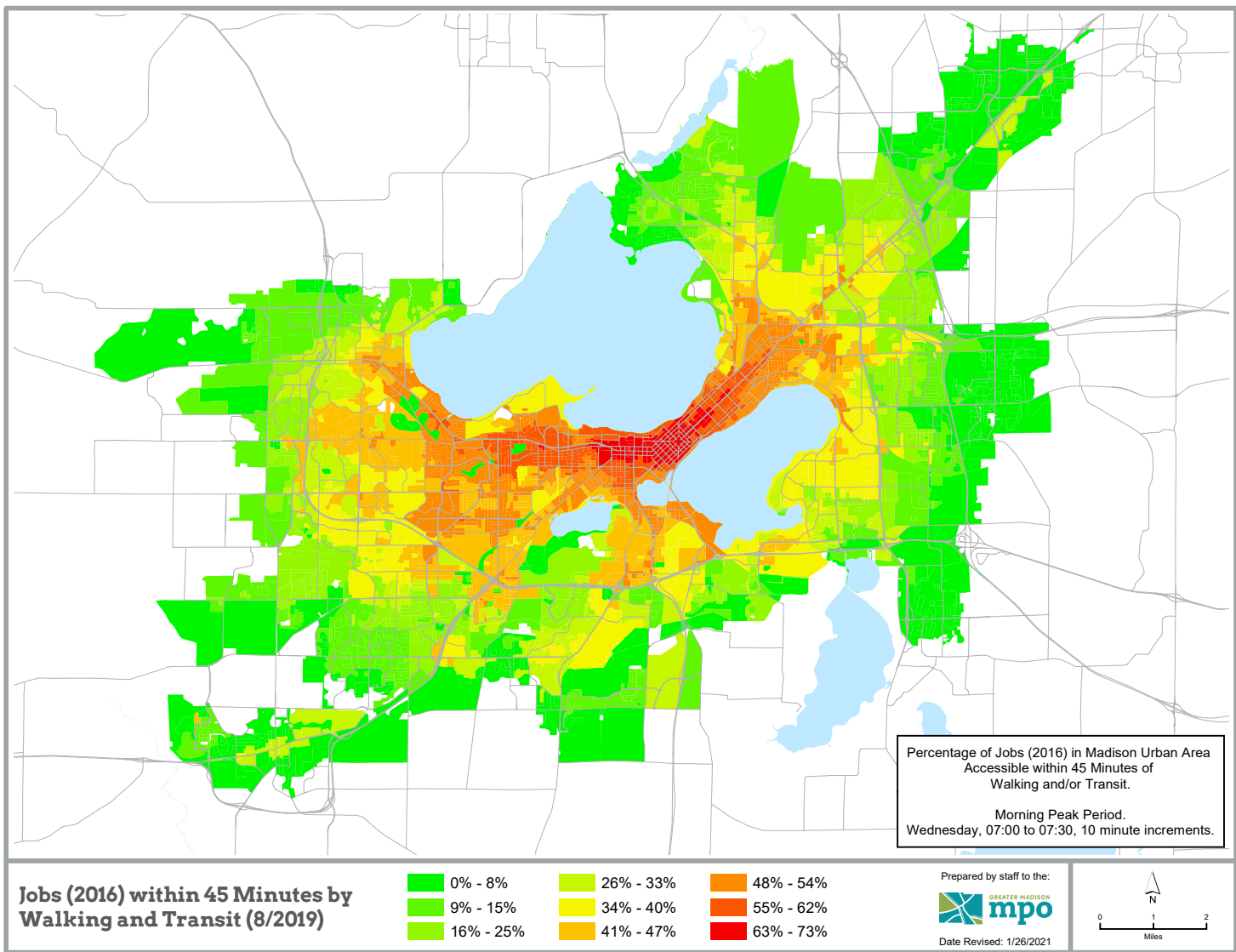
Source: ACS 1-Year Estimates

Dane County Unemployment Rate by Race and Ethnicity, 2014-2019



Source: ACS 5-year Estimates

1 in 7 residents can access 50% or more of the region's jobs within 45 minutes via transit.



all measured races and ethnic groups, and rates among Black and Native populations have declined dramatically since 2010. However, disparities persist. In 2019, white workers were unemployed at a rate of 2%, Black at 7%, Asian at 3%, Hispanic at nearly 4%, and American Indian or Native Alaska Native at 3%.

Job Accessibility

Transit accessibility has declined in the Greater Madison Area, and continues to be a barrier to opportunity. On average, 32% of jobs in the Transit Service Area are accessible within 45 minutes of walking or transit.

Land Use

REGIONAL LAND USE PLANNING

This report characterizes the region’s recent and anticipated population growth, demographic shifts, transportation pattern changes, economic trends, and urban service area expansions – all factors that strongly influence land use. Achieving a desirable land use pattern in the face of these changes will require coordinated planning.

The *Vision 2020: Dane County Land Use and Transportation Plan* served as the region’s land use and development guide from 1997 to 2020. The 2050 Regional Development Framework will soon replace *Vision 2020* as the “master plan for the physical development of the region” (Wis. Stat. § 66.0309).

CARPC’s 2050 Regional Development Framework is designed to be a guide for incorporating regional land use goals into local decisions. Integrating public priorities, local input, and regional data, the Framework will provide a foundation to support continuing growth, tackle common challenges, and protect key resources.

At the broadest level, the RDF advocates for development that promotes climate resilience, connects all residents to housing, jobs, and services, and conserves resources and farmland. Strategies for meeting these goals include:

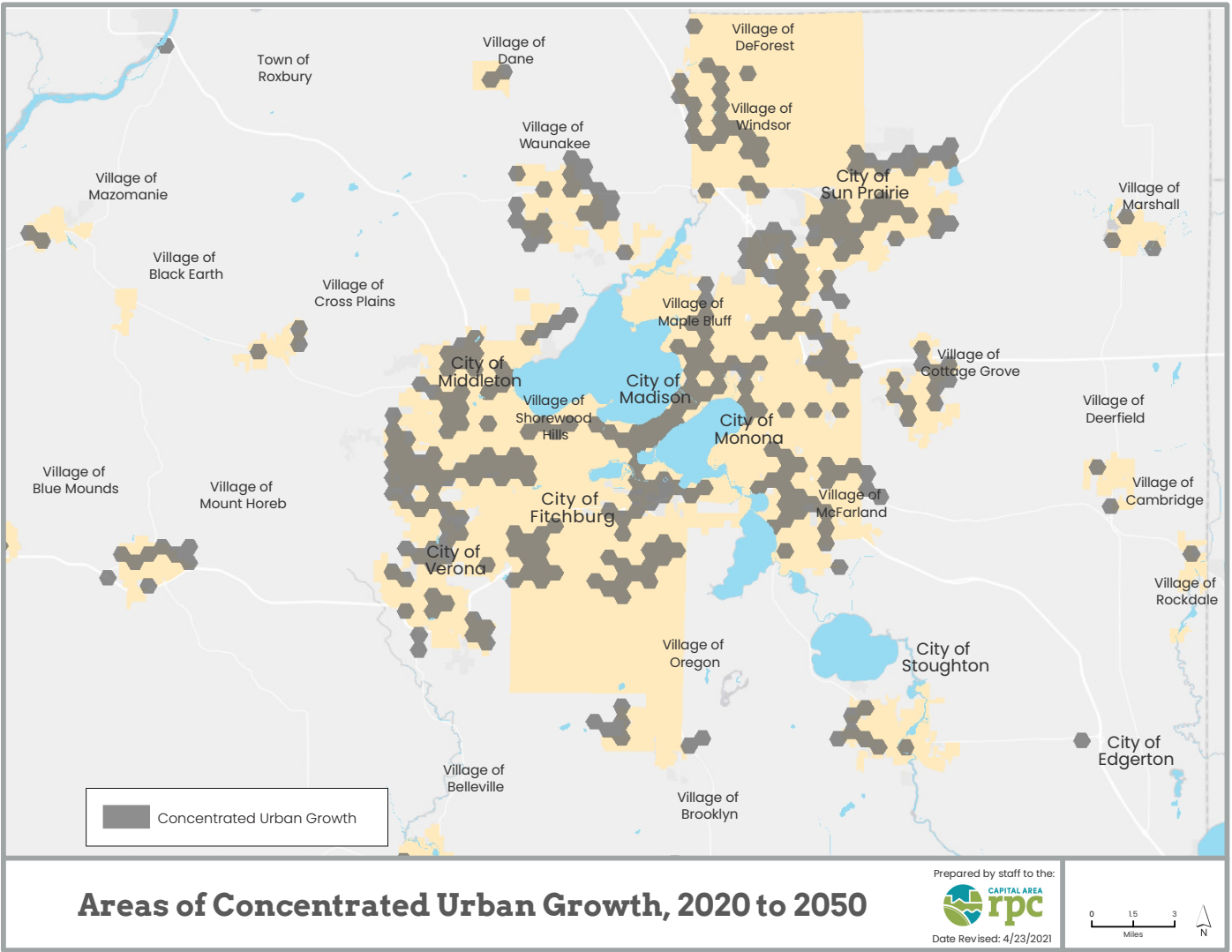
- Focus growth in vibrant centers and corridors
- Prioritize growth in already developed areas
- Plan areas for quality business growth
- Plan complete neighborhoods
- Preserve farmland areas
- Encourage placement of stewardship areas into Environmental Corridors

OBSERVED TRENDS

Urban Land Use

The Dane County Land Use Inventory tracks the number of acres allocated to various urban land use types. Between 1990 and 2015, a total of 23,723 acres were developed in Dane County’s urban areas, a 49% increase. The largest expansions occurred in the commercial (88% growth) and extraction/industrial/manufacturing (73% growth)

| Urban Land Use, 1990–2050 | | | | | | | | |
|---|--|--------|--------|--------|--------|--------|-------------------------------------|--------|
| | Observed (Acres) Dane County Land Use Inventory | | | | | | Projected (Acres) UrbanFootprint | |
| Land Use Type | 1990 | 1995 | 2000 | 2005 | 2010 | 2015 | 2020 | 2050 |
| Commercial | 4,485 | 4,863 | 5,800 | 6,614 | 8,017 | 8,432 | 9,630 | 9,810 |
| Communication/ Transportation/Utilities* | 16,302 | 17,677 | 18,192 | 20,182 | 22,433 | 23,211 | 25,795 | 26,129 |
| Extraction/Industrial/ Manufacturing | 2,257 | 3,491 | 3,958 | 4,599 | 3,123 | 3,908 | 4,279 | 5,485 |
| Institutional/Government | 3,854 | 4,090 | 4,222 | 4,684 | 4,945 | 4,381 | 5,469 | 5,597 |
| Mixed Use | – | – | – | – | – | – | 133 | 1,724 |
| Residential | 21,721 | 24,565 | 26,834 | 30,534 | 31,793 | 32,411 | 34,327 | 38,730 |
| Total Developed Land | 48,619 | 54,687 | 59,007 | 66,613 | 70,312 | 72,342 | 79,633 | 87,474 |
| *UrbanFootprint basemap excludes currently developed rights-of-way. Value is generated by creating a union of Dane County with UrbanFootprint parcels and assuming acreage of the non-UF remainder is transportation. | | | | | | | | |



categories. Residential development grew by almost 50% during this 25-year period.

Urban Service Area Expansions

Over 280 Urban Service Area amendments have increased the supply of developable land on the edges of cities and villages since 1981. The number of amendments approved annually peaked from about 2002 to 2008 and has since followed a downward trend. A total of 30 amendments were approved from 2015 to 2020. The communities with the greatest number of amendments in recent years are the City of Madison, Village of Cottage Grove, and City of Verona.

PROJECTED GROWTH

Future Urban Development Types

In developing the Regional Development Framework, CARPC staff used UrbanFootprint to project future land use patterns based on

anticipated population, household, and economic growth. Based on this analysis, we can expect commercial and residential growth to occur more often in mixed use buildings, which are fairly new to the region. Industrial and manufacturing are expected to continue to expand at previous rates while communication/transportation/utilities and institutional/government will expand more slowly.

Future Urban Growth Areas

Though it is not possible to pinpoint the exact location of future growth, CARPC’s concentrated urban growth map identifies the general, regional-scale development patterns that would result from prioritizing growth in already developed areas. Concentrating new growth in these areas will help reduce pressure to develop farmland and natural areas, reduce greenhouse gas emissions by reducing car travel, and conserve taxpayer funds by utilizing existing infrastructure.



Capital Area Regional Planning Commission

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Madison, WI 53703

capitalarearpc.org