

# Appendix A



# Air Quality Impacts Analysis of the Recommended Regional Transportation Plan 2030

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## ***Introduction***

The Federal Clean Air Act (CAA) has established National Ambient Air Quality Standards (NAAQSs) in order to protect public health, safety and welfare from known or anticipated effects of certain “criteria” pollutants. They are called criteria air pollutants because the agency has regulated them by first developing health-based criteria as the basis for setting permissible levels. Geographic areas or air quality control regions that meet or do better than the NAAQS are designated by the United States Environmental Protection Agency (USEPA) as “attainment” areas. Areas that are shown through air quality monitoring to exceed a NAAQS are designated as “non-attainment” areas for that pollutant. For areas that are designated as non-attainment, states must submit State Implementation Plans (SIP) that demonstrate through air quality modeling how the area(s) will attain the NAAQS through implementation of air pollutant reduction measures and then later demonstrate through air quality monitoring attainment of the NAAQS.

Ground level ozone and carbon monoxide (CO) are among the criteria pollutants for which NAAQSs have been designated. Ground-level ozone is produced by a combination of pollutants from many sources, including motor vehicles and electric power plants burning fossil fuels. The two primary smog-producing pollutants are oxides of nitrogen (NOX) and volatile organic compounds (VOC). They react together in the presence of heat and sunlight to form ozone. Nearly one-half of Dane County’s smog-producing pollutants come from motor vehicles, as well as other gasoline and diesel engines that power everything from construction equipment to lawn mowers. This ground level ozone should not be confused with the good ozone that occurs naturally in the Earth’s atmosphere—10 to 30 miles above the Earth’s surface—where it forms a protective layer that shields us from the sun’s harmful ultraviolet rays.

In 1997, USEPA established a new eight-hour standard of 0.08 parts per million for ground-level ozone. Based upon air quality monitoring, a number of southeastern Wisconsin counties were designated non-attainment areas for ozone under the new standard in 2004. Most of the counties had been designated non-attainment under the old one-hour standard as well. The Wisconsin Department of Natural Resources has until June 15, 2007 to prepare a new SIP to attain the eight-hour standard. For areas designated as non-attainment, MPOs must demonstrate conformity of the long-range regional transportation plan (RTP) and transportation improvement program (TIP) with SIP. This conformity assessment involves a comparison of forecast mobile sector (motor vehicles) emissions from the RTP and TIP with the SIP.

Dane County was designated as attainment for ground-level ozone. Dane County is also in attainment of the NAAQS for all other criteria pollutants. While Dane County was designated attainment for ozone, monitoring data shows that the air quality is considered unhealthy during some summer days and that the county could become non-attainment for ozone in the future. WisDNR’s air quality modeling also shows that air pollutant emissions in Dane County contribute to ozone formation in the state’s southeastern counties, which are non-attainment. The Dane County Clean Air Coalition (CAC)—a private/public partnership of businesses, schools, government agencies, and citizens—has been formed to work together to voluntarily reduce air pollution, keep the air healthy, and help ensure Dane County continues to meet state and federal air quality standards. The Madison Area MPO is a member of the CAC.

## ***Regional Transportation Plan Air Quality Impacts***

While Dane County is in attainment of the ozone standard and thus the Madison Area MPO was not required to conduct a conformity analysis for the Regional Transportation Plan 2030, the MPO nonetheless conducted an air quality emissions analysis of the plan. In most respects, this analysis met USEPA’s criteria for conformity determinations, including use of the most recent planning assumptions and the most recent emissions estimation model, USEPA’s Mobile 6.2 model.

Motor vehicle emissions are influenced by a number of factors such as vehicle age, vehicle fleet mix, average speed, average trip length, temperature, miles traveled, and engine condition. In non-attainment areas, federally mandated emission control regulations such as vehicle inspection and maintenance programs also affect emissions. The RTP land use-related and roadway and transit facility recommendations can reduce motor vehicle emissions to some extent by reducing vehicle

trips and trip lengths, vehicle miles traveled (VMT), and by reducing traffic congestion. RTP recommendations related to bicycle and pedestrian facilities, travel demand management (TDM) programs, and transportation system management (TSM) measures can also have an impact on motor vehicle emissions, but the MPO's regional travel forecast model is not capable of estimating the impacts of these facilities and measures on vehicle trips and VMT.

The air quality analysis showed that the largest impact on motor vehicle emissions will occur from changes in the motor vehicle fleet as newer, lower pollutant emitting vehicles replace the older higher emitting vehicles. The transportation improvements in the RTP will have little relative impact on vehicle trips and VMT. Table A-1 shows the average vehicle speed, vehicle trips, VMT per day, and pollutant emissions for: (1) the 2000 base year scenario; (2) the 2030 future year scenario with the existing plus committed (E+C) roadway and transit system<sup>1</sup>; and (3) the 2030 future year scenario with the recommended roadway capacity expansion projects and the recommended transit service improvements. The roadway capacity improvements are listed in Sections 1 (those already programmed) and 2 (additional recommended projects) of Table 24 on pages 135-136 and illustrated in Figure 41 on page 134. The transit system improvements include the hybrid rail and express bus system illustrated in Figure 40 on page 131 as well as additional local bus service improvements.

The 2000 base year vehicle trips of 1.618 million are estimated to produce 12.187 million VMT on an average weekday in the Madison urban area and surrounding Dane County at an average speed of 35.8 miles per hour (mph). In the 2030 E+C scenario, the forecast land use development growth increases vehicle trips from 1.618 to 2.314 million and VMT from 12.187 to 18.270 million. This growth in traffic and implementation of only the committed transportation system improvements results in increased congestion levels, dropping the system-wide average speed to 29.6 mph. Pollutant levels still fall even though congestion levels rise because of newer vehicles gradually replacing older (more polluting) vehicles over time. By implementing the roadway and transit improvements recommended in the plan, average system-wide speed increases to 31.2 mph, although still well below the 2000 base year speed of 35.8 mph. Vehicle trips per day drop from 2.314 to 2.310 million compared to the 2030 E+C scenario and VMT drops from 18.270 to 18.207 million. The increase in average speed and slight reductions in trips and VMT result in a slight reduction of VOC, NOX, and CO emissions for the 2030 recommended plan scenario compared to the 2030 E+C scenario.

**TABLE A-1**

<b>Regional Transportation Plan 2030 Air Quality Impacts</b>						
Land Use/Transportation Scenario	Avg. Speed MPH	Vehicle Trips Per Day	Vehicle Miles of Travel Per Day	Pollutants Tons/Day		
				VOC	CO	NOx
2000 Land Use & Existing+Committed Highway Network & 2004 Bus Transit	35.8	1,617,857	12,187,307	6.47	236.13	18.54
2030 Land Use & Existing+Committed Highway Network & 2004 Bus Transit	29.6	2,313,781	18,269,751	6.47	105.56	6.08
2030 Land Use & Recommended Plan Roadway Network & Express Bus/Rail Transit	31.2	2,310,319	18,207,375	6.32	105.18	6.06

<sup>1</sup>The existing plus committed (E+C) systems include facilities that existed in 2000, capacity expansion projects that were built since then, and programmed projects with committed funding in the MPO's 2002-2006 Transportation Improvement Program (TIP).

# Appendix B



# Discussion of Roadway Levels of Service (LOS) for Motorists

Roadway level of service (LOS) is a concept, which denotes the different operating conditions that occur on a roadway and the perception of those conditions by motorists when accommodating various traffic volumes. It places traffic flow conditions into six levels of service, designated A through F, from best to worst. The concept can also be used for controlled street intersections with queuing time used to measure the LOS.

A nationally recognized LOS concept has also been developed for public transit. LOS concepts have also been developed for bicycling and walking, although they are not as well established. Factors considered for transit LOS include frequency of service, span of service, reliability of service, bus stop facilities and amenities, and accessibility of bus stops. The LOS concept was used in the Madison Area MPO's 2000 Bicycle Transportation Plan to denote the suitability of streets for bicycling. Factors included motor vehicle traffic volume, traffic speeds, inside lane width, presence of a bike lane or paved shoulder, presence of parking, and land use. The various modes interact with each other such that LOS improvements for one mode may improve or lower the LOS for other modes. Research is currently being conducted to attempt to develop a multimodal LOS for urban streets.

The factors that may be considered in evaluating roadway LOS for motorists include the following:

1. Operating speed and travel time
2. Traffic interruptions or restrictions
3. Freedom to maneuver
4. Safety
5. Driving comfort and convenience
6. Economy

However, a more practical approach to ascertaining LOS commonly uses operating speed and the ratio of traffic volume to capacity. Operating speed is the highest overall speed at which a motorist can travel on the roadway under favorable weather conditions and under prevailing traffic conditions without at any time exceeding the safe speed as determined by the design of the roadway. The volume-to-capacity (V/C) ratio can be thought of as a "desired capacity" as the capacity is typically related to a LOS selected for a facility. For example, for the traffic modeling conducted for this plan LOS E was used as the capacity or V/C of 1.0. It refers to the amount of traffic that a roadway can accommodate while still maintaining a quality of service appropriate to the indicated LOS. Typically, this refers to the peak hour or peak period although daily capacities are currently used in the MPO's regional travel model. The daily capacity assumes a certain percentage of the traffic occurs in the peak and off-peak periods.

In addition to the LOS selected, factors that determine the capacity of a roadway include the following:

1. Number of travel lanes
2. Width of travel lanes
3. Operating speed
4. Presence or absence of shoulders (for rural or access controlled roadways)
5. Grades
6. Presence or absence of a median
7. Intersection design (% of turns from exclusive lanes) (for surface streets)
8. Spacing and timing of traffic signals (for surface streets)
9. Spacing of driveways (if any) (for surface streets)
10. Presence or absence of parking and bus stops (for surface streets)
11. Volume of trucks, buses, and other large vehicles

The Highway Capacity Manual published by the Transportation Research Board and the AASHTO Geometric Design of Highways and Streets ("Green Book") list the following levels of service: A = Free flow; B = Reasonably free flow; C = Stable flow; D = Approaching unstable flow; E = Unstable flow; and F = Forced or breakdown flow. The following descriptions provide more detail on the characteristics of the different levels of service:

### ***Level of Service A***

Describes a condition of free flow with low traffic volumes and high speeds. Traffic density is low with speeds controlled by driver desires, speed limits, and physical roadway conditions. There is little or no restriction in maneuverability due to the presence of other motor vehicles, and drivers can maintain their desired speeds with little or no delay.

### ***Level of Service B***

This is still in the zone of stable flow, but with operating speeds beginning to be restricted somewhat by traffic conditions. Drivers still have reasonable freedom to select their speed and lane of operation. Reductions in speed are not unreasonable, with a low probability of traffic flow being restricted.

### ***Level of Service C***

This is still in the zone of stable flow, but speeds and maneuverability are more closely controlled by the higher volumes. Most motorists are restricted in their freedom to select their own speed, change lanes, or pass. A relatively satisfactory operating speed is still obtained, but the general level of comfort and convenience begins to decline noticeably at this level.

### ***Level of Service D***

This represents high density, but still generally stable flow with tolerable operating speeds being maintained. However, this is approaching unstable flow and speed and freedom to maneuver are severely restricted. Fluctuations in volume and temporary restrictions to flow may cause substantial drops in operating speeds. Small increases in traffic flow will generally cause operational problems at this level. Motorists' comfort and convenience are low, but conditions can be tolerated for short periods of time.

### ***Level of Service E***

This represents operating conditions at or very near the capacity level. Operations are reduced to lower speeds than in LOS D (typically in the neighborhood of 25 mph), but are still relatively uniform. Freedom to maneuver is extremely difficult and usually accomplished by forcing a vehicle to accommodate such maneuvers. Comfort and convenience levels are extremely poor and frustration levels high. Flow is unstable and there may be momentary stoppages. Small increases in flow or minor perturbations within the traffic stream will cause breakdowns.

### ***Level of Service F***

This describes forced flow operation at low speeds or breakdown flow. This condition exists wherever the amount of traffic approaches a point that exceeds the amount that can traverse the point. Queues form behind such locations. Operations within the queue are characterized by stop-and-go waves and are extremely unstable. Stoppages may occur for short or long periods of time because of downstream congestion. In the extreme, both speed and volume can drop to zero.

The Wisconsin Department of Transportation's State Highway Plan provides a LOS matrix that converts the alpha-character scale to a numeric scale in order to facilitate a more detailed comparison between roadway segments and to compare segment values with threshold values that trigger consideration of capacity expansion improvements. For example, LOS D is represented by a numeric LOS range of 4.01 to 5.00; if the computation falls midway within the LOS D range the numeric value for that LOS is 4.5. WisDOT has adopted a LOS threshold value of 4.0 for designated Corridors 2020 (C2020) Backbone Routes, 4.5 for C2020 Connector Routes, and 5.5 for other arterials and collectors. The lower threshold values for C2020 routes reflect their importance for regional mobility and economic development purposes. See WisDOT Facilities Development Manual.

# Appendix C



# List of Significant Public Comments on the Draft Plan and MPO Responses

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Comment: Support goals/policy objectives/recommendations and regional transportation improvements identified in the plan.

Response: Thank you.

Comment: Remove the CTH C (North City Station Dr. to STH 19) project from Table 24 Potential Arterial Street and Roadway Improvements 2007-3030: Section 1. Potential Capacity Improvements & Studies Already Programmed, because it will be completed by the end of 2006.

Response: Project will be removed.

Comment: Add recommendation under Streets/Roadways to conduct a study of Egge Road as a future regional arterial roadway.

Response: Recommendation for study will be added.

Comment: Supports recommendation for official mapping and eventual capacity improvement of Hoepker Road (USH 51 to CTH C) and asks that the project be given a higher priority for Federal funds.

Response: The source of funding for the project is shown in Table 24 as Local or STP Urban. Prioritization of projects for STP Urban funding is made as part of preparation of the Transportation Improvement Program (TIP) based upon the MPO's adopted project selection criteria.

Comment: Supports the Thompson Road Overpass of USH 151 in City of Sun Prairie and asks that stronger endorsement be made of the project due to congestion relief benefits to adjacent interchanges.

Response: The following recommendation will be added to the Streets/Roadways section: "Continue or initiate detailed planning and construction of collector street connections and extensions that help complete the "grid" street network, thereby efficiently distributing traffic on the regional system." The Thompson Drive overpass project will be listed along with others as examples of currently planned or proposed such connections.

Comment: Supports proposed rail transit system and extension to City of Sun Prairie and encourages MPO to retain concept as part of the plan.

Response: The rail transit system concept will be retained as part of the final plan.

Comment: Show East Washington Avenue as a regional bikeway.

Response: The regional bikeway system map focuses on off-street paths and those on-street routes with low traffic volumes that would be part of a signed bike route system. The plan recommends bike lanes on all arterial and collector roadways where feasible and appropriate. The 2000 regional bicycle transportation plan identifies major roadways where bike lanes are needed, and this analysis will be updated when the bicycle plan is updated.

Comment: A north-south off- and/or on-street bicycle route is needed between Madison and De Forest.

Response: Because of the uncertainty regarding the location/type of route, an arrow will be added to the bikeway map north of the airport with a note to identify Madison – De Forest bikeway connection. Potential off-street routes include the rail corridor or USH 51.

Comment: Add connection from Madison – Sun Prairie bikeway route to the USH 151 corridor route or extend rail corridor route to Sun Prairie.

Response: The currently proposed Madison – Sun Prairie regional bikeway route does utilize the USH 151 corridor path/underpass. Another longer term planned regional bikeway will be added in the rail corridor, extending it from the current terminus at Felland Road to Sun Prairie.

Comment: Add off-street or more direct on-street bikeway route in the Southeast Madison/McFarland area connecting the E-Way segment of the Capital City Trail to the Glacial Drumlin Trail.

Response: The two connections currently shown utilize Nob Hill underpass/Broadway/Femrite Dr./Marsh Rd. or the proposed Capital Springs path/Siggelkow/Marsh Rd. No other more direct connections are possible other than the South Towne Drive, which would not be a designated route.

Comment: Strengthen Recommendation #9 under Bicycle Transportation, which refers to acquiring land or easements for bikeways.

Response: Some editing revisions will be made to the recommendation.

Comment: Make reference to transit-oriented developments (TODs) to make transit more viable.

Response: Policy Objectives #3-#6 and Recommendations #1, #3, and #4 under Land Use and Transportation System Coordination all address promotion of transit/pedestrian-friendly development.

Comment: Include “complete streets” language to ensure all street plans take into account bicycles and pedestrians.

Response: While the term “complete streets” is not used, the concept is incorporated into the plan. See, for example, Policy Objective #3 under Streets/Roadways, Policy Objective #3 and Recommendations #8 and #10 under Bicycle Transportation, and Policy Objectives #6 and #7 and Recommendations #4 and #7 under Pedestrian Transportation. In addition, a new Policy Objective #9 is being added under Streets/Roadways that states, “Provide bicycle and pedestrian accommodations along and across all streets in conjunction with street construction and reconstruction where feasible and appropriate in accordance with the U.S. Department of Transportation Policy on Integrating Bicycling and Walking into Transportation Infrastructure.”

Comment: Land use growth should be based on the planned transit corridors and roadway corridors with available capacity. This should be done and then compared with the “adopted plans” land use assumption.

Response: Land use growth was allocated based on a realistic forecast of where growth will occur while also remaining generally consistent with regional land use plan policies. The MPO does not have any authority over land use development and it would not be appropriate to prepare a transportation plan based on unrealistic land use assumptions. It is anticipated that as part of the Transport 2020 Study, a land use scenario that assumes an even greater amount of redevelopment and development around the proposed rail transit stations will be tested to see how much additional transit ridership is generated.

Comment: Scale back capacity-expanding roadway projects and create more transportation alternatives. These alternatives will be necessary as gasoline prices increase and supplies decrease.

Response: The plan calls for a major expansion of transit services and the pursuit of a dedicated source of transit funding to support this expansion. The plan also recommends bicycle and pedestrian facility improvements. The plan also recommends some roadway expansion projects as part of a balanced overall plan, recognizing the limitations of transportation alternatives for serving many trips and that the auto will continue to be the primary mode of transportation for the foreseeable future. The potential impact of rising oil prices (if they do indeed continue to rise during the plan period) on use of alternative transportation and regional development is impossible to predict at this time. The plan recommends ambitious improvements in transit service and bicycle facilities in order to provide mode choice wherever possible. Travel and land use trends will continue to be monitored and any major shifts can be factored into future plan updates.

Comment: Provide positive incentives for use of alternative transportation through better service rather than negative incentives (e.g., increased parking costs).

Response: The plan proposes a balanced approach that includes enhanced transit service, improved pedestrian and bicycle facilities, and ridesharing/TDM services and programs (e.g., subsidized bus passes), as well as strategies (e.g., parking management) that recognize the high costs of driving.

Comment: Interstate 39/90/94 Bridge over Lien Road needs to be widened when it is reconstructed.

Response: This project is in the plan and the bridge will be widened to accommodate four lanes of traffic, bike lanes, and sidewalks. See Table 24, Section 1. Potential Capacity Improvements & Studies Already Programmed.

Comment: It should be demonstrated that the rail transportation alternatives being studied as part of the Transport 2020 Study and Streetcar Study are the best alternatives.

Response: The plan recommends fixed-guideway transit service in the East-West Transit Corridor and improved downtown/UW campus circulator service, but does not recommend a particular technology as that will be determined as part of the ongoing studies. In order to be given approval by the Federal Transit Administration to proceed to preliminary engineering and to later receive any Federal funding, any rail service proposed will need to meet stringent cost-benefit criteria.

Comment: Supports creation of regional transit authority (RTA) or district.

Response: The plan recommends implementation of the finance/governance recommendations from the Transport 2020 Study, which will likely include an RTA, and also includes a separate recommendation to pursue a dedicated source of funding for transit. See Recommendations #1 and #10 under Public Transit. Language will be added under #1 mentioning creation of an RTA as the likely recommendation.

Comment: Transit accommodations should be built into every roadway improvement.

Response: The plan recommends addressing the needs of all users, including transit users, when planning and designing roadways. See Policy Objective #3 under Streets/Roadways. It also specifically recommends continuing efforts to implement traffic management strategies that give priority to transit, including bus lanes. See Recommendation #5 under Public Transit. Text will be added to identify a few roadways where addition of bus lanes may be possible and should be considered.

Comment: Bus routes should be simplified and Sunday service added to the airport.

Response: The plan recommends continuing to improve and expand local bus service through reduced travel time, increased service frequency, and other means. Details regarding specific routes or service to particular destinations are addressed as part of the Transit Development Program and sub-area planning efforts.

Comment: Provide for many types of transit service (express, commuter, core, circulator, connecting, and service for special needs populations). Increase the goal for increasing transit ridership from 30-40% to 100-200%.

Response: The plan recommends this. See Public Transit Recommendations #1-#4. The 30-40% increase in transit ridership cited is not a goal, but a forecast from the regional travel model that assumes a very aggressive increase in transit service that goes beyond what is being considered for a start-up rail system in the current Transport 2020 Study. Over 3/4s of current weekday transit trips are work and school trips destined for the downtown/UW campus area. While the plan assumes some redevelopment in the central area, most growth will occur on the urban periphery and in outer area communities where serving trips by transit is much more difficult. This limits the potential for increasing the share of trips made by transit. The plan does recommend transit-supportive development to make transit more viable in the future.

Comment: Consider other travel needs besides work trips.

Response: While much of the information provided is for work trips, the plan does consider travel needs for all trips. The work trip is particularly important because it serves as an anchor for many other trips (i.e., trip chaining) and accounts for 1/2 of all weekday transit trips. Most work trips are also made during the peak periods.

Comment: The State should provide increased transit funding.

Response: The plan recommends supporting increased state funding to support regional transit system improvements along with a dedicated local funding source. See Recommendation #10 under Public Transit.

Comment: The plan should include a goal of reducing VMT by 20% by 2015 and should support financial incentives for people driving less and recognize the area's air quality issues. The adverse health effects from increased motor vehicle emissions will disproportionately impact the area's minority and low-income populations.

Response: The VMT reduction goal is unrealistic given trends over the last thirty years. The plan recommends TDM incentives and alternative transportation incentive programs. See Recommendations #3 and #5 under TDM/Ridesharing. It does not propose any pricing or user-pay programs (e.g., pay-as-you-drive insurance), which would generally need to be implemented at a state level. Air quality emissions modeling was conducted for the recommended plan using the travel model and emission factors provided by WisDNR. The modeling showed that Year 2030 emissions would be less under

the recommended plan scenario than under the 2030 Existing Plus Committed Projects scenario and significantly less than the Base Year 2000 scenario. Reducing congestion problems in areas such as the Verona Road/Beltline corridor will improve air quality.

Comment: The MPO should be designated a regional transit authority with control of all transportation funding in the area. In order to meet VMT reduction goal, it should be required that ¼ of funding be used for transit and ¼ for TDM.

Response: Special finance and governance mechanisms for regional transit service are being studied as part of the Transport 2020 (East-West Transit Corridor) Study, and require state enabling legislation.

Comment: Supports rail service from Evansville and Oregon/Fitchburg to Madison.

Response: The plan recommends pursuing express bus service from these communities and preserving rail corridors for potential rail service in the long-term future.

Comment: Supports increasing service in developed areas as well as in developing areas and outlying communities and providing more incentives to use the bus.

Response: The plan recommends both of these. See Public Transit and TDM/Ridesharing Recommendations.

Comment: Provide incentives for people to live closer to where they work.

Response: This is mostly beyond the scope of the transportation plan. The plan does recommend continuing and expanding the Smart Commute Program. See Recommendation #8 under TDM/Ridesharing.

Comment: It is important that population, labor force, and employment changes be tracked and compared to the forecasts. It is also important that the MPO coordinate land use-transportation planning efforts with the new Capital Area Regional Planning Commission.

Response: The following new Recommendation #5 will be added under Land Use and Transportation System Coordination: “The Madison Area MPO should work with the new Capital Area Regional Planning Commission to coordinate planning efforts and track socioeconomic changes and land use growth.”

Comment: Add new Recommendation #9 under TDM/Ridesharing that states “Explore public-private partnerships for door-to-door transit services to reduce single-occupancy vehicle trips.”

Response: Recommendation will be added.

Comment: The WisDOT Bureau of Planning & Economic Development provided the following comments on the environmental justice analysis for the plan:

1. The accessibility analysis should include a map that shows the selected environmental justice areas and destinations and should also include a discussion of how the locations were selected. Also, data should be provided for the travel time analysis.
2. Information should be provided on the number and percentage of the MPO’s population that is minority, low-income, and/or autoless. This information should be provided by municipality.
3. Information should be provided describing specifically what constitutes a “high” concentration of the above-referenced EJ population groups and what level of data (Census block groups, TAZs, etc.) was used.
4. Information should be provided comparing travel times to work for the EJ population groups versus the general population.
5. A statement should be added noting that additional EJ analysis will be completed as projects move forward and as part of corridor and sub-area studies.
6. A statement should be added that while roadway preservation projects generally have beneficial impacts to adjacent and nearby properties, some negative impacts may occur during project construction.
7. Transit service to the intercity bus station and airport should be discussed.
8. Information should be provided on efforts to involve EJ populations in the planning process.

Response: The following revisions will be made to the analysis to incorporate these comments:

1. A map showing the locations of the EJ areas and destinations selected for the travel time analysis will be provided, and the reasons for selecting these locations will be explained. Tables will be provided showing 2000 base year auto and existing 2006 transit travel times. Tables will also be provided comparing the travel times for the 2030 Existing Plus Committed Projects (E+C) and Recommended Plan scenarios.

2. This information will be provided.
3. This information will be provided.
4. A new sub-section will be added with this information.
5. Such a statement will be added.
6. The recommended clarifying statement will be added.
7. Information on transit and taxi service to the intercity bus station and airport will be provided.
8. Efforts to involve EJ populations is discussed in the first (background) section in the plan.

Comment: The Commuter (Hybrid) Rail Transit Alternative map on page 145 of the plan shows express bus service from Verona to Madison, but the route does not run on Monroe Street. Monroe Street is projected to be very congested and express bus service should be considered along the street to encourage more drivers to take the bus.

Response: The map on page 145 shows how express bus service might feed into and complement a potential “hybrid” (i.e., uses rail technology that allows running on street as well on a rail line) rail transit system—one of the options currently being considered as part of the Transport 2020 (East-West Transit Corridor) Study. An operational detail is whether any or all of the express routes would continue to and through the downtown area, thereby providing express service between the bus transfer points. If the Verona express route were continued to downtown, it might be decided to use a more direct routing such as Monroe Street rather than connect to the West Transfer Point which is served by the rail system. Such a decision would be made at the time the service is going to be implemented.

Comment: Increase the number of planned off-street bicycle paths in the plan.

Response: The plan recommends a very ambitious regional bikeway system with complementary local off-street paths and routes. See Figure 45 on page 152. The plan also recommends planning and development of other local paths and routes, using the regional bikeway system as a framework. Planning of additional neighborhood level bicycle facilities is beyond the scope of this regional plan.

Comment: In the discussion of commuting patterns on page 26 it would be useful for people to know that the City of Middleton and perhaps other Madison area communities are also net importers of jobs in addition to the City of Madison.

Response: A note will be added that Middleton and Monona also have more employment than resident labor force.

Comment: The City of Middleton has a draft Traffic Management Plan that recommends some changes to the existing functional classification of several city streets.

Response: These recommended changes will be considered and addressed as part of the next update of the MPO’s roadway functional classification system. However, keep in mind that the MPO’s classifications must be based on state rules with specific criteria for classifying the roadways.

Comment: Most of the City of Middleton’s traffic signals can be pre-empted by emergency vehicles.

Response: A note will be added in the TSM/Operations subsection under Streets/Roadways that traffic signals in the City of Middleton and other communities are also being equipped with emergency vehicle preemption capability.

Comment: It is not clear how the discussion of emergency evacuation planning for the City of Madison that has been required by the Governor fits in the ITS section.

Response: It will be moved to the TSM/Operations subsection on page 39 under a new sub-heading of “emergency management.”

Comment: Add language about the limited ability of private taxicabs to accommodate persons with disabilities in the discussion of taxi service under Public Transit.

Response: Language will be added.

Comment: It would be useful to point out that the cost of roadways is not entirely covered by user fees rather than just providing this information in the Public Transit section.

Response: A footnote will be added in the discussion of Metro operating costs and revenues under Public Transit indicating that the cost of roadways is not completely covered by user fees, but is supplemented by public funding. Data from WisDOT’s 1994 Highway Cost & Pricing Study will be cited.

Comment: Add a note about the 2006 Middleton service improvements in the discussion of transit service needs and recent improvements to address some of those needs. Also, note that Middleton is working with Metro to implement Saturday service in 2007 and that Metro is working with several suburban communities (e.g., Sun Prairie, Oregon, Cross Plains) to implement limited commuter service.

Response: This information will be added.

Comment: Revise Figure 24, Existing Bicycle Facilities Map, to show three recently completed facilities, including the Parmenter Street underpass.

Response: The map will be revised to show these facilities.

Comment: Add information about the recent reconstruction of the Middleton Municipal Airport—Morey Field and add a note that the future of Blackhawk Airport in Cottage Grove is in doubt due to development pressures. Also, add a reference to the Middleton airport in the Goals/Policy Objectives/Recommendations section.

Response: The information will be added and a recommendation will be added to continue to maintain and improve the Middleton airport as the primary reliever airport for the Dane County Regional Airport.

Comment: Add language to the note following Recommendation #1 under Land Use and Transportation System Coordination that other communities besides Madison have or are revising their ordinances as recommended.

Response: Language will be added noting this.

Comment: Add trucks to the list of roadway users in Policy Objective #3 under Streets/Roadways.

Response: Trucks will be added to the list.

Comment: Revise Policy Objective #4 under Streets/Roadways regarding an interconnected roadway system to specifically mention that cul-de-sacs should be avoided whenever possible.

Response: This language will be added.

Comment: Pleasant View Road may need to be four lanes between USH 14 and Airport Road and an interchange may eventually be needed at Pleasant View Road and USH 14.

Response: Our traffic forecasts do not show a need for either of these projects within the planning period. However, we will monitor the situation closely.

Comment: Show the North Mendota Parkway project as straddling the last two time periods in Table 24, Potential Arterial Street and Roadway Improvements, 2007-2030.

Response: The lack of an identified funding source makes it more appropriate to place the project in the last time period for now.

Comment: Middleton is also investigating potential circulator service, possibly using a trolley bus, between downtown and Greenway Center.

Response: Recommendation #2 under Public Transit will be revised to recommend exploring this.

Comment: The fact that persons with disabilities have limited access to private taxicabs should be addressed in the recommendations.

Response: A new Recommendation #7 under Paratransit/Specialized Transportation will be added, stating “Continue efforts to increase the accessibility of private taxicab service for persons with a disability.”

Comment: Incorporate two planned Middleton bicycle facilities not shown on Figure 45, Planned Regional Bikeway System—an east-west path on the north side and an underpass at the Park St./University Ave. intersection.

Response: These will be added to the map.

Comment: Make segments of the Pheasant Branch Trail the identified regional route rather than Pheasant Branch Road and Donna Drive. The plans are to pave these trails. The Middleton City Council is on record opposing the addition of bike lanes on Pheasant Branch Road.

Response: The identified segments of the Trail will be shown as the regional route with the understanding they will be paved. Pheasant Branch Road will still be shown as local route. The map does not address on-street bike lane recommendations.

Comment: Delete the Parmenter Street ped/bike underpass from Table 25, High Priority Off-Street Bicycle Facility Projects as that project will be completed in November.

Response: The project will be deleted and the existing facility map revised to add the facility.

Comment: Add a recommendation under Rail Transportation to promote installation of suitable gates at rail crossings in order to allow establishment of quiet zones.

Response: Such a recommendation will be added.

Comment: Revise Figure 39, Planned Future Land Use Growth, to incorporate the City of Middleton's Westside Neighborhood concept on the Erdman property and make corrections to the Discovery Springs Business Park area.

Response: The map will be revised to properly reflect plans in these areas.

Comment: Indicate in the Introduction section when discussing SAFETEA-LU that the plan is being completed under TEA-21 and will be revised to incorporate all SAFETEA-LU requirements next year, as noted in the new concluding section.

Response: Such language will be added.

Comment: Should the new state law regarding bicyclists and demand-actuated signals be mentioned as part of the discussion of bicyclist barriers in the Bicycle Transportation section?

Response: A footnote will be added referencing the new state law, but noting that the signals should be still be adjusted to detect bicycles.

Comment: The information in Table 31 in the Financial Analysis section does not match Table 30. Table 31 does not indicate funds being spent in the second and third time periods for the plan.

Response: The information in Table 31 attempts to further subdivide the information in Table 30 at a more detailed level. However, most of the information at this more detailed level is unknown and confusing to the discussion presented in the text. Therefore, Table 31 will be deleted.

Comment: Add Johnson Street (Randall to Bassett) to the list of examples of arterial streets where bus lanes should be considered in the future in the note to be added following Recommendation #5 under Public Transit on page 146.

Response: This segment of Johnson Street will be added to the list of examples.

Comment: In the discussion of the travel modeling scenarios on page 126, edit the last paragraph to clarify that projects associated with ongoing corridor studies are not included in the plan because the specific type of improvement and funding have yet to be determined. Specific project recommendations generated by these studies will need to be added to the plan as part of a plan amendment.

Response: The text will be edited to clarify this.

Comment: Clarify the definition of "planned" versus "potential" park-and-ride lots in Figure 44, Park & Ride Lot System. "Planned" indicates some formal discussion or agreements have occurred as part of a WisDOT improvement project or the location has been identified as part of a study, while "potential" indicates simply that the lot is in a general location of priority.

Response: This language will be added to the map legend.

Comment: WisDOT Southwest District is planning to conduct a freeway conversion study on USH 12 from Parmenter Street to STH 19. Please add to the plan.

Response: A recommendation for this the study will be added. The study will also be added to Table 24 and Figure 41.