transportation . connectivity . development

BROADWAY TIF DISTRICT **MASTER PLAN**

BROADWAY
TOWN OF FORTVILLE
TIF DISTRICT MASTER PLANS
SOUTH MADISON

AMERICAN
STRUCTUREPOINT
INC.

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ACKNOWLEDGMENTS

The following individuals provided their considerable insight into the creation of the Fortville Broadway TIF District Plan. The following individuals listed contributed relevant ideas that responded to changing needs of the community.

TOWN OF FORTVILLE

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Jerry Bridges, AICP (MCCOG)
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Bob Hiday
Pat Calhoun
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John Kitterman

LOCAL STAKEHOLDER ORGANIZATIONS

Fortville Chamber of Commerce
TenWest Center for the Arts
Hancock County Visitors Bureau
Hancock County Community Foundation
Hancock County Historical Society
Fortville Action Inc.
Main Street Property and Business Owners
Hancock County Health Department
Hancock County Economic Development Council
Mt. Vernon School Corporation
Hancock County Commissioners
Hancock County Plan Commission
Hancock County Highway Department
Duke Energy


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01 PROJECT SUMMARY


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The case for why walkability and pedestrian infrastructure is necessary, and is often times an easy story to tell. Walkable communities promote healthier lifestyles. Walkable communities oftentimes have less vehicles on the road, which reduces the emissions and pollution levels in the community. Walkable communities encourage sociability amongst the residents by providing places for shopping, dining, and recreational activities. Overall walkable communities provide a unique balance of physical amenities and emotional outlets that over time, greatly contribute to the quality of life in a town or community.

Walkability is quickly become a differentiator when it comes to private development and real estate decisions. More and more community residents want to be within safe and comfortable walking distance to the destinations that meet their everyday needs, such as shops, places to eat, services, parks, and good transportation options that can take us downtown, to jobs, and other places we want to go. The question of why make communities walkable is clear. The question of how to make a community walkable is oftentimes more difficult to answer and ultimately relies on an integrated approach to private development and public infrastructure. An approach that allows for both innovation and experimentation in design as well as adaptability in implementation to accommodate new or evolving treatments and trends. The Town of Fortville and more specifically, the Broadway TIF District is proof that adaptability and innovation can be used to define and plan for change in a community.

The Broadway Street area is currently, and will continue to be influenced by a number of ongoing strategic planning initiatives and state infrastructure improvements, including the *Connect Fortville Thoroughfare Plan*, the Main Street Corridor Improvements, and the signalization of US 36 and SR 13. Additionally, Town leadership and community stakeholders have recently finalized policy documents that will set the bar high for development use and visual aesthetic within the Broadway district. While well positioned, the transformation of private development will be dependent on market demands and the varying economy of the region, and could occur at a slow and incremental pace. To complement and enhance the development-led transformation, the Town is also working to identify capital improvements that they can both lead and fund. These capital improvements include amenities that will not only enhance the visual character of the Town, but also include those projects that increase the pedestrian, bicycle, and vehicular connectivity in and through the community. The *Broadway TIF District Master Plan* focuses on providing a series of prioritized, and phased capital improvement recommendations so that Fortville Town leadership can work to identify the necessary funding requirements, implementation partnerships, and private development impacts along the corridor, in both a near-term and long-term horizon.

In addition to providing clear and action oriented recommendations for infrastructure improvements, the *Broadway TIF District Master Plan* seeks to provide continuity to an area at the center of several ongoing planning and design initiatives. The corridor improvements identified for the public right-of-way not only provides the desired and necessary pedestrian and vehicular connections along one of the Town's primary thoroughfares, but also integrates the long-term vision for mixed-use, pedestrian oriented development.

THE STUDY AREA

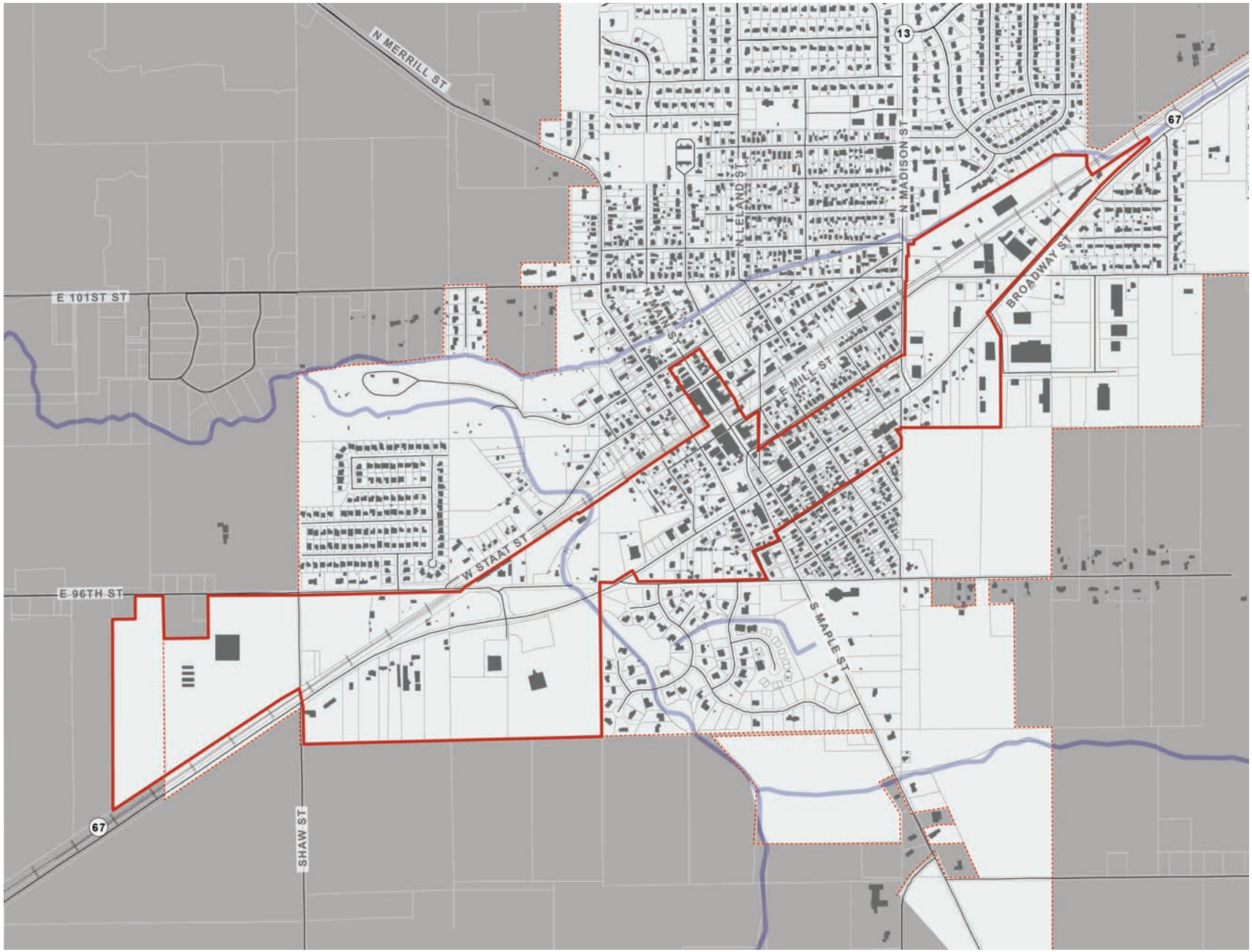
The Town of Fortville, Indiana is located about 12 miles northeast of Indianapolis in the northwest corner of Hancock County. The town is situated between the Town of Pendleton and the Town of McCordsville, and is less than 1 mile east of the limits of the City of Fishers. Fortville was originally established along a defined crossroad location at what is now Merrill Street and US 36/State Road 67/Broadway, and to this day it remains a crossroads to multiple levels of traffic. Significant amounts of traffic utilize State Road 67 travelling to and from Indianapolis every day, and State Road 13 provides a convenient connection to Interstate 69 to the north.

Within the Town of Fortville, the TIF district covers approximately 250 acres surrounding the Town's historic downtown core. The Broadway TIF District is located in the center of the Fortville community and is home to not only historic downtown, but the majority of the community's commercial and retail development. The district shares boundaries with the Fortville Business Park TIF District to the east and the South Madison TIF District to the south.

The Broadway district is also in the early stages of a huge transformation. Recently developed policy prescribes denser, pedestrian-oriented, high-quality development, which will increase the future property tax revenue for the area. By establishing the Broadway TIF district now, the Town will be able to leverage incremental property tax revenue from increased assessed value resulting from new investments. This additional property tax revenue can be used in the Broadway area and can be invested in much-needed infrastructure that will continue to support future development and redevelopment in the heart of the community.

A tax increment finance district (TIF) is an economic development tool used by local governments to encourage development or redevelopment in an area of the community where private investment has not occurred or is difficult because of a number of different limiting factors. The districts are often established in areas needing reinvestment because of deteriorating or undesirable public facilities, obsolete or substandard buildings, or potential brownfields, among others. As an alternative, districts can also be created to encourage and incentivize private investment in strategic, undeveloped areas of the Town that are not currently served by transportation and utility infrastructure and other needed services.

The Town of Fortville has established 3 TIF districts within the community. The Broadway TIF District is approximately 250 acres, encompasses historic Main Street, and extends approximately 1 mile to the east and west along US 36/State Road 67.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PLANNING APPROACH AND METHODOLOGY

The planning process for the *Broadway TIF District Master Plan* utilized a design-driven process that incorporated public input and investigation of area wide opportunities and constraints.

The *Broadway TIF District Master Plan* process, while built on research and public input, allowed for flexibility and evolution of the existing conditions within the district. The planning process for the TIF district and the framework of recommendations was designed specifically to accommodate and plan for the evolution of the physical and policy conditions.

The scope of this planning effort was comprehensive and included field studies and analysis of previous planning recommendations, policy statements, ongoing, and planned capital improvement projects and current redevelopment efforts. The end goal of the process is a flexible set of capital improvement recommendations for the Broadway corridor that integrates and balances the land use, zoning, and development character recommendations with the functional needs of the right-of- way and the vehicular traffic traveling to and through the Town. The study area analysis discussed in Section 02 includes a series of vignettes that outline and analyze information gained from site visits, review of regional and local studies completed to date, ongoing studies, and initiatives, ongoing and planned capital improvement projects as well as additional data collected during the planning process. In addition to allowing the corridor conditions and current and previous planning work to inform the process, a steering committee of 13 local and county officials was formed to provide direction to the process. The group met monthly from September 2016 to April 2017 to provide guidance on the plan's goals, infrastructure, and development recommendations, and strategic implementation steps.

In addition to the regular steering committee meetings, the design team held informal stakeholder interviews with four additional groups in October 2016 to discuss specific topics including downtown Fortville, tourism, business attraction and retention, education, industry and workforce development, transportation, and utility needs. A group discussion was also used to identify Town-specific policy needs that could be used to dictate how this planning document should be organized.

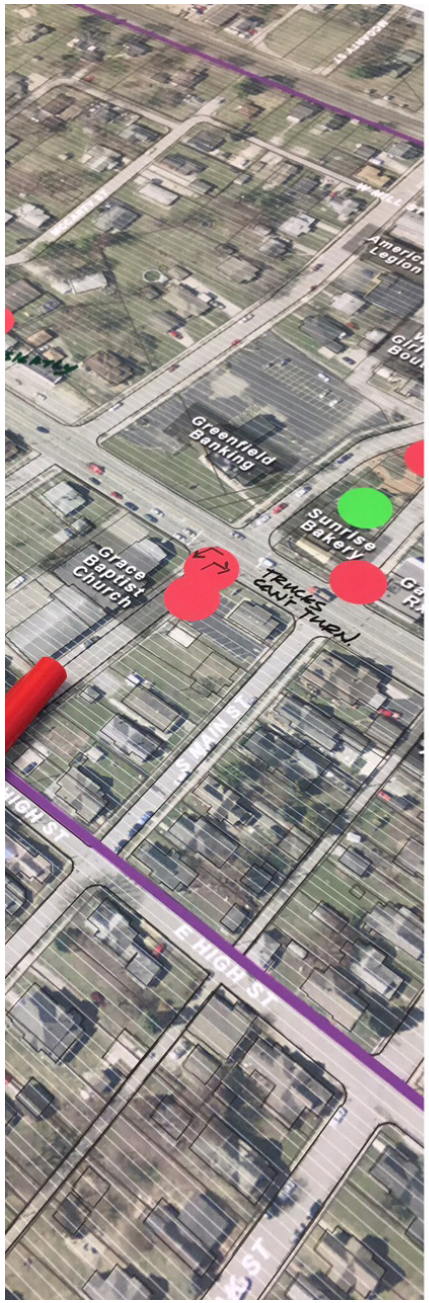
PUBLIC OUTREACH

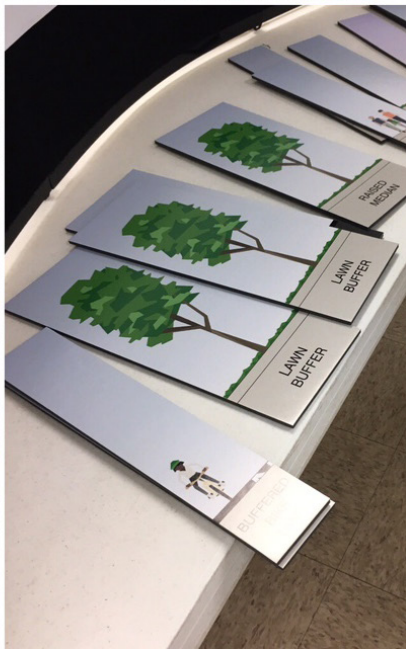
The *Broadway TIF District Master Plan* process incorporated public input early in the process. A public open house was held on Thursday, November 3, 2016, at the Fortville Community Center to introduce the public to the master planning process. The meeting was advertised by utilizing printed yard signage, window flyers, and a direct mailing to property owners. The initial meeting yielded between 30 to 40 attendees throughout the open house. Meeting attendees were asked to participate in a series of exercises aimed at providing information on the following:

- Community Connectivity
- Development Districts and Intended Character
- Corridor Character and Facilities

Additional information was provided on TIF districts and how the revenue can be used, and future infrastructure projects currently planned for the area.

The feedback gained during this initial public meeting allowed the design team and the steering committee to better understand the development interest and intent from a public perception for the Broadway district. Of primary interest were the exercises designed to gain understanding on development districts and intended character, and future corridor character and facilities.





Development Districts and Intended Character

Meeting attendees were asked to identify what type of development they would like to see throughout both the Broadway and South Madison TIF Districts. Size development categories were identified that illustrated a different mix of uses, scale, and character. During the meeting, a design team member facilitated the exercise and was available to answer questions regarding development type and scale. The station contained two boards that identified the six development categories and a handout that attendees used to mark their development areas. What we found was that the public agreed that the urban character of downtown should spill out onto the Broadway corridor so that the primary intersection of Maple Street/Main Street and Broadway is flanked by multi-story mixed use buildings. The public also showed us that the urban mixed-use character was not desirable along the entire length of Broadway Avenue.

This public feedback was discussed during the steering committee and was used during the *Broadway- Main Design Guidelines* audit which is discussed in Section 02.

Corridor Character and Facilities

In an effort to understand which amenities should be placed into the public right-of-way, meeting participants were asked to create their ideal roadway cross section by utilizing a series of puzzle pieces, pre-marked with a vehicular, pedestrian, or aesthetic component.

During the exercise, participants gravitated to landscape elements that included functional space for pedestrians and bicyclists. Spaces reserved for pedestrian amenities including bicycle racks, tables and chairs, and seating areas were also used often. Nearly every cross section created included the separation of functional pedestrian amenities from the roadway by integrating a planted median or tree buffer. Each cross section that was created was photographed and was then used as a guide when creating the recommendations discussed during the process.

The public was invited to stay involved in the project throughout the process by reviewing and commenting on steering committee materials and recommendations located on the project website. Additionally, a direct link was placed on the Town's website as well to further promote the project.

A second public meeting was held on Saturday, June 3, 2017 at the Fortville Community Center in conjunction with Community Ball Day. Participants were able to review the preliminary recommendations for both the long range, and interim plan options, along with a summary of the planning process and critical next steps for implementation. This community meeting was also advertised using yard signs and window signage. Approximately 20-30 individuals stopped by during the two-hour open house.

PRIMARY CORRIDOR WIDTH

100'-0" RIGHT OF WAY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02 EXISTING CONDITIONS + RELATED INITIATIVES


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While not completely linear in nature, a traditional design process utilizes research and public input to inform a series of design recommendations. These design recommendations are then tested which often times involves additional public engagement and technical review. During a traditional process, the existing conditions of a site are typically known quantities and while they do change over the course of the planning study, no large transformations take place. At its most simplistic level, the research and on-the-ground existing conditions inform a series of design recommendations, which are then used to set policy and future critical strategies for the area. This fairly linear process allows for a plan's recommendations to be tailored specifically to a static set of existing conditions, which allows for technical accuracy, well-defined critical path strategies, and often times immediate implementation.

The *Broadway TIF District Master Plan* process, while built on research and public input, allowed for flexibility and evolution of the existing conditions within the district. The Broadway district is in the early stages of a massive transformation. A transformation that will integrate private development and public investment at local, regional, and state levels.

When an area is primed for change it necessitates strategic planning on a variety of fronts. In order to proactively plan for the area's transition, the Broadway corridor and the surrounding TIF district are the central focus for a variety of planning and construction initiatives. The planning process for this TIF district master plan was undertaken specifically to accommodate and plan for the evolution of the physical and policy conditions. To clearly delineate the existing conditions from the ongoing strategies and initiatives, this section of the plan is broken up into two parts. Using both fieldwork and analysis of past planning documents, a general summary of the area's land use, zoning and transportation system is provided. When applicable, the current condition is supplemented with a summary of the ongoing related initiative and the impacts the ongoing work will or could have on the Broadway corridor or TIF district. In nearly every instance, the ongoing strategy or related initiative was being completed concurrently to the *Broadway TIF District Master Plan's* process, with each being led by individual Town staff, or planning/design consultants.

EXISTING CONDITION

Maple Street/Main Street

Maple Street changes how it is classified, its name, and its character throughout the TIF District. Maple Street, also known and Fortville Pike to the south, is classified as a major collector and plays a significant role in moving traffic between Fortville and Greenfield, the county seat of Hancock County. The corridor sees approximately 3,300 to 4,400 vehicles daily. The portion of this corridor from High Street northwest to Broadway Street lies within the TIF District. This segment of roadway is urban in nature and consists of two travel lanes with curbs. Both sidewalks and above-ground utilities are present on both sides of the roadway, and there are street light standards on utility poles.

From Broadway Avenue northwest, Maple Street is classified as a local road. Maple Street merges with and transitions to Main Street at which point the character changes to what is typical of a small town downtown. This area of the corridor consists of 2 travel lanes with curbs, on-street parking, street lights, and sidewalks on both sides of the roadway. One and two-story commercial buildings are immediately adjacent to the sidewalks. The corridor transitions from downtown in character to urban in nature in the last block of the TIF district, which ends at Church Street. The last block of the TIF district consists of 2 travel lanes with on-street parking and sidewalks on both sides. With the exception of one commercial building, all the buildings in this block are residential. From this point on, the corridor consists of 2 travel lanes without curbs and sidewalks on both sides of the roadway. This section of the roadway is also lined with traditional single-family neighborhoods.

The speed limit along Maple Street within the TIF district is 25 mph and increases to 45 mph as it exits the Town and heads south. The speed limit of Main Street remains 25 mph north of the TIF district.

RELATED INITIATIVE

RELATED INITIATIVE:
MAPLE STREET/ MAIN STREET RECONSTRUCTION

Currently, the Town is undertaking a corridor improvement study for Main Street beginning at Broadway and extending north to Church Street. The purpose of the project is to improve the downtown Main Street corridor by allowing for a more pedestrian friendly space and to replace aging infrastructure. The major focus of this project is to improve safety for pedestrians along the corridor, but consideration is also being given to improving safety for motorists as well. The project will identify ways parking bump outs at crosswalks, wider sidewalks and ADA curb ramps at all pedestrian crossings can be integrated into the public right-of-way. Revised parking configurations, additional vehicular signage and traffic calming elements will also be recommended to improve safety and efficiency for vehicles in the area. The project is being jointly financed by the Federal Highway Administration and the Town of Fortville.

The intersection of Main Street, Maple Street, and Broadway will be a critical component of the Main Street improvements project and will need to be a transitional element between the downtown core, and the proposed redevelopment areas along Broadway in the future. The revised intersection is proposed to include additional landscaping, street lighting and a broader pedestrian plaza area. These amenities and improvements will need to be designed in such a way to allow for the future right-of -way configuration of Broadway proposed as part of the long range recommendations outlined in Section 05.

Construction on the Main Street corridor improvements is set to begin in October 2019 and will likely continue through the 2020 construction season.

Northern Half

The Main Street corridor improvements images were completed as a part of the design process lead by VS Engineering and Context Design. The images included on this page were presented to the Fortville Town Council in June of 2017.

CURRENT CHARACTER AND LAND USE

Currently the corridor is a blend of residential and commercial uses with a combination of churches and civic uses dispersed within. The center of the district features the historic downtown core that includes restaurants, retail shops, and offices. While the uses along Main Street are local and regional destinations, the environment and infrastructure in the area promote walkability from the intersection of Broadway and Main Street, north to Staat Street. In contrast, the primary arterial corridor of Broadway is bordered not by structures, but with parking lots and utility poles from the west edge of town to the east. The commercial uses along the corridor are primarily destination based such as car washes, strip mall type retail centers, and fast food restaurants. These uses rely on vehicular traffic volumes and require minimal levels of pedestrian connectivity. The infrastructure in the area is not supportive of connectivity, making these businesses a primary stop for commuting traffic on their way into or out of town. The secondary streets in the TIF district are predominantly lined with single-family residential homes, some of which have visible signs of improvement, and some of which are vacant.

In 2014, the Town of Fortville worked to develop a Comprehensive Plan outlining several strategies that responded to community opportunities and challenges. During that planning process, the community expressed the desire to revitalize downtown, focus on schools, promote community growth, and to improve the Town's transportation infrastructure. During the comprehensive planning process, a Future Growth Concept Map was created to help the group envision what the Town should look like from a land use perspective, with an emphasis on the Broadway corridor remaining a mix of commercial and residential uses. After establishing this area as a TIF District, the Town refined the Future Growth Concept Map and worked to develop a clear vision for future development within downtown and the adjacent areas of the Broadway TIF District. The vision for the area supported a mix of commercial and residential uses, but put new emphasis on providing higher densities and on providing more sensitively designed building types that serve multiple users. Additionally, a connection was defined between the development characteristics of the future and the supporting vehicular and pedestrian infrastructure systems. In 2015, the *Broadway-Main TIF District Design Standards* were presented and required the integration of Broadway corridor amenities such as sidewalks, tree plantings, and site development standards including building materials, lighting levels, and parking lot placement.

The current adopted future growth plan, and the *Broadway-Main TIF District Design Standards* together provide the framework for a development focus of continued commercial development and a revised look at what residential housing is within Fortville's core development area. The intent is to create a mixed-use setting that is representative of an urban environment where businesses and commercial units provide services to their patrons along the street level of downtown, and residential living becomes available on a second or third floor.





BEVERAGES



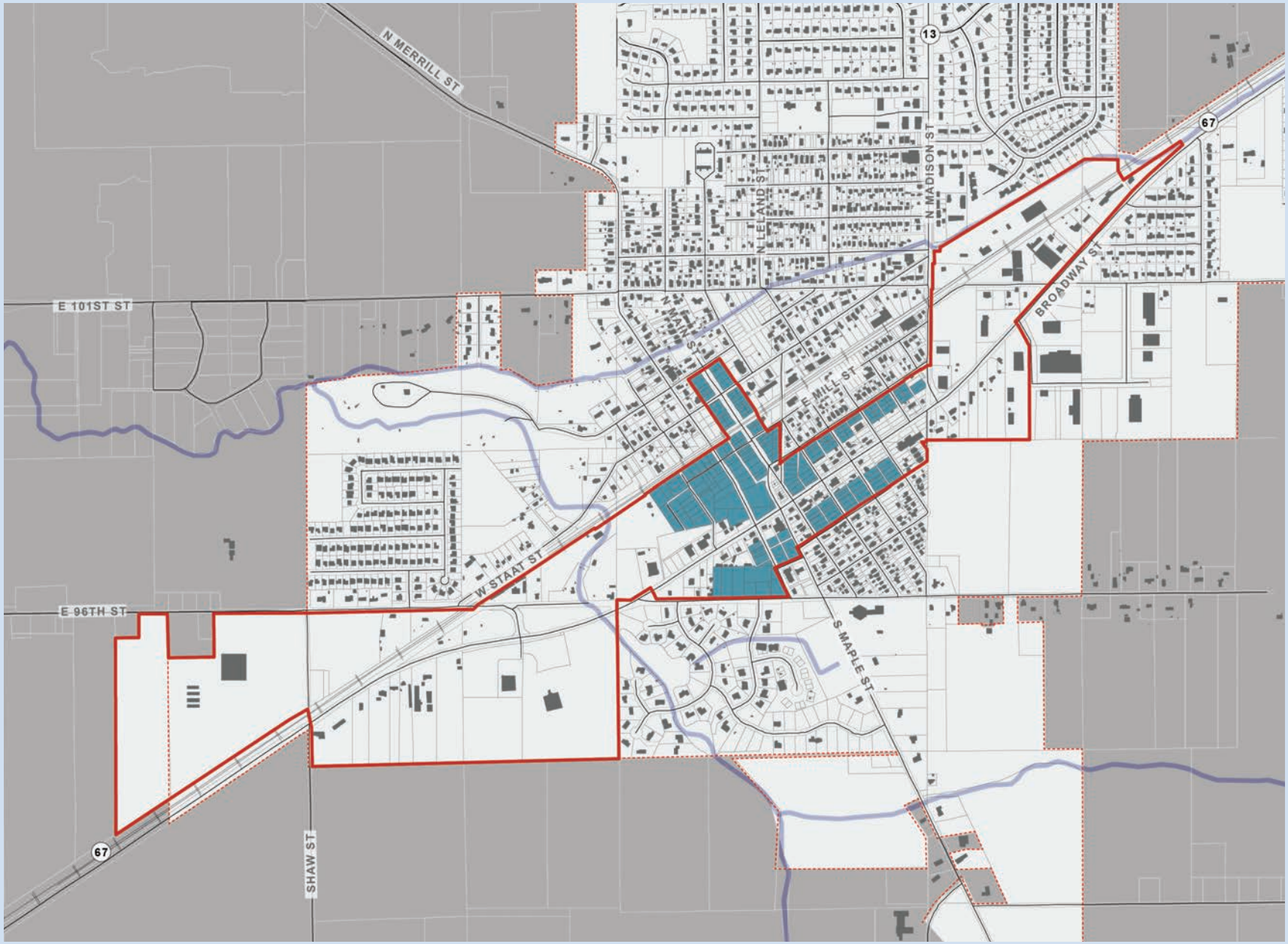

RELATED STRATEGY: CURRENT CHARACTER AND LAND USE

During each planning process completed since the 2014 *Envision Fortville Comprehensive Plan*, Town leadership and stakeholders have delivered a cohesive vision, to retain the community's small-town charm by encouraging growth that is sustainable, planned, interconnected, and neo-traditional. Part of the small-town charm comes from the businesses that call Fortville home, but a part of it comes from site specific qualities such as architectural character, building materials, and overall architectural scale. Authentic, community character is difficult to reproduce, so as Fortville's Broadway corridor redevelops the Town will need to constantly balance the current needs of development, with the scale and character of the Town.

During the site review and existing conditions analysis portion of the master planning process, the existing properties along the corridor were inventoried based on their use and development pattern. As an outcome of that process several properties were identified as having cultural significance to the community. While these properties are not designated as historical or as preservation sites, the architectural character does provide a direct link to the small-town character the Town wishes to maintain.

While these properties are within the TIF District, and influenced by the Comprehensive Plan's Future Growth Concept Map and the *Broadway-Main TIF District Design Standards*, it is important to show how these properties could be integrated into the redevelopment of the Broadway corridor. As development interests increase within the area, each property should be discussed with Town leadership and staff to determine what should remain or be preserved.

Part of the small-town charm comes from the businesses that call Fortville home, but a part of it comes from site specific qualities such as architectural character, building materials, and overall architectural scale.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DISTRICT ZONING

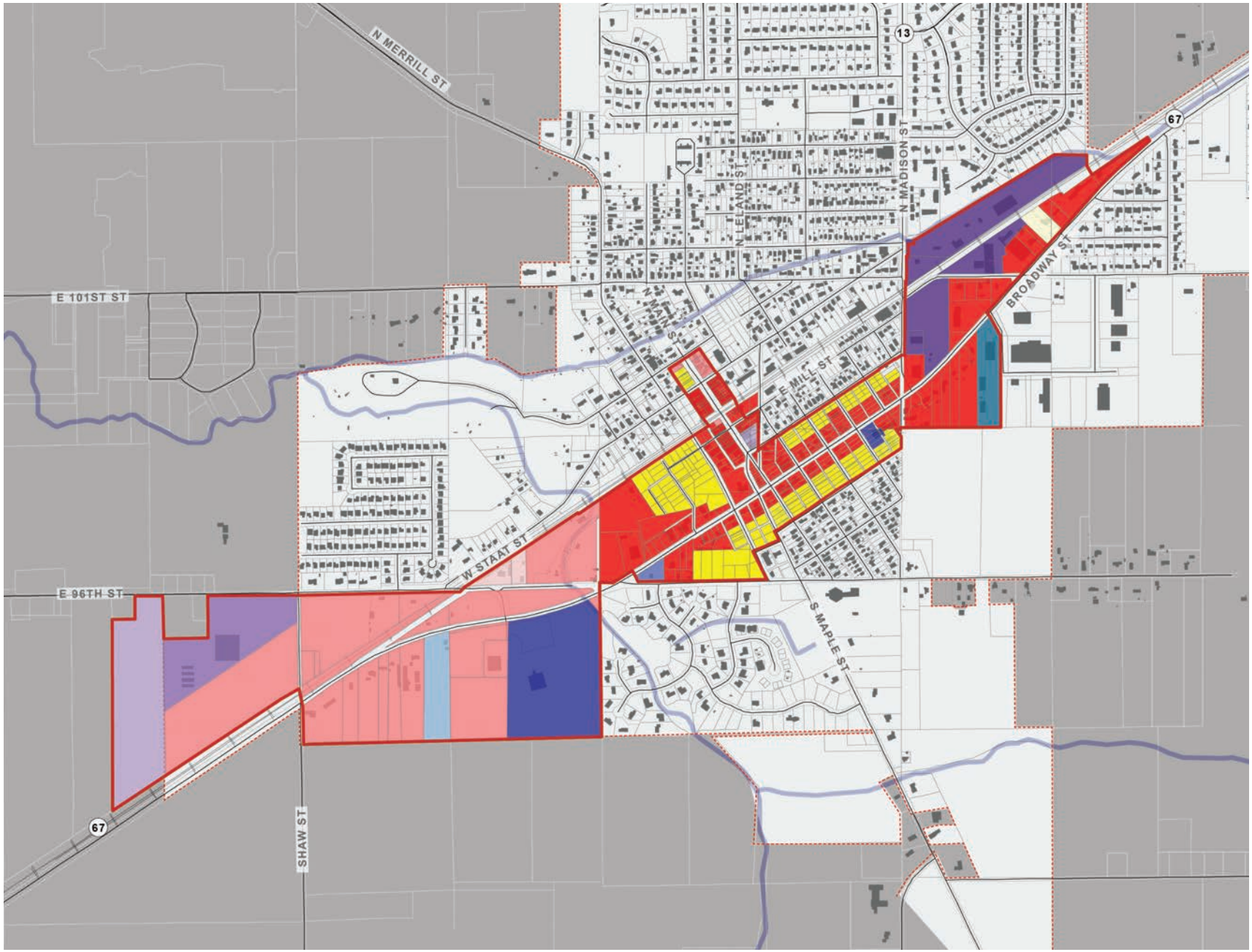
Currently, zoning and development standards in the Town of Fortville are administered by Hancock County. The district is currently an eclectic mix of commercial, light industrial, business and residential uses of varying intensities. The core area from Garden Street to Madison Street is predominately zoned as Community Commercial which allows for slightly denser, mixed-use buildings that accommodate restaurants, offices, retail shops, and upper floor residential options. Outside of the central portion of the district, the standards allow for a diverse set of uses but with more suburban site development standards that include deeper setbacks and flexibility when it comes to siting building and parking lot footprints.

While the Hancock County base zoning standards provide for the incorporation of mixed-use developments, the site development standards do not require the more urban characteristics the Town desires for this area. The Broadway TIF District utilizes an additional zoning policy to further restrict the traditional County zoning standards for commercial development. Adopted in 2016, the *Broadway-Main TIF District Design Standards* are meant to ensure that all future development within the boundaries of the Broadway TIF District will be of a higher design/aesthetic than would otherwise be required by the minimum standards and regulations of the County's zoning ordinance. These standards are overlay district standards, wherein, there are base zoning district standards that apply as well, and that what exists in the *Broadway TIF District Design Standards* is more restrictive than what would otherwise be allowed elsewhere in the town. Additionally, a 2014 Fortville Overlay to the County Zoning Ordinance applies, which sets some unique regulations on setbacks, development standards, and architectural standards.

WHAT IS AN OVERLAY DISTRICT?

Overlay zoning is a regulatory tool that creates a special zoning district, placed over an existing base zone(s), which identifies special provisions in addition to those in the underlying base zone.

The overlay district can share common boundaries with the base zone or cut across base zone boundaries. Regulations or incentives are attached to the overlay district to protect a specific resource or guide development within a special area.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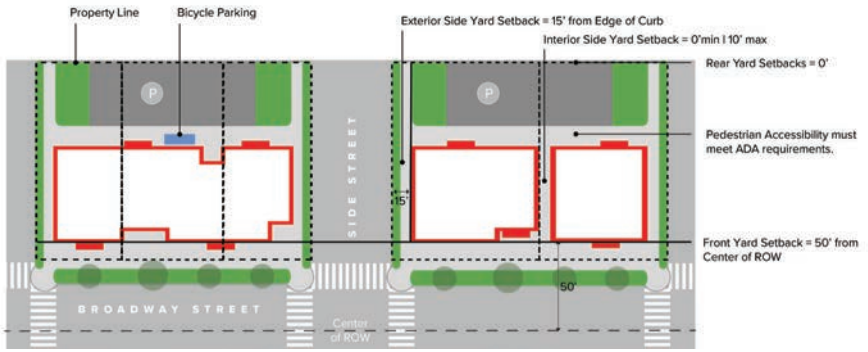
RELATED INITIATIVE: DISTRICT ZONING

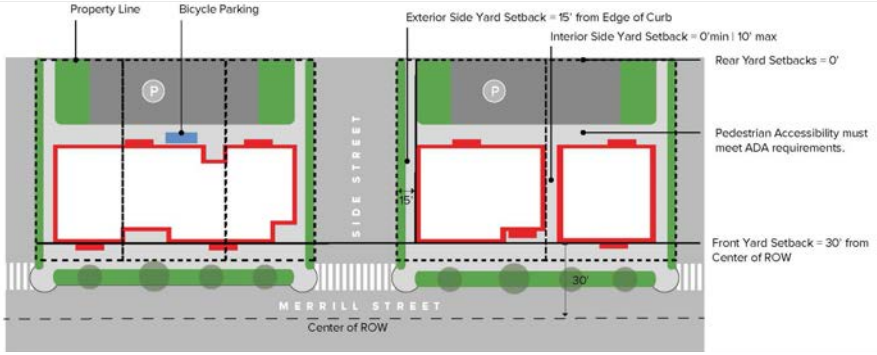
During the planning process for this master plan study, the *Broadway-Main TIF District Design Standards* were undergoing further review concurrently. While the standards have been adopted, and are currently being used as a baseline for development along the US36/SR 67 Broadway corridor, additional improvements and changes are being incorporated into the policy document. As a part of this planning study, a high-level audit was conducted of the Design Standards. The audit was intended to provide review and guidance to the Town on items that may need to be amended, omitted, or addressed in some way to further enforce the design character intended for the TIF district and the corridor itself. The results of the audit were compiled into a memorandum which is included in Appendix A.

The *Broadway-Main TIF District Design Standards* provide for the expansion of public right-of-way along the Broadway corridor. The Design Standards do not however provide for the dedication of such land. Additional policy statements related to private development and right-of-way dedication are being drafted and reviewed as part of the *Connect Fortville Thoroughfare Plan*. These policy statements will allow for the formal dedication of right-of-way as properties redevelop.

High Visibility Corridor Standards



Moderate & Low Visibility Corridor Standards



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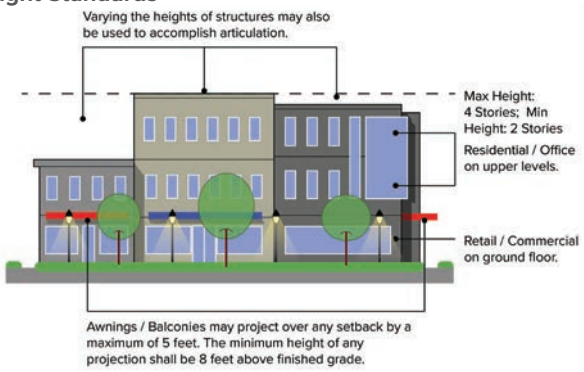
Building Height Standards



Building Material/ Facade Standards

The Broadway-Main TIF District Design Standards were prepared to provide an illustrative guide that encouraged high-quality development throughout the TIF district. New, non-residential and multi-family development must comply with the recently adopted design standards. All images taken from the Broadway-Main TIF District Design Standards document.

UTILITIES

Sanitary Sewer infrastructure is provided throughout the Broadway planning area by the Town of Fortville Wastewater Treatment Plant. The Town of Fortville operates a Class II, 0.95 million gallon per day (MGD) oxidation ditch treatment facility located at 500 W. Church Street. The collection system is comprised of 100% separate sanitary sewers by design with no overflow or bypass points. Current residences in the study area operate and discharge to the separated sewer system. Any new development must be supported by sanitary sewer infrastructure per current regulations.

The Fortville Water Works Department operates a 1.4 MGD groundwater treatment plant. New development will be supported by the extension of the existing Fortville water infrastructure. The Streets & Distribution Department is responsible for operating and maintaining the Town's water reservoirs, pump stations, and water mains.

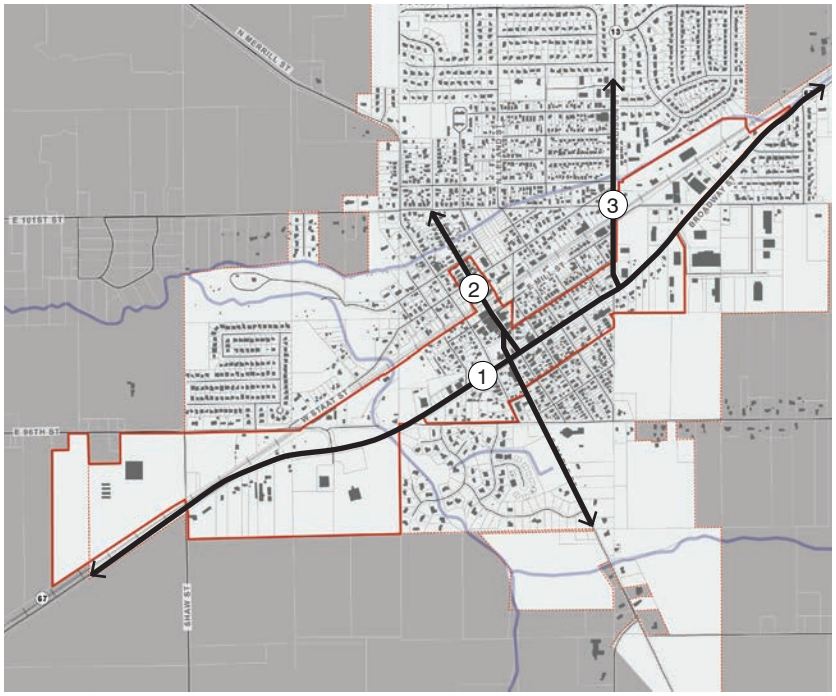
The Town of Fortville is one of the few communities in the State of Indiana with completely separate stormwater and wastewater systems. Currently, stormwater is managed along the Broadway corridor by periodic drain inlets along the face of the curb. The spacing of the existing inlets is not consistent, and at some locations along the corridor it is unclear if existing elevations would allow for positive drainage. Additionally, there are portions of the Broadway corridor that are not curbed, or have a curb with a minimal height. While undocumented, in these areas stormwater runoff is likely handled on private property, or on adjacent side streets.

As future redevelopment and development efforts take hold along the corridor, or if improvements are made within the right-of-way, modifications will be necessary to adequately provide for stormwater drainage within the right of way and for adjacent private development.

TRANSPORTATION NETWORK

Since the earliest days of Fortville, the Town has been a hub for regional traffic. Being established around an existing crossroads has only intensified over time, and the amount of vehicles that pass through the Town will continue to increase as the surrounding area develops. Because of the proximity and accessibility of larger towns and businesses, residents are finding the northeast corridor outside of Indianapolis to be an excellent location as it captures the feeling of living in a more rural setting without being too far from the comforts and amenities of Indianapolis. According to the Indianapolis 2035 Long Range Transportation Plan, it's projected that the northeast corridor will grow substantially, roughly 200,000 people in Hamilton and Hancock Counties combined. With the influx of new residents comes an expected increase in vehicular traffic, and an increase in potential conflicts with pedestrians.

A key component of the Town's transportation network also serves as a central division line for the TIF district and the Town itself. Broadway (US 36/SR 67) is the primary northeast to southeast corridor in Fortville, and is classified as a major arterial. The corridor accommodates nearly 13,000 vehicles per day southwest of Maple Street, and around 9,900 vehicles northeast of Maple Street. It is a primary commuter route connecting both cars and truck traffic to Indianapolis, communities in Hancock County and regionally through Interstate 69. The transportation network key map was created to represent specific thoroughfares within the Broadway district. Roadway specific characteristics and configuration are outlined below.



TRANSPORTATION NETWORK LEGEND

1. *Broadway Street*
2. *Main Street (North), Maple Street (South)*
3. *Madison Street*








Broadway (US 36/SR 67) is the primary northeast to southeast corridor in Fortville, and is classified as a major arterial. The corridor accommodates nearly 13,000 vehicles per day southwest of Maple Street, and around 9,900 vehicles northeast of Maple Street.

Broadway/US 36/SR 67

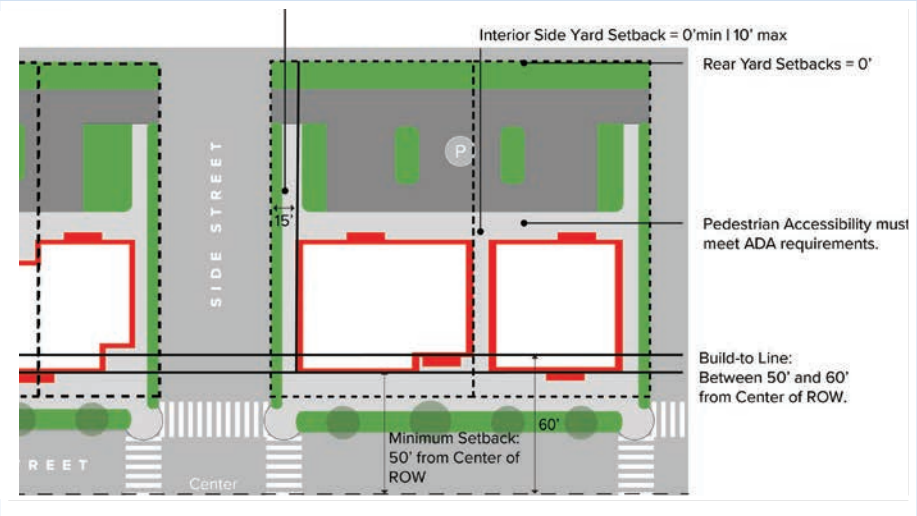
Broadway, also known as US36/SR67, is classified as a major arterial. It serves as the principal means for traffic to pass through Fortville from east to west, which includes traveling through the heart of Fortville's downtown core. Broadway sees approximately 13,000 vehicles per day and serves not only local traffic, but regional traffic as well. The roadway provides for a connection to east Indianapolis, Lawrence and McCordsville to the southwest, and Alfont, Ingalls, Pendleton, SR 9, and SR 38 to the northeast. The roadway also provides an important connection to the south through the intersection with Maple Street/ Fortville Pike and to the north through the connection with Madison Street/SR 13.

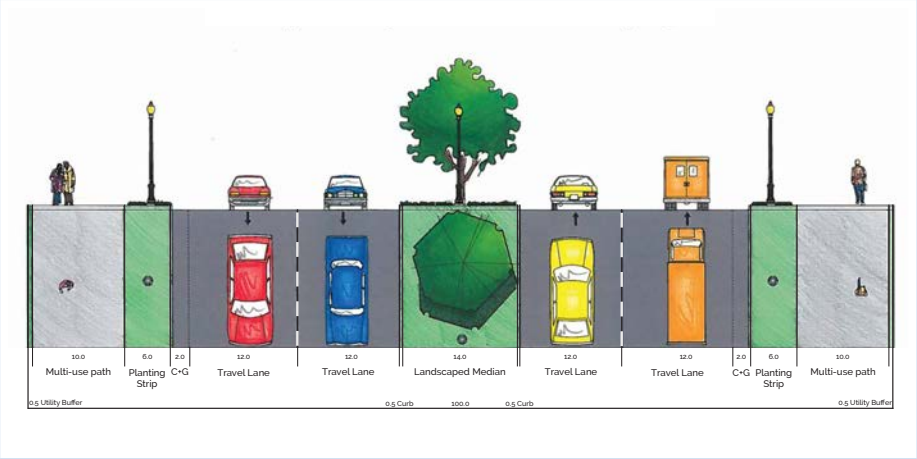
The character of Broadway from Garden Street east to Madison Street is generally older auto-oriented development in nature. This section of the corridor consists of 4 travel lanes with curbs. In the block from Walnut Street to Madison Street, the street narrows to 3 travel lanes with curbs. From Garden Street east to Maple Street, above-ground utilities are present on the north side of the roadway that connect across Broadway to utility poles with street light standards on the south side of the roadway. From Maple Street east to Madison Street, the above-ground utilities shift to the south side of the roadway and connect across Broadway to utility poles with street light standards on the north side of the roadway. Similar to other older auto-oriented commercial corridors, there are a number of curb cuts along Broadway. Parking and other uses are situated immediately adjacent to the roadway, resulting in the lack of consistent sidewalks along the corridor. This section of the corridor consists mainly of a mix of commercial uses with some residences and churches intermixed.

The character of the corridor changes as the road travels either west of Garden Street or east of Madison Street to outside of the Town limits in either direction. The section of the corridor west of Garden Street consists of 2 travel lanes with a shoulder on each side of the roadway. There is only one segment of sidewalk present which is located on the south side of Broadway Street from Vitality Drive east approximately 360'±. The CSX railroad runs north of and parallel to Broadway until Broadway curves to the south away from the railroad. There are above-ground utilities present north of the CSX railroad tracks along the section of roadway from Shaw Street east. Above-ground utilities are also present on the south side of the street from just west of Vitality Drive and continuing east to just before Garden Street, where they shift to the north side of the roadway. This section of the corridor which lies west of Garden Street is less densely developed, but still has a mix of uses including commercial, medical and residential. The section of the corridor east of Madison Street consists of 2 travel lanes with a shoulder on each side of the roadway and above-ground utilities on the south side of the roadway. This section of the corridor, which lies east of Madison Street, has the most diverse mix of uses including commercial, institutional, industrial and residential.

The speed limit along the corridor is predominately 40 mph and increases to 45 and 50 mph as you leave the downtown core in either direction. The speed limit increases to 55 mph as you pass outside the Fortville town limits.

INDOT has planned a mill and 1.5" asphalt overlay for Broadway which would begin in late 2019 and would be completed in early 2020.





Top image: The minimum front yard set back along Broadway Street shall be 50 feet measured from the center of the right-of-way. Taken from the Broadway-Main TIF District Design Standards.

Bottom image: In the Connect Fortville Thoroughfare Plan, Primary Arterial corridors such as Broadway Street should utilize a 100' right-of-way cross section. Taken from the Connect Fortville Thoroughfare Plan.

RELATED INITIATIVE: BROADWAY CORRIDOR RIGHT OF WAY

The existing Indiana Department of Transportation (INDOT)-controlled right-of-way is limited along Broadway and varies from approximately 65' feet to 80'+ over the length of the corridor. Traditionally, for right-of -way to increase along the corridor, a right-of-way acquisition process would be used to compensate land holders for the land being transferred to the public right-of-way. The Broadway corridor, however, will be able to utilize policy language to secure a 100' right -of-way width throughout the TIF district, without the cost and impacts of a formal acquisition process.

Currently the *Broadway-Main TIF District Design Standards* require new development, or redevelopment to adhere to a minimum setback of 50' from the center of Broadway. The minimum setback will increase the public right of way approximately 10'-20' on either side of the corridor. While recently adopted policy allows this setback to remain free of building and parking footprints, additional policy language is currently being drafted to allow for the formal dedication of the portion of private property within the 50' setback to the Town of Fortville and/or INDOT. This area will become part of the Broadway corridor right-of-way and can be used to accommodate roadway expansion, intersection improvements, and pedestrian infrastructure in the future.

Maple Street/Main Street

Maple Street changes how it is classified, its name, and its character throughout the TIF District. Maple Street, also known and Fortville Pike to the south, is classified as a major collector and plays a significant role in moving traffic between Fortville and Greenfield, the county seat of Hancock County. The corridor sees approximately 3,300 to 4,400 vehicles daily. The portion of this corridor from High Street northwest to Broadway Street lies within the TIF District. This segment of roadway is urban in nature and consists of two travel lanes with curbs. Both sidewalks and above-ground utilities are present on both sides of the roadway, and there are street light standards on utility poles.

From Broadway Street northwest, Maple Street is classified as a local road. Maple Street merges with and transitions to Main Street at which point the character changes to what is typical of a small town downtown. This area of the corridor consists of 2 travel lanes with curbs, on-street parking, street lights, and sidewalks on both sides of the roadway. One and two-story commercial buildings are immediately adjacent to the sidewalks. The corridor transitions from downtown in character to urban in nature in the last block of the TIF district, which ends at Church Street. The last block of the TIF district consists of 2 travel lanes with on-street parking and sidewalks on both sides. With the exception of one commercial building, all the buildings in this block are residential. From this point on, the corridor consists of 2 travel lanes without curbs and sidewalks on both sides of the roadway. This section of the roadway is also lined with traditional single-family neighborhoods.

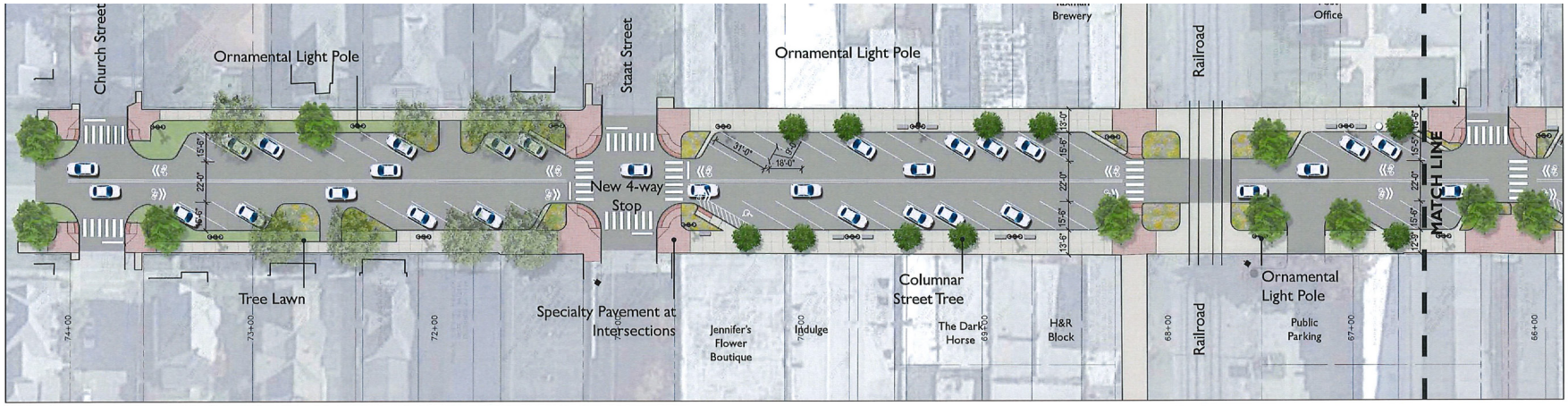
The speed limit along Maple Street within the TIF district is 25 mph and increases to 45 mph as it exits the Town and heads south. The speed limit of Main Street remains 25 mph north of the TIF district.

RELATED INITIATIVE:
MAPLE STREET/ MAIN STREET RECONSTRUCTION

Currently, the Town is undertaking a corridor improvement study for Main Street beginning at Broadway and extending north to Church Street. The purpose of the project is to improve the downtown Main Street corridor by allowing for a more pedestrian friendly space and to replace aging infrastructure. The major focus of this project is to improve safety for pedestrians along the corridor, but consideration is also being given to improving safety for motorists as well. The project will identify ways parking bump outs at crosswalks, wider sidewalks and ADA curb ramps at all pedestrian crossings can be integrated into the public right-of-way. Revised parking configurations, additional vehicular signage and traffic calming elements will also be recommended to improve safety and efficiency for vehicles in the area. The project is being jointly financed by the Federal Highway Administration and the Town of Fortville.

The intersection of Main Street, Maple Street, and Broadway will be a critical component of the Main Street improvements project and will need to be a transitional element between the downtown core, and the proposed redevelopment areas along Broadway in the future. The revised intersection is proposed to include additional landscaping, street lighting and a broader pedestrian plaza area. These amenities and improvements will need to be designed in such a way to allow for the future right-of -way configuration of Broadway proposed as part of the long range recommendations outlined in Section 05.

Construction on the Main Street corridor improvements is set to begin in October 2019 and will likely continue through the 2020 construction season.



Northern Half

The Main Street corridor improvements images were completed as a part of the design process lead by VS Engineering and Context Design. The images included on this page were presented to the Fortville Town Council in June of 2017.

Madison Street

Madison Street, also known as State Road (SR) 13, is classified as a local road. Although it is a local road, it provides an important connection from Broadway north through Fortville to both I-69 and Lapel. The corridor, which has an average of 6,000 vehicles per day, is urban in nature. The roadway consists of two travel lanes with curb and gutter. Both sidewalks and above-ground utilities are present on both sides of the roadway. Single-family homes are the predominant use along Madison Street. However, on the east side of Madison Street within the TIF district there is a library and light industrial uses. Locally, the corridor serves as a connection to existing traditional residential neighborhoods to the east and west.

The speed limit along Madison Street is 30 mph. The speed limit increases to 55 mph as it exits the Town limits and enters Madison County.

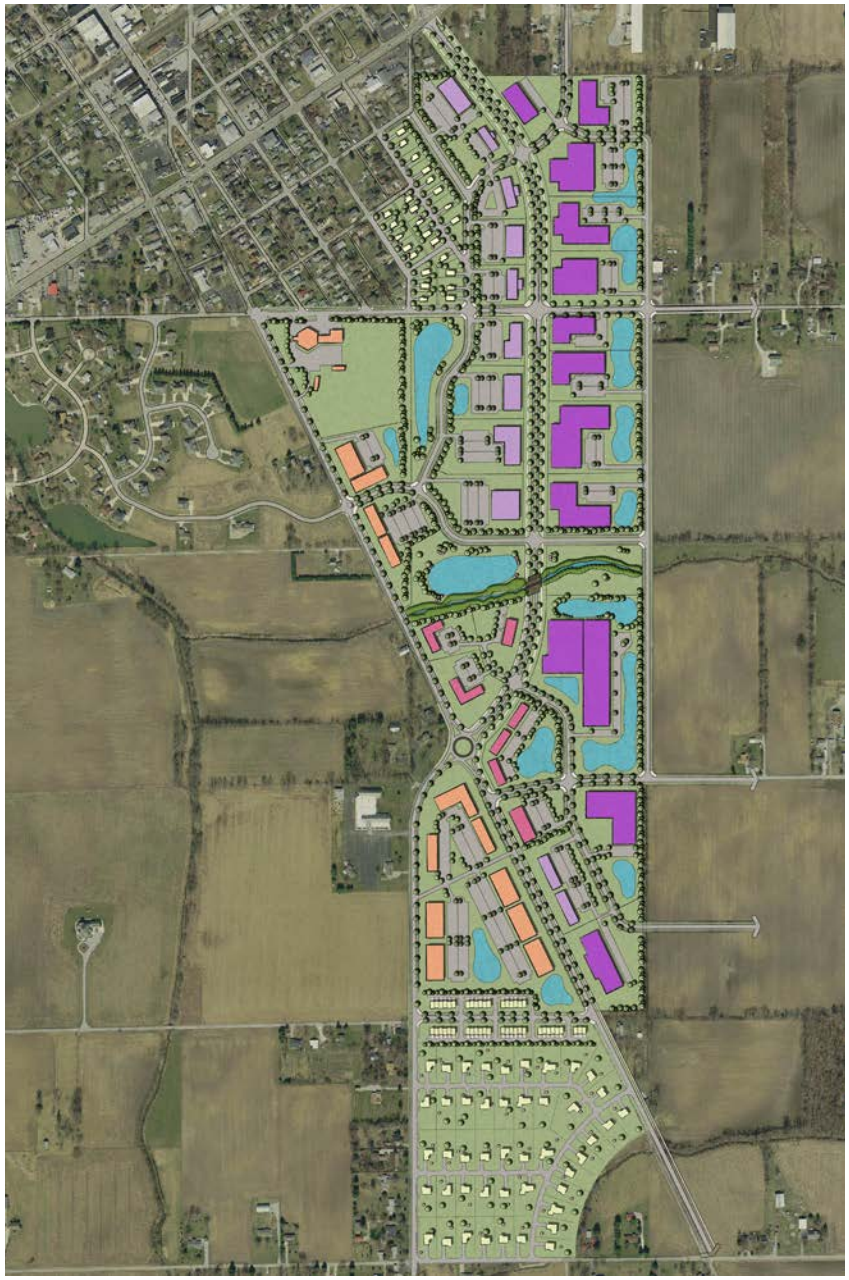
INDOT has planned a new signal light at the intersection of Madison Street and Broadway. The project will begin in November 2019 and will be completed in early 2020.

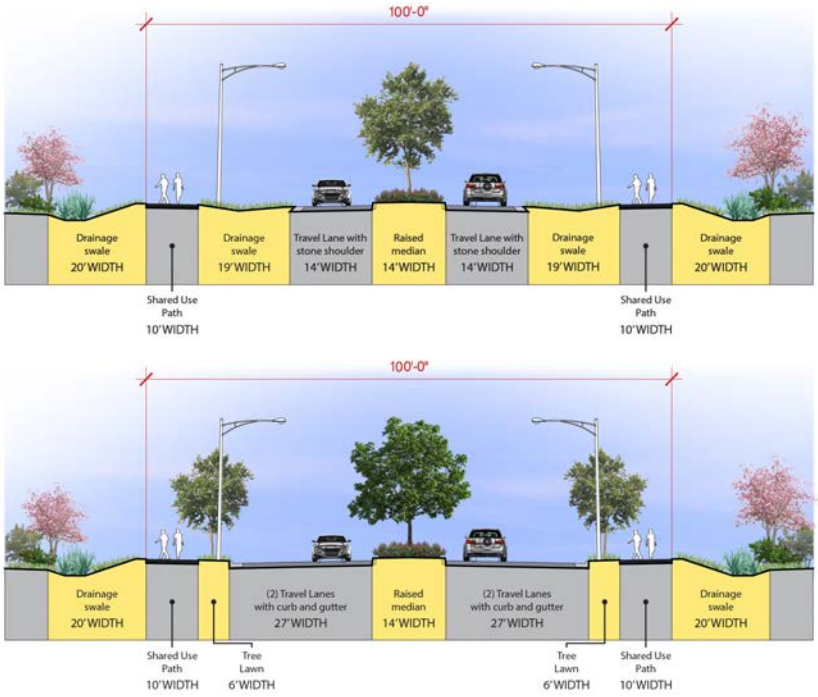
RELATED INITIATIVE:
MADISON STREET

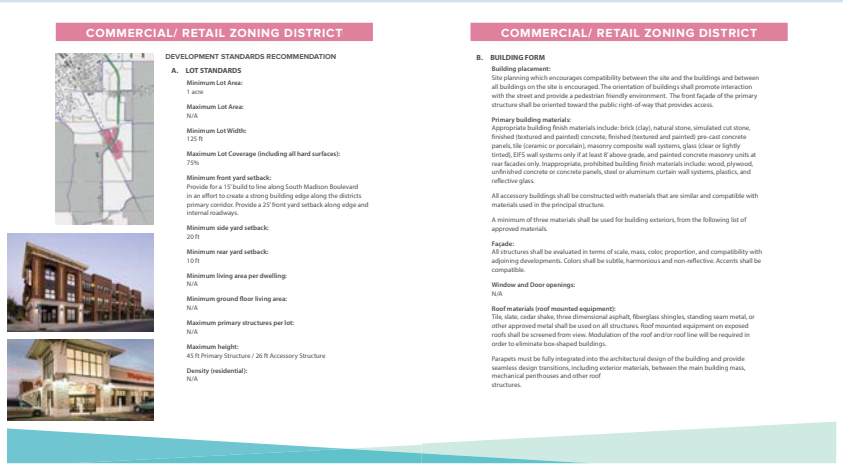
In July 2017, the Town of Fortville adopted the *South Madison TIF District Master Plan*, a document focusing on the development of the agricultural land southeast of the historic downtown core. The purpose of the Plan is to set a new focus on creating a sense of place within the Town of Fortville, improving the physical amenities and infrastructure to allow for connectivity and activity and to provide opportunities for development and redevelopment within the TIF District. While the master plan outlines future land use, zoning and development standard recommendations, the recommendations related to transportation infrastructure could become critical to the success of the Broadway corridor.

The Plan's proposed transportation network provides for efficient access to the proposed development sites, to downtown Fortville, and to the nearby neighborhoods by creating a series of interconnected and well-managed right-of-way corridors. The proposed street network provides vehicular circulation through the South Madison TIF district, provides access to downtown Fortville and provides efficient regional routes that connect to SR 234, Broadway, and SR 13. The hierarchy of street types provides for a multi-layered network of connectivity that features bicycle and pedestrian facilities, as well as opportunities for enhanced landscaping along key corridors. The central spine of this transportation network is the proposed southern extension of Madison Street.

When complete, the new boulevard will allow for an alternate traffic route around the Town, reducing, or eliminating the truck traffic through and around downtown. This reduction in vehicular counts along the Broadway corridor will help in the creation of an active, pedestrian-scaled development along this prominent thoroughfare.







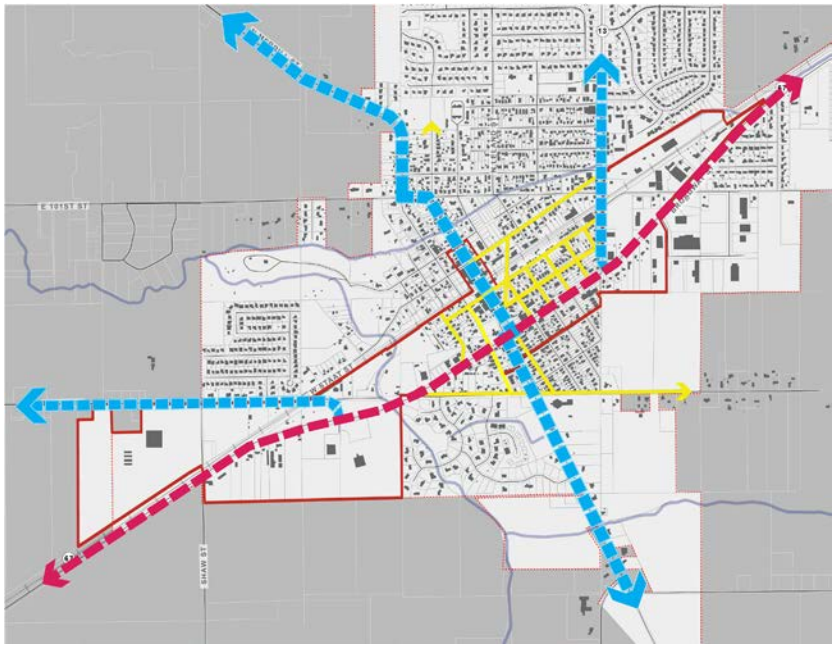
The Plan included phased roadway design and preliminary design guidelines for new development.

CIRCULATION HIERARCHY

The TIF district contains significant existing transportation thoroughfares that provide both local and regional connectivity. Broadway is the prime east-west corridor that travels through Fortville. Regionally, it provides a connection through Hancock County that ultimately reaches southwest to the I-465 beltway around Indianapolis. In addition, it provides a connection to the northeast with SR 9, a primary north-south corridor, and SR 38, a primary east-west corridor. Locally, Broadway provides access to a number of smaller local roads that connect the commercial corridor to surrounding residential uses.

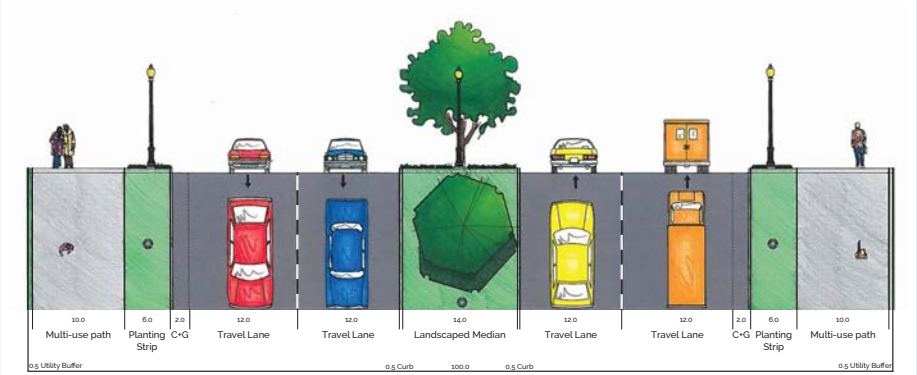
While Broadway provides east-west connectivity, Maple Street and Madison Street provide for north-south connectivity. Although only a short segment of Maple Street is within the district, it provides regional connectivity through Hancock County to the south, outside of the district, as it transitions into Fortville Pike. Fortville Pike provides connections to SR 234, a primary east-west corridor. Further south, Fortville Pike extends into Greenfield and runs in close proximity to the I-70 interchange at SR 9. Locally, Maple Street provides access to both the downtown core and surrounding residential neighborhoods. Madison Street provides for regional connectivity to the north with a direct connection to I-69. It also provides local access to surrounding residential neighborhoods.

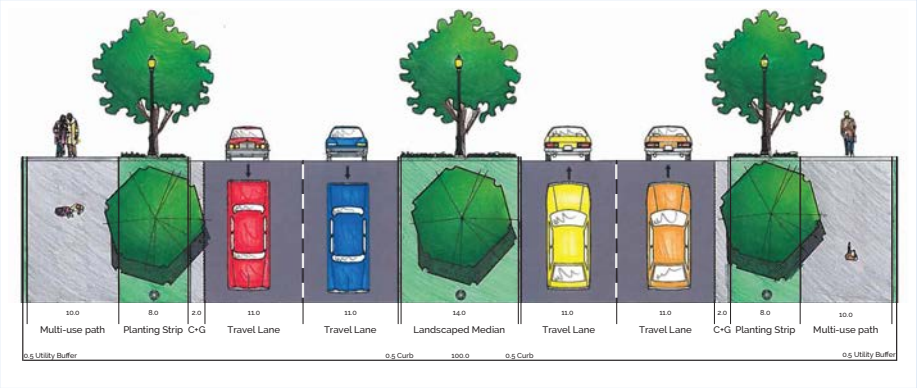
Together, Broadway, Maple Street, and Madison Avenue serve as the primary routes through the district. Smaller local streets provide access from these routes to local neighborhoods. Merrill Street, also known as Southeastern Parkway outside of the town limits, provides a connection to I-69 and the Hamilton Town Center area.

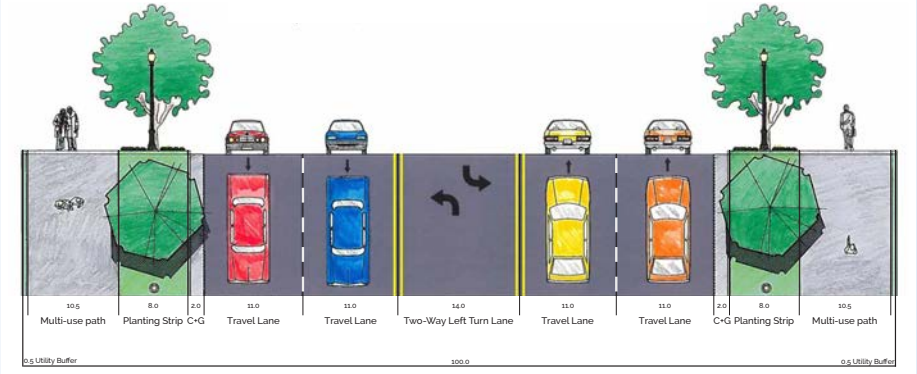


CIRCULATION HIERARCHY LEGEND

- *Primary corridors*
- *Secondary corridors*
- *Supporting corridors*







Taken from the Connect Fortville Thoroughfare Plan.

RELATED INITIATIVE: THOROUGHFARE PLAN

The Town of Fortville is currently finalizing the area's first thoroughfare plan. The *Connect Fortville Thoroughfare Plan* is an amendment to the 2014 Fortville Comprehensive Plan and is intended to be used in coordination with plans for future land use and bicycle and pedestrian systems. The final plan will include both policy statements and a graphic representation of the policy statements in the form of a map.

Connect Fortville is a guide that anticipates future transportation needs in the Town of Fortville and responds to potential needs by identifying options for maintaining a well-coordinated, efficient, and effective street network. The need, location, and extent of any future street construction and/or improvements should follow this plan and be implemented based on the best information available at that time.

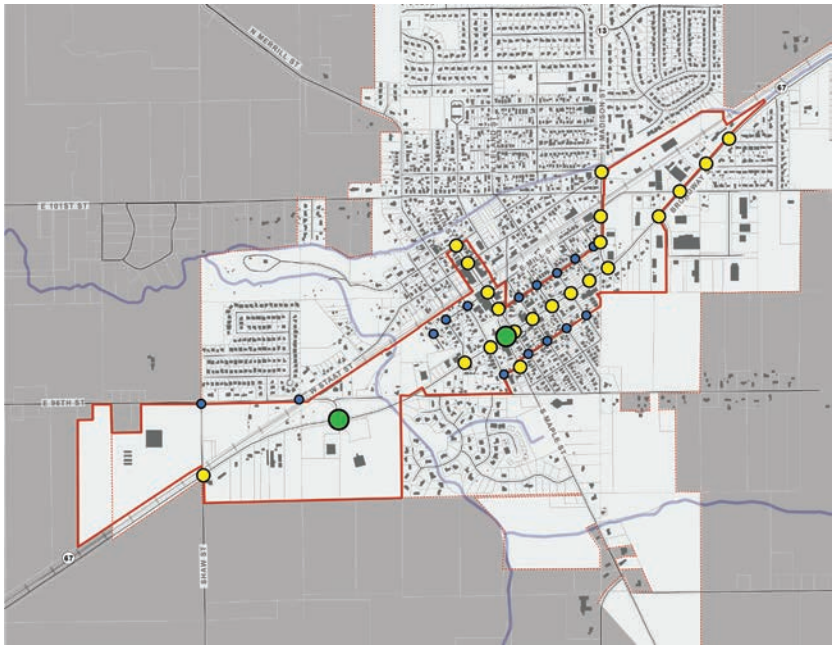
The *Connect Fortville* plan establishes a classification system and design standards for roadways throughout the community. The plan is based on public input and an evaluation of the Envision Fortville Comprehensive Plan's Goals and Objectives. Since the Connect Fortville plan sets development priorities, right-of-way requirements, and funding requirements for the application of the proposed classification system standards, it will be critical for the recommendations outlined in Section 05 of this document to be included in the final *Connect Fortville* plan policies and maps. By having the recommendations of the Connect Fortville plan, and the recommendations included in this planning study align, adoption, policy enforcement, and project implementation will be streamlined.

INTERSECTION TYPES

The main intersection in the district is the intersection of Broadway, a major arterial, and Maple Street, a major collector. This intersection is controlled by a traffic light. There is also a traffic light at the intersection of Broadway and Vitality Drive/Garden Street. A number of other intersections occur along Broadway with cross streets and alleyways that serve as access to surrounding neighborhoods. The following streets intersect with Broadway: Shaw Street, Vitality Drive/Garden Street, Garden Street, McCarty Street, Merrill Street, Main Street, Oak Street, Poplar Street, Walnut Street, Elm Street, High Street, Madison Street, Industrial Drive, Ohio Street, Linda Drive, and Motel Drive. All of these intersections are controlled by 2-way stop signs.

Intersections also occur along both Maple Street/Main Street and Madison Street. These intersections include: Maple Street and High Street, Maple Street and Main Street, Main Street and Pearl Street, Main Street and Mill Street, Main Street and Staat Street, Main Street and Church Street, Madison Street and Pearl Street, Madison Street and Mill Street, Madison Street and Staat Street, and Madison Street and Michigan Street. All of these intersections are controlled by 2-way stop signs.

In addition there are a number of other intersections that occur throughout the district that primarily serve the surrounding residential neighborhoods. The majority of these intersections are controlled by 2-way stop signs. One intersection is controlled by a 4-way stop sign and one intersection does not have a traffic control sign. These other district intersections include the intersection of Shaw Street and Garden Street, Garden Street and Staat Street, Baker Court and Mill Street, McCarty Street and Mill Street, Mill Street and Merrill Street, High Street and Merrill Street, High Street and Main Street, High Street and Oak Street, High Street and Poplar Street, High Street and Walnut Street, Pearl Street and Oak Street, Pearl Street and Poplar Street, Pearl Street and Walnut Street, Pearl Street and Elm Street, Pearl Street and Ash Street.



CIRCULATION HIERARCHY LEGEND

Signalized intersections

Non signalized intersections

Alley intersections

INDOT has currently planned on installing a traffic signal at the intersection of SR 13 and Broadway. This new improvement will allow for SR 13 travelers to safely turn onto Broadway, where currently no signalization is present.

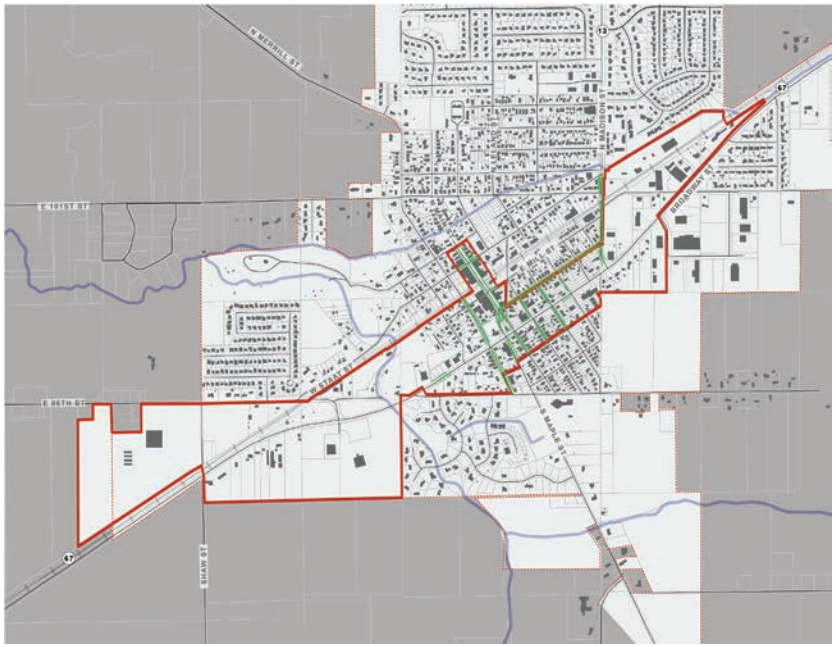
RELATED INITIATIVE: INTERSECTION SIGNALIZATION

The Indiana Department of Transportation has currently planned on installing a traffic signal at the intersection of SR 13 and Broadway. This new improvement will allow for SR 13 travelers to safely turn onto Broadway, where currently no signalization is present. Modifications would be necessary at this intersection to incorporate a small raised median along a portion of Broadway. This median will prohibit left turns onto Broadway or onto the side streets north of the corridor.

INDOT is aware of the South Madison and Broadway TIF District Master Plan studies. If possible, accommodations will be made to plan for future infrastructure investments within both districts during the installation of the traffic signal.

EXISTING PEDESTRIAN NETWORK

The sidewalk network lacks consistent connectivity throughout the district. Although Broadway serves as a major east-west corridor through town for vehicular traffic, it does not provide for this connection for pedestrians. Due to the nature of development on Broadway, sidewalks are present only intermittently along the corridor. Within the main core of Fortville, from Garden Street to Madison Street, the majority of streets that intersect with the Broadway Street corridor have sidewalks on both sides. These sidewalks provide an opportunity to increase connectivity within the district when sidewalks are provided along Broadway.



PEDESTRIAN NETWORK LEGEND

Existing concrete sidewalks









Due to the nature of development on Broadway, sidewalks are present only intermittently along the corridor. Within the main core of Fortville, from Garden Street to Madison Street, the majority of streets that intersect with the Broadway Street corridor have sidewalks on both sides.

TRAFFIC CAPACITY AND SENSITIVITY ANALYSIS

Traditionally, the focus of roadway design is on system and capacity expansion, not contraction. Whenever and wherever traffic volumes on a section of road outgrew what a 2-lane road could accommodate efficiently, the next step in roadway design in most cases was to increase the cross-section to 4 lanes. Consequently, four-lane roadways became the norm throughout the country, whether the capacity was necessary or not. Recently, communities, state wide departments of transportation and the Federal Highway Administration have demonstrated that "Road Diets" can prove to be beneficial for vehicular safety, corridor operations, pedestrians, and cyclists and overall community quality of life.

A road diet is generally described as removing travel lanes from a roadway and utilizing the space for other uses and travel modes. The most common road diet practice is the conversion of an undivided four lane roadway to a 3-lane undivided roadway made up of two through lanes and a center 2-way left-turn lane. The reduction of lanes allows the roadway cross section to be reallocated for other uses such as bike lanes, pedestrian refuge islands, transit uses, and/or parking.

While road diets are proving to be game changers in terms of overall corridor safety and efficiencies, the feasibility of a road diet depends on a variety of factors including speed, level of service, quality of service, capacity, peak hour and peak direction, turning volumes and patterns as well as the considerations of multi-modal users such as pedestrian, cyclists, and transit. In order to fully understand the Broadway corridor, its current condition, level of service and future capacity needs, the master plan study included a cursory capacity analysis of the corridor to determine if a road diet was feasible for the corridor.

The intent of the exercise is only to show that the two study intersections (Broadway and Main Street/ Maple Street and Broadway Street and SR 13/Madison Street) can operate through a 20 year lifespan with the following criteria:

- Volume to Capacity (V/C) ratio of less than 1.0 for the US 36 and SR 13 approaches
- Approach LOS D or better for the US 36 and SR 13 approaches
- Movement LOS E or better for the US 36 and SR 13 approaches
- No thresholds for all local approaches

The capacity analysis output is included as part of a full memorandum to the Indiana Department of Transportation and is included in Appendix B. This memorandum was used during the planning process to inform the Indiana Department of Transportation on the planning project, its process and the short and long term recommendations outlined in Section 05 of this plan.

This analysis incorporates the recommendations found in the South Madison TIF District Master plan and includes the extension of South Madison Boulevard south of US 36 to Fortville Pike with a 3-lane cross-section and a modification of the traffic signal at the intersection of US 36 and Madison Street. This new connection will relieve Broadway of some traffic currently using the Broadway corridor to get to Fortville Pike; however, the reduction in traffic will be offset due to the anticipated redevelopment of properties along US 36. Therefore, no traffic was shifted from Broadway to Madison Street for the purposes of this analysis. Using the proposed land uses determined in the 2014 Envision Fortville Comprehensive Plan as a guide, the Broadway TIF District is expected to generate approximately 11,350 trips per day, some of which will utilize US 36. These trips have been included.

Findings and Outcomes

Following are findings of the capacity analysis exercise on Broadway:

- The AM peak hour has a significantly higher demand than does the PM peak hour; however, both the AM and PM peak periods were analyzed to ensure that no directional movements existed that would cause the subject approaches to fail.
- It is possible to meet the objectives listed above for both the Maple Street and the SR 13 intersections with US 36 in both the AM and PM peak hours if the following minimum lane configurations are used:
  - US 36 and Maple Street
    - Eastbound – 1 left turn, 1 through, 1 right turn
    - Westbound – 1 left turn, 1 through, 1 right turn
    - Northbound – Existing (1 shared left/through/right)
    - Southbound – Existing (1 shared left/through/right)
  - US 36 and SR 13 (Madison Street)
    - Eastbound – 1 left turn, 1 through, 1 right turn
    - Westbound – 1 left turn, 1 shared through/right
    - Northbound – 1 left turn, 1 shared through/right (to be constructed with Madison Street extension)
    - Southbound – Existing (1 shared through/left, 1 right turn)

The measures of effectiveness (MOE's) can be summarized as follows:

Intersection: US 36/ Maple Street
Analysis Period: Design year AM peak hour

Approach	Movement	V/C ratio	LOS	Delay (sec/veh)	95th %-ile Queue (ft)
N	L	2.51	F	>300	1,029
	T				
	R				
E	L	0.46	A	9	65
	T	0.96	C	33	1,486
	R				
S	L	2.88	F	>300	1,168
	T				
	R				
W	L	0.11	A	9	25
	T	0.54	C	21	458
	R	0.15	A	2	29

Intersection: US 36/ Maple Street
Analysis Period: Design year PM peak hour

Approach	Movement	V/C ratio	LOS	Delay (sec/veh)	95th %-ile Queue (ft)
N	L	1.24	F	183	561
	T				
	R				
E	L	0.47	C	23	63
	T	0.61	C	26	460
	R				
S	L	1.76	F	>300	1,127
	T				
	R				
W	L	0.15	B	12	37
	T	0.91	D	46	818
	R	0.15	A	5	39

Intersection: US 36/ SR 13/ Madison Street
Analysis Period: Design year AM peak hour

Approach	Movement	V/C ratio	LOS	Delay (sec/veh)	95th %-ile Queue (ft)
N	L	0.47	C	29	134
	T				
	R	0.94	D	41	219
E	L	.35	A	8	48
	T	.85	C	28	532
	R	0.12	A	3	25
S	L	0.22	C	25	50
	T	0.29	B	12	59
	R				
W	L	0.79	C	29	127
	T	0.58	B	12	220
	R				

Intersection: US 36/ SR 13/ Madison Street
Analysis Period: Design year PM peak hour

Approach	Movement	V/C ratio	LOS	Delay (sec/veh)	95th %-ile Queue (ft)
N	L	0.66	D	45	205
	T				
	R	0.43	A	6	63
E	L	0.72	D	43	125
	T	0.68	C	34	390
	R	0.16	A	2	12
S	L	0.41	C	35	130
	T	0.55	C	28	225
	R				
W	L	0.84	C	30	303
	T	0.92	D	40	775
	R				

In addition to the design year analysis, a sensitivity analysis was run to determine the approximate reduction in design year traffic that would need to occur in order to obtain a V/C ratio of less than 1.0 for all movements at each of the intersections. It was determined that at 70% of the design year volumes, the AM peak hour will have a V/C ratio of less than 1.0 for all movements. Likewise, at 75% of the design year volumes, the PM peak hour will have a V/C ratio of less than 1.0 for all movements.

Based upon the cursory analysis performed to check the efficacy of a three-lane section on US 36, it can be concluded that the three-lane section will perform acceptably on the INDOT approaches for approximately 20 years. It was also determined that the side streets will continue to operate acceptably until the overall network volumes reach 70% of the design year traffic.

The outcome of the study allows for the Town of Fortville to consider short term infrastructure modifications to the corridor. Modifications that could potentially be implemented within the right-of-way they currently control. This flexibility allows for immediate changes to be considered, as well as planning for the long-term transformation of the corridor.


RATLIFF
INSTRUCTION

03 DISTRICT VISION


RATLIFF
INSTRUCTION

Transportation systems, streets and intersections are vital pieces of livable, attractive communities. Everyone, regardless of age, ability, income, race, or ethnicity, ought to have safe, comfortable, and convenient access to community destinations and public places– whether walking, driving, bicycling, or taking public transportation. But too many of our streets are designed only for speeding cars or creeping traffic jams. They are often unsafe for people on foot or bike and generally unpleasant for everyone.

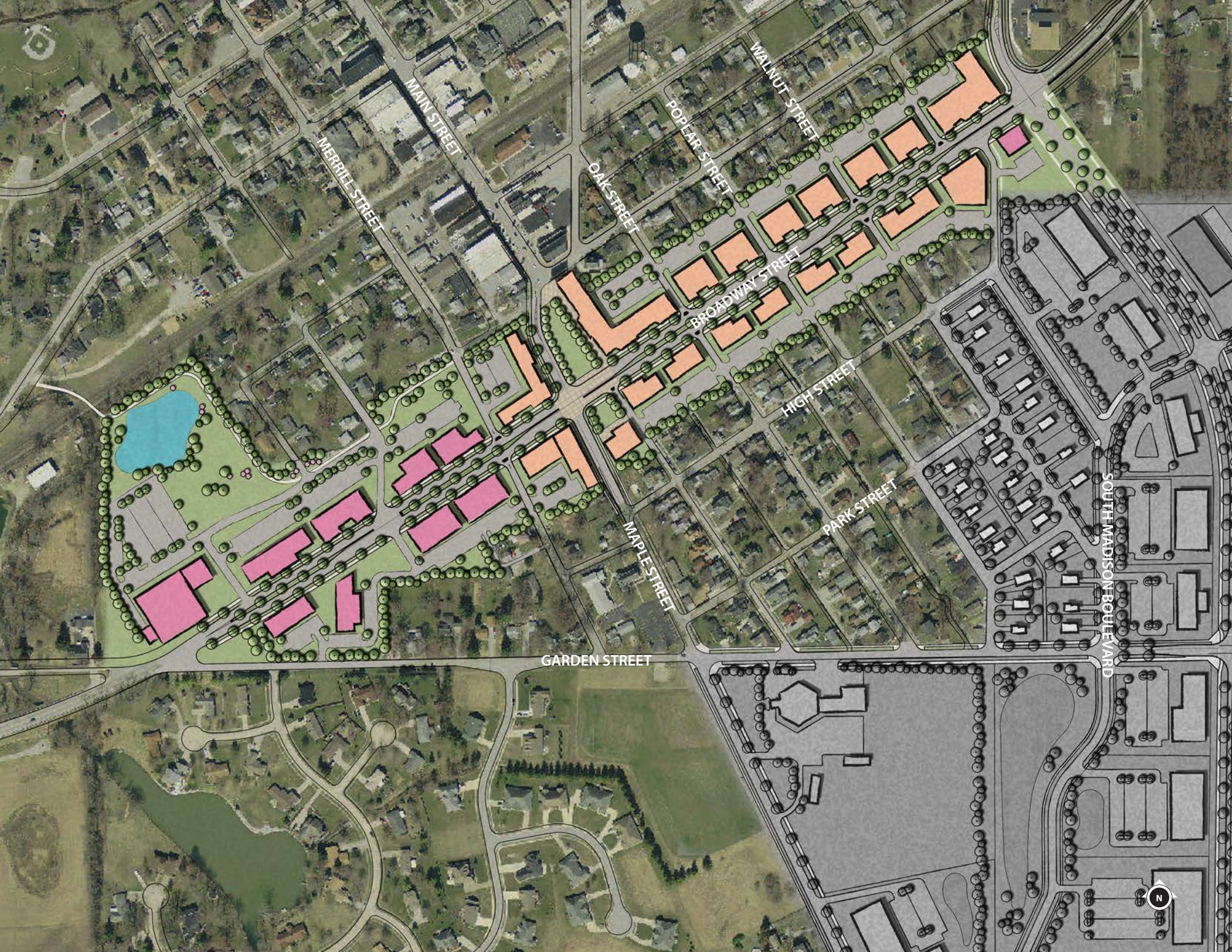
Even where daily destinations are close to home, incomplete streets too often make them inaccessible by foot, or bicycle. These destinations are often times cut off by high-speed roads lacking bike facilities, sidewalks, and/or safe crossings. While some streets do provide a minimally safe pedestrian environment, it may not be a pleasant one – the absence of benches, scarce landscaping, proximity to high-speed or heavy traffic, and storefronts set back from the sidewalk do little to encourage walking.

In an effort to foster walkable and livable communities, cities and towns across the country are beginning to embrace fundamental principles of smart growth to meet the local residents' desires of having choices in housing, shopping, recreation and transportation. Fortville is one of those communities and is proactively working to create and foster a smarter, more comprehensive form of development and infrastructure.

> ***Streets designed solely for automobile travel also put people at risk. Between 2005 and 2014, a total of 46,149 people were struck and killed by cars while walking in the United States. In 2014, the most recent year for which data are available, 4,884 people were killed by a car while walking—105 people more than in 2013. On average, 13 people were struck and killed by a car while walking every day in 2014. And between 2005 and 2014, Americans were 7.2 times more likely to die as a pedestrian than from a natural disaster. Each one of those people was a child, parent, friend, classmate, or neighbor. And these tragedies are occurring across the country—in small towns and big cities, in communities on the coast and in the heartland.***
>
> *Complete Street Coalition*

For the Broadway corridor, and surrounding TIF district, the vision has always been clear and well defined. The district is intended to be an active area of diverse development that respects and fosters the small-town charm for which Fortville is known. Additionally, the district needs to be safe and encourage mobility along all of its corridors with primary connectivity being provided along the Broadway corridor, the primary spine running through both the Town and the TIF district.

Together, Town leadership, community stakeholders and the public developed, and refined a shared vision for both the district and the corridor that included allocating space for wide pedestrian walkways along Broadway, allowing for paved, designated utility corridors so pedestrian paths were not interrupted by light poles, wayfinding signage, fire hydrants or traffic signal controls. The community envisioned having tree lawns on either side of the roadway corridor that would allow for street tree plantings which would lessen the noise and visual impacts along the road. A landscaped median would provide additional aesthetic value, but would also allow for controlled vehicular access along the congested corridor. Limited turning movements, would allow for designated pedestrian crossings at known intersections and limited curb and driveway cuts (all of which reduces opportunity for conflicts between vehicles and pedestrians). Improved signalized intersections would benefit pedestrians, but also the thousands of vehicles that travel through the district reducing the congestion that exists today. Town leaders, stakeholders and the public also see the Broadway TIF District becoming a vibrant and active place, home to restaurants, offices, apartments and boutique shops. Over time, the historic downtown core will be so prosperous that the development will continue, and begin to front Broadway so that the new, walkable spine is bordered by restaurant cafes, and storefronts.


MERRILL STREET
MAIN STREET
OAK STREET
POPLAR STREET
WALNUT STREET
BROADWAY STREET
HIGH STREET
PARK STREET
MAPLE STREET
SOUTH MADISON BOULEVARD
GARDEN STREET
N

This vision of a vibrant district and a corridor that caters to both vehicular and pedestrian transportation choices originated during the 2014 Envision Fortville Comprehensive Plan, and continues in the recently adopted Connect Fortville Thoroughfare Plan. Together, these planning policy documents encourage the development and maintenance of a transportation system that provides safe and pleasant routes for all modes of transportation in addition to the automobile. In addition to transportation focused changes, the planning documents foster the development of land use and subdivision regulations that encourage development patterns that connect to, and enhance the Town's arterials and secondary corridors. The goals and objectives outlined in the Comprehensive and recent Thoroughfare Plan, are currently becoming a reality thanks to the efforts of Town leadership and community stakeholders.

Based on the work completed to date and outlined in Section 02, the Town of Fortville has active policy directives that provide for the mix of land uses, housing options, preservation of culturally historic properties and clearly defined development policies and practices for the historic downtown core and the Broadway TIF District as a whole. These policies and procedures will guide the Town in developing a livable community within the Broadway TIF District, but are unfortunately dependent on private development and changing economic conditions. As a way to continue the development of a walkable and livable Fortville, the Town has begun to put considerable thought into how they, in partnership with the Indiana Department of Transportation (INDOT) can promote a more walkable and connected community. By planning for both sidewalk and shared use path improvements throughout the town, Fortville leadership can provide for these capital improvement projects based on budgeting cycles, rather than private development rates and economic conditions. Prior to the initiation of this TIF District master planning process, the Town of Fortville leadership, along with key community stakeholders, identified the tie between livable and active community development, and diverse transportation choices.

> ***Designing a street with pedestrians in mind – sidewalks, raised medians, better bus stop placement, traffic-calming measures, and treatments for travelers with disabilities – may reduce pedestrian risk by as much as 28 percent.***
>
> *King, M., Carnegie, J., & Ewing, R.*

The tie between livable and active communities and diverse transportation choices ultimately will benefit the Town of Fortville in a variety of ways. Communities with multiple transportation choices are often considered to offer their residents a higher quality of life. Residents tend to be physically healthier. A comprehensive study of walkability has found that people in walkable neighborhoods did about 35-45 more minutes of moderate intensity physical activity per week and were substantially less likely to be overweight or obese than similar people living in low-walkable neighborhoods.[i] They are oftentimes incredibly connected to the community, both socially and physically, as they have accessible connections to key focal points of activity throughout their neighborhood. Children are able to walk to school, allowing them to become familiar with their community and perform better in school. Traffic congestion is lower because there are fewer vehicles on the road and less conflict with allowed alternative transportation users. In addition to these well-documented benefits, multi-modal transportation choices make economic sense. A balanced transportation system that includes complete streets can bolster economic growth and stability by providing accessible and efficient connections between residences, schools, parks, public transportation, offices, and retail destinations.

The investment that communities make in implementing Complete Streets infrastructure can stimulate far greater private investment, especially in retail districts and downtowns where pedestrians and cyclists feel unwelcome. Lancaster, California added pedestrian safety features as part of a downtown revitalization effort, including a pedestrian-only plaza, wider sidewalks, landscaping and traffic calming. The project spurred $125 million in private investment, a 26% increase in sales tax revenue, and 800 new jobs, after a public investment of $10.6 million.[ii]

Complete Streets is a policy and design approach that requires streets to be planned, designed, operated, and maintained to enable safe, convenient and comfortable travel and access for users of all ages and abilities regardless of their mode of transportation. Complete Streets allow for safe travel by those walking, cycling, driving automobiles, riding public transportation, or delivering goods.

i Sallis, James F, et al. (2009). "Neighborhood built environment and income: Examining multiple health outcomes." Social Science and Medicine 68:1285-1293.
ii National Complete Streets Coalition (2012, February 22). It's a safe decision: Complete streets in California. PDF.

In addition to private investment, balanced transportation systems have been noted to raise property values, by providing safe and accessible routes for people on foot or bicycles. In a survey of 15 real estate markets from Jacksonville, Florida to Stockton, California a one-point increase in the walkability of a neighborhood as measured by WalkScore.com increased home values by $700 to $3,000. This increase is amplified when walkable neighborhoods are near each other[iii], demonstrating the value of balanced networks throughout a community.

By implementing multi-modal transportation improvements within the designated Broadway TIF District, the Town of Fortville is poised to reap the rewards of a balanced and smarter approach to capital improvements on both physical and economic fronts. As a component of this planning study, the financial benefits and TIF property impacts associated with redevelopment, new development and multi-modal corridor improvements were studied in order to provide a revenue projection for the Broadway TIF district. The methodology and results are outlined in Appendix 'C'.

There is no singular design prescription for completing all streets, instead each roadway corridor is unique and the design needs to respond to its community context and overarching community needs. A complete street may include: sidewalks, bike lanes (or wide paved shoulders), special bus lanes, comfortable and accessible public transportation stops, frequent and safe crossing opportunities, median islands, accessible pedestrian signals, curb extensions, narrower travel lanes, roundabouts, and more. The recommendations outlined in Sections 04 and 05 have been informed by years of previous planning, policy development, private development needs, and the desires, wants and needs of the Fortville residents.

When complete, either in the short-, or long-term, the Town of Fortville will have created a walkable environment for their downtown core, the adjacent residential neighborhoods, and would have also provided for additional north-south and east-west connections which provide connections to local offices, retail establishments, schools and community open spaces.

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iii The Brookings Institution. (2012, May 25). Walk this way: The economic promise of walkable places in metropolitan Washington D.C. (16). Washington D.C.: The Brookings Institute. Retrieved 2012, August 8, from http://www.brookings.edu/research/papers/2012/05/25-walkable-places-leinberger.

04 CONNECTIVITY TOOLKIT


RATLIFF
INSTRUCTION

The design of vehicular roadway corridors and dynamic pedestrian environments is unique and varies based on site constraints, market demands, and local politics. These variables also evolve and change based on the timing of implementation, available funding, the desires of private development, and often times hinge on the approval of local or state officials. The Broadway corridor is not immune to the impacts of these external factors and will be sensitive to the market demands on the area. As outlined in Section 05, the recommendations for Broadway Street are organized around two different assumptions, and together provide a series of recommendations for immediate and short-term improvements or a more transformative long-term reconstruction plan. The plan's recommendations therefore needed to be detailed yet flexible to allow for implementation over a wide time frame.

The Connectivity Tool Kit was designed to provide guidance to planners, designers, and engineers during the planning and design of future Broadway amenities. The Connectivity Tool Kit is intended to provide a general overview of each proposed amenity, its impact on connectivity, and identify minimum design standards for successful implementation. The Tool Kit is organized into the following categories so users can easily find information on the appropriate tool, or combination of tools that address the vehicular and pedestrian environment.

- Vehicular Functionality
- Pedestrian Facilities
- Pedestrian Amenities + Environment

The features and amenities outlined in this section are considered core facilities and are necessary to the development of the active pedestrian environment adjacent to the Broadway corridor. The Tool Kit supports implementation of the full corridor vision discussed in Section 04 by providing facility design flexibility to accommodate a variety of potential future user types and volumes. The core facility parameters outlined here should be supplemented with the aesthetic details of Section 05, which correspond to both short- and long-term implementation time frames.

VEHICULAR FUNCTIONALITY

Features and amenities included in the vehicular functionality category provide for the safe and efficient movement of vehicular traffic. These elements together define the vehicular speeds and vehicular facilities. Additionally, these elements are within the boundaries of land owned and maintained by the state and are within their purview regarding oversight and approval.

Corridor Right-of-Way

Public right-of-way is defined as a portion of land that is owned and reserved by local and state government for the intended use of pedestrian and vehicular traffic along public routes. Right-of-way corridors typically include all transportation amenities including medians, travel lanes, parking lanes, tree lawns, paved buffers, public sidewalks and/or trails. To allow multiple agencies access to public or private utilities, the right-of-way often times includes all necessary utility mains, inlets and access points. This land is generally controlled either by the state or a community through the enforcement of zoning ordinances, and when it is well-designed, it can help to create a unified aesthetic of municipal infrastructure that is often part of the experience and overall identity of a community.

Right-of-Way Expansion

As development patterns and transportation needs change, the allocated right-of-way along public corridors may need to expand. This right-of-way expansion can occur at the onset of a construction improvement project or can be done proactively by a community interested in dedicating land for future growth and expansion. The most common process used to expand a corridor's right-of-way is acquisition by purchase. Purchasing from private land owners results in fair compensation for private property owners, and in the instance of unoccupied or unowned properties, legal methods such as condemnation can be utilized. Acquisition by purchase is most often used at the onset of construction, and depending on the total number of property owners, this method can escalate project costs and affect project timelines.

When planning for a community's long-term expansion, additional right-of-way can be secured by using land dedication or land exchanges. To facilitate the exchange, expectations of right-of-way acquisition are identified as part of a public policy or zoning ordinance (see *Connect Fortville Thoroughfare Master Plan*), and through new development or redevelopment, private property is dedicated as public right-of-way. This process, while potentially slow, requires minimal public funds and is often done prior to construction of an improvement project having minimal effect on costs and schedules.

Planning for Right-of-Way

Right-of-way widths are critical to the functional and aesthetic success of a corridor. Wide corridors can often times feel uninviting to pedestrians or cyclists due to the scale of the space, while narrow right-of-way corridors may not allow for vital infrastructure such as sidewalks, trails or street tree plantings making the space unsafe or unpleasant. When planning for future right-of-way amenities or acquisitions, communities should evaluate the goals (both functional and visual) per each specific roadway.

Roadway speed limits

A corridor's vehicular speed limit defines the maximum speed at which one is allowed to drive on a particular corridor. Determining the speed limits of roads within a transportation system has a significant role in the speed management of vehicles as well as the way pedestrians traverse the corridor and experience places along the corridor.

State and local transportation agencies recommend and set appropriate speed limits by completing engineering speed studies and following the guidance presented in the Manual on Uniform Traffic Control Devices (MUTCD) published by the Federal Highway Administration (FHWA).

From a functional standpoint, corridor speed limits are selected based on the following elements:

- **Functional Classification**
  Functional classification is the process by which streets and highways are grouped into classes, or systems, according to the character of service they are intended to provide. Functional classification outlines how travel can be channelized within the network in a logical and efficient manner by defining the part that any particular road or street should play in serving the flow of trips through a highway network. Traditionally, roadways with a highway functional classification should be designed with a higher design speed than a lower functional classification facility.

- **Urban/Rural**
  The design speed in a rural area is generally higher than that in an urban area. This is consistent with the typically fewer constraints in a rural area (e.g., less development/less access to adjacent land).

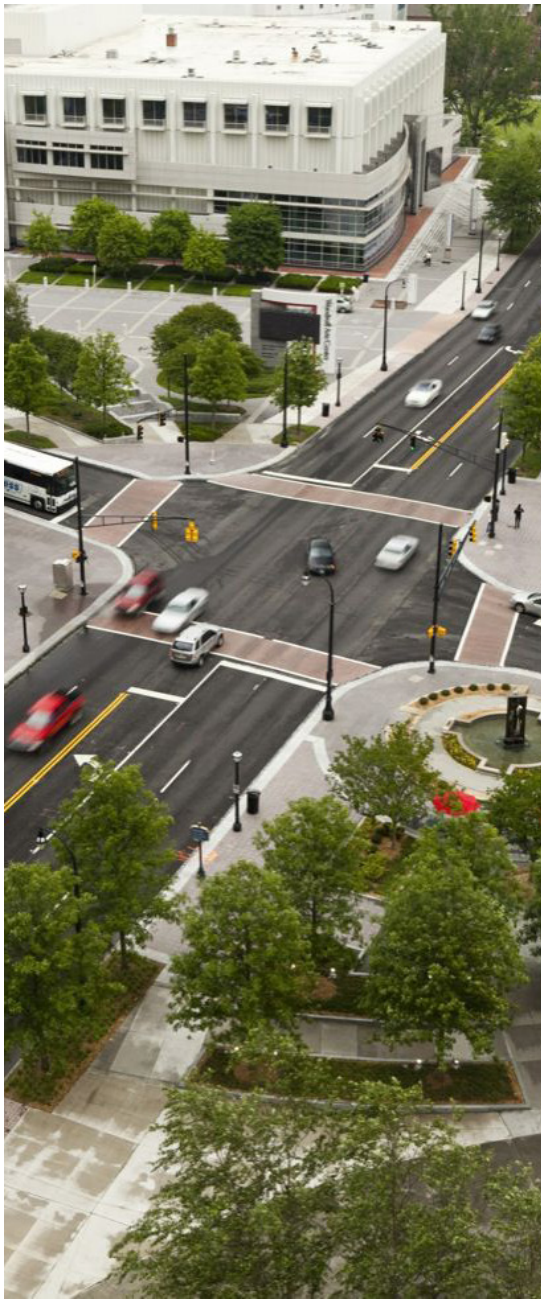
- **Terrain**
  The flatter the terrain, the higher the selected design speed may be.

- **Traffic Volume**
  As traffic volume increases, a higher design speed should be used. For example, the design speed on a rural collector will vary according to traffic volume.

  In a corridor that provides facilities for both vehicles, pedestrians and cyclists, speed limits should take into account not only vehicular capacity, but the pedestrian facilities within the right-of-way, as well as the needs of the adjacent businesses.

While no empirical evidence is available to show the relationship between pedestrian use and vehicle speeds, it is well understood that most people will tend to avoid situations they deem to be hazardous. As traffic speeds increase, the rate of movement and the sounds of passing vehicles are more imposing, causing anxiety and discomfort. Areas of lesser traffic and slower speeds will be more calm and tolerable and feel safer to people of varying ages and backgrounds.

VEHICULAR FUNCTIONALITY



Access management

Access management is the proactive management of vehicular access point locations, spacing, and design. Access management techniques traditionally include the use of driveway and road spacing, turning lane location and design, median treatments, and right-of-way management. The effective design and management of these amenities promotes safety and efficiency along roadway corridors by increasing the roadway capacity and reducing the number of conflict points along a corridor.

Access management techniques are often achieved through the application of both planning, regulatory, and design strategies. While much of the planning and regulatory techniques are being identified and implemented as a part of the ongoing strategies and initiatives throughout the district (see Section 02), specific design strategies can be beneficial as the Broadway corridor develops over time.

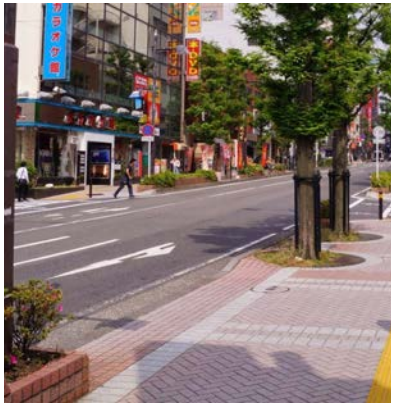
The Town is in the process of reviewing a formal Access Management Policy/Ordinance, intended to be adopted in early 2018, which was developed by the Madison County Council of Governments (MCCOG) in conjunction with the *Connect Fortville Thoroughfare Master Plan*.

Signal Spacing

Closely spaced or irregularly spaced traffic signals on arterial roadways result in frequent stops, unnecessary delay, increased fuel consumption, excessive vehicle emissions, and high crash rates. Long and uniform signal spacing allows timing plans that are efficient during the varying conditions of peak and off-peak traffic.

Non-Signalized Spacing

Non-signalized connection spacing of cross streets also greatly affects the safety and efficiency of the roadway. Closely spaced or irregularly spaced non-signalized intersections pose safety concerns by minimizing sight distances, reducing the functional area of the corridor, and providing more opportunities for turning movement conflicts. Separating or spacing out non-signalized intersections simplifies the driver's workload and helps reduce the risk of collisions.



Medians

The presence or absence of a median has a substantial impact on roadway operations and safety, and for allowing left turns to abutting properties. Non-traversable medians utilize a raised design, which accommodates landscaping while physically controlling the turning movements along the corridor.

Driveway Consolidation

Driveway consolidation is the process of reducing the frequency/ occurrence of driveways along a major roadway by closing driveways, creating alternative access ways, creating shared driveways, relocating entrances to side streets, or promoting cross access. Such projects are generally done to improve highway safety but can also improve traffic flow and in some cases it can provide a better environment for the business owner in terms of parking and circulation. Driveway consolidation can be applied as an individual access management strategy, but it is most often done in conjunction with the installation of medians, two-way-left-turn lanes, and/or frontage or backage roads.

Left Turn Lanes

Left turn lanes are an important access management measure because they allow left turning vehicles to be separated from the through traffic. This helps to reduce delays and traffic backups that cause lane changing and rear-end collisions.

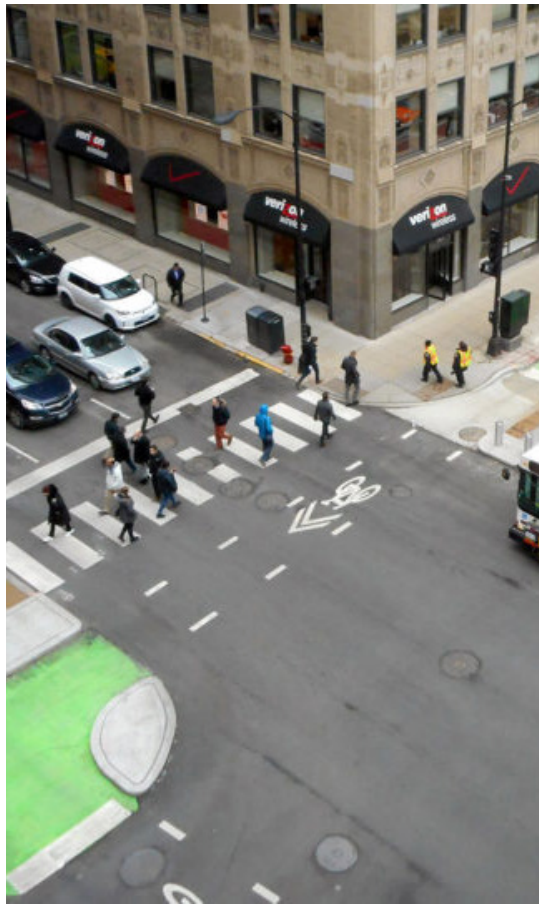
VEHICULAR FUNCTIONALITY

Intersection Design

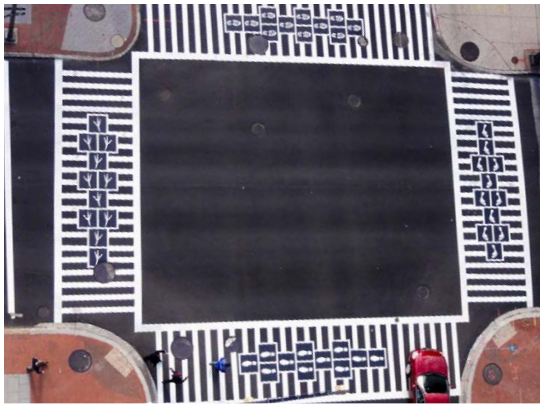
Multimodal intersections operate with pedestrians, bicycles, cars, buses, trucks, and in some cases, trains. The diverse uses of intersections involve a high level of activity and shared space. Intersections have the unique characteristic of accommodating the almost-constant occurrence of conflicts between all modes, and most collisions on thoroughfares take place at intersections. This characteristic is the basis for most intersection design standards, particularly for safety.

Designing multimodal intersections with the appropriate accommodations for all users is performed on a case-by-case basis. The design extends beyond the immediate intersection and encompasses the approaches, medians, streetside and driveways, and adjacent land uses. The designer should begin with an understanding of the community objectives and priorities related to design trade-offs such as vehicular capacity and level of service, large-vehicle turning requirements, conflicts, pedestrian and bicycle convenience, accessibility and the efficiency of public transit service. Intersections are perhaps the most sensitive operational component of thoroughfare systems.

In urban areas, intersections have a significant place-making function as well as a transportation function. Significant land uses and architecturally significant buildings are located at intersections and might provide pedestrian access directly from the corners. Intersections may also serve as gateways and are frequently the first thing visitors see when they enter a neighborhood.











LOOK


PEDESTRIAN FACILITIES

Features and amenities included in the pedestrian facilities category provide for the safe and efficient movement of pedestrian traffic. In active, urban or suburban environments, pedestrian facilities must be integrated into the vehicular network. Special care and attention therefore must be given to the design and placement of these facilities within the right of way.

Sidewalks

Creating a sidewalk system along Broadway will require more than just filling in gaps along the existing network. It will require a more complete understanding of what makes a more comfortable and usable environment in an urban setting. Quality sidewalks accommodate the needs of users with different physical abilities and provide other functional needs such as amenities, lighting, and safety. Successful urban walkways also address aesthetics enhancing the overall feel and improving the visual appeal of a place. Incorporating the following recommendations into future projects will ensure that a wide variety of users will comfortably navigate the sidewalks and the Town will be a more pleasant and inviting location.

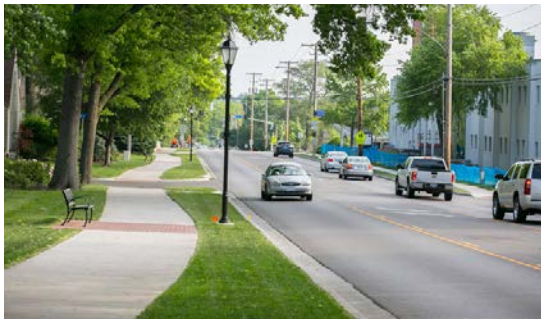
Location

Sidewalks are traditionally located within the public right-of-way to provide connections to multiple development areas. In more developed, urban areas sidewalks bridge the gap between roadway corridors and private development by providing space for walking, pedestrian amenities and utilities. Public sidewalks can be located immediately adjacent to roadway curbs, providing for a limited buffer between pedestrians and vehicular traffic. When space is available, sidewalks can be separated from vehicular travel by a paved, or vegetated buffer.

Widths

In general, sidewalks along Broadway should maintain a minimum width of 6 feet (72 in.) to allow two people, walking in the same direction to walk side-by-side with ease. This also allows two people to comfortably pass each other walking in opposite directions. When approaching commercial centers or other public gathering places, sidewalks may need to widen to accommodate many users at once, and where significant intersections are located, additional space should be provided for proper traffic flow.

When trying to accommodate off-street bicycle activity within the pedestrian zone, walkways will need to be expanded to a minimum of 10 feet in width. This additional width allows for two cyclists to safely pass one another.



Grades

The grade, or slope, of sidewalks is an important consideration. First, people with limited mobility may tire easily moving up steep slopes but have less difficulty traveling over gradual inclines. Traveling down steep inclines may be troublesome for anyone when the ground is wet or icy, and wheelchair users might have difficulty maintaining control. For these reasons, sidewalk slopes should not exceed 5 percent. When 5 percent is not attainable, 8.3 percent is the maximum incline while providing landings every 30 feet.

Materials

Traditionally, sidewalks are constructed using standard or reinforced concrete pavement with a uniform joint pattern applied throughout. To further enhance a community's character and appeal, other pavement treatments including pavers (asphalt, concrete and/or permeable systems), and decorative color or stamping to further tie the pedestrian space to the built environment.

When pedestrian facilities widen beyond 6 feet in width, some communities will utilize asphalt pavement rather than poured concrete. In wider dimensions the asphalt sidewalk is easier to install and is sometimes more cost efficient. Decorative treatments can also be applied to asphalt pavement to allow for a unique character that enhances the community throughout and gives the asphalt a more welcoming appearance.

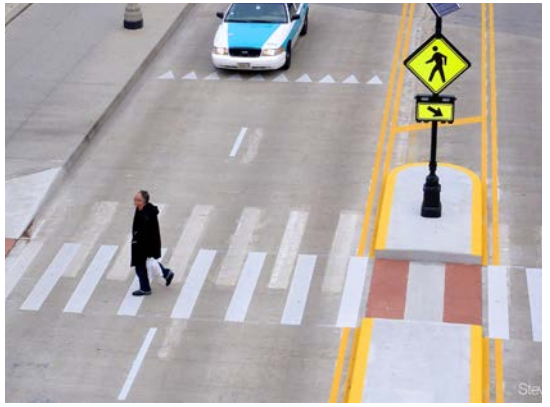
Regardless of the application, consideration of several different factors should be taken into account prior to selecting materials. Pavement should be chosen based on the aesthetics and the purpose of the proposed location. Durability, cost and maintenance priorities should also be thought of as materials handle the elements differently from one another. While a quality paver might be more expensive initially, concrete and asphalt will wear over time and crack, losing their appeal and will typically need to be repaired or replaced much sooner. Additionally, the material type used should reflect the adjacent land typology. A concrete sidewalk is more typical in urban and commercial settings, while asphalt paths are more common in suburban and semi-rural environments.

PEDESTRIAN FACILITIES

Pedestrian Crossings

Pedestrian crossings are essential, as they make the difference between sidewalks existing as isolated segments and an interconnected, community-wide pedestrian network. According to the National Highway Traffic Safety Administration, 5,376 pedestrian fatalities occurred in the United States in 2015[i]. Ensuring quality pedestrian crossings should be a priority to every community as these locations intersect pedestrian and automobile realms and pose the greatest potential conflict between the two. Proper design is critical to ensuring that both pedestrians and motorists are aware of one another, and that both parties understand when and where it is appropriate for pedestrians to cross the street.

The most common crossing locations for pedestrians are at signalized intersections and are marked to clearly define the pedestrian zone to maximize visibility. Crosswalk markings should include a series of 12- to 24-inch wide stripes spaced 12 to 24 inches apart and running parallel to the direction of vehicle travel. Using contrasting markings and bright colors will provide greater visual significance to crosswalks. Additional consideration may be taken to space the markings so that the primary path of vehicle tires runs between the painted stripes, thereby increasing the longevity of the crosswalk. Simply providing two lines running parallel to the direction of pedestrian travel is not as visible to approaching drivers.



i https://www.nhtsa.gov/search?keywords=pedestrian&name=

Pedestrian Signals

Pedestrian crosswalks should not be used as an isolated tool, but rather should be paired with infrastructure that is visible to the vehicular network. To enhance the visibility and functionality of crosswalks, various elements such as signs or crossing signals may accompany them at intersections.

Pedestrian signals should be clearly visible to the pedestrian at all times when in the crosswalk or waiting on the far side of the street. Existing WALK and DON'T WALK messages may remain for the rest of their useful life, but countdown pedestrian indications are required for all newly installed traffic signals where pedestrian signals are installed. They must be designed to begin counting down at the beginning of the clearance (flashing DON'T WALK) interval and can be on fixed-time, or pushbutton operation. Countdown signals have been demonstrated to reduce pedestrian crossings when only a few seconds remain.

Pedestrian detectors at traffic signals may be pushbuttons or passive detection devices, which register the presence of a pedestrian in a position indicative of a desire to cross, without requiring the pedestrian to push a button. Pedestrian pushbuttons should be well-designed and within reach and operable from a flat surface for pedestrians in wheelchairs and with visual disabilities. They should be conveniently placed in the area where pedestrians wait to cross and should clearly indicate which pedestrian signals will be activated.

PEDESTRIAN FACILITIES

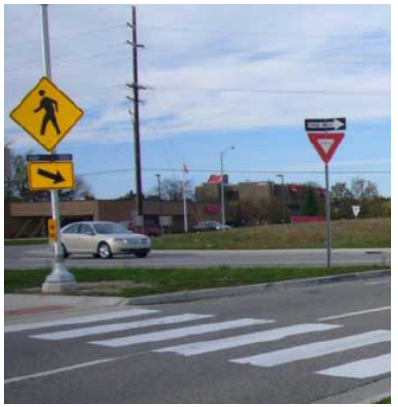
To further maximize the placement of pedestrian signals, adjacent vehicular traffic signals may be retimed to prevent cars in a turning lane from establishing their turn before pedestrians may begin crossing. Typically, a pedestrian signal changes from DON'T WALK to WALK the same time the concurrent traffic signal changes from red to green. The challenge for pedestrians is that turning vehicles may begin driving before pedestrians have a chance to begin crossing. With the leading pedestrian interval strategy, drivers would be held at a red light for 4 to 7 seconds while pedestrians may begin crossing the street.

Pedestrian safety is maximized when drivers are aware of the crosswalk location and know when a pedestrian is attempting to cross. People who use wheelchairs are at a lower height than other pedestrians and may be more difficult for motorists to detect. People with vision impairments cannot establish eye contact with an approaching motorist, which may also decrease the probability that they will be seen or that the motorist will know that a crossing will be attempted. Flashing lights that are activated only when a pedestrian is attempting to cross can enhance crosswalk detection by motorists.

Rectangular Rapid Flash Beacon (RRFB's)

These signals most commonly are used at intersections without stoplights or in mid-block pedestrian crossing lanes. Using rapidly flashing, yellow LED lights mounted on yellow pedestrian signs, the lights flash to signal to drivers that a pedestrian is either about to cross or is in the crosswalk. The lights are activated either by pushbutton or passive detection, and are often times powered by solar panels attached to the top of the unit, reducing costs and energy consumption. According to statistics from the Federal Highway Administration, this system shows a significant increase in traffic stopping for pedestrian crossings compared to crossings without a beacon signal[ii].

ii https://safety.fhwa.dot.gov/intersection/conventional/unsignalized/tech_sum/fhwasa09009/



High Intensity Activated Crosswalk (HAWK)

Identified by the Federal Highway Administration as a pedestrian hybrid beacon, these crosswalks are usually located at mid-block crossings where drivers may not typically be required to stop. While mid-block crossings may be less common, the majority of fatal accidents with pedestrians occur at these locations. According to the FHWA, more than 70% of pedestrian fatalities occur at these locations, where vehicles are travelling at much faster speeds. Using HAWK systems help to significantly reduce such accidents and have even shown to reduce accidents due to drivers trying to avoid hitting pedestrians, as well.

These signals remain off until activated by a pedestrian wishing to cross a specific intersection, and upon manually pressing a button, a raised signal, similar to a stop light, begins flashing yellow to warn drivers to prepare to stop. Once the signal changes to a solid red state, traffic is required to stop and the pedestrian receives a WALK signal to proceed. After a brief period, the red light begins to blink, permitting drivers to proceed once pedestrians have crossed and it is safe to do so.

PEDESTRIAN AMENITIES + URBAN CHARACTER

The quality of the pedestrian environment is just as important as the facilities that accommodate pedestrian movement. Urban design qualities such as plantings, benches, bicycle racks and wayfinding signage aid in creating a well-scaled, and well-defined environment for the user.

Public Amenity Areas

Amenity areas are publicly accessible areas, typically located within the public right-of-way, and their purpose is to enhance the enjoyment of the public realm. These areas are included to meet the needs of pedestrians and provide features such as seating, bike racks, or waste receptacles. To avoid conflict with adjacent pedestrian and bicycle facilities, these areas should adhere to certain guidelines as established below.

In their most basic form, amenity areas may simply serve as a buffer between pedestrians and vehicular traffic. While comfort is one of the greatest psychological factors in creating a usable public space, separation from traffic will reduce the feeling of angst and discomfort caused by walking adjacent to vehicles traveling at higher speeds. Buffers may be designed to create a visual separation from traffic, such as a lawn panel or an on-street bike lane. Buffers may also take on a more physical barrier such as street trees or other plantings or a parking lane. Providing a defined distinction between pedestrian and vehicular space will go a long way in making a public walkway feel more inviting.

Spacing of these areas should be considered to fit the needs of all parties along the entirety of a walkable route. To provide ample opportunities for users to take advantage of these areas, it is recommended that a community provide amenities along every 75 linear feet of roadway next to businesses and every 150 feet adjacent to residential or civic uses. To accommodate a wider array of users, it is recommended that at least half of these amenity areas include additional space for equipment such as wheelchairs or bicycles. Having adequate amenities within busier districts will allow a larger group of users more access to these features.

Within these amenity areas, routes should be clear of all obstructions that might disrupt the flow of pedestrian traffic or cause injury, especially in a day where technology demands our attention at all times. All benches and receptacles should be situated off of the main path with additional room for users; an 18-inch buffer is recommended between the walking path and all seating areas. A 5’ minimum clear zone between bike racks and walkways should provide ample room for cycling equipment without disturbing the flow of pedestrian traffic. The physical layout of all amenity areas should be addressed to ensure the safety of all users along walking paths.

Another important factor to all amenity areas is that of safety and visibility. All amenity areas should be clear from any feature that may conceal activity or obstruct views to or from these public areas. It is recommended that any supporting landscape is not to exceed 30” in height, and all overhead structures shall maintain visibility up to 7’. Lighting is recommended to be incorporated in close proximity to all amenities to enhance visibility beyond daylight hours, and provide comfort and usability of these areas at all times. While there are many factors to consider when incorporating amenities to a public space, safety and visibility should be the number one priority.

While most amenities are included to enhance the comfort and aesthetics of a site, amenities also need to include elements such as locations for utility infrastructure both above and below ground as well as things such as signage, fire hydrants and street lights. Typical utility buffers are at minimum 2’ in width, but may be larger depending on the right-of-way and the amount of underground utilities. These utility buffers may be utilized directly beneath pavement, but sometimes they may take the form of landscape beds with small shrubs, perennials, or turf. There are many different treatments that these buffers may receive, but the most important function is accessibility and flexibility as these areas will need to be disturbed to make repairs or changes to surrounding utilities.

Finally, designating such amenity areas will help delineate spaces for gathering and spaces for traveling. Using methods such as a contrasting decorative pavement or landscaping specifically in these areas will help to define these different uses, and will also provide visual cues for those not looking forward or distracted by other things. The change in color and texture will create a rhythm within the walkway and a continuity within the district, visually unifying and integrating many different locations into one identifiable corridor within the heart of Fortville.

PEDESTRIAN AMENITIES + URBAN CHARACTER

Quasi-Public Amenities

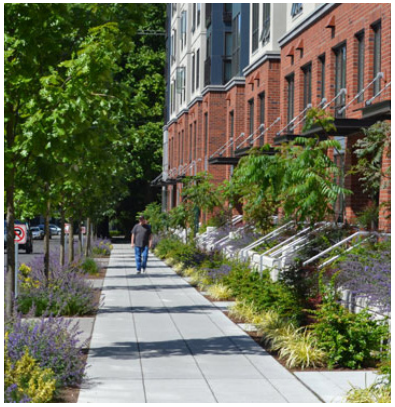
The quasi-public sphere consists of the transition area between the public and private realms, including the public sidewalk, building facade, the first level building uses and any parking or open space available to public users. The quasi-public amenity areas along a corridor create outdoor living spaces in the built environment. The zone is a planned or impromptu destination along the corridor and can contribute to an area's economic vitality, provide respite from urban activity, and create a sense of community. The activities in the zone generate interest along the streetscape and adjacent land uses, where walking and social gathering are encouraged and appealing. Examples of activity zone elements include sidewalk cafes, public art, seating areas, plazas, and street retail.

Street Trees and Corridor Plantings

Street trees provide an enormous benefit to streetscapes. They improve the aesthetic quality of a street and offer shade and shelter in varying weather conditions. For pedestrians on sidewalks, they are an important buffer from traffic, and large trees can be effective at calming traffic because they appear to enclose the street making it feel narrower. When constructing new sidewalks, efforts should be made to preserve existing trees, and new trees should be planted when none are present.

The planting zone should be a minimum of 5 feet in width to allow for adequate soil volume, and open space around the base of the tree. Without open space at the base of the tree, the roots will not collect enough water. The results are seen in stunted tree growth, poor tree health and the formation of surface roots, which can cause sidewalk panels to heave and shift causing damage and trip hazards.

Each instance of the applications shown below create a different character and aesthetic within a street corridor.



Parkway with Turf

A continuous parkway is planted with turf. Step out strips and paved walks at regular intervals allow pedestrians to cross the parkway without stepping into the plantings. This provides a very clean and tidy appearance that softens the roadside appearance.

Flush Landscape Planter

A landscape planter is set flush with the adjacent sidewalk. Grasses or low hedges visually bound the planter and protect the soils from pedestrian traffic, as well as provide opportunities for seasonal interest.

Parkway with Infiltration

A parkway set flush with the sidewalk allows stormwater runoff to collect in the planter area and infiltrate into the ground. Appropriate landscape material must be selected and overflow outlets allow excess water to drain into the city sewer. Communities interested in utilizing infiltration within their streetscapes should proactively plan for the cleaning and maintenance of the system due to sedimentation and vegetation planted within a harsh soil environment.

Tree Pit Guards

Low, sturdy fence-like structures protect trees and surrounding plants from damage, soil compaction, and pets. Low, sturdy fences can also be removed and flush tree grates can be placed to maximize the walkable space as trees mature.

When paving around tree pits, it is important to account for additional soil volume where possible. Utilizing structural soil, or construction methods that maximize the soil volume under the pavement will allow for increased tree growth and optimum tree health, ultimately increasing the longevity of the proposed vegetation.

PEDESTRIAN AMENITIES + URBAN CHARACTER

Corridor and District Wayfinding

One aspect of creating a visual unity throughout a community is through wayfinding and signage. Many times street signs along more prominent corridors will be more ornate and attractive than standard street identification. Also, there will often be additional signage to denote specific locations such as parks and civic buildings. These signs will usually be placed along main routes where visitors or those unfamiliar with the community will see.

Gateways are another element constructed to welcome travelers to a specific corridor and identify when entering a town center or district. These spaces will feature prominent signage, accompanied by landscape and lighting, and should be placed at key points along the main road. Due to the nature of these entryways, attention should be provided to ensure these spaces are well maintained and provide the best appearance at all times. These entrances provide a first impression to those entering the community, and the style and character will often match the architecture or reflect how a community wants to be seen. Providing matching pieces throughout the Broadway corridor will unify this space and provide a sense of purpose and identity.


FRUITVALE


FRONT STREET DISTRICT
Opera House
Warehouse Dist
Visitor Center


You've Made It...
...Till Next Time
PUB


RATLIFF
INSTRUCTION

05 PLAN RECOMMENDATIONS


RATLIFF
INSTRUCTION

The Broadway district, and its transformation into an active and vibrant development area, is complex. The district is home to existing residents and business owners, and the existing development has responded over time to the needs of both by encroaching on public right-of-way, locating curb cuts and parking lots along primary corridors, and eliminating visually unique characteristics from the area. The district is also the focal point for a community-wide transformation. The transformation of the area, which is supported by Town leadership and the public, requires the collaboration of public and private entities as well as the participation of existing property owners throughout the community. These collaborations and partnerships often times can be difficult and are developed and nurtured over many years. To further complicate things, the area is likely to be impacted by a wide variety of environmental, political and market conditions that no one person, or entity can control.

The transformation of the district does not need to be developed from scratch, nor does it need to rely on projects at a grand scale. Small improvements, such as new sidewalks, pedestrian crossings and pedestrian amenities, that provide for safe connections to key community facilities can be transformative and can be leveraged into larger improvements in the future. Each new pedestrian improvement implemented along the Broadway corridor not only encourages pedestrian activity, but stands as a visual reminder to the community that improvements are occurring, and that the district is developing into the active, diverse commercial district they wished to create. Together, Town leadership, community stakeholders and the public identified that the Broadway TIF District would be an active area of diverse development that respects and fosters the small-town charm for which Fortville is known. Additionally, they identified ways to provide for safe mobility along the Broadway Street corridor.

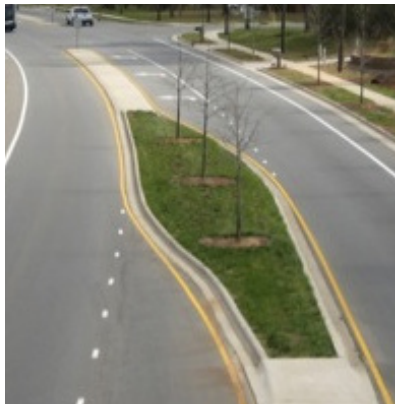
While capital improvements and policy recommendations outlining how the Town could achieve the long-term vision of the district for the Broadway corridor was the primary goal of the planning process, it became clear that providing immediate improvements along the corridor was an important part of achieving the long-term goals for the district. By identifying ways to allow for pedestrian facilities, and encourage safe pedestrian flow along the corridor, the Town can proactively begin the visual and physical transformation of the district immediately. The goal of the interim corridor recommendations is to identify how the connectivity toolkit elements outlined in Section 04 can be applied using the existing right-of-way along the Broadway corridor. This could potentially reduce the overall project costs by eliminating additional right-of-way acquisition, and will provide for a streamlined set of implementation strategies that can be funded by the Town in partnership with INDOT.

The interim recommendations outlined in this section provide for visual and physical change along a prominent corridor. Implementation of these recommendations also offers the Town the opportunity to build momentum and show forward progress towards a broader, district wide goal. In 2014, Town leadership, stakeholders and the public committed themselves to the development of a vibrant commercial district and a transportation system that caters to both vehicular and pedestrian transportation choices. Beginning with the *Envision Fortville Comprehensive Plan*, the Town's commitment to developing active and well-connected districts has only grown stronger. This strength and clarity surrounding transportation and development goals is evident in the recent *Connect Fortville Thoroughfare Plan*, and the *Broadway-Main TIF District Design Standards*. While the focus and detail of each planning initiative has varied, the vision for the Broadway district and the corridor has remained true to its intention. Broadway Street, which will be home to restaurants, offices, apartments and boutique shops, serves as a walkable corridor linking downtown to the southern areas of town.

The community envisioned wide pedestrian walkways that were unobstructed by light and signage poles. Tree lawns would be used to add visual interest and would soften the look and sounds of the adjacent vehicular roadway. Additionally, the community envisioned a safer corridor, with slower speeds, less areas and points of conflict and more opportunities for pedestrians to cross the street safely. While each previous planning document acknowledged the vision and goals of the district, and in some cases provided for the administrative and procedural requirements needed to facilitate the transformation, no consolidated set of recommendations had been developed to outline how public improvements should be implemented along the Broadway corridor. This planning document, and the recommendations included in the preferred corridor recommendations, provide for the specific right-of-way improvements needed to create a well-connected, active and safe pedestrian environment along Broadway Street.

Using the Connectivity Toolkit elements defined in Section 04 as a framework, the interim and long-term corridor recommendations are intended to provide an overview of each proposed amenity, its impact on connectivity, and recommended design treatments for successful implementation. The recommendations are organized around three categories: Vehicular Functionality, Pedestrian Facilities and Pedestrian Amenities + Environment.

The recommendations outlined in this section are considered core facilities for both the vehicular and pedestrian environments and are critical for the development of an active pedestrian environment adjacent to the Broadway corridor. Both the interim and preferred corridor recommendations, while specific to the public right-of-way, will serve as a complement to the future built environment of the Broadway District and the historic downtown.




PUSH BUTTON
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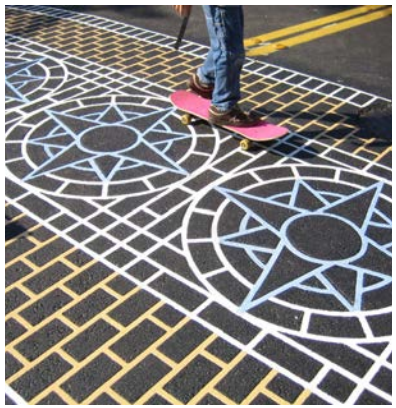



SALON & SPA
AVEDA
SANSAR

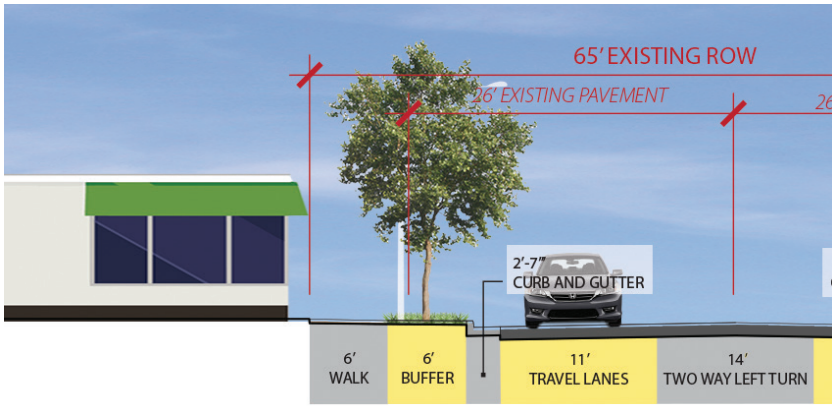
VEHICULAR FUNCTIONALITY

These elements together define the vehicular speeds and vehicular facilities and ultimately provide for the safe and efficient movement of vehicular traffic. With nearly 13,000 vehicles per day, the functionality of the Broadway corridor is critical now and in the future. These fundamental elements are proposed to be within the boundaries of land owned and maintained by the state of Indiana and will be within their purview regarding oversight and approval. The recommendations outlined below would need to be coordinated and approved by INDOT.

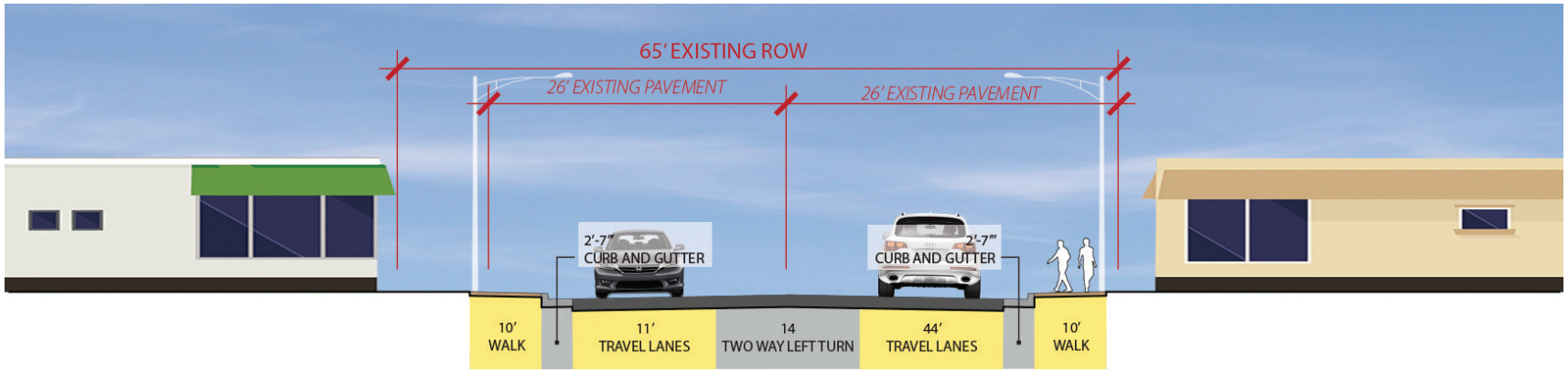
Interim Corridor Right-of-Way and Right-of-Way Expansion Recommendations

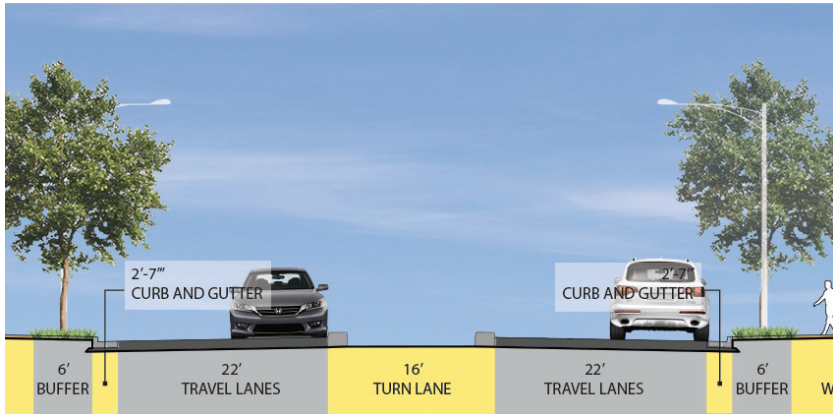
In order to implement the interim recommendations as outlined in this section, no additional permanent right of way is required. The corridor right of way widths will remain between 65' and 75', with only temporary acquisitions needed to facilitate construction which would be confirmed through the design process.

To better utilize the existing right-of-way width, it is recommended that a road diet be implemented to convert the current four lane configuration to a three lane configuration. Based upon the cursory analysis performed during the traffic sensitivity analysis, it was concluded that the three-lane section will perform acceptably for approximately 20 years. Because of the applicability of a three-lane cross section, the remaining corridor right-of-way can be repurposed to accommodate pedestrian facilities.



Alternate sidewalk section with a 6' buffer should be installed where existing right of way, and building placement allows.



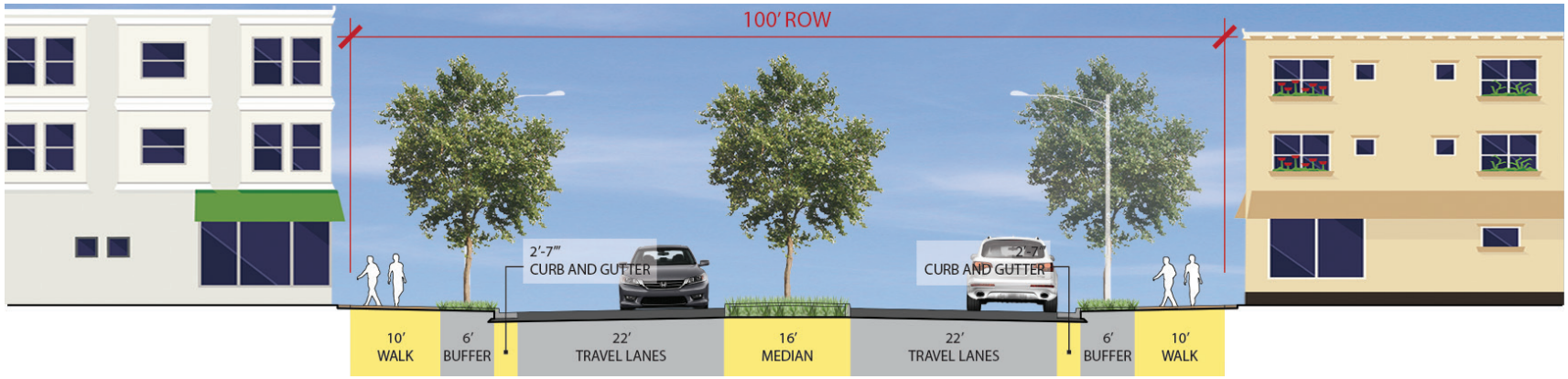


A buffered and paved left turn lane may be necessary to facilitate turning movements in the preferred scenario.

Preferred Corridor Right-of-Way and Right-of-Way Expansion Recommendations

The proposed right-of-way for the Broadway corridor is proposed to be 100'. The Broadway Street corridor will be able to utilize a right-of-way dedication policy to secure a 100' right of way width throughout the TIF district, without the cost and impacts of a formal acquisition process. Traditionally, for right-of-way to increase along the corridor, a right-of-way acquisition process would be used to compensate public or private land holders for the land being transferred to the public right-of-way.

As properties develop or redevelop, the requirements identified in the *Broadway-Main TIF District Design Standards* require a minimum setback of 50' from the center of Broadway Street. The setback requirement will increase the public right-of-way approximately 10'-20' on either side of the corridor. Policy language is currently being drafted to allow for the formal dedication of the portion of private property within the 50' setback to the Indiana Department of Transportation.



VEHICULAR FUNCTIONALITY

Interim Corridor Geometry and Alignment Recommendations

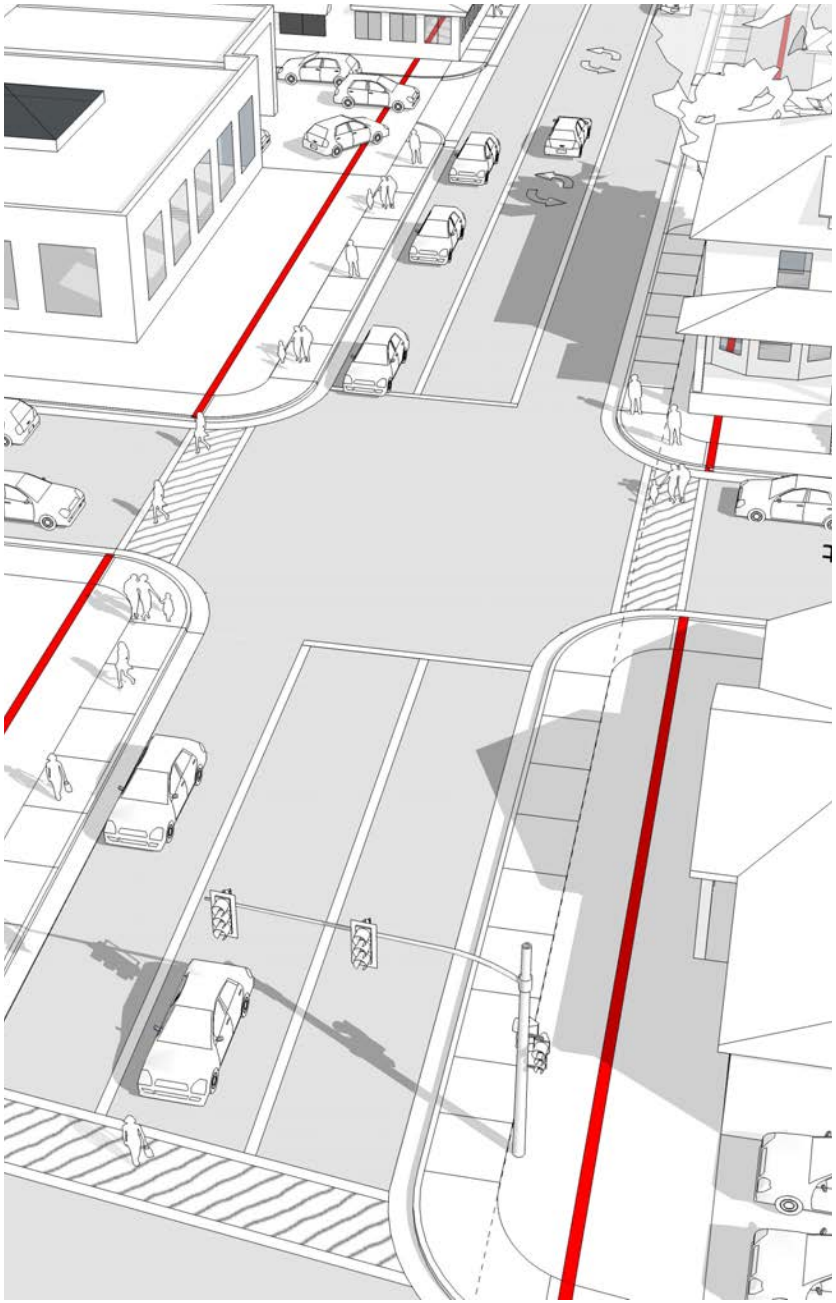
It is recommended that the corridor utilize a road diet to reduce the overall number and widths of lanes along Broadway Street from Garden Street to SR 13 This reduction in travel lanes will allow for the existing right-of-way and the existing roadway to be converted into pedestrian facilities and buffer space.

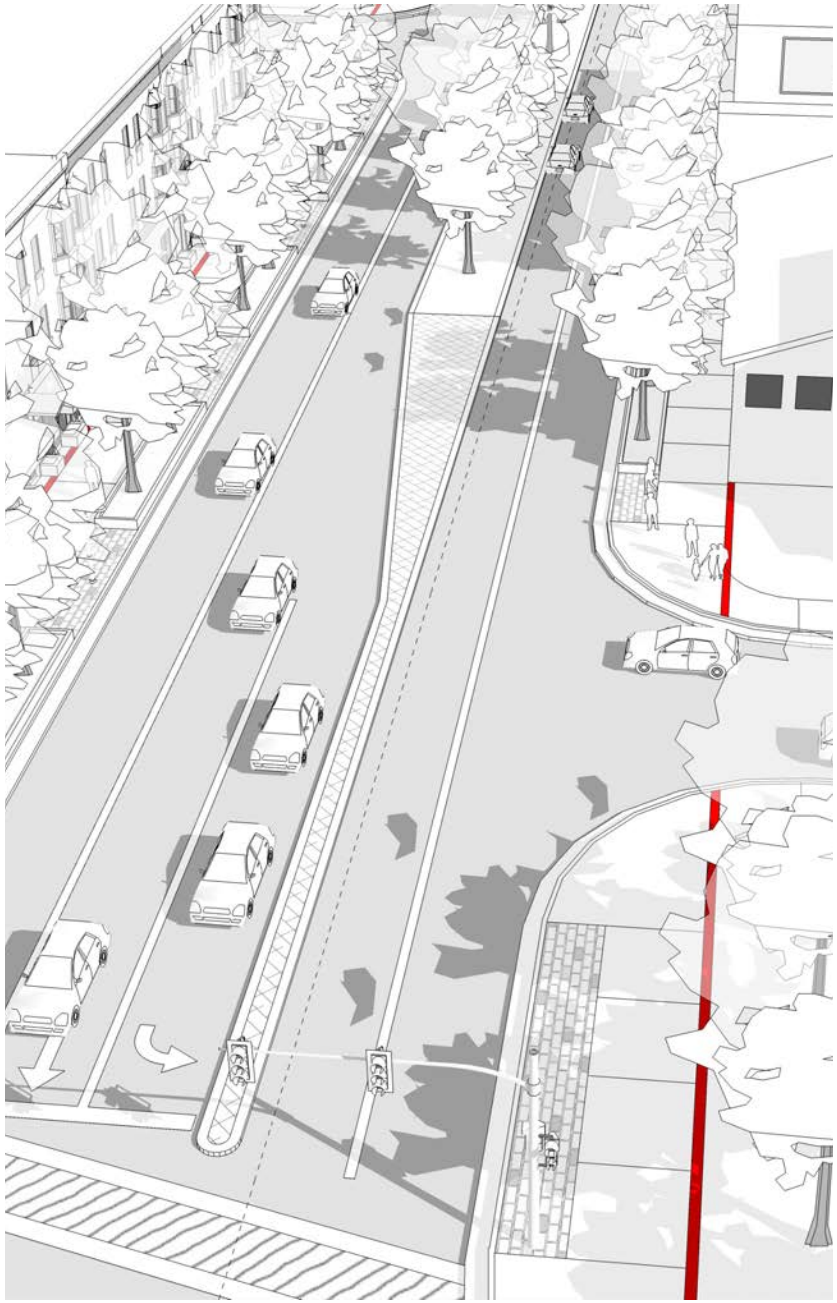
Two 11' wide vehicular travel lanes separated by one 14' wide two way center left turn lane will accommodate the vehicular needs of the corridor. A new 2'-7" curb and gutter should be installed along both the north and south edge of the existing curb location to direct the flow of stormwater along the length of the road. As necessary, new storm inlets should be installed to complete the system. The curb and gutter system should be tied back into existing development and parking areas as necessary to complete the design.

West of Garden Street, and east of SR 13, the Broadway corridor lane widths and overall lane configurations should transition back to the current geometry and alignment of two travel lanes in either direction with a stone shoulder and open ditch drainage system.

Because the Broadway corridor runs directly through the heart of the Town, it is recommended that Town officials work with INDOT representatives to lower the maximum speed limit to 30 or 35 mph. This reduced speed zone would be in effect from the intersection of Broadway Street and SR 13 on the east, to Broadway Street and Garden Street on the west.

The nearby communities of McCordsville, Ingalls, and Pendleton all feature reduced speed limits along SR 67, which run through both residentially and commercially developed portions of the community and around the state.





Preferred Corridor Geometry and Alignment Recommendations

With the expansion of the corridor right-of-way, it is recommended that the Broadway corridor remain four travel lanes in width. Each lane (two in each direction) should be 11' wide. A 16' wide central median should be constructed along the center of the road alignment with protected left turn lanes being offered at McCarty Street, Maple Street, Poplar Street and SR 13. New curb and gutters should be installed along the north and south edges of the roadway to collect and direct the flow of stormwater along the corridor. New storm inlets should be provided at all necessary points to control the corridor's drainage and runoff. The curb and gutter system should be tied back into existing development and parking areas as necessary to complete the design. It is possible that due to the proposed corridor width, and proposed curb and gutter system, additional reconstruction of driveways, private parking and side street intersections may be necessary. Modifications should be made to promote and ensure adequate drainage within the right-of-way.

West of Garden Street, and east of SR 13, the Broadway corridor lane widths and overall lane configurations should transition back to the current geometry and alignment of two travel lanes (approximately 13' in width) in either direction with a stone shoulder and open ditch drainage system.

VEHICULAR FUNCTIONALITY

Access management techniques provide for the proactive management of vehicular access points and are often achieved through the application of both planning, regulatory, and design strategies. Much of the planning and regulatory techniques that are being identified and implemented currently will greatly impact the access management along the corridor in the future.

Interim Intersection Design and Signal Spacing Recommendations

In the short-term, the existing traffic signals along the corridor will remain in place. The intersections of Broadway and W Garden Street, Maple Street and SR 13 will utilize traffic signals, with only minor modifications to the intersection geometry to accommodate turning radii and queuing space, occurring as additional corridor amenities are implemented.

SIGNALIZED INTERSECTION LEGEND

Signalized intersections
- *W Garden Street*
- *Maple Street*
- *SR 13*

Non signalized intersections (with through access)
- *McCarty Street*
- *Merrill Street*
- *Main Street*
- *Oak Street*
- *Walnut Street*
- *Poplar Street*
- *Elm Street*

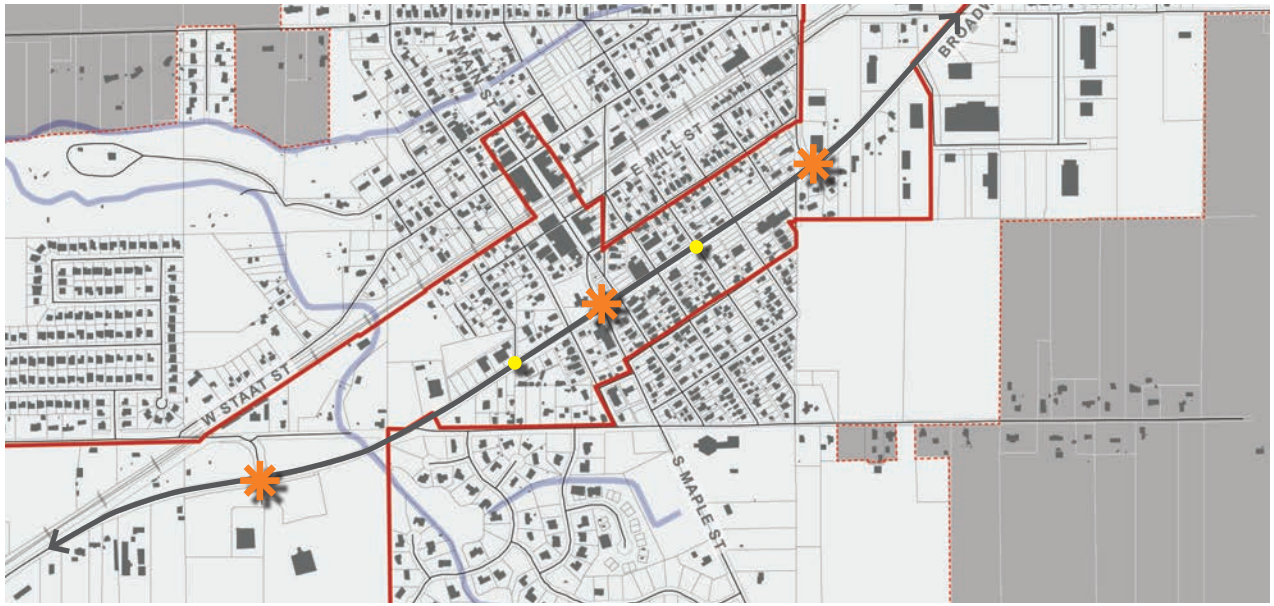
Preferred Intersection Design and Signal Spacing Recommendations

It is recommended that the signalized intersections of Maple Street and SR 13, along the Broadway corridor be reconstructed due to the comprehensive changes being recommended for the corridor geometry and alignment. Both intersections currently have standard or typical dedicated left turn lanes (from all four sides or maybe outline which travel directions), which provide access to downtown, and connectivity to the rural areas of town to the south. These lanes should be integrated into the raised central median when the corridor geometry and alignment is modified. Currently, no right turn lanes exist at these intersections, which over time could pose efficiency problems for the corridor due to slower or stopped traffic.

Additionally, dedicated right turn lanes, that would provide for north and south access along Maple Street and SR 13 should be integrated into the intersection design if traffic demand warrants such at the time of design and construction.

Side street intersection approach treatments, providing access north and south, should also be investigated at the time of design and construction to determine if additional turning lane space is necessary.

While the recommendations shown in this planning document identify that traffic signals be included at these key points along the corridor, during future design processes all intersection configurations should be reviewed and evaluated. Signalized intersections and roundabouts offer different benefits and constraints, and which design is most appropriate depends on the site-specific locations, traffic demands and surrounding infrastructure.



SIGNALIZED INTERSECTION LEGEND

Signalized intersections
- *W Garden Street*
- *Maple Street*
- *SR 13*

Non signalized intersections (with through access)
- *McCarty Street*
- *Poplar Street*

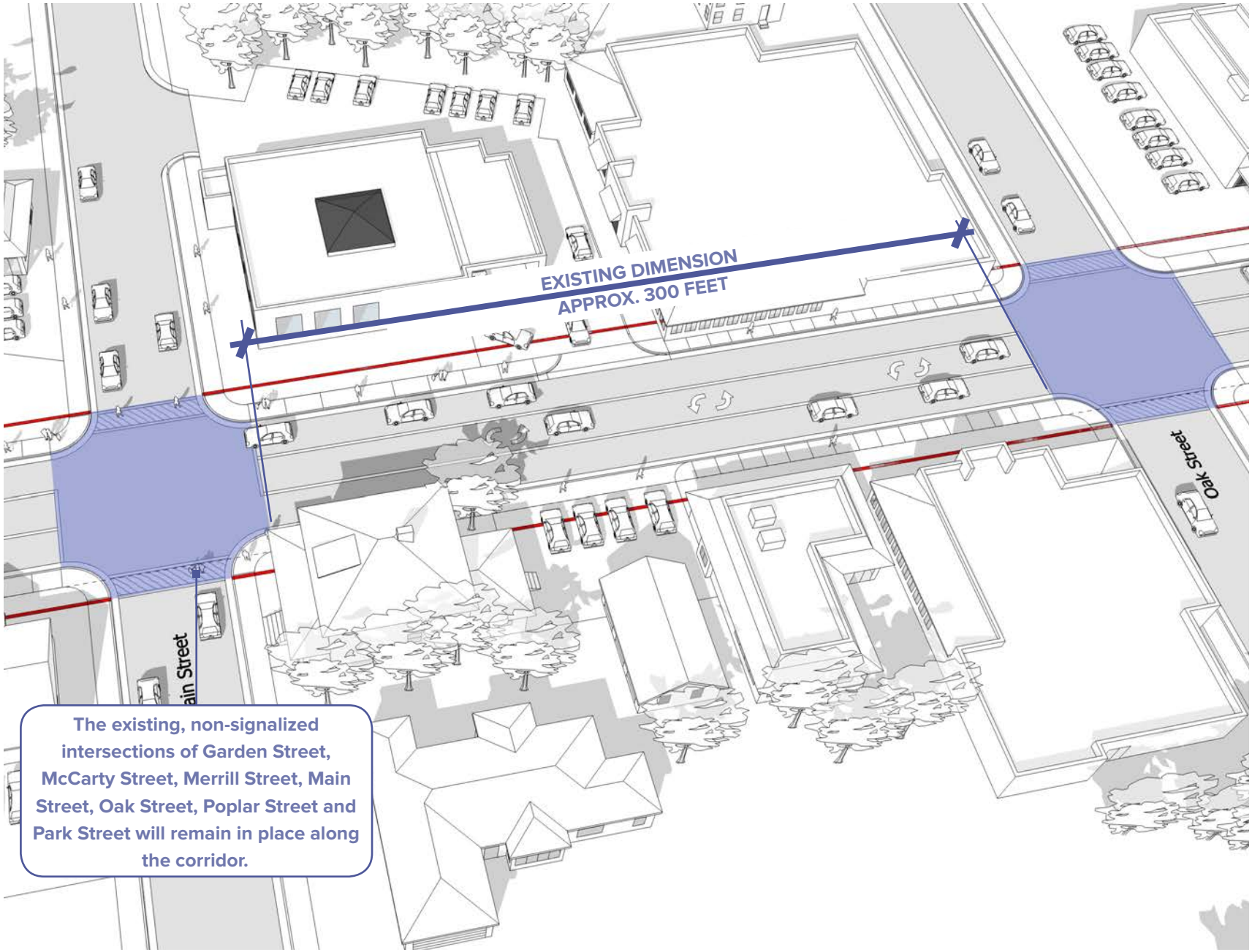
Interim Non-Signalized Spacing Recommendations

The existing, non-signalized intersections of Garden Street, McCarty Street, Merrill Street, Main Street, Oak Street, Poplar Street and Park Street will remain in place along the corridor. Additional pedestrian crossings should be installed as identified in 'Interim Pedestrian Signals and Crossings: Non-Signalized Intersections Recommendations' which is outlined below.

SIGNALIZED INTERSECTION LEGEND

Signalized intersections
- *W Garden Street*
- *Maple Street*
- *SR 13*

Non signalized intersections (with through access)
- *McCarty Street*
- *Merrill Street*
- *Main Street*
- *Oak Street*
- *Walnut Street*
- *Poplar Street*
- *Elm Street*



The existing, non-signalized intersections of Garden Street, McCarty Street, Merrill Street, Main Street, Oak Street, Poplar Street and Park Street will remain in place along the corridor.

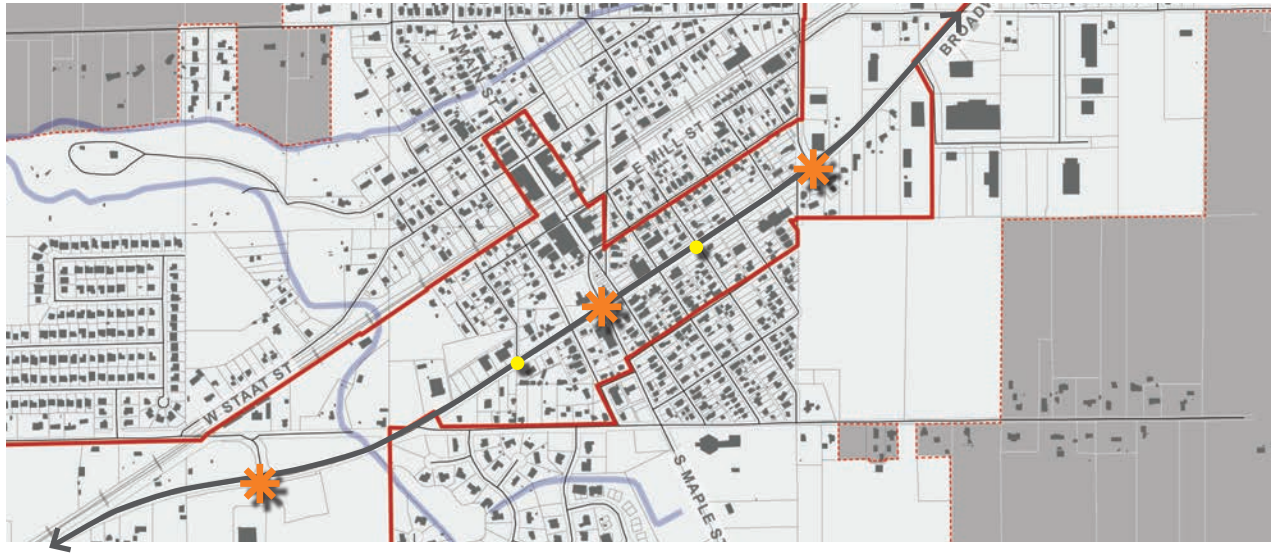
Preferred Non-Signalized Spacing Recommendations

It is recommended that the intersections of McCarty Street and Poplar Street be treated as secondary intersections. These intersections should allow for north, south and through access, with dedicated left turn lanes being provided within the Broadway corridor right-of-way. It is not recommended for these intersections to be signalized, however, if during the design process the traffic demand warrants a traffic signal, then one should be provided and coordinated with the other signalized intersections along Broadway Street.

It is recommended that if additional southern connectivity to private development is wanted at the time of implementation that McCarty Street be extended to the south. Modifications to the alignment may be necessary north of Broadway Street, and should be coordinated as properties redevelop. The desired intersection geometry should be considered as properties along the south side of Broadway Street and McCarty Street development or redevelop to ensure appropriate right-of-way is preserved or obtained.

The intersection of Broadway Street and Main Street should be eliminated and the existing right-of-way should be converted to public space in accordance with the recommendations included in the Envision Fortville Main Street plan and the ongoing Main Street corridor improvement study. The elimination of the intersection of Main Street and Broadway Street, will provide for a more efficient vehicular and pedestrian circulation pattern, which in turn will allow for greater levels of safety at the intersection and along the streetscape.

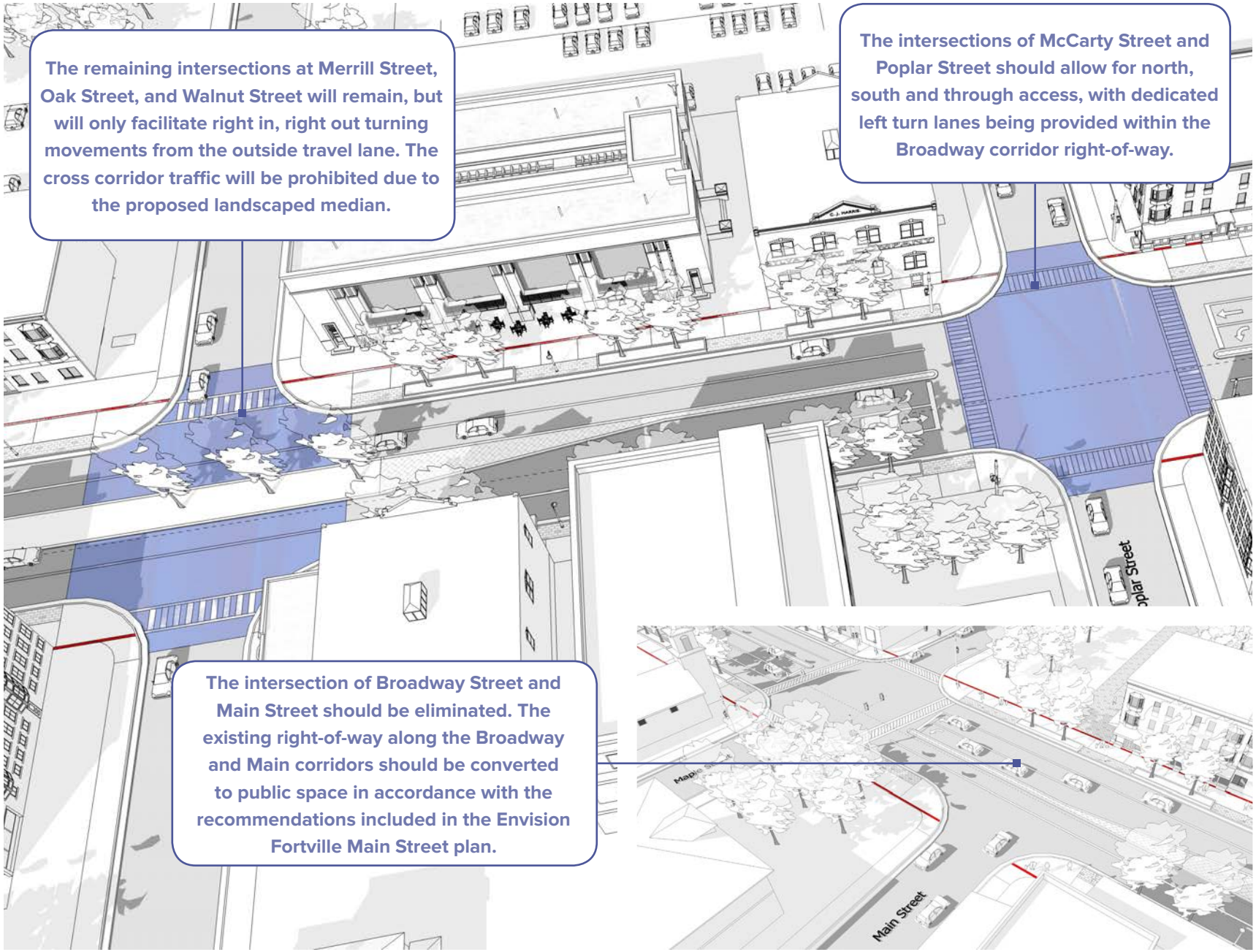
The remaining intersections at Merrill Street, Oak Street, and Walnut Street will remain, but will only facilitate right in, right out turning movements from the outside travel lane. The cross corridor traffic will be prohibited due to the proposed landscaped median.



SIGNALIZED INTERSECTION LEGEND

Signalized intersections
- *W Garden Street*
- *Maple Street*
- *SR 13*

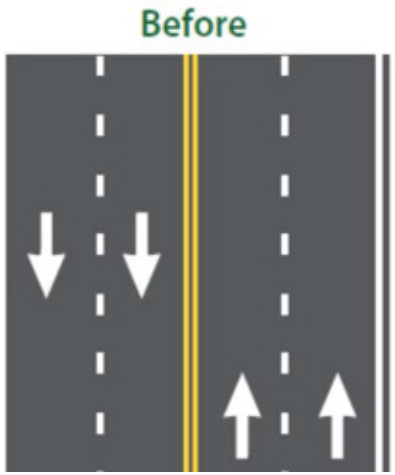
Non signalized intersections (with through access)
- *McCarty Street*
- *Poplar Street*

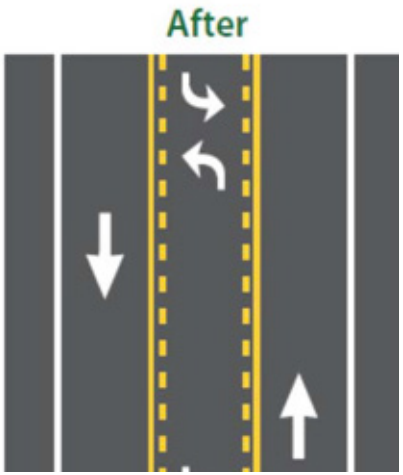

The remaining intersections at Merrill Street, Oak Street, and Walnut Street will remain, but will only facilitate right in, right out turning movements from the outside travel lane. The cross corridor traffic will be prohibited due to the proposed landscaped median.
The intersections of McCarty Street and Poplar Street should allow for north, south and through access, with dedicated left turn lanes being provided within the Broadway corridor right-of-way.
The intersection of Broadway Street and Main Street should be eliminated. The existing right-of-way along the Broadway and Main corridors should be converted to public space in accordance with the recommendations included in the Envision Fortville Main Street plan.
Main Street

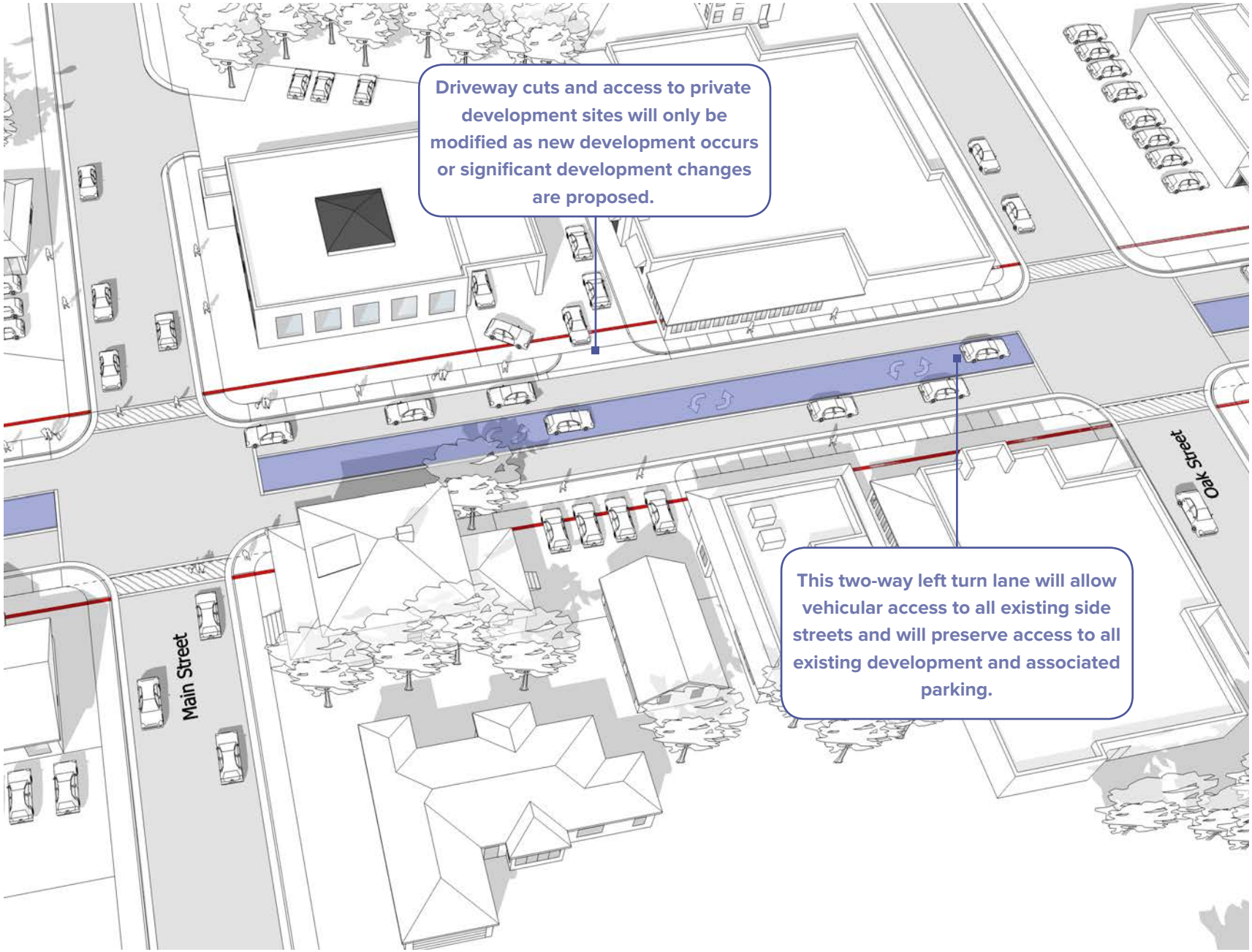
VEHICULAR FUNCTIONALITY

Interim Medians, Left Turn Lanes and Driveway Consolidation Recommendations

Due to the reuse of the existing right-of-way, and the need to accommodate three vehicular travel lanes, no dedicated median can be added to the corridor. Vehicular traffic will instead utilize a two way left turn center lane from Garden Street to Elm Street. This two-way left turn lane will allow vehicular access to all existing side streets and will preserve access to all existing development and associated parking. Driveway cuts and access to private development sites will only be modified as new development occurs or significant development changes are proposed. The driveway cuts and access points would be modified to meet the regulations identified in the *Broadway-Main TIF District Design Standards* and the *Connect Fortville Thoroughfare Plan*.






Driveway cuts and access to private development sites will only be modified as new development occurs or significant development changes are proposed.
This two-way left turn lane will allow vehicular access to all existing side streets and will preserve access to all existing development and associated parking.
Main Street
Oak Street

VEHICULAR FUNCTIONALITY

Preferred Medians, Left Turns and Driveway Consolidation Recommendations

The primary access management component along the Broadway corridor is recommended to be a 16' wide, landscaped median that is approximately 6" higher than the adjacent travel lanes. The median is recommended to run the length of the corridor, beginning at W Garden Street and extending east to SR 13.

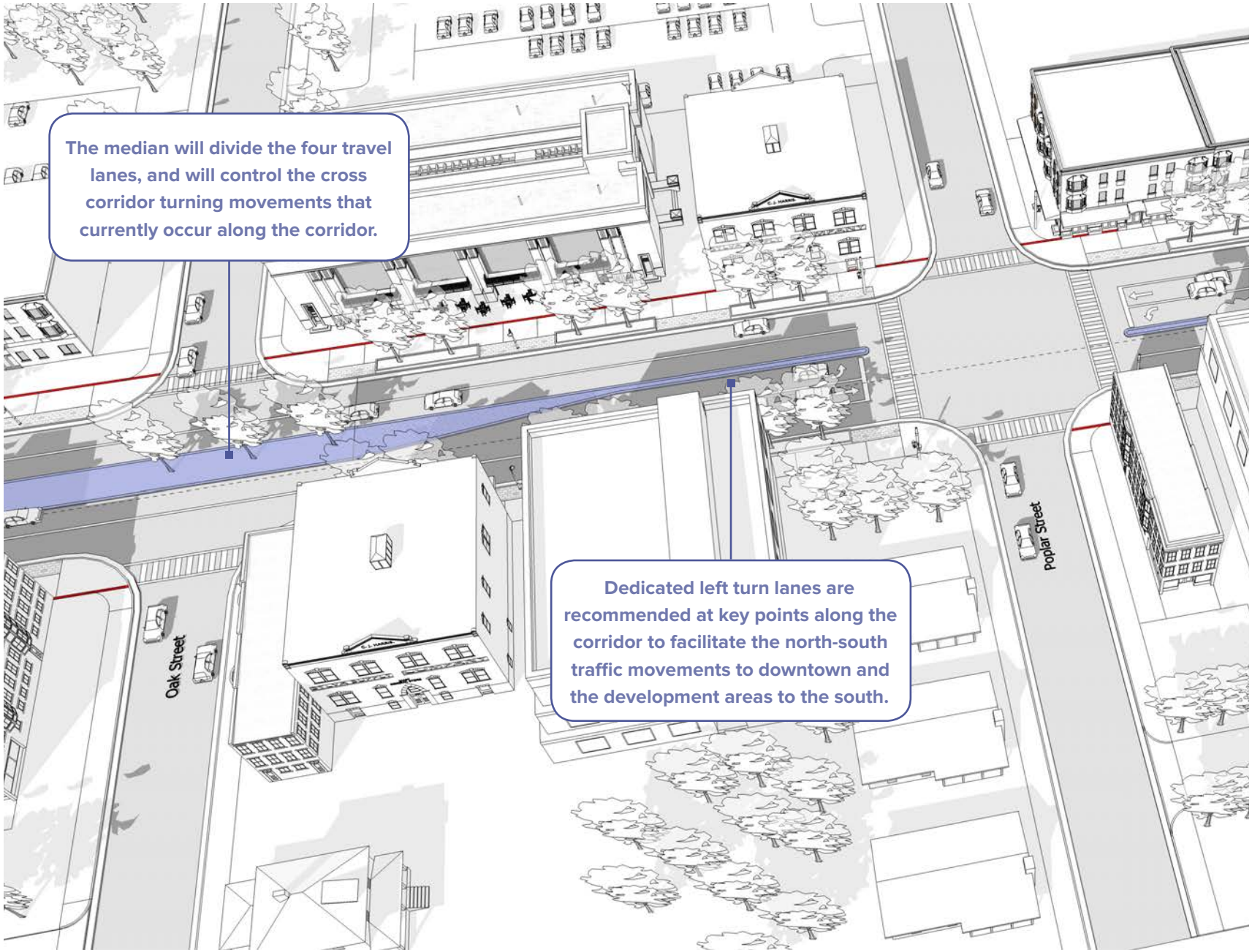
The median will divide the four travel lanes, and will control the cross corridor turning movements that currently occur along the corridor. Left turn, and cross corridor travel, will only be accommodated at the intersections of McCarty Street, Maple Street, Poplar Street and SR 13. Dedicated, protected left turn lanes will be integrated into the raised median at these locations. Other secondary streets will only be accessible by right turn movements.

The median also offers the opportunity to integrate aesthetic elements along the corridor, including turf, perennials, deciduous and evergreen shrubs and street trees. Adding these elements to the raised median will add visual interest, and will assist in transitioning the scale and character of the built environment to one that is inviting to pedestrians.

As properties along the corridor redevelop, the location of buildings, private parking and access drives will change based on the regulations outlined in the *Broadway-Main TIF District Design Standards*. Parking areas will be located on the interior of the lot, and will be accessible to the public street through an entrance drive located on a side street. This relocation of parking and entrance drives will eliminate the multiple driveway and curb cuts currently found on the corridor causing many uncontrolled exiting and entering points along the corridor equaling conflict, etc).

To further enforce the location, and potential relocation of private drives and curb cuts, the Town is currently working to develop and adopt an access control ordinance that will be applicable to the Broadway corridor, and other prominent corridors. The access control ordinance will define where private access points should be located and will provide parameters related to minimum driveway spacing.

Dedicated left turn lanes are recommended at key points along the corridor to facilitate the north-south traffic movements to downtown and the development areas to the south. These turn lanes will be integrated into the center raised median at the intersections of Garden Street, McCarty Street, Maple Street, Poplar Street and SR 13. Left turn signals will only be provided at the signalized intersections of Garden Street, Maple Street and SR 13. If during the design process it is found that additional signalization is necessary along the corridor, dedicated left turn signals would need to be installed at the intersections of McCarty Street and Poplar Street.


The median will divide the four travel lanes, and will control the cross corridor turning movements that currently occur along the corridor.
Dedicated left turn lanes are recommended at key points along the corridor to facilitate the north-south traffic movements to downtown and the development areas to the south.
Oak Street
Poplar Street

PEDESTRIAN FACILITIES

Features and amenities included in the pedestrian facilities category provide for the safe and efficient movement of pedestrian traffic. In active, urban environments, pedestrian facilities must be integrated into the vehicular network. Special care and attention therefore must be given to the design and placement of these facilities within the right of way.

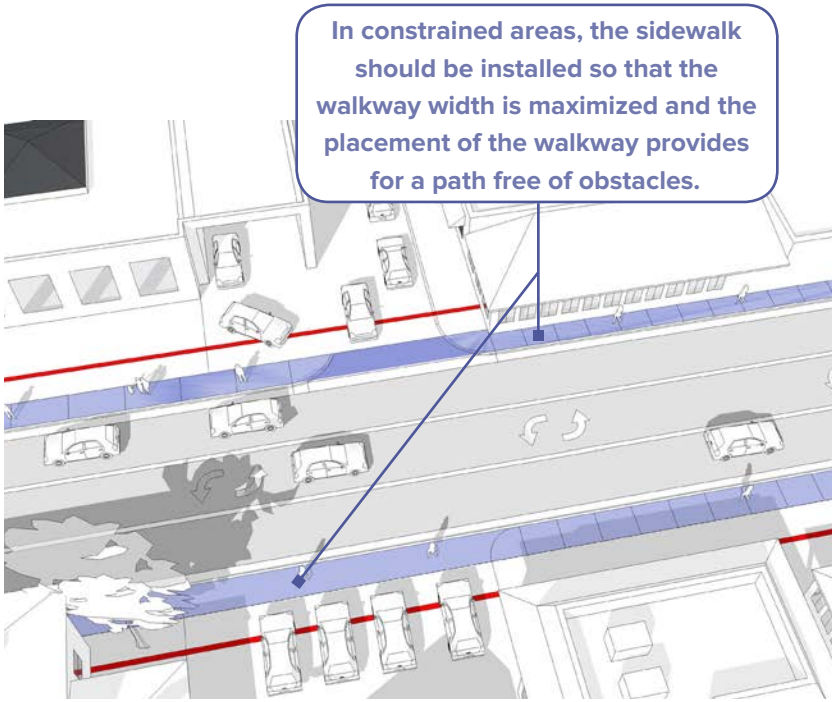
Interim Sidewalk Recommendations

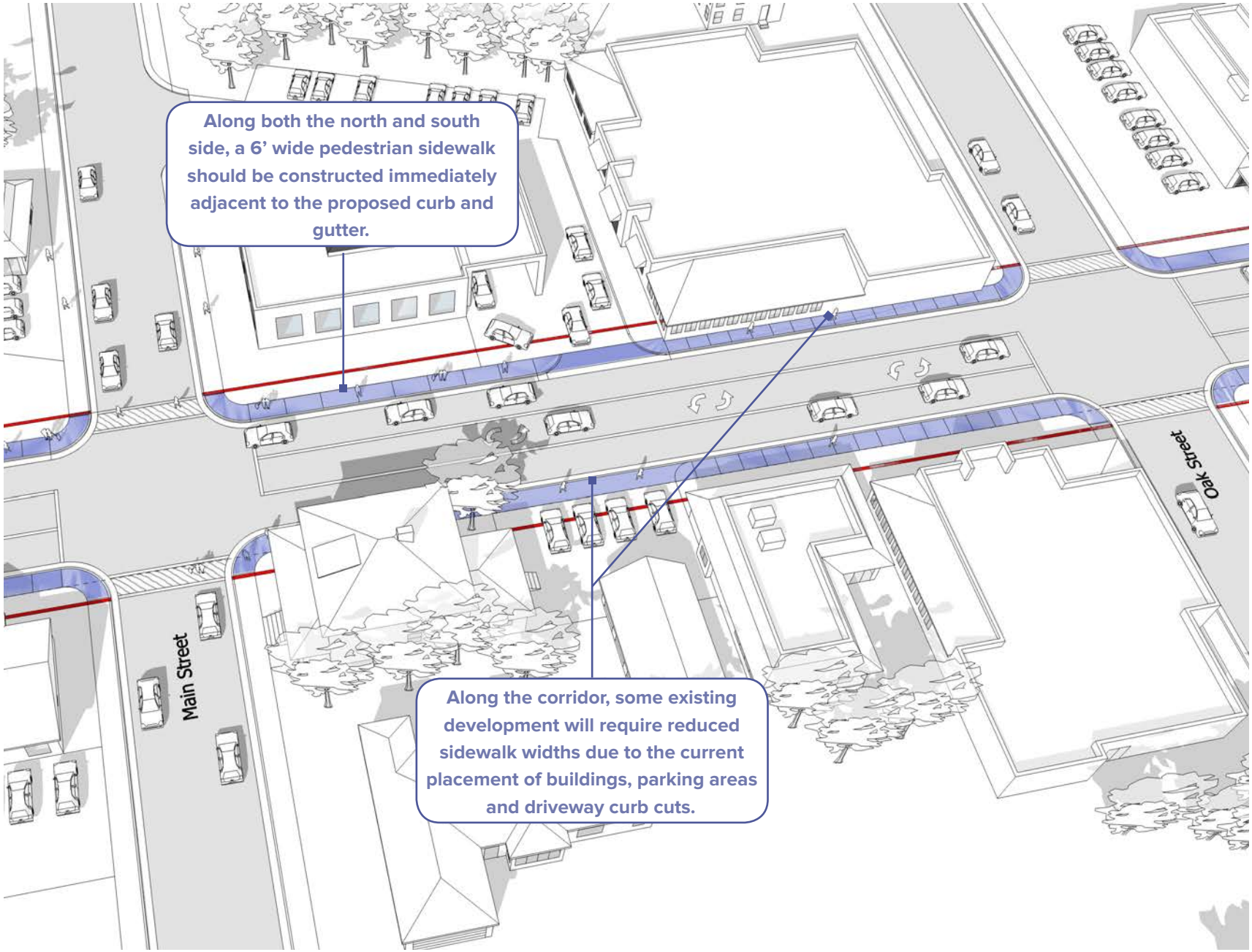
The proposed road diet and reuse of the right-of-way allows for the integration of pedestrian facilities on both the north and south sides of the corridor. Along both the north and south side, a 6' wide pedestrian sidewalk should be constructed immediately adjacent to the proposed curb and gutter.

While the 6' width is provided as a general recommendation along the corridor, some existing development will require reduced sidewalk widths due to the current placement of buildings, parking areas and driveway curb cuts. In those instances, the sidewalk should be installed so that the walkway width is maximized and the placement of the walkway provides for a path free of obstacles including light and sign poles and fire hydrants and other amenities.

As redevelopment occurs over the length of the corridor, new sidewalks should be placed in accordance with the *Broadway-Main TIF District Design Standards*. When newly placed sidewalks abut existing walks, clear and logical transitions should be provided to allow for a continuous pedestrian path along the corridor.

It is recommended that sidewalks be constructed of standard concrete pavement with a light to medium broom finish. It is recommended that the sidewalk be scored with a five foot jointing pattern to reduce the scale of the pavement and provide visual interest along the corridor. Standard concrete is readily available and wears well over time which will allow for the work to be incorporated into multiple implementation phases if necessary and is expected with the short-term approach.




Along both the north and south side, a 6’ wide pedestrian sidewalk should be constructed immediately adjacent to the proposed curb and gutter.
Along the corridor, some existing development will require reduced sidewalk widths due to the current placement of buildings, parking areas and driveway curb cuts.
Main Street
Oak Street

PEDESTRIAN FACILITIES

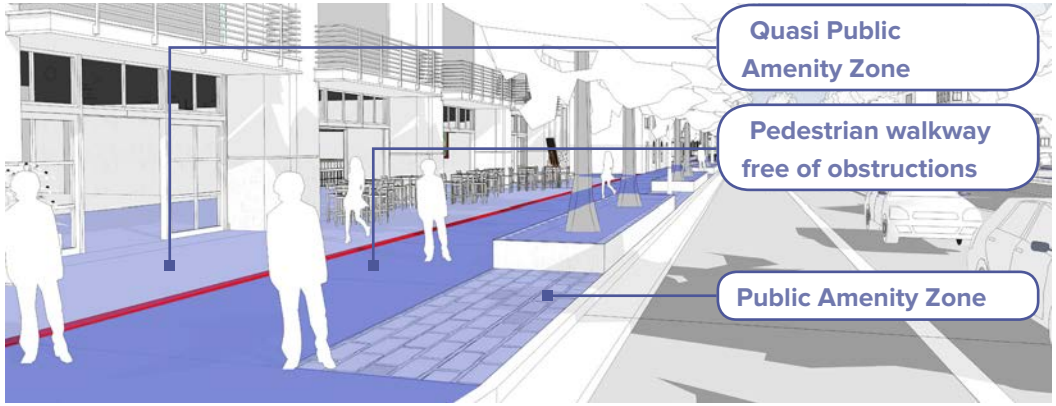
Preferred Sidewalk Recommendations

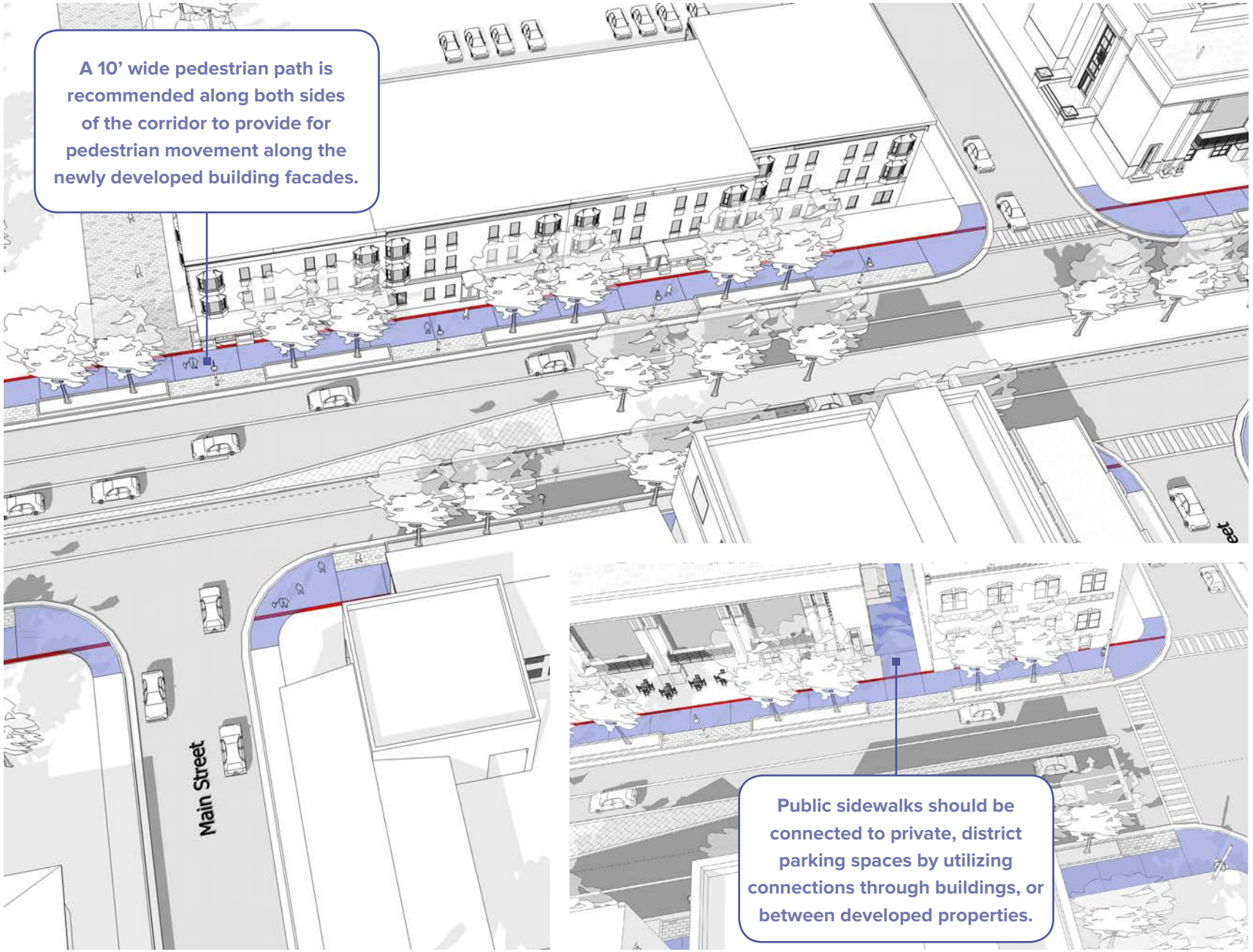
The expansion of right-of-way along the corridor allows for the integration of wide pedestrian facilities on both the north and south sides of the corridor. A 10’ wide pedestrian path is recommended along both sides of the corridor to provide for pedestrian movement along the newly developed building facades. The pedestrian paths should be separated from the edge of pavement by public amenity area at least 6’ in width. Street lights, wayfinding poles, fire hydrant and other amenities should be located outside of the 10’ pedestrian pathway and within the 6’ public amenity area. This will ensure a clear, walkable space that is free of obstacles. The amenities and guidelines for these public amenity areas are discussed later in this chapter. It is recommended that bicycles be encouraged to use the 10’ wide pathway on both the north and south sides of the corridor.

It is recommended that sidewalks be constructed of standard concrete pavement with a light to medium broom finish. It is recommended that the sidewalk be scored with a five foot jointing pattern to reduce the scale of the pavement and provide visual interest along the corridor. Standard concrete is readily available and wears well over time which will allow for the work to be incorporated into multiple implementation phases if necessary.

The sidewalk, which would be dedicated as public right-of-way as part of private development and redevelopment, would provide for continuous pedestrian foot traffic. Additional quasi-public space can be located between the sidewalk and the building façade. The amenities and guidelines for these transitional pedestrian areas are discussed later in this chapter.

Public sidewalks should be connected to private, district parking spaces by utilizing connections through buildings, or between developed properties. These proposed path connections will enable pedestrians to move through the district in a safe and efficient way.




A 10’ wide pedestrian path is recommended along both sides of the corridor to provide for pedestrian movement along the newly developed building facades.
Main Street
Public sidewalks should be connected to private, district parking spaces by utilizing connections through buildings, or between developed properties.

PEDESTRIAN FACILITIES

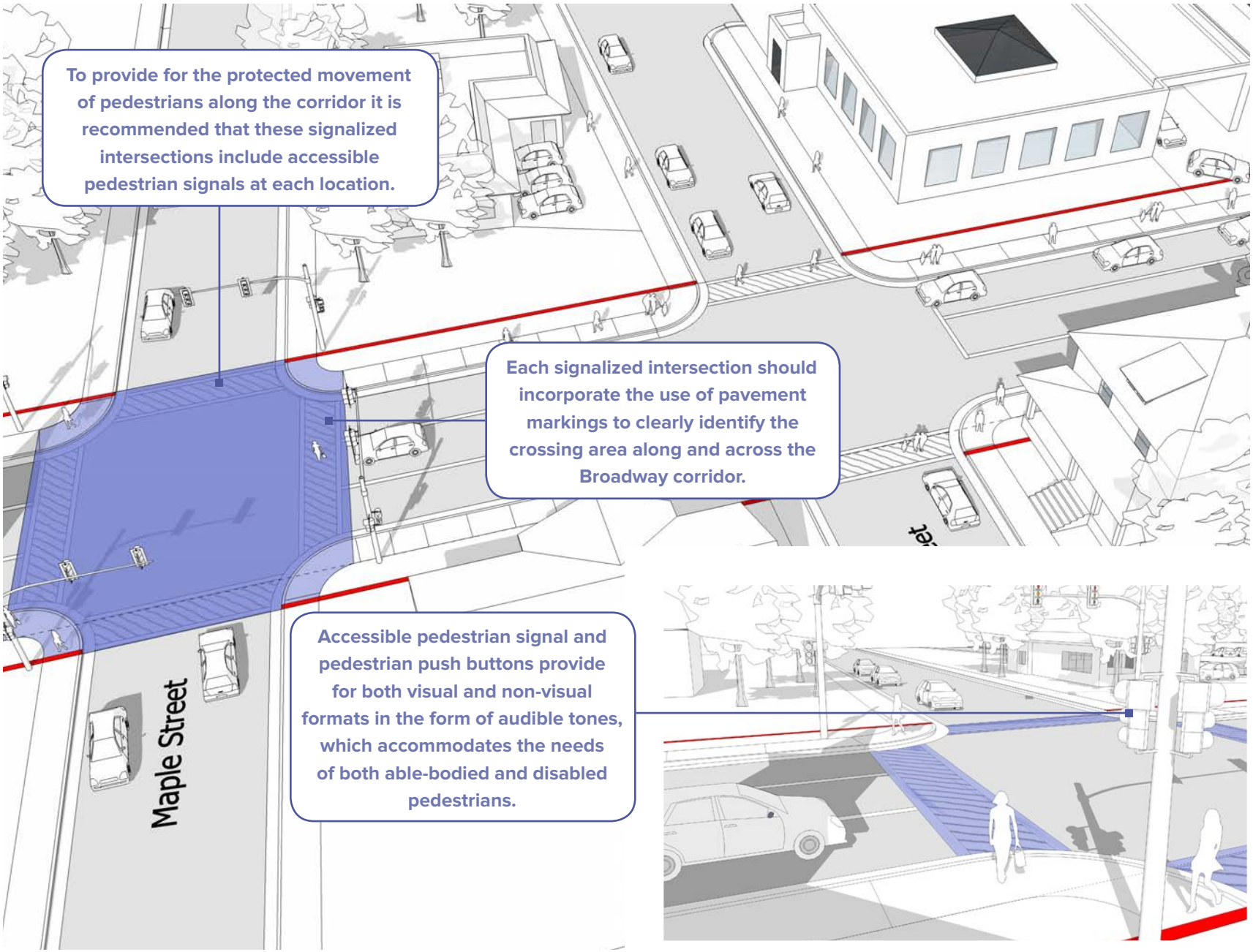
Interim Pedestrian Signals and Crossings: Signalized Intersections Recommendations

With the introduction of pedestrian facilities on either side of the Broadway corridor, the incorporation of controlled, safe pedestrian crossings will be critical to the success of the pedestrian system. In the interim time horizon, the existing traffic signals along the corridor will remain in place. The intersections of Broadway and W Garden Street, Maple Street and SR 13 will utilize traffic signals. To provide for the protected movement of pedestrians along the corridor it is recommended that these signalized intersections include accessible pedestrian signals at each location. The accessible pedestrian signal and pedestrian push button is an integrated device that communicates information about crossing intervals at signalized intersections. This system provides for both visual and non-visual formats in the form of audible tones, which accommodates the needs of both able-bodied and disabled pedestrians.

In addition to the pedestrian signals at W Garden Street, Maple and SR 13, it is recommended that each signalized intersection incorporate the use of pavement markings to clearly identify the crossing area along and across the Broadway corridor. These intersections should utilize decorative crossing treatments to further reinforce (to vehicles and pedestrians) these signalized intersections as the primary points of crossing. Decorative pavement treatments will not only provide for a strong visual aesthetic along the corridor, but they can be customized for each location and community. Future pedestrian crossings along the Broadway corridor could be used to further connect the visual brand and identity of downtown and the developing Broadway TIF District.

While decorative pavement markings can be applied using simple materials such as paint, it is recommended that along the Broadway corridor an inlaid system such as Duratherm, or a pavement coating such as StreetBond be used. These products will provide for a variety of artistic designs, vibrant color choices and minimal maintenance over the long term. Additionally, these systems can be installed on new or existing pavement, which allows for them to be installed outside of larger, construction projects.

At a minimum, the pedestrian crossing should meet the standards of the Manual on Uniform Traffic Control Devices (MUTCD) and include ladder striping along the width of the roadway corridor.

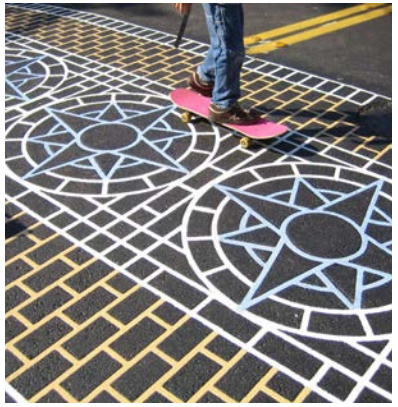

To provide for the protected movement of pedestrians along the corridor it is recommended that these signalized intersections include accessible pedestrian signals at each location.
Each signalized intersection should incorporate the use of pavement markings to clearly identify the crossing area along and across the Broadway corridor.
Accessible pedestrian signal and pedestrian push buttons provide for both visual and non-visual formats in the form of audible tones, which accommodates the needs of both able-bodied and disabled pedestrians.
Maple Street

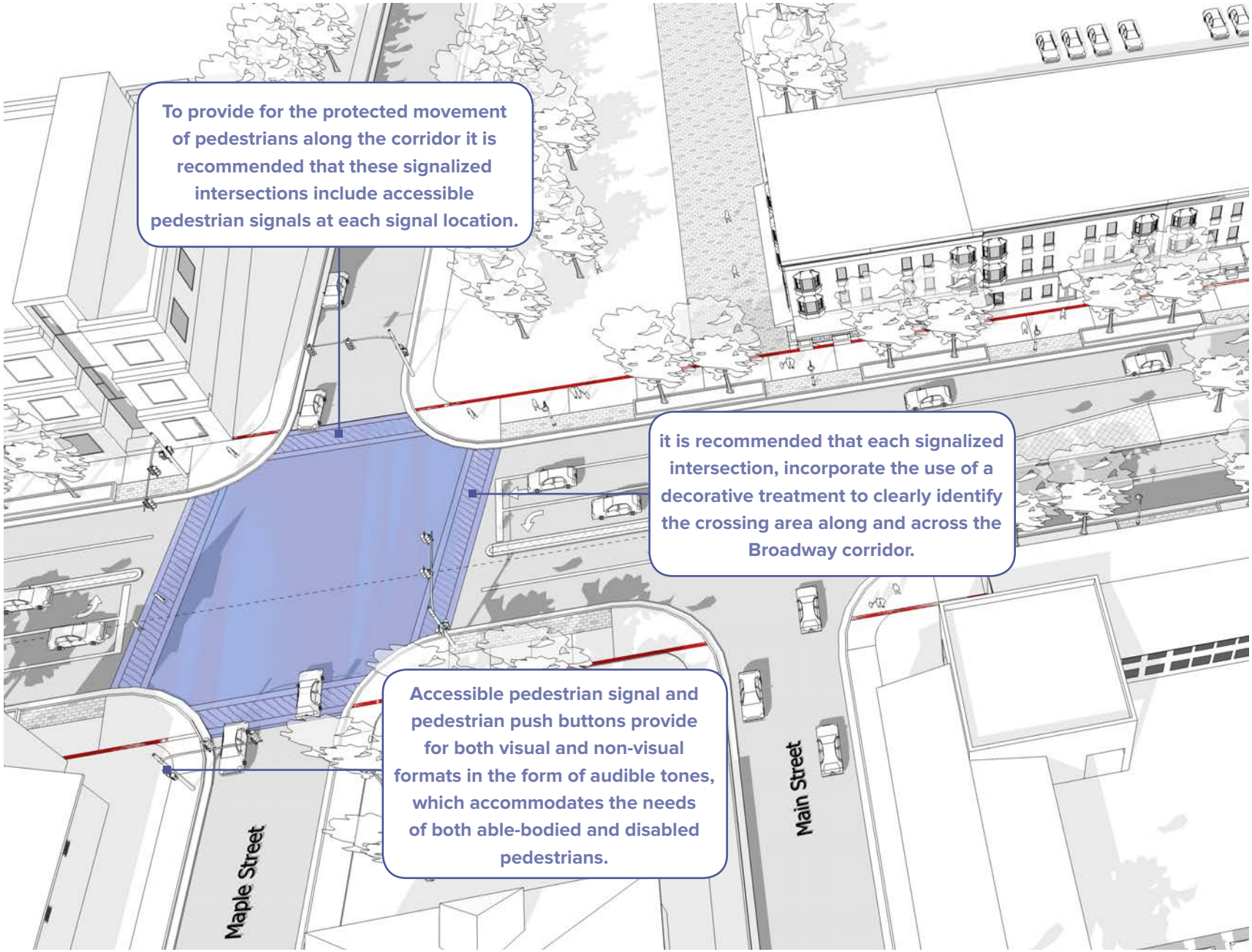
PEDESTRIAN FACILITIES

Preferred Pedestrian Signals and Crossings: Signalized Intersections Recommendations

With the introduction of pedestrian facilities on either side of the Broadway corridor, the incorporation of controlled, safe pedestrian crossings will be critical to the success of the pedestrian system. With the configuration of the wider, 100' right-of-way, pedestrian crossings are limited to three signalized intersections, and two non-signalized intersections. The intersections of Broadway and W Garden Street, Maple Street and SR 13 will utilize traffic signals. To provide for the protected movement of pedestrians along the corridor it is recommended that these signalized intersections include accessible pedestrian signals at each location. The accessible pedestrian signal and pedestrian push button is an integrated device that communicates information about crossing intervals at signalized intersections. This system provides for both visual and non-visual formats in the form of audible tones, which accommodates the needs of both able-bodied and disabled pedestrians.

In addition to the pedestrian signals at W Garden Street, Maple and SR 13, it is recommended that each signalized intersection, incorporate the use of a decorative treatment to clearly identify the crossing area along and across the Broadway corridor. These intersections should utilize decorative crossing treatments to further reinforce (to vehicles and pedestrians) these signalized intersections as the primary points of crossing. Decorative treatments will not only provide for a striking visual aesthetic along the corridor, but they can be customized for each location and community. Future pedestrian crossings along the Broadway corridor could be used to further connect the visual brand and identity of downtown and the developing Broadway TIF District.




To provide for the protected movement of pedestrians along the corridor it is recommended that these signalized intersections include accessible pedestrian signals at each signal location.
it is recommended that each signalized intersection, incorporate the use of a decorative treatment to clearly identify the crossing area along and across the Broadway corridor.
Accessible pedestrian signal and pedestrian push buttons provide for both visual and non-visual formats in the form of audible tones, which accommodates the needs of both able-bodied and disabled pedestrians.
Maple Street
Main Street

PEDESTRIAN FACILITIES

Interim Pedestrian Signals and Crossings: Non-Signalized Intersection Recommendations

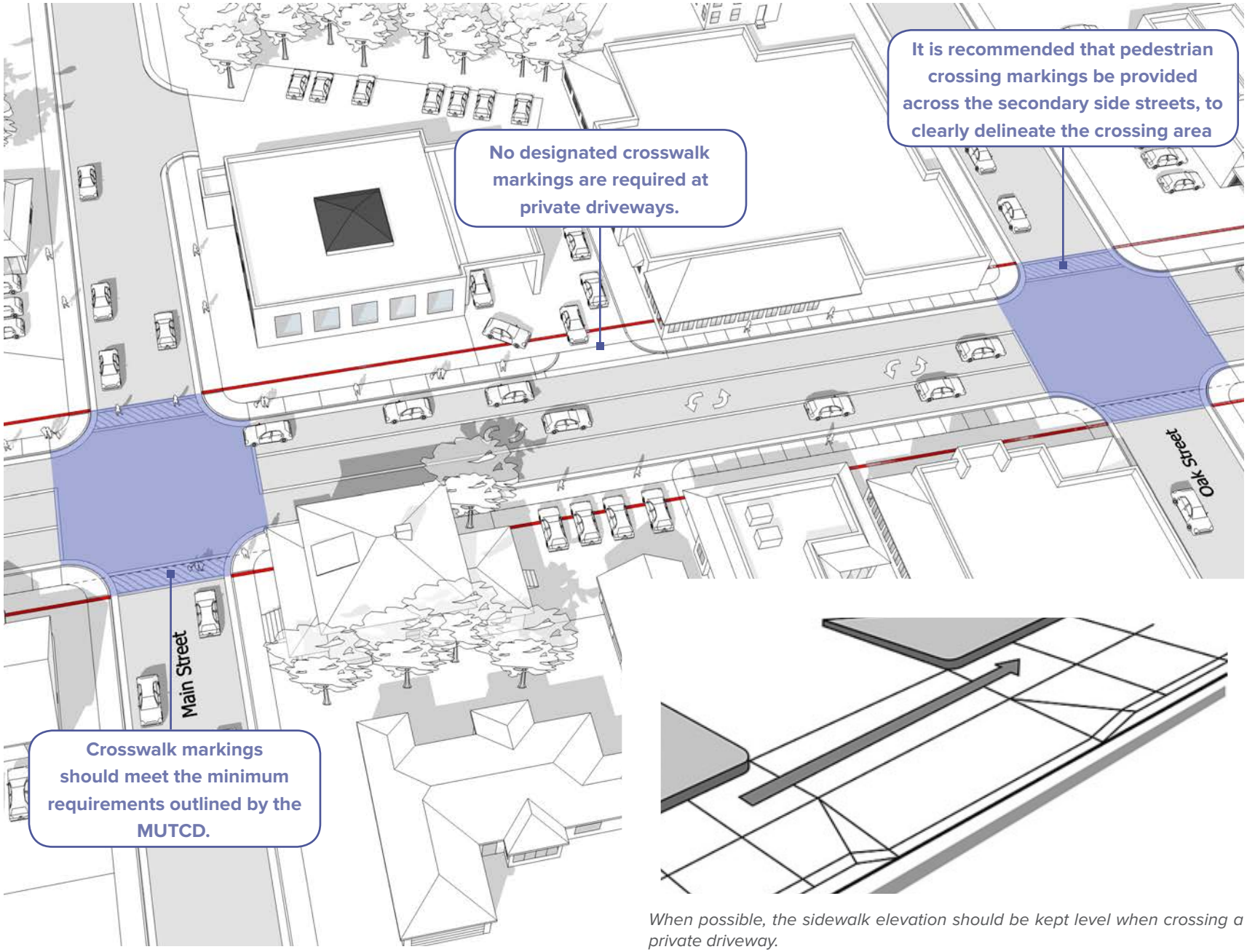
The Broadway corridor will feature three primary points for pedestrians to cross Broadway Street and those are at the three signalized intersections, but there are also numerous points along the corridor where secondary streets intersect. The secondary intersections of Garden Street, Merrill Street, Main Street, Oak Street, and Elm Street will need to provide for safe crossings for pedestrians traveling along the Broadway corridor. At these secondary intersections it is recommended that pedestrian crossing markings be provided across the secondary side streets, to clearly delineate the crossing area. No additional pedestrian signals or pushbuttons are recommended for these secondary intersections. Pedestrian crossings across Broadway Street should be prohibited at these secondary locations due to the vehicular volume along the roadway.

Since there are only three signalized intersections along the ¾ mile corridor it is recommended that mid-block crossings be placed at two key locations. The intersections of McCarty Street and Poplar Street provide halfway points between the current signalized intersections. By providing for north-south connectivity across the Broadway corridor, the district will be further connected which will benefit existing and future development.

The recommended intersections are not currently controlled by traffic signals, and due to spacing, future signals at these locations would unlikely be warranted. Instead, we recommend the incorporation of HAWK signals in these two locations. As outlined in Chapter 04, HAWK signals are a hybrid beacon that provides for visual indicators for both pedestrians and vehicles. The signals are activated by a push button, similar to a signalized intersection, but until activated would remain off. The signals would need to be hard wired into the electrical utility system, which potentially increases the implementation costs, but provides control over the pedestrian and vehicular environment.

As an alternative to the HAWK signals, rectangular rapid flash beacons (RRFB's) can be installed at the intersections of McCarty Street and Poplar Street. RRFB's are operated in the same way as the recommended HAWK signals, but are oftentimes powered by solar panels which eliminates the need to connect to the electrical utility system. This typically makes implementation less expensive and easier to phase in over the course of a project. The RRFB system does not include an overhead signal alerting vehicular traffic to the oncoming pedestrians, which does reduce the effectiveness of the system.

Whether using HAWK signals or RRFB's it is also recommended that pavement markings be provided across the Broadway corridor at these locations. These pavement markings only need to meet the minimum requirement of the MUTCD.



When possible, the sidewalk elevation should be kept level when crossing a private driveway.

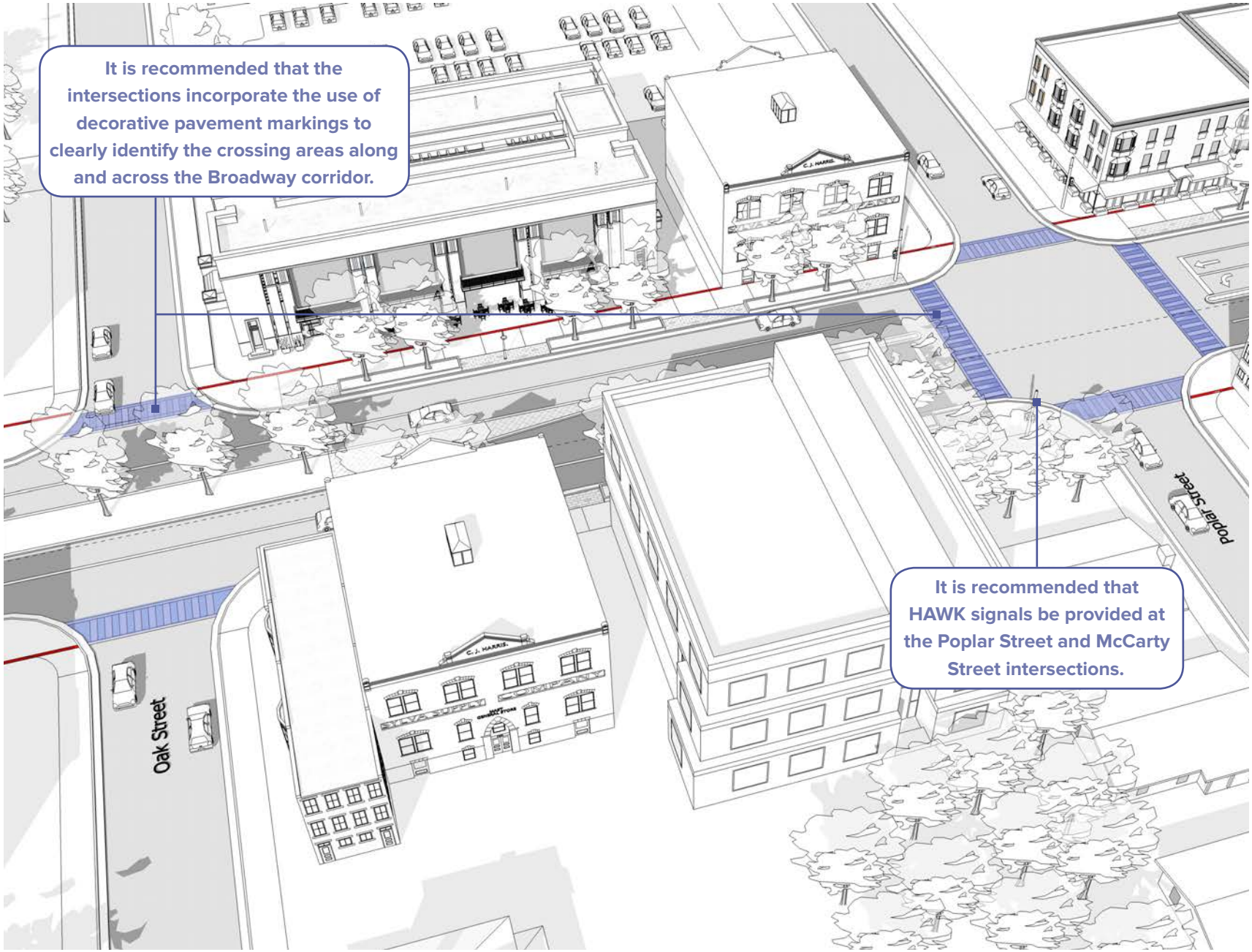
PEDESTRIAN FACILITIES

Preferred Pedestrian Signals and Crossings: Non Signalized Intersection Recommendations

The Broadway corridor will feature three primary points for pedestrians to cross Broadway Street, but there are two additional, non-signalized intersections along the corridor where secondary streets intersect and allow through vehicular access. The secondary intersections of McCarty Street, and Poplar Street will need to provide for safe crossings for pedestrians traveling along, and across the Broadway corridor. It is recommended that HAWK signals be provided in these two locations. As outlined in Chapter 04, HAWK signals are a hybrid beacon that provides for visual indicators for both pedestrians and vehicles. The signals are activated by a push button, similar to a signalized intersection, but until activated would remain off. The signals would need to be hard wired into the electrical utility system, which potentially increases the implementation costs, but provides control over the pedestrian and vehicular environment.

To further delineate the movement of pedestrians it is recommended that these secondary intersections incorporate the use of decorative pavement markings to clearly identify the crossing areas along and across the Broadway corridor. Decorative pavement treatments will not only provide for a highly visual aesthetic along the corridor, but they can be customized for each location along the Broadway corridor. While not signalized, these secondary intersections should receive the same decorative treatment recommended for the signalized intersections along the corridor. Raised pedestrian crosswalks, or raised intersections will provide for visual appeal and will increase the safety for pedestrians and vehicles.

As a cost savings consideration, these secondary intersections could also utilize inlaid decorative pavement markings systems such as Duratherm, or a pavement coating such as StreetBond. These products will provide for a variety of artistic designs, vibrant color choices and minimal maintenance over the long term. Additionally, these systems can be installed on new or existing pavement, which allows for them to be installed without the implementation of larger, construction projects.


It is recommended that the intersections incorporate the use of decorative pavement markings to clearly identify the crossing areas along and across the Broadway corridor.
It is recommended that HAWK signals be provided at the Poplar Street and McCarty Street intersections.
Oak Street
Poplar Street
C. J. HARRIS

PEDESTRIAN AMENITIES + URBAN CHARACTER

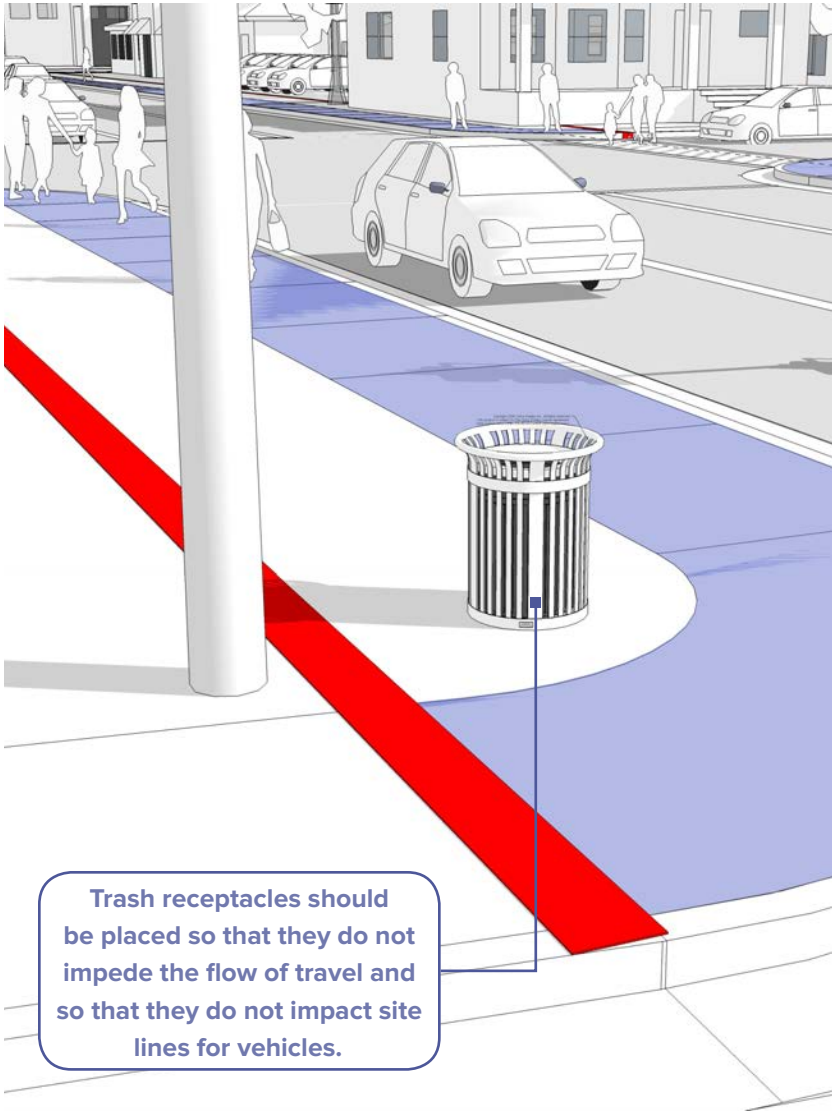
The quality of the pedestrian environment is just as important as the facilities that accommodate pedestrian movement. Urban design qualities such as plantings, benches, bicycle racks and wayfinding signage aid in creating a proportional, and well-defined environment for the user.

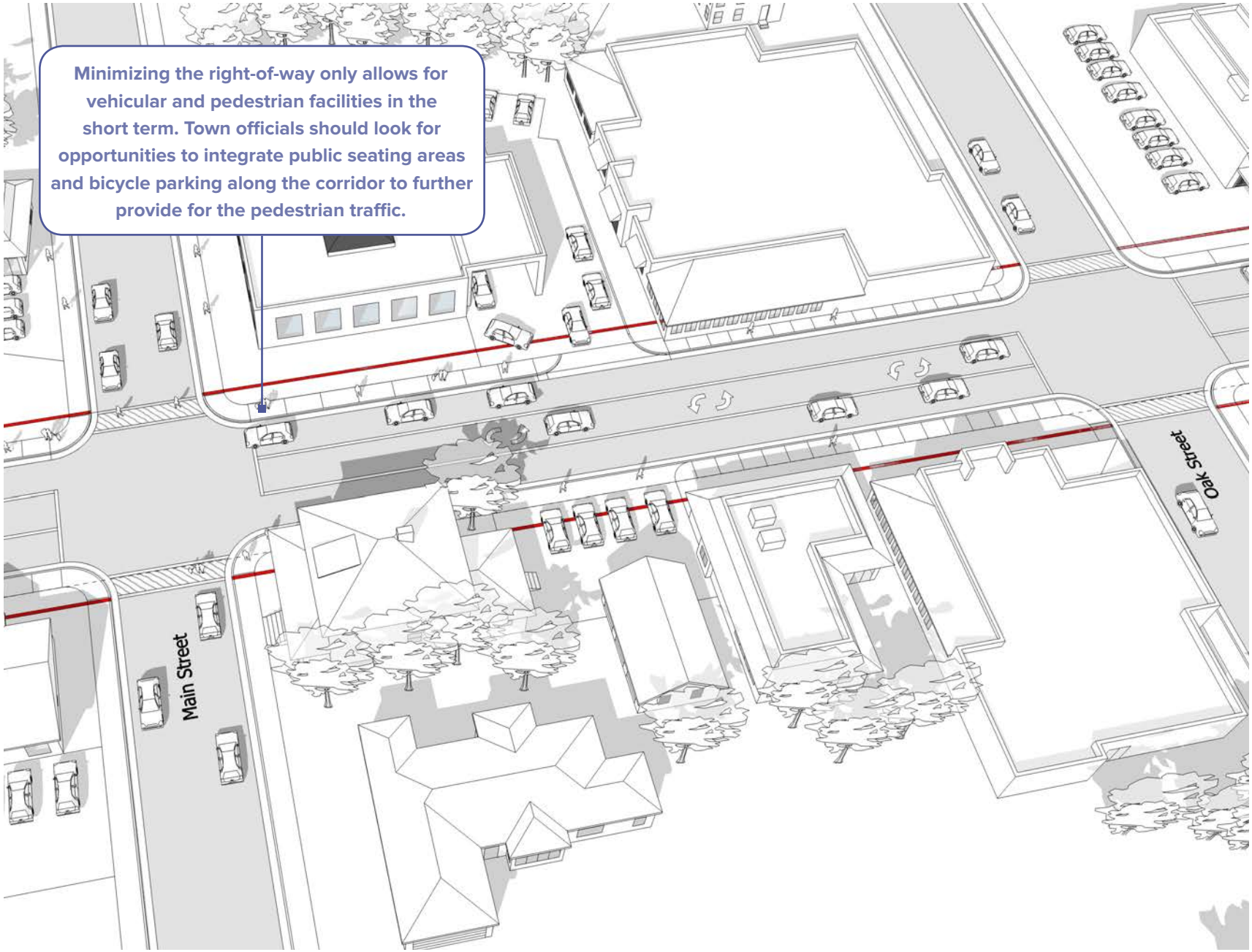
Interim Public Amenity Area Recommendations

By utilizing road diet techniques within the existing right-of-way along the Broadway corridor, slower traffic speeds and pedestrian facilities can be integrated easily since no additional acquisition needs to occur. However, minimizing the right-of-way only allows for vehicular and pedestrian facilities in the short term. As an initial recommendation, trash receptacles should be placed at the signalized intersections of W Garden Street, Maple Street and SR 13. Trash receptacles should be placed so that they do not impede the flow of travel and so that they do not impact site lines for vehicles. The final trash receptacle selection should be made during the design and construction of the pedestrian facilities, however it is recommended that a contemporary style be chosen so that it complements the desired architectural characteristics found in the *Broadway-Main TIF District Design Standards.*

As private properties transition along the corridor, Town officials should look for opportunities to integrate public seating areas and bicycle parking along the corridor to further provide for the pedestrian traffic.

In addition to pedestrian amenities, the constrained right-of-way does not allow for separate utility and signage areas. Instead, light poles and wayfinding signage will need to be placed along, or within the pedestrian walkways. To minimize the impediments, both visual and physical, it is recommended that light poles be placed at the back of the pedestrian walk and wayfinding signage be placed within 18”-24” of the back of curb. This placement will provide for a continuous walkway along both sides of the corridor.




Minimizing the right-of-way only allows for vehicular and pedestrian facilities in the short term. Town officials should look for opportunities to integrate public seating areas and bicycle parking along the corridor to further provide for the pedestrian traffic.
Main Street
Oak Street

PEDESTRIAN AMENITIES + URBAN CHARACTER

Preferred Public Amenity Area Recommendation

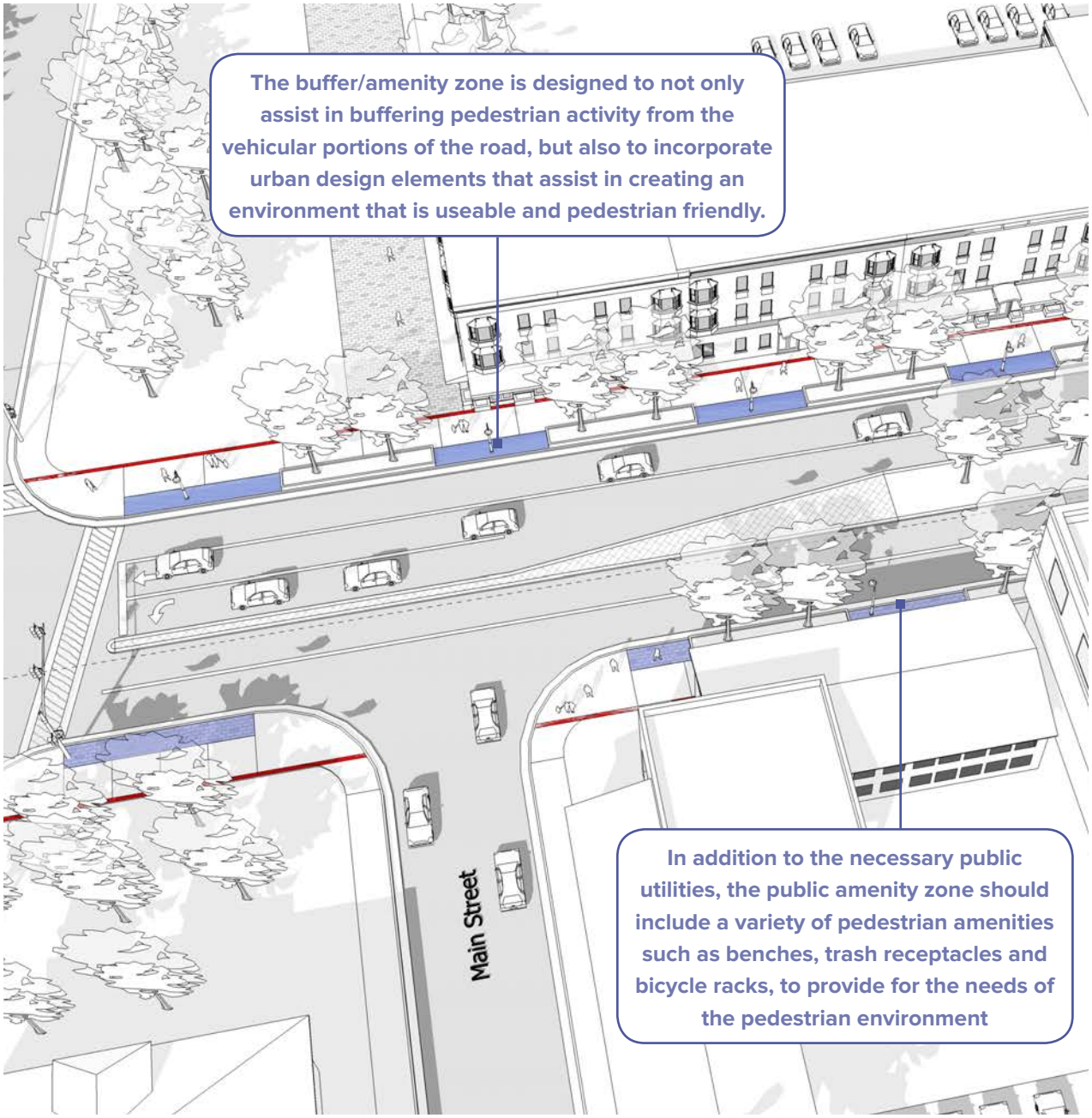
The expanded right-of-way along the Broadway corridor allows for additional pedestrian facilities and amenity areas. The buffer/amenity zone, located on each side of the corridor, is designed to not only assist in buffering pedestrian activity from the vehicular portions of the road, but also to incorporate urban design elements that assist in creating an environment that is useable and pedestrian friendly.

The primary role of the buffer/amenity zone is to provide a transition between the vehicular roadway and the pedestrian environment. These 6' wide zones are not intended to be an expansion of the pedestrian sidewalk, and should therefore be treated differently in materials and visual appearance. It is recommended that the 6' path beginning at the back of the curb and extending towards the private development facades, incorporate a decorative pavement treatment to clearly delineate this area from the pedestrian walkway. Pavers or colored concrete can be used to provide a change in color, and decorative patterning, or paver texture can be altered to provide for a texture change would be detectable by the visually impaired.

To further enhance the transitional element of the public amenity zone, and provide additional buffering to the pedestrian paths on either side, the public amenity zone should also integrate vegetation such as street trees, either in grates or planters, at regular intervals. Additional recommendations on the treatment and placement of vegetation can be found in 'Street Trees and Corridor Plantings' below.

Since the public amenity area is not designed to be an extension of the public walkway, this 6' wide band should also be used to site light poles, fire hydrants, wayfinding sign poles and required vehicular signage. This will ensure that these obstacles will not impede the flow of pedestrian movement along the corridor.

In addition to the necessary public utilities, the public amenity zone should include a variety of pedestrian amenities such as benches, trash receptacles and bicycle racks, to provide for the needs of the pedestrian environment. Public seating, trash receptacles, bicycle parking and pedestrian wayfinding signs/ kiosks are all elements that encourage the presence of pedestrians and assist in activating the public space. These elements should be focused at the primary intersections along the corridor. It is recommended that a cohesive set of pedestrian amenities be defined for the public amenity areas. The elements should be chosen so that they reflect the historic character of downtown and the proposed architectural style of the anticipated district development.

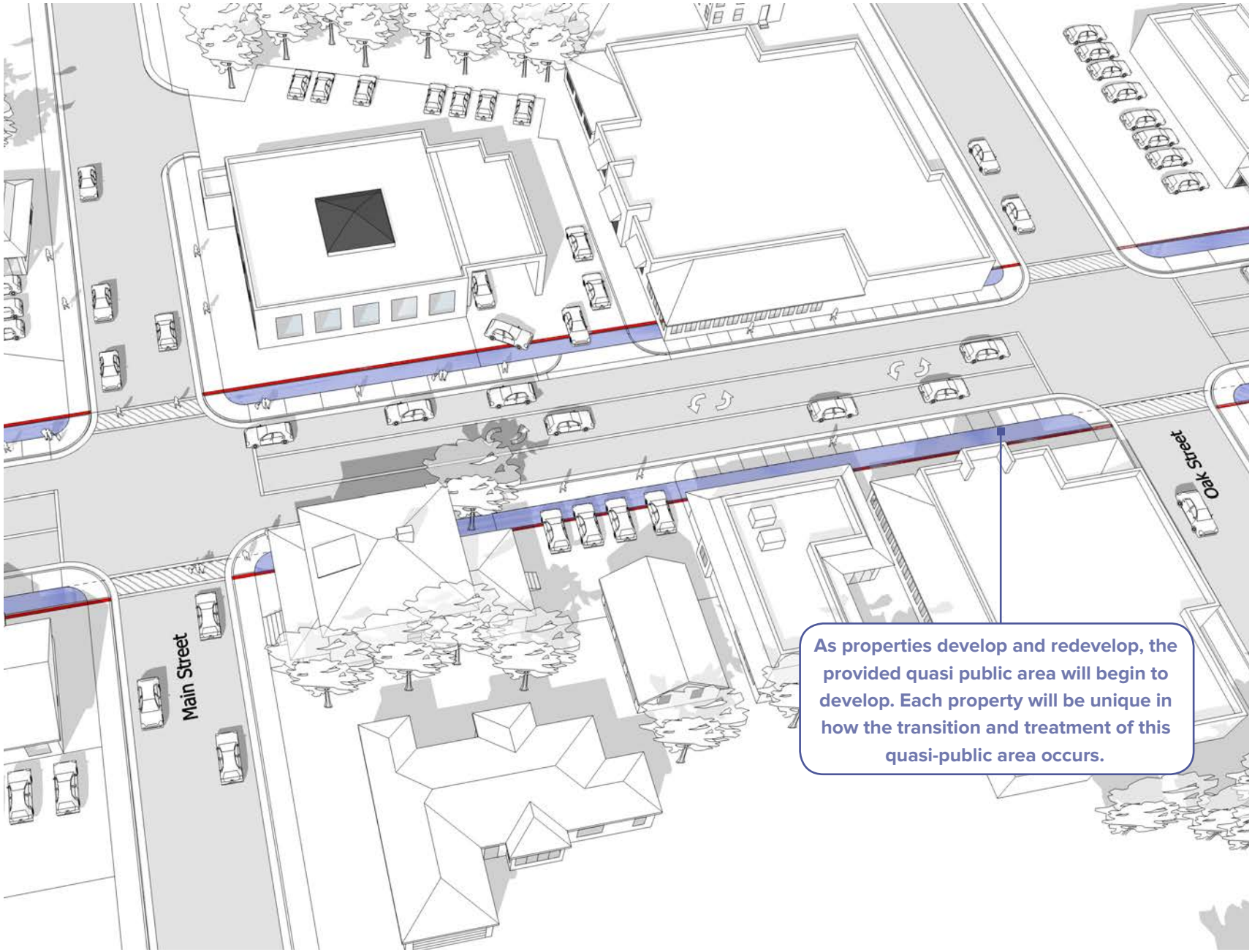

The buffer/amenity zone is designed to not only assist in buffering pedestrian activity from the vehicular portions of the road, but also to incorporate urban design elements that assist in creating an environment that is useable and pedestrian friendly.
In addition to the necessary public utilities, the public amenity zone should include a variety of pedestrian amenities such as benches, trash receptacles and bicycle racks, to provide for the needs of the pedestrian environment
Main Street

PEDESTRIAN AMENITIES + URBAN CHARACTER

Interim Quasi-Public Area Recommendations

Currently no quasi-public amenity spaces existing along the corridor. The existing development does not account for street frontage and the interaction of pedestrians along the corridor. As properties develop and redevelop, this will change due to the requirements of the *Broadway-Main TIF District Design Standards*. Following the construction of the pedestrian sidewalks on either side of the corridor, private property will continue to transition. Since the Design Standards dictate the placement of buildings, and encourage the interaction of public and private spaces, transitional elements may be required to connect the newly placed sidewalks to the private development improvements.

Each property will be unique in how the transition and treatment of this quasi-public area occurs. It is recommended that Town officials work collaboratively with private property owners to fully identify the opportunities and constraints associated with the site-specific demands and the needs of the pedestrian transportation system.

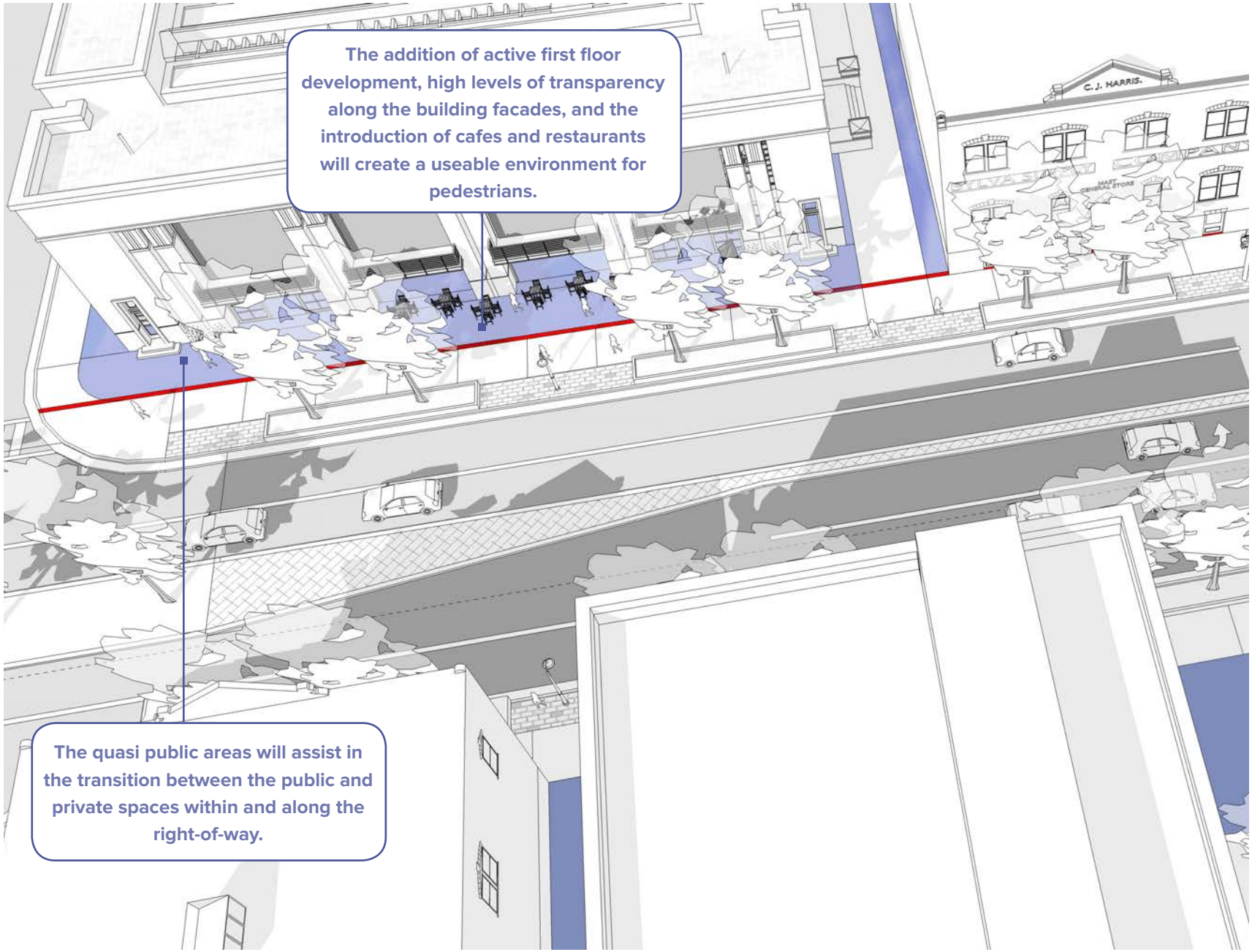

Main Street
Oak Street
As properties develop and redevelop, the provided quasi public area will begin to develop. Each property will be unique in how the transition and treatment of this quasi-public area occurs.

PEDESTRIAN AMENITIES + URBAN CHARACTER

Preferred Quasi-Public Area Recommendations

The quasi-public area consists of the area between the public and private realms, including the public sidewalk, building facade, the first level building uses and any parking or open space available to public users. This zone will be an outcome of the district's development and redevelopment initiatives due to the requirements outlined in the *Broadway-Main TIF District Design Standards*. The addition of active first floor development, high levels of transparency along the building facades, and the introduction of cafes and restaurants will create not only a useable environment for pedestrians, but it will assist in the transition between the public and private spaces.

While the regulations in *the Design Standards* provide for the development of these spaces by providing for a flexible 50'-60' front yard setback measured from the centerline of Broadway Street, it is recommended that private developers be strongly encouraged to include these active areas into their development plans. Town leadership should work to create strong partnerships with the development community so that they can assist in influencing the final choices of street furniture, lighting and visual aesthetics in these privately-owned spaces.


The addition of active first floor development, high levels of transparency along the building facades, and the introduction of cafes and restaurants will create a useable environment for pedestrians.
The quasi public areas will assist in the transition between the public and private spaces within and along the right-of-way.
C. J. HARRIS.

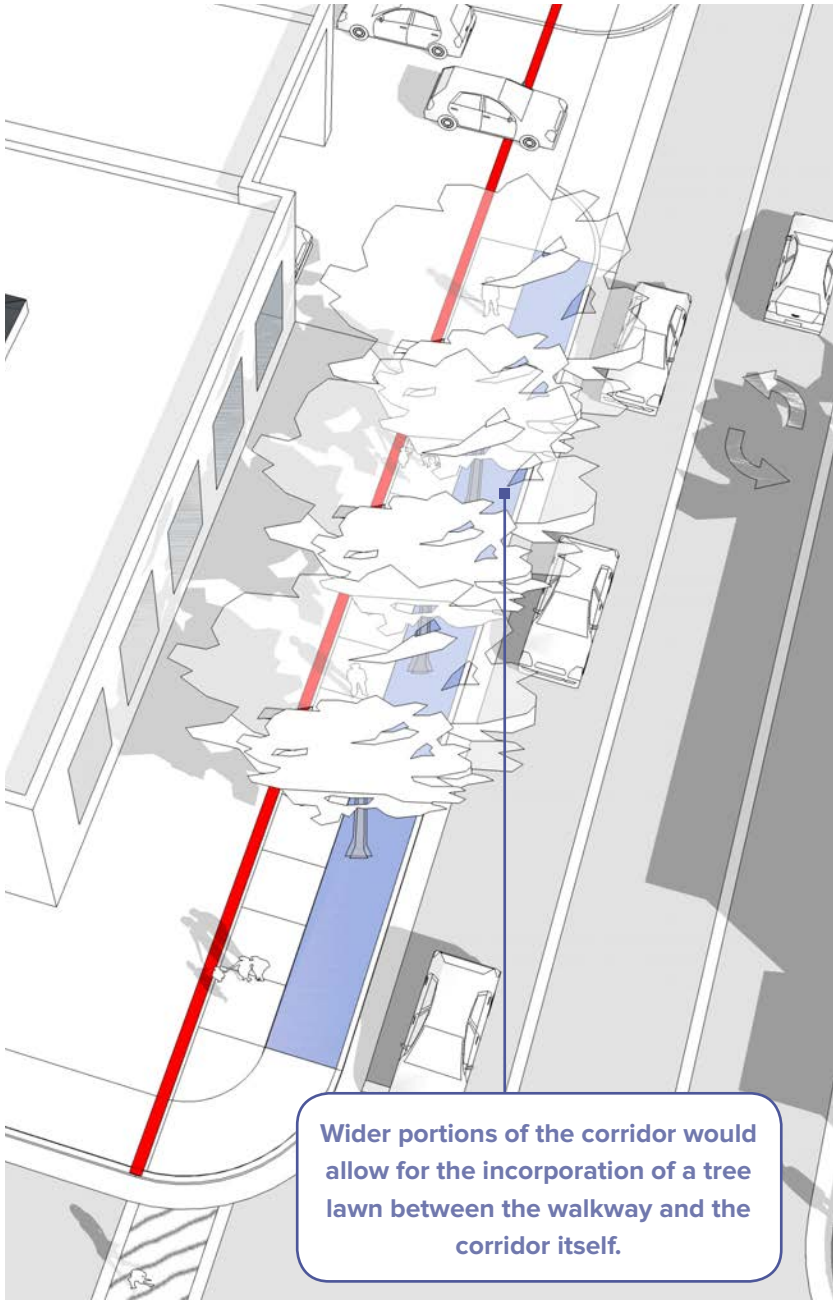
PEDESTRIAN AMENITIES + URBAN CHARACTER

Interim Street Trees and Corridor Planting Recommendations

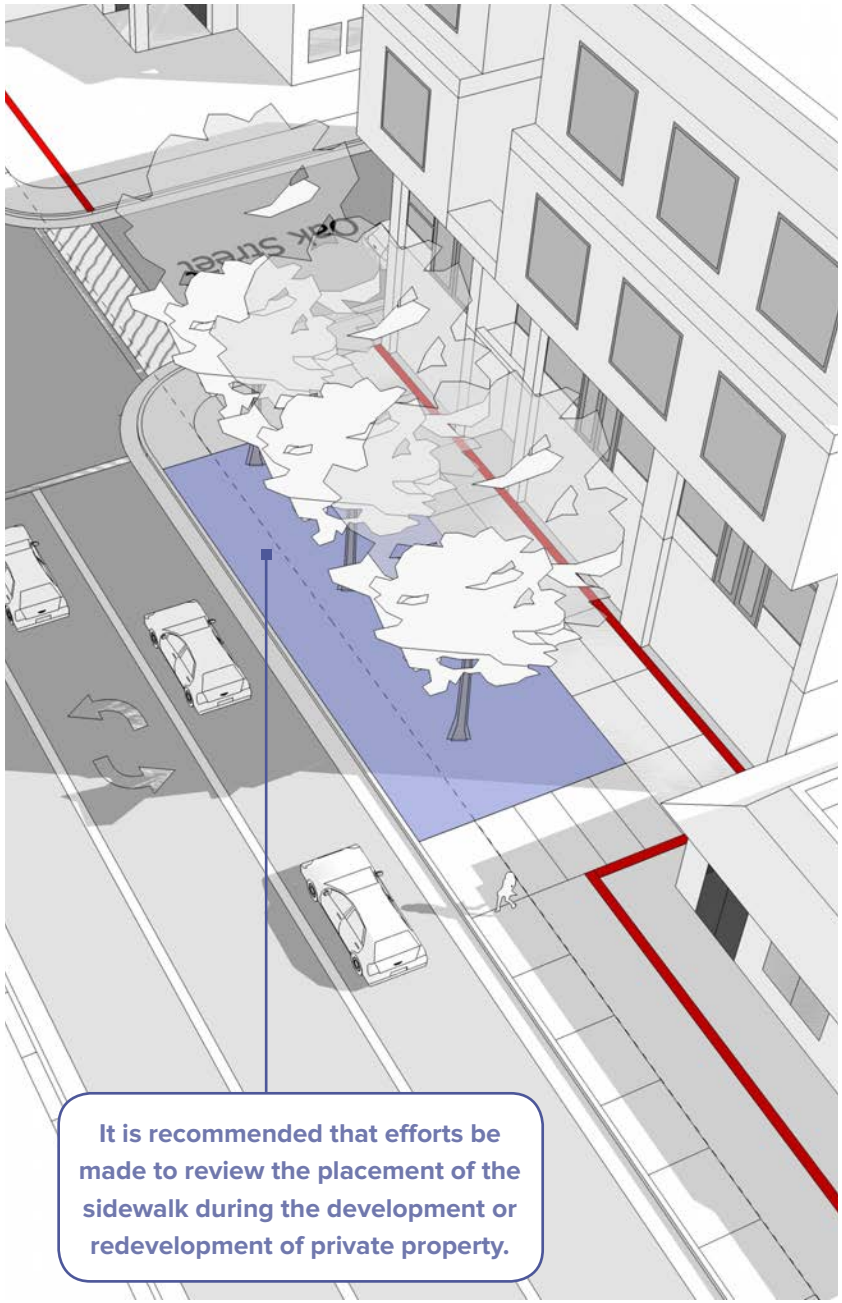
Utilizing the existing 65'-75' of right-of-way along the corridor, greatly reduces the opportunities to incorporate and establish a continuous tree canopy within the short-term horizon. Instead efforts will need to be made to review each segment of the corridor during final design of the interim recommendations to identify if there is an opportunity to place the sidewalk in a location that would allow for a tree buffer adjacent to the corridor.

While the primary recommendations of the short-term solution call for the construction of curb adjacent pedestrian facilities, street tree integration could occur in two instances. First, there are portions of the corridor that feature an existing right-of-way greater than 65'. Broadway Street immediately adjacent to the Main Street/ Maple Street intersection has the narrowest right of way width, but extending to the west and east, the width increases to a maximum of 75'. These wider portions of the corridor would allow for the incorporation of a tree lawn between the walkway and the corridor itself. During design of the final interim recommendations, it is recommended that areas that could offer a continuous planting bed of 5' in width or greater be utilized to separate the pedestrian areas from the vehicular travel lanes. This area, which would be flush to the adjacent walk and curb, should be planted with appropriate urban street trees to further establish a pedestrian scaled, urban environment.

For the properties or segments of the corridor that cannot currently accommodate a tree lawn, it is recommended that efforts be made to review the placement of the sidewalk during the development or redevelopment of private property. While the placement of pedestrian facilities can occur now within the right-of-way, the placement does not meet the vision both Town officials and the community outlined during this planning process. Ultimately, the pedestrian facilities would be buffered from the roadway by planting areas. As private property redevelops, and buildings and parking areas are placed according to the *Broadway-Main TIF District Design Standards,* the relocation of public sidewalks and the incorporation of buffer yards should occur as part of the development process. Appropriate transitions should be made to adjacent properties so that a unified pedestrian system and visual aesthetic is achieved.



Wider portions of the corridor would allow for the incorporation of a tree lawn between the walkway and the corridor itself.



It is recommended that efforts be made to review the placement of the sidewalk during the development or redevelopment of private property.

Preferred Street Trees and Corridor Planting Recommendation

As discussed in the recommendations for the Public Amenity Areas, the addition of vegetation and street trees along the corridor will not only enhance the visual appeal, but will visually separate the pedestrian environment from the heavy traffic flow through Town. To ensure the health, and longevity of the corridor plantings, it is recommended that the corridor utilize a modified tree pit guard design along both the north and south sides of the corridor.

It is recommended that the tree pit include the design of a slightly raised planter. The planter, will create a separation between the vehicular and pedestrian environments, and will also allow for additional soil volume for the plantings themselves. To further encourage tree growth, structural soil can be utilized under the adjacent concrete pavement. The use of structural soil will allow for maximum soil volume which is necessary for overall tree health and growth in urban areas.

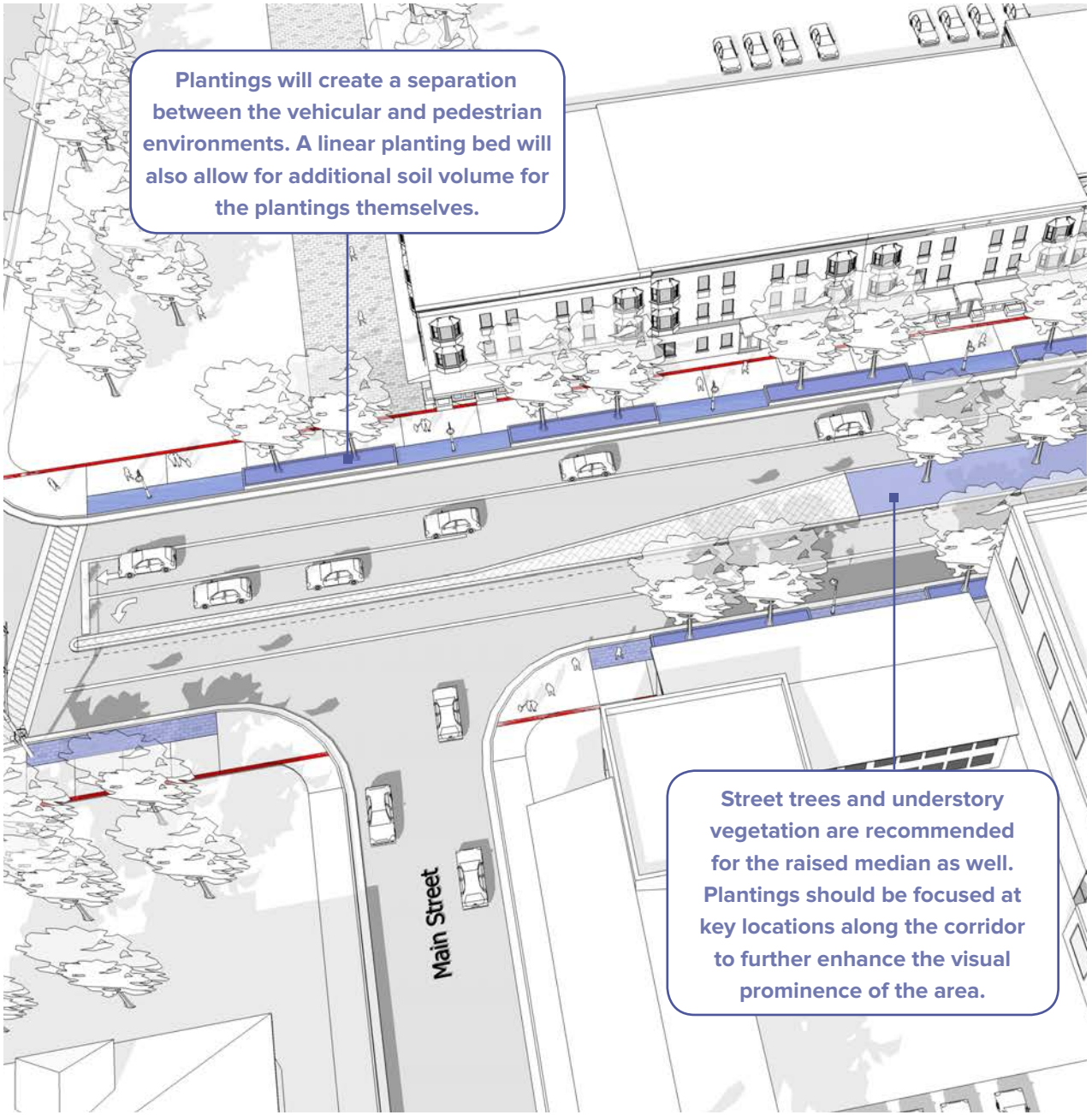
If the incorporation of a raised tree bed is found to be undesirable during design, the tree bed can be placed flush with the adjacent pavement. Since the Broadway corridor will ultimately become an active urban environment, tree grates or a similar walkable surface should be installed around the tree plantings to limit the compaction of soil on, or around the root ball.

Because the long-term recommendations are substantial and require the reconstruction of the road, and all impacted utilities, streetscape plantings can also be accommodated in infiltration basins, or rain gardens. The incorporation of rain gardens along the Broadway corridor would allow for street trees, and seasonal vegetation, but would also accommodate the needs of the stormwater drainage utility system. Rain gardens would require additional maintenance and oversight, so conversations should occur early in the design process to identify ownership and maintenance responsibilities if green infrastructure is desired along the corridor.

In addition to the public amenity area, street trees and understory vegetation are recommended for the raised median as well. Plantings should be focused at key locations along the corridor to further enhance the visual prominence of the area.

Street trees species should be those with higher canopies to provide visibility at the street level, ornamental or seasonal aesthetic value, or shade and density. To promote variety along the streetscape, street trees shall be planted such that specimens of one tree species are clustered in groups of three or five trees and are staggered.

Plantings should be placed so that corner visibility is maximized. No tree, or understory vegetation should be placed so that it blocks or impedes the view of pedestrians or vehicles. Plantings must also be placed so that they do not block site lines to wayfinding or roadway signage.


Plantings will create a separation between the vehicular and pedestrian environments. A linear planting bed will also allow for additional soil volume for the plantings themselves.
Street trees and understory vegetation are recommended for the raised median as well. Plantings should be focused at key locations along the corridor to further enhance the visual prominence of the area.
Main Street

Corridor and District Gateways and Wayfinding

A key component to creating a powerful sense of place for residents and visitors alike, is a town's approach to both gateway and wayfinding. A strong gateway and wayfinding package will assist the Town in creating a unique identity, presence and sense of place. Additionally, it will assist in general wayfinding to local destinations and places of interest within the community and the Broadway District.

While no new signage is proposed as a part of this planning document, it is anticipated that as the district transitions, future directional signage to local destinations and business would be warranted. In order to provide a cohesive set of amenities, it is recommended that any future directional signage program should meet the following general recommendations.

Wayfinding signage should be appropriately scaled and shall be present at key locations throughout town, but it is especially important in the approach experience zones which lead into the core of the district. The portions of Broadway Street west of W Garden Street and east of SR 13, are travelers' first opportunity to identify the locations within Fortville. Notification of destinations in this approach area will properly navigate visitors to major attractions and destinations within Fortville. It is important to provide both vehicular and pedestrian scale signage to allow for proper visibility for users of all transportation types.

The wayfinding signage along the Broadway corridor and within the Broadway district should build upon the architectural standards identified in the *Broadway-Main TIF District Design Standards*. Similar colors, materials or design aesthetics should be utilized to provide a cohesive visual identity throughout the area.

Wayfinding signage should be placed within 18"-24" of the back of curb. This placement will allow for clear walking paths and unobstructed views. Wayfinding signage placement should be coordinated with corridor plantings to minimize conflicts between the two.

Gateway features within the district serve to mark or punctuate arrival points and will assist in the definition of district boundaries. Paired with a themed wayfinding system, gateways can be used to define a place. The creation of a sense of place within the TIF district was a strong desire of the stakeholders and community during the planning process and the incorporation of gateway features will be critical to defining the Broadway district as a unique and active place to be.

While no gateway design element has been defined as a part of this planning document, it is recommended that the intersections of Garden Street and SR 13 be treated as the Broadway TIF District beginning and ending points along the Broadway corridor. These intersections should feature moderately scaled monument signage markers located in the median of the boulevard to designate a sense of place for businesses and other development looking to move to the area. This definition will also aid in creating the notion of a special district, separate from the Main Street corridor and will allow it to become an identifiable destination.


FRONT STREET DISTRICT
Opera House
Warehouse Dist
Visitor Center


LANDING DISTRICT
Grand Wayne Center
Main Library
Museum of Art
Arts United Center
Government District
P


FRUITVALE


7TH AVENUE
-SPENCER-


Town Hall Arts Center


DISCOVER
DOWNTOWN
1890


Post Office
RTD Light Rail Station
Arapahoe Community College
Littleton Center
City Offices
Geneva Park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06 CRITICAL PATH STRATEGIES


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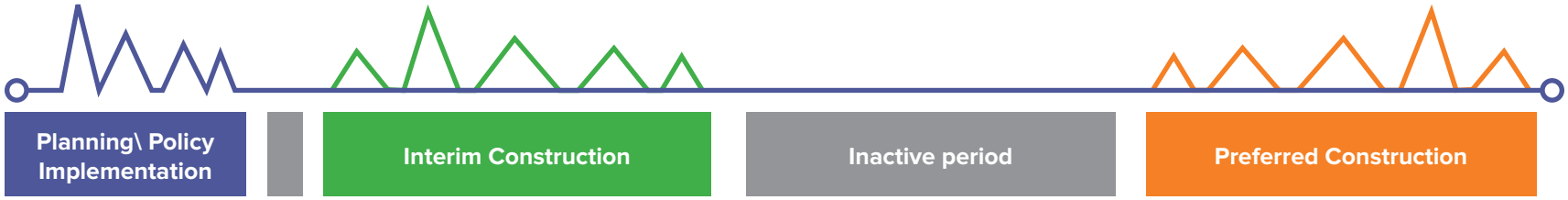
The evolution of the Broadway TIF District will require the collaboration of public and private entities as well as the participation of existing property owners throughout the community. These collaborations and partnerships often times can be difficult and are developed and nurtured over many years. While the Town is well positioned, the transformation of private development will be dependent on market demands and the varying economy of the region, and could occur at a slow and incremental pace. The Town's dependency on these numerous external factors could result in little, to no physical change to the corridor for a several years. The dormancy of physical progress poses a threat to the community momentum gained during the previous planning processes that date back to 2014.

The critical path strategies outlined below offer a balanced approach between achieving long term goals while showing short term progress. This approach will allow the Town to maintain the public momentum, while lessening the negative impacts of the various external factors on the area. The transformation of the district does not need to rely on projects at a grand scale. Small improvements, such as new sidewalks, pedestrian

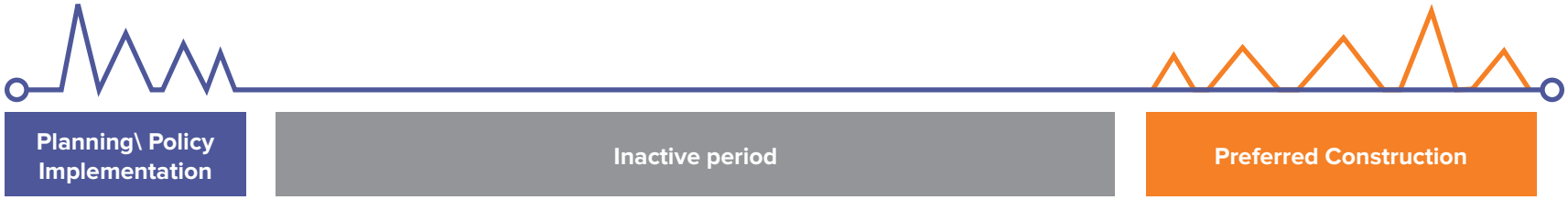
crossings and pedestrian amenities, that provide for safe connections to key community facilities can be transformative and can be leveraged into larger improvements in the future. As outlined in Section 05, the interim recommendations provided in this document identify projects that will result in both visual and physical change along the Broadway corridor. The implementation of the interim recommendations does not negate, or take the place of the long term corridor recommendations. Instead, by implementing the interim recommendations now, while continually planning for long term and wide spread change, consistent progress will be present in the area. This interim progress, fills a void in the implementation timeline, a void that often times results in public frustration, and disinterest in the area.

The detailed critical path strategy matrix is intended to further outline necessary and specific planning policy additions or improvements, capital improvement strategies, responsibilities, potential resource opportunities. The matrix also identifies any path triggers or prerequisites necessary to complete the identified strategy. The matrix is intended to help facilitate the implementation of this plan's recommendations. The matrix should be reevaluated on a regular basis (2-5 years) to identify new, or necessary strategies for implementation.

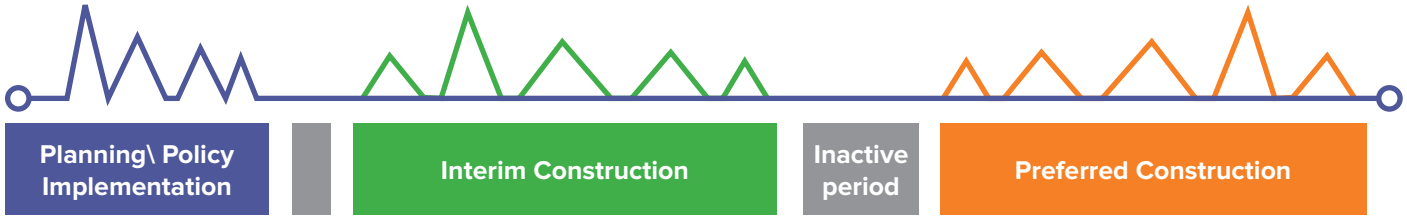
IMPLEMENTATION TIMELINES



Separate implementation timelines: Interim then Preferred



Preferred only implementation



Interim implementation while planning for preferred

Strategy Critical Path Matrix						
		Responsibilities				
Strategy	Priority	Primary	Secondary	Resources	Trigger	Prerequisite
1. Broadway-Main TIF District Design Guidelines	Immediate	Town	Hancock County	MCCOG		
Using the technical audit of the Broadway Street Design Guidelines document, finalize any necessary changes and/or amendments.						
2. Connect Fortville Thoroughfare Plan Update	Immediate	Town	Hancock County	MCCOG	None	None
Incorporate right of way improvements (width, facilities etc.) identified in this plan into the Connect Fortville Thoroughfare Plan as necessary.						
3. Finalize Right-of-way Dedication Policy	Immediate	Town	Hancock County	MCCOG	Broadway corridor development	
Draft, adopt and record the ordinance pursuant to Indiana Code. Revise necessary development ordinances to reference the right-of-way dedication policy and process.						
4. Finalize Access Control Ordinance	Immediate	Town	Hancock County	MCCOG		
Draft, adopt and record the ordinance pursuant to Indiana Code. Revise the applicable subdivision control ordinance to reference the access control ordinance, where appropriate or necessary.						
5. Regional Long-Range Improvement Plan Update	Immediate (Update annually)	Town	MCCOG INDOT	MPO	Road improvement implementation	Potentially necessary for grant/ INDOT funding
Update applicable regional long range transportation plans to show the programmed projects, along with a corresponding update of the State of Transportation Improvement Program (STIP) through Indiana Department of Transportation (INDOT) for those projects that would be on state roadways.						
6. Traffic Impact Analysis (TIA)	Immediate	Town	INDOT	Design Consultant	Lane restriping/ Road diet	Necessary for INDOT approval
Perform additional Traffic Impact Analysis (TIA) for US 36/SR 67/ Broadway Street and SR 13 within Fortville to support and obtain official approval for the proposed lane restriping recommendations.						

Strategy Critical Path Matrix

		Responsibilities				
Strategy	**Priority**	**Primary**	**Secondary**	**Resources**	**Trigger**	**Required**
7. INDOT Coordination and Preliminary Approval	Immediate	Town	INDOT	Design Consultant	Lane restriping/ Road diet	Necessary for INDOT approval
Coordinate proposed interim typical roadway cross section with the Greenfield District of the Indiana Department of Transportation (INDOT). Outline corridor amenities, desired dimensions and preliminary responsibilities for funding and implementation.						
8. Project Commitments and Responsibilities	Immediate	Town	INDOT	Design Consultant	Lane restriping/ Road diet	Necessary for INDOT approval
Provide a commitment of intent to Indiana Department of Transportation (INDOT) outlining the Town of Fortville's interim project recommendations including but not limited to pedestrian sidewalks, curb and gutters, lighting and lane restriping. Project impacts, including opinions of cost should be included in the commitment of intent documentation.						
9. Design Improvements and Right of Way Coordination	Immediate	Town	INDOT	Design Consultant INDOT Staff	Lane restriping/ Road diet	INDOT approval
Design Broadway interim project recommendations including but not limited to pedestrian sidewalks, curb and gutters, lighting and lane restriping. Design shall coordinate any right of way needs and should incorporate the work of any ongoing Town initiative including adjacent trails, and local private development occurring at the time of implementation. Permitting will be necessary as part of any and all design processes. The actual permits that will be required will vary depending on the funding source.						
10. Project Funding	Immediate	Town INDOT		Design Consultant INDOT Staff MPO		

- Explore funding options for all transportation improvements as one project or as separate projects as funding mechanisms require through regional and state agencies including but not limited to INDOT and MCCOG. Specifically review programs related to competitive funding rounds related to MCCOG TIP, INDOT STIP, and INDOT's other programs.
- Explore local funding options for all transportation improvements as one project or as separate projects as funding mechanisms require through local programs including but not limited to general funds, special appropriations, and TIF Bonds.
- Ensure all components are in place and current regarding Tax Increment Financing such as Redevelopment Commission, Economic Development Areas, Allocation Areas, Designation of Allocation Areas, Effect of Tax Abatement on TIF Districts, Acquisition of Real Property by Redevelopment Commission, Disposition of Property by Redevelopment Commission, Amendments of Redevelopment or Economic Development Plans, Roles of Consultants, Housing TIF, Age Restricted Housing TIF Districts, Limit on number and size of TIF Districts, Joint Action by Redevelopment Commission, Sources of Funds, and Statutory Authority for Redevelopment Commissions and TIF. http://www.btlaw.com/files/Uploads/Documents/Publications/Pitman_TIF%20OVERVIEW--Generic%20(2).pdf
- Permitting will be necessary as part of any and all design processes. The actual permits that will be required will vary depending on the funding source.

Strategy Critical Path Matrix						
		Responsibilities				
Strategy	Priority	Primary	Secondary	Resources	Trigger	Required
11. Project Permitting	Immediate	Town	INDOT	Design Consultant INDOT Staff	Corridor Construction & Secured Funding	
Permitting will be necessary as part of any and all design processes. The actual permits that will be required will vary depending on the funding source.						
12. Corridor Construction	Immediate	INDOT	Town	Contractor	Secured Funding	INDOT approval
Construct Broadway interim project recommendations including but not limited to pedestrian sidewalks, curb and gutters, lighting and lane restriping.						
13. Mid-Block Crossings	Short Term (0-5 years)	INDOT	Town	Contractor	Increased Pedestrian Activity	Corridor Construction
Install HAWK signals (or RRFB's) and appropriate pedestrian crossing pavement markings at the intersections of McCarty Street and Broadway Street and Poplar Street and Broadway Street.						
14. Investment and Reinvestment in the District	On Going	Town	Hancock County	Design Consultant Town/ County Staff	Broadway corridor development	
Promote and encourage private (re)investment in the Broadway TIF District by collaboratively working with private property owners and developers. As necessary develop and implement marketing tools to showcase the district's opportunities, and development sites to private developers.						
15. Right of Way Expansion and Dedication	On Going	Town	INDOT	Attorney	Broadway corridor development	Right-of-way Dedication Policy
As properties within the Broadway TIF District (re)develop, transfer the necessary land to the Town of Fortville/ INDOT by way of the Right-of-way dedication policy outlined previously.						

Strategy Critical Path Matrix						
		Responsibilities				
Strategy	Priority	Primary	Secondary	Resources	Trigger	Required
16. INDOT Coordination	Short Term (0-5 Years)	Town	INDOT		Corridor expansion	
Discuss, coordinate, and integrate the long term corridor recommendations into INDOT's long term corridor planning tools, policies and documents. This ongoing coordination will allow for all impacted parties to work towards one common goal.						
17. Traffic Impact Analysis (TIA)	Long Term (10+)	Town	INDOT	Design Consultant	Corridor expansion	Necessary for INDOT approval
Perform additional Traffic Impact Analysis (TIA) for US 36/SR 67/ Broadway Street and SR 13 within Fortville to support and obtain official approval for the proposed preferred corridor recommendations.						
18. INDOT Coordination and Preliminary Approval	Mid Term (5-10 Years)	Town	INDOT	Design Consultant	Corridor expansion	Necessary for INDOT approval
Coordinate proposed preferred typical roadway cross section and associated improvements with the Greenfield District of the Indiana Department of Transportation. Outline corridor amenities, desired dimensions and preliminary responsibilities for funding and implementation.						
19. Project Commitments and Responsibilities	Long Term (10+ years)	Town	INDOT	Design Consultant	Corridor expansion	Necessary for INDOT approval
Provide a commitment of intent to INDOT outlining the Town of Fortville's preferred project recommendations including but not limited to 10' wide pedestrian sidewalks, utility and tree buffer lawns, curb and gutters, raised median, lighting and signal/ intersection improvements. Project impacts, including opinions of cost should be included in the commitment of intent documentation.						
20. Design Improvements and Right of Way Coordination	Long Term (10+ years)	Town	INDOT	Design Consultant	Corridor expansion	Preliminary INDOT approval
Design Broadway preferred project recommendations including but not limited to 10' wide pedestrian sidewalks, utility and tree lawn buffers, curb and gutters, raised medians, lighting and signal/ intersection improvements. Design shall coordinate any right of way needs and should incorporate the work of any ongoing Town initiative including adjacent trails, and local private development occurring at the time of implementation. Permitting will be necessary as part of any and all design processes. The actual permits that will be required will vary depending on the funding source.						

Strategy Critical Path Matrix						
		Responsibilities				
Strategy	Priority	Primary	Secondary	Resources	Trigger	Required
21. Utility Coordination	Long Term (10+ years)	Town	INDOT	Design Consultant	Corridor expansion	Preliminary INDOT
Coordination for public and private utilities within the Broadway Street corridor should take place during the design of the preferred corridor recommendations process. Utility relocations (design and construction) should be factored into the costs and timelines for the corridor improvements.						
22. Project Funding	Long Term (10+ years)	Town	FRC			
It is anticipated that TIF revenue will be the primary source of project funding once the TIF starts to accumulate revenue and has capacity for bonding. At the time funds are necessary for one or more projects, a Bond Anticipation Note (BAN) may be issued. In order to utilize TIF revenue for projects listed here, the Town and Redevelopment Commission must have all necessary plans and procedures in place with TIF and Redevelopment Commission						
23. Project Permitting	Long Term (10+ years)	Town	INDOT	Design Consultant INDOT Staff	Corridor Construction & Secured Funding	
Permitting will be necessary as part of any and all design processes. The actual permits that will be required will vary depending on the funding source.						
24. Corridor Construction	Long Term (10+ years)	Town	INDOT	Design Consultant	Corridor expansion	Necessary for INDOT approval
Construct Broadway preferred project recommendations including but not limited to 10’ wide pedestrian sidewalks, utility and tree lawn buffers, curb and gutters, raised medians, lighting and signal/ intersection improvements.						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APPENDIX **A**


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AMERICAN STRUCTUREPOINT INC.

7260 Shadeland Station, Indianapolis, Indiana 46256
TEL 317.547.5580 FAX 317.543.0270

www.structurepoint.com

M E M O R A N D U M

DATE: February 10, 2017

TO: Fortville TIF District Master Plan Steering Committee

FROM: Brooke Thomas, AICP
Senior Planner

RE: Broadway Consolidated TIF District Design Standards Audit

CC: Katie Clark, PLA, ASLA
Landscape Architect

The purpose of this memo is to review the Broadway Consolidated TIF District Design Standards in search of guidelines and regulations that may need to be amended, omitted, or addressed in some way. The audit on the following pages is based on the following assumptions.

- The purpose of the Broadway Consolidated TIF District Design Standards is to ensure that all future development within the boundaries of the Broadway TIF District will be of a higher design/aesthetic than would otherwise be required by the minimum standards and regulations of the Town's zoning ordinance.
- And that while the Broadway Consolidated TIF District Design Standards are intended to be more restrictive than what would otherwise be required elsewhere in the Town (the South Madison TIF District excluded), local elected and appointed officials do not want to unnecessarily hinder future (re)development in the area.
- These standards are overlay district standards, wherein, there are base zoning district standards that apply as well, and that what exists in the Broadway Consolidated TIF District Design Standards is more restrictive than what would otherwise be allowed elsewhere in the town.
- As written, the Broadway Consolidated TIF District Design Standards are incomplete, in that they are currently silent on how to handle such things as land use classifications, permitted (and prohibited) land uses, the citing of public art, as well as, access management.
- As written, some of the standards are not as clear as they could be.
- The stated objectives on page 4 were "met" when the Broadway Consolidated TIF District Design Standards were adopted.

It is important to note that the auditor has the following biases:

- Development regulations and development guidelines are distinctly different tools and should be treated as such. For the purposes of this audit, development regulations should be only those provisions that Town government and/or the Area Plan Commission is willing to administer AND enforce. By contrast, development guidelines should simply communicate a vision, and shouldn't necessarily be required – at least not in terms of the zoning and permit review process.
- With respect to land use regulations that are intended to govern the law of the land, terms like "encourage" and "support" are merely suggestions. They often fail to convey to the property owner or developer what they can or cannot do, and they can be equally troublesome for staff when they try to apply them to a proposed development or other permit applications.
- Similarly, provisions that prescribe a range (low to high or minimums and maximums) – while they appear flexible in nature – can introduce subjectivity, which rarely has the effect of making things more clear or concise.

- In the event that a provision applies to properties along a particular frontage or street, the design standards should also say what can or cannot happen for all other properties not located along said street.
- The regulations should state a provision one time, or risk inadvertently introducing conflicting or inconsistent language.
- The Town should only adopt land-use regulations that it is equipped and prepared to enforce, regardless of whether or not enforcement of the ordinance is handled on a complaint basis (i.e., neighbors complaining about neighbors), or if the zoning inspector cites property owners for violations when he/she discovers them. For example, citing a property owner for having burnt-out light bulbs on an electronic message board.

Ordinance Structure
As written, the Broadway Consolidated TIF District Design Standards switch between requirements and recommendations. To make the Broadway Consolidated TIF District Design Standards much more clear and concise, consider a) making the most pertinent guidelines read as regulations, and b) remove (or republish elsewhere) the remaining guidelines that only serve as suggestions.

Consider that very few end users read an ordinance from front to back and that more end users treat ordinances like a reference document. Consider also that some practitioners use different parts of the ordinance during different parts of the design or review process. The most user-friendly ordinances group standards by topic.

Much of the interpretation of land-use regulations lies with the definitions of land uses, for example. Consider either referencing the definitions section of the Hancock County Zoning Ordinance or including a list of definitions in the amendment to the Broadway Consolidated TIF District Design Standards.

Applicability
The current standards as written apply to the entire TIF District as shown in Figure 156.046.01-A on page 6 in the PDF document. As we have discussed during the TIF district master plan steering committee meeting, the desired dense, urban character along Broadway is predominately wanted adjacent to the downtown core and extending from Madison Street to Garden Street. As the roadway alignment and configurations are finalized for Broadway Avenue, the Madison and Garden Street intersections will be treated as bookends/ entrances to Fortville and would be used to transition from one development character to another. It is recommended that the Town review the extent to which the design guidelines should be applied.

Consider that as currently written, the development standards wouldn't apply to single-family attached housing (e.g., townhomes and flats), and that these types of housing units would help to achieve any number of the stated objectives on page 4. (*See also Land Uses and Classifications on the following pages*.)

Both the phasing guidelines and visibility designations add a certain amount of complexity to the standards. While the parcel phasing guidelines do appear to be rather straightforward, it is not entirely clear how often each scenario is likely to apply, given that: lot sizes within the Broadway Consolidated TIF District vary greatly; many of the parcels have an irregular (non-rectangular) shape; and the development that exists varies considerably. The visibility designations, particularly the moderate visibility designation, may or may not add value to the purpose of the design standards. (*See also references to which standards apply to which corridors on the following pages*). The Town should consider a single set of design standards that addresses both the phasing and the visibility simultaneously, wherein the strictest application of the regulations is placed on West Broadway Street and South Main Street (the highest visibility corridors) but then allow for them to be a little more relaxed throughout the rest of the TIF district. For example, for properties along West Broadway Street or South Main Street, any improvement that increases an existing building's gross floor area by more than a certain percentage (e.g. 25%) must come into conformance with all design standards. Conversely, improvements to an existing building on any other street within the consolidated TIF district could be streamlined by finding a compromise between the Phase I and Phase II requirements. At a minimum, the applicability provisions and section 156.046.02.B. should be reconciled to make sure that it is clear what needs to happen when.

Development and Performance Standards
Tables, like the sample provided below, would make the document much more user friendly, but perhaps more importantly than that, there is less of a chance of the ordinance having conflicting language.

SAMPLE Development Standards Table			
Roadway	**Min Front Yard Setback**	**Minimum Side Yard Setback**	**Minimum Rear Yard Setback**
West Broadway Street	50 feet	15 feet	5 feet
South Main Street	30 feet	15 feet	5 feet
All other roadways	5 feet	5 feet	5 feet

The following pages detail some of the changes that should be considered given: A) the stated objectives of the Broadway Consolidated TIF District Design Standards, B) the difficulty in administering the design standards as written, and C) there are additional difficulties that are likely to present themselves over time.

Block Standards

Similar to the applicability discussion above, this section (156.046.02.01) requires the end-user to have to reference the development standards, a map, and an image/drawing to determine what is required. Consider simplifying the map and eliminating the "visibility corridors" and in instances where properties and buildings (existing or proposed) along West Broadway Street and/or South Main Street call for stricter standards, spell it out directly within the applicable provision.

As written, the Block Standards address everything from the location of off-street parking, screening with landscaping, and shared-use parking agreements, which are all provisions that have their own section dedicated to them. Vehicular access and permitted uses are also mentioned; it is recommended that access management and permitted uses also be given their own sections.

This section should be reserved for provisions related to lot width, depth, area, coverage, and street frontage. Given how walkable portions of the Broadway Consolidated TIF District are, block length should also be a consideration. In the event that the applicability section retains a reference to Floor Area Ratios, this section may need to be revised to prescribe Floor Area Ratios.

Lot / Yard Standards

Consider prescribing a build-to-line OR a minimum front yard setback for West Broadway Street, South Main Street, AND all other roadways, and avoid establishing both a build-to-line and/or minimum front yard setback for any roadway. Consider also that it is best if the lot/yard standards can address each of the following lot and yard types: corner lot, interior lot and through lots, as well as which have front, side, and rear yards. For example, does a corner lot have two front yards and two side yards, or would the physical street address determine which street-facing side is the front yard?

It is not clear what is meant by the requirements that read, "Shall be as established at the time of this ordinance."

Consider that a zero lot line at the side or rear of the parcel can cause issues in terms of loading and unloading, encroachment, and access for maintenance and that a 5-foot minimum side and rear yard setback may be more appropriate throughout the district.

Measuring setbacks can often be simplified by always measuring from the center of the right-of-way.

If additional ROW is needed now or in the future, consider accounting for the additional right-of-way when establishing the build-to line or minimum front yard setback, whichever is most appropriate.

Encroachment standards are currently identified as setback standards and repeated verbatim for each "visibility classification." In addition to them being pulled out and addressed in one place, special attention should be given in areas where an encroachment would be appropriate but where another provision, like a zero lot line, could pose issues for the property owner now or in the future.

The public utilities requirement – if it is needed at all – is buried between Lot Depth and Lot Coverage.

Lastly, it may be better to address non-conformities (lots, uses, buildings, etc.) in one section of the ordinance. The same is true for the applicability. Section 156.046.02.02.B reiterates what has already been established in terms of what can and cannot occur before a property is required to be brought into conformance with the design standards.

Height Standards

Consider simplifying all of the building height provisions by prescribing a maximum number of feet, rather than limiting the number of stories (or floors) that are allowed, and then translating the number of stories into feet as well.

Encroachments are addressed in this section as well – both in the image on page 19 and in the text (156.046.02.05 A.ii.). Consider adding a section that addresses all encroachments in one place.

Accessory Use / Structure Standards

Section 156.046.02.06.A. explains that all accessory uses and structures must comply with all development standards of the ordinance, and then Section 156.046.02.06.D. prescribes citing requirements (some of which pertain to

encroachments) and lot placement. This section should clearly explain how to cite accessory structures without the reader having to determine what, if any, additional provisions apply.

This section also addresses outside storage; something that is addressed in other places in the ordinance. Consider addressing outside storage once, while making these provisions easier to find within the larger set of standards.

Parking Standards

Consider adopting parking minimums and/or parking maximums, which may vary from one part of the district to the next, and eliminating the range of parking spaces required throughout the Broadway Consolidated TIF District. Consider reconciling the redundancy between Section 156.046.02.07.A., which says that each space must be at least 9' x 18,' and Table 156.046.02-B, Parking Space, and Interior Drive Requirements. The latter repeats the same 9' x 18' provision but allows for different types of parking stalls, including 30 degrees, 45 degrees, 60 degrees, and/or 90 degrees, which can require more or less space than the typical 9' x 18' stall. Future updates to one but not the other could introduce conflicting regulations in the future. Lastly, if stormwater management within the Broadway Consolidated TIF District is more restrictive than elsewhere in the Town of Fortville, consider having a separate and distinct section devoted to drainage, rather than burying it within the parking standards and landscaping standards, for example.

Landscaping Standards for Required Off-street Parking Areas

It is recommended that all landscaping standards be co-located in one section of the ordinance, eliminating redundancies where possible.

Loading Standards

Given that the sizes of the parcels within the Broadway Consolidated TIF District vary considerably, and that – at least in some areas – a zero lot line is desirable, there may be parcels that do not or will not be able to conform to these loading standards. All of the provisions of Section 156.046.02.09. should be revisited by first determining how much of the existing development complies with these provisions, as written.

Fence and Screening Standards

It is recommended that this section be expanded to include all screening/buffering requirements.

Referring to the earlier comment about lot types, it would be beneficial for this section if the ordinance explained how to treat corner, through, and interior lots, so as to prevent a 6' fence from being placed along West Broadway Street.

Consider also that some uses include a truck court. A secure truck court almost always requires the use of a barbed- or razor-wire, chain-link fence that is often electrified.

Landscaping Standards

Rather than allowing for "any existing vegetation on site" to count toward the minimum landscaping requirements, (Section, determine which types and sizes of vegetation can count toward the minimum landscaping requirements) include provisions for how to preserve and protect such vegetation during the construction phase. As written, it is entirely possible that invasive species and/or infected trees could count toward the minimum landscaping requirements.

Similar to the comment in the previous section, consider that the earthen mounds of this section are intended to screen something. As such, the specifications for such should be located in a new section that addresses all of the ways in which a use, parking area, loading area, outside storage, etc., can be screened from view.

Consider also that a standard height for a new shrub could be 24" rather than 12,'' and that the requirement for foundation plantings is currently buried among the plant material provisions.

Lastly, consider simply referring to the roadways that require additional plantings by name, and eliminate the visibility corridors all together, while remembering that the ordinance should specify what is required elsewhere within the district. For example:

SAMPLE Interior Planting Requirements Table			
Roadway	**Minimum No. of Plantings Required**	**Plant Type**	**Minimum amount of land area (planting area)**
West Broadway Street	2	Deciduous or Evergreen trees	1,000 sq. ft. of ground floor area
	1	Ornamental tree	1,000 sq. ft. of ground floor area
	1	Foundation planting	10' of perimeter
South Main Street	1	Deciduous or Evergreen trees	1,000 sq. ft. of ground floor area
	1	Ornamental tree	1,000 sq. ft. of ground floor area

	1	Foundation planting	15' of perimeter
All other roadways	1	Deciduous or Evergreen trees	2,000 sq. ft. of ground floor area
	1	Ornamental tree	2,000 sq. ft. of ground floor area
	1	Foundation planting	20' of perimeter

Building and Architectural Design Standards

Consider that the following provision (Section 156.046.02.12.B., as it is currently written, lacks a specific provision to be followed, "All commercial developments shall comply with respect to street orientation to ensure appropriate human scale and pedestrian accessibility 1,000 sq. ft. of ground floor area."

Consider referencing the need to screen roof-mounted and ground-mounted mechanical equipment here, but moving all screening provisions to a separate section that deals with all buffering and screening requirements.

Consider that the 50% masonry requirement for all structures could probably be limited to the highest visibility corridors of West Broadway Street and South Main Street and relaxed for structures along the other roadways throughout the district. The same could be true for the rest of Section 156.046.02.12, Building Design and Architectural Standards. Otherwise, this will likely end up being a disincentive for existing properties to make (minor or major) improvements in the future.

Large-Scale Retail Standards

Consider simply addressing these provisions along with the (revised) Building and Architecture Design Standards (Section 156.046.02.12), rather than calling them out separately.

Lighting Standards

Consider requiring and reviewing/approving a lighting plan as part of the review and approval process to ensure that a development will not result in glare or light pollution. Consider also that it might be better to require that lighting not spill over onto adjacent properties, rather than worry about some additional lighting along streets (Section 156.04602.14.iv.).

Sign Standards

Consider adding the term "maintain" to the list of conditions under the Intent to ensure that the sign standards have the broadest reach possible. If revised, it would read, "Except as otherwise provided in this section, no sign shall hereafter be maintained, erected, moved, relocated, constructed, enlarged or altered except as provided by this code and for which a permit for the same has been issued by the Building Official," for example.

Consider consulting your local attorney regarding Section 156.046.02.15.D. Abandoned Signs, as it is likely to be considered unconstitutional following the U.S. Supreme Court Decision in Reed v. Town of Gilbert, Arizona. As written, someone would have to read the sign to determine if it was abandoned or not. Furthermore, requiring the removal of everything – not just the sign face – could be considered a bit onerous.

Lastly, Section 156.046.02.15.F. Temporary Signs, has the potential to result in a proliferation of non-permanent signs given that they can be installed without a permit, regardless of the fact that 156.046.02.15.F.iii.1. requires a permit. Also, if banners are prohibited, what sign structures are considered to be temporary? Construction signs?

Land Uses and Classifications

Consider that mixed-use is best defined as residential and non-residential uses in some combination (as opposed to office and commercial), and that most ordinances fail to recognize the full spectrum of housing units that exist. Most ordinances, like that of the Town of Fortville, are often limited to addressing anything beyond single-family (read: detached), two-family (i.e., duplexes) and multi-family (i.e., apartments). Any permitted use table should take into consideration the following residential land uses: single-family detached, single-family attached (e.g., townhomes and flats), two-family (duplexes), three-family (triplexes), four-family (quads), multi-family apartments, and accessory dwelling units.

Consider also that some land uses are likely to detract from the intended purpose of the district, which is to attract "high-quality development" and "encourage compact, walkable development patterns." So while uses like self-storage facilities exist, they shouldn't be allowed to expand, nor should the Broadway Consolidated TIF District Design Standards be revised to accommodate them.

If the Hancock County Area Plan Commission doesn't currently issue Change in Use Permits, it will difficult to require property owners to comply with these standards when the land use changes from one thing to another but no other structural changes take place.


RATLIFF
INSTRUCTION

APPENDIX **B**


RATLIFF
INSTRUCTION

AMERICAN STRUCTUREPOINT INC.

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M E M O R A N D U M

DATE: June 2, 2017

TO: Luis Laracuente, PE

FROM: Jeromy Grenard, PE, PTOE

RE: Broadway Street (US 36) - Fortville, Indiana

CC: Cash Canfield, File

Broadway Street (US 36) is the primary northeast to southwest corridor in Fortville, Indiana, and is classified as a Minor Arterial. Currently, the ADT is just over 13,000 southwest of Maple Street, and is around 9,900 northeast of Maple Street. It is lined with sparse commercial/retail land uses that have been the subject of a recent Master Planning exercise undertaken by the City in an effort to revitalize the corridor and make it into an attractive amenity for the residents of the City.

Background

Regarding Broadway Street, there are a few contextual points to be made:

- While this roadway is an important connection between the east side of Indianapolis and the Town of Pendleton, there is an alternate interstate access around Fortville using I-69 that connects the northeast corner of Indianapolis to Pendleton, Anderson, and points beyond.
- Traffic flow is important within the City; however, providing spare capacity is not a primary goal of the City's for the corridor.
- The City's vision for the corridor is to encourage the redevelopment of the corridor with denser land uses that create a walkable, bikeable area, with retail, multifamily residential, and office uses fronting a wide sidewalk.
- Of more importance to the City than moving traffic is to calm traffic so that the wide sidewalks and new development are inviting places for pedestrians to spend their leisure time. Essentially, they would like to convert the corridor from being completely focused on automobile travel to a more Complete Street for all users. This means creating safer pedestrian crossings (and perhaps midblock crossings utilizing pedestrian hybrid beacons) and slowing traffic. This requires a paradigm shift in the way that this corridor is viewed.

Currently, the corridor is two lanes southwest of Fortville and northeast of Fortville. It widens to a four-lane section within Fortville, with no access control, creating a de-facto three-lane section and causing drivers to shift lanes often in order to not be trapped behind left turning vehicles.

It has been proven through many studies that a reduction from a four to a three-lane section under these circumstances does not significantly reduce capacity, but does improve the safety of the corridor. This would also help to achieve the City's goals for the corridor that were stated above by reducing the crossing distance for pedestrians, providing additional space for parking and/or bicycling, and allowing for access management to eventually be built into the corridor that would limit the number of full-access driveways directly accessing Broadway Street.

American Structurepoint is the planning consultant developing the master plan documents including Broadway Street and other areas in the City. We have coordinated with the MPO, MCCOG, to obtain traffic projections for the corridor. We have also performed trip generation, distribution, and assignment for a new TIF District that is being developed south of Broadway Street along a proposed extension of Madison Street. This additional traffic was added on top of the base volumes obtained from MCCOG. It should be noted that the trip generation for the proposed development was conservative, in that no internal or pass-by trips were removed from the trip generation. It is also noted that the background growth rate used was 2% per year.

Capacity Analysis

At INDOT's request, a cursory capacity analysis has been performed to determine if the three-lane configuration can be accommodated on US 36 for 20 years without causing unnecessary delay to the US 36 approaches of the signalized intersections. The intent of this exercise is only to show that the two study intersections can operate through a 20-year lifespan with the following criteria:

- Volume to Capacity (V/C) ratio of less than 1.0 for the US 36 and SR 13 approaches
- Approach LOS D or better for the US 36 and SR 13 approaches
- Movement LOS E or better for the US 36 and SR 13 approaches
- No thresholds for all local approaches

The capacity analysis output has been attached to this memorandum, and the Synchro files can also be made available for inspection upon request.

This analysis incorporates the extension of Madison Street south of US 36 to Fortville Pike with a 3-lane cross-section and a modification of the traffic signal at the intersection of US 36 and Madison Street. This new connection will relieve Broadway of some traffic currently using Broadway to get to Fortville Pike; however, the reduction in traffic will be offset due to the anticipated redevelopment of properties along US 36. Therefore, no traffic was shifted from Broadway to Madison Street for the purposes of this analysis. The TIF zone is expected to generate approximately 11,350 trips per day, some of which will utilize US 36. These trips have been included.

Findings

Following are findings of the capacity analysis exercise on Broadway Street:

- The AM peak hour has a significantly higher demand than does the PM peak hour; however, both the AM and PM peak periods were analyzed to ensure that no directional movements existed that would cause the subject approaches to fail.
- It is possible to meet the objectives listed above for both the Maple Street and the SR 13 intersections with US 36 in both the AM and PM peak hours if the following minimum lane configurations are used:
    - US 36 and Maple Street
        - Eastbound – 1 left turn, 1 through, 1 right turn
        - Westbound – 1 left turn, 1 through, 1 right turn
        - Northbound – Existing (1 shared left/through/right)
        - Southbound – Existing (1 shared left/through/right)
    - US 36 and SR 13 (Madison Street)
        - Eastbound – 1 left turn, 1 through, 1 right turn
        - Westbound – 1 left turn, 1 shared through/right
        - Northbound – 1 left turn, 1 shared through/right (to be constructed with Madison Street extension)
        - Southbound – Existing (1 shared through/left, 1 right turn)
- The measures of effectiveness (MOE's) can be summarized as follows:

Intersection: **US 36 / Maple Street**
Analysis Period: **Design year AM peak hour**

Approach	Movement	V/C ratio	LOS	Delay (sec/veh)	95th %-ile Queue (ft)
N	L	2.51	F	>300	1,029
	T				
	R				
E	L	0.46	A	9	65
	T	0.96	C	33	1,486
	R				
S	L	2.88	F	>300	1,168
	T				
	R				
W	L	0.11	A	9	25
	T	0.54	C	21	458
	R	0.15	A	2	29

Intersection: **US 36 / Maple Street**
Analysis Period: **Design year PM peak hour**

Approach	Movement	V/C ratio	LOS	Delay (sec/veh)	95th %-ile Queue (ft)
N	L	1.24	F	183	561
	T				
	R				
E	L	0.47	C	23	63
	T	0.61	C	26	460
	R		C		
S	L	1.76	F	>300	1,127
	T				
	R				
W	L	0.15	B	12	37
	T	0.91	D	46	818
	R	0.15	A	5	39

Intersection: **US 36 / SR 13 / Madison St**
Analysis Period: **Design year AM peak hour**

Approach	Movement	V/C ratio	LOS	Delay (sec/veh)	95th %-ile Queue (ft)
N	L	0.47	C	29	134
	T				
	R	0.94	D	41	219
E	L	0.35	A	8	48
	T	0.85	C	28	532
	R	0.12	A	3	25
S	L	0.22	C	25	50
	T	0.29	B	12	59
	R				
W	L	0.79	C	29	127
	T	0.58	B	12	220
	R				

Intersection: **US 36 / SR 13 / Madison St**
Analysis Period: **Design year PM peak hour**

Approach	Movement	V/C ratio	LOS	Delay (sec/veh)	95th %-ile Queue (ft)
N	L	0.66	D	45	205
	T				
	R	0.46	A	6	63
E	L	0.72	D	43	125
	T	0.68	C	34	390
	R	0.16	A	2	12
S	L	0.41	C	35	130
	T	0.55	C	28	225
	R				
W	L	0.84	C	30	303
	T	0.92	D	40	775
	R				

In addition to the design year analysis, a sensitivity analysis was run to determine the approximate reduction in design year traffic that would need to occur in order to obtain a V/C ratio of less than 1.0 for all movements at each of the intersections. It was determined that at 70% of the design year volumes, the AM peak hour will have a V/C ratio of less than 1.0 for all movements. Likewise, at 75% of the design year volumes, the PM peak hour will have a V/C ratio of less than 1.0 for all movements.

Conclusions

Based upon the cursory analysis performed to check the efficacy of a three-lane section on US 36, it can be concluded that the three-lane section will perform acceptably on the INDOT approaches for approximately 20 years.

It was also determined that the side streets will continue to operate acceptably until the overall network volumes reach 70% of the design year traffic.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	570	130	204	1098	25	156	254	116	39	381	46
Future Volume (vph)	13	570	130	204	1098	25	156	254	116	39	381	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		325	200		325	0		0	0		200
Storage Lanes	1		1	1		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1863	1583	1770	1853	0	0	1736	0	0	1811	0
Flt Permitted	0.045			0.294				0.985			0.996	
Satd. Flow (perm)	84	1863	1422	548	1853	0	0	1711	0	0	1805	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			137		1			8			3	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1045			1577			529			342	
Travel Time (s)		23.8			35.8			12.0			7.8	
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Lane Group Flow (vph)	14	600	137	215	1182	0	0	553	0	0	490	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Split	NA		Split	NA	
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases	4		4	8								
Detector Phase	7	4	4	3	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	7.0	20.0	20.0	7.0	20.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	11.5	24.5	24.5	11.5	24.5		20.5	20.5		20.5	20.5	
Total Split (s)	17.0	92.0	92.0	17.0	92.0		20.5	20.5		20.5	20.5	
Total Split (%)	11.3%	61.3%	61.3%	11.3%	61.3%		13.7%	13.7%		13.7%	13.7%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5			4.5			4.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?												
Recall Mode	None	C-Min	C-Min	None	C-Min		None	None		None	None	
Act Effct Green (s)	95.8	88.8	88.8	104.5	99.9			16.0			16.0	
Actuated g/C Ratio	0.64	0.59	0.59	0.70	0.67			0.11			0.11	
v/c Ratio	0.11	0.54	0.15	0.45	0.96			2.88			2.51	
Control Delay	9.1	21.0	2.4	8.7	33.2			881.6			720.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Total Delay	9.1	21.0	2.4	8.7	33.2			881.6			720.6	
LOS	A	C	A	A	C			F			F	
Approach Delay		17.4			29.5			881.6			720.6	
Approach LOS		B			C			F			F	
Queue Length 50th (ft)	4	343	0	47	844			~929			~801	
Queue Length 95th (ft)	11	458	29	m65	m#1486			#1168			#1029	
Internal Link Dist (ft)		965			1497			449			262	
Turn Bay Length (ft)	100		325	200								
Base Capacity (vph)	197	1102	897	483	1234			192			195	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0	0	0	0			0			0	
Spillback Cap Reductn	0	0	0	0	0			0			0	
Storage Cap Reductn	0	0	0	0	0			0			0	
Reduced v/c Ratio	0.07	0.54	0.15	0.45	0.96			2.88			2.51	

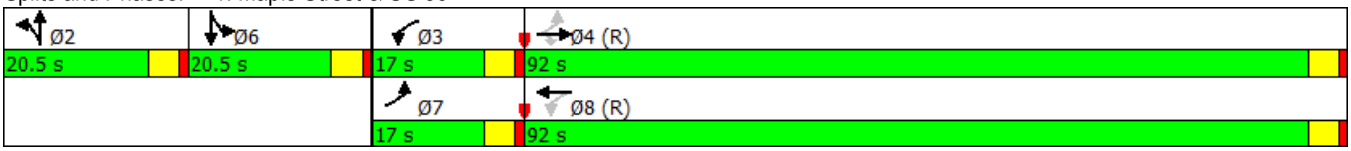
Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 12 (8%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 2.88	
Intersection Signal Delay: 280.4	Intersection LOS: F
Intersection Capacity Utilization 134.9%	ICU Level of Service H
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Maple Street & US 36



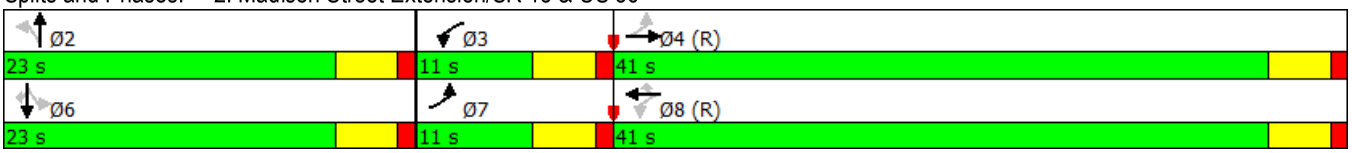
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	205	389	108	152	744	86	52	47	73	64	98	490
Future Volume (vph)	205	389	108	152	744	86	52	47	73	64	98	490
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		325	100		325	0		0	0		0
Storage Lanes	1		0	1		1	1		0	0		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1777	0	1770	1863	1583	1770	1628	0	0	1827	1583
Flt Permitted	0.122			0.338			0.595				0.833	
Satd. Flow (perm)	227	1777	0	621	1863	1487	1073	1628	0	0	1530	1487
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		26				91		77				264
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1577			757			857			460	
Travel Time (s)		35.8			17.2			19.5			10.5	
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Lane Group Flow (vph)	216	523	0	160	783	91	55	126	0	0	170	516
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4			8		8	2			6		6
Detector Phase	7	4		3	8	8	2	2		6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	9.5	22.5		9.5	22.5	22.5	22.5	22.5		22.5	22.5	22.5
Total Split (s)	11.0	41.0		11.0	41.0	41.0	23.0	23.0		23.0	23.0	23.0
Total Split (%)	14.7%	54.7%		14.7%	54.7%	54.7%	30.7%	30.7%		30.7%	30.7%	30.7%
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5			4.5	4.5
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?												
Recall Mode	None	C-Min		None	C-Min	C-Min	Min	Min		Min	Min	Min
Act Effct Green (s)	44.3	37.5		43.5	37.1	37.1	17.6	17.6			17.6	17.6
Actuated g/C Ratio	0.59	0.50		0.58	0.49	0.49	0.23	0.23			0.23	0.23
v/c Ratio	0.79	0.58		0.35	0.85	0.12	0.22	0.29			0.47	0.94
Control Delay	28.7	12.3		7.9	28.2	3.0	25.1	12.4			29.2	41.3
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Delay	28.7	12.3		7.9	28.2	3.0	25.1	12.4			29.2	41.3
LOS	C	B		A	C	A	C	B			C	D
Approach Delay		17.1			22.8			16.2			38.3	
Approach LOS		B			C			B			D	
Queue Length 50th (ft)	98	143		26	305	0	20	18			67	118
Queue Length 95th (ft)	m127	m220		48	#532	21	50	59			124	#310
Internal Link Dist (ft)		1497			677			777			380	
Turn Bay Length (ft)	200			100		325						
Base Capacity (vph)	274	907		460	927	786	268	465			383	570

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0		0	0	0	0	0			0	0
Spillback Cap Reductn	0	0		0	0	0	0	0			0	0
Storage Cap Reductn	0	0		0	0	0	0	0			0	0
Reduced v/c Ratio	0.79	0.58		0.35	0.84	0.12	0.21	0.27			0.44	0.91

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 75			
Offset: 36 (48%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.94			
Intersection Signal Delay: 24.8		Intersection LOS: C	
Intersection Capacity Utilization 94.1%		ICU Level of Service F	
Analysis Period (min) 15			

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Madison Street Extension/SR 13 & US 36



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	51	764	106	79	513	20	184	287	99	35	217	25
Future Volume (vph)	51	764	106	79	513	20	184	287	99	35	217	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		325	200		325	0		0	0		200
Storage Lanes	1		1	1		0	0		0	0		0
Taper Length (ft)	25			25			0			0		
Satd. Flow (prot)	1770	1863	1583	1770	1845	0	0	1756	0	0	1811	0
Flt Permitted	0.289			0.069				0.984			0.994	
Satd. Flow (perm)	538	1863	1422	129	1845	0	0	1721	0	0	1802	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			96		2			6			3	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1045			1577			529			342	
Travel Time (s)		23.8			35.8			12.0			7.8	
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	54	804	112	83	561	0	0	600	0	0	291	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Split	NA		Split	NA	
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases	4		4	8								
Detector Phase	7	4	4	3	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	7.0	20.0	20.0	7.0	20.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	11.5	24.5	24.5	11.5	24.5		20.5	20.5		20.5	20.5	
Total Split (s)	19.0	81.0	81.0	19.0	81.0		29.0	29.0		21.0	21.0	
Total Split (%)	12.7%	54.0%	54.0%	12.7%	54.0%		19.3%	19.3%		14.0%	14.0%	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5			4.5			4.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?												
Recall Mode	None	Min	Min	None	Min		None	None		None	None	
Act Effct Green (s)	69.2	61.6	61.6	71.7	65.0			24.8			16.7	
Actuated g/C Ratio	0.53	0.48	0.48	0.55	0.50			0.19			0.13	
v/c Ratio	0.15	0.91	0.15	0.47	0.61			1.76			1.24	
Control Delay	12.3	46.1	5.0	23.1	26.4			386.5			183.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Total Delay	12.3	46.1	5.0	23.1	26.4			386.5			183.5	
LOS	B	D	A	C	C			F			F	
Approach Delay		39.4			26.0			386.5			183.5	
Approach LOS		D			C			F			F	
Queue Length 50th (ft)	19	600	7	29	336			~763			~307	
Queue Length 95th (ft)	37	818	39	63	460			#1127			#561	
Internal Link Dist (ft)		965			1497			449			262	
Turn Bay Length (ft)	100		325	200								

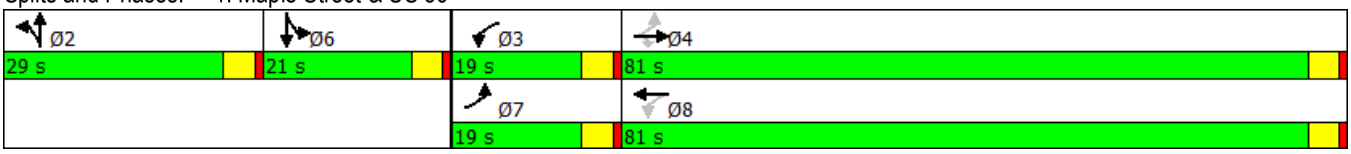
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)	448	1112	887	259	1106			340			235	
Starvation Cap Reductn	0	0	0	0	0			0			0	
Spillback Cap Reductn	0	0	0	0	0			0			0	
Storage Cap Reductn	0	0	0	0	0			0			0	
Reduced v/c Ratio	0.12	0.72	0.13	0.32	0.51			1.76			1.24	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 129.6			
Natural Cycle: 150			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.76			
Intersection Signal Delay: 135.8		Intersection LOS: F	
Intersection Capacity Utilization 107.7%		ICU Level of Service G	
Analysis Period (min) 15			

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Maple Street & US 36

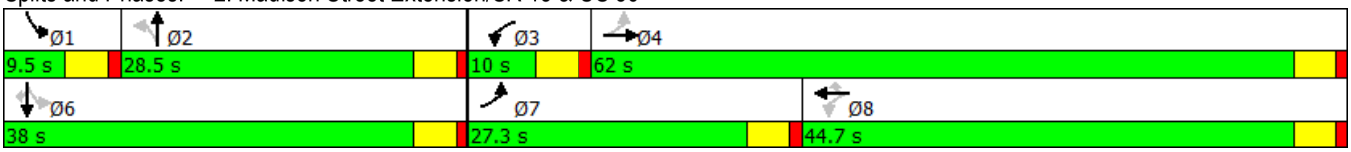


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	413	719	83	117	438	95	121	110	171	103	75	290
Future Volume (vph)	413	719	83	117	438	95	121	110	171	103	75	290
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		325	100		325	0		0	0		0
Storage Lanes	1		0	1		0	1		0	0		1
Taper Length (ft)	25			25			0			0		
Satd. Flow (prot)	1770	1820	0	1770	1863	1583	1770	1611	0	0	1811	1583
Flt Permitted	0.233			0.109			0.566				0.500	
Satd. Flow (perm)	434	1820	0	203	1863	1457	1005	1611	0	0	920	1457
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8				149		65				305
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1577			757			857			460	
Travel Time (s)		35.8			17.2			19.5			10.5	
Confl. Peds. (#/hr)	20		20	20		20	20		20	20		20
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	435	844	0	123	461	100	127	296	0	0	187	305
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA		pm+pt	NA	Perm
Protected Phases	7	4		3	8			2		1	6	
Permitted Phases	4			8		8	2			6		6
Detector Phase	7	4		3	8	8	2	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	9.5	22.5		9.5	22.5	22.5	22.5	22.5		9.5	22.5	22.5
Total Split (s)	27.3	62.0		10.0	44.7	44.7	28.5	28.5		9.5	38.0	38.0
Total Split (%)	24.8%	56.4%		9.1%	40.6%	40.6%	25.9%	25.9%		8.6%	34.5%	34.5%
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5			4.5	4.5
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
Recall Mode	None	Min		None	Min	Min	None	None		None	Min	Min
Act Effct Green (s)	60.8	50.5		42.4	36.8	36.8	31.0	31.0			31.0	31.0
Actuated g/C Ratio	0.60	0.50		0.42	0.36	0.36	0.31	0.31			0.31	0.31
v/c Ratio	0.84	0.92		0.72	0.68	0.16	0.41	0.55			0.66	0.46
Control Delay	29.9	40.2		43.0	34.0	1.7	34.6	28.0			45.3	5.9
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Delay	29.9	40.2		43.0	34.0	1.7	34.6	28.0			45.3	5.9
LOS	C	D		D	C	A	C	C			D	A
Approach Delay		36.7			30.9			30.0			20.8	
Approach LOS		D			C			C			C	
Queue Length 50th (ft)	147	503		34	261	0	71	135			115	0
Queue Length 95th (ft)	#303	#775		#125	390	12	130	225			#205	63
Internal Link Dist (ft)		1497			677			777			380	
Turn Bay Length (ft)	200			100		325						

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)	570	1065		172	767	688	315	550			312	696
Starvation Cap Reductn	0	0		0	0	0	0	0			0	0
Spillback Cap Reductn	0	0		0	0	0	0	0			0	0
Storage Cap Reductn	0	0		0	0	0	0	0			0	0
Reduced v/c Ratio	0.76	0.79		0.72	0.60	0.15	0.40	0.54			0.60	0.44

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 101			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.92			
Intersection Signal Delay: 31.6		Intersection LOS: C	
Intersection Capacity Utilization 94.3%		ICU Level of Service F	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 2: Madison Street Extension/SR 13 & US 36




RATLIFF
INSTRUCTION

APPENDIX **C**


RATLIFF
INSTRUCTION

Fortville Broadway
TIF District Master Plan

Long Term TIF Revenue Projection

January 11, 2018

POLICY ANALYTICS LLC

Scope and Overview

The purpose of this analysis is to estimate the revenue producing potential of the Fortville Broadway TIF allocation area as envisioned in the Broadway TIF Master Plan. This revenue analysis is a component of the TIF Master Plan, which defines the size, scale and type of illustrative development within the TIF area.

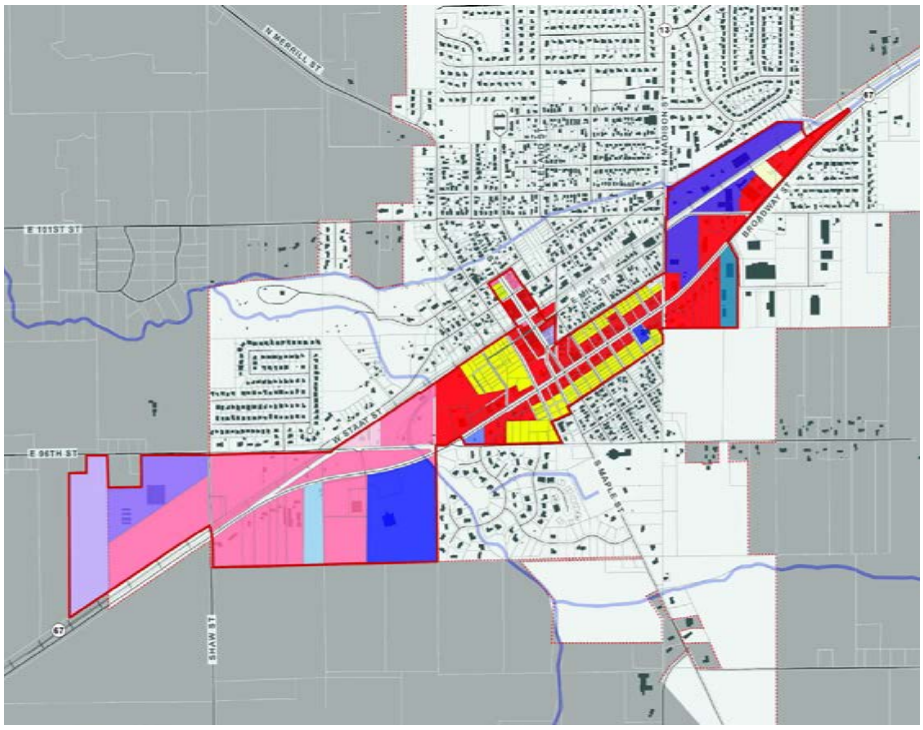
Information from trade databases and the assessment of local comparable property was used to convert investment parameters (square footage, investment type) into estimates of taxable assessed value. Incremental property tax revenues were then estimated from these projections of assessed value under current property tax statutes.

This analysis is intended as a capacity analysis to estimate the total revenue potential of the Broadway TIF ***if*** it is developed to the scale and composition described in the TIF master plan.

This analysis is not a market demand analysis intended to estimate the level of market demand for future development or the magnitude or timing of potential investments. The development timelines used herein are for illustrative purposes only and have not been market tested.

The outcomes of this analysis will allow Fortville officials and stakeholders to gauge the potential revenues of TIF development against the cost of public infrastructure and economic development expenditures.

Broadway TIF Concept Map



The Broadway TIF master plan envisions a range of redeveloped uses along the Broadway Corridor. The purpose of this report is to evaluate the TIF revenue potential of the TIF.

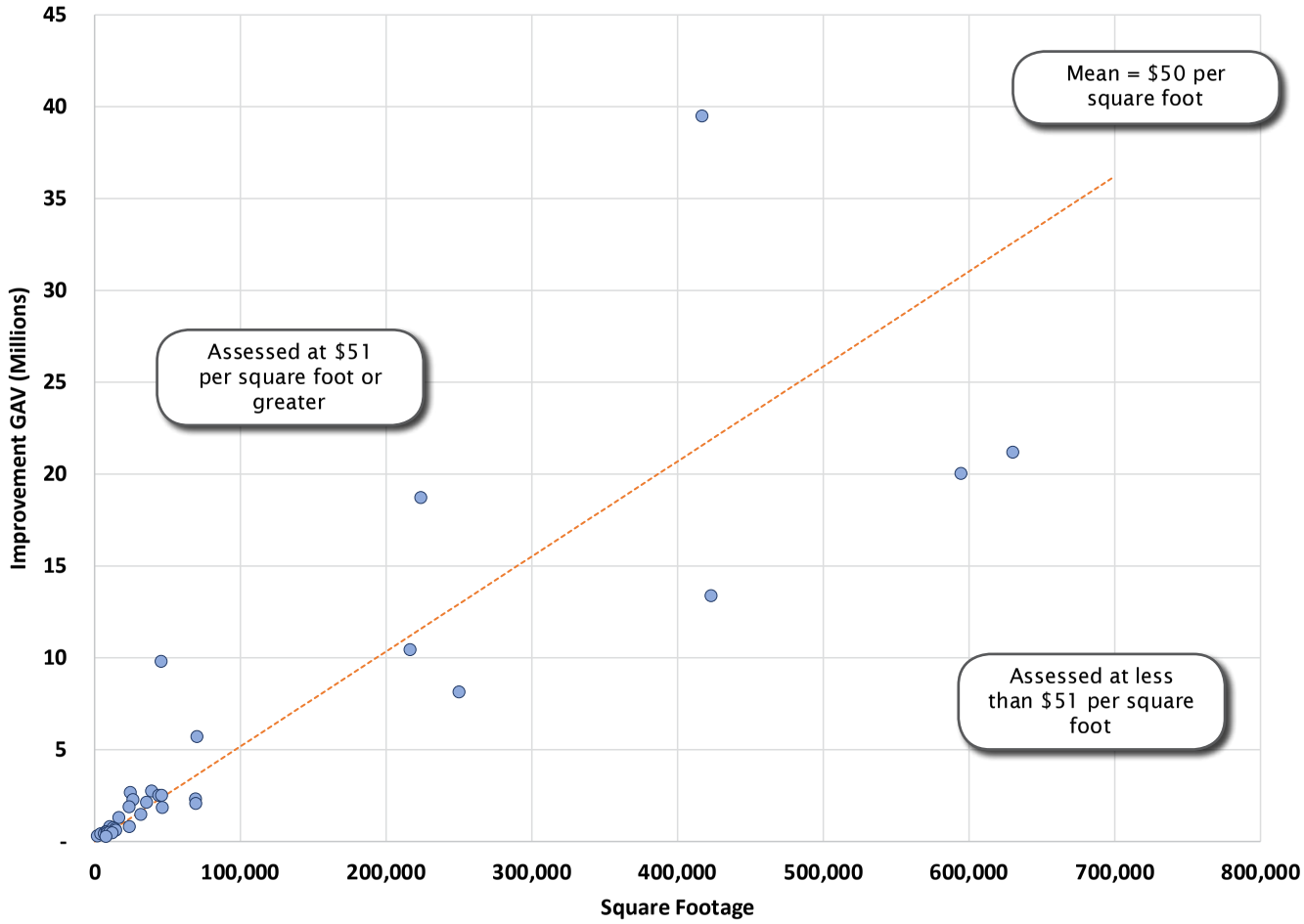
This is a capacity analysis intended to quantify potential TIF revenues if the corridor is developed as described in the Master Plan. This analysis is not a market assessment or a forecast of predicted private investment within the area.

ASSESSED VALUE COMPARISONS

Improvement Gross AV per Square foot for Comparable Properties

Hancock and Hamilton Counties (Delaware and Fall Creek Twp.); 2015 pay 2016

n = 35



Policy Analytics used information from industry databases and gathered assessment data on comparable properties within Hancock and Hamilton Counties to inform the assumptions used in this analysis.

A sample of comparable properties, including a variety of industrial and commercial uses, was compiled from a search of public records. The gross assessed value per square foot was then computed for each property within the sample.

The mean assessed value per square foot of the sample was found to be $50. Commercial facilities that incorporated more expensive materials or located in high traffic areas were generally assessed at a higher level. Larger industrial facilities and warehouses were assessed at lower levels when normalized by area.

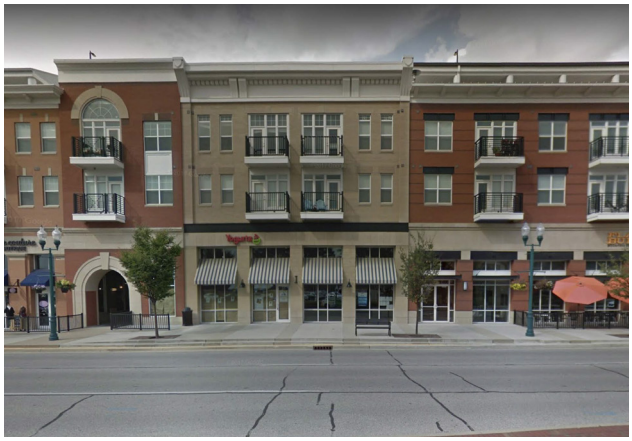
Assessed value comparisons for recent projects in the City of Fishers were used to inform the assumptions for mixed use residential development.

Examples of the differing levels of property tax assessment are shown on the following page.

COMPARABLE PROPERTY EXAMPLES

Examples of Comparable Properties
(Improvement Assessed Value per Square Foot)

Greater than $100 per sq. ft.



Between $70 and $80 per sq. ft.

Between $50 and $60 per sq. ft.

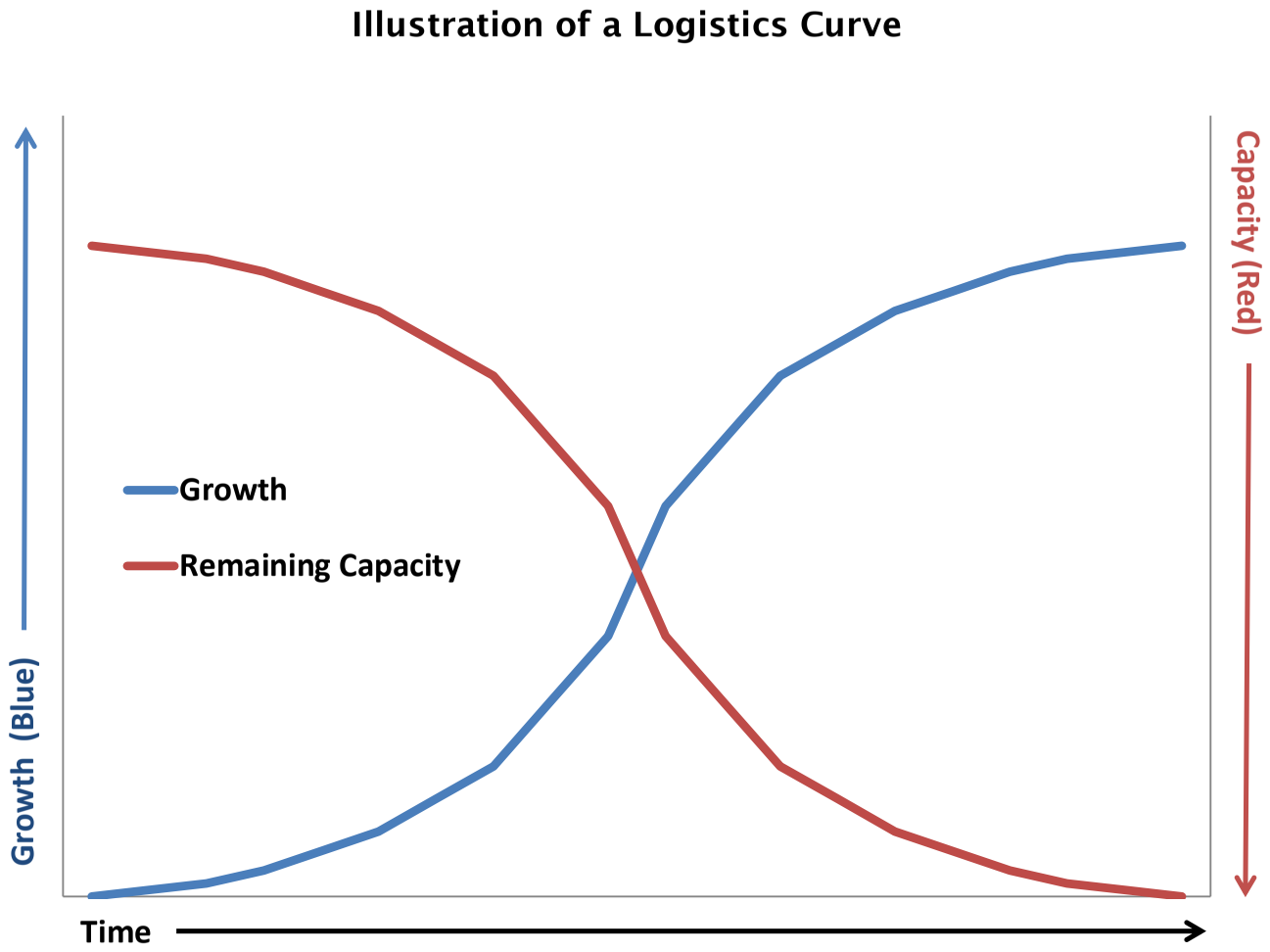
Image Source: Google

ASSESSED VALUE ASSUMPTIONS

Gross Assessed Value Assumptions for Broadway Development

		Development Details				AV per Sq Ft			Total Gross Assessed Value		
Site	Class	Site Size	Bldg Size	Stories	Building SF	Low	Mid	High	Low	Mid	High
PHASE 1											
1	Mixed Use	54,747	15,692	3.0	47,076	98	109	120	4,618,156	5,131,284	5,644,412
2	Mixed Use	77,429	43,360	3.0	130,080	98	109	120	12,760,848	14,178,720	15,596,592
3	Mixed Use	12,147	6,802	1.5	10,204	98	109	120	1,001,012	1,112,236	1,223,460
4	Mixed Use	13,359	7,538	2.0	15,077	98	109	120	1,479,054	1,643,393	1,807,732
5	Mixed Use	34,876	19,530	2.0	39,061	98	109	120	3,831,884	4,257,649	4,683,414
6	Mixed Use	11,769	6,590	3.0	19,771	98	109	120	1,939,535	2,155,039	2,370,543
7	Mixed Use	30,972	26,946	3.0	80,837	98	109	120	7,930,110	8,811,233	9,692,356
8	Mixed Use	31,136	24,909	3.0	74,726	98	109	120	7,330,621	8,145,134	8,959,647
	Total Phase I	**266,435**	**151,367**		**416,832**				**40,891,219**	**45,434,688**	**49,978,157**
PHASE 2											
1	Mixed Use	67,819	20,300	3.0	60,900	98	109	120	5,974,290	6,638,100	7,301,910
2	Mixed Use	66,534	20,300	3.0	60,900	98	109	120	5,974,290	6,638,100	7,301,910
3	Mixed Use	67,669	20,300	2.5	50,750	98	109	120	4,978,575	5,531,750	6,084,925
4	Mixed Use	68,209	18,399	2.0	36,798	98	109	120	3,609,884	4,010,982	4,412,080
5	Mixed Use	70,715	20,485	3.0	61,455	98	109	120	6,028,736	6,698,595	7,368,455
6	Mixed Use	109,898	21,032	3.0	63,096	98	109	120	6,189,718	6,877,464	7,565,210
7	Mixed Use	71,330	13,003	3.0	39,009	98	109	120	3,826,783	4,251,981	4,677,179
8	Mixed Use	69,930	13,003	2.5	32,508	98	109	120	3,189,035	3,543,372	3,897,709
9	Mixed Use	81,177	25,443	2.0	50,886	98	109	120	4,991,917	5,546,574	6,101,231
10	Mixed Use	74,925	41,827	3.0	125,481	98	109	120	12,309,686	13,677,429	15,045,172
	Total Phase II	**748,206**	**214,092**		**581,783**				**57,072,912**	**63,414,347**	**69,755,782**
PHASE 3											
1	Commercial/ Retail	33,286	4,499	2.0	8,998	133	148	163	1,197,746	1,330,829	1,463,912
2	Commercial/ Retail	385,743	77,149	2.0	154,297	44	48	53	6,712,279	7,458,087	8,203,896
3	Flex office/ Industrial	277,185	69,296	1.5	103,944	46	51	56	4,801,231	5,334,701	5,868,172
4	Commercial/ Retail	152,733	30,547	1.5	45,820	57	63	69	2,595,251	2,883,612	3,171,974
5	Flex office/ Industrial	20,128	5,032	1.5	7,548	151	168	185	1,142,714	1,269,682	1,396,650
6	Flex office/ Industrial	191,672	47,918	1.5	71,877	50	55	61	3,584,192	3,982,436	4,380,680
7	Commercial/ Retail	225,036	45,007	1.5	67,511	51	56	62	3,418,490	3,798,322	4,178,154
8	Commercial/ Retail	53,860	10,772	1.5	16,158	91	101	111	1,469,489	1,632,766	1,796,042
9	Flex office/ Industrial	417,144	104,286	1.5	156,429	43	48	53	6,793,195	7,547,994	8,302,793
10	Commercial/ Retail	308,111	47,088	2.0	94,176	47	52	57	4,430,506	4,922,785	5,415,063
11	Commercial/ Retail	580,940	81,164	2.0	162,328	43	48	53	7,017,079	7,796,755	8,576,430
12	Commercial/ Retail	406,801	81,360	1.0	81,360	48	54	59	3,944,101	4,382,334	4,820,568
13	Commercial/ Retail	2,327,291	232,729	1.0	232,729	42	46	51	9,689,008	10,765,565	11,842,121
14	Commercial/ Retail	502,716	100,543	1.0	100,543	46	52	57	4,672,153	5,191,281	5,710,409
15	Open Space	113,751	-	-	-	-	-	-	-	-	-
16	Open Space	84,032	-	-	-	-	-	-	-	-	-
	Total Phase III	**6,080,429**	**937,390**		**1,303,718**				**61,467,435**	**68,297,150**	**75,126,865**
	TOTAL - ALL PHASES	**7,095,070**	**1,302,849**		**2,302,333**	**-**	**-**	**-**	**159,431,567**	**177,146,185**	**194,860,804**

DEVELOPMENT TIMELINE ASSUMPTIONS



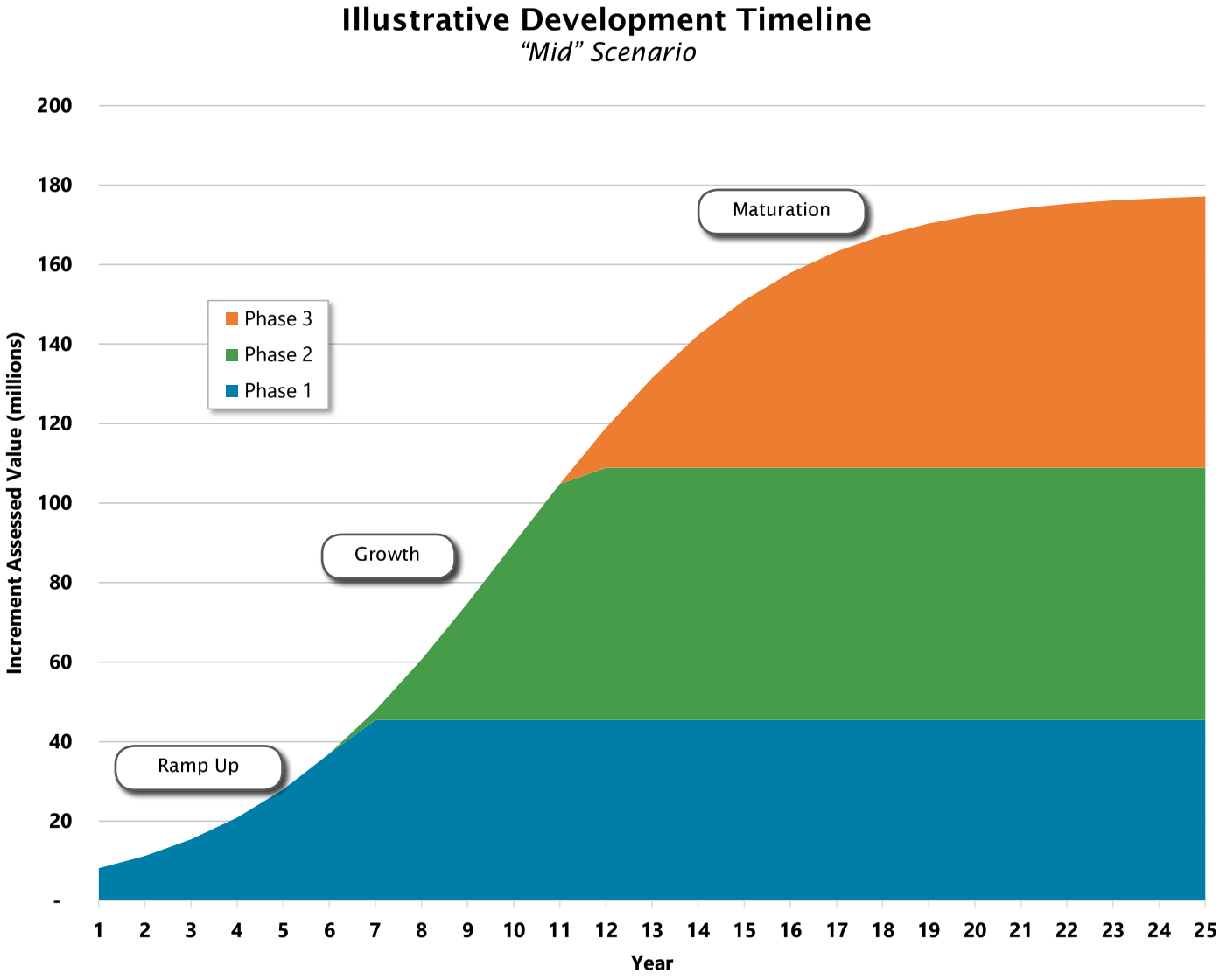
A logistics model is a mathematical function that relates the rate of growth of a specific variable to the amount of remaining capacity. It forms a distinctive "S" curve that includes an introductory period, a period of growth and a period of maturity as the amount of available capacity diminishes.

Logistics curves are used in a variety of formats, and are useful in land use planning to estimate the pace of potential development.

In this context, the rate of development growth within the TIF is shown as an inverse function of the amount of undeveloped land.

The estimated development curve begins with relatively slow growth that accelerates in years 5-15 before tapering off again.

ILLUSTRATIVE DEVELOPMENT TIMELINE



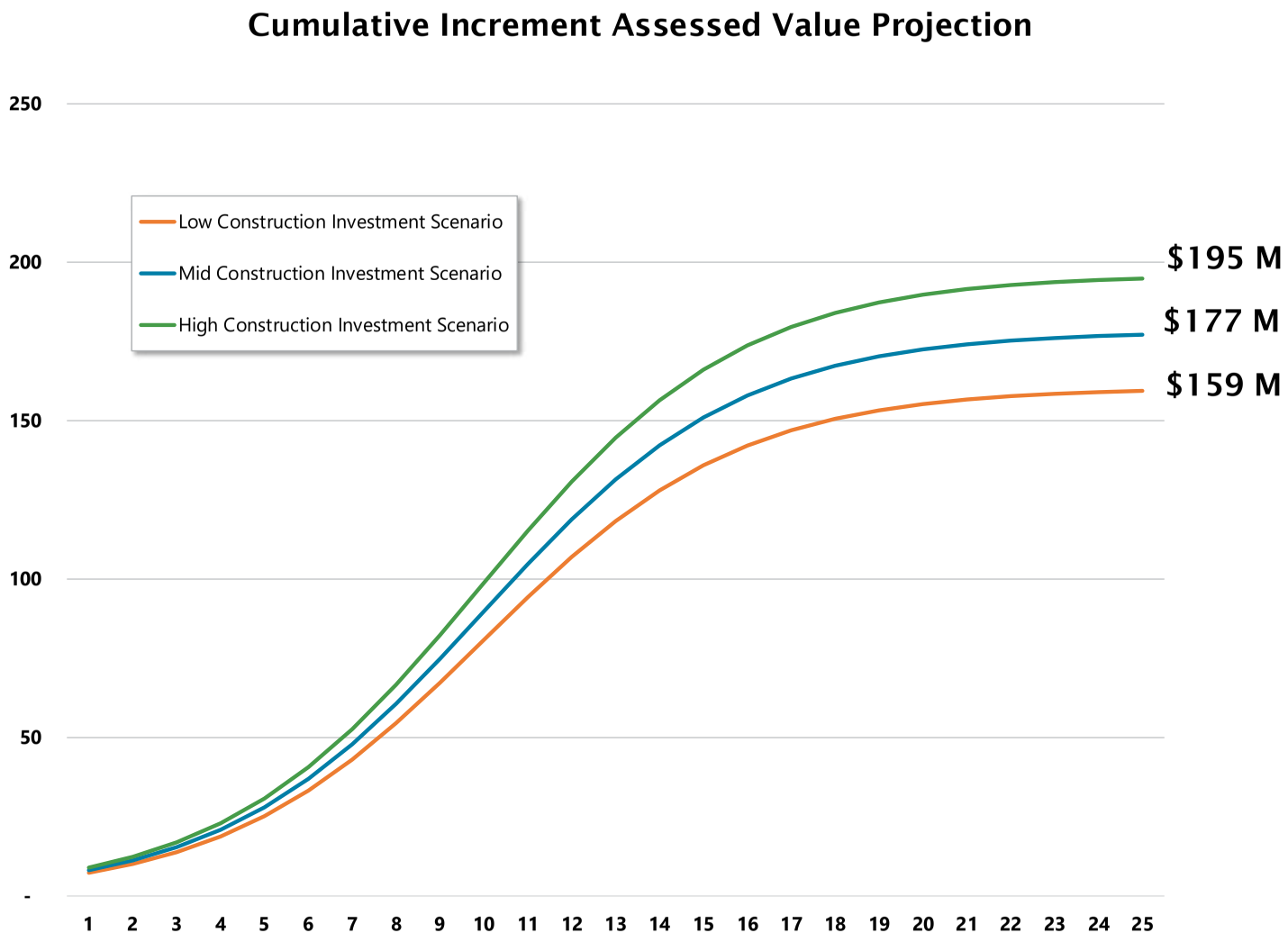
The Broadway TIF Master Plan is segmented into three phases. Applying the illustrative development timeline to the planned investments in each phase yields the investment growth pattern shown above.

Under this scenario, Phase 1 of the master plan builds out over a 6 to 7 year timeframe. Phase 2 builds out during the subsequent four years and concludes in Year 11.

The Phase 3 development begins in the growth stage of the development curve and continues through the maturity phase.

While the development timeline is "smooth" for illustrative purposes, it is likely to be "bumpy" in reality as development projects tend to be clustered together.

ASSESSED VALUE PROJECTION



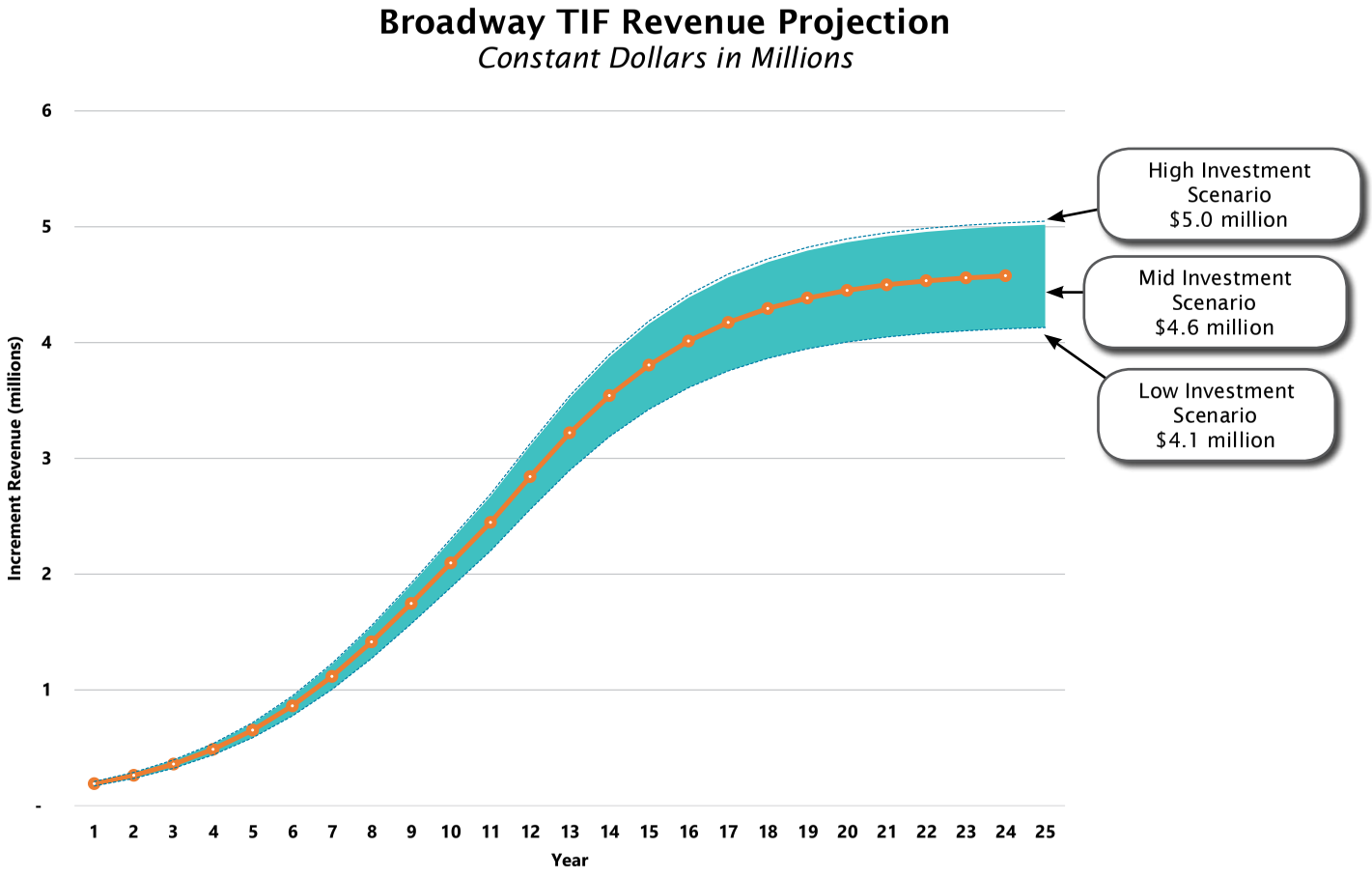
The chart above shows the total increment assessed value projection for each of the three investment scenarios over a 25 year time horizon.

Using this methodology yields, the Broadway TIF could generate potential increment revenues in the amount of $177 million in the mid-investment scenario, $195 million in the high investment scenario and $159 million in the low investment scenario.

As previously described, the illustrative development timeline assumes that investment begins at a slow pace, before accelerating in years 6 through 15 of the analysis.

The high and low development scenarios assessed values vary by 10% from the Mid investment scenario.

TIF REVENUE ESTIMATES



The estimated level of assessed value will generate a projected $4.6 million in incremental revenue in the "Mid" investment scenario by the end of the forecast period (constant dollars).

The "Low" and "High" investment scenarios generate $4.1 and $5.0 million respectively.

Timing factors are important when considering fiscal options for the TIF. By statute, Indiana TIF districts expire 25 years after the first bond payment is due and payable.

If bond financing is required at the outset of the development to fund infrastructure, then delays in the development timeline have a significant, negative impact on the overall bonding capacity of the TIF.

CUMULATIVE REVENUE PROJECTIONS

Broadway TIF: Cumulative Revenues by Phase

Constant Dollars in Millions

	Low Scenario				Mid Scenario				High Scenario			
Phase	**1-5**	**6-8**	**9-25**	**Total**	**1-5**	**6-8**	**9-25**	**Total**	**1-5**	**6-8**	**9-25**	**Total**
Phase 1	$1.8	$2.7	$16.2	$20.7	$2.0	$3.0	$18.0	$23.0	$2.1	$3.3	$19.8	$25.3
Phase 2	-	$0.4	$21.4	$21.8	-	$0.4	$23.8	$24.2	-	$0.5	$26.2	$26.7
Phase 3	-	-	$19.7	$19.7	-	-	$21.9	$21.9	-	-	$24.1	$24.1
Total	**$1.8**	**$3.1**	**$57.4**	**$62.2**	**$2.0**	**$3.4**	**$63.8**	**$69.1**	**$2.1**	**$3.7**	**$70.1**	**$76.0**

The above table shows the cumulative revenues produces in each investment scenario, and allows for a comparison of the total revenues generated under each investment scenario.

Over the 25 year forecast period, the "Low" investment scenario generates 10% less revenue than the "Mid" investment scenario, and the "High" investment scenario produces 10% more revenue.

Broadway TIF: Annual Projected Revenues

Constant Dollars in Millions

	Forecast Year					
	1	5	10	15	20	25
Low Investment Scenario						
Increment Assessed Value	7,336,140	25,188,258	80,861,391	135,902,520	155,268,616	159,431,567
Increment Revenue	171,177	587,726	1,886,766	3,423,981	4,004,964	4,129,853
Mid Investment Scenario						
Increment Assessed Value	8,151,267	27,986,954	89,845,990	151,002,800	172,520,685	177,146,185
Increment Revenue	190,196	653,029	2,096,406	3,804,424	4,449,960	4,588,725
High Investment Scenario						
Increment Assessed Value	8,966,393	30,785,649	98,830,589	166,103,079	189,772,753	194,860,804
Increment Revenue	209,216	718,332	2,306,047	4,184,866	4,894,956	5,047,598

Policy Considerations

Strategic issues that carry long term implications for TIF revenues

- **Capture of Residential Parcels** - Growth from residential parcels cannot be captured in the TIF increment, so there is no upside revenue potential to including residential areas. However, the inclusion of residential parcels can negatively affect the TIF increment if assessed values decrease.
- **TIF Sunset Dates** - TIF allocation areas expire 25 years after the first bond payment is due and payable. Areas of the TIF may need to be reestablished to maximize the potential for revenue capture.
- **"Dark" Store Assessments and Property Tax Appeals** -There is a trend to use the sales price of vacant structures when assessing occupied commercial and industrial buildings. Recent changes in state statue allow protections against property tax appeals to be written in to economic development agreements.
- **Abatements and Economic Development Incentives** -The use of property tax abatements (at least initially) may be necessary to incentivize investment. Property tax abatements will defer the capture of TIF revenue until property becomes taxable.
- **Optimal Level of TIF Capture** -Capturing the growth of commercial and industrial investment limits the "real" (non-inflationary) increase in the existing tax base. In areas affected by circuit breaker losses, this may reduce a taxing unit's ability to provide increased levels of service. A "pass-through" mechanism allows excess increment assessed value to be released to the tax base.

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