

CONNECTING THE REGION A Newsletter from the Greater Madison MPO Fall 2020

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Introducing the Greater Madison MPO

Connecting People, Places & Opportunities

You may have noticed that something's changed... as the newly minted Greater Madison MPO (formerly Madison Area Transportation Planning Board), we are excited to share the results of our recent rebranding!

We initiated this process as a big step toward improving public awareness and understanding of the MPO's role and resources within the region. The results and feedback we gathered will help us draw better connections to the everyday things that people value most, and will inform our approach to future engagement processes such as the Regional Transportation Plan update that will begin in early 2021.

As part of the rebrand, we also defined a forward-thinking mission and vision to guide our work in the region, and teamed with the Capital Area Regional Planning Commission to further connect our two regional planning agencies with coordinated brands.

Finally, our transportation options program, Rideshare Etc., received an exciting facelift and will be introduced publicly as RoundTrip in 2021.

We are grateful to everyone who assisted us in this journey and we look forward to bringing our new identity to life in the coming weeks and months. We updated our website and Facebook page to reflect the new MPO name and logo, and additional improvements are planned for the future.

Greater Madison MPO's COVID-19 Response

Like many organizations, the MPO office remains closed to the public due to COVID-19. Our staff will continue to work remotely part- or full-time to help protect the health of our community, and we are committed to providing the same dependable level of service that you are accustomed to. While our phones are monitored, the best way to reach us during this time is via email. If you have any questions or requests, please visit our <u>staff page</u> for a complete list of contact information.

After an initial interruption, we will also continue to maintain our Policy Board, Technical Coordinating Committee, and Citizen Advisory Committee schedules. These meetings will be held on Zoom throughout the pandemic. Schedules and agendas are posted on the <u>calendar page</u> of our website and on our <u>Facebook page</u>. Agendas will provide information about how to register to join virtually, and how to provide a comment if desired.

Madison Region Remote Work Survey

COVID-19 Impact

In response to the unprecedented circumstances of COVID-19, the Greater Madison MPO conducted a three-week online survey between June 9-30 to assess the effect of the pandemic on remote work trends and attitudes in the Madison region. The goal of the survey was to understand the unique implications of COVID-19 for workplace structure and commuter transportation trends, and to identify opportunities to connect area employers and employees with the tools needed to support the long-term adoption of remote work as a sustainable commute option.

Results from the survey will inform the MPO's transportation options program, Rideshare, Etc., which connects individuals and employers in the Madison region with convenient alternatives to driving alone in order to reduce vehicle miles traveled (VMT), congestion, and greenhouse gas emissions. This includes encouraging employers to offer remote work as an option, and working with regional partners to support this mission. Results will also provide local insights to help employers and organizations in the region make decisions about the future.

MPO staff worked with partners including CARPC, MadREP, the Greater Madison Chamber of Commerce, Latino Chamber of Commerce of Dane County, Madison Black Chamber of Commerce, and UW Small Business Development Center to refine the draft survey, as well as many others who helped distribute it through local municipal and organizational contact lists.

The survey received 1,881 responses, of which 73% are employees, 16% are managers, and 11% are executives. Organizations included both public and private employers, with sizes ranging from fewer than ten staff to over ten thousand. Many of the respondents (38%) work in downtown Madison, but home locations are dispersed throughout the county and beyond.

Prior to COVID-19, 78% of respondents never worked from home, and 83% of executives and managers did not supervise employees working remotely. In contrast, 80% of all respondents worked from home at least one day per week during the height of the pandemic, defined for this survey as March 25 – May 26, 2020; 64% worked from home full-time.

The survey found that although COVID-19 initiated a crash course in remote work for most employers and employees in the Madison region, the overall work experience has been positive. As a result, significant demand exists among employees for remote work to continue as an option into the future. Of all respondents, 79% would like to continue working from home at least one day per week after business returns to normal, and 69% say they will view an employer more favorably in the future if given the option to work from home. These results are consistent with findings from national surveys.

Encouragingly, 69% of executives and managers in the Madison region now anticipate that more employees will work from home periodically when business returns to normal, and 27% anticipate that more employees will work from home nearly full-time.

While concerns about employee productivity and effective management have been some of the primary historic barriers to wider adoption of remote work, the survey found that since COVID-19, 65% of executives and

Impact of Remote Work on VMT and Air Quality

A recent analysis by Streetlight found that if commuters in Seattle worked from home just one to two days per week, the benefit would be a nearly 5% decrease in emissions.

Similarly, an analysis of workplace data and trends conducted by KPMG Automotive Group in June 2020 estimates that 10 to 20 percent of the U.S. workforce could permanently switch to remote work, contributing to a 9.2 percent long-term reduction in annual VMT when coupled with a greater reliance on e-commerce.

Sources

Government Technology, June 2020 (link here)

KPMG Automotive Group, June 2020 (link here)

After business returns to normal:

79% of respondents would like to continue working from home at least one day per week

69% say they will view an employer more favorably if given the option to work from home

"If you had asked before the pandemic, my response would be that [work from home] isn't possible. I now know it is possible, it can work, and there are benefits. There are also some challenges, but they are manageable."

- Survey respondent

managers in the region believe their workforce is 76-100% efficient when working remotely, and another 12% say that efficiency is better than ever. Similarly, 75% of employees felt the same or better about their personal job performance at the height of the outbreak, and 37% were more productive.

The greatest challenges of remote work identified by this survey reflect the findings of many other surveys from around the nation. They include: (1) lack of access to the necessary tools and resources to work effectively, including computer equipment, a quality office space, and reliable internet; (2) barriers to communication and collaboration among and between coworkers and managers; and (3) negative impacts to workplace culture and social connectivity, perhaps exacerbated by few respondents having access to virtual watercoolers and other employer-sponsored social opportunities.

The greatest benefits of remote work, which respondents reported more frequently than challenges, revolve around saving time and money, and converting these savings to positive pursuits. Of all respondents, 70% are saving money by not commuting; 57% are spending more time with family and friends; 54% have more time to sleep and do housework; and slightly over one third are being more productive at work, exercising more, and eating healthier. Other top benefits include reduced stress and greater comfort while working from home, as well as feelings of greater satisfaction with personal job performance and life overall.

These results indicate that employers have an incredibly unique opportunity to take advantage of lessons learned from COVID-19 by focusing their efforts in three main areas. These include: (1) creating a company culture and flexible workplace model that support a variety of workplace preferences and needs; (2) ensuring that the right tools and resources are in place for employees to thrive both professionally and personally in a hybrid workplace; and (3) maintaining open communication to continually learn from missteps and build upon successes.

For agencies and organizations that work with employers, the survey highlights key resources desired by employees, managers, and executives to make remote work easier and more effective. By connecting employers and employees with the right knowledge, guidance, and opportunities, we can build upon the valuable new awareness generated by the unexpected circumstances of COVID-19, and continue to forge a sustainable and successful path forward for transportation and quality of life in our region.

COVID-19 Impacts Regional Traffic

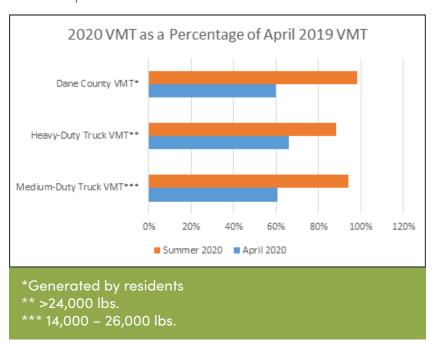
Traffic volumes dropped dramatically throughout Dane County earlier this year as the county's stay-at-home order went into effect in late March, and retail/service businesses closed to mitigate the spread of COVID-19. The decrease was especially noticeable during the morning and afternoon peak commute periods on arterial roads such as the Beltline and East Washington Avenue, which would normally experience significant congestion.

How much did traffic volumes actually decrease during the stay-at-home order, and how much have volumes recovered since then? MPO staff used StreetLight Data, a travel analytics service providing access to "big data", to answer these questions (see related article). MPO staff evaluated: (1) the change in total estimated daily vehicle miles of travel (VMT) generated by residents of Dane County; (2) the change in total estimated daily commercial truck VMT (medium and heavy-duty) for travel that began, ended, or passed through Dane County; and (3) the change in estimated daily traffic volumes at over 200 selected locations within the county, primarily on roadways that had an average weekday volume of over 10,000 before the pandemic.

Three time periods were selected: April 2019, April 2020 (during the stay-at- home order), and June 15 – July 15, 2020 (most recent data available).

StreetLight Data indicates that **total VMT** generated by residents of Dane County dropped 40.1% during April 2020 compared to April 2019. Medium-duty truck VMT decreased by a similar amount, 39.2%, while heavy-duty truck VMT dropped 34.1%.

VMT has since rebounded with the reopening of the economy, though with fewer jobs. Between June 15 and July 15, 2020, VMT generated by residents of Dane County increased to 98% of the April 2019 level, while medium-duty and heavy-duty truck VMT increased to 93.9% and 88.1% of their April 2019 levels, respectively. Although there are seasonal factors that affect



VMT from month to month affecting the comparison between spring and summer data, it is clear that resident and truck VMT have mostly recovered now.

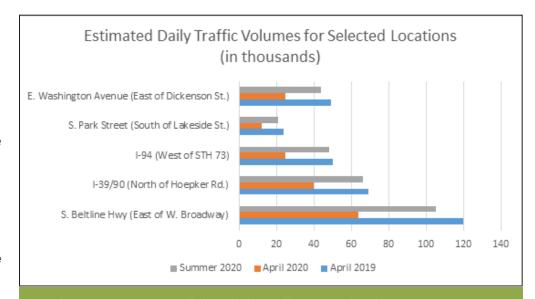
April 2020 average weekday daily traffic (AWDT) volumes in Dane County generally decreased 40-60% on roadways that had an AWDT volume of 10,000 or greater pre-pandemic, compared to the same period in 2019.

AWDT volumes have since rebounded, and were generally 80-95% of their April 2019 levels during the June 15-July 15 period.

Peak period travel demand does not appear to have rebounded by the same amount, indicating that travel is now distributed more evenly throughout the day due to a shift in travel behavior such as more telecommuting.

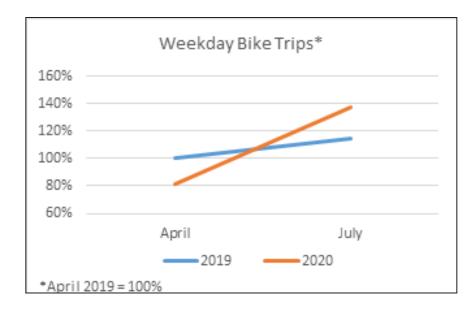
Further study is warranted. The chart to the right shows the change in AWDT volumes over the three time periods for selected locations in Dane County.

Bicycle travel was similarly affected by COVID-19. As shown on the next page, weekday bike trips in April were down about 20% in 2020 compared to 2019. By July,



April 2020 average weekday daily traffic (AWDT) volumes in Dane County generally decreased 40-60% on roadways that had an AWDT volume of 10,000 or greater pre-pandemic, compared to the same period in 2019.

however, they were substantially higher than 2019 levels.



While the overall number of weekday bike trips increased in July 2020 compared to July 2019, these trips were less concentrated spatially. In July 2019, the four zones that cover Library Square Mall, UW Hospital, Camp Randall Stadium, and Henry Vilas Zoo each accounted for 1.1% – 1.6% of Dane County weekday bike trips; in July 2020, these zones accounted for 0.3% – 0.9% of weekday bike trips.

Weekend bike trips in April and July 2020 exceeded those in April and July 2019 by 15% and 23% respectively, indicating more recreational bicycling.

Big Data Helps MPO Understand Travel Patterns in the Greater Madison Area Last year, the MPO began working with StreetLight Data, a company that

Last year, the MPO began working with StreetLight Data, a company that processes location information from mobile phones and navigation devices – a type of "big data" – into useful data that can be used to answer a wide variety of questions about how, when, and where people travel.

The mobile phone data is the primary source of information about passenger car, bicycle, and pedestrian trips, while data from in-vehicle navigation devices is the main source of information about commercial vehicle trips and vehicle speeds. Streetlight plans to have transit trip data available by the end of 2020.

The mobile phone data comes from signals sent by location-based services (LBS) smart phone applications to determine the phone's location. LBS signals allow StreetLight to much more accurately determine location than signals to and from cellular towers, which were the primary source of this type of data until several years ago.

The data is anonymized before Streetlight acquires it, so data records cannot be traced to any individual person or household. The data is made available for analysis on its interactive web based platform.

The MPO is using this valuable new tool to support a variety of planning activities, including:

- Dane County Bicycle Map: traffic estimates were a key factor in determining the bike suitability of roadways, particularly those without actual counts.
- Regional travel forecast model update and improvements (ongoing): origin-destination analyses are being used for model calibration and validation. Bicycle volumes may be used as well.
- Dane County Climate Action Plan: average vehicle-miles traveled (VMT) per household by census tract helps to quantify how travel behavior varies across the metro area and county,

The data that Streetlight processes represents close to 30% of the population. Streetlight then normalizes the data to represent the whole population.

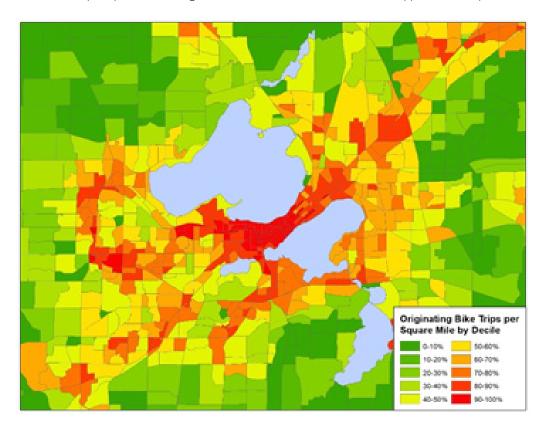
To assess the accuracy of the data, MPO staff compared StreetLight traffic volume estimates to continuous traffic counts from the Wisconsin Department of Transportation and City of Madison, and found them extremely well aligned.

and assess progress going forward in achieving plan goals. This information can also be used to inform CARPC's Regional Development Guide and local land use plans.

- Congestion management: roadway segment estimates of traffic congestion can help highlight key chokepoints.
- » Environmental justice (EJ) analyses: better understanding the travel behavior of people living in EJ priority areas is critical to assessing how well vulnerable populations are served by transit and the bicycle network.
- » Bicycle and pedestrian planning: the amount of available bicycle and pedestrian travel data is now expanding to enable the MPO to better understand bicycle and pedestrian travel patterns, key routes, and network gaps.
- Assessing COVID-19 impacts on travel: MPO staff has begun to analyze the impact of COVID-19 on travel behavior and roadway volumes (see separate article). Because Streetlight Data updates its platform with recent travel data every couple of months, staff will be able monitor travel changes moving forward as COVID-19 is addressed and the economy begins to recover.

The map below shows bike trips per square mile originating in Dane County in 2018, by decile. Zones shown in red are among the 10% of zones with the highest level of originating bike trips. Unsurprisingly, the downtown and campus areas, along with major shopping destinations, show the highest level of bike activity.

Without the use of "big data," such as that provided by StreetLight, it would be virtually impossible to gather the data needed for this type of analysis.



Dane County Bicycle Map 2020

The Dane County Bicycle Map is a cooperative project between the MPO and Dane County. For the 2020 edition, MPO staff updated the road and multi-use path networks, and reviewed and adjusted the bicycle suitability ratings for area roadways, using data obtained through our StreetLight Data subscription to determine traffic volumes on roads where counts have not been conducted (see Big Data article, above).

Map text was translated into Spanish by the City of Madison Department of Civil Rights Language Assistance Program, making this the first bilingual bicycle map published in Dane County – and possibly the state! Also new in 2020 is a color-coded map of the County Bicycle Trail network indicating where a State Trail Pass is required.

by volunteers to area bicycle shops and mailed by request to agencies and organizations. To request a mailing of up to 25 maps, or to schedule a pick-up of a larger quantity of maps, please email blyman@cityofmadison.com.

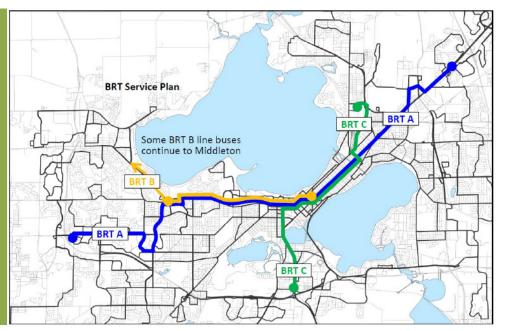
Click here to view, download, and print the map, or view other MPO bicycle map resources.

Refinements to East-West Bus Rapid Transit Considered as Project Moves Forward

The City of Madison's East-West Bus Rapid Transit (BRT) project acheived important milestones over the spring and summer. The City Council selected the Locally Preferred Alternative (LPA) and the project was accepted into Project Development—necessary steps toward securing funding from the Federal Transit Administration (FTA) Small Starts program.

Some previously planned expenses, such as bus purchases and the development of electric bus charging capacity, will be designated BRT-related as appropriate. This enables those costs to be counted as non-Small Starts funding, although they may come from federal funding programs.

The MPO Policy Board amended the fiscally-constrained Regional Transportation Plan to include BRT and the satellite bus maintenance facility. The City of Madison submitted a request for project rating to FTA for Small Starts in late August. The rating must be Medium overall for a project to be considered for funding. There are two components to the project rating:



Project Justification, which includes anticipated ridership and for which Madison is expected to score Medium; and Local Financial Commitment, for which Madison is expected to score Medium High based on the city's current commitment of funds and planned 50% match.

As a result of continued planning and in light of COVID-19 impacts to traffic and budgets, the City of Madison is now considering refinements to the project design. One entails three overlapping BRT routes, with local service continuing past the core East-West BRT corridor into Middleton, and another BRT

route connecting to the North and South Transfer Points (minus infrastructure improvements initially) (see map on left).

Another potential change would be to use a center-running (vs. curb side) alignment on portions of East Washington Avenue and Mineral Point Road. Median- or center-running BRT has the advantage of eliminating conflicts with right-turning vehicles and bicyclists, but adds restrictions on left-turning traffic and would require eliminating bike lanes in these corridors.

Other refinements under consideration include: relocating the eastern terminus off of the East Towne Mall property; eliminating the extension of Rosa Road through the UW Research Park; bypassing the Stoughton Road/East Washington Avenue intersection with a new bus-only connection to Mendota Street; and relocating several stops along the corridor.

A public meeting is planned for October 22. More information is available at www.cityofmadison.com/metro/routes-schedules/bus-rapid-transit.

Draft 2021–2025 Transportation Improvement Program Available for Review and Comment

The <u>Draft 2021-2025 Transportation Improvement Program (TIP) for the Madison Metropolitan Area & Dane County</u> is now available for review and comment. The TIP lists major transportation improvements and studies with approved or committed funding during the next five-year period. The Greater Madison MPO must approve all projects with federal funding and/or that are regionally significant, including those selected or programmed by implanting agencies such as WisDOT and Metro Transit. As part of the TIP process, the MPO ensures coordination of projects amongst implementing agencies and consistency of projects with the Regional Transportation Plan.

The MPO receives its own allocation of federal funding under two federal highway programs: Surface Transportation Block Grant (STBG) Urban and Transportation Alternatives (TA). The MPO solicits applications and selects projects for funding under these programs every two years. Last year, the MPO awarded federal STBG Urban funding to three roadway projects. The construction schedules for these projects were finalized earlier this year and cost estimates updated. They are:

- County Trunk Highway (CTH) M (Oncken Rd. to Willow Rd.): Reconstruction and expansion to four lanes with on and -off street bicycle facilities (construction in 2023 – 2024).
- Pleasant View Road Phase 1 (USH 14 to Timber Wolf Tr.): Reconstruction and expansion to four lanes with sidewalk and on- and off-street bicycle facilities (construction in 2023).
- >> Exchange Street (Farwell St. to Sleepy Hollow Rd.): Reconstruction (construction in 2024).

This year the MPO awarded federal STBG TA program funds to the following bicycle projects, to be implemented or constructed in 2022-23.

- Dane County Safe Routes to School Program: County-wide program that includes targeted support to schools with a high proportion of students qualifying for free/reduced price lunches. Program will be implemented by the Wis. Bike Federation.
- West Main Street (Proudfit St. to Fairchild St.): Corridor bike improvements, including design elements to slow speeds, bike lanes in selected locations, and Rectangular Rapid Flashing Beacon signal at the crossing of Proudfit Street.
- West Towne Path Extension (Commerce Park Drive to Ice Age Junction Path): Construct shared-use path connecting to current path segment from S. High Point Road to Commerce Drive. One remaining gap from West Towne to High Point Road will exist.
- Commercial Avenue Path (S. Bird St. to Kroncke Dr.): Resurface and widen path on north side of street. Path connects lowincome housing to a middle school and to a new path connecting to Sun Prairie East High School.
- DeForest Safe Routes School Path (Holum St./North Towne Rd. to Yorktown Rd.): Construct new path filling missing links in the

Cycle September Bike Challenge

This year, the MPO engaged
Love to Ride to run two
regional bicycle challenges
on the Love to Ride Madison
platform, joining a network
of Love to Ride challenge
communities around the
nation and world.

Due to COVID-19, the first planned challenge in May was postponed to 2021. Cycle September was then organized around a new message, "Bike Anyhere, Anytime," and over 580 participants from 52 organizations in the Madison area are now participating! A special element of Cycle September is that businesses and organizations can create personalized team pages, which goes the extra mile (pun intended!), to create a sense of community that encourages new and occasional riders to join.

Cycle September was organized in partnership with Madison Bike Week, and includes many #PedalForGood promotions focused on giving back to our community.

Cycle September



lovetoride.net/madison

village bike network and connecting the middle and high schools.

The MPO also receives an allocation of federal funding under a federal transit program (Section 5310) that funds projects providing enhanced services beyond ADA requirements for the elderly and persons with disabilities. The projects proposed to be funded in 2021 include:

- Continuation of Dane County's one-call center and mobility training and bus buddy programs.
- Continued funding of Madison Metro's paratransit eligibility & mobility coordination program, which conducts in-person paratransit eligibility assessments and provides travel training.
- Purchase of an accessible vehicle by Capital Express, a private shared-ride non-emergency medical transportation provider.
- Purchase of an accessible vehicle by the City of Stoughton for its shared-ride taxi fleet.

Regional Transportation Plan Update

MPO staff have begun to prepare for the update to the Regional Transportation Plan (RTP) 2050. The MPO is coordinating the update with the Capital Area Regional Planning Commission's (CARPC) update of the Regional Development Guide (RDG). The RDG is anticipated to be completed by the end of 2021, while the RTP is anticipated to be completed by spring 2022. The major tasks being completed this year include:

- Working with a consultant to update and improve the MPO's regional travel forecast model;
- Working with CARPC, City of Madison, and other local staff and officials on updated household and employment forecasts (interim year 2035 and 2050), which are a key input to the travel model; and
- Dupdating the federally required MPO Congestion Management Process, which lays out the process, performance measures, and monitoring to be done to manage congestion and maximize safety and mobility consistent with other goals.

The travel model will be updated to a new 2016 base year, using data from a regional household travel survey and other data, including origin/destination data from Streetlight, a big data provider (see related article). A number of improvements are being made to the model. These include:

- Improving its sensitivity to land use/place type in forecasting travel, including trips generated, distribution, and choice of travel mode;
- Improving the accuracy of forecast distribution of trips (i.e., where people travel) by accounting for the accessibility of destinations by different travel modes (rather than just auto travel time) as well as the land use/place type of areas;
- Adding a bicycle network categorized by "level of traffic stress" and forecasting bicycle trips along with motor vehicle, transit, and

pedestrian trips;

- Incorporating intersection delay into trip assignment (i.e., routing) on the roadway network; and
- Improving the accuracy of "external" trips (i.e., to/from outside the county and through the county).

The county population forecast is anticipated to be significantly higher than the one used for RTP 2050, based on growth trends since the last projections by the WI Dept. of Administration Demographic Services Center in 2013. A preliminary forecast puts the population increase at nearly 200,000 to 739,000 in 2050. The employment forecast is also anticipated to be higher than that used previously.

Public engagement activities associated with the RTP update will begin in early 2021. Look for more information in our next newsletter!

CARPC CORNER

Planning for Future Development in the Capital Region

As part of our commitment to increased collaboration, the Greater Madison MPO and the <u>Capital Area Regional Planning Commission</u> (CARPC) have aligned our long-term regional planning efforts. While the MPO has begun updating the Regional Transportation Plan, CARPC is simultaneously engaged in preparing a regional development framework.

CARPC is charged under state statute to "prepare and adopt a master plan for the physical development of the region." Such an advisory plan is needed to guide future development in our fast-growing region, which expects to welcome more than 180,000 additional people over the next 30 years. The existing regional plan, Vision 2020: Dane County Land Use and Transportation Plan, is now past its useful life and due for a major update.

The regional development framework that CARPC is working on now will fulfill the statutory requirement and serve as a guide for local public and private entities to achieve the desired balance of physical development and preservation in the Dane County region. The framework's goals and recommendations are intended to be incorporated into the plans and policies of local governments, community organizations, and businesses, aligning them with shared regional objectives.

Last year, CARPC began the update process by developing and refining <u>goals and objectives</u>. CARPC drew on the findings of the <u>A Greater Madison Vision</u> (AGMV) initiative to establish three overarching goals for the region: fostering community resilience to climate change; increasing access to jobs, housing, and services for all people; and conserving farmland, water resources and natural areas. These goals and their related objectives were then revised based on <u>feedback from local government officials</u>.

CARPC's recent plan update activities have included completing a participation plan, launching a Technical Advisory Committee, and drafting regional population, household, and employment projections. As planning continues, CARPC will explore growth concepts in local plans and other regions, and prepare draft regional development frameworks and maps. Staff will also prepare and solicit input on indicators for each regional development objective, providing a way to measure progress.

For those interested in learning more about the framework and overall update process, CARPC regularly shares planning updates on our <u>website</u> and <u>Facebook page</u>, in our <u>monthly newsletter</u>, and at our <u>Commission meetings</u>. We invite feedback and collaboration, and look forward to creating a meaningful, useful, and successful roadmap for the future of our region.