Small-Scale Infill and Redevelopment Best Practices in Middleton, WI

Professional Project Submission

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Cover Image Credit: Infill Real Estate Development by MUTI.

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EXECUTIVE SUMMARY

Urban living is currently experiencing a resurgence in popularity in cities throughout the United States. Because of this resurgence, and because of its lack of available land on the periphery, the City of Middleton hopes to encourage infill and redevelopment in its urban areas as a strategy to provide the land and opportunities necessary to accommodate its expected population growth over the next several decades. This report is intended to provide guidance about best practices for infill and redevelopment along the University Avenue Corridor that can be used by developers and City staff alike as they design, negotiate, and review development projects. The best practices listed in this report reflect recommendations found in the University Avenue BUILD Plan (2009), Middleton's Comprehensive Plan (2006), and other redevelopment guideline documents produced by various states and municipalities across the country.

INTRODUCTION

In recent years, urban living has again grown popular. Currently, there is a high market trend for urban places with walkable, human-scaled places (Denver Issues Paper 2014). Many developers and municipalities have turned to infill and redevelopment projects as a way to provide new opportunities for urban living in urban centers instead of continuing to develop on the urban fringe. The City of Middleton, with its expected increase in population growth and current lack of available, developable land on the periphery, hopes to encourage infill and redevelopment throughout its more urban areas.

Infill is usually defined as development on vacant parcels within developed areas where public infrastructure is available. Redevelopment can be defined as development on developed but underutilized parcels, typically where the land value is higher than the improvement value (Denver Issues Paper 2014). Redevelopment sites include sites containing abandoned or underutilized buildings, which can be converted to new and more productive uses through a process called "adaptive reuse" (Regulatory Strategies 2006). For the purposes of this report, infill and redevelopment together can be defined as development that occurs on vacant or underutilized parcels of land served by existing infrastructure and located within existing urban areas.

There are many benefits to implementing infill and redevelopment strategies. The four main benefits include a reduced need for greenfield development, neighborhood revitalization, more efficient use of existing infrastructure, and a decrease in air pollution. By encouraging higher-density development within existing urban areas, there is less demand for greenfield development, or sprawl. Infill and redevelopment can create development projects that become catalysts for neighborhood revitalization and economic vitality, such as a new commercial center or housing project. These types of development projects often provide creative ways to meet a community's existing housing needs, as well as encourage development around public transit corridors (Regulatory Strategies 2006). Due to the decreased need for new roadways and other public utilities, adaptive reuse projects make more efficient use of existing public infrastructure. The higher density found in most infill and redevelopment projects can encourage walkability within a neighborhood, leading to decreases in traffic and air pollution (Envision Utah 2002).

For its many benefits, there are also barriers to infill and redevelopment that often prevent these developments from happening. These include historic preservation considerations, inadequate existing infrastructure, cost, inflexible land use regulations, parcel characteristics, legal challenges, and unsupportive neighbors. While infill and redevelopment may be cheaper than greenfield development in some instances, this is not usually the case. Existing infrastructure may not be sufficient to support a higher-density development and may therefore need to be replaced in order to service the area, increasing the project cost. Depending on previous land uses of the parcel, environmental cleanup may be necessary which would also increase project cost. Parcels available for infill and redevelopment are often those that have sat vacant for a reason (Denver Issues Paper 2014). This might be because of a parcel's unique characteristics such as overall area or lot width that prohibit development due to inflexible zoning and land use regulations. It may also be that the parcel alone will not be able to generate the kinds of economic returns that merit its development, and therefore it may need to be combined with

other parcels to form a larger development area. In addition to these challenges, there may be neighboring property owners and residents who are unsure of the proposed new developments and who do not wish to see the character of their neighborhood fundamentally changed (Regulatory Strategies 2006).

PURPOSE OF THIS REPORT

The City of Middleton hopes to encourage infill and redevelopment in its urban areas but is currently lacking a set of guidelines for how to direct these development projects. Development projects brought before the City are zoned as planned development districts and negotiated and reviewed on a case-by-case basis. This has resulted in fragmented developments that do not have uniformity in design, character, or land use.

This report is intended to be used in conjunction with the Planned Development District (PDD) (sec. 10.82 in Middleton City Code) to establish guidelines for suitable infill and redevelopment projects that can be used by both developers and City staff to streamline the PDD negotiation process and provide continuity and cohesion between projects. This document will help to facilitate the process of obtaining approval for infill and redevelopment projects which can be costly and time-consuming.

LOCATIONS FOR INFILL

Infill and redevelopment are typically practiced in existing urban areas. In areas of single-family development, this typically manifests as developing vacant lots within a neighborhood, while taking care to conform to the existing neighborhood atmosphere. Commercial, mixed-use, and multi-family infill and redevelopment often take place in denser urban areas, such as along arterials and commercial corridors, or in places with higher volumes of traffic, both vehicular and pedestrian. This is the type of infill and redevelopment in which the City of Middleton is most interested.

When considering a site for infill or redevelopment, especially those projects that will involve some type of housing component, there are several important locational aspects that should be considered:

- *Public Transport:* easily accessible, servicing desired destinations
- *Employment:* located within the neighborhood or along public transit routes
- *Neighborhood Amenities*: affordable shopping, grocery stores, libraries, parks, banks
- *Community-based Services*: medical, financial, legal, and language services
- *Schools and Daycares*: located nearby
- *Security*: safe areas with low crime rates

In Middleton, there are three main corridors that are well-suited for infill and redevelopment: Allen Boulevard, Parmenter Street, and University Avenue. Allen Boulevard and Parmenter Street are show in red in Figure 1 below, while University Avenue is shown in yellow. Because the City has already developed plans to guide the (re)development of both Allen Boulevard and Parmenter Street (Allen Boulevard BUILD Plan, Parmenter Neighborhood Plan), this document

will focus on the University Avenue Corridor and the best practices for infill and redevelopment there.

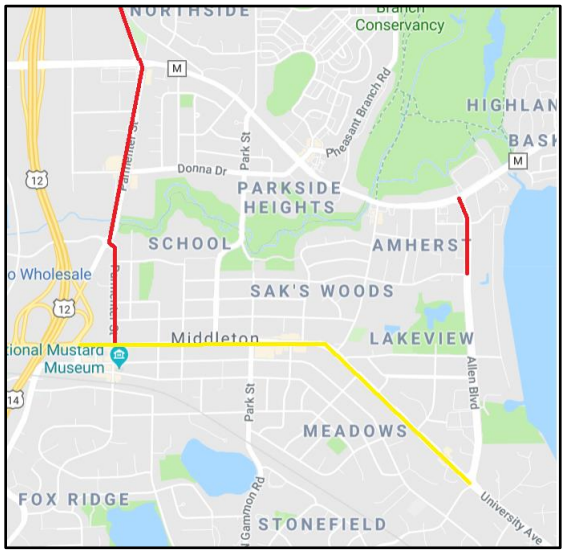

Figure 1. Redevelopment Corridors in Middleton.

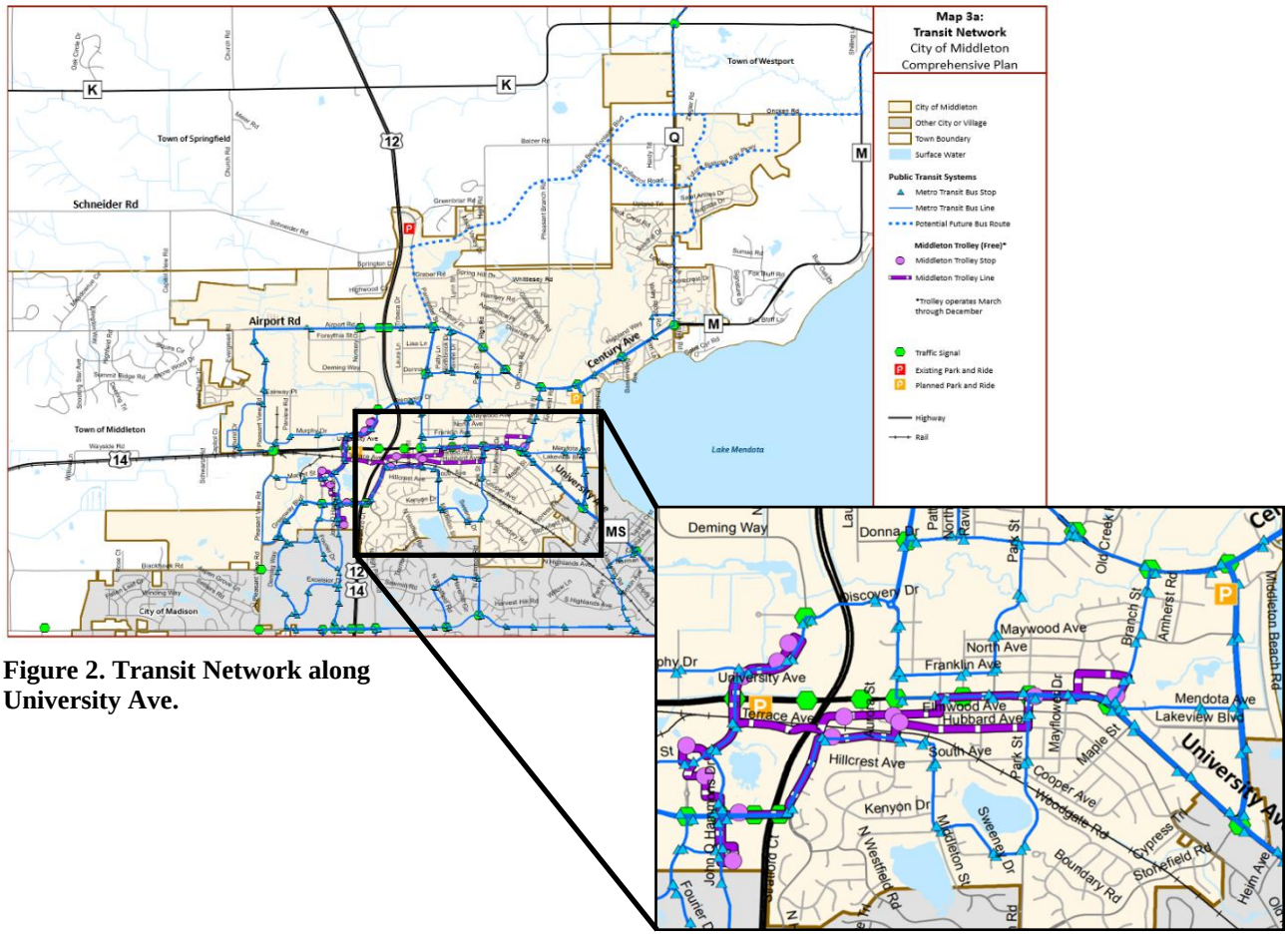

Figure 2. Transit Network along University Ave.

University Avenue stretches east to west through the City of Middleton, connecting to the City of Madison in the east and intersecting with Highway 12 in the west. It serves as an arterial road, with a high volume of people and vehicles traversing this area daily. This area, particularly the section that stretches from the Highway 12 interchange in the west to the intersection of University Avenue and Allen Boulevard in the east is well-suited to commercial and mixed-use development, much of which could take place through redevelopment and infill.
The University Avenue Corridor is well-served by public transit, as shown in Figure 2 above. Metro transit bus lines #70, #71, and #72 connect the City of Middleton to the City of Madison and have stops along University Avenue that run fairly frequently. This area is also served by the Middleton Trolley which runs Monday – Saturday in the evenings and connects to downtown Middleton.

The Corridor is also well-served by schools, parks, and other nearby neighborhood amenities, as Figure 3 below shows.

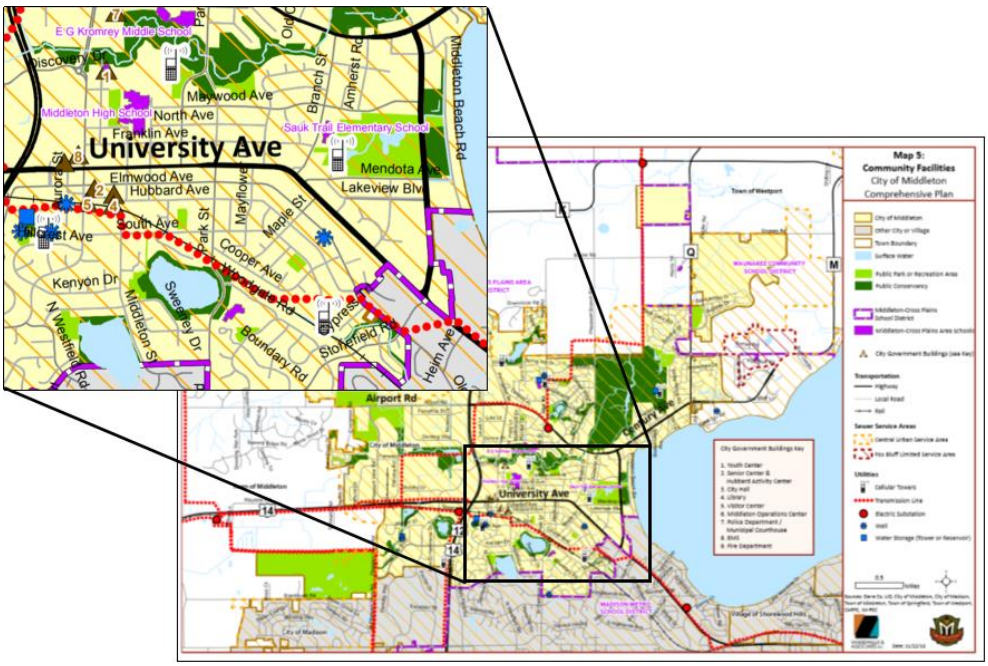

Figure 3. Community Facilities along University Ave.

In 2009, the City of Middleton received a BUILD plan for the University Avenue Corridor that detailed challenges to and opportunities for the development and redevelopment of the area. This plan was not adopted. However, much of the data gathered regarding infill and redevelopment possibilities throughout the Corridor is still relevant, and many suggestions outlined in the BUILD plan can be found in the following "best practice" guidelines.

BEST PRACTICES

TYPES OF INFILL & REDEVELOPMENT

The terms infill and redevelopment generally pertain to projects focused on housing, commercial, and mixed-use developments. In some cases, a single redevelopment project could contain all these types of uses. These projects are often created as medium- to high-density developments, meaning that they have a higher intensity of land use demonstrated by more dwelling units per acre or a larger amount of improved area on a lot than low-density developments.

Best Practices:

- Infill housing in existing urban areas
- Encourage infill and redevelopment in presently developed commercial areas, where appropriate

The City of Middleton understands that there is limited land available for residential and business growth within existing city limits, as well as an increasing lack of affordable housing. This is a concern as Middleton expects to see population and commercial growth in the coming decades. Pursuing infill and redevelopment strategies is a way to utilize existing infrastructure to provide the opportunities for growth and change within the City that are currently lacking.

Middleton's Comprehensive Plan lists several objectives that pertain to the types of infill and redevelopment that will be encouraged within the City:

- Accommodate a significant amount of population growth in Middleton over the next 20 years through redevelopment and infill development on existing properties
- Encourage the infilling of housing in urban areas that make more efficient use of existing infrastructure
- For presently developed commercial areas, encourage infilling and redevelopment where appropriate.
- Prevent the proliferation of strip commercial areas along streets and highways

Successful infill and redevelopment projects will incorporate these objectives into their designs.

SETBACKS

The Middleton Code of Ordinances sets minimum setback requirements for structures in each of its zoning districts. Currently, there is a 20' minimum setback requirement for business zoning districts along University Avenue. Redevelopment projects should instead comply with a maximum setback of 15'. This is the same setback required in Middleton's Traditional Neighborhood Development (TND) District, which is a district designed for human connection and walkability

Best Practices:

- Max. front yard setback of 15'
- Max. side yard setback of 8'

while providing a mix of land uses. This will require buildings to be located nearer to the street which will help achieve the Corridor's goal of a more pedestrian-friendly environment.

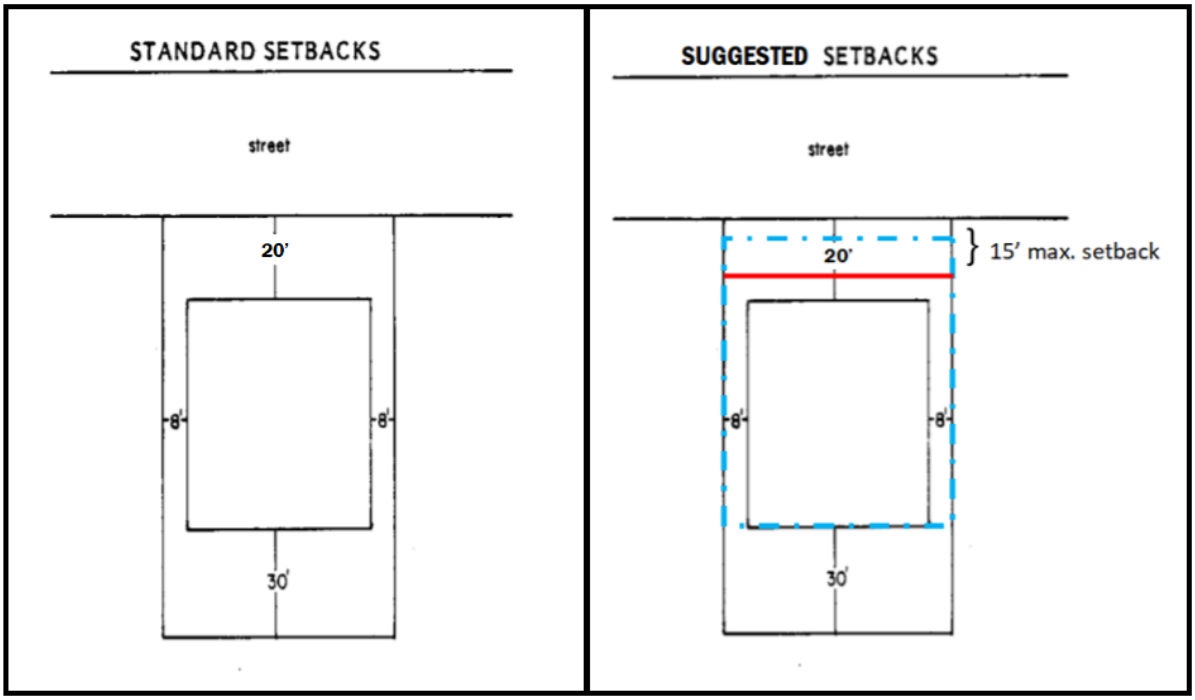

Figure 4. Standard vs. Suggested Setbacks along University Ave.
Source: City of Middleton Zoning Code.

Side yard setbacks should also be reduced from their current minimum of 8' to a maximum of 8'. If a building is located on a corner, the side yard setbacks should fall between 10' and 20'. Figure 4 shows the difference in building footprint that can result from setting maximum front and side yard setbacks. These recommended setbacks follow "Main Street" principles and will populate the University Avenue Corridor with buildings that are located closer together and much nearer to the street.

HEIGHT RESTRICTIONS

Urban areas, especially those located along arterial streets, are more capable of supporting taller buildings and developments. This is mainly because these areas function as centers of city life and often provide a great deal of mobility throughout an area (FHA). University Avenue functions as a commercial arterial roadway, which served over 20,000 vehicles per day in 2006 (BUILD Plan). As a commercial arterial, University Avenue can support taller developments than other areas of Middleton.

Human-scaled buildings encourage pedestrian use of a corridor by creating a sense of enclosure. To be considered "human-scaled," a building's height should be at least one third of the street width, as measured from opposing building fronts. In areas of University Avenue where buildings are located closer to the street, street width is a minimum of 90' wide. This means that buildings along University Avenue should stand at least 30' tall. The ratio of building height to street width should be between 1:2 and 1:3, which means that in the above example, the building should be between 30' and 45' tall (3 to 4 stories).

Best Practices:

- Residential buildings: 2-3 stories tall
- Commercial/Mixed-Use buildings: 5 stories or less
- Single-story buildings discouraged

The BUILD plan recommends that residential buildings along University Avenue be 2 to 3 stories tall. By the calculations above, I recommend that office, retail, and mixed-use buildings along University Avenue should stand no more than 5 stories (60') tall. Single story buildings do not provide the desired density for the area and are discouraged.

Buildings of Appropriate Height	Buildings that are Too Short
 Three-story residential building Source: Omaha Plan	 One-story commercial building
 Two-story office building	 One-story commercial building

Figure 5. Building Heights.

MINIMUM LOT SIZE

Minimum lot size is often determined by minimum square footage of a parcel and by minimum lot width. These restrictions can be challenging to accommodate for lots that may be excellent candidates for infill or redevelopment due to the common problems of irregular shape or small size that often plague these parcels. With this in mind, lot sizes should not the sole factor in restricting development potential. Flexibility is required between the City and the developer to allow these types of redevelopment and infill projects to move forward.

Best Practices:

- Consider lots 5,000 sq. ft. or more for redevelopment/infill
- Flexible negotiation between City and developer regarding lot size, width, and depth encouraged

In the B-1 Office District and the B-2 General Business District, which make up a majority of the University Avenue Corridor, the minimum area of a lot is 7,200 square feet, and the minimum lot width is 60 feet. Most of the lots around the Corridor meet both of these requirements. However, for those lots that do not meet these requirements, the City should work with developers as part of the PDD negotiation process to determine the type of development that would be appropriate for that lot size. I recommend that lots with a minimum area of at least 5,000 square feet be considered acceptable for PDD development, as this will include almost every parcel along the University Avenue Corridor.

MINIMUM LOT DENSITY

There are many ways to measure lot density including minimum lot area per dwelling unit, number of dwelling units per acre, and floor area ratio (FAR). For its residential zoning districts, the City of Middleton's Code specifies minimum lot area per dwelling unit as its standard for lot density. In the recently retired PDD-Infill zoning district, which included most urban infill projects, the density requirement was a FAR of .7, meaning that the gross building floor area was equivalent to 70% of the total lot area. Figure 6 explains FAR in more detail.

Best Practices:

- Residential projects: 8-12 dwelling units per acre
- Commercial/Mixed-Use buildings: FAR between 1 and 2

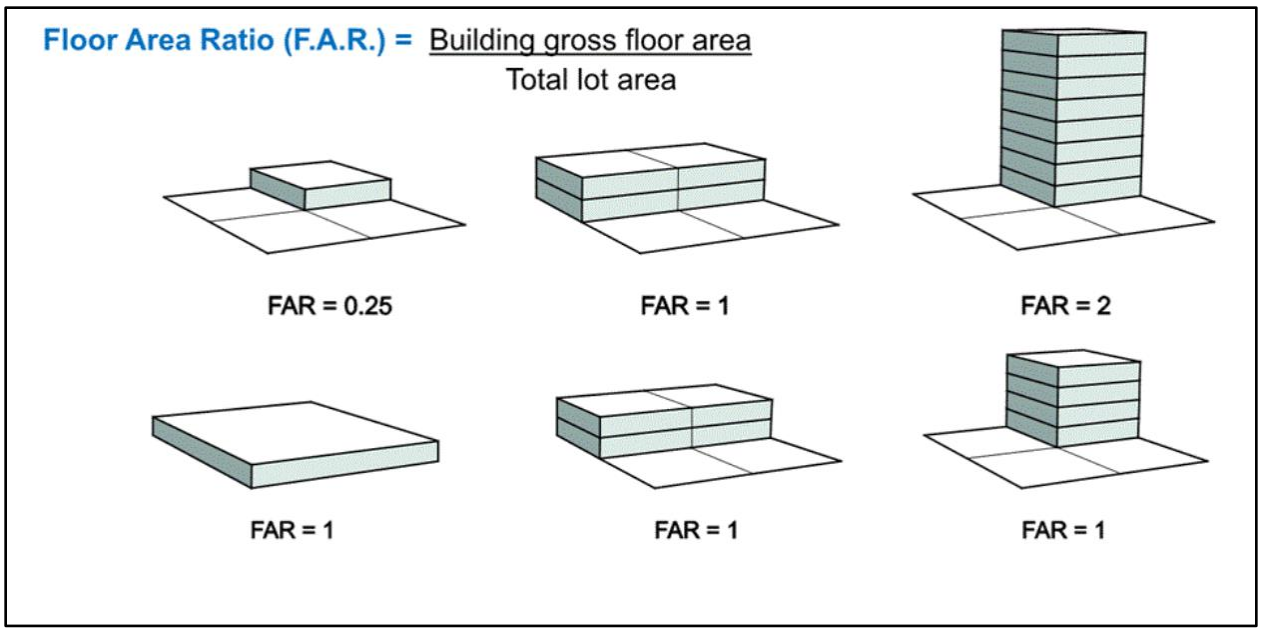

Figure 6. Floor Area Ratio (FAR).

I recommend that residential redevelopment and infill projects along University Avenue develop at a density between 8 and 12 dwelling units per acre. This is the density that cities like Verona, WI allow in their urban residential zoning districts. For projects that are less residential-focused, the FAR should be between 1 and 2, which is an increase from the former PDD-I's FAR requirement and matches density requirements used in places like San Francisco and Oregon. These requirements, along with height and setback considerations found elsewhere in this document, will help to promote density along the University Avenue Corridor.

LOT COVERAGE

Most cities set limits for the percentage of impervious surfaces allowed on a single lot. Almost all these limits require impervious surfaces to make up less than 50 percent of the lot. However, these limits make more sense in areas of greenfield development (EPA 2009). Urban areas do not require these strict limits because these places tend to be well-served by public parks and open space.

Best Practices:

- Allow up to 100% impervious surface coverage on all lots within University Avenue Corridor

I recommend that land along the University Avenue Corridor should be allowed a maximum impervious surface coverage of up to 100 percent. This is a typical practice in downtowns and along main streets throughout the United States including in Oregon, San Francisco, and Leander, TX. Nearby parks and open space provide recreational opportunities and help to mitigate stormwater runoff produced by these developments. In San Francisco, developers are encouraged to use rooftops for green space to mitigate runoff even further. Because University Avenue is served by several accessible parks located within one half mile of the street, the area will be able to accommodate an increase in impervious surface coverage. Figure 7 shows the various parks serving the University Avenue Corridor.

These parks include:

- Lakeview Community Park (east)
- Parisi Park (north)
- Fireman's Park (west)
- Middleton Station Park (south)
- Meadows Park (southeast)

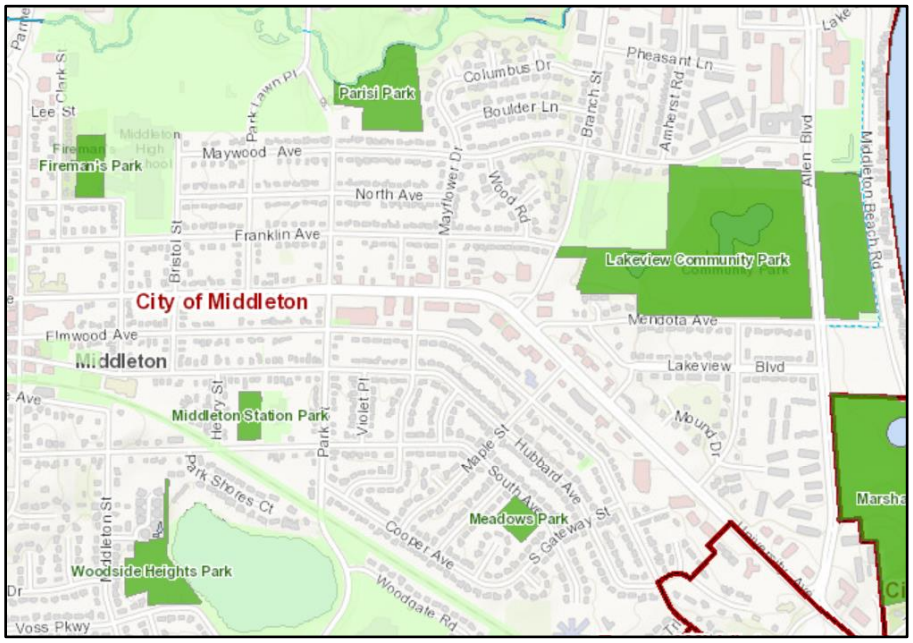

Figure 7. Green Spaces Within .5 Mile of University Ave.
Source: DCI Maps.

BUILDING ORIENTATION

Buildings in the University Avenue Corridor should be street-oriented. Currently, this is not the case, as many of the current buildings reflect the original vehicle-centric site design and building orientation from this corridor's development in the 1970s and 1980s (BUILD Plan). This means that the main entrances for many buildings along this corridor are located adjacent to parking lots, instead of adjacent to the sidewalk and street.

Best Practices:

- Locate buildings near the street
- Create prominent, street-oriented, pedestrian entrance
- Create a continuous front setback between existing and new buildings

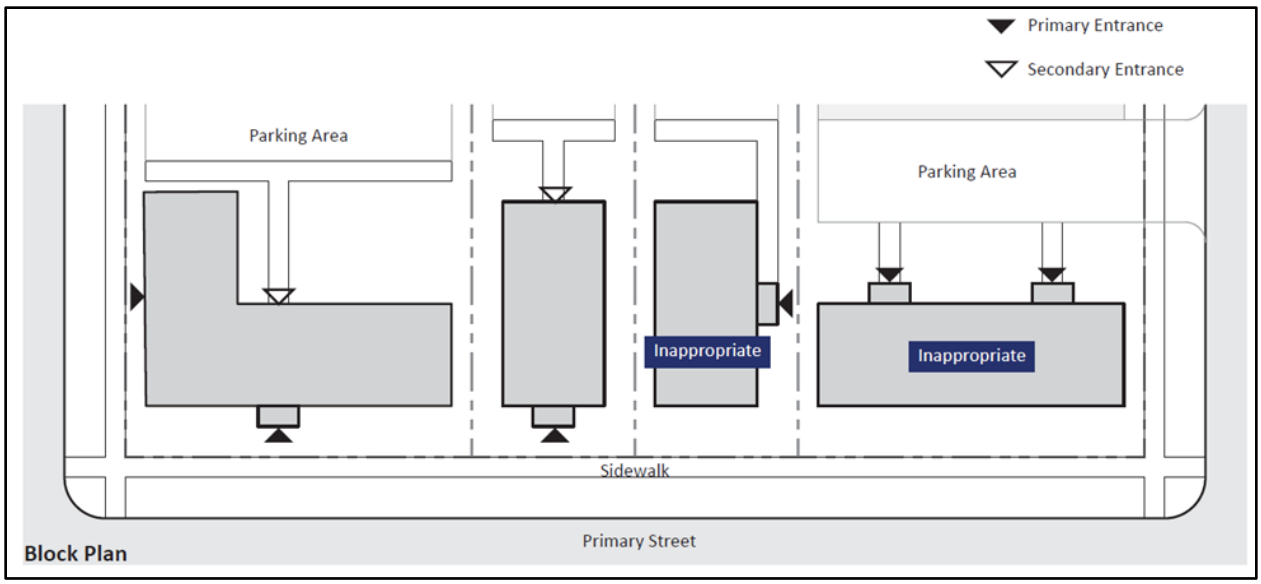

Figure 8. Main Entrance Orientation.
Source: Omaha Infill & Redevelopment Design Guidelines.

The BUILD Plan suggests that developments and redevelopment projects should orient buildings on each site to front University Avenue. The buildings should be located near the street with a minimal front setback. A prominent pedestrian entrance should be located on the front, or street-side, of the building, with no blank walls facing the street. Buildings along University Avenue should strive to create a continuous setback so that the buildings are uniformly located near the street.

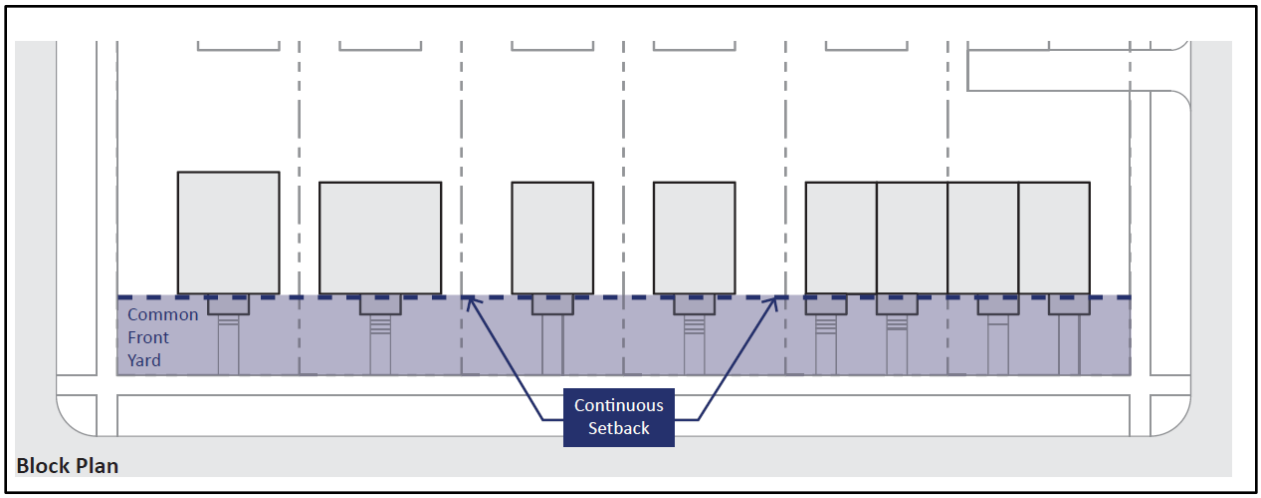

Figure 9. Continuous Setback.
Source: Omaha Infill & Redevelopment Design Guidelines.

Appropriate Building Orientation	Inappropriate Building Orientation
 Buildings are located close to the street and share a common setback.	 Blank wall with no pedestrian entrance facing University Avenue.
 Buildings are located close to the street with prominent pedestrian entrances.	 Building is not oriented to the street – no pedestrian entrance. Building is located far from the street.

Figure 10. Building Orientation.

PARKING REQUIREMENTS

The City's Parking Ordinance does not apply to lots zoned as PDDs. Therefore, it is important to explain the City's expectations for parking and parking requirements for infill and redevelopment properties located along University Avenue. Currently, there is an excess of surface parking lots surrounding University Avenue.

To minimize parking requirements for infill and redevelopment projects I recommend the City require fewer parking spaces for commercial uses than stated in the Parking Ordinance and encourage street parking on streets surrounding University Avenue. For example, Franklin Avenue and Elmwood Avenue are both available for street parking, as well as the connector streets that connect University Avenue to Franklin and Elmwood Avenues. Figure 11 below shows a small sample of the streets along University Avenue that are available for street parking.

Best Practices:

- Minimize surface parking spaces and lots by encouraging:
  - On-street parking
  - Shared-access lots
  - Rear-access parking
  - Structured parking
- Minimize parking spaces required for commercial uses

Figure 11. Streets Available for Street Parking.

In the BUILD Plan, the City recommends several other parking strategies to decrease the amount of open parking lots along University Avenue including shared parking, rear-access parking, and structured parking. Shared parking involves using one parking lot and one access drive for multiple buildings of different uses. Because different land uses reach peak parking demand at different times of the day and week, it is possible to share parking spaces. For example, a multi-family residence could share a parking lot with an office building. Figure 12 demonstrates the peak parking times for various land uses.

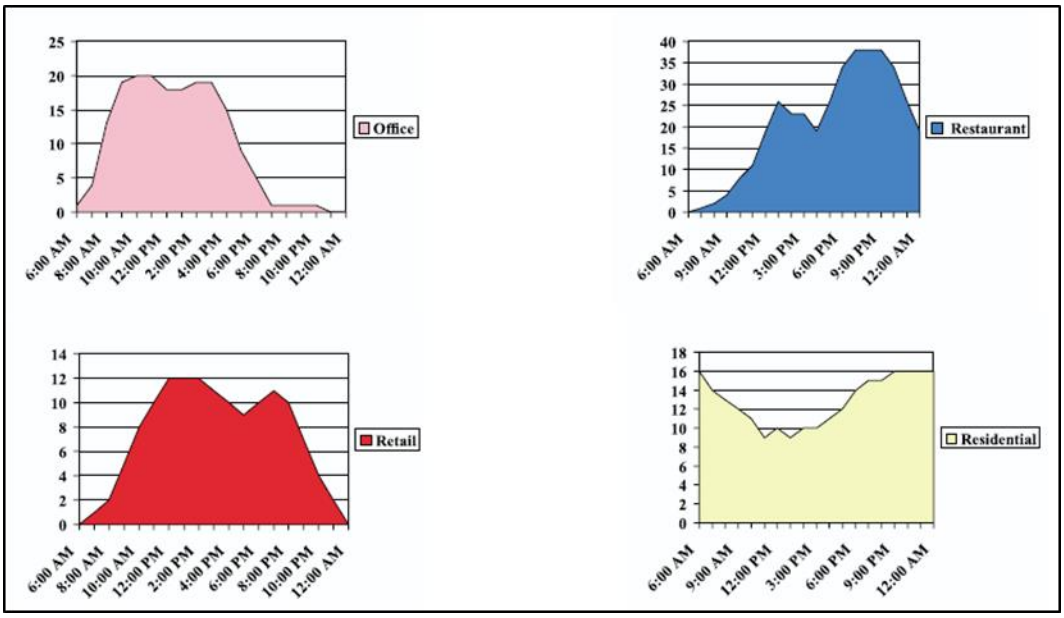

Figure 12. Peak Parking Times.
Source: Envision Utah.

Rear-access parking is another strategy to minimize surface parking lots along University Avenue. These parking lots are located in the rear of buildings situated near the front of the property along the street. A shared access drive serves multiple buildings and/or businesses and allows local traffic to get off the main road. The third frame of Figure 13 demonstrates the appropriate orientation of rear-access parking.

Figure 13. Rear-Access Parking.
Source: El Paso, TX Code.

Still another option to eliminate excess surface parking lots is to create structured parking. Below-grade structured parking is ideal, but above-grade is acceptable as well. In the past, the City of Middleton has helped finance several of these projects through TIF.

PARCEL CONNECTIVITY

In the BUILD Plan, the City focused on making the University Avenue Corridor safer for alternative transportation options, such as walking, biking, and transit, in addition to accommodating the automobile. One of the most important components of this is creating a walkable area, with safe spaces for pedestrians to walk and visit. There are currently sidewalks

along both sides of University Avenue that range from 4'-5' in width. Infill or redevelopment projects along Corridor should continue to create 4'-5' sidewalks that connect to building entrances to enhance walkability throughout the area.

Best Practices:

- 4'-5' sidewalks with walkways connecting to building entrances
- Connect to existing bicycle network where possible

I recommend that redevelopment projects throughout the Corridor should also include connections to the existing bicycle network and open space amenities. Figure 14 depicts the bicycle network for the eastern portion of the City of Middleton. Figure 15 shows a closer view at the bicycle network that exists around University Avenue. Several roads that intersect University Avenue, including Parmenter Street, Park Street, Branch Street, and Allen Boulevard are equipped with bike lanes that connect to parks, bike trails, and green spaces in the area.

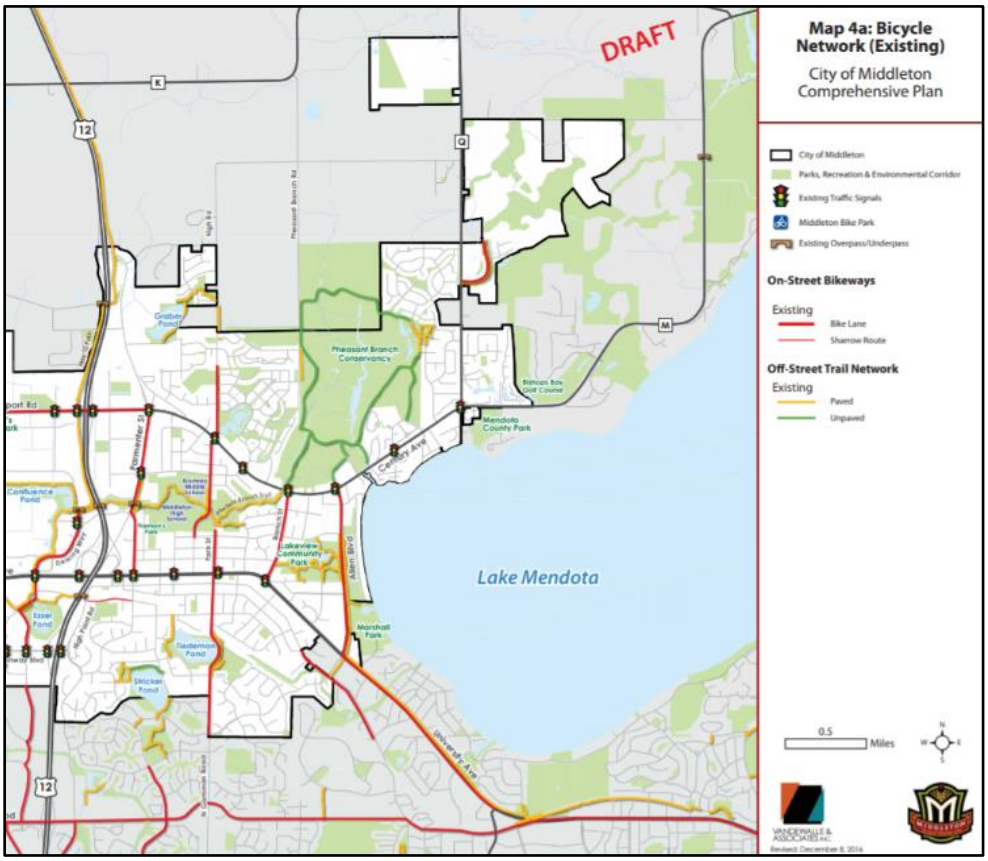

Figure 14. City of Middleton Bicycle Network.
Source: City of Middleton.

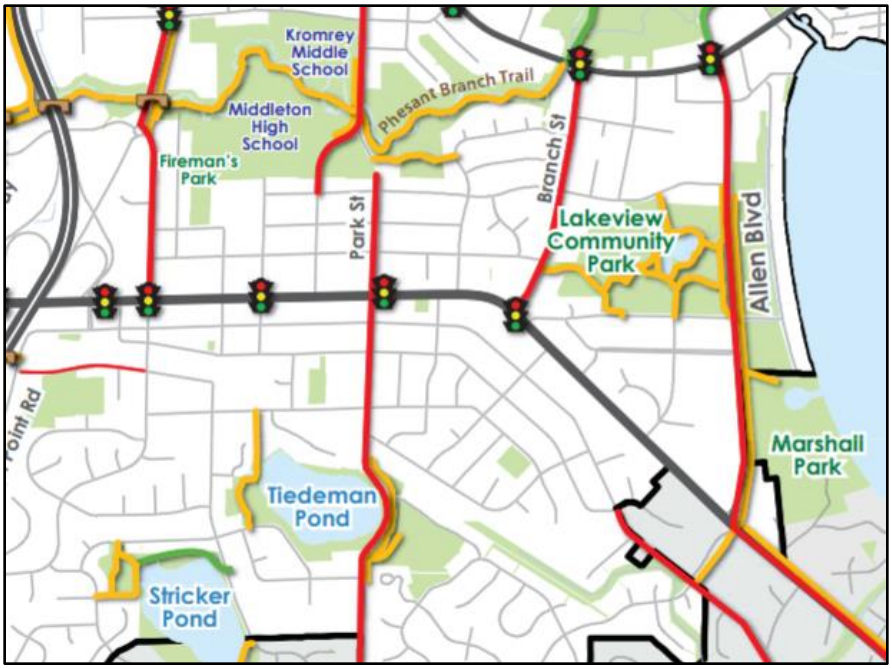

Figure 15. Bicycle Network around University Ave.

CONCLUSION

This document provides a set of guidelines, or best practices, for infill and redevelopment projects in the City of Middleton. Developers and City staff should use these guidelines to streamline the development review and PDD negotiation process.

These best practices are only a beginning. In the future, The City of Middleton should consider creating and implementing an overall development plan for the University Avenue Corridor, much like the BUILD plan from 2009. This development plan should include design guidelines for the Corridor in order to encourage uniformity and cohesion in development in the area. With these tools, the University Avenue Corridor will develop into an area that the City can be proud to display to residents, businesses, and visitors alike.

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