

Transport 2020

Environmental Impact Statement
and New Starts Application

Transit Supportive Land Use Report

February 2007



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INTRODUCTION

Purpose of the Report

Transport 2020 is a study of transportation improvement alternatives for the Dane County/ Greater Madison Metropolitan area. The first phase of the study, completed in 2002, evaluated a number of options to meet the future transportation needs of the region ranging from highway expansion to new light rail service. At the conclusion of that phase, a Locally Preferred Alternative (LPA) was identified which recommended a commuter rail system supported by expanded bus service and park-and-ride lots.

The study is in its second phase which involves the preparation of a Draft Environmental Impact Statement (DEIS) and New Starts Application to the Federal Transit Administration (FTA). An assessment of the transit supportive character of the proposed commuter rail stations through an analysis of existing land use and development patterns and development regulations and policies, is an important component of the New Starts application.

This Transit Supportive Land Use Report is an analysis of existing conditions and current plans and policies affecting development patterns within the proposed transit corridors in relation to the New Starts criteria, described later in this section. Based on this analysis and a real estate market study completed to assess future development potential, the Report also includes key recommendations that could increase the transit supportive character of the proposed transit corridors and, potentially improve their ranking for transit supportiveness based on the New Starts criteria. The recommendations focus on changes to existing land use policies and planning practices to improve the transit supportive environment within the study area

New Starts Criteria

In its evaluation of the land use affecting potential New Starts, the FTA considers the following transit supportive land use categories and factors:¹

1. Existing Land Use
2. Transit Supportive Plans and Policies, including the following factors:
 - Growth management
 - Transit supportive corridor policies
 - Supportive zoning regulations near transit stations
 - Tools to implement land use policies

¹ Table 3: Land Use Rating Categories, Factors, and Supporting Factors, *Guidelines and Standards for Assessing Transit supportive Land Use*, May 2004, published by the Federal Transit Administration, Office of Planning.

3. Performance and Impacts of Policies, including the following factors:
 - Performance of land use policies
 - Potential impact of transit project on regional land use
4. Other Land Use Considerations, including exceptional environmental, historic or other factors, if applicable

The FTA applies these criteria to evaluate candidate transit improvement projects seeking federal funding assistance under the New Starts program. Funding for New Starts is an extremely competitive process with several projects from across the nation, seeking funds. Therefore, the extent to which a project can demonstrate transit supportive land uses and policies can improve its chances for receiving funding support.

Methodology

This transit supportive land use report has been prepared based on an analysis of existing conditions and policies affecting each station area within the alternative transit corridors. For the purpose of this analysis, station area is defined as the area encompassing a half-mile radius around a proposed station. A half-mile radius, which represents a comfortable ten-minute walking distance from the station, is generally the walk-access ridership base for a station and is also the service area considered as a part of the New Starts criteria.

The following steps were undertaken in preparation of the report:

- **Existing Land Use and Development Patterns** – Principal data sources included:
 - Year 2000 existing land use data from Dane County (latest available)
 - Existing conditions analysis and maps included in the comprehensive and neighborhood plans of the cities of Madison and Middleton
 - Bus route maps from Madison Metro
 - Field reconnaissance by the consulting team

Information obtained from these data sources was supplemented by field surveys to develop an understanding of existing land uses and development patterns within the station areas. Besides existing land use, this included an analysis of access and circulation patterns in the station areas including the street network and major vehicular, pedestrian and bus routes and the urban design conditions including an assessment of pedestrian facilities.

- **Land Use Workshops** – A series of meetings and workshops were held over two days with local planners and developers to get their feedback regarding existing conditions and future development potential within the station areas. These included meetings with city, county and agency land use and planning staff and with local developers who have knowledge and/or development interests in the study area. The study team also

conducted a tour of the study area and presented their findings based on the tour and the meetings to the Implementation Task Force (ITF).

- **Current Plans and Policies** – In this step, all the current official land use plans, policies and development regulations for units of government within the proposed transit corridors were collected and reviewed to estimate the extent of transit- supportive conditions currently existing, and proposed for the future. The review focused on future plans for the station areas including type and intensity of proposed development, parking management, pedestrian and bike improvements, and design guidelines to create a pedestrian friendly environment. Review of current policies focused on supportiveness of zoning regulations for creating dense, mixed-use, pedestrian-oriented environments with reduced parking requirements near transit stops.

Plans and policies for Dane County, Madison including its neighborhood plans, Middleton, Shorewood Hills, and the University of Wisconsin at Madison were also reviewed.

- **Real Estate Market Analysis** – A real estate market analysis was completed for the transit corridors to estimate the future residential, commercial and office development potential over the next 15 years (by Valerie Kretchmer and Associates). During this analysis, several interviews were conducted with key persons including representatives from the municipalities, Dane County, the State government, the University as well as property owners, developers and realtors. These interviews helped in gaining an understanding of real estate development trends and preferred development patterns within the region.

This report presents the assessment of transit supportiveness of the proposed stations and the corridors in two formats:

- A summary table which ranks the stations and corridors relative to the New Starts criteria, and
- A narrative highlighting existing characteristics and policies that influence the transit supportive character of the station areas as outlined in the New Starts criteria, and implementation recommendations that could potentially result in a more favorable New Starts ranking. The implementation recommendations are generally organized as planning initiatives, recommended policy updates and improvement projects.

Report Organization

The report is organized in three main sections:

1. **Section A: Executive Summary** – This includes an overview of the project conditions, a summary of the real estate market analysis (full report is included in the Appendix), a ranking of the transit supportive land uses in the station areas and, a brief explanation of the ranking results.

2. **Section B: Transit Supportive Land Use – Conditions and Policies in the Corridors and Station Areas** – This section includes a detailed explanation of existing conditions and policies for each corridor and its stations providing the rationale for the rankings in the summary table in Section A. The existing conditions analysis is followed by recommendations that could potentially improve the current ranking of the stations under the New Starts program. Also included in this section is an assessment of the existing growth management programs and strategies within the region.
3. **Appendices** – The Appendices include the complete real estate market analysis report and a summary of the developers’ workshop. The workshop summary includes presentation materials and notes from presentations to the Implementation Task Force Committee.

SECTION A. EXECUTIVE SUMMARY

A-1. Overview of Corridor Conditions

The Transport 2020 study area is centered on the 13-mile railroad corridor extending from the City of Middleton on the west through the University of Wisconsin campus and downtown Madison to Madison's east side, near its border with the City of Sun Prairie. Two branches, one on the southwest side serving the West Towne area, and another serving the Dane County Regional Airport, are also included in the study area (See Figure 1).

The study area has been organized into, eight "opportunity areas" for transit service. These subareas represent logical station clusters and submarkets of the community's greater real estate market. Opportunity areas, (Figure 1) include:

1. Middleton
2. Southwest
3. Hill Farms
4. University
5. Capitol
6. East Isthmus
7. East Towne
8. Airport

The opportunity areas have widely varying land use and density patterns. The highest densities and pedestrian friendly areas are found in the corridors in on near the City center such as the University and Capitol corridors. The corridors on the fringes, such as the Southwest and the East Towne corridors, have a comparatively low-density, auto-oriented development pattern. However, considerable future growth is forecasted for these areas due to the proximity to regional highways. This future growth pattern presents an opportunity to intensify these corridors and create a more transit supportive environment through careful planning and decision making.

Existing and Forecasted Population Density

Population densities within the half-mile area surrounding the proposed stations are an important measure of transit supportive land use in the FTA New Starts criteria. Higher population densities imply a greater potential ridership base, increasing the project's effectiveness and chances of securing federal funding. Figures 2 and 3 illustrate the Year 2000 population density and the Year 2030 forecasted population density respectively for the study area by Traffic Analysis Zones (TAZs). Both the Year 2000 and the Year 2030 forecast data is based on information provided by the Madison Area Metropolitan Planning Organization (MAMPO). Figure 4 illustrates the change in population over

the forecast period, from 2000 to 2030.

Population densities illustrated in Figures 2 and 3 have been categorized and mapped according to the FTA ranking criteria.² These maps provide an indication of where sufficient population densities exist today within the study corridor (medium to high density) and the impact of the growth scenario under the current MPO forecast. While several of the corridors exhibit the entire density range from “low” to “high”, the ones with the large areas under higher densities, have higher ridership potential. The highest existing population densities are within the University, Capitol and the East Isthmus corridors. It is evident from Figures 3 and 4 that under the current MPO forecast, population growth is expected in the downtown areas as well as the westside and eastside neighborhoods located close to the major highways (Beltline Highway on the west and Interstate Highways 90/94 on the east).

Even though the MPO forecast shows increasing population within the corridor (except for the area near the Airport), the increases are generally modest and do not affect the FTA ranking to a great extent. For the purposes of this study, it is important to view the MPO forecast in conjunction with the real estate market analysis, which explicitly assumes the presence of commuter rail transit, and is presented below.

² Federal Transit Administration (FTA) specifies ranking for population density within the half-mile station areas in Table 5: Quantitative Element Rating Guide, *Guidelines and Standards for Assessing Transit supportive Land Use*. The population density ranges are as follows: Low Density = fewer than 3,333 people/square mile, Low-Medium Density = between 3,333-6,667 people/square mile, Medium Density = 6,667-10,000 people/square mile, Medium High Density = 10,000-15,000 people/square mile and, High Density = more than 15,000 people/square mile.

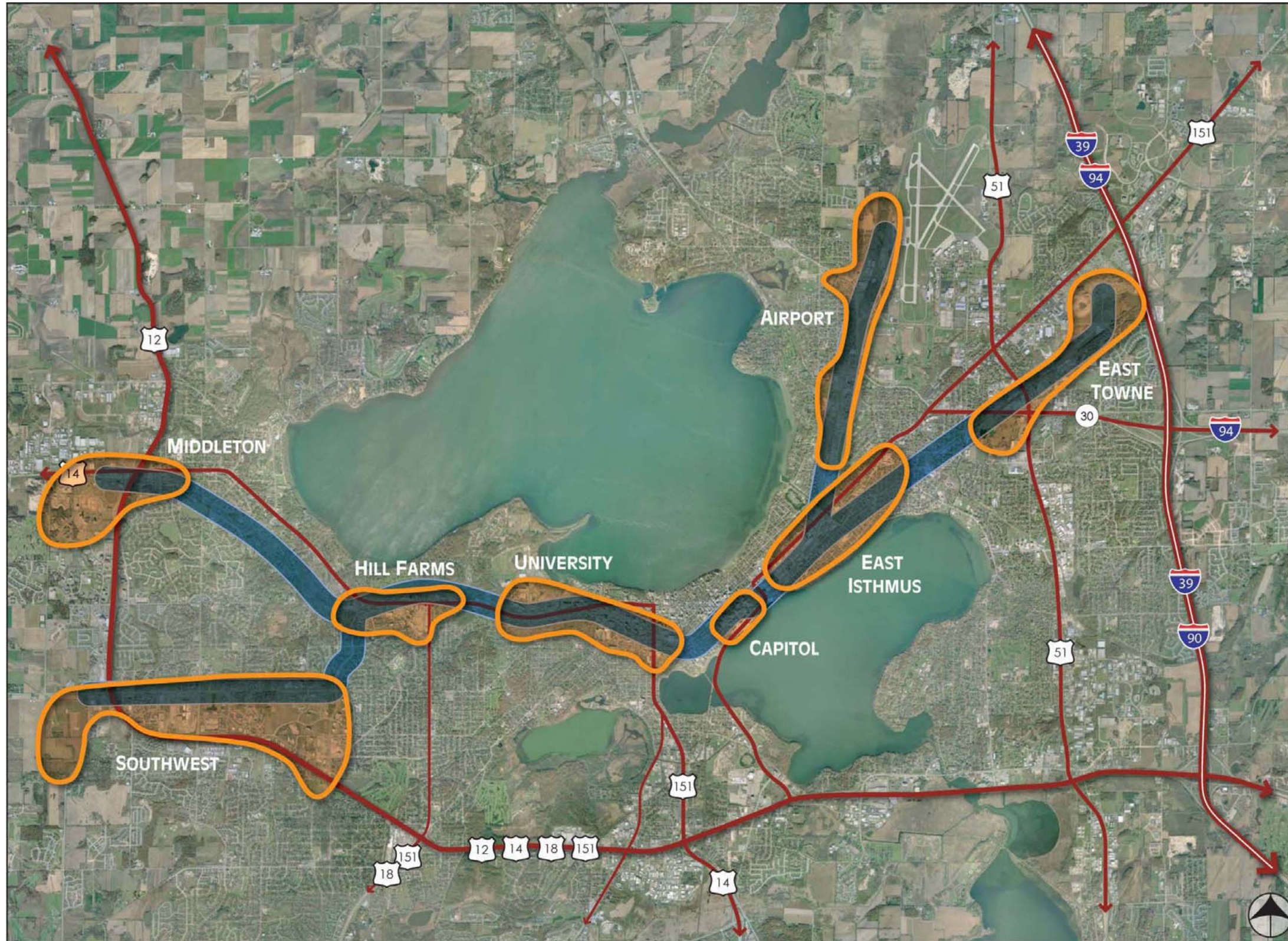


Figure 1 - Opportunity Corridors

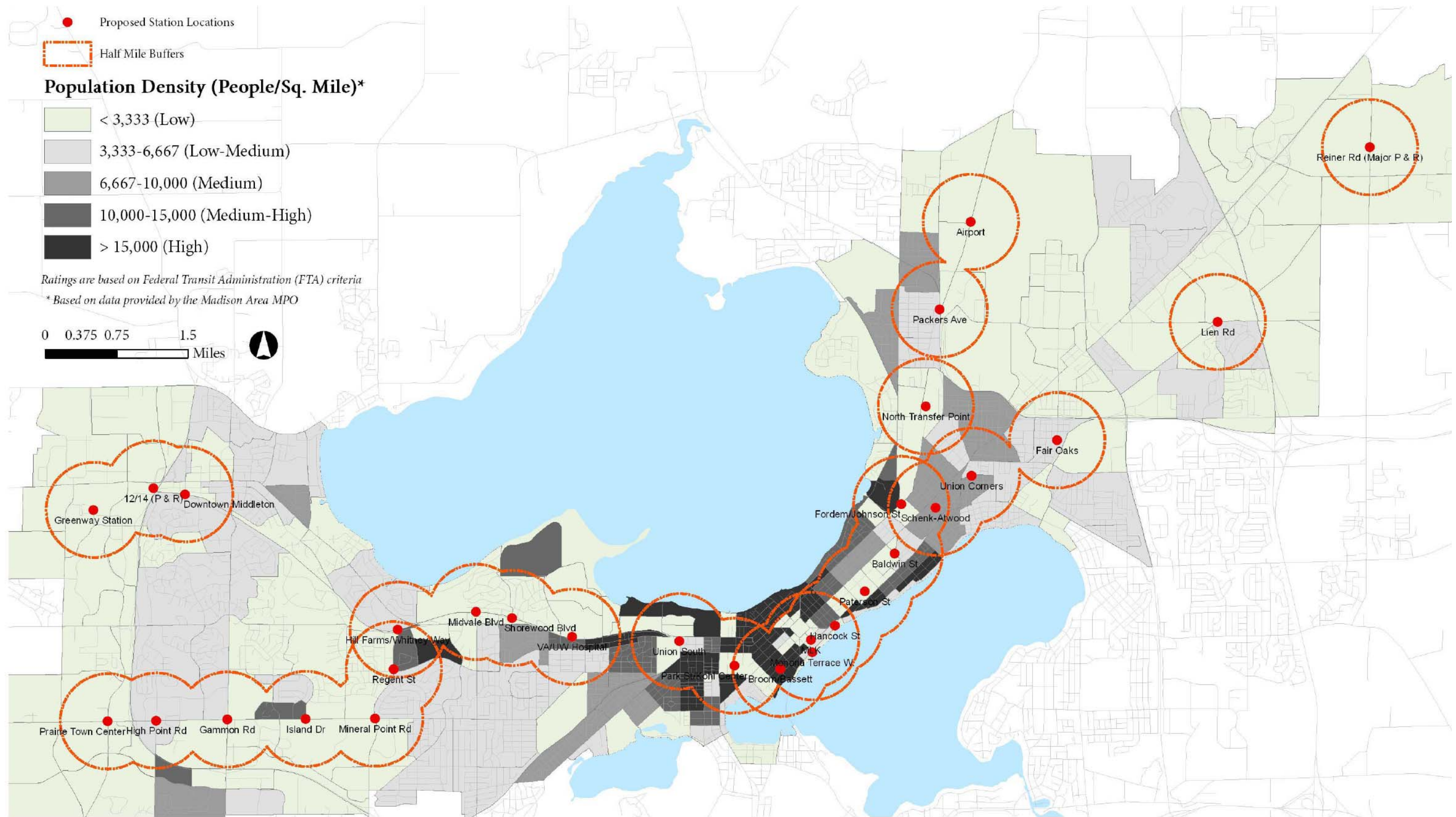


Figure 2 - Year 2000 Population Density

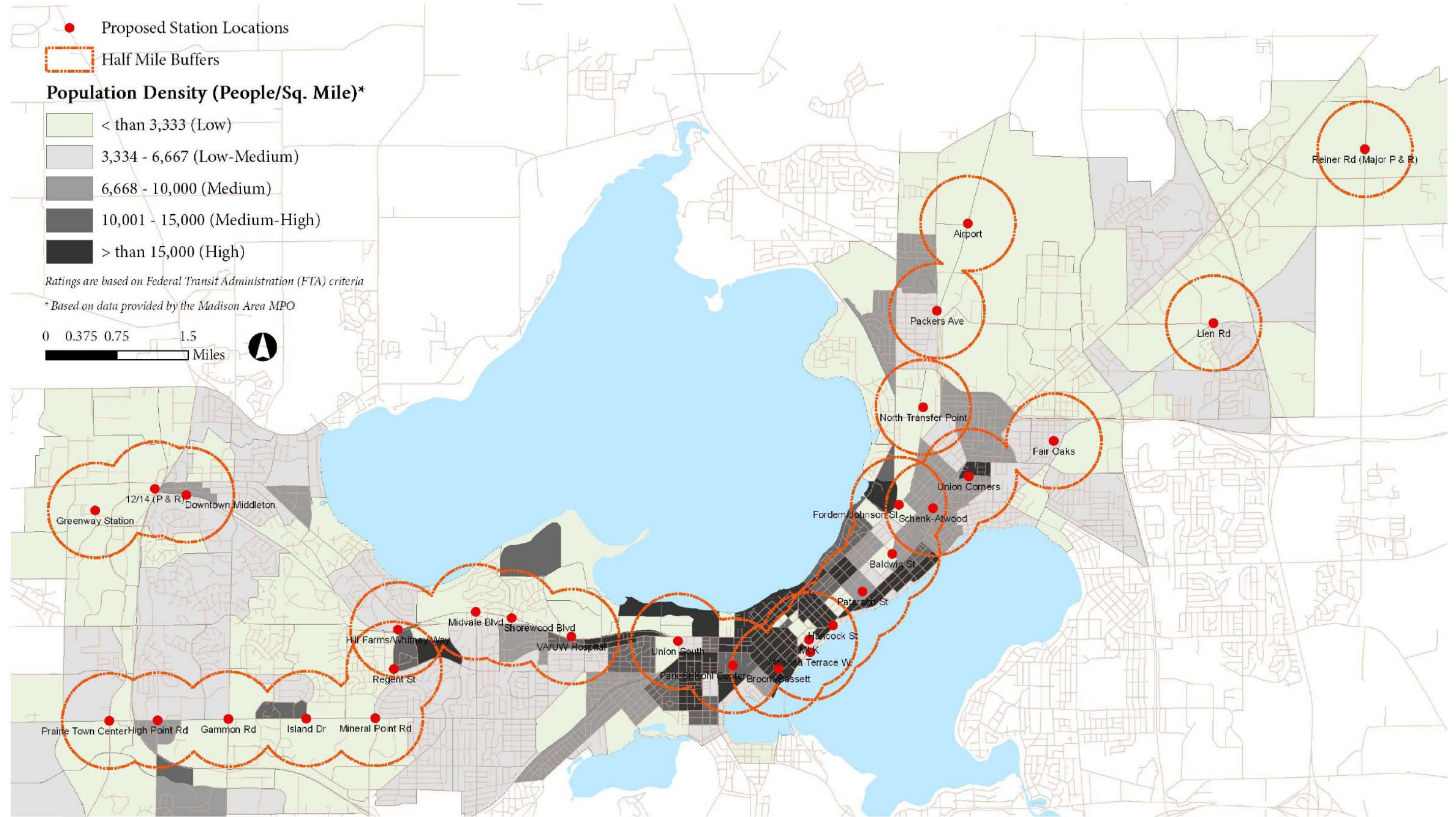


Figure 3 - Year 2030 Population Density

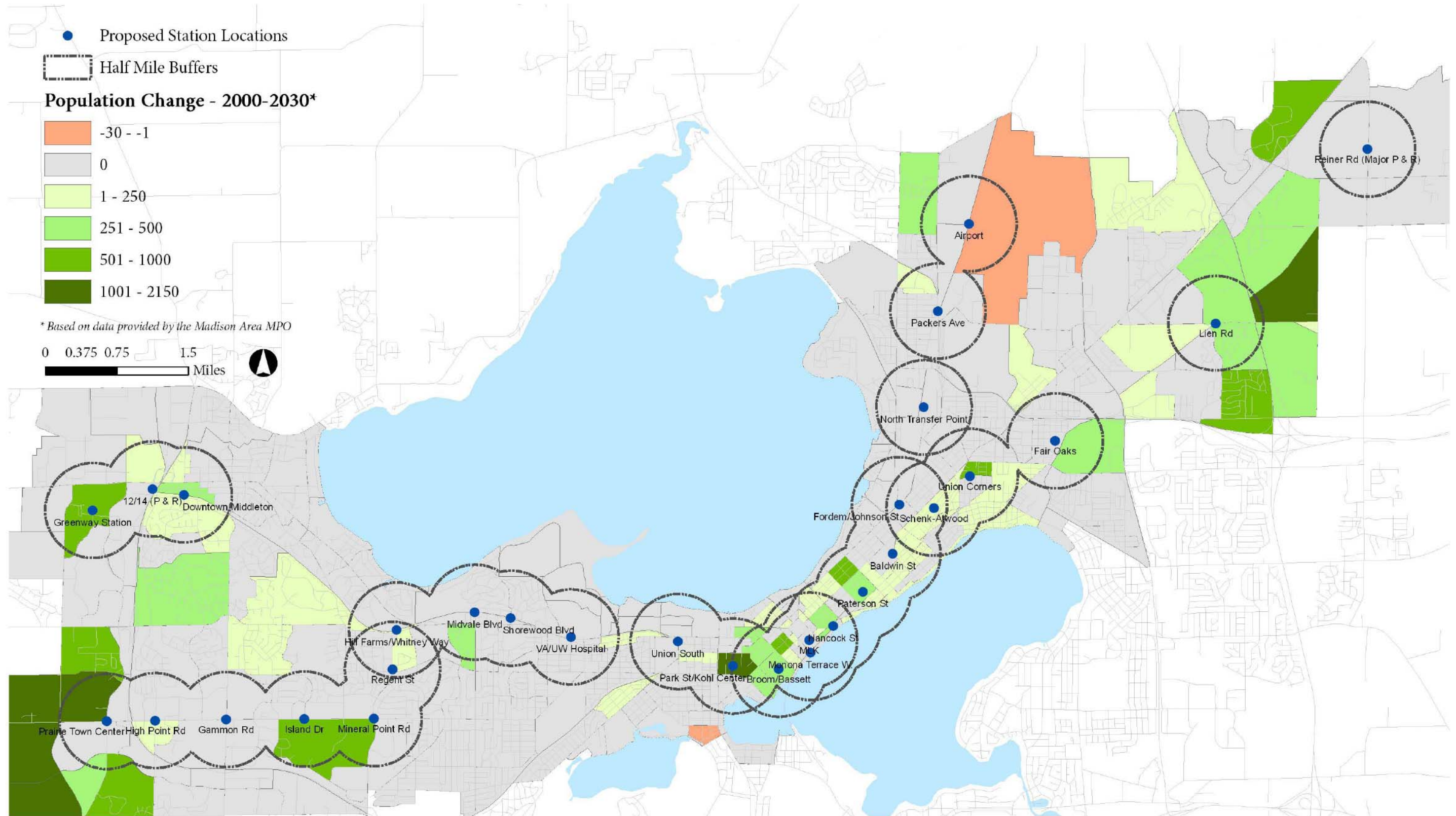


Figure 4 - Population Change, 2000-2030

A-II. Market Analysis: Overview and Summary Results

A valuable step in the process is to understand where future real estate investment will occur in the corridor. The exercise lends an understanding of how the market is expected to behave in the near term for preferred locations for real estate investments. Comparisons can then be made between current land use policies, and the 2030 forecast.

Valerie Kretchmer and Associates (VSKA) has completed a real estate market analysis for the corridor area, which is included in its entirety in the Appendix. A summary of the analysis, which outlines the market potentials for household growth and new office and retail space by Opportunity Corridor Area, is presented in Table 1.

Also included as Table 2 is a comparison of the VSKA market analysis with the MPO 2030 forecast. It is important to understand that the market analysis, takes into account the increased desirability of the corridors for attracting development with commuter rail service, and therefore often shows higher development potentials than that forecasted by the MPO, which did not assume any new transit service.

Table 1 - Projected Residential, Office and Retail Development Potential from 2005 to 2020, Corridor Opportunity Areas

	East Towne	Airport	East Isthmus	Capitol	University**	Hill Farms***	Southwest	Middleton	Total
<u>Dwelling Units</u>									
2005-2010	40	10	100	150	200	300	250	50	
2010-2015	40	25	300	200	200	300	350	100	
2015-2020	40	25	200	200	200	300	400	100	
Total Units	120	60	600	550	600	900	1,000	250	4,080
Population (1)	272	136	1,362	1,249	1,362	2,043	2,270	539	9,233
<u>Office Space (Square Feet)*</u>									
2005-2010	25,000	25,000	100,000	250,000	125,000	50,000	200,000	50,000	
2010-2015	25,000	25,000	100,000	250,000	125,000	350,000	400,000	50,000	
2015-2020	25,000	25,000	100,000	250,000	125,000	200,000	500,000	25,000	
Total	75,000	75,000	300,000	750,000	375,000	600,000	1,100,000	125,000	3,400,000
Office Employment (2)	375	375	1,500	3,750	1,875	3,000	5,500	625	17,000
<u>Retail Space (Square Feet)</u>									
2005-2010	150,000	10,000	50,000	50,000	50,000	75,000	100,000	50,000	
2010-2015	50,000	20,000	75,000	50,000	50,000	50,000	100,000	75,000	
2015-2020	50,000	20,000	75,000	50,000	50,000	50,000	100,000	75,000	
Total	250,000	50,000	200,000	150,000	150,000	175,000	300,000	200,000	1,475,000
Retail Employment (3)	500	100	400	300	300	350	600	400	2,950

* Office space includes both private and public sector space

** Space in the University Area includes University replacement housing but not classroom and special purpose buildings

*** Office space in Hill Farms includes the space that the Department of Transportation will re-build at its current location

1: Average household size in 2020 is assumed to be 2.27 people for the City of Madison, and 2.15 people for the City of Middleton

2: Average square feet of office space per office worker is assumed to be 200 square feet

3: Average square feet of retail square feet per worker is assumed to be 500 square feet

Source: Valerie S. Kretchmer Associates, Inc.

Table 2 - Comparison of Increase in Household and Employment, Corridor Opportunity Areas

Opportunity Area	Household Increase		Service/ Office Employment Increase		Retail Employment Increase	
	2030 Forecast	2020 Market Study	2030 Forecast	2020 Market Study	2030 Forecast	2020 Market Study
East Towne	317	120	345	375	386	500
Airport	77	60	523	375	12	100
East Isthmus	1,716	600	470	1500	127	400
Capitol	2,787	550	1,219	3750	153	300
University	1,024	600	1,105	1875	78	300
Hill Farms	158	900	59	3000	95	350
Southwest	964	1,000	6,575	5500	454	600
Middleton	387	250	737	625	386	400
Total	7,430	4,080	11,033	17,000	1,691	2,950
Average Annual Increase*	248	272	368	1,133	56	197

Source: Cambridge Systematics; Valerie S. Kretchmer Associates, Inc.

* The 2030 MPO Forecast is for a 30 year time period from 2000 to 2030, the 2020 Market Study projections are for a 15 year time frame from 2005 to 2020.

A-III. Transit Supportive Land Use Ranking Approach

As mentioned earlier, all the proposed stations within the transit corridors were analyzed and assigned ranks based on their transit supportive character in relation to the New Starts criteria.

A five point ranking system was used for this analysis; a brief explanation of the ranking criteria is presented below. The ranks help in assessing the overall transit supportive environment in a station area based on existing conditions and policies.

Criteria used to establish station area rankings:

(Note: Rankings are based on a scale of 1 to 5; 1 indicating a “low” rank, 3 indicating a “medium” rank and 5 indicating a “high” rank.)

- **Station area population densities**
 - According to FTA parameters
- **Assessment of supportiveness of existing land uses**
 - Low – mostly lower-density residential uses primarily within the quarter-mile station area (1)
 - Medium – a mix of residential, commercial and/or employment uses within the half-mile station area at a modest density (3)
 - High – strong mix of uses, particularly a high percentage of residential uses within the half-mile station area (5)
- **Existing street network connectivity – access patterns**
 - Low – street network density is low; broken/unconnected network within the half-mile station area; limited sidewalks (1)
 - Medium – street network is not high density; network is in place but circuitous/irregular; minor sidewalk and access issues (3)
 - High – street network density is high; network is more or less on a continuous grid; complete sidewalk system (5)
- **Intermodal capability at station locations**
 - No multimodal access is planned or available at the station area; only automobile accessibility is provided (1)
 - Bus service is planned for the station area; a sidewalk network is in place (3)
 - The station is already served by one or more bus routes; has strong bicycle and pedestrian connections to the surrounding neighborhood (5)

- **Supportive parking policies**
 - Supportive parking policies or regulations are absent (1)
 - Policies and recommendations for shared parking, structured parking, and/or reduced parking in place with evidence of impact in station areas (3)
 - Mixed use/reduced parking requirements; constraints on parking supply in place (5)
- **Extent to which there are properties subject to change for transit supportive uses**
 - Recently built or largely protected environment with minimal development/redevelopment opportunities foreseen (1)
 - Low to medium density development opportunities for varied land uses (3)
 - Opportunities for high density mixed used projects, especially within the half mile station area (5)
- **Degree to which current community / neighborhood plans support TOD**
 - Plans do not address TOD at that location (1)
 - Plans address TOD possibilities and the use mix in the area (3)
 - Plans provide clear direction in use mix, development patterns, access improvements, and development implementation (5)
- **Degree to which current zoning consistent with TOD and market**
 - Zoning regulations are completely inconsistent with market-oriented uses and encourages improper development pattern (1)
 - Zoning mix is appropriate for the area, relatively aligned with density opportunities (3)
 - Zoning has considered TOD needs in the area and specifically addresses station area uses, density, design and access (5)
- **Market / Economic support for development at station area**
 - Limited market support for residential, commercial, employment and mixed uses (1)
 - Relatively reasonable market support for two or more uses to in the station area (3)
 - Strong market support for identified uses (5)
- **Degree of alignment between market opportunities and plan recommendations**
 - Limited market support for residential, commercial, employment and mixed uses (1)
 - Relatively reasonable market support for two or more uses to in the station area (3)
 - Strong market support for identified uses (5)

A-IV. Transit Supportive Land Use Ranking Results

The results of land use ranking for all the proposed stations are presented in Table 3.

Table 3 - Land Use Conditions and Policies – Station Rankings

Corridor Area	Station	Transit Supportive Existing Land Use	Existing Street Network/Connectivity	Intermodal capability	Supportive Parking Policies	Properties Subject to Change for Transit Supportive Uses	Degree to which current citywide/ neighborhood plans support transit	Degree to which current zoning supports Plan	Degree to which market appears to support development	Degree of alignment between market and plans	Summary Points	Average Station Ranking	Average Corridor Area Ranking
Middleton	Highway 12/14	3	2	3	4	4	5	4	4	5	34	3.8	3.9
	Downtown Middleton	5	4	4	4	3	5	4	2	5	36	4.0	
Hill Farms	Regent Street	4	3	3	2	1	1	5	3	1	23	2.6	3.5
	Hill Farms/Whitney Way	4	3	3	3	5	4	2	5	5	34	3.8	
	Midvale Blvd.	4	3	4	3	5	5	3	5	5	37	4.1	
	Shorewood Blvd.	4	3	4	3	3	2	5	3	5	32	3.6	
University	UWVA Hospital	5	4	4	5	4	5	4	5	5	41	4.6	4.4
	Union South	5	4	4	5	5	5	4	5	5	42	4.7	
	Park St./Kohl Center	5	4	4	5	3	5	4	2	4	36	4.0	
Capitol	Broom/Bassett	5	5	5	4	4	5	3	4	4	39	4.3	4.3
	MLK	5	5	5	4	4	5	3	4	4	39	4.3	
	Monona Terrace W.	5	5	5	4	4	5	3	4	4	39	4.3	
	Hancock St.	5	5	5	4	4	5	3	4	4	39	4.3	
	Paterson St.	3	4	5	4	5	5	1	5	4	36	4.0	
East Isthmus	Baldwin St.	4	3	5	4	5	5	1	5	4	36	4.0	4.0
	Schenk-Atwood	5	5	5	4	3	5	1	4	3	35	3.9	
	Union Corners	5	3	5	4	5	5	4	5	5	41	4.6	
	Fordem/ Johnson	3	2	5	3	3	5	3	4	3	31	3.4	
East Towne	Fair Oaks	3	3	5	2	4	5	3	2	2	29	3.2	2.4
	Lien Road	2	1	3	2	4	5	3	2	2	24	2.7	
	Reiner Road	1	1	1	1	1	1	4	1	1	12	1.3	
Southwest	Prairie Town Center	2	2	2	2	5	3	3	5	3	27	3.0	2.8
	High Point Road	4	2	2	2	1	1	3	5	3	23	2.6	
	Gammon Road	3	2	2	2	4	3	3	5	3	27	3.0	
	Island Dr.	3	2	2	2	4	3	3	5	3	27	3.0	
	Mineral Point Rd	3	2	2	2	2	1	3	5	3	23	2.6	
Airport	North Transfer Pt.	3	1	3	2	3	3	3	2	3	23	2.6	2.7
	Packers Ave	3	2	3	2	3	3	3	2	3	24	2.7	
	Airport	5	2	4	1	3	3	5	2	1	26	2.9	

The composite scores for the opportunity areas are presented in Table 4.

Table 4 - Opportunity Corridor Composite Scores

East Towne	Airport	Southwest	Hill Farms	Middleton	East Isthmus	Capitol	University
2.4	2.7	2.8	3.5	3.9	4.0	4.3	4.4

Source: HNTB Corporation

A-V. Summary of Ranking Results

Tables 3 and 4 above indicate that several of the opportunity corridors, exhibit a fairly strong transit supportive environment, in terms of existing conditions as well as future plans and have the potential of achieving relatively high transit supportive ratings in the New Starts assessment. Yet these corridor areas continue to undergo redevelopment and are constantly evolving to meet the needs of a changing market. The redevelopment opportunities should be used to enhance the transit-oriented environment within the corridors while preserving their historic urban fabric, which gives them their unique characters

The East Towne, Airport and Southwest corridors, which include stations at the urban fringes of the City of Madison, do not currently provide a strong transit supportive environment. These areas have developed mostly on a suburban, auto-oriented pattern in contrast to the older neighborhoods of Madison that are traditionally mixed-use and pedestrian oriented. Considerable change would be required over time to make these corridors pedestrian-friendly and increase current densities to transit supportive levels. A proactive approach on the part of the City to promote infill and redevelopment in these areas and implement necessary streetscape improvements to increase pedestrian comfort and safety will be helpful in creating a more transit supportive environment.

The corridor-specific land use analysis presented in the following section provides recommendations that can be undertaken for each corridor to enhance their transit supportive character.

SECTION B. TRANSIT SUPPORTIVE LAND USES

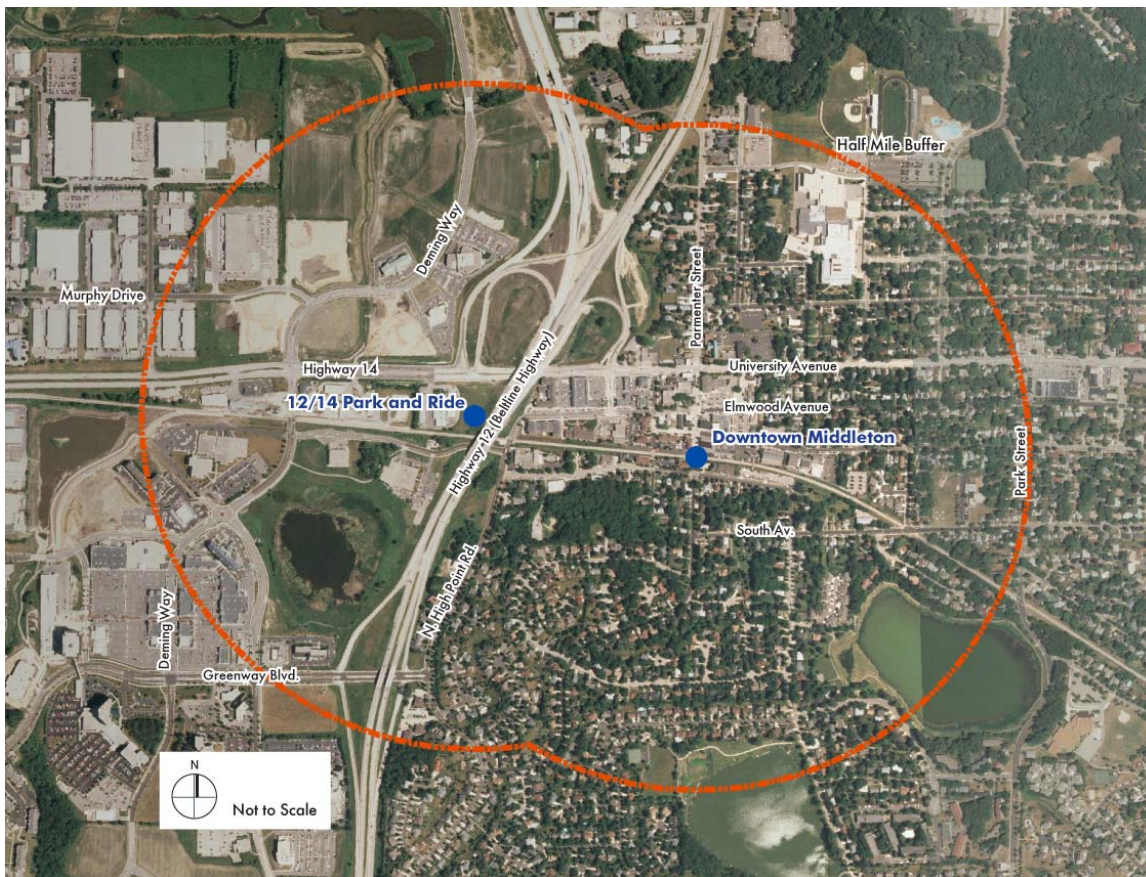
B-I. Transit Supportive Land Use in Corridors – Existing Conditions, Policies and Recommendations

MIDDLETON CORRIDOR

Introduction

The Middleton Corridor serves Middleton, a fast growing suburb located northwest of the City of Madison. Middleton is emerging as a residential and employment center with an increasing number of commuters to and from Madison.

Two stations are proposed within this corridor – Downtown Middleton and the Highway 12/14 Park and Ride station. The station study areas are illustrated below.



Existing Conditions

Existing Land Use and Development Patterns

The two station areas offer varying intensities and type of development.

Downtown Middleton: This station is being proposed near Parmenter Street in the Central Business District (CBD) of Middleton which contains a range of commercial and employment uses in a traditional, pedestrian friendly, downtown environment. Most of the downtown development is in low-rise (2-3 stories) and single story buildings. The CBD is surrounded by residential neighborhoods including mainly single-family homes and two low-rise multi-family residential developments.

12/14 Park and Ride: A Park-and-Ride station is being proposed at the west end of Middleton near Highway 12 (West Beltline Highway) and Highway 14. This station location is auto-oriented, containing mostly highway oriented commercial, office parks and hotels. A significant part of the station area has environmental constraints and is preserved as a conservation area. There is limited residential development in the station area west of the highway. Several apartment complexes are located southwest of the station area near Greenway Station, a commercial center containing over 350,000 square feet of retail space occupied by national and local retailers and restaurants. While the prevalent development pattern in the station area is not supportive of walk-access, it is suitable for a large park-and-ride facility serving the surrounding suburban areas.

Existing Population Density

As illustrated in Figure 2, Year 2000 Population Density, population densities in the Middleton corridor rank “Low” or “Low-Medium” (based on FTA New Starts criteria). The commercial areas including the CBD and most of the corridor west of the Beltline highway have limited or no residential development and therefore a low population density. The residential areas east of the highway have a “low-medium” population density reflecting the prevalent low-density suburban development in the area.

Existing Transportation Facilities and Conditions

Roadway Access

The Middleton corridor has excellent roadway access due to its proximity and direct access to the Beltline Highway, a circumferential roadway providing access to Madison and other surrounding communities. Arterial roadways in the corridor include University Avenue (Highway 14 west of the Beltline) providing east-west access, and segments of Park and Parmenter Streets providing north-south access. Collector roadways, providing access within the corridor, include Elmwood Avenue, North High Point Road, Parmenter Street between Ellefson Court and Elmwood Avenue, Deming Way, and Greenway Boulevard.

Street Network Density

The core CBD area in downtown Middleton has a moderately dense and interconnected street network. Outside the CBD the residential areas are laid out on a curvilinear street pattern with cul-de-sacs resulting in poor connectivity. West of the Beltline, the street network in the commercial areas is also low density with limited interconnections.

Transit

The Middleton corridor has limited bus service. While there is no bus service on weekends and holidays, on weekdays, two Metro bus routes serve the downtown area. These bus routes continue eastward on University Avenue into Madison. Another bus route operates as a circulator route in the 12/14 Park and Ride station area connecting the employment areas west of Beltline with the residential areas to the east. There are also opportunities along this route to transfer to connecting bus routes to Madison. Currently, none of the bus routes provide direct access to either of the two proposed stations.

Bike and Pedestrian Access

West of the Beltline Highway, bike lanes are present along Deming Way and Murphy Drive. East of the highway, bike lanes are present along North High Point in the residential area just east of the highway and along Park Street at the eastern edge of the Downtown station area. Middleton also has an extensive system of off-street multi-use trails along waterways and in conservation areas. Together with the on-street bike routes, these provide an overall good bike network within the study corridor and the community.

The downtown area offers a very pedestrian friendly environment with walkable block lengths and continuous sidewalks. Mid-block pedestrian walkways are present in the downtown area across the railroad and on long blocks to the east, further improving pedestrian connectivity. Outside the downtown, the station areas are not very pedestrian friendly. Even though sidewalks are present along most streets, the block sizes are large with very few intersections and several dead-end streets limiting the possibility of short, direct pedestrian routes between uses.

Urban Design Conditions

Urban Design considerations are focused on the quality of the pedestrian experience within each station area.

Downtown Middleton offers a high quality pedestrian environment with comfortable sidewalks, well-defined pedestrian crossings, pedestrian friendly landscaping and pedestrian-oriented buildings creating an interesting street environment. The residential areas have quiet, narrow, pedestrian friendly streets. The commercial areas within the corridor, especially west of the Beltline, are auto-oriented and lack most of the characteristics of pedestrian friendly environments. These areas could benefit from coordinated streetscape improvements over time.

Market Conditions

Based on the real estate market study³ completed as a part of this analysis, the Middleton corridor is mostly built-out with limited development opportunities over the next 15 years. It is estimated that by the year 2020, the corridor could attract 250 additional dwelling units and 125,000 square feet of new office and 200,000 square feet of retail space.

While the downtown station area is well developed, some redevelopment and infill development (on sites like surface parking lots) could occur. Retail stores catering to downtown businesses, nearby residents and potential commuters, and multi-family residential development (3-5 stories in height) would be appropriate for the area.

³ Transport 2020: Real Estate Market Analysis, November 2006, prepared by Valerie S. Kretchmer Associates, Inc. is included in the Appendix.

In the 12/14 Park and Ride station area, there are some vacant lots in the Greenway Station development to the south and the Discovery Springs Business Park to the north. These lots could be developed with residential and office uses respectively. As development pressures increase in the area, especially with the start of a potential new rail service, the area might see significant infill development as surface parking lots get replaced with parking garages freeing up land for development.

Current Plans and Policies

Current Plans

The City of Middleton recently completed and adopted (November 2006) a new Comprehensive Plan for the City. Besides the Comprehensive Plan, the Southwest Quadrant Plan, completed in 2005, includes the study corridor.

Future Land Use and Development

The Land Use element of the Comprehensive Plan does not contain specific recommendations for the station areas. However, it provides general objectives that should be considered during future development/redevelopment efforts with the station areas. The objectives include:

- Discourage the development of low density development within a quarter mile of rail stations and bus-stops.
- Promote the development of well-designed, compact, mixed-use neighborhoods which provide a range of services within walking distance, thereby lessening the need for automobile trips.
- Locate housing for seniors and low-moderate income residents in areas with transit service to provide access to shopping, employment and other destinations without needing a personal automobile.
- Encourage infill and redevelopment of existing commercial areas where appropriate.
- Enforce design guidelines in industrial areas north of Highway 14 and west of Highway 12.

Middleton's Comprehensive Plan supports a regional commuter rail in the future and also the proposed station locations within the City. It recommends the southwest corner of the intersection of Highways 12 and 14 as the ideal location for a parking garage for the proposed park-and-ride station.

Parking

Middleton's Comprehensive Plan encourages the use of structured or underground parking in commercial areas and neighborhood centers to reduce the use of large surface parking lots which it considers incompatible with walking and transit service.

Plans to Improve Pedestrian Facilities

The City of Middleton requires all new public streets within its jurisdiction to include pedestrian sidewalks. Where sidewalks are not present on existing streets, the City considers including them as a part of a reconstruction project.

Design Guidelines

While the Comprehensive Plan does not include design guidelines, it recommends completing streetscape enhancements including installation of gateway features at the entryways to the City, landscaping, street furniture and bike racks, and implementing a new wayfinding and signage system along its major business corridors and community destinations.

Current Policies

Zoning Ordinance

The immediate area surrounding the downtown Middleton station is mostly zoned for Planned Developments and as B4, Downtown Business District. The surrounding areas are zoned R1 and R2, Single Family, and Single and Two Family Residential. Most of the 12/14 Park and Ride Station is zoned for Planned Development as well.

Planned Development designations allow greater flexibility in site and building design compared to the underlying zoning district's regulations to create high quality developments often including amenities like public open space. Therefore, such a designation is appropriate for promoting mixed-use, transit-oriented development in the station areas. The B-4 district is not conducive for mixed-use development. Although residential units are permitted in this zone, the proposal is subject to Plan Commission review for appropriate balance between residential and commercial uses. Also, the development is required to make open space dedications to the City for every proposed dwelling unit.

The zoning code includes the provision of design review of development proposals within some districts including Planned Developments, business and industrial districts, government and utility facilities. Parking lots including 50 or more spaces are also subject to design review. The zoning code includes general design standards to be applied during the review process. These standards relate to landscaping, building massing, parking lots, external storage and lighting.

Recommendations to Improve Transit Supportive Land Use

Planning Initiatives

The City should consider preparing sub-area plans for the downtown and the commercial area west of the Beltline to identify key development/redevelopment sites and preferred land use and development density for these sites. This will help in leveraging development opportunities to enhance the transit supportive environment in the station areas.

Middleton should prepare and adopt detailed design guidelines for distinct areas within the City as a supplement to the design review standards included in its zoning code. The design guidelines should include the following elements:

- Building scale and massing; architectural design and detailing
- Building placement in relation to pedestrian sidewalks
- Site design including landscaping
- Streetscape design including sidewalk widths, street trees, lighting and street furniture

Policy Recommendations

Middleton should consider updating its parking requirements, especially in the downtown area. Currently, one parking spot is required for every 300 square feet of commercial space throughout the City. Based on the FTA criteria,⁴ this requirement translates to a “Low-Medium” ranking for areas outside the downtown and a “Low” ranking for the downtown. The City should consider lowering the requirement in the downtown to one parking space per 400 square feet of floor area to meet the “Medium” rating standard. With the provision of adequate bicycle parking and improved pedestrian connections, the City could further reduce the parking requirement to one parking space per 575 square feet to meet the “Medium-High” rating.

Improvement Projects

The City should implement streetscape improvement projects along major corridors outside the downtown area including Highway 14 (University Avenue), Park Street and Deming Way to create an attractive pedestrian environment.

Wherever feasible, the City should improve roadway connectivity by creating new streets through large parcels within the half-mile station areas. Where full street connections are not possible, the City should consider providing pedestrian and bike paths. Developing an access and circulation plan could help achieve this as the station areas experience new development and redevelopment in the future.

The City should explore the feasibility of providing a pedestrian linkage across the Beltline Highway near the downtown (similar to the Pheasant Creek multi-use pathway) to improve connectivity.

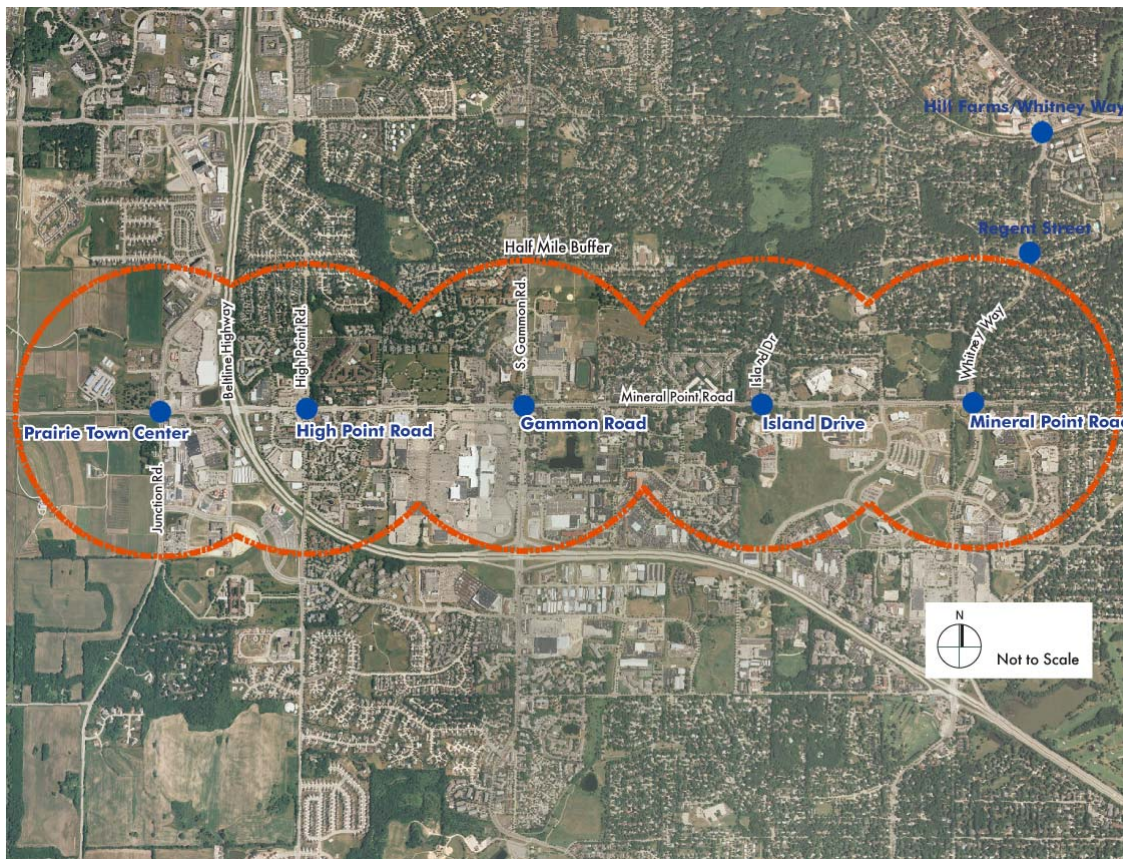
⁴ Federal Transit Administration (FTA) specifies ranking for amount of parking spaces required by local zoning ordinances in Table 5: Quantitative Element Rating Guide, *Guidelines and Standards for Assessing Transit supportive Land Use*. For non-CBD areas, Low = > than 3.75 spaces/1000 square feet, Low-Medium = 3-3.75 spaces/1000 square feet, Medium = 2.25-3.0spaces/1000 square feet, Medium High = 1.5-2.25 spaces/1000 square feet and High = less than 1.5 spaces/1000 square feet. For CBD areas, Low = > than 3.25 spaces/1000 square feet, Low-Medium = 2.5-3.25 spaces/1000 square feet, Medium = 1.75-2.5spaces/1000 square feet, Medium High = 1-1.75 spaces/1000 square feet and High = less than 1 space/1000 square feet.

SOUTHWEST CORRIDOR

Introduction

The Southwest Corridor is one of the fastest growing areas in Madison. The southwest side is experiencing a surge in population as new residences are being constructed. Employment is on the rise with the expansion of the University’s Research Park and the increasing popularity of the area for new office development. Currently, the area is mostly a retail center. The West Towne shopping mall and several big-box retailers are located within the corridor. Even though the Southwest corridor contains a mix of uses, it is highly auto-oriented and lacks the pedestrian friendliness inherent in the older parts of Madison.

Five stations are proposed within this corridor: Mineral Point Road, Island Drive, Gammon Road, High Point Road, and Prairie Town Center.



Existing Conditions

Existing Land Use and Development Patterns

Most of the stations within the southwest corridor have a mix of residential and commercial/employment uses. However, these uses are not well-connected, resulting in single, isolated uses located adjacent to each other rather than an integrated mixed-use environment.

Mineral Point Road: This station is proposed near the intersection of Whitney Way and Mineral Point Road. North of Mineral Point Road, the station area consists mostly of established single-family neighborhoods. The University of Wisconsin's Research Park occupies most of the station area south of Mineral Point Road. The Research Park, with almost 1.5 million square feet of office space on an area of approximately 250 acres, is the largest office park in west Madison.

Island Drive: This station is proposed near the intersection of Island Drive and Mineral Point Road. The station area contains a mix of single-family and multi-family residential neighborhoods. The multi-family developments within the Island Drive station account for the highest population density within the entire southwest corridor. The station area also contains some neighborhood scale strip commercial centers.

Gammon Road: The Gammon Road station is proposed near the Gammon and Mineral Point Road intersection. West Towne Mall, the largest shopping mall in western Madison, and several big-box retailers are located within the station area. Memorial High School and Jefferson Middle School are also located here. Residential uses, mostly multi-family developments, are located in the northwestern and eastern parts of the station area.

High Point Road: This station is proposed near the intersection of High Point and Mineral Point Roads. The station area has several single-family and multi-family residential developments. Big-box retailers and smaller, suburban office buildings are present along the eastern and western edges, overlapping with the adjacent station areas.

Prairie Town Center: This station is proposed west of the Beltline Highway near the intersection of Junction and Mineral Point Roads. Big-box retailers as well as smaller neighborhood-scale retail strip centers are located in the station area. Most of the area west of Junction Road is currently vacant. However, it is slated to be developed as a Research Park by the University of Wisconsin over the next 10-20 years.

Existing Population Density

As illustrated in Figure 2: Year 2000 Population Density, population densities in the Southwest corridor rank as "Low" or "Low-Medium" (based on FTA criteria) reflecting the prevalent low-density suburban development pattern in the area. A small area just west of the Island Drive station ranked "Medium" population density because of the presence of several higher density multi-family developments.

Existing Transportation Facilities and Conditions

Roadway Access

The Southwest corridor has excellent roadway access to central Madison as well as to the larger Madison area. The corridor is centered on Mineral Point Road which is an east-west arterial providing access to the University and the Capitol areas to the east. Mineral Point Road also provides direct access to the Beltline Highway, which passes through the corridor. The Beltline is a major highway connecting Middleton and other suburban communities in the region to Madison and to Interstates 90/94 located to the east. Gammon Road, a north-south arterial also provides access to the Beltline Highway and connects the corridor to the City of Middleton to the north.

South High Point and South Westfield Roads, Tree Lane, South Yellowstone and Island Drives, South Rosa Drive and South Hill Drive serve as collector roadways within the corridor.

Street Network Density

The street network in the southwest corridor is and lacks good connectivity. Most of the commercial and office uses are big-box/suburban type of developments, located on large parcels that break the street grid. The street network is generally denser in the residential areas, but often contains closed end/dead-end streets, reducing connectivity.

Transit

The Southwest corridor is served by Metro bus routes that among other places provide access to the Metro West Transfer Point, which has connecting bus service to different parts of the City including the downtown. Bus routes operate on the arterial and most of the collector roadways within the corridor.

Bike and Pedestrian Access

All the station areas, except for Prairie Town Center, offer one or more marked bike routes on a lower volume roadway or a paved off-street bike path. Bike paths along Tree Lane and S. Westfield Road through the High Point Road and Gammon Road stations connects them to the areas further north and east through regional bike routes along Old Sauk Road and Regent Street. Similarly, bike paths along Grand Canyon Drive, Regent Street and an off-street bike path, connect the Island Drive and Mineral Point Road stations to the regional bike path network providing access to areas further north and east including the University Campus and the Capitol.

As mentioned earlier, most of the development in the southwest corridor is highly auto-oriented. Buildings are typically set back far from the street behind large parking lots with no direct pedestrian access from the street. Sidewalks are mostly present along the arterial and collector roadways, but not along all local roads, disrupting pedestrian connectivity. Also, the overall street network density and connectivity is relatively low within the corridor reducing pedestrian accessibility.

Urban Design Conditions

Urban Design considerations are focused on the quality of the pedestrian experience within each station area. Currently, the southwest corridor with its predominantly suburban, auto-oriented pattern of development, does not offer

a pedestrian friendly environment. The major streets including Mineral Point Road have several traffic lanes carrying high volumes of high-speed traffic. There is no formal streetscape program for any part of the corridor. Pedestrian facilities are limited to sidewalks; amenities such as benches, shade trees and specially paved crosswalks are absent.

Market Conditions

According to the real estate market study prepared by VSKA, the Southwest corridor offers the highest development and redevelopment opportunities among the eight opportunity areas over the next 15 years. It is estimated that by the year 2020, the corridor could attract 1,000 additional dwelling units, 1,100,000 square feet of new office and 300,000 square feet of new retail space.

The projected office development, which will lead to the largest office and service sector employment increase in the study corridors, will occur mostly within the University Research Parks. The first phase of the Research Park located near the proposed Mineral Point Road station, is almost built out, with less than 20 acres of land remaining vacant. The second phase of the Research Park, located near the proposed Prairie Town Center station, is planned on a 250-acre site and is proposed to be developed at a higher density than Phase I. It will have 2-3 story buildings compared to the single story structures of Phase I. High density residential uses are also proposed in a “town center” environment centered on the proposed station.

The redevelopment/rehabilitation of a vacant, 100,000+ square feet office building in the Gammon Road station area located just east of the Sunset Memory Gardens Cemetery, would add more office space to the corridor.

There are several undeveloped parcels and older retail centers with vacancies in the vicinity of the West Towne Mall in the Gammon Road and the High Point Road station areas. These areas could be developed or redeveloped with mixed-uses in a pedestrian friendly environment improving the transit supportive character of the corridor.

Residential development is expected to occur along the corridor as multi-family homes in mixed-use projects as well as single-family homes in residential neighborhoods.

Current Plans and Policies

Current Plans

Madison’s Comprehensive Plan (adopted 2006) provides general direction for the development of the Southwest area. The corridor does not have any neighborhood plans or sub-area plans.

Future Land Use and Development

The Comprehensive Plan designates the Island Drive, Gammon Road and the Prairie Town Center station areas as “Potential Transit Oriented Development Areas” and indicates extensive redevelopment opportunities in the corridor south of Mineral Point Road and west of Gammon Road. The Plan presents general, but appropriate, guidelines for TODs recommending compact, mixed-use development patterns that focus the highest development densities in close

proximity to transit stops. These areas are however only “conceptual” and the Plan recommends preparation of more detailed sub-area or neighborhood plans to determine the most appropriate areas for TOD.

The Future Land Use Plan included as a part of the Comprehensive Plan, identifies areas of employment, commercial and mixed use development along with medium to low density residential within the southwest corridor. The highest concentration of office uses is expected in the University Research Parks in the Mineral Point Road and Prairie Town Center stations. Most existing commercial development is proposed to remain and intensify as the area redevelops. The West Towne mall and its surrounding parcels in the Gammon Road station area are proposed to evolve into a regional mixed use center incorporating residential development approaching densities of more than 60 dwelling units per acre. Community scale mixed-use development including minimum two story buildings and a maximum density of 60 dwelling units/acre is proposed for the undeveloped site south of Mineral Point Road in the Island Drive station area. Most of the single-family residential in the corridor is located with the Mineral Point Drive and the Island Drive station areas. Medium density residential (16-40 dwelling units/acre) is proposed for all the stations except Mineral Point Road which is mostly built-out and stable.

Parking

Madison’s Comprehensive Plan recommends a variety of strategies for reducing the amount of land consumed by surface parking lots in TOD areas like shared parking, parking structures and underground parking.

Plans to Improve Bicycle Facilities

The City’s Future Bicycle Route Plan proposes several new on-street and off-street bike routes in the Southwest corridor to fill the “gaps” in the existing system and to create new routes connecting the corridor to the surrounding growth areas.

A north-south bike route is proposed along High Point Road which will provide connections to Middleton and neighborhoods south of the Beltline Highway. The Plan also recommends extending the off-street bike path along the Beltline Highway north up to the bike path along Old Sauk Road. Further east, a bike path is proposed on Rosa Road, from Old Sauk Road to south of the Beltline Highway.

Plans to Improve Pedestrian Facilities

The Comprehensive Plan emphasizes the importance of creating streets that are safe, comfortable and attractive for pedestrians throughout the City. However, the Plan, consistent with its philosophy of developing neighborhood plans for detailed planning recommendations, does not include any improvement recommendations for specific streets.

Design Guidelines

The Comprehensive Plan emphasizes the need for establishing detailed design guidelines to ensure that all new developments/redevelopments in the City enhance the existing environment. Creating a pedestrian scale and character for the public realm through appropriate street design, placement and style of buildings, and arrangement of

uses among other things, is an important consideration in the urban design recommendations of the Comprehensive Plan.

Current Policies

Zoning Ordinance

Existing residential zones within the corridor are present north of Mineral Point Road and include R1 (Single Family Residence District), R3 (Single and Two Family Residence District) and, R4 (General Residence District). While R4 allows multiple family dwellings, the density is restricted to a maximum of 20 dwelling units/acre and building height to maximum of two stories or three stories in case of planned developments. While the R1 and R3 designations mostly apply to established neighborhoods, some of the areas zoned as R4 are shown as medium density residential areas to be developed at densities of 16-40 dwelling units/acre in the Future Land Use Plan. Therefore in some instances, existing zoning, unless revised, might restrict the full development potential of the station areas.

South of Mineral Point Road, the corridor is zoned for employment and commercial uses. The Phase I of the University Research Park is zoned appropriately as RPSM, Research Park and Specialized Manufacturing District. C2 (General Commercial), C3 (Highway Commercial) and C3L (Commercial Service and Distribution District) are the commercial districts, with C3L being the most widespread. All the commercial districts allow a range of retail, service and office uses. C2 and C3 also allow residential development; however, the number of residential dwelling units is restricted to four or less than 50 percent of the total Floor Area Ratio (FAR)⁵. This restricts the potential for new mixed-use developments as suggested in the Future Land Use Plan. C3L prohibits any residential development and is therefore inconsistent with the Plan's recommendation of redeveloping the West Towne Mall area into a regional mixed-use center.

Parts of the High Point Road and Prairie Town Center station areas are zoned SIP (Specific Implementation Plan for Planned Community Development/ Planned Unit Development/Planned Community Mobile Home Park Districts). This zone offers the greatest flexibility in development by removing restrictions on mix of uses and bulk and height requirements in lieu of a high quality development that incorporates development characteristics considered desirable by the City.

The mostly vacant area west of Junction Road in the Prairie Town Center station area is zoned as Agriculture District, which allows the rezoning of land such that it is compatible with City's Future Land Use Plan when development is feasible and desirable.

The zoning code includes a special provision which allows for the reduction of automobile parking for developments based on certain criteria like proximity to transit routes and/or bicycle paths and provision of bicycle parking, existing or potential shared parking agreements and availability and accessibility of alternative parking. Applications for

⁵ Floor Area Ratio or FAR is defined as the total building area (inclusive of all floors) divided by the area of the parcel the building is located on.

automobile parking reduction are reviewed on a case by case basis. The code also requires the provision of off-street secure bicycle parking for several residential, institutional and commercial uses.

Madison's Comprehensive Plan recognizes the need to update the current zoning ordinance to implement Plan recommendations. Suggested changes include creation of a new mixed-use zoning district, a Traditional Neighborhood Development District and zoning standards for TOD.

Urban Design Commission Ordinance

Madison's Urban Design Commission Ordinance provides for an Urban Design Commission that reviews development proposals within designated Design Districts and certain type of projects throughout the City to ensure a high quality public realm. Large retail developments (over 40,000 square feet and located on a single zoning lot) are included in this review to "enhance the urban fabric through a more urban site and building design." While the southwest corridor is not covered by a specific Urban Design District, it contains several large retail establishments that are subject to review by the Commission in the case of any significant alterations or redevelopments to the existing structure.

Recommendations to Improve Transit Supportive Land Use

Planning Initiatives

The southwest corridor does not include neighborhood or sub-area plans. The Comprehensive Plan, while providing general guidance, encourages the preparation of more detailed sub-area/neighborhood plans to guide future planning in neighborhoods. Therefore, one of the first steps towards creating a transit supportive character in the corridor is the preparation and adoption of a neighborhood plan that addresses the unique opportunities and challenges facing the area. Some of the key elements that should be considered during the planning process include:

- Identification of key development and redevelopment sites within the corridor for transit supportive uses like higher density residential and mixed-use developments.
- Recommendations for improving street network connectivity in the area – as large parcels under single uses are redeveloped in the future efforts should be made to provide vehicular and pedestrian connections through them connecting to the existing street grid. When vehicular connections are not possible, pedestrian and/or bike connections should be provided if feasible.
- Implementing pedestrian improvements including sidewalks on both sides of the streets, specially paved cross-walks at heavily used intersections, median refuges for pedestrians on wide streets and amenities like shade trees and benches on new roadway projects as well as existing roadways lacking these facilities.
- Design guidelines aimed at creating mixed-use, pedestrian friendly environments that encourage walking and transit usage. Streetscape design including street furniture, public art and wayfinding, building design and its location in relation to the adjacent streets, public parks and plazas should be addressed as a part of the design guidelines.

- Parking management to reduce the amount of land used as surface parking through a variety of strategies including provision of parking garages, shared parking agreements between uses and reducing the need for vehicular trips by improving walkability among different destinations within the corridor and providing improved transit service.

Policy Recommendations

The City should implement the Comprehensive Plan recommendation for updating the zoning ordinance. Besides creating mixed-use zones and special standards for designated TOD areas, the City should update the allowable density within some of its residential zones to meet the recommendations of the Future Land Use Plan.

HILL FARMS CORRIDOR

Introduction

The Hill Farms Corridor, located just west of the university, is an active, urban corridor. Centered on University Avenue, a major east-west thoroughfare in Madison, it is experiencing significant intensification through new infill development and redevelopment of older, obsolete buildings.

Four stations are proposed within this corridor: Regent Street, Hill Farms/Whitney Way, Midvale Boulevard and Shorewood Boulevard.



Existing Conditions

Existing Land Use and Development Patterns

Regent Street: The Regent Street station, proposed near the intersection of Regent Street and Whitney Way, is mostly residential. It contains older, stable single-family neighborhoods and some multi-family developments in the northeastern part of the station area.

Hill Farms/Whitney Way: The Hill Farms station is proposed near the intersection of Whitney Way and Old Middleton Road, just south of University Avenue. This station area contains a mix of residential (both single-family and multi-family neighborhoods), commercial and office development. Commercial and office uses are concentrated along University Avenue in neighborhood-scale centers.

Midvale Boulevard: Proposed near the railroad intersection with Midvale Boulevard, the south side of this station is located in Madison and the north side in the Village of Shorewood Hills. Towards the north, most of the station area within Shorewood Hills consists of higher-end single-family homes. South of University Avenue, more modest single-family homes are present east of Midvale Boulevard. There are several large multi-family developments near the Hilldale Mall and towards the west end where the station area overlaps with the Hill Farms station area. Commercial and employment uses are present along the University Avenue frontage. The Hilldale Mall, along with the retail development across University Avenue, is a strong retail node, and is poised to become a larger regional draw with the expansion of the Hilldale Mall. This station area is also a strong employment center. Federal government offices and several state offices including the Department of Transportation and the Crime Lab are located here. The state office buildings are proposed to be redeveloped in the near future creating opportunities for creating more transit supportive development in the station area.

Shorewood Boulevard: The Shorewood Boulevard station is proposed near the intersection of Shorewood Boulevard and the railroad. Like the Midvale Boulevard station, this station area lies in both Madison and Shorewood Hills. Besides commercial development along University Avenue, this station area is mostly residential.

Existing Population Density

As illustrated in Figure 2, Year 2000 Population Density, population densities in the Hill Farms corridor ranged from “Low” to “High” (based on FTA criteria). The low-density areas are mostly located in the Village of Shorewood Hills. The highest density areas are in the multi-family developments in the Hill Farms/Whitney Way station area. Moderate population densities are present north of University Avenue in the Hill Farms/Whitney station and south of University Avenue in the other station areas reflecting the smaller lot sizes of these older, modest neighborhoods and the presence of multi-family dwellings including duplexes and four-unit structures.

While some of the commercial areas, specifically the Hilldale Mall, appear as low density in the 2000 population map, it is likely to change in the future with residential redevelopment in the mall area.

Existing Transportation Facilities and Conditions

Roadway Access

The Hill Farms corridor, located just west of the University Campus is easily accessible to the Capitol area as well as the growing West Towne area and the City of Middleton located to the west and northwest respectively.

University Avenue serves as a primary east-west arterial roadway throughout the corridor providing the most direct access to the Campus and the Capitol to the east and the areas to the west. Whitney Way and Midvale Boulevards also serve as arterial roadways providing north-south connections to and from the corridor. In addition, a well-connected system of collector roadways ensures good roadway access south of University Avenue. Within Shorewood Hills, the residential areas have mainly local access roadways.

Street Network Density

The street network within the residential neighborhoods in Madison is moderately dense and well connected. The residential area in Shorewood Hills however has long curvilinear blocks with some dead-end streets and few access points to the neighborhoods south of the railroad, limiting connectivity.

The station areas include several large multi-family and commercial developments that occupy large parcels. These developments break the street grid disrupting connectivity within the corridor.

Transit

The Hill Farms corridor is well connected by Madison Metro bus routes. Several east-west bus routes operate along University Avenue and north-south routes along Whitney Way and Eau Claire Avenue. These bus routes connect the station areas to the University campus, downtown Madison and to neighborhoods located to the west, north and south of the corridor.

Bike and Pedestrian Access

All the proposed stations have access to one or more marked on-street or off-street bike paths.

On-street bike paths along Regent Street, Eau Claire Avenue and Old Middleton Road serve the Regent Street and the Hill Farms/Whitney Way stations providing access to the University Campus and the Capitol area. The Old Middleton Road bike path continues along the railroad through the Midvale Boulevard and the Shorewood Boulevard stations, however, it stops just east of Shorewood Boulevard before connecting back to existing bike paths. The station areas lack an interconnected street network and continuous sidewalks and therefore have limited pedestrian access.

Regent Street, through the station area, has sidewalks on only one side and the residential neighborhood in the northwest quadrant lacks sidewalks. Old Middleton Road and University Avenue also lack continuous sidewalks. The developments on large parcels that break the street grid also disrupt pedestrian connectivity in the corridor. In addition, University Avenue, a high speed, high traffic roadway, is difficult for pedestrians to cross and acts as a barrier separating the north and south ends of the Midvale and Shorewood Boulevard stations.

Urban Design Conditions

Urban Design considerations are focused on the quality of the pedestrian experience within each station area.

Although there is no formal streetscape program for any part of the corridor, several of the older, established residential neighborhoods have sidewalks and present a quiet, pedestrian friendly street environment. University Avenue, as mentioned earlier, is a wide busy thoroughfare lacking in pedestrian friendly features.

Market Conditions

The market study conducted by VSKA suggests that the Hill Farms corridor has significant development potential over the next 15 years. It is estimated that by the year 2020, the Hill Farms corridor could attract 900 additional dwelling units, 600,000 square feet of new office and 175,000 square feet of retail space.

The redevelopment of the 37-acre Hilldale Mall site is expected to add a total of new 700 residential units and approximately 350,000 square feet of new commercial space over the next ten years. The office buildings currently occupied by the State of Wisconsin in the Hill Farms/Whitney Way and Midvale Boulevard stations also offer significant redevelopment opportunities. The State of Wisconsin is planning on developing the old suburban style office buildings set amidst large parking lots into higher density, transit-oriented mixed-use buildings in the near future.

There are several additional redevelopment opportunities within the corridor. The vacant, circular, white office building located east of the State Crime Lab building could be rehabilitated for residential uses or redeveloped into a transit-oriented use. The Garden Homes multi-family development located in Shorewood Hills is obsolete and slated for redevelopment. In the Hill Farms/Whitney Way station area, the University Place commercial strip, located northeast of the proposed station, could be redeveloped.

Current Plans and Policies

Current Plans

Comprehensive Plans for the City of Madison and Shorewood Hills provide general direction for the future development of the Hill Farms corridor. In addition, the Spring Harbor neighborhood plan (May 2006) provides recommendations for the Hill Farms/Whitney Way station.

Future Land Use and Development

The Village of Shorewood Hills is built-out; therefore future recommendations are limited to re-developable areas. The Garden Homes site, located just west of the proposed Midvale Boulevard station is proposed to be redeveloped into high-density multi-family housing.

The Spring Harbor neighborhood plan recommends redevelopment of the employment and the commercial area on both sides of Whitney Way north of the railroad into a high density transit-oriented employment district. Madison's future land use plan recommends employment uses and neighborhood scale mixed-use development for this area. Based on the neighborhood plan, it appears that community scale mixed-use might be more appropriate for the area

then neighborhood mixed-use. The City's Plan shows most of the University Avenue frontage as intensifying over time into community scale mixed-use with residential densities of not more than 60 dwelling units/acre. The State offices in the Hill Farms area are shown as an employment area in the future. While office space will remain the pre-dominant use, the State's plan call for a mix of uses therefore a mixed-use designation in the City's future plan would be more appropriate for the area.

The Comprehensive Plan identifies the area near the proposed Hill Farms/Whitney Way and the Midvale Boulevard stations as "Potential Transit Oriented Development Areas" to be developed as compact, mixed-use development areas with highest development densities in close proximity to transit stops. The Spring Harbor neighborhood plan and the Shorewood Hills Comprehensive Plan also recommend rail stations at these proposed locations.

Parking

Madison's Comprehensive Plan recommends a variety of strategies for reducing the amount of land consumed by surface parking lots in TOD areas like shared parking, parking structures and underground parking. The Village of Shorewood Hills recommends reducing off-street parking requirements for redevelopment projects located within the TOD areas.

Plans to Improve Bicycle Facilities

Madison's future bicycle plan includes a recommendation for extending the bike path along the railroad further east to connect with the bike path system near the Capitol. On the west side, the bike path is proposed to be extended beyond the Beltline Highway. These extensions will greatly improve bicycle access to the corridor.

Plans to Improve Pedestrian Facilities

The Comprehensive Plans of Madison and Shorewood Hills recognize the importance of creating pedestrian-friendly streets. Shorewood Hills recommends extending the pedestrian-bike multi-use path further east along the railroad and creating direct pedestrian connections to retail developments along University Avenue.

The neighborhood plans contain recommendations for providing continuous sidewalks and bike path along University Avenue, crosswalk enhancements and intersection improvements to enhance pedestrian safety.

Design Guidelines

Madison's Comprehensive Plan recommends establishing detailed design guidelines to ensure that new development and redevelopment within the City enhances its physical character and improves its pedestrian friendly and transit supportive character. Shorewood Hills encourages developments along University Avenue to have some physical orientation towards the railroad right-of-way and to address pedestrian and bike movement. The Spring Harbor neighborhood plan actually includes design guidelines for commercial properties to ensure pedestrian orientation of buildings and provision of amenities to make the area more pedestrian-friendly.

Current Policies

Zoning Ordinance

The existing residential zoning within the corridor reflects the range of densities present. Single family areas are zoned R1 and R2 (both Single Family Residence Districts) while the multi-family areas are zoned R4-R6 (General Residence Districts permitting increasing levels of density).

Most of the University Avenue frontage within Madison, including the State offices, is zoned C2 (General Commercial District). While C2 allows residential development along with commercial uses, the number of residential dwelling units is restricted to four or less than 50 percent of the total floor area ration (FAR).⁶ This restricts the potential for the redevelopment of University Avenue as a high-density mixed-use corridor without the aid of variances or special provisions under planned developments.

The Garden Homes site in Shorewood Hills is currently zoned R2, Single Family Residence District and does not allow high density multi-family residential development. Therefore the current zoning would have to be amended to allow development to occur in accordance with the Village's future plan.

Madison's zoning code includes a special provision which allows for the reduction of parking for developments based on certain criteria like proximity to transit routes and/or bicycle paths and provision of bicycle parking, existing or potential shared parking agreements and availability and accessibility of alternative parking. Applications for parking reduction are reviewed on a case-by-case basis. The code also requires the provision of off-street secure bicycle parking for several residential, institutional and commercial uses.

Madison's Comprehensive Plan recognizes the need to update the current zoning ordinance to implement Plan recommendations. Suggested changes include creation of a new mixed-use zoning district, a Traditional Neighborhood Development District and zoning standards for TOD.

Urban Design Commission Ordinance

Madison's Urban Design Commission Ordinance provides for an Urban Design Commission that reviews development proposals within designated Design Districts to ensure a high quality public realm. University Avenue, through the entire length of the Hill Farms corridor is included in Design District # 6 which was formed with the intent of enhancing this significant entryway into the City of Madison. The ordinance includes general guidelines regarding public rights-of-way, off-street parking areas, signage, building facades, lighting, landscaping and utility service.

⁶ Ratio of the total square feet of buildings on a certain location to the square footage of the land area of that location

Recommendations to Improve Transit Supportive Land Use

Planning Initiatives

The University Avenue corridor is undergoing significant redevelopment and will continue to do so in the near future. To ensure that this redevelopment results in a high quality transit supportive environment, the City should consider preparing a corridor plan for University Avenue with the following key elements:

- Direction regarding appropriate mix and density of uses in different parts of the corridor.
- Detailed design guidelines to create a pedestrian friendly environment including guidelines on placement, bulk and height and appearance of buildings and design of public spaces like plazas and parks.

Policy Recommendations

Shorewood Hills and Madison should implement their Comprehensive Plan recommendations for updating the zoning ordinance to allow for more transit supportive development.

- Shorewood Hills should rezone the Garden Homes site to permit higher density, multi-family development.
- Madison should update its code to include mixed-use zones and special standards for TOD areas that would allow high density mixed-use development recommended in the plans.

Improvement Projects

The City should consider implementing streetscape improvements along the University corridor to:

- Create a unique identity for the corridor through well-designed program for wayfinding, signage, landscaping, street furniture and public art.
- Improve pedestrian safety and comfort by installing broad sidewalks, corner bulb-outs to reduce intersection width for pedestrians, specially paved crosswalks, median refuges and features like countdown pedestrian signals.

Both Madison and Shorewood Hills should work towards providing continuous sidewalks along all roadways within the station area.

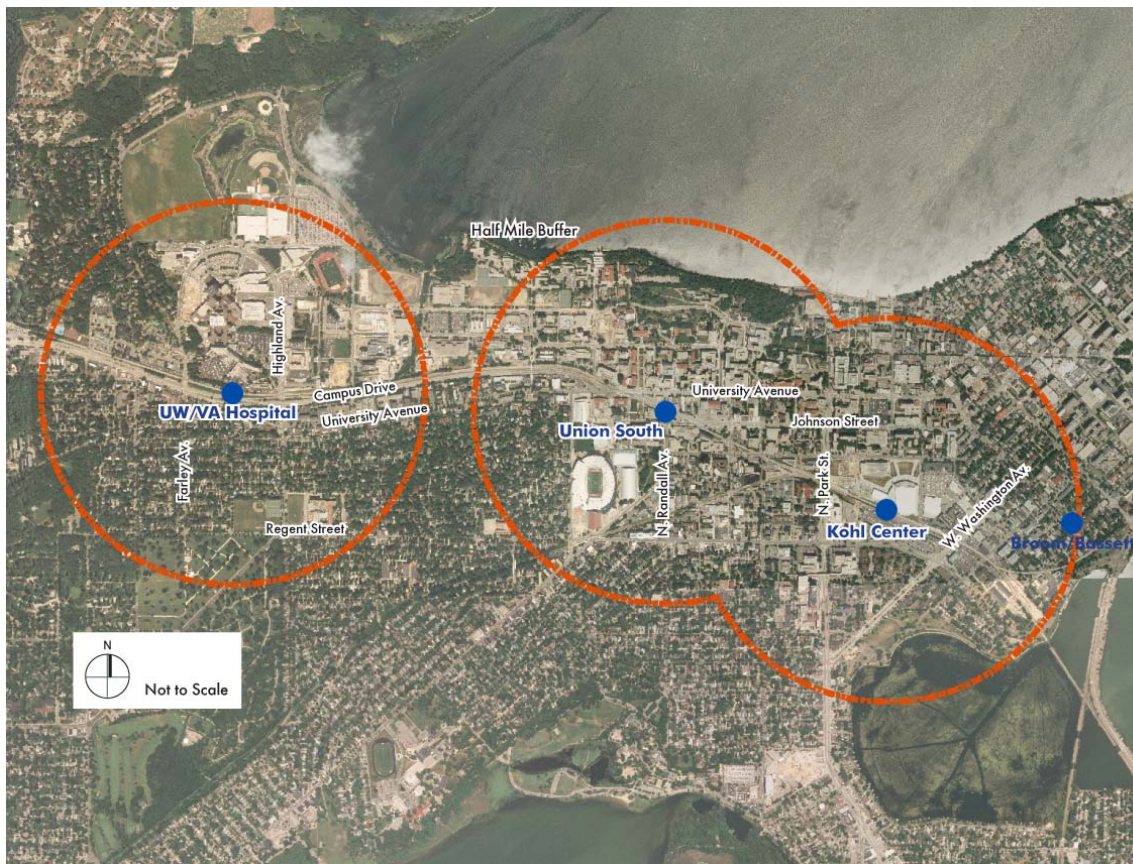
Whenever feasible, the City should utilize redevelopment opportunities to extend the street grid through large parcels to improve street network connectivity within the station areas. For example, if a large single use parcel is slated for redevelopment into a denser, mixed-use environment, it might present opportunities for laying out new public roads through the parcel that can connect back to the existing street network.

UNIVERSITY CORRIDOR

Introduction

The University Corridor serves the University of Wisconsin Campus and the near west side neighborhoods. The corridor is experiencing significant intensification as the University is expanding to meet its future space needs within the existing boundaries, through infill development and higher density redevelopment of older, obsolete structures.

Three stations are proposed within this corridor: University of Wisconsin/Veterans Administration (UW/VA) Hospitals, Union South and Kohl Center.



Existing Conditions

Existing Land Use and Development Patterns

The University corridor includes a significant part of the University campus and surrounding neighborhoods within Madison and Shorewood Hills.

UW/VA Hospitals: This station is proposed near the University of Wisconsin and Veterans Administration Hospitals. A significant part of the station area north of University Avenue is occupied by the hospitals and the University campus. West of the hospitals, most of the station area consists of single-family residences within the Village of Shorewood Hills. A medical offices complex known as “Doctors’ Park” is located along University Avenue. The University Avenue frontage on the south side contains a variety of commercial uses and multi-family apartments occupied mostly by students. Further south, the station area is mostly residential containing established single-family neighborhoods. West High School is also located within the station area.

Union South: The Union South station is proposed near the South Randall Road intersection proximate to Camp Randall Stadium and Union South, the student union building for the west campus area. Most of this station area is within the University campus and houses a range of University functions. According to the Campus Master Plan dated 2005, significant redevelopment is being proposed in the immediate vicinity of the proposed station.

Kohl Center: The Kohl Center station is proposed near the southwestern edge of the University Campus on the south side of the sporting arena on Park Street. A significant part of the station area is within the University Campus; the remaining area is mostly residential. The northern part of the station area is mostly student housing containing a mix of older two-flats to newly constructed high-rise apartments and condominiums. South of Kohl Center, the station area consists of modest 2-3 unit dwellings.

Existing Population Density

As illustrated in Figure 2, Year 2000 Population Density, densities in the University corridor ranged from “Low” to “High” (based on FTA criteria) reflecting the range of existing densities as well as uses. The low density areas mostly correspond to the University buildings used for academic/research or administrative purposes and the hospital campus. The residential neighborhood within Shorewood Hills is also low density. The highest population densities are found in the areas with the greatest concentration of student housing, University residence halls and as private apartments in residential neighborhoods. Even the residential areas without a substantial student population have moderately high population densities reflecting the smaller lot sizes and the presence of a large number of 2-3 unit buildings. Although there are some low-density areas, most of the corridor has moderate to high population densities indicating a strong ridership base.

Existing Transportation Facilities and Conditions

Roadway Access

University Avenue serves as a primary east-west arterial roadway throughout the corridor providing the most direct access to the Capitol to the east and the areas to the west. West Johnson and North Park Streets are other arterial

roadways within the corridor providing access to the east and south respectively. Several collector roadways including Farley, Highland and Randall Avenues provide north-south connectivity.

Street Network Density

The corridor has an overall dense and well connected street network. Some large uses including Camp Randall and the Kohl Center, which occupy large parcels of land, break the street grid disrupting connectivity. University Avenue, because of its high speed and high volume of traffic, is difficult to cross for vehicles and pedestrians and therefore acts as a barrier between the north and south ends of the station areas.

Transit

The University corridor is very well connected by Madison Metro bus routes. Several east-west bus routes operate along University Avenue and Campus Drive and, north-south routes along Highland Avenue, Mills and Park Streets. Additional routes along Observatory and Linden Drives provide direct access to campus buildings. These bus routes connect the station areas to downtown Madison and the eastside neighborhoods and also to neighborhoods located to the west and south of the corridor.

Bike and Pedestrian Access

The station areas, especially within the University campus, have very good bike access through signed on-street bike routes and off-street multi-use and bike paths.

A bike path runs all along the lakefront on Lake Mendota through the campus area providing a scenic view and access to the campus from the Capitol area to the east and the Village of Shorewood Hills to the west. Another off-street bike routes is present along the railroad ROW on the southeast side. Bike routes are also present along Linden Drive, University Avenue and West Dayton Street. North-south bike connections across University Avenue are present at Highland Avenue, Prospect Avenue and Lake Street.

Most of the University corridor, especially the campus, presents a very pedestrian-oriented walkable environment characterized by a dense street network with continuous sidewalks. Although large University buildings like Camp Randall Stadium and Kohl Center disrupt the street grid, they provide pedestrian pathways maintaining connectivity. As mentioned earlier, University Avenue, a high-speed, high-traffic roadway, is difficult for pedestrians to cross and acts as a barrier between the north and south ends of the station areas within the corridor.

Urban Design Conditions

Urban Design considerations are focused on the quality of the pedestrian experience within the corridor and each station area. The University corridor offers a high-quality pedestrian environment. Within the campus, the streetscape is very pedestrian-oriented with wide sidewalks and well defined crosswalks, use of special pavers to enhance safety and aesthetics, landscaping including shade trees and pedestrian orientation of buildings.

Although there appears to be no formal streetscape program for the residential neighborhoods within the corridor, several of the older, established residential neighborhoods have sidewalks and present a pedestrian friendly street environment. University Avenue is a wide, busy thoroughfare lacking in pedestrian friendly features.

Market Conditions

The real estate market study conducted by VSKA indicates that the University corridor offers significant development opportunities over the next 15 years. It is estimated that by the year 2020, the University corridor could attract 600 dwelling units, 375,000 square feet of office and 150,000 square feet of retail space. Although these estimations include replacement housing being built or planned by the University, it does not include classroom space or special purpose buildings.

Most of the future development in the corridor is expected to be University related. According to the market study report, in the near term, significant redevelopment opportunities exist in the Union South station area where the University is planning the construction of new student union buildings to replace the current building, new replacement dormitories and a premier research institute, the Wisconsin Institute of Discovery. The University is also planning an expansion of the Children's Hospital and its health science facilities located in the UW/VA station area.

Opportunities for private development are limited in the near term. However, a few fairly large projects are already underway. These include a mixed-use project including 51 condominium units targeted towards empty nesters and a Trader Joe's grocery store being constructed between Monroe and Jefferson Streets, just south of Camp Randall in the Union South station area. Another mixed-use project, called the University Square which is under construction in the Kohl Center station area, will include 350 rental units targeted towards students and 40,000– 50,000 square feet of retail space. In the VA/UW station area, the Doctor's Park development in Shorewood Hills is obsolete and slated for redevelopment into a high density mixed-use project including residential, retail and office uses. Another significant redevelopment opportunity in this station area exists along University Avenue between Farley and Highland Avenues and near Allen Street. These areas have the potential for higher intensity mixed-use development.

Current Plans and Policies

Current Plans

There are several current plans for the University corridor:

- Madison's Comprehensive Plan provides general guidance for future development within the corridor,
- The Village of Shorewood Hills Comprehensive Plan provides recommendations for the western edge of the corridor within the Village boundaries, and
- The University of Wisconsin's plans including the 2005 Campus Master Plan which provides specific redevelopment plans for the Campus over the next 20-30 years, the West Campus Plan for the

health science facilities and the 2005 Long Range Transportation Plan and Transportation Demand Management Plan.

Currently, there is no neighborhood plan for the area. The Regent Neighborhood Plan, which will cover a part of the study area, is currently underway.

Future Land Use and Development

Madison's Comprehensive Plan emphasizes the importance of coordinating with the University to plan an attractive interface between the campus and the adjacent neighborhoods compatible with existing, stable development. The existing residential neighborhoods to the south of the campus are buffered from higher intensity campus buildings through medium and high density residential uses and mixed-use developments.

The Village of Shorewood Hills identifies the obsolete Doctor's Park development, located between Marshall Court and University Avenue, for redevelopment into a high density mixed-use project with pedestrian and bike connections to neighboring areas.

The University's Campus Master Plan is an ambitious program for adding a significant amount of new building space for a variety of uses over the next twenty years. Since the University is surrounded by Lake Mendota and built-out neighborhoods, all the expansion is proposed within the existing campus boundaries. The University's plan is to "recreate itself in place" by renovating and replacing outdated existing buildings with modern, higher density structures and through infill development on under-utilized areas like surface parking lots and single-story structures.

In the UW/VA station area, the University is proposing an integrated, pedestrian oriented health sciences campus by combining its health-care teaching and research facilities with expanded hospital and clinical facilities. The redeveloped campus is envisioned to be built at a human scale by ensuring appropriate building scale and incorporating open spaces. The University is proposing significant redevelopment in the Union South station area including the replacement of the current Union building with a new Union facility, the Wisconsin Institute of Discovery for interdisciplinary biological research, and new academic buildings. Several new University buildings are also proposed south of Johnson and west of North Park Street in the area in between the Union South and the Kohl Center stations.

Madison's Comprehensive Plan identifies the general area around all the three proposed stations as "Potential Transit Oriented Development Areas" to be developed as compact, mixed-use areas with highest development densities in close proximity to transit stops. Shorewood Hills also identifies the area near Doctor's Park as a potential stop for future rail transit.

The University strongly supports future commuter rail and the proposed stations within/near the campus. Its transportation plan recognizes the importance of providing rapid commuter rail transit within the Madison region to reduce travel times and make transit an attractive option for commuters. The University has also reserved funds in its transportation capital budget to help fund the stations within the University corridor.

Parking

Madison's Comprehensive Plan recommends a variety of strategies for reducing the amount of land consumed by surface parking lots in TOD areas. These include shared parking, parking structures and underground parking. The Village of Shorewood Hills recommends reducing off-street parking requirements for redevelopment projects like the Doctor's Park located within the TOD areas.

The University, even with the addition of several million new square feet of development in the future, is committed to maintaining its parking supply at the current level of 13,000 spaces. All the parking will be eventually provided in parking structures as surface parking lots are developed to accommodate the University's future building and open space needs.

Plans to Improve Bicycle Facilities

Madison's future bicycle plan includes a recommendation for extending the bike path along the railroad in Shorewood Hills, further east to connect to the Southwest bike path near the Kohl Center. The University's Plan includes a continuous connection from the Southwest bike path towards Camp Randall and new bike lanes along several roadways within the campus to improve connectivity for bicyclists. A pedestrian/bike bridge is proposed over Campus Drive west of Camp Randall. In addition, the University plans to provide several bicycle stations within the campus with secure bicycle parking and locker room facilities.

Plans to Improve Pedestrian Facilities

The Comprehensive Plans of Madison and Shorewood Hills contain general recommendations for providing a safe and comfortable pedestrian environment. The Campus Plan also seeks to further enhance the pedestrian-friendly character of the campus by implementing streetscape improvements on several roadways, traffic calming through landscaping, crosswalk enhancements and signalization of busy intersections and pedestrian bridges across high traffic streets.

Design Guidelines

Madison's Comprehensive Plan recommends establishing detailed design guidelines at the neighborhood level to ensure that new development and redevelopment within the City enhances its built environment and improves its pedestrian friendly and transit supportive character.

Shorewood Hills encourages redevelopments along University Avenue, like the Doctor's Park site, to have a physical orientation towards University Avenue and the railroad right-of-way and to address pedestrian and bike access.

The Campus Master Plan identifies "Buildings and Design Guidelines" as one of six goals that help set the direction for the plan. The plan recommends developing comprehensive design guidelines as a part of the detailed campus planning process, to provide architectural coherence throughout the campus. It also suggests defining "neighborhoods of design" to ensure that new campus buildings fit into their neighborhood context which can vary across the campus.

Current Policies

Zoning Ordinance

The University of Wisconsin campus occupies a large part of the corridor. For the most part, the campus area is zoned R5, General Residence District which allows University buildings as a conditional use. University uses are exempt from several requirements of the zone including bulk and height making it possible for the University to develop at a high level of density.

Parts of the University Avenue frontage in the UW/VA station area and Regent Street in the Union South station area, which are designated for mixed-use development in Madison's land use plan, are zoned C2 (General Commercial District). While C2 allows residential development along with commercial uses, the number of residential dwelling units is restricted to four or less than 50% of the total FAR. This restricts the potential for mixed-use redevelopment along the corridors.

The Doctor's Park site in Shorewood Hills is currently zoned C-3, Medical Office-Commercial District which does not allow residential development. The Village's Comprehensive Plan recommends creating a new mixed-use transit district for the area to allow a high density mixed-use development in accordance with the Plan recommendations.

Madison's zoning code includes a special provision which allows for the reduction of parking for developments based on certain criteria like proximity to transit routes and/or bicycle paths and provision of bicycle parking, existing or potential shared parking agreements and availability and accessibility of alternative parking. The code also requires the provision of off-street secure bicycle parking for several residential, institutional and commercial uses. The University has taken a lead role in reducing the amount of automobile parking spaces for campus buildings and promoting alternative modes of transportation including bicycling and intra-campus transit.

Madison's Comprehensive Plan recognizes the need to update the current zoning ordinance to implement Plan recommendations. Suggested changes include creation of a new mixed-use zoning district, a Traditional Neighborhood Development District and zoning standards for TOD. Once implemented, these zones will be helpful in promoting mixed-use developments at the edges of the campus, as recommended in the Land Use Plan.

Urban Design Commission Ordinance

The University corridor is not included in the Design Districts designated with the ordinance.

Recommendations to Improve Transit Supportive Land Use

Planning Initiatives

When completed, the Regent Neighborhood Plan will provide a detailed plan for the area south of Campus Drive and west of Camp Randall, the City should consider preparing a plan for the neighborhoods in the eastern part of the corridor. Campus and non-campus neighborhoods interface in this area and it would be helpful to develop a plan that preserves the existing character of the neighborhoods while supporting the development needs of the University.

The City should continue to work with the University as it refines and finalizes its Campus Master Plan to ensure that its future development continues to have a positive impact on the community.

The City should work jointly with the University in developing design guidelines, especially for the edges of the campus where city neighborhoods abut the campus. These design guidelines, based on the “neighborhoods of architectural design” concept proposed in the Campus Master Plan, can help preserve the unique traditional character of the different City neighborhoods by promoting campus development that is compatible in terms of scale and architectural style.

Policy Recommendations

Both Madison and Shorewood Hills should implement their Comprehensive Plan recommendations for updating their respective zoning ordinances to allow for more transit supportive development.

- Shorewood Hills should rezone the Doctor’s Park site to permit higher density, mixed-use development.
- Madison should update its code to include mixed-use zones and special standards for TOD areas that would allow the higher density mixed-use development recommended in the plan.

Improvement Projects

The City should consider implementing streetscape improvements along University Avenue to:

- Create a unique identity for the corridor through well-designed program for wayfinding, signage, landscaping, street furniture and public art.
- Improve pedestrian safety and comfort by installing broad sidewalks, corner bulb-outs to reduce intersection width for pedestrians, specially paved crosswalks, median refuges and features like countdown pedestrian signals.

The City should support the University’s plans to install new bike paths, complete streetscape improvements and build new mid-block pedestrian walkways through large blocks to improve connectivity.

CAPITOL CORRIDOR

Introduction

The Capitol Corridor runs through downtown Madison providing access to the State Capitol and the Central Business District (CBD) of the City. Downtown Madison is a thriving civic, business and residential center supporting high development intensity in a highly pedestrian friendly environment. Its location on the isthmus between lakes Monona and Mendota creates scenic waterfront views throughout the corridor. Downtown Madison has experienced significant redevelopment and intensification over the past several years. This trend is expected to continue, albeit at a slower pace, further increasing the transit supportive character of the area.

Five stations are proposed in this corridor – Broom/Bassett, MLK, Monona Terrace, Hancock and Paterson. Since this is a high-density corridor, the stations are proposed relatively close to each other. The Monona Terrace, Hancock and Paterson stations are proposed in the Alternatives 2A and 3 (LPA, Railroad Right-of-Way and LPA/Airport, Railroad Right-of-Way respectively). The Broom/Bassett and MLK stations are proposed in Alternative 5 (LPA, Isthmus, Mineral Point, Rail Right-of-Way, Street Running).



Existing Conditions

Existing Land Use and Development Patterns

All the station areas within the corridor have a mix of uses and relatively high development intensity. The highest densities are found in the Capitol Square area which comprises the Monona Terrace, MLK and the Hancock stations.

Monona Terrace, MLK and Hancock: These stations are proposed in the Capitol Square area. The Monona Terrace station, as the name suggests, is proposed near the Monona Terrace Community and Convention Center. The MLK station is proposed proximate to the State Capitol building near Martin Luther King Boulevard and Doty Street. The Hancock station is proposed further east near Hancock and Wilson Streets.

Besides the State Capitol, these station areas include several institutional and cultural buildings like the City Library, the City Senior Center, the Convention Center and several museums. The State, County and City offices are also located here along with a variety of other private offices. Retail and service businesses in the area include restaurants, banks and convenience stores. Residential uses are mainly high density, including apartments as well as condominium buildings. Single-family neighborhoods are located at the peripheries of the station areas.

Paterson: The Paterson station, proposed in the near east side near the Paterson Street and the railroad intersection, has a strong residential base. Both single-family and multi-family homes are present in older, walkable neighborhoods near the station. Some neighborhood scale retail is present along East Washington Avenue and further north near the Johnson and Paterson Street intersection. Older industrial uses occupy large blocks between Washington Avenue and Williamson Street. Some of these sites are currently vacant or underutilized creating redevelopment opportunities.

Broom/Bassett: The Broom/Bassett station, proposed west of the Capitol near Bassett and Doty Streets, overlaps with the Kohl Center station located further west. The station area has a strong residential base containing a mix of older and newer homes. Although there are owner-occupied, single-family homes in the area, it is largely a multi-family residential district with a high percentage of rental housing occupied by students. However, the area is slowly transitioning to include a broader mix of population, income levels and ownership. East of Broom Street, the station area contains a mix of institutional, office and commercial uses. On the west side between Proudfit and Broom Streets, the station area contains a mix of older industrial, commercial and newer residential uses in remodeled warehouses and lofts.

Existing Population Density

As illustrated in Figure 2, Year 2000 Population Density, densities in the Capitol corridor ranged from “Low” to “High” (based on FTA criteria). The low-density areas correspond to the employment centers within the corridor while most of the residential areas range from “Medium” to “High” population density reflecting the overall dense character of the corridor. For the most part, except the Paterson station which includes low density industrial uses and the area around the Capitol Square, the Capitol corridor has high population densities indicating a strong ridership base.

Existing Transportation Facilities and Conditions

Roadway Access

The Capitol corridor, located in the heart of Madison, is well connected through a strong network of arterial and collector roadways to all parts of the City and the surrounding areas.

East Washington Avenue is a primary east-west arterial roadway through the corridor providing access to the eastern parts of the City and to Interstates 90 and 94. Johnson and Gorham Streets and Packers Avenue are primary arterials providing access to the northeast side. University Avenue connects the Capitol area to the neighborhoods to the west. John Nolen Drive provides access to the south side across Lake Monona. Several arterial and collector roadways provide access within the corridor.

Street Network Density

The Capitol corridor has a dense, interconnected street network characterized by walkable block lengths especially in the Capitol Square area included in the Monona Terrace, MLK and Hancock station areas. Block sizes are larger in areas surrounding the Capitol Square, but the overall street network remains relatively dense and interconnected.

The large industrial parcels east of Blair Street and south of East Main Street break the street grid in the Paterson station area, reducing connectivity. Similarly, the street network in Findorff Yards in the Broom/Bassett station area is interrupted by railroads and large parcel sizes characteristic of industrial uses.

Transit

The Capitol corridor has excellent bus service with multiple bus routes providing access to all parts of the region served by the Metro bus system. Within the Capitol area, east-west bus routes operate on East Washington Avenue and Gorham, Johnson, Wilson and Williamson streets. Most of these routes connect with each other as they loop around the Capitol Square. Other cross-isthmus bus routes run along Broom and Bassett Streets at the west end of the corridor.

Bike and Pedestrian Access

All station areas are served by on-street and off-street bike paths providing good bike access to the corridor. At the northern edge of the corridor, on-street bike routes are present along Gorham and Johnson Streets. At the southern edge, an off-street bike path runs along the lakeshore and east of Blair Avenue, along the railroad right-of-way. These bike paths are connected through a bike route running along State Street, the Capitol Square and King Street. West of the Capitol, bike routes are present along West Washington Avenue and Bassett Street. These bike paths connect to the regional bike network providing region-wide bike access from the Capitol area.

The Capitol corridor has excellent pedestrian access. All the station areas have a dense, interconnected street network with sidewalks on both sides, except for the former and current industrial areas in the Broom/Bassett and Paterson station areas where large block sizes limit access. Roadway intersections are mostly pedestrian-friendly, even on major thoroughfares, creating a safe pedestrian environment.

Urban Design Conditions

Urban Design considerations are focused on the quality of the pedestrian experience within each station area. The Capitol corridor provides a very high quality pedestrian environment, especially in the station areas located in the core downtown area, Monona Terrace, MLK and Hancock. Wide pedestrian sidewalks often with special paving patterns, continuous streetwall created by closely spaced buildings with pedestrian-oriented façade treatments, streetscape improvements like street trees, coordinated wayfinding and signage and public art, all contribute to a high-quality pedestrian environment.

The residential neighborhoods along the lakefront have quiet, narrow, tree-lined streets also providing a very comfortable pedestrian environment. The industrial areas within the corridor lack the same quality of pedestrian improvements. However, as these areas are redeveloping into residential and higher intensity employment uses, they are planning and implementing streetscape improvements that will greatly enhance the pedestrian character.

Market Conditions

Based on the real estate market study completed as a part of this analysis, the Capitol corridor offers significant development and redevelopment opportunities over the next 15 years. It will continue to be among the strongest office markets in the region and attract increasing amounts of residential development. It is estimated that by the year 2020, the Capitol corridor could attract 550 additional dwelling units, 750,000 square feet of new office and 150,000 square feet of retail space.

The Capitol corridor has experienced significant new development over the last few years and as a result, it is mostly well developed with high density uses in a mixed-use environment. However, redevelopment opportunities still exist where there are underutilized sites (such as surface parking lots) and, as older buildings get obsolete. Also, high-density residential development is proposed along the Lake Monona waterfront in the Broom/Bassett and Monona Terrace station areas and near the Elks Club in the Paterson station area.

The greatest redevelopment opportunities within the corridor exist in the Paterson station area. Intensification of uses along East Washington and redevelopment of the industrial parcels south of East Washington into higher intensity employment uses, present tremendous opportunities to enhance the transit-oriented character of the area.

Current Plans and Policies

Current Plans

In addition to Madison's Comprehensive Plan (adopted 2006) that provides general direction for the future development of the Capitol area, there are several neighborhood plans that provide specific recommendations for the different station areas. These include:

- First Settlement Neighborhood Master Plan (July 1995)
- Bassett Neighborhood Master Plan (January 1997)
- East Rail Corridor Plan (January 2004)

- Tenney-Lapham Neighborhood Plan (Draft, September 2006)
- Tenney-Lapham Old Market Place Neighborhood Plan (June 1995)

Future Land Use and Development

Land use recommendations in the Future Land Use Plan associated with the Comprehensive Plan, are based on the recommendations of the neighborhood plans. The Comprehensive Plan as well as the neighborhood plans call for the preservation of the historic, older neighborhoods in the Capitol area while promoting compatible, high density and high quality new development in the central downtown area and along major corridors.

The Comprehensive Plan identifies ten distinct sub-areas within the downtown with recommendations for land use mix, density and building heights. The highest densities are proposed in the core downtown area near the State Capitol where residential densities are expected to exceed 60 dwelling units/net acre and the building heights are restricted by the Capitol View rather than by a fixed number of stories. The proposed densities diminish gradually with distance from the Capitol area and based on the existing development character. Therefore, while 4-6 story mixed-use structures are proposed along State Street, a maximum of four stories are allowed within the residential area between South Broom and Henry Streets. These recommendations are mostly consistent with the neighborhood plans.

In the City's future land use plan as well as the neighborhood plan, specialized employment uses including office and research are proposed for the redeveloping industrial corridor south of East Washington Avenue in the Paterson station area. Higher density mixed uses are proposed to replace the aging commercial/industrial development along the East Washington Avenue frontage. The East Johnson Street neighborhood business district is also proposed to expand to span the 700, 800 and a part of the 900 block of Johnson Street by the rehabilitation of existing buildings and construction of new mixed-use structures.

The Comprehensive Plan designates the general area around the proposed MLK and Paterson station areas as "Potential Transit Oriented Development Areas" characterized by compact, mixed-use development patterns that focus the highest development densities in close proximity to transit stops. However, these areas are only "conceptual" and the Plan recommends preparation of more detailed sub-area or neighborhood plans to determine the most appropriate areas for TOD. The neighborhood plans support passenger rail service recognizing the need for high speed transit for reducing congestion and providing convenient access to the downtown area. Proposed station locations in the Plans include the MLK, Monona Terrace and Hancock stations.

Parking

Madison's Comprehensive Plan recommends a variety of strategies for reducing the amount of land consumed by surface parking lots in TOD areas, such as shared parking, parking structures and underground parking. These strategies are endorsed in several of the neighborhood plans. In addition, the neighborhood plans recommend remote parking or "park and walk" lots at the edge of downtown, locating parking lots at the side and rear of buildings, providing public parking structures to reduce the need for individual businesses to provide parking and, lowering

minimum parking requirements in areas that are walkable and have good transit connections. Providing covered, secure bicycle parking would also help in reducing the need for automobile parking.

Plans to Improve Bicycle Facilities

The Capitol corridor is well served by existing bike routes and therefore no significant additions or improvements are proposed for this area in the Bicycle Plan for the City. Neighborhood plans recommend maintaining and enhancing bike facilities along the heavily traveled bike routes.

Plans to Improve Pedestrian Facilities

The Comprehensive Plan emphasizes the importance of creating streets that are safe, comfortable and attractive for pedestrians. The neighborhood plans also contain several recommendations for enhancing the pedestrian environment:

- Streetscape improvements throughout the station areas with an emphasis on major pedestrian corridors like Main, Wilson and Williamson Streets including pedestrian scale lighting, landscaping and traffic calming features with safer crosswalks.
- “Gateway” improvements along Washington Avenue, which serves as a major entryway into the Capitol.

Design Guidelines

The Comprehensive Plan as well as the neighborhood plans emphasize the need for establishing detailed design guidelines to preserve the traditional character of the residential neighborhoods and to ensure that all new development/ redevelopment is of the highest quality, enhancing the existing environment. The neighborhood plans offer a variety of strategies including creating historic/conservations districts and “community character overlays” as well as development incentives like density bonuses for architectural/neighborhood enhancements, to preserve the historic character of these older Madison neighborhoods located within the Capitol area.

Current Policies

Zoning Ordinance

Existing zoning designations within the station areas include several higher density residential districts: R4, R5 and R6, all of which permit multi-family residential development at increasing densities. The Capitol Square and the State Street corridor are zoned C4, Central Commercial District, the surrounding areas are zoned C2 (General Commercial District). East Washington, through most of the study area is zoned C3 (Highway Commercial). A significant part of the Paterson station area especially south of East Washington Avenue, is zoned M1, Limited Manufacturing District. Several parcels in the corridor are zoned SIP (Specific Implementation Plan in Planned Community Development/Planned Unit Development/Planned Community Mobile Home Park Districts) which allows flexibility in the application of zoning code requirements to allow a high quality development.

In several instances, the current zoning designations appear to be inappropriate for the type and intensity of redevelopment recommended in the plans for the station areas. For example, in the Paterson station area, the plans call for replacement of obsolete industrial uses with office, research and other specialized employment uses at “urban” densities (multiple story structures that occupy most of the lot area). The M1 designation for these former industrial areas allows a maximum FAR of 2, which will limit the density of new development. Additionally, although only non-nuisance type of manufacturing uses that are compatible with residential areas are allowed within the zone, the primary uses within this zone are industrial and certain types of commercial instead of residential, office and commercial/service uses envisioned in the plan. The proposed “Central Park” along the railroad is also currently zoned M1.

The highest density residential zone within the corridor is R6, General Residence District, which allows multi-family dwelling units but has a maximum FAR of 2. The plans however recommend residential buildings up to ten stories in height in some locations, which would not be possible under current regulations. Conversely, some historic, older mostly single-family neighborhoods are zoned to allow three story multi-family buildings, which if actually developed, would be incompatible with existing development.

Although a mixed-use environment already exists throughout the Capitol corridor, only C4, the district surrounding the State Capitol building and State Street, is suitable for mixed-use development. While C2 and C3 allow residential development along with commercial uses, the number of residential dwelling units is restricted to four or less than 50% of the total FAR. This restricts the potential for new mixed-use developments without the aid of variances or special provisions under planned developments.

The zoning code includes a special provision which allows for the reduction of parking for developments based on certain criteria like proximity to transit routes and/or bicycle paths and provision of bicycle parking, existing or potential shared parking agreements and availability and accessibility of alternative parking. Applications for parking reduction are reviewed on a case-by-case basis. The code also requires the provision of off-street secure bicycle parking for several residential, institutional and commercial uses.

Madison’s Comprehensive Plan recognizes the need to update the current zoning ordinance to implement Plan recommendations. Suggested changes include creation of a new mixed-use zoning district, a Traditional Neighborhood Development District and zoning standards for TOD.

Urban Design Commission Ordinance

Madison’s Urban Design Commission Ordinance provides for an Urban Design Commission that reviews development proposals within designated Design Districts to ensure a high quality public realm. A part of the study area along East Washington Avenue is included in Design District # 4 which was formed with the intent of enhancing this gateway corridor to the Capitol. The ordinance includes general guidelines regarding public rights-of-way, off-street parking areas, signage, building facades, lighting and landscaping.

Recommendations to Improve Transit Supportive Land Use

Planning Initiatives

The neighborhood plans for all the station areas except Paterson are a little dated and most of their redevelopment recommendations have been implemented or are currently underway. The City should consider updating these plans to address the future development/redevelopment needs of the neighborhoods within the Capitol corridor. Besides the type and intensity of preferred land uses, the updated plan should address building and site design standards to promote a high quality built environment. This will help in maintaining and enhancing the vibrancy of the Capitol area and its desirability as a place to live and conduct business. The Comprehensive Plan also includes a recommendation for the preparation of a Downtown Plan as a high priority.

General design guidelines for the Downtown area are included in the City Plan and in the Urban Design Commission Ordinance for a part of East Washington Avenue. Some neighborhood plans also include design guidelines but they vary significantly in their scope and level of detail. The City should consider creating a unified set of design guidelines for the Capitol area and its surrounding neighborhoods. These guidelines, while retaining specific recommendations to maintain the unique character of the different areas within the Capitol corridor, will provide unifying elements that go beyond neighborhood/sub-district boundaries. The design guidelines could be included in an updated plan for the area and enforced as a part of the Urban Design Commission Ordinance or used separately as a tool for guiding public and private investment in the area.

Policy Recommendations

The City should implement the Comprehensive Plan recommendation for updating the zoning ordinance. Besides creating mixed-use zones and special standards for designated TOD areas, the City should consider updating its parking requirements. Reducing parking requirements for TOD areas allows for higher intensity development and encourages people to walk and use transit. For example, parking requirements could be lower for businesses in the Capitol area compared to similarly zoned businesses in outlying areas without transit service and/or pedestrian sidewalks. Currently, one parking spot is required for every 300 square feet of commercial space throughout the City. This requirement translates to a “Low” ranking based on the FTA criteria, outlined earlier in the section. The City should consider lowering the requirement in the central downtown area less than one parking spot per 1,000 square feet to meet the “High” rating standard, and to one parking spot per 575 square feet in the surrounding areas to meet the “Medium-High” standard. Requiring adequate bicycle parking could partially compensate for the reduction in automobile parking spaces.

Improvement Projects

The neighborhood plans recommend streetscape improvements on several streets to create more pedestrian friendly and transit supportive environments. While the streetscape program within the Capitol Square area is well underway, the City should extend these improvements further out into the Paterson station area and to the Broom/Bassett station area on the west. Streetscape improvements should be first implemented on the more heavily used pedestrian corridors like Main, Henry, Broom, Wilson and Paterson Streets.

Where block lengths are longer than 600 feet, whenever feasible, pedestrian and bike connections should be provided through them to maintain a high level of walkability in the area.

EAST ISTHMUS CORRIDOR

Introduction

The East Isthmus Opportunity Corridor serves as the eastern gateway into downtown Madison. The City’s recently adopted Comprehensive Plan as well as neighborhood plans focus on East Isthmus as a high priority redevelopment area. The plans encourage redevelopment of former industrial uses into higher density employment uses and higher density mixed-uses as infill development that will strengthen the transit-oriented character of the area.

Four stations are proposed within this corridor: Baldwin, Schenk-Atwood, Union Corners and Fordem/Johnson. The Fordem/Johnson station is included in Alternative 3 only (LPA/Airport, Railroad Right-of-Way).



Existing Conditions

Existing Land Use and Development Patterns

The station areas within the corridor have varying intensities and type of development.

Baldwin: The Baldwin station, proposed near Baldwin Street, has a strong residential base. A large part of the half-mile area around the station consists of older, walkable residential neighborhoods containing both modest and larger homes. Several multi-family residences are also present. Some neighborhood-scale retail is present along Williamson Street south of the station and along Washington Avenue. Older industrial uses occupy large blocks between Washington Avenue and Wilson Street. Some of these sites are currently vacant or underutilized creating redevelopment opportunities. The Yahara River runs along the eastern edge of the station area.

Schenk-Atwood: Schenk-Atwood is a vibrant, older near east-side neighborhood. The station is proposed in the heart of the neighborhood, near 2nd and Winnebago Streets. This station area has a strong mix of residential, commercial and employment uses. The immediate station area south of the railroad has a neighborhood-scale business district including local restaurants, convenience stores, banks, professional offices and a theatre. Residential uses are present throughout the station area as upper story apartments in mixed-use buildings in the business district and in residential neighborhoods surrounding the commercial core.

Union Corners: The Union Corners station is proposed at the south end of the former battery factory site, which is being replaced by a mixed-use development adding 350 residential units, the largest redevelopment project in the City of Madison. The station area also has older, moderate income residential neighborhoods containing single family homes, several 2-8 unit buildings, and some multi-family residences. In addition to the development already mentioned in the Schenk Atwood station area (which overlaps with the Union Corners station area), commercial uses are present along East Washington Avenue west of 6th Street. East High School and Emerson Elementary School are located within the station area, on Washington Street and Johnson Avenue respectively.

Fordem/Johnson: The station is proposed near the intersection of Fordem Avenue and Johnson Street. The station area, which overlaps significantly with the Baldwin and Schenk Atwood station areas, contains a mix of residential, commercial and industrial uses. Residential neighborhoods are present east of Fordem Avenue and south of Johnson Street. Besides the Schenk Atwood business district, commercial uses within the station area includes the Fiore shopping center located at First and Washington Streets. Industrial uses are concentrated mainly north of the station between Fordem and Pennsylvania Avenues and scattered along the Yahara River. Several of these industrial facilities are becoming obsolete because of changing space requirements, creating significant redevelopment opportunities within the station area.

Existing Population Density

As illustrated in Figure 2, Year 200 Population Density, densities in the East Isthmus corridor ranged from “Low” to “High.” The highest densities are located along the lakefront in the Baldwin and the Fordem/Johnson station areas. The industrial/employment clusters in these station areas had the lowest population densities. The Schenk Atwood and Union Corners stations offer mostly Low-Medium and Medium population densities reflecting the small-scale residential character

of these neighborhoods. Overall, the corridor has significant areas of moderate and high population densities indicating a fairly strong ridership base for future transit.

Existing Transportation Facilities and Conditions

Roadway Access

The East Isthmus corridor is proximate and well connected to downtown Madison and as well as neighborhoods further east through a good network of arterial and collector roadways.

East Washington serves as a primary east-west arterial roadway throughout the corridor providing direct access to the Capitol area. Pennsylvania /Packers Avenue and Johnson Street are primary arterials providing access from the north-east to the Capitol. Other arterial roadways serving the area include – Fordem /Sherman Avenue from the north-east, Milwaukee Avenue from the east, and William son Street and Atwood Avenues from the east and southeast respectively. Baldwin Avenue, which functions as a collector street, is an important local street.

Street Network Density

The density and interconnectedness of the street network varies among the different station areas.

The Baldwin station has a dense street network within existing residential neighborhoods. However, the large industrial parcels south of East Washington Street break the street grid limiting cross connections across the isthmus.

The Schenk Atwood area provides a consistently a dense interconnected street network. The intersection of the angled isthmus grid with the north-south grid further east, creates an interesting street pattern lending a unique character to the area.

The Union Corners station area also has a well established and connected street network in the residential areas. The “battery redevelopment site” is fairly large, and it will be critical to ensure that the future development reconnects to the surrounding neighborhoods. East Washington through the station area, is a high speed, high volume roadway making it difficult to cross (for pedestrian and vehicles). Therefore, East Washington, especially at the intersection with Milwaukee and North Streets acts as a barrier disrupting pedestrian connectivity.

Again, the residential areas in the Fordem/Johnson station area south of Johnson Street are laid out mostly on a grid pattern and are well connected. The residential area west of Fordem Avenue includes a number of closed/dead end streets limiting connectivity. The industrial area between Fordem and Pennsylvania Avenues acts as a barrier between the east and the west ends of the station area.

Transit

The East Isthmus corridor is well connected by Madison Metro bus routes. Several east-west bus routes operate along East Washington Avenue, Johnson, Williamson and Jennifer Streets. Further east, bus routes run along Fordem,

Pennsylvania and Atwood Avenues and Milwaukee Street. These bus routes connect the station areas to downtown Madison and also to areas located further east.

Bike and Pedestrian Access

All the station areas, except for Union Corners, offer an existing marked bike route on a lower volume roadway or one or more paved off-street bike paths. A bike path along Johnson and Mifflin Streets through the Baldwin and Fordem/Johnson stations connects them to the Capitol area and continues further west to the University campus. Another bike path is present along Sherman Avenue at the western edge of the Fordem/Johnson station area. Further south, an off-street bike path near Wilson Street and Eastwood Drive connects the Schenk Atwood neighborhood to the Capitol. A bike path along Baldwin Street provides a cross-connection connecting the three bike paths.

Pedestrian accessibility varies across station areas. The Baldwin station area has an interconnected street network with sidewalks on both sides of the street providing good pedestrian access except for the industrial areas where large block sizes limit access. East Main, East Wilson, the railroad corridor, and the cross streets of Ingersoll of Baldwin are the primary pedestrian connections within the station area.

The Schenk Atwood station area has a dense network of streets complete with sidewalks making it very accessible to pedestrians.

The Union Corners station area also presents a mostly pedestrian-friendly environment with well-connected streets and sidewalks on both sides. It is critical to ensure that the redevelopment of the former battery factory is pedestrian friendly and provides direct connections to adjacent neighborhoods. As mentioned earlier, East Washington Avenue, especially at the intersection with Milwaukee and North Streets is difficult to get across and would benefit from measures to improve pedestrian safety.

The Fordem/Johnson station is the least pedestrian friendly amongst the East Isthmus corridor stations. The area south of Johnson Street has sidewalks and is mostly pedestrian friendly but in the remaining station area sidewalks are either discontinuous or completely lacking.

Urban Design Conditions

Urban Design considerations are focused on the quality of the pedestrian experience within each station area. These conditions vary significantly among the various station locations as well as within each individual station area.

It is apparent there is no formal streetscape program for any part of the corridor. However, several of the older traditional neighborhoods with their closely spaced buildings, mix of uses, variety of architecture, relatively narrow streets, and shade trees, have a high-quality pedestrian environment. The Schenk Atwood station area and the residential neighborhoods of Baldwin and Union Corners contain several examples of such streets.

The industrial areas within the corridor and roadways like East Washington Avenue, Fordem and Pennsylvania Avenues lack most of the characteristics of pedestrian friendly environments and should benefit from improvements over time.

Market Conditions

According to the real estate market study, the East Isthmus corridor offers several development and redevelopment opportunities over the next 15 years. It is estimated that by the year 2020, the corridor could attract 600 additional dwelling units and 300,000 square feet of new office and 200,000 square feet of retail space.

The Union Corners redevelopment, which is underway, will add 350 new residential units and new commercial space at the site of the former battery factory. Several smaller scale redevelopment and infill development projects have been completed or are near completion in the Schenk Atwood area. Both Union Corners and Schenk Atwood areas will continue to see more development as underutilized sites (such as surface parking lots) are redeveloped for higher uses, leading to further intensification.

East Washington Avenue, throughout the East Isthmus corridor, has the potential for more intense, transit-oriented redevelopment. The market analysis suggests a strong market for condominiums, mixed-use projects and employment-oriented uses along East Washington especially where older industrial parcels are redeveloped. While residential development would likely be more intense, the City's strong desire to maintain the traditional employment base in East Isthmus could potentially result in a broader mix of uses such as office spaces and service uses.

The Williamson Street corridor, located south of East Washington, is also likely to see development although at a lower intensity (maximum of 3-4 stories) to maintain compatibility with the adjacent mostly single-family neighborhoods.

The Baldwin station area has extensive development potential. Intensification of uses along East Washington, redevelopment of the industrial parcels south of East Washington, and redevelopment of obsolete/ underutilized sites along the Yahara River all present tremendous opportunities to enhance the transit-oriented character of the area.

The Fordem/Johnson station area will see significant redevelopment as the industrial parcels start to become obsolete in the future. Although longer term (10-20 years), these sites offer redevelopment opportunities which could significantly improve the transit-oriented character of the area. In the near term, sites like the surface parking lot of the Fiore shopping center and the Scanlan Morris building offer redevelopment opportunities.

Current Plans and Policies

Current Plans

Besides Madison's Comprehensive Plan (adopted 2006) that provides general direction for the future development of the East Isthmus area, there are several neighborhood plans that provide specific recommendations for the different station areas. These include:

- East Rail Corridor Plan (January 2004)
- Emerson East-Eken Park Neighborhoods (March 1998)
- Schenk-Atwood-Starkweather-Worthington Park Neighborhood Plan (March 2000)
- Schenk-Atwood Neighborhood Business District Master Plan (December 2000)

- Tenney-Lapham Neighborhood Plan (Draft, September 2006)
- Tenney-Lapham Old Market Place Neighborhood Plan (June 1995)

Future Land Use and Development

Land use recommendations in the Future Land Use Plan associated with the Comprehensive Plan are in accordance with the recommendations of the neighborhood plans. The Comprehensive Plan as well as the neighborhood plans call for the redevelopment and intensification of industrial and commercial areas and major arterial corridors while maintaining the existing character and integrity of existing residential neighborhoods. In the City's future land use plan, specialized employment uses including office and research are proposed for the redeveloping industrial corridor west of the Yahara River, surrounded by mostly medium density residential development (16-40 dwelling units/acre). Medium density residential is also proposed along parts of East Washington Avenue east of the Yahara River and west of Fordem Avenue. Community scale mixed-use characterized by a minimum of 2-story structures and residential densities not exceeding 60 dwelling units/acre is proposed for the Schenk Atwood business district, the Union Corners redevelopment and parts of East Washington. The older, established neighborhoods are expected to remain as low density residential areas with average densities of less than 15 dwelling units/acre.

The Comprehensive Plan designates all the four station areas as "Potential Transit Oriented Development Areas" characterized by compact, mixed-use development patterns that focus the highest development densities in close proximity to transit stops. However, these areas are only "conceptual" and the Plan recommends preparation of more detailed sub-area or neighborhood plans to determine the most appropriate areas for TOD. The Comprehensive Plan outlines general guidelines for TODs that emphasize the importance of creating a walkable, high-quality public realm, providing a mix of uses in a high-density environment and managing parking.

The neighborhood plans also support the proposed station locations and promote higher density TOD near the stations. Future rail stops are recommended at the proposed Baldwin and Schenk-Atwood station locations, the Fordem/Johnson station is proposed as a park and ride facility in a TOD environment. The preliminary site plan for the Union Corners redevelopment shows a future transit stop at the proposed station location integrated with the new mixed-use development.

Parking

Madison's Comprehensive Plan recommends a variety of strategies for reducing the amount of land consumed by surface parking lots in TOD areas like shared parking, parking structures and underground parking. These strategies are echoed in several of the neighborhood plans. In addition, the neighborhood plans recommend increasing on-street parking where feasible to meet increased parking needs, locating parking lots at the side and rear of buildings, providing public parking structures to reduce the need for individual businesses to provide parking and, lowering minimum parking requirements in areas that are walkable and have good transit connections. Providing covered, secure bicycle parking would also help in reducing the need for automobile parking.

Plans to Improve Bicycle Facilities

The City's Future Bicycle Route Plan included in the Comprehensive Plan recommends new on-street and off-street bike routes through the East Isthmus corridor to better connect it to the neighborhoods further east and north. Specifically, a bike route is proposed along the Yahara River providing a cross-connection between the existing east-west routes. Another connecting bike route is proposed north along the railroad connecting to the existing route on Sherman Avenue and routes further north. The bike path along the railroad in the Schenk Atwood neighborhood is proposed to be extended all the way up to Burke Road in East Towne. The neighborhood plan recommendations for future bike paths are similar. The preliminary site plan for the Union Corners redevelopment indicates the installation of a bike path along the railroad corridor at the southern edge of the development. The Schenk-Atwood-Starkweather-Worthington Park Neighborhood Plan also recommends bike-paths on East Washington and Atwood Avenues and Milwaukee Street.

Plans to Improve Pedestrian Facilities

The Comprehensive Plan emphasizes the importance of creating streets that are safe, comfortable and attractive for pedestrians. The neighborhood plans contain several recommendations for improving pedestrian facilities and safety within the station areas:

- Overall streetscape improvements on major corridors including wide sidewalks, narrow traffic lanes, street trees, pedestrian scale lighting, street furniture and public art
- Crosswalk enhancements near uses generating high levels of pedestrian activity such as school
- Pedestrian underpasses at busy intersections on Washington Avenue and Johnson Street
- Off-street trails along the railroad and the Yahara River

Design Guidelines

The Comprehensive Plan, as well as the neighborhood plans, emphasizes the need for establishing detailed design guidelines to preserve the traditional character of the neighborhoods and to ensure that new development/redevelopment enhances the existing environment. Retaining the pedestrian scale and character of the public realm is another important design consideration mentioned in the plans. Several of the neighborhood plans include design guidelines for elements like appropriate building height, setbacks, massing, use of materials and architectural detail.

Current Policies

Zoning Ordinance

Existing zoning designations within the station areas include several residential zones – R2, R3, R4 and R5 with R4 being the most widespread. The north side of East Washington, west of the river is zoned C3 (Highway Commercial), most other commercial areas are zoned C2 (General Commercial District). A significant part of the corridor, especially the Baldwin and Fordem/Johnson station areas, is zoned M1, Limited Manufacturing District.

In several instances, the current zoning designations appear to be inappropriate for the type and intensity of redevelopment recommended in the plans for the station areas. For example, the plans call for replacement of obsolete industrial uses with office, research and other specialized employment uses at “urban” densities (multiple story structures that occupy most of the lot area). The M1 designation for these former industrial areas allows a maximum FAR of 2 which will limit the density of new development. Additionally, although only non-nuisance manufacturing uses that are compatible with residential areas are allowed within the zone, the primary uses within this zone are industrial and certain types of commercial, office and commercial/service uses envisioned in the plan. Several parcels along the Yahara River, which are proposed to be redeveloped as residential, are zoned M1 which does not allow residential development.

The highest density residential zone within the corridor is R5, General Residence District which allows multi-family dwelling units but restricts the maximum height at three stories. The plans however recommend residential buildings up to four stories in height in several locations. Conversely, some historic, older mostly single-family neighborhoods are zoned to allow three story multi-family buildings and certain commercial uses, which if actually developed, would be incompatible with existing development.

Although a mixed-use environment already exists within the East Isthmus corridor, especially in the Schenk-Atwood station area, none of the zoning designations are very suitable for mixed-use development. While C2 allows residential development along with commercial uses, the number of residential dwelling units is restricted to four or less than 50 percent of the total FAR. This restricts the potential for new mixed-use developments without the aid of variances or special provisions under planned developments.

The zoning code includes a special provision which allows for the reduction of parking for developments based on certain criteria like proximity to transit routes and/or bicycle paths and provision of bicycle parking, existing or potential shared parking agreements and availability and accessibility of alternative parking. Applications for parking reduction are reviewed on a case-by-case basis. The code also requires the provision of off-street secure bicycle parking for several residential, institutional and commercial uses.

Madison’s Comprehensive Plan recognizes the need to update the current zoning ordinance to implement Plan recommendations. Suggested changes include creation of a new mixed-use zoning district, a Traditional Neighborhood Development District and zoning standards for TOD.

Urban Design Commission Ordinance

Madison’s Urban Design Commission Ordinance provides for an Urban Design Commission that reviews development proposals within designated Design Districts to ensure a high quality public realm. A part of the study area along East Washington Avenue and Pennsylvania/Packers Avenue is included in Design District # 4 which was formed with the intent of enhancing these gateway corridors to the Capitol. The ordinance includes general guidelines regarding public rights-of-way, off-street parking areas, signage, building facades, lighting and landscaping.

Recommendations to Improve Transit Supportive Land Use

Planning Initiatives

The Emerson East – Eken Park Neighborhood Plan (March 1998) is the latest neighborhood plan available for the Fordem/Johnson station area. The Comprehensive Plan, while providing general guidance, encourages the preparation of more detailed sub-area/neighborhood plans to guide future planning in neighborhoods. The neighborhood plan is over eight years old, and does not adequately address the industrial parcels within the station area that might be subject to change in the near future. Therefore it will be helpful to prepare a new plan that addresses this redevelopment opportunity before it occurs.

While the various neighborhood plans provide several excellent recommendations for future development and improvements, they do not seem to be prioritized. It would be helpful to prioritize the recommendations based on significance for the station area and the relative difficulty of completion. This will help identify “key” or catalyst projects for the station areas and help the City and the neighborhood focus their redevelopment efforts.

Design guidelines included in the neighborhood plans vary significantly in their scope and level of detail. The City should consider combining these into a unified set of design guidelines for East Isthmus. These guidelines, while retaining specific recommendations to maintain the unique character of the different areas within the Isthmus, will provide unifying elements that go beyond neighborhood boundaries. The design guidelines could be incorporated as a part of the Urban Design Commission Ordinance or used separately as a tool for guiding public and private investment in the area.

The real estate market analysis completed as a part of this report, indicates strongest market support for new office development in the Madison area in downtown Madison and the fast growing West Towne area. To increase the competitiveness of the East Isthmus area for new office/employment uses, the City should identify the kind of businesses most likely to locate in the area and work closely with the neighborhood organizations to recruit them. The City should also consider offering appropriate financial and other incentives to businesses for locating within the East Isthmus area.

Policy Recommendations

The City should implement the Comprehensive Plan recommendation for updating the zoning ordinance. Besides creating mixed-use zones and special standards for designated TOD areas, the City should consider updating its parking requirements. Reducing parking requirements for TOD areas allows for higher intensity development and encourages people to walk and use transit. For example, parking requirements could be lower for a business in the Schenk-Atwood neighborhood compared to a similarly zoned business in an outlying area without transit service and/or pedestrian sidewalks. Currently, one parking spot is required for every 300 square feet of commercial space throughout the City. This requirement translates to a “Low-Medium” ranking based on the FTA criteria. The City should consider lowering the requirement in highly walkable areas to one parking spot per 450 square feet to meet the

“Medium-High” rating standard. Where adequate bicycle parking is provided, the City could further reduce the parking requirement.

Improvement Projects

The neighborhood plans recommend streetscape improvements on several streets to create more pedestrian friendly and transit supportive environments. These improvements should be implemented first along the most visible corridors including East Washington Avenue, East Johnson, Baldwin and Winnebago Streets, Eastwood Drive and Atwood Avenue. Again, the City should work with the neighborhoods to develop a unified streetscape improvement program that will help in creating a coherent, pedestrian friendly environment throughout the East Isthmus corridor.

EAST TOWNE CORRIDOR

Introduction

The East Towne Corridor extends beyond the Interstates 90/94 to the eastern edge of Madison, near the City of Sun Prairie, a fast-growing suburban community.

Three stations are proposed within this corridor: Fair Oaks, Lien Road and Reiner Road.



Existing Conditions

Existing Land Use and Development Patterns

The three station areas differ significantly in terms of existing land uses and development pattern.

Fair Oaks: This station is proposed near the intersection of the railroad and Fair Oaks Avenue, between Milwaukee Street and Commercial Avenue. Besides walk-access, a park-and-ride facility is also proposed at the Fair Oaks Station. Most of the station area west of Fair Oaks and north of the railroad is residential consisting mainly of older, modest single-family neighborhoods. Some commercial and office uses are located at the intersection of East Washington Avenue (US Highway 151) and Commercial Avenue (State Highway 30). The East Transfer Station, which serves as a major hub for Metro bus routes, is located at the eastern edge of the station area on Milwaukee Street.

Starkweather Creek runs south of the railroad and a significant part of this area east of Fair Oaks is covered by wetlands presenting environmental constraints for development. Currently, most of this area is owned by the Voit family and is under agricultural use.

Lien Road: The Lien Road station is proposed south of the East Towne shopping mall near the Lien Road intersection. Commercial uses dominate this station area. Besides the East Towne mall, several high trip generating big box retailers are located here. This area is suburban and auto-oriented in character. South of Lien Road, the station area is mostly residential and includes newer single-family residences and apartment buildings. A significant part of the station area in the immediate vicinity of the station remains undeveloped. This area has environmental constraints for development associated with the Starkweather Creek.

Reiner Road: This station is proposed near the Reiner Road intersection north of Nelson Road. A large park-and-ride facility is proposed at this location to serve the suburban residential areas in the far-east side and the City of Sun Prairie. An asphalt plant and a landfill facility are located on Nelson Road east just east of Reiner Road. Besides these industrial uses, most of the station area is currently undeveloped.

Existing Population Density

As illustrated in Figure 2, Year 2000 Population Density, densities in the East Towne corridor were “Low” or “Low-Medium” based on FTA criteria. The Reiner Road station, which is mostly undeveloped, has low population densities throughout. The Fair Oaks and the Lien Road stations have slightly higher population densities (Low-Medium) in the predominantly residential neighborhoods; other areas remain at low population density.

Existing Transportation Facilities and Conditions

Roadway Access

The East Towne corridor has excellent roadway access through a network of arterial and collector roadways and its proximity to the Interstate Highways 90/94.

The Fair Oaks station, located on Fair Oaks Avenue which functions as an arterial, is also bounded by several arterial roadways, East Washington Avenue (US Highway 151), Commercial Avenue (State Highway 30), Milwaukee Street and

Stoughton Road (US Highway 51). These arterial roadways provide excellent east-west and north-south access to and from the station.

The Lien and Reiner Road stations are located less than a mile from the Interstate interchange with US Highway 151. A system of collector roadways including Lien, Reiner and Nelson Roads connect the station areas to the highways.

Street Network Density

The density and interconnectedness of the street network varies among the different station areas.

A significant part of the Fair Oaks station area contains older, established neighborhoods which are laid out on a grid pattern with a well connected and fairly dense street network. The local street network is interrupted by the large undeveloped area east of the railroad, directing all vehicular and pedestrian traffic to the surrounding arterial roadways.

The Lien Road station has poor street connectivity. The residential neighborhood located to the southeast has long blocks and several dead-end streets. The shopping mall and the big-box retailers located towards the north are typical suburban developments with an introverted building design and large parking lots separating them from adjacent uses. Zeier Road provides the only connection between the commercial and residential developments within the station area.

The Reiner Road station has a limited existing street network as most of the area is still undeveloped.

Transit

Transit access also varies greatly across the station areas within the East Towne corridor.

The Fair Oaks station is served by several bus routes along Milwaukee Street and two routes each along Fair Oaks and East Washington Avenues. The East Transfer Point of the Madison Metro system, located at the eastern edge of the station area, provides connecting bus service to different parts of the City. While bus routes serve the commercial development within the Lien Road station area and one of the routes continue south to connect to the residential development, the immediate station area is not served by a bus route. The Reiner Road station area is not served by Metro bus routes.

Bike and Pedestrian Access

The current bike path system does not extend out to the Reiner Road station. However, there are existing on-street bike routes in both the Fair Oaks and the Reiner Road station areas that connect them to other bike routes within the region. The bike route on Fair Oaks Avenue connects to the bike route on Anderson Street to the north and to the off-street bike path near Lake Monona to the south. In the Lien Road station area, the bike route on Thompson Drive and Zeier Road loops around the mall area to connect to the Anderson Street bike path.

None of the station areas provide good pedestrian access. The Fair Oaks station area lacks sidewalks in the residential neighborhoods limiting pedestrian access even though the street network is mostly continuous. The arterial roadways

lack any pedestrian friendly improvements making pedestrian access difficult especially at roadway intersections. Within the Lien Road station area, most of the local residential streets and several collector roadways serving the commercial areas have pedestrian sidewalks. However, the overall road network is very discontinuous and lacks direct connections between uses creating a difficult pedestrian environment. The Reiner Road station area is mostly undeveloped and has very few roadways, most of which lack sidewalks.

Urban Design Conditions

Urban Design considerations are focused on the quality of the pedestrian experience within each station area. The East Towne corridor does not have a formal streetscape program and is generally lacking in urban design improvements. All the station areas would benefit from streetscape improvements and pedestrian facilities like comfortable sidewalks, shade trees, buildings placed closer to the sidewalk and with direct pedestrian entries.

Market Conditions

The real estate market study shows limited residential and office, but good commercial development opportunities for the East Towne Corridor over the next 15 years. It is estimated that by the year 2020, the corridor could attract up to 120 additional dwelling units, 75,000 square feet of new office and 250,000 square feet of new retail space.

In the Fair Oaks station area, redevelopment opportunities exist in the undeveloped land along Starkweather Creek. Even though a significant portion of this area will be unavailable for development because of the presence of wetlands and the creek, the southern portion of the land along Milwaukee Street could be redeveloped for transit supportive uses. In addition, the commercial uses along Fair Oaks Avenue south of Commercial Avenue, could be subject to change.

The Lien Road station offers several development/ redevelopment opportunities. Several out lots in the East Towne mall area are still undeveloped. The area immediately surrounding the proposed station is also mostly vacant and could be developed into a transit-oriented use.

The Reiner Road station is being envisioned as a park-and-ride facility to serve commuters living on the far east side and eastern suburbs, such as Sun Prairie. The area is currently mostly undeveloped and is likely to remain so in the near future. Therefore this station area was not included in the real estate market study.

Current Plans and Policies

Current Plans

In addition to Madison's Comprehensive Plan (adopted 2006) that provides general direction for the future development of the East Towne area, there are several neighborhood plans that provide specific recommendations for the different station areas. These include:

- Carpenter-Hawthorne-Ridgeway-Sycamore-Truax Neighborhood Plan (April 2001)
- Ridgewood Neighborhood East Central Development Plan (November 2002)

- Nelson Neighborhood Master Plan (July 2001)

Future Land Use and Development

The land use recommendations outlined in the Comprehensive Plan are mostly in accordance with the neighborhood plans. The Comprehensive Plan recommends transit supportive land uses like higher density residential uses and mixed-use developments in pedestrian-oriented environments in developable/re-developable areas within the station areas.

In the Fair Oaks station area, the portion of the undeveloped area south of the Starkweather Creek environmental corridor is proposed for mixed-use development including a variety of residential types and commercial and institutional uses. The highest development intensities are proposed near the Madison Metro's East Transfer Point, which is an existing transit hub. The Town of Blooming Grove covers a part of the station area; therefore Madison's plan recommends working co-operatively with the town to guide future development in the area.

A mixed-use environment is envisioned for the East Towne Mall and its surrounding parcels – as the vacant out-lots are developed and existing structures are remodeled over the years, efforts should be made to incorporate more residential and higher density development in a walkable environment. The vacant area immediate vicinity of the proposed Lien Road station is proposed for medium density residential and employment uses. While the residential proposal is consistent with the neighborhood plan of attracting senior housing, it proposes neighborhood scale commercial instead of an employment use for the remaining area.

The Comprehensive Plan as well as the neighborhood plan does not propose any new development within the Reiner Road station area. The current industrial uses are expected to continue. The landfill operation, when closed, is proposed to be developed as open space as a part of the Madison-Sun Prairie community separation area.

The Comprehensive Plan indicates the general area around the proposed Fair Oaks and the Lien Road stations as "Potential Transit Oriented Development Areas" suitable for compact, mixed-use development patterns that focus the highest development densities in close proximity to transit stops. However, these areas are only "conceptual" and the Plan recommends preparation of more detailed sub-area or neighborhood plans to determine the most appropriate areas for TOD.

Parking

Madison's Comprehensive Plan recommends a variety of strategies for reducing the amount of land consumed by surface parking lots in TOD areas like shared parking, parking structures and underground parking. The neighborhood plans do not include recommendations on parking management.

Plans to Improve Bicycle Facilities

The City's Future Bicycle Route Plan recommends new bike path along the railroad through the Fair Oaks and the Lien Road stations connecting to the bike path near Lake Monona on the south and extending up to Burke Road on the north. A new bike path is also proposed along the Starkweather Creek in the Fair Oaks station area. These new bike

paths will provide direct bike access to the proposed stations. The neighborhood plans also recommend bike paths along the railroad and the creek. The neighborhood plan for the Reiner Road station area (Nelson Neighborhood Master Plan), recommends that all new and reconstructed roadways in the area be designed with sufficient width to accommodate bicyclists.

Plans to Improve Pedestrian Facilities

The Comprehensive Plan emphasizes the importance of creating streets that are safe, comfortable and attractive for pedestrians. The neighborhood plans include some recommendations for improving pedestrian facilities and safety within the station areas:

- Installation of wide sidewalks and crosswalk enhancements in heavily traveled pedestrian zones
- Pedestrian walkways that provide short, direct connections between uses and to transit stops from surrounding areas

Design Guidelines

The Comprehensive Plan emphasizes the need for establishing detailed design guidelines to enhance pedestrian-friendliness and transit supportive character throughout the City and especially in the areas identified for TOD. The Comprehensive Plan includes general guidelines for developments in TOD areas; the neighborhood plans do not present design guidelines.

Current Policies

Zoning Ordinance

Existing zoning designations within the station areas include several residential zones ranging from R1 (Single Family Residence District) to R4 (General Residence District) representing the single family neighborhoods and the higher density multi-family areas within the stations. The commercial zones include C2, C3 and C3L representing the range of commercial development – from neighborhood scale centers to regional scale big-boxes and shopping mall. While the Fair Oaks Road station is mostly zoned residential, the Lien Road station is mostly zoned commercial. A significant part of the Fair Oaks and the Reiner Road station areas are within Dane County's jurisdiction.

In the Fair Oaks station area a portion of the undeveloped land is under Dane County (Township of Blooming Grove) jurisdiction. The Dane County DciMap for the area indicates commercial zoning for a part of the undeveloped land. A portion of the undeveloped area within Madison, is zoned C3L (Commercial Service and Distribution District) which prohibits residential development and is therefore inappropriate for the mixed-use development with a high density residential component as proposed in Madison's comprehensive plan.

Again, in the Lien Road station area, C3L and M1 designations for the East Towne Mall area are not suitable because they do not allow the high density mixed use environment proposed for the area as it redevelops in the future.

The portion of the Reiner Road station area within Madison is zoned GDP (General Development Plan in Planned Community Development/Planned Unit Development/Planned Community Mobile Home Park Districts) allowing planned developments although the Land Use Plan recommends maintaining this area as open space. Most of the station area within Dane County is zoned for green space which follows Plan recommendations. The asphalt plant, located at the northwest corner of Nelson and Reiner Roads, is an industrial use but is zoned commercial. A few parcels at the southeast corner of Nelson and Reiner Roads are also zoned commercial.

The zoning code includes a special provision which allows for the reduction of parking for developments based on certain criteria like proximity to transit routes and/or bicycle paths and provision of bicycle parking, existing or potential shared parking agreements and availability and accessibility of alternative parking. The code also requires secure bicycle parking for new commercial and several types of residential development.

Madison's Comprehensive Plan recognizes the need to update the current zoning ordinance to implement Plan recommendations. Suggested changes that could affect development within the corridor include creation of a new mixed-use zoning district, a Traditional Neighborhood Development District and zoning standards for TOD.

Urban Design Commission Ordinance

Madison's Urban Design Commission Ordinance provides for an Urban Design Commission that reviews development proposals within designated Design Districts to ensure a high quality public realm. A small portion of the Fair Oaks station area along the East Washington Avenue frontage is included in Design District # 5, which was formed with the intent of enhancing this gateway corridor to the Capitol. The ordinance includes general guidelines regarding public rights-of-way, off-street parking areas, signage, building facades, lighting and landscaping.

Recommendations to Improve Transit Supportive Land Use

Planning Initiatives

Sub-area plans or master plans are needed for the developable/redevelopable areas with Fair Oaks and Lien Road stations to provide more detailed guidance on future development potential:

- The City should work co-operatively with the neighborhood groups in the Fair Oaks station area and the Township of Blooming Grove to prepare a plan for the undeveloped area east of the railroad and south of Commercial Avenue.
- The City should prepare a plan to guide the redevelopment of the East Towne Mall area as and when redevelopment opportunities occur, into a pedestrian-oriented mixed-use environment from its current auto-centric environment.

The City should consider preparing design guidelines to improve the pedestrian environment within the station areas. While the Urban Design Commission Ordinance offers some design guidelines for the East Washington corridor, other

major roadways including Milwaukee Street, Commercial Avenue (SH 30), Fair Oaks Avenue and Lien Road would benefit from detailed guidelines regarding streetscape improvements, building placement and design.

In the Reiner Road station area the City could explore the feasibility of using the landfill area for locating the proposed park-and-ride facility once the active landfill operation is closed. The parking lots could be designed with extensive landscaping to maintain the green open space character of the area.

Policy Recommendations

The City should implement the Comprehensive Plan recommendation for updating the zoning ordinance. A new mixed-use zone and special standards for designated TOD areas would address the existing discrepancies between development recommendations in the Plan and allowable development based on the zoning code.

Improvement Projects

Wherever feasible, the City and the County should improve roadway connectivity and install sidewalks within the half-mile station areas to maintain pedestrian accessibility. Developing an access and circulation plan could help achieve this as the station areas experience new development and redevelopment in the future.

AIRPORT CORRIDOR

Introduction

The Airport Corridor, as the name suggests, is proposed to serve the Dane County Regional Airport and northeast Madison. The corridor, proposed to connect the airport to the Capitol through the East Isthmus corridor, is mostly industrial with manufacturing and employment uses centered on the railroad.

Three stations are proposed within this corridor: North Transfer Point, Packers Avenue and Airport. This corridor is included in Alternative 3 only (LPA/Airport, Railroad Right-of-Way).



Existing Conditions

Existing Land Use and Development Patterns

North Transfer Point: This station is proposed near the North Transfer Point of the Madison Metro bus system, located near Aberg and Packers Avenues. The immediate station area is mostly industrial. Kraft Foods-Oscar Meyer has a large manufacturing plant in the area just east of the railroad between Commercial and Aberg Avenues. Neighborhood scale commercial including a grocery store are present within the station area. Residential neighborhoods are located at the western edge of the station along Lake Mendota and east of Packers Avenue near the eastern edge of the station area.

Packers Avenue: The station is proposed near the intersection of Packers Avenue with the railroad. The western half of the station area is mostly residential containing single-family neighborhoods as well as several multi-family developments. A commercial center is located at the northwest edge of the station area. East of Packers Avenue, a part of the station area is occupied by the Bridges Golf Course and employment uses closer to the airport. The area between Packers Avenue and the Golf Course in the southern part of the station is mostly undeveloped.

Airport: The terminal station on this branch is proposed at the Dane County Regional Airport near the airport terminals to provide easy access for passengers. Most of the station area is airport property occupied by airport or related uses. Some airport related warehousing and industrial uses are located at the southern edge of the station area. The southwest part of the station area between Sherman and Packers Avenue is occupied by residential uses.

Existing Population Density

As illustrated in Figure 2, Year 2000 Population Density, population in the Airport corridor ranged from “Low” to “Medium” based on FTA criteria. The airport area has restricted residential development and therefore low population density. The Packers Avenue station has Low-Medium to Medium population densities in the largely residential western half. The North Transfer Point station, which is mostly industrial, also has low population density except for the eastern edge of the station area, which has older residential neighborhoods.

Existing Transportation Facilities and Conditions

Roadway Access

The airport corridor has good regional roadway access with arterial roadways connecting it to the Capitol area and other parts of Madison. Packers and Sherman Avenues, north south arterial roadways through the corridor, connect to East Johnson Street a primary entryway into the Capitol area. Aberg Avenue (State Highway 30) and Northport Drive connect the corridor to neighborhoods to the east and northwest respectively. Commercial Avenue, which functions as a collector street, provides an important east-west connection within the corridor. International Lane and Darwin Roads, also collector roadways, provide access to the airport.

Street Network Density

The street network is very fragmented within the corridor except for the residential neighborhoods in the Packers Avenue station. Large industrial parcels in the North Transfer Point station disrupt street connectivity. In the Packers

Avenue station, industrial parcels, undeveloped areas and the golf course result in poor street connectivity in the eastern half of the station area.

The railroad and adjacent development act as a barrier separating the eastern and western parts of the corridor. Aberg and Commercial Avenues, both located in the North Transfer Point station area, present the only opportunities to cross the railroad tracks within the corridor.

The airport station area is occupied mostly by the airport and therefore lacks a dense street network.

Transit

The Airport corridor is served by several Madison Metro bus routes with most of the routes operating on Packers and Sherman Avenues. Metro's North Transfer Point and Park and Ride, which serves as a hub and transfer point for bus routes, is located in the North Transfer Point station area near the proposed station, providing good intermodal connectivity. The Transfer Point provides connecting bus service to most parts of the region including the airport. Another Metro Park and Ride facility with bus connections to the North Transfer Point is located in the Packers Avenue station area, near Sherman Avenue and Northport Drive. Most of the routes in the corridor operate on major roads therefore some residential neighborhoods do not have direct access to bus service. One of the neighborhood plans proposes the use of circulator buses within the neighborhoods to provide more convenient transit access.

Bike and Pedestrian Access

The North Transfer Point and Packers Avenue stations have on-street bike routes along Sherman and Aberg Avenues and Ruskin and Anderson Streets respectively. The Ruskin Street and Sherman Avenue bike routes connect to the Johnson Street bike path providing access to the Capitol area. The Anderson Street and Aberg Avenue (continues on an off-street route west of Packers Avenue) bike paths continue further east to the East Towne Mall area. The airport is not connected by bike routes.

Except for the residential neighborhoods located in the western half of the Packers Avenue station, the station areas have poor pedestrian access characterized by a complete lack of or discontinuous sidewalks. Arterial roadways within the corridor including Packers and Aberg Avenues do not have safe pedestrian crossings making it difficult for pedestrians to get across, further reducing connectivity.

Urban Design Conditions

Urban Design considerations are focused on the quality of the pedestrian experience within each station area. Currently, the station areas within the airport corridor do not offer a high quality pedestrian experience as they are lacking in basic pedestrian amenities like sidewalks and safe crossings.

Market Conditions

According to the real estate market study completed by VSKA, the Airport corridor has the least development opportunities among the eight corridors. It is estimated that by the year 2020, the Airport corridor has the potential for attracting 60 additional dwelling units, 75,000 square feet of new office and 50,000 square feet of retail space.

Development near the airport in the Airport and the Packers Avenue station area, is limited by the height and scale restrictions relating to the airport clear zones. In the Packers Avenue station area, the Sherman Plaza shopping center (located near Sherman Avenue and Northport Drive) has some vacancies and could potentially be redeveloped in the future. The undeveloped area east of the railroad and Nelson Street could be developed for airport-related employment uses. The airport station area could potentially attract one or two economy hotels.

The North Transfer Point station could present redevelopment opportunities in the future as older commercial and/or industrial become obsolete. The undeveloped area west of Kraft Foods-Oscar Meyer could be developed with non- nuisance manufacturing or commercial uses.

Current Plans and Policies

Current Plans

The Comprehensive Plan for the City of Madison provides general direction for the future development of the Airport corridor. The Emerson East-Eken Park (March 1998) and the Brentwood Village-Packers-Sherman (July 2006) neighborhood plans provide more detailed recommendations for the North Transfer Point and the Packers Avenue stations. The airport does not have a current plan; the recommendations included in the latest master plan for the airport (dated 1991) have already been implemented.

Future Land Use and Development

The neighborhood plans promote redevelopment of the vacant and/or obsolete commercial and industrial areas with new transit supportive mixed-use development and non- nuisance type of manufacturing and other employment uses. The vacant, developable areas near the airport and near the Kraft Foods-Oscar Meyer plant, are proposed for employment uses. As the vacant area east of Packers Avenue (Nelson Street) in the Packers Avenue station is developed, it will be important to ensure that the new street network improves connectivity within the area. The plan recommends extension of Schlimgen Avenue to provide an east-west connection across the railroad and Packers Avenue.

The City's Future Land Use Plan is mostly consistent with the recommendations outlined in the neighborhood plans. In addition, the City's Plan designates the area around all the three proposed stations as "Potential Transit Oriented Development Areas" to be developed as compact, mixed-use areas with the highest development intensities near existing/proposed transit stops. These areas are however only "conceptual" and the Plan recommends the preparation of more detailed neighborhood plans to identify the most appropriate TOD areas. The current neighborhood plans do not include any recommendations regarding potential transit stops or TOD areas.

Parking

Madison's Comprehensive Plan recommends a variety of strategies for reducing the amount of land consumed by surface parking lots in TOD areas, such as, shared parking, parking structures and underground parking. The neighborhood plans do not include any recommendations regarding parking.

Plans to Improve Bicycle Facilities

Madison's future bicycle plan does not include any improvement recommendations within the station areas. The neighborhood plan recommends installation of new bike paths when possible along railroad ROW and Commercial Avenue.

Plans to Improve Pedestrian Facilities

The Comprehensive Plan emphasizes the importance of creating streets that are safe, comfortable and attractive for pedestrians. The neighborhood plans contain several recommendations for improving pedestrian safety and comfort within the station areas:

- Streetscape improvements including continuous, wide sidewalks, landscaping and pedestrian scale lighting along major corridors including Packers, Sherman and Aberg Avenues
- Safer pedestrian crossings throughout the corridor and especially along Packers Avenue between Commercial Avenue and International Lane

Design Guidelines

Madison's Comprehensive Plan recommends establishing detailed design guidelines at the neighborhood level to ensure that new development and redevelopment within the City enhances its physical character and improves its pedestrian friendly and transit supportive character. The current plans do not include design guidelines.

Current Policies

Zoning Ordinance

Manufacturing is the most prominent zoning district within the airport corridor. Significant portions of the station areas, including most of the airport, is zoned M1, Limited Manufacturing District. The M1 designation allows a maximum FAR of 2 and permits only non-nuisance type of manufacturing uses that are compatible with nearby residential areas are allowed within the zone. Although and FAR of 2 will limit the development of higher intensity employment uses, the permissible uses are mostly in accordance with the future plans for the area. The Kraft Foods – Oscar Meyer plant and the adjacent parcels to the west are zoned M2, General Manufacturing District, which allows all types of industrial uses, including potentially nuisance generating uses. The plans however recommend only non-nuisance type of industrial uses for the area in the event of any future redevelopment.

Commercial districts within the station areas include C2 (General Commercial District), C3 (Highway Commercial District) and C3L (Commercial Service and Distribution District). The shopping centers within the corridor are zoned C2 - while this zone allows residential development along with commercial uses, the number of residential dwelling units is restricted to four or less than 50 percent of the total FAR. This restricts the potential for the re-development of the older shopping centers into mixed-use areas as proposed in the plans, without the aid of variances or special provisions under planned developments.

The North Transfer Point and the Packers Avenue station areas have several different residential zoning districts in their residential neighborhoods reflecting the range of densities present –R1 and R2 are Single Family Residence Districts, R3 permits single family and two-family homes while the multi-family areas are zoned R4 and R5 (General Residence Districts permitting increasing levels of density).

The western portion of the airport station area is within Dane County’s jurisdiction. Most of this area is zoned as green space.

Madison’s zoning code includes a special provision which allows for the reduction of parking for developments based on certain criteria like proximity to transit routes and/or bicycle paths and provision of bicycle parking, existing or potential shared parking agreements and availability and accessibility of alternative parking. The code also requires the provision of off-street secure bicycle parking for several residential, institutional and commercial uses. This provision, by reducing automobile parking requirement and promoting biking, enhances the opportunity for providing transit supportive densities near transit stops.

Madison’s Comprehensive Plan recognizes the need to update the current zoning ordinance to implement Plan recommendations. Suggested changes include creation of a new mixed-use zoning district, a Traditional Neighborhood Development District and zoning standards for TOD.

Urban Design Commission Ordinance

Madison’s Urban Design Commission Ordinance provides for an Urban Design Commission that reviews development proposals within designated Design Districts to ensure a high quality public realm. A part of the corridor along Packers Avenue between International Lane and Pennsylvania Avenue is included in Design District # 4 which was formed with the intent of enhancing this significant entryway into the City of Madison. The ordinance includes general guidelines regarding public rights-of-way, off-street parking areas, signage, building facades, lighting, landscaping and utility service.

Recommendations to Improve Transit Supportive Land Use

Planning Initiatives

The Emerson East – Eken Park Neighborhood Plan (March 1998), the latest neighborhood plan available for the greater part of the North Transfer Point station area, is over eight years old, and does not adequately address the redevelopment potential of the older commercial and industrial properties. Therefore it would be helpful to prepare a new plan that addresses these redevelopment opportunities. Also, there is no neighborhood or sub-area plan for the area east of Packers Avenue and north of Aberg Avenue in the Packers Avenue station area. This area has a considerable amount of vacant land proposed for development and it will be helpful to prepare a plan that promotes transit supportive development in the area.

The master plan for the Dane County Regional Airport (1991) has been mostly implemented. It would be useful for the airport to prepare an updated plan reflecting its future expansion and development needs, especially potential commuter rail access to the airport.

The City should consider preparing and adopting detailed design guidelines for the airport corridor to develop a unified and high quality aesthetic environment as the corridor redevelops. The airport corridor serves as an entryway into Madison from the airport creating a first impression of the City for visitors, and is therefore of special significance. The design guidelines, that should include elements like streetscape improvements and building placement and design, could be incorporated as a part of the Urban Design Commission Ordinance or used separately as a tool for guiding public and private investment in the area.

Policy Recommendations

The City should implement the Comprehensive Plan recommendation for updating the zoning ordinance. A new mixed-use zone and special standards for designated TOD areas would be helpful in promoting higher density, transit supportive development in the station areas.

Improvement Projects

Implementing the streetscape and pedestrian safety improvements on the existing roadways as recommended in the neighborhood plans, should be a high priority for the City to improve walkability and the transit supportive character of the area.

Wherever feasible, the City and the County should improve roadway connectivity by creating new streets through large parcels as they redevelop and install sidewalks within the half-mile station areas to maintain pedestrian accessibility. Developing an access and circulation plan could help achieve this as the station areas experience new development and redevelopment.

B-II. Assessment of Growth Management Plans and Initiatives in the Region

Growth management focuses on the efforts made by regional and local governments on:

- Promoting the concentration of development around established activity centers and transit stops, and
- Land conservation and management

Dane County has been fairly proactive in preparing and adopting regional plans and policies that support growth management within the County. It adopted the Dane County Land Use and Transportation Plan in 1997 to guide development, preservation and transportation decisions in the County through the year 2020. This Plan, prepared in cooperation with the former Dane County Regional Planning Commission (now temporarily a part of the Dane County Department of Planning and Development), the City of Madison, and the Wisconsin Department of Transportation, includes a strong commitment towards growth management. The Plan includes eleven goals, four of which directly relate to growth management issues:

- Promote compact urban development, redevelopment, and infill
- Concentrate employment and activity centers along public transit corridors
- Maintain downtown Madison as the region's major activity center
- Protect agricultural lands, in part by limiting non-farm development in agricultural areas

To realize the goals set forth in the Plan, one of the primary recommendations is to accommodate most of the forecasted population and employment growth within the urban areas of the County. The Plan includes a Regional Development Plan Map as a basic framework for directing growth within the region. The framework is made up of three main elements:

1. **Urban Service Areas** - These are areas in and around existing communities where public services exist or can be easily extended. Most future development, over a period of 20-25 years, is recommended to be located within these areas. Within urban areas, the highest development densities are proposed near transit nodes. The Plan provides urban service area boundaries for near-term growth (up to 10 years) and recommends reviewing and adjusting the boundaries in the future to accommodate future growth.
2. **Rural Areas** - These are areas outside the urban service areas intended to remain predominantly rural in character. The Plan recommends limited or no development in the rural areas, which could include farmland preservation areas as well as non-farmland areas.
3. **Open Space Corridors** - These are environmentally sensitive corridors within urban and rural areas that should be protected from development.

The Plan encourages local governments to incorporate the regional development framework in their planning efforts. It also recommends preparing neighborhood plans for transitional areas at the urban-rural fringe and other areas experiencing growth pressures even though they might not be adequately serviced for development. These plans would help the local

governments in managing growth pressures and redirecting development towards areas considered more desirable by the community.

In addition to the Land Use and Transportation Plan, the County has a Farmland Preservation Plan that was adopted in 1981 for the purpose of identifying and preserving valuable farmland and sensitive natural areas within the County and the areas most suitable for urban development. Several of the unincorporated towns within the County have adopted policies at the local level to implement the recommendations of the Farmland Preservation Plan including the inclusion of an exclusive agriculture zone in their code. Currently, the County is in the process of preparing a Comprehensive Plan which will build upon the previous planning efforts in the County and provide a Vision and framework for future development.

While Dane County's plans provide a regional framework for growth management, the implementation responsibility rests largely with local governments who exercise land use control.

The City of Madison is actively promoting infill and redevelopment within its boundaries while limiting development in the peripheral areas. Its recently adopted Comprehensive Plan identifies several policies that the City could follow to manage growth within its limits and its extra-territorial jurisdiction. Some of the key policies include the following:

- Discourage non-farm development in its Extra-Territorial Jurisdiction (ETJ) areas by not approving land divisions for non-agricultural use except in limited situations.
- Reduce the demand for vacant development land on the periphery by encouraging urban infill, redevelopment and higher densities in areas identified as appropriate in the Comprehensive Plan by creating a supportive planning environment including updating zoning regulations, constructing infrastructure improvements and assisting with land assembly and environmental clean-up in case of brownfield sites.
- Recognizing that not all future development will occur within existing neighborhoods, the Plan seeks to identify "smart growth" areas (contiguous to existing development and/or serviced by existing infrastructure) within and at the urban edges of Madison and guide new development and redevelopment to these areas when possible. The Comprehensive Plan includes a Peripheral Area Plan to guide development along the edges of the City.
- Permanently preserve important open space features and corridors within and at edges of Madison.

In addition, the recent redevelopment efforts in the East Isthmus area including the Union Corners redevelopment, the continuing public and private investment resulting in higher density development in the Capitol area and the intensification of the University Avenue corridor through projects like the Hilldale mall expansion, exhibit the City's commitment to accommodating new population and employment growth in its existing neighborhoods. The University of Wisconsin, is also proposing a significant expansion of its facilities within its existing campus boundaries by utilizing infill and redevelopment opportunities. These redevelopment efforts continue to strengthen Madison as the largest activity center in the region and increase transit-supportive densities within its neighborhoods.

Middleton's Comprehensive Plan also includes several growth management measures including:

- Discourages low density development within ¼ mile radius of transit stops
- Encourages infilling and redevelopment of existing commercial areas where appropriate
- Recommends purchase of land or development rights to key parcels near existing and planned rural roadways designated for farmland preservation

APPENDIX A – REAL ESTATE MARKET ANALYSIS REPORT

APPENDIX B – SUMMARY OF LAND USE WORKSHOPS