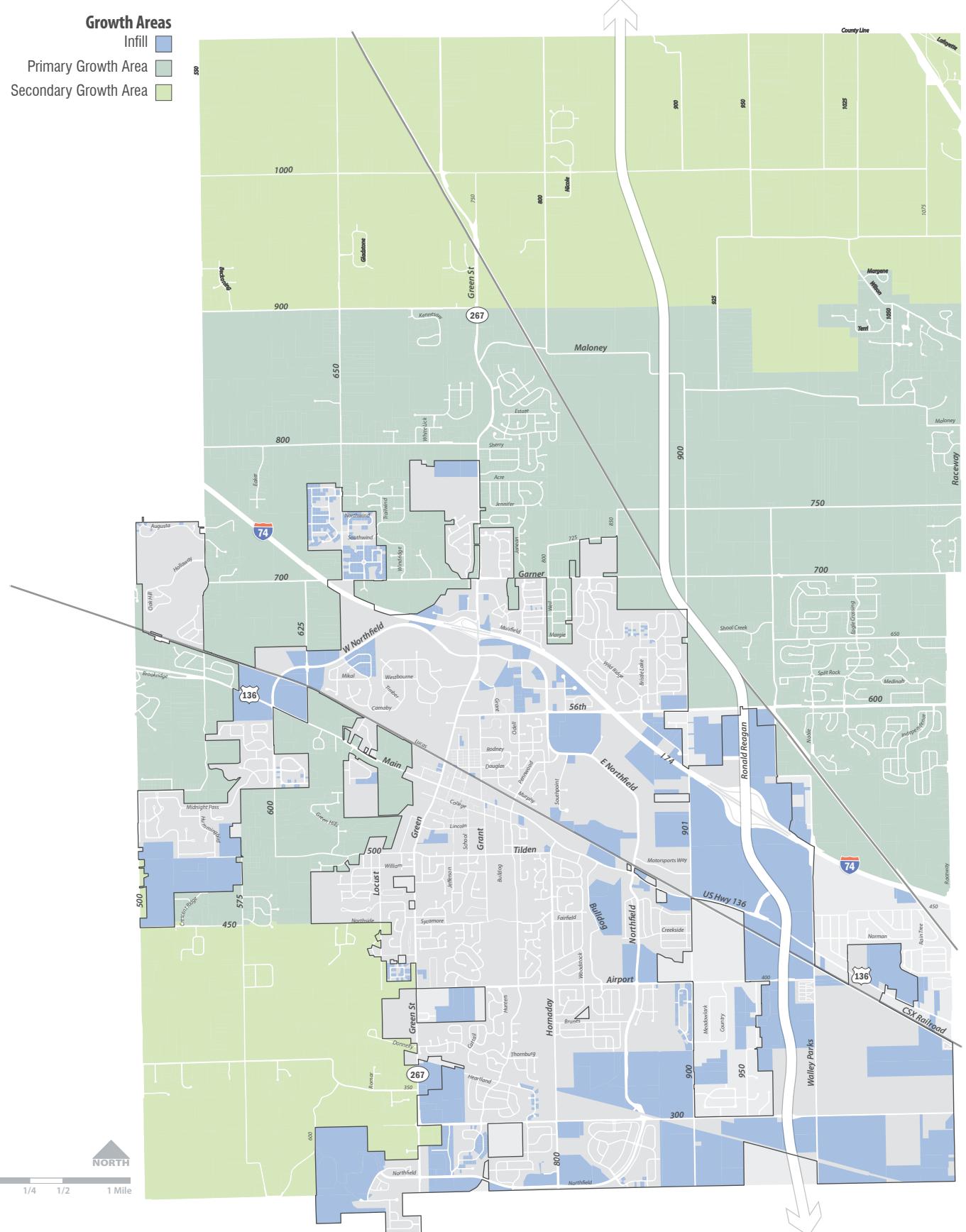


GROWTH AREAS PLAN



Matching Lot Lines

Where higher-density development is planned or permitted adjacent to larger lot subdivision, consideration should be given to requiring the lot dimensions of new residential development to match the dimensions of adjacent existing residential neighborhoods for lots sharing a rear property line. This technique will assist in transitioning density from new adjoining development that is denser and less rural in character.

Buffering & Screening

Screening and buffering are also effective methods that are sensitive to existing development. Within rural areas, expanses of open space should be used to establish a buffer and horizontal separation between existing residential neighborhoods and new residential or commercial development. Landscaping elements can also be used to screen more intense residential and commercial uses from rural residential uses.

Sensitive Natural Areas

In areas located along or near sensitive environmental features, such as the White Lick Creek corridor, the Town should promote the use of conservation design techniques, including clustering and naturalized drainage, to maintain and preserve wetlands, floodplain, large wooded areas, or other natural resources. These techniques may reduce minimum lot areas but should not reduce the gross density of a development. These techniques will allow new development to minimize the impact on quality natural areas, preserving them for public enjoyment, while maintaining the rural character of the Town's growth areas.

BOUNDARY AGREEMENTS

Boundary and annexation agreements are important for municipal planning purposes and they inform private development entities of the local controls. When not in place, developers can create "bidding" wars between communities, damaging relationships, and often resulting in lower quality development.

The Town has a formal boundary agreement with the neighboring Town of Avon to the south which establishes a boundary along the Lincoln-Washington Township line between N 500 County Road E and Raceway Road. The Town also has an agreement with the Town of Pittsboro. Each community may annex any portion of the area on their respective side of the boundary.

The areas to the north and east that lie within Brownsburg's planning jurisdiction area do not overlap with the planning jurisdiction of any other community. The Town should continue to monitor development activity in the areas within proximity of agreed boundaries and maintain dialogue with neighboring communities. Boundary agreements should be revisited and renewed prior to their potential expiration.

TRANSPORTATION PLAN

The Growth Areas Plan promotes a well-balanced transportation system that connects to existing roads which provide the key framework. The Town should improve its growth areas with a hierarchical system of arterials, collectors, and local roads that organizes the Town's transportation system. A logical and organized system of roadways ensures that traffic is balanced among multiple streets and avoids concentrating a larger percentage of area traffic on a few key roadways. The combination of several road types will encourage the separation of through-traffic from local roadways and minimize the need for large multi-lane intersections that divide neighborhoods.

Local Street Systems

Future development should also encourage neighborhood design that allows for a higher number of access points to the local roadway network. Higher street connectivity in projects, narrower street standards for local roads, and well-integrated transportation alternatives can reduce impervious paving, discourage cut-through traffic in neighborhoods, and promote cross-access and pedestrian activity between commercial developments and residential neighborhoods.

CHAPTER 9

TRANSPORTATION & MOBILITY PLAN

TRANSPORTATION & MOBILITY PLAN



The existing roadway system within the Town is well established, but strategic improvements can improve overall circulation and connectivity within Brownsburg. The Transportation and Mobility Plan focuses on the coordination and optimization of all modes of travel within the Town, including vehicular, bicycle, walking, and transit. The Transportation and Mobility Plan includes specific recommendations for motorized and non-motorized travel, circulation, and linkages between key areas of the community.

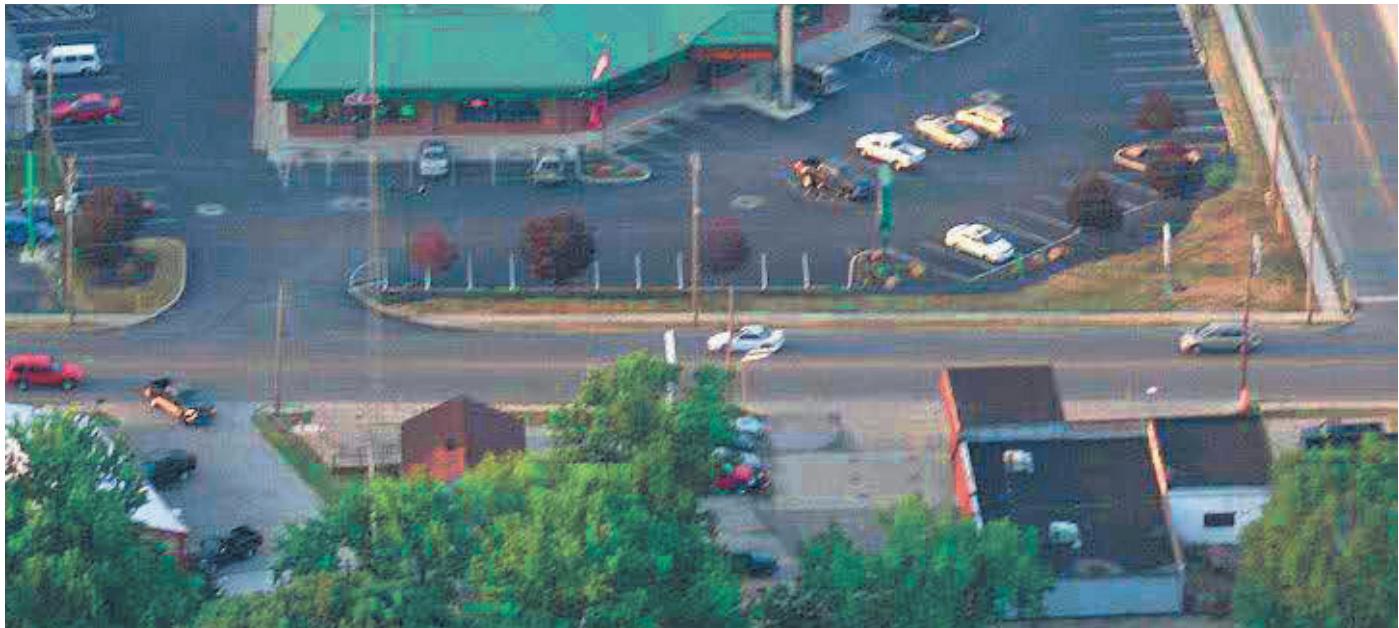
There are many opportunities to improve Brownsburg's transportation infrastructure in the coming years with careful investments in roadway, pedestrian, and bicycle facilities.

In addition to improving pedestrian and bicycle access throughout the community, traffic congestion along Brownsburg's two main thoroughfares – Green Street and Main Street (US 136) – is also a primary issue. Planned improvements including road rehabilitation projects along Green Street and to Garner Road (CR 700 N), roundabouts construction along the Airport Road and CR 300 N corridors, and the completion of the Ronald Reagan Parkway between CR 600 N and I-65 will all have positive impacts on traffic circulation throughout the community. Managing congestion will continue to be key to maintaining the quality of life for Brownsburg residents and promoting economic development within the Town.

TRANSPORTATION & MOBILITY RECOMMENDATIONS

Transportation and mobility throughout the Town of Brownsburg will be enhanced over the long term through proper planning and engineering. The following recommendations will assist the Town in managing future growth and improving the overall quality of life of the Brownsburg community.

- » Utilize federally-funded programs such as Surface Transportation Block Grant (STBG), Congestion Mitigation and Air Quality (CMAQ), Highway Safety Improvement Program (HSIP), and Transportation Alternatives (TA) to maximize future investments in roadways and pedestrian/bicycle facilities within the Town.
- » The Complete Streets Concept is part of INDOT's 2045 Long Range Transportation Plan and the Town should consider development of their own policy. The policy must be adhered to in order to qualify for STBG or TA project funding, or seek exemption. In Central Indiana, projects must include a sidewalk, or multi-use path on one side of the street, or on-street bike lanes. The policy encourages provision of transportation facilities that serve all users.



- » Plan for long-term transportation solutions including all options for improving traffic flow, such as added travel lanes, signalization, roundabouts, etc.
- » Maintaining the ADA Transition Plan will enhance walkability and bikeability throughout Brownsburg and access to facilities within the Town.
- » Develop an Access Management Plan to assist in managing expectations of the Town, developers, and general public in regard to achieving a balance between safe traffic operations on Brownsburg's roadways and adequate access of adjacent facilities. Integrate the plan and its' concepts in future Thoroughfare Plan updates.
- » Continue to require engineered Traffic Impact Studies for proposed development when traffic generation has the potential to impact capacity.

- » At a minimum, monitor existing and future traffic volumes and patterns in areas anticipating higher growth, such as the Ronald Reagan Parkway interchange, Green Street, Main Street (US 136), and West Northfield Drive. An overall traffic data collection program would enable to the Town to monitor and plan for growth throughout all portions of the community.
- » Consider the implementation of mass transit facilities in key areas throughout the Town as development and redevelopment occurs – specifically in the area of Ronald Reagan Parkway and the near the intersection of Green Street and Main Street (US 136), and the Green Street/I-74 interchange.
- » Focus on enhanced connectivity with each development or redevelopment project. Traffic congestion on the Town's roadways can be managed through strategic improvements such as the use of cross-access between businesses and the addition of north-south, grade-separated crossings, such as CR 700 North over I-74.

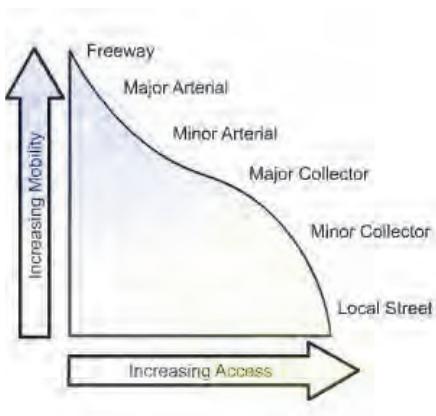
TOWN OF BROWNSBURG 2020 THOROUGHFARE PLAN

A thoroughfare plan is an important planning tool that outlines how short and long-term improvements to the transportation system will best support a community's needs in the future

The thoroughfare plan was developed with five key goals in mind for the Town:

- » **Goal 1:** Improving safety for motorized and non-motorized traffic;
- » **Goal 2:** Improving capacity and congestion on the Town's roadways;
- » **Goal 3:** Improving connectivity of the Town's street network;
- » **Goal 4:** Promote both motorized and non-motorized modes of travel; and
- » **Goal 5:** Support a strong, healthy economy.

The Town of Brownsburg completed their 2020 Thoroughfare Plan in November of 2009, however this plan is slated for update in 2019. The Comprehensive Plan, and the land use and development policies it establishes, should serve as the basis for future Thoroughfare Plan recommendations. Conversely, where more detailed transportation analysis that is undertaken as part of the Thoroughfare Plan requires updates or changes, the Comprehensive Plan should be amended to ensure agreement between the two policy documents.



FUNCTIONAL CLASSIFICATION SYSTEM

The 2020 Thoroughfare Plan classifies all of the streets within the Town of Brownsburg and its growth areas according to a hierarchical system that is based on elements such as the number of travel lanes, traffic volumes, and the level of access. The functional classifications used includes Primary Arterials, Secondary Arterials, Collectors, and Neighborhood Collectors.

The Transportation & Mobility Plan figure presented in this section includes the future roadways classifications identified in the Thoroughfare Plan as well as additional linkages identified to support future growth in the community and improve overall traffic flow. Roadway hierarchy and placement has been modified in some areas to reflect the land use and development recommendations of the Comprehensive Plan.

ACCESS & CONTROL

Access management can be defined as the planning, design, and implementation of land use and transportation strategies that maintain a safe flow of traffic while accommodating the access needs of adjacent development. The goal is to achieve a balance between access and mobility. As the Town of Brownsburg continues to grow, traffic congestion will continue to increase. This will require proper planning and access management during times of new development and redevelopment in order to effectively reduce congestion and accidents, improve travel times, and preserve roadway capacity, while supporting economic activity and growth.

INDOT GUIDE

INDOT has a guide that outlines access management benefits, design criteria, and techniques to be implemented along state routes such as Main Street (US 136) within the Town of Brownsburg. Formerly INDOT managed State Road 267 through the community, however relinquished the jurisdiction to the Town, which now maintains it as Green Street (formerly SR 267)

Main Street has a series of closely spaced drives, with many operating as full-access. In some instances, multiple drives serve individual parcels where existing traffic volumes would not require more than one access point. During times of planning for new development, redevelopment, and/or future roadway improvements, it is critical that access points along Main Street be properly evaluated with respect to access management guidelines and traffic operations. The Town should continue to work with INDOT to alleviate traffic congestion, maintain traffic flow, and reduce crash rates.



Town Access Management Guide

Brownsburg currently has a Traffic Study Process in place to evaluate existing operational problems on the Town's roadways along with the impact any new developments or redevelopments will have on existing traffic flow and capacity and continues to require Traffic Impact Studies where necessary. The Town would further benefit by having an Access Management Guide developed that would address items such as the following:

- » Purpose of the Access Management Guide
- » Benefits of Access Management
- » Basic Access Management Principles and Features
- » Intersection Spacing & Locations (Signalized and Unsignalized)
- » Driveway Spacing & Locations
- » Corner Clearance Requirements
- » Minimum Sight Distance Requirements
- » Number of Access Points
- » Cross Access & On-site Circulation
- » Turn-lane Warrants and Design

EMERGENCY RESPONSE

The Town of Brownsburg takes consistent action to improve safety for emergency response personnel and the traveling public. In 2011, the Town applied for Highway Safety Improvement Funding (HSIP) for the installation of emergency preemption equipment at traffic signals within Brownsburg, including outfitting approximately 60 police department vehicles with preemption emitters. As a result, Brownsburg was successfully awarded funding in excess of \$200,000 for design and construction of the safety improvements.

Traffic signal emergency preemption equipment minimizes delay due to conflicting traffic signal indications by yielding the right-of-way to emergency vehicles, improve emergency vehicle response times, and maximize safety for all vehicles as the emergency vehicles pass through the affected intersections. The Town has installed emergency preemption equipment at all signals within the Town limits, and preemption equipment is now required as a standard for future traffic signals in the Town.

IMPROVING INTERSECTIONS

NEW SIGNALS

Locations for new traffic signals are determined through the Town's Traffic Study Process. Traffic operational studies and signal warrant analyses are completed as necessary to identify if a signal is warranted based on the appropriate INDOT and Manual on Uniform Traffic Control (MUTCD) Standards. Potential locations for future traffic signals as previously identified by the SR 267/Lorraine Drive Traffic Operational Analysis and the West Northfield Drive Small Area Plan include the following:

- » Green Street at Stonybrook Drive
- » West Northfield Drive at Morningside Drive
- » West Northfield Drive at North CR 625 E
- » US 136 at North CR 550 East

CR 900 E

INDOT is working with the Town of Brownsburg to address safety issues and access at the intersection of US 136 and CR 900 East, where the CSX railroad passes through the intersection. The proposed design for the intersection, and any other options for realignment, and/or rerouting of traffic patterns on US 136 or CR 900 East are being evaluated through a more detailed traffic engineering analysis and discussions with INDOT. INDOT is currently considering a double roundabout solution at the rail crossing.



ROUNDABOUT FIRST

INDOT has indicated that when considering signal upgrades at intersections, that a “roundabout first” methodology will be implemented. Mainly, operations at an intersection will be evaluated to determine if a roundabout is the best long-term solution as the first option. The installation of signals and added turn or travel lanes where necessary will be the second option if roundabouts are not considered optimal based on geometric or operational conditions.

The Town of Brownsburg has successfully implemented roundabouts, like the one at Green Street and CR 300 North, and has further projects under design and in construction phases. Through the Traffic Study Process, the Town should continue to evaluate the potential for roundabouts to improve operations at intersections with existing capacity issues and in areas of new development to maintain traffic flow as volumes continue to increase. When designing a roundabout emphasis should be placed on slowing traffic and ensuring traffic safety.

LINKAGES & CONNECTIVITY

Brownsburg has a few connectivity issues, particularly in the commercial centers along US 136 and the various self-contained subdivisions within and on the outskirts of the Town. Along US 136 (and scattered throughout the Town) are a number of adjacent parking lots without available cross access. In these instances, providing a way for cars to drive between retail sites without needing to return to the main road helps to relieve traffic congestion and makes moving between businesses for shopping easy.

Additionally, suburban residential neighborhoods in Brownsburg can suffer from a lack of connectivity to the surrounding street grid, which creates unnecessary driving and eliminates alternative routes through the community should one route become blocked or congested. Disconnected grids can also serve to increase emergency response times both due to longer routes and a confusing street network.

NORTHFIELD DRIVE

Based on the Town’s Thoroughfare Plan, increased connectivity due to construction of the remaining unbuilt section of the Northfield Drive loop would enhance overall traffic flow and accessibility in Brownsburg. Although this project may exceed the timeframe of this long-range plan, the retention and preservation of this corridor for its ultimate construction should remain a priority.

RONALD REAGAN PARKWAY

Ronald Reagan Parkway is a north-south corridor that, as of December 2017, connected I-70 (just west of the Indianapolis International Airport) to I-74. The Parkway terminates north of I-74 at CR 600 North (56th Street), however when completed it will extend further north to I-65 in Boone County. Ronald Reagan Parkway now serves as a regional north-south corridor by providing connectivity between Plainfield, Avon, and Brownsburg.

Planning for additional connector roads as new development occurs around the Ronald Reagan Parkway interchange will also be important to ensure generated traffic can be accommodated in both the near future and long-term.



BUSINESS LOOP

With the opening of the Ronald Reagan Parkway interchange, the Town now has two prominent interchanges along I-74. Green Street and Main Street provide continuous roadway connections between Brownsburg's two interchanges, related regional commercial areas, and Downtown Brownsburg. This route possesses the potential to become a formal business loop within Brownsburg. Transportation improvements are needed to establish a seamless route between Brownsburg's commercial areas, helping to draw traffic from the Town's interchange areas and through the community to the benefit of local businesses, as wayfinding signage investments by the Town have made a great impact on navigation in the community. The Town should work with INDOT to identify improvements to Main Street (US 136) necessary to establish a business loop, including installation of the remaining wayfinding signs along this route.

GRADE-SEPARATED CROSSINGS

The Town is bisected by the CSX Railroad as well as I-74, constraining the local roadway network and segmenting the community. While it is necessary to limit the number of at-grade crossings for safety reasons, there may be opportunities to create additional grade separated crossings in select areas.

The Town currently has four grade-separated crossings to provide connectivity over I-74, which include the Green Street interchange, the Ronald Reagan Parkway interchange, the 56th Street (CR 600 N) crossing, and the CR 1000 E crossing. The Indianapolis MPO includes two planned crossings in the current Transportation Improvement Plan. The 2045 Long Range Transportation Plan (LRTP) recommended project list includes a new bridge crossing and road alignment project for CR 625 East over I-74. The other is a proposed bridge over I-74 connecting two segments of CR 900 E. Both projects will provide improved connectivity in the Town.

CSX Railroad

The Town of Brownsburg is divided by two segments of the CSX railroad. One segment travels in a northwesterly direction, bisecting the eastern and northern portions of the Town and its planning area. The other segment runs east-west through the core of the community, paralleling US 136 (Main Street) to the north.

North-South Connectivity

While there are numerous at-grade crossings within Brownsburg, the railroad segment that bisects the central portion of the community limits north-south connectivity.

East-West Connectivity

Given the limited population in the Town's agricultural areas, connectivity issues caused by the northwesterly segment are not as significant as in central Brownsburg. However, as development occurs, establishing east-west connections across this railroad will be an important consideration.

Additional opportunities for future connectivity are outlined in the Town's Thoroughfare Plan, however further studies may be necessary to define the optimum alignments, access points, and overall traffic impacts on the Town's existing road network.

TRANSPORTATION PLAN





EXISTING & FUTURE TRAFFIC VOLUMES

Monitoring existing and historical traffic count data can provide insight regarding areas experiencing growth in volumes and, subsequently, identify improvements necessary to accommodate such growth. Daily traffic counts were most recently taken in 2016 and 2017. Additional counts are taken as needed when traffic impact studies are completed for new developments within the Town or for isolated analyses on existing traffic operations. INDOT's traffic data collection program updates average daily traffic counts along Green Street and US 136 every 2-3 years.

Brownsburg would benefit from having a traffic data collection program in place. At a minimum, a program should be established to monitor volumes on roadways near areas of future development such as Ronald Reagan Parkway, Main Street, and West Northfield Drive. Counts obtained would begin to serve as a basis for estimating traffic growth rates and developing future projections as additional development or redevelopment occurs. This will allow the Town to identify areas of elevated traffic growth or changing traffic patterns in time to plan future roadway improvements accordingly.

PUBLIC TRANSPORTATION

Although there are not any public transportation services currently within Brownsburg, there will likely be a higher demand for such services as the Town continues to grow. Indy Connect, a central Indiana transportation initiative of which the Indianapolis MPO is a partner, has identified the intersection of US 136 and Green Street as a potential area for a regional transit hub. A circulator bus service has also been proposed for Brownsburg. Currently three modes of public transit are supported within the Central Indiana area: fixed-route bus, on-demand services, and vanpool services. Indy Connect's Central Indiana Transit Plan estimates that if transit referendums passed with 0.25% income tax being collected, the potential revenue for transit in Brown and Lincoln Townships per year could be \$3,161,535. In addition to Indy Connect long range plans, the new Ronald Reagan interchange at I-74 also presents an opportunity to incorporate public transportation services.

During times of development or redevelopment of these areas, mass transit facilities such as bus stops, bus pull-offs, parking, etc. should be considered at the planning and design stages. The Downtown Key Focus Area Plan contained within Section 13: Key Focus Area Plans features additional discussion regarding these recommendations.

The Trails and Transit Generators figure identifies various community facilities and popular destinations throughout the Town that are potential generators for transit ridership and should be taken into consideration when evaluating future transit service routes and scheduling.

BIKE & PEDESTRIAN FACILITIES

Bike and pedestrian facilities are important components of a vibrant community. Active modes of transportation such as walking and biking can help to promote healthy habits, reduce automobile congestion, and mitigate pollution levels. A healthy pedestrian environment is also an important component in place-making strategies. People attract people, and a welcoming street environment is a critical component in attracting those initial users and activating what would otherwise be a place reserved for cars and trucks.



There are a number of strategies a community can use to improve the existing bicycle and pedestrian facilities. Certainly, sidewalks are a prerequisite to any pedestrian realm, as are bike lanes, off street trails, frequent and highly visible crosswalks, and other pedestrian amenities. Section 12: Identity, and Community Character as well as the following Complete Streets section, gives more specific guidance on streetscape elements that can be integrated to create a pleasant pedestrian experience.

SIDEWALKS & ADA TRANSITION

The Town of Brownsburg adopted an ADA Transition Plan in 2013, in accordance with Section 504 of the Rehabilitation Act of 1973 and Title II of the Americans with Disabilities Act of 1990. The plan implements Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way (PROWAG) as the standard for assessment of ADA compliance and design for public streets and includes a sidewalk inventory for the Town. The ADA Transition Plan should be updated regularly to enable this resource to be applied as the Town grows, to identify and prioritize improvements necessary to enhance accessibility, and to ensure compliance with all federal regulations.

COMPLETE STREETS

Complete streets are designed to enable safe access for all users including pedestrians, bicyclists, motorists, and transit users of all ages and abilities. Complete streets are also designed and operated to allow safe movement along and across its right-of-way.

There is no one design prescription for complete streets, but common components of a complete street include: sidewalks, bike lanes (or wide paved shoulders), frequent crossing opportunities, median islands, accessible pedestrian signals, curb extensions, and more. A complete street in a rural area will look quite different from a complete street in a highly urban area, but both are designed to balance safety and convenience for everyone using the road.

Adopt Complete Streets Policy

The Town should continue to apply complete streets design to all project and consider adopting a complete streets policy as a formal recognition of Brownsburg's commitment to incorporating all transportation modes in the development of infrastructure. Regardless of a policy's form, the National Complete Streets Coalition has identified the following ten elements of a comprehensive complete streets policy.

- » States a vision for how and why the community wants complete streets.
- » States that "all users" includes all modes of travel including pedestrians, bicyclists, vehicles, public transit users of all ages and abilities.
- » Includes a statement that street connectivity aims to create a comprehensive, integrated network for all modes.
- » Is adoptable by all agencies to cover all roads in the community (i.e. Village, County, State).
- » States that the policy applies to both new and retrofit projects.\
- » Makes any exceptions clear and specific and sets an easy to follow procedure for approval of any exceptions.
- » Directs the use of the most current design criteria and guidelines while recognizing the need for flexibility.
- » States that complete streets solutions will complement the context of the community.
- » Establishes performance standards with measurable outcomes.
- » Provides specific steps for implementing the complete streets policy.

TRAILS

Trails and greenways are important components of a parks and recreation system, providing valuable connections between park sites, community assets and natural areas. Prior to completion of this Comprehensive Plan, the Town has already invested significant resources in planning for and constructing trail and greenway segments throughout the Town and its planning area. As a result, Brownsburg Parks has over 13 miles of trails in their parks system. This section of the Comprehensive Plan presents an overview of recent planning efforts and underscores the need to continue to implement previous recommendations.

ACTIVE TRANSPORTATION PLAN

In 2014, the Town adopted the Brownsburg Active Transportation Plan, which provides a bicycle and pedestrian master plan for the Town. The plan sets out goals and objectives for the construction of a complete system of facilities, including trail systems, to connect people to neighborhoods, schools, shopping centers and parks without reliance on automobiles. The goals from this planning efforts are to increase both recreational and transportation opportunities, improve connectivity between neighborhoods and destinations, provide a safer walking and biking environment, increase property values through development of active transportation amenities, and to encourage biking and walking through education and outreach. The plan envisions a hub and spoke system of trail facilities that radiate outwards from Arbuckle Acres.

Facilities included in the system include:

- » Multi-use paths,
- » Sidewalks,
- » Greenways,
- » Trails Adjacent to Rail,
- » Bike Lanes,
- » Traffic Calming with Shared Lane Markings,
- » Signed Bike Routes, and
- » Trail Heads.

GREENWAYS MASTER PLAN

In 2008, the Town completed a Greenways Master Plan which inventoried the potential trail corridors and opportunity for connections of the network throughout the community. This plan will be updated as a component of the Brownsburg Park's forthcoming Strategic Master Plan (2019-2023).

Included in the inventory were natural corridors, transportation corridors (primary and secondary), civic and cultural connections and historical areas of interest. The study outlined various challenges and unique opportunities with regards to expansion of the Towns existing trail network that have implications for land use and development recommendations contained within the Comprehensive Plan that remain highly relevant.

- » As high-volume thoroughfares within Town, such as Green Street and US 136, are improved to accommodate additional vehicular capacity, multi-use trails should be incorporated into the design.
- » The CSX railroad presents challenges as the line bisects the Town and only a limited number of crossings are permitted due to safety concerns with at-grade crossings.

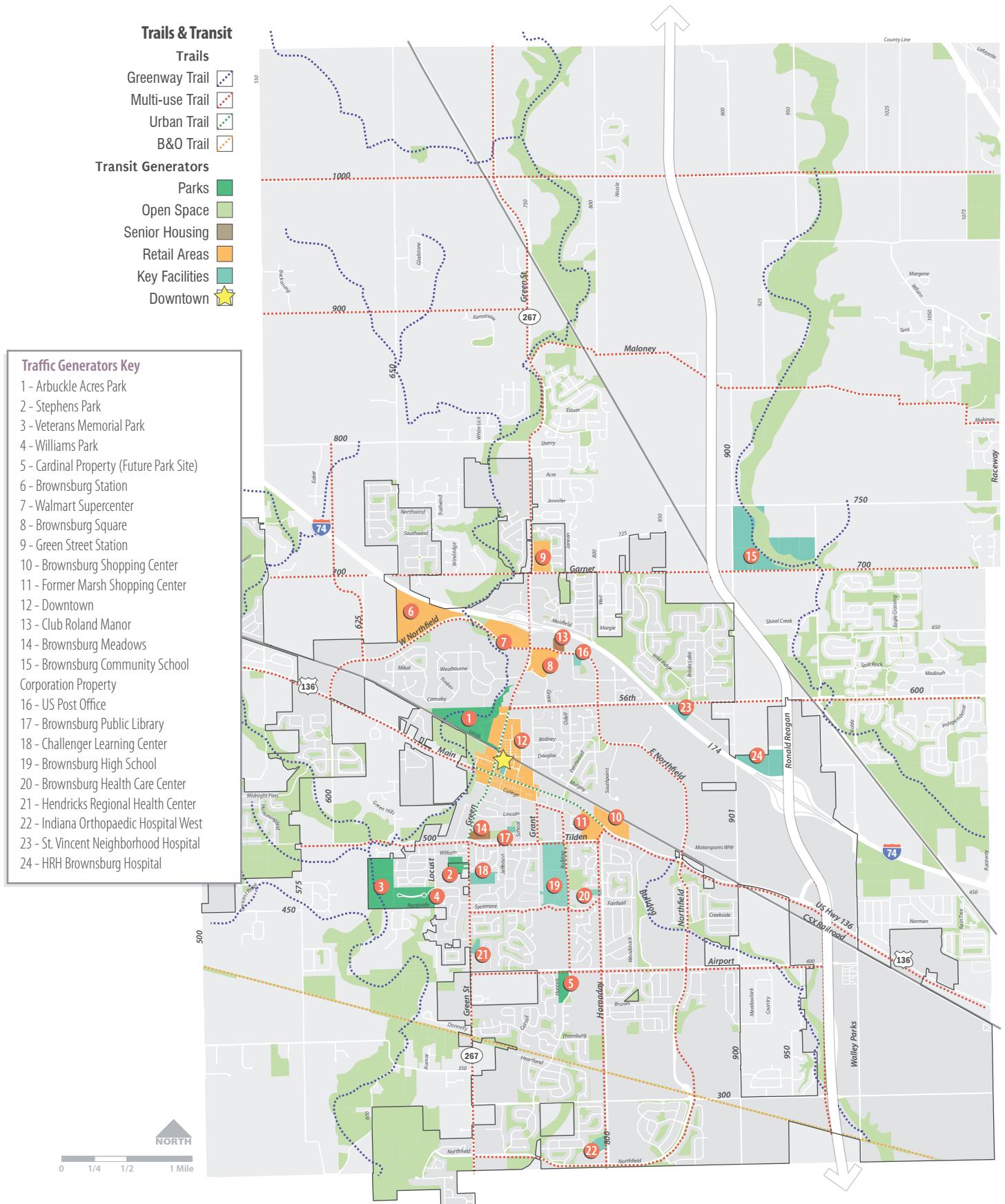
- » White Lick Creek, South Branch Creek and their respective tributaries provide natural corridors to support greenway trail development and should to be preserved.
- » An emphasis should be placed on connecting parks, schools, commercial areas, and community facilities such as the library to encourage use of the trail system.

Future planning for trails should continue to reference former studies and draw from more recent experience in the community as new developments are constructed.

TRAIL FUNDING

The Town should continue to identify funding sources to implement the recommendations of the Brownsburg Parks Strategic Master Plan (2019-2023) and the Active Transportation Plan. The Town should continue to evaluate funding sources and agencies such as state or regional agencies and potential partner organizations such as the Indiana DNR, Indianapolis MPO, Indiana Trails Fund, and Hoosier Mountain Bike Association (HMBA) Trail Fund. Federal funding sources include Transportation Alternatives (TA), through FHWA (INDOT), which fund on- and off-road pedestrian and bicycle facilities.

TRAILS & TRANSIT PLAN



OTHER JURISDICTIONAL TRANSPORTATION EFFORTS

There are a number of projects that are either currently in the process of being completed or are slated to begin over the next few years. These projects have been split up into their relevant jurisdictional entities. A brief description of these projects can be found below.

INDIANA DEPARTMENT OF TRANSPORTATION (INDOT)

INDOT administers the State Transportation Improvement Program (STIP), which includes investments in various transportation modes, such as transit, highways, and bicycle facilities, and is the means of implementing the goals and objectives identified in the Indianapolis MPO Long-Range Transportation Plan. The current Statewide Transportation Improvement Program outlines projects scheduled from year 2018 through year 2021. INDOT currently has intersection improvements planned at multiple locations in Brownsburg and will continue to monitor traffic at the intersection of N CR 900 E and US 136, due to safety concerns submitted a part of the STIP. No other projects are planned for the near term within the Town of Brownsburg.

INDOT Roadways

With important INDOT-managed thoroughfares like I-74 and US 136 running through the community, the Town should maintain active lines of communication with INDOT to ensure roadway improvements are coordinated with the growth and development of the community. Town staff and officials must make INDOT aware of the community's vision for the areas surrounding INDOT roadways and keep INDOT informed of new development that will have an impact on roadway service levels. While the Town does not desire to widen or expand roadways prematurely and contribute to sprawl, it is important that roadway capacity is expanded in a timely manner to minimize congestion as the Town's resident and day time populations increase.

INDIANAPOLIS METROPOLITAN PLANNING ORGANIZATION

The Indianapolis Metropolitan Planning Organization's (MPO) role is to assist local governments in creating a cohesive, coordinated transportation network within the regional planning area.

Short Term Improvement (2018-2021)

The following projects are identified in the 2018-2021 Indianapolis Regional Transportation Improvement Program (IRTIP), which serves as a schedule for implementing improvement projects, for the Town of Brownsburg.

- » East Northfield Drive – Realign from CR 300 N to CR 400 N (under construction);
- » North Green Street Rehabilitation from US 136 to 56th Street (under construction);
- » Hornaday Road and CR 300 N Roundabout;
- » Tilden Road and Odell Street Roundabout;

- » Airport Road and Hornaday Road Roundabout;
- » Airport Road and Green Street Roundabout;
- » East CR 700 N Road Reconstruction from Arbor Springs Drive to N CR 900 E;
- » South Green Street Reconstruction
- » 56th Street at Wild Ridge Boulevard Intersection Improvements;
- » B&O Trail Tunnel Crossing at CR 300 N;
- » Hornaday Road Trail (under construction);
- » Bicycle and Pedestrian Projects along O'Dell, Sycamore, Tilden, Jefferson Streets; and
- » Pedestrian Crosswalk Safety Around Schools.

Long Term Planning

It is important that over the long-term, the Indianapolis MPO and Brownsburg continue to work together along with other adjacent communities and agencies within the planning area to ensure future transportation projects are effectively coordinated.

Brownsburg improvements within the MPO's long term plans include:

- » A new bridge crossing and road alignment project for CR 625 East over I-74, and
- » A new bridge over I-74 connecting two segments of CR 900 E.

CHAPTER 10



COMMUNITY FACILITIES PLAN



COMMUNITY FACILITIES PLAN



The Town of Brownsburg has a number of departments, organizations, and agencies that provide community services and facilities to residents and businesses. These community facilities and services are an essential piece to the overall quality of life for Brownsburg residents and the local business climate. This section of the Comprehensive Plan highlights key community facilities in the community and provides recommendations to ensure the community is well-served and illustrates their locations in the Town. Community facilities and services include those “public” uses provided by the municipality, other governmental agencies and districts, organizations, and religious institutions. While some recommendations for new facilities and improvements are provided, much of this section reflects existing facilities.

TOWN OF BROWNSBURG FACILITIES & SERVICES

BROWNSBURG WATER DEPARTMENT

The Brownsburg Water Department repairs, maintains and builds water lines, flushes fire hydrants, maintains and operates two water plants, tests water quality, and installs water meters as some of its primary functions.

Water Treatment Plant

The Town of Brownsburg currently operates two water treatment plants to treat and disinfect drinking water prior to distribution to customers. Water Treatment Plant No. 1 was constructed in 2013 and Water Treatment Plant No. 2 was built in 1987.

Plant No. 1, located in Arbuckle Acres Park, conveys 3.2 million gallons of water per day and was built in to replace a prior plant built in 1968. Plant No. 2 conveys about 900,000 gallons per day.

Future Needs

The Town should continue to regularly monitor its water treatment capacity and reevaluate its needs as development occurs within the Town and its growth areas. Moreover, while the Town has improved capacity since the new plant was constructed, the Town should continue to maintain a positive relationship with Citizens Water in the event that local treatment capacity reemerges as an issue in Brownsburg. In particular the Town should continue to evaluate water capacity in areas north of I-74, where both water and sewer infrastructure investment has the potential to limit or free up large areas of developable land within the primary growth area.

Water Distribution

As more growth occurs in the future, the availability of a sufficient water supply source will be the most critical component of Brownsburg’s water distribution system. The Town currently purchases water from the Citizens Energy Group water utility and is dependent upon the utility to provide up to 500,000 gallons of water per day. The remaining water demand within the Town is served by eight groundwater wells and water tower storage. To ensure that local ground water supplies can be utilized to their full potential, it is vital that the Town take steps to minimize the impacts of development on the recharging of local aquifers.



Protecting Water Quality

In addition to protecting the future availability of groundwater, these efforts would also help maintain the health of streams, rivers, and wetlands which can also be threatened as groundwater sources are depleted. Given the regional nature of water resources, the Town should work with other entities, such as Hendricks County and neighboring communities, to evaluate area-wide policies to land use and development that protect groundwater resources.

Policies could address a wide range of issues including aquifer recharge area protection, zoning controls in sensitive natural areas, wellhead siting and protection, greywater reuse, and water conservation. The Town should also continue to implement its Wellhead Protection Program, approved by the Indiana Department of Environmental Management in 2002.

BROWNSBURG WASTEWATER DEPARTMENT

Wastewater Plant Expansion

The Department has indicated that the plant it operates at 225 South Mardale Drive will continue to undergo various renovations and repairs over the next 15 years. Expansion of the plant ultimately depends on the type of growth Brownsburg experiences and is guided by the Wastewater Treatment Plant Expansion Master Plan 2012 Update. As growth occurs within the Town, the department should continue to monitor the intensities and types of land uses that develop to determine what level of wastewater service is needed, updating master plans on a regular basis. Infrastructure should be sized sufficiently and at the appropriate depths to allow for continued future growth.

Sanitary Sewer Improvements

Improvements to the sanitary sewer system are guided by the Sanitary Sewer Master Plan 2012 Update, and Brownsburg's sewer system includes both combined sanitary and storm water sewers, and separate sanitary sewers. Newer suburban subdivisions are served by separate sanitary sewers which typically outlet to sanitary lift stations. There are three regional sanitary lift stations, and additional lift stations and associated piping are in various stage of design and construction, as per the recommendations of the master plan. Industrial development has a major impact when discharging waste water to sanitary sewer, and the Wastewater Department should continue to monitor potential impacts of new industrial expansion on the sewer system. Also, sewer investment to areas north of I-74 will contribute to the community's development in primary growth areas for the Town.



BROWNSBURG STREET DEPARTMENT

The Town of Brownsburg is responsible for maintaining 250 miles of streets and roads, signs, storm sewers, and rights-of-way, and oversees engineering of new roads and construction projects. All projects must comply with the Town of Brownsburg's Construction Standards Specifications and Details, revised in January 2018 and should continue to evaluate construction standards on a regular basis to ensure the use of lower-cost, well-performing construction methods that can improve the Town's built infrastructure, including roadways. In addition, the Town should establish a method for prioritizing future roadway projects to better estimate costs for budgetary purposes and maximize the benefit of tax dollars spent on roadway maintenance and other capital improvements, rating existing roadway infrastructure conditions, and ranking improvements in a capital improvements plan.

POLICE DEPARTMENT

The Brownsburg Police Department operates a police station adjacent to the Town Hall as well as a training facility at 75 Whittington Drive. While there are no new facilities planned, the department is planning the renovation of the training facility to incorporate another classroom and storage areas. It is important that long-term growth and development policies ensure quality police protection services throughout all areas of the Town and its planning area. Currently, the hiring and retention of new officers are planned and spaced out over a six-year program, and the expansion of the recruitment and hiring program over the next 10-year period is a priority outlined in departments staffing plan.

When examining potential sites for new facilities within the Town's growth areas, the police department and fire territory should consider the benefits of establishing a joint public safety facility that houses members from both departments. Assuming a mutually beneficial site could be identified and secured, a joint facility would be an efficient and cost-effective approach when compared to renovating or constructing two separate facilities. A location near Lucas Oil Raceway could provide for service in Brownsburg's existing areas and planned development and assist in supporting events at the raceway.

BROWNSBURG FIRE TERRITORY

The Brownsburg Fire Territory provides Fire, Rescue, and EMS response to residents and visitors within the Town of Brownsburg, Brown Township, and Lincoln Township. Brownsburg Fire Territory currently has three fire stations and a headquarters/training facility. The Town's land use and development recommendations should include considerations regarding public safety response and ensure proper emergency vehicle access and water supply. As the community experiences growth and redevelopment, it is also important that potential impacts on staffing and equipment needs are considered. Providing emergency service to anticipated development along the Ronald Reagan corridor and in areas near the Town's northern limits are two areas that the Town and Brownsburg Fire Territory should work together to address.

Ronald Reagan Corridor

As the Ronald Reagan corridor experiences commercial and industrial development, the Town should work with the Brownsburg Fire Territory to identify potential sites for a future station in the area of County Road 300 N and County Road 900 E. In addition to improving response times to the area surrounding the Ronald Reagan Parkway and nearby Lucas Oil Raceway, this future station would also improve service to the expanding commercial and residential development occurring along the Northfield Drive corridor.

Fire Station #132

Fire territory officials have indicated that Fire Station #132 (7455 E County Road 1000 N) is currently located 1.5 to 2 miles too far north to be effective as a first line response facility. Growth is to be encouraged in areas to the Town's current limits and development near Fire Station #132 may be limited over the mid to long term. The Town should work with the Fire Territory in identifying sites closer to County Road 700 N. In addition to improving response times to portions of Brownsburg to the north of I-74, a station located in this area could also utilize the proposed crossing over I-74 at County Road 700 E to improve response times to western Lincoln Township.

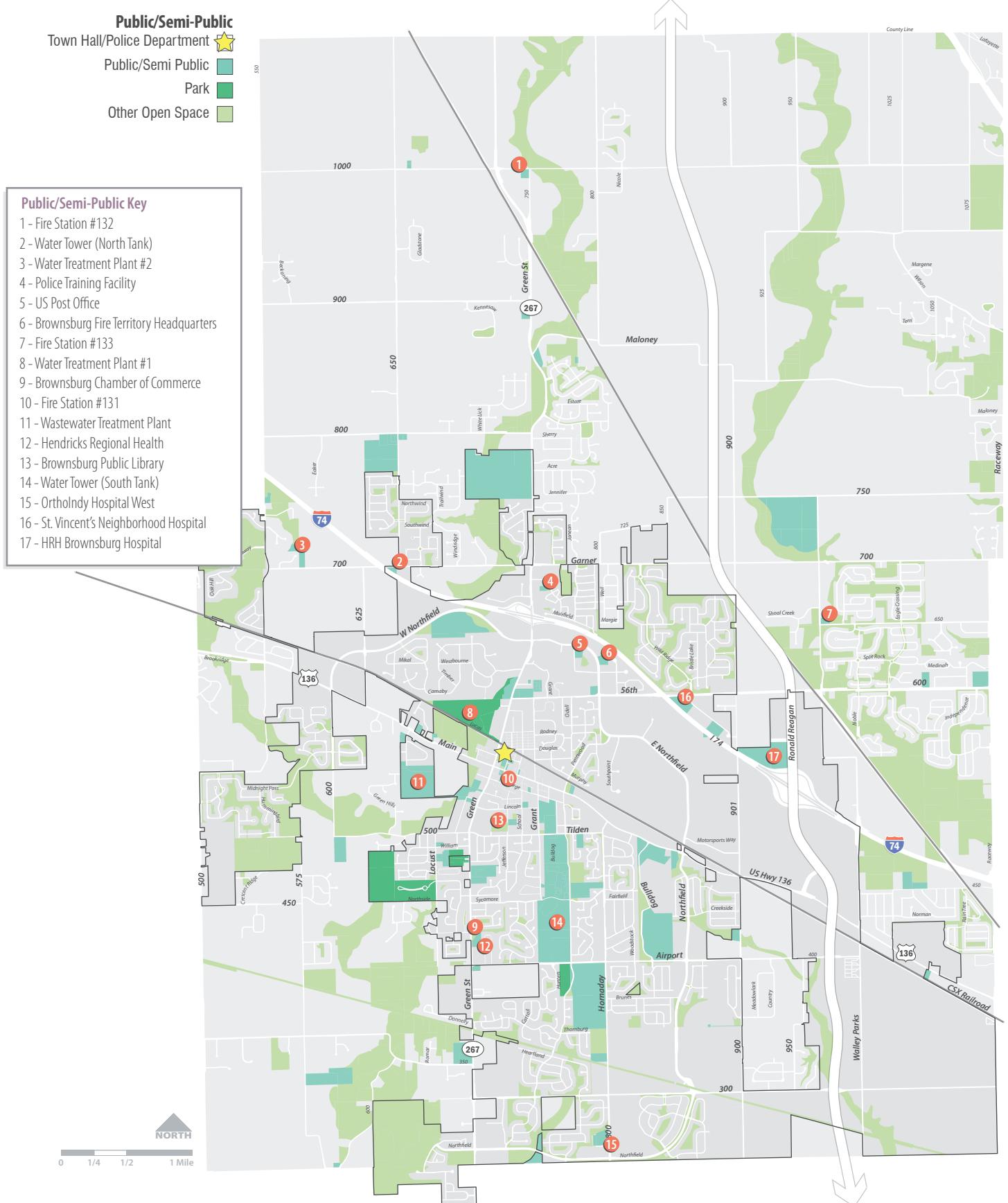
BROWNSBURG COMMUNITY SCHOOL CORPORATION

The Brownsburg Community School Corporation (BCSC) currently operates thirteen facilities within the Town and had 9,023 students in preschool through 12th grade, in the 2017-2018 school year. In general, school officials believe the locations of the schools are excellent, and with growing enrollment BCSC opened a seventh elementary in August 2018 and is undergoing significant renovations and additions at Brownsburg High School through 2020. A 2015 demographic study commissioned by BCSC indicated that build-out or maximum growth for K-12 enrollment is likely to occur before 2035, when Brownsburg could have roughly 1,000 students in each grade. Brownsburg may need to expand from 7 to 9 elementary schools and make expansions to both middle schools and Brownsburg High School in order to maintain appropriate class sizes.

As the Brownsburg community experiences growth and redevelopment, there will be additional impacts on school facilities and their staffing. The Town should continue to work with the BCSC as growth occurs to ensure that land can be acquired and properly serviced as the school district expands and determines that new school sites are necessary.



COMMUNITY FACILITIES: PUBLIC/SEMI-PUBLIC





Growth Area School Campus

The Brownsburg Community School Corporation owns property in the area to the northeast of the intersection of County Road 700 N and County Road 900 E. While plans for the site have not been formalized, it is anticipated that this area would eventually accommodate a school campus with multiple grade levels from elementary to high school.

While this site will play a key role in serving Brownsburg's population to the north of I-74, it is also located approximately one-quarter to one-half mile east of the proposed route of the Ronald Reagan Parkway corridor.

As such, commercial or industrial/employment uses may locate near the school site along the Ronald Reagan Parkway corridor, creating the potential for traffic congestion in the area. While development of this final phase of the Ronald Reagan Parkway is likely more than 10 to 15 years away from completion, it is important that the Town work with BCSC to ensure that appropriate roadway and access improvements are in place to mitigate potential transportation conflicts with future uses in the area.

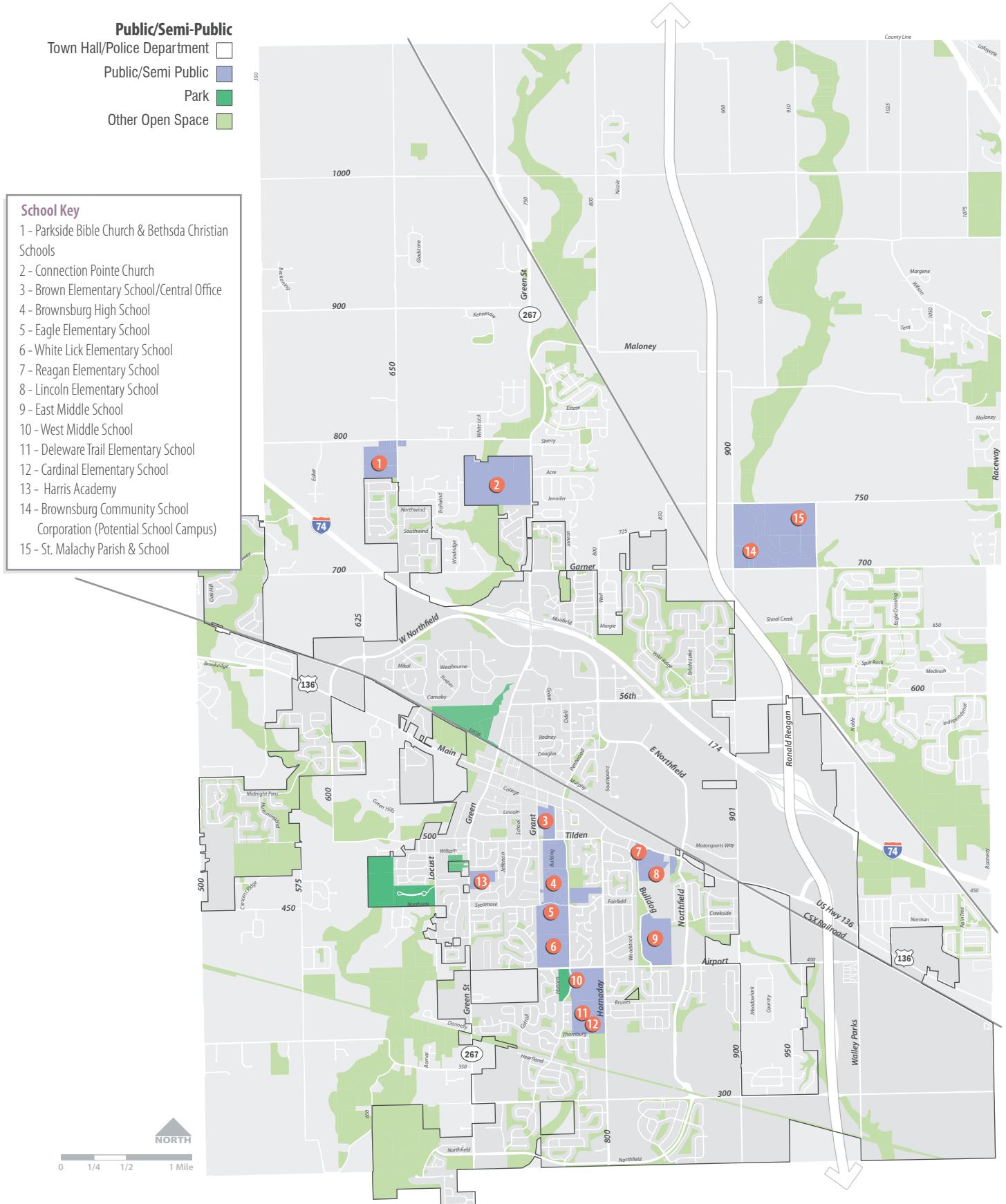
BROWNSBURG PUBLIC LIBRARY

The need for library services within Brownsburg has expanded as the community has experienced growth and redevelopment. In addition to demand on materials in circulation, the increasing popularity of Adult Education classes, English as a Second Language (ESL) classes, and computer training for senior citizens have also increased demands for meeting rooms and community rooms. The library has no current plans for expansion, but the library is to undergo a planned renovation of the current facility in 2019 to restructure its spaces and create more meeting room space.

RELIGIOUS INSTITUTIONS

There are numerous religious institutions and denominations located throughout the Town of Brownsburg. Religious institutions are a valued component of the Town's land use and development that contribute positively to the community's character. The uncoordinated development of such uses can cause issues such as problematic parking and traffic within residential neighborhoods or the use of potentially significant commercial sites by a tax-exempt entity. The Town should work with new or existing institutions to ensure that any proposals are appropriate and to minimize potentially negative impacts of their growth and expansion.

COMMUNITY FACILITIES: SCHOOLS



CHAPTER 11

PARKS, OPEN SPACE & SUSTAINABILITY PLAN

PARKS, OPEN SPACE & SUSTAINABILITY PLAN



Parks, areas of open space, and environmental features are all important components of the Town and contribute significantly to overall quality of life for Brownsburg residents. This Plan recognizes the value of these areas and seeks to protect and enhance them as vital community assets. In addition, the Plan addresses the issue of community sustainability and outlines strategic recommendations designed to ensure the long-term stability of the Town.

PARKS & RECREATION

BROWNSBURG PARKS

Brownsburg Parks is the Town department responsible for the provision of parks and recreation in the Town. Brownsburg Park's stated mission is to:

"To maximize resources in providing beautiful parks, recreation activities and quality facilities to the Brownsburg community that enhance residents' health and promote economic vitality for long-term sustainability."

Brownsburg Parks owns and maintains five park sites and facilities located in the central portion of Brownsburg. In addition to operating these facilities, Parks runs a number of community events and recreation programs in cooperation with partner organizations.

Parks and recreation are important contributors to the quality of life enjoyed by residents. This section of the Comprehensive Plan outlines various guiding principles to parks and recreation development that should serve as a general guide, however it is strongly recommended that more detailed planning efforts be conducted by Brownsburg Parks.

PARKS STRATEGIC MASTER PLAN

Brownsburg Parks is in the process of preparing a strategic master plan. The Parks, Open Space, and Sustainability Plan contained in this Comprehensive Plan should be used to assist Brownsburg Parks in its planning efforts. In turn, once new plans are adopted, the Comprehensive Plan should be kept current and amended to reflect changing strategies or future direction.

2017 Needs Assessment Survey

As part of the strategic planning process, Brownsburg Parks conducted a Needs Assessment Survey to establish priorities for improvements to parks and recreation facilities and programs in the Town. A total of 579 residents completed the survey. Some of the survey findings are summarized as follows:

» Seventy-six percent (76%) of respondents visited Arbuckle Acres Park during the year preceding the survey. Other Brownsburg parks/facilities used include: Williams Park (69%), B&O Trail (42%), and Town Hall Green (28%).

- » The parks and facilities that respondents used most during the past year were Arbuckle Acres Park, Williams Park, and the B&O Trail.
- » Thirty-seven percent (37%) of respondents indicated their household has used the Splash Pad at Williams Park during the past year.
- » Walking and biking trails, outdoor swimming pools/water parks, nature centers and trails, and indoor fitness and exercise facilities are the items for which the highest number of residents has a need.
- » The programs that were the most important to households were community special events, group fitness and wellness programs, and youth sports programs.

The survey concluded that Brownsburg Parks could focus on walking and biking trails, outdoor swimming pools/water parks, and group fitness and wellness programs to provide the greatest benefit for the largest number of residents within the Town. Also, the Town could sustain and improve performance in specified areas that were identified as "high priorities", including ranked facility and programming priorities.



PARK & RECREATION STANDARDS

For decades, the agreed upon standards for park and recreation facilities have been those established by the National Recreation and Park Association (NRPA). The NRPA recognized the importance of establishing and using park and recreation standards, particularly to provide a community with a recommended minimum number of facilities and land requirements for parks based upon population and geographic area. For simplicity and ease of use across the country, the accepted open space standard is 10-acres of parkland for every 1,000 people.

PARK LAND ACQUISITION

With approximately 152 acres of parkland and 27,000 residents as of 2018, a standards analysis would suggest the Town of Brownsburg has a parkland shortage of approximately 118 acres. Supporting this observation is the fact that, during the initial outreach process for the Comprehensive Plan, it was noted that while the recreation department performs well given its budget and the number of parks it oversees, some felt that the community is underserved by recreation, trails and open space.

Brownsburg's existing park land is concentrated in Arbuckle Acres (51.5 acres) and Williams Park (80.3 acres), Cardinal Park (15 acres), Stephens Park (3.2 acres), Arbuckle Commons (1.8 acres) and few neighborhood parks (either publicly or privately owned). It is recommended that the Town continue to promote the importance of parks and recreation, improve service in existing neighborhoods, and provide policies to ensure new growth areas are well served, which also depend on development ordinances and impact fee ordinances to ensure the adequate provision of park land and funds necessary to build and maintain parks and recreation infrastructure throughout the community.

Development Ordinances

The Town's Unified Development Ordinance contains open space requirements for Planned Developments that include single-family or multiple-family residential uses, requiring that 15% of all land being developed shall be open space, 25% of which must be for recreation purposes. As well, most forms of new subdivisions are required a minimum open space allotment to promote a positive aesthetic as well as provide recreation opportunities.

The UDO requirements are a key component to the future expansion of parks and open space in the undeveloped portions of Brownsburg and surrounding Brown and Lincoln Townships and should be periodically reviewed to ensure the retention of open space to meet the recreational needs of the community. When suitable, the Town Parks Board may consider purchasing or accepting dedication of any portion of the required areas of open space.

Impact Fee Ordinance

The Town has a Park and Recreation Impact Fee that requires a per-dwelling unit fee be paid for all residential development requiring a building permit within the Town limits. The impact fee is beneficial because future residents pay for the increased demand on parks services, and current residents do not end up bearing the burden of expansion due to population growth. It allows Brownsburg Parks to plan for and develop park sites throughout the Town and maintain the quality of the life of the Town as it grows. The Town should continue to evaluate the impact fee ordinance, update it where appropriate every 5 years as required, and extend the ordinance prior to its expiration.



UNDERSERVED NEIGHBORHOODS

In addition to facilitating park development in future neighborhoods, the Town should continue to strive to ensure that all existing residential areas have safe and convenient access to parks. The Town should identify and prioritize opportunities to purchase land in underserved areas of the community and develop small neighborhood “pocket parks” and “tot lots” in areas identified to have the greatest need for new park space. Nearby neighborhood parks should be centrally located within residential neighborhoods, ideally within a half-mile walk of all homes. If needed, larger parks should be located along arterials and collectors with pedestrian linkages.

Future Park Sites

While unique opportunities for park land acquisition will present themselves as subdivision development occurs and individual properties become available for purchase, the Parks and Open Space Plan figure identifies underserved residential areas where new park land would be desirable. The areas highlighted in blue in the figure indicate the service areas for the Town’s existing and future parks.

Future School Campus Site

The Brownsburg Community School Corporation owns property in the area to the northeast of the intersection of CR 700 N and CR 900 E, which is within the Town’s growth area. While plans for the site have not been formalized, it is anticipated that this area would eventually accommodate a school campus including outdoor recreation facilities. As residential development occurs in this area, the Town should work with the school corporation to identify opportunities for pedestrian and bicycle linkages to planned recreation facilities that could be utilized by the public. Moreover, Brownsburg Parks should take into consideration proximity to any parks and recreation amenities provided at the school site when identifying the location of future park sites.

ENHANCING EXISTING PARKS

While the creation of new parks is desired to better meet the needs of underserved areas of the community, opportunities to enhance or expand existing park properties should also be pursued.

Cardinal-Delaware Property

This property is located to the south of Cardinal & Delaware Trails Elementary Schools and was acquired through a land swap with the Brownsburg Community School Corporation for the Vic Overman Sportsfield Park in 2007. Phase I of Cardinal Park was completed in Fall 2018 with the installation of stormwater basins, a parking lot that accommodates 50 vehicles, the extension of Thornburg Parkway to Hornaday Road, and the creation of a Recreational Trails Program (RTP) trail that provides access from the B&O Trail north to Main Street. Phase II construction will begin in Spring 2019, adding a 2-acre dog park and a year-round restroom facility. Phase III is projected to begin in 2020 and will add a sensory playground and shelter/pavilion to the park.

Arbuckle Acres Park Expansion

Arbuckle Acres is a 51.5-acre park located west of Green Street at Park Road which has been the principal facility of the park system since 1958. The park has many amenities and is the location of several heavily attended community events throughout the year, serving as an important destination within downtown Brownsburg. Amenities in the park include a baseball fields, lighted basketball and tennis courts, trails, and playground area. White Lick Creek meanders through the park.

In 2018, a small portion of the park was redeveloped as part of the Arbuckle Commons development, although opportunity remains for improved access and the creation of additional recreation amenities such as a new community/recreation center. In addition to pursuing expansion opportunities to expand recreation offerings and community amenities at Arbuckle Acres, the Town should continue to strengthen pedestrian and trail connections to the park and future facilities to maximize potential spill over between the downtown and park.

Aquatic Center

In past and recent Needs Assessment Surveys conducted by the Town, the creation of a new aquatic center/outdoor swimming pool was the frequently cited as a top priority. Brownsburg Parks currently offers aquatics programs in cooperation with the Brownsburg School Corporation at the Bulldog Aquatic Center facility at Brownsburg High School. The Town should consider including the development of a public aquatic center in its future expansion plans.

Future Projects

Other future Brownsburg Park projects include the Trailhead Property and the site at 315 W. Main Street. The Trailhead Property is a 6.7 acres parcel in southeast Brownsburg intended to be developed as a trailhead for B&O Trail users, with parking, a small playground, shelter, and a restroom facility. The Town purchased the 51-acre property at 315 W Main Street from the Tague family in June 2018. Located west of the intersection of Green and Main Street, the large parcel has the potential to accommodate future park expansion needs for both active and passive recreation.

PROGRAMMING & PARTNERSHIPS

Brownsburg Parks coordinates its programming with several different municipal departments and service providers including but not limited to the Public Library, Brownsburg Fire Territory, and the Brownsburg Community School Corporation. For example, Brownsburg Parks conducts after school-programming for middle-schoolers at East Middle School, and utilizes a number of local schools for programs in before-and after-school enrichment. The Brownsburg High School Aquatics Center is also the location of the Brownsburg Parks Learn to Swim program. The Town should continue to partner with these and other agencies to provide high quality recreation programming to Brownsburg residents of all ages.

EAGLE CREEK PARK

Eagle Creek Park is a 5,200-acre park (including 1,300 acres of water) that is owned and maintained by the City of Indianapolis. While this large park is not within the Town's planning jurisdiction, it borders the eastern edge of Brown and Lincoln Townships and is a significant regional asset within close proximity to Brownsburg.

Areas adjacent to the Town of Brownsburg's planning area include:

- » Eagle Creek Golf Course, a 27-hole course that features a driving range and training facility;
- » A large natural area composed of a mix of open space (former farm land) and forested areas; and,
- » Two retreats (Eagle's Hide-A-Way and Eagle's Crest), that are used to host large groups and social events, can be accessed via Raceway Road and Fishback Road.

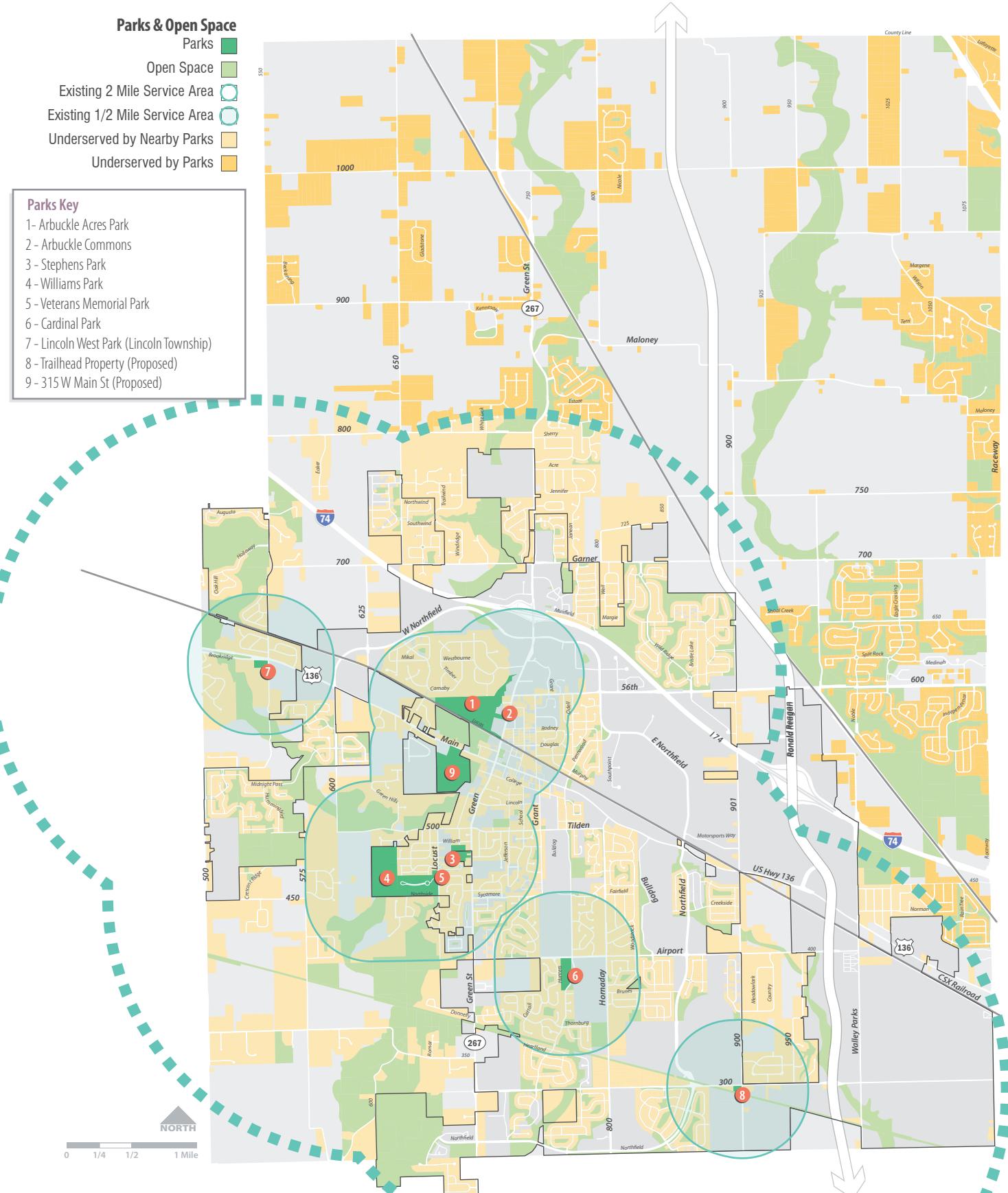
Eagle Creek Park is easily accessible via automobile, but pedestrian and bicycle linkages between Brownsburg and the park are limited. As proposed in the Town's Active Transportation Plan, trails should be established along the Maloney Road, 62nd Street (CR 700 N), CR 650 N, and 56th Street (CR 600 N) corridors.

The Town should prioritize the development of the 56th Street trail as entrances to many of the park's amenities are located along 56th Street which is a primary east-west corridor passing through some of the Town's most populated areas. A greenway trail should also be established along the South Branch of Eagle Creek, providing a scenic corridor between residential areas in the eastern portion of the Town's planning area and the southern portion of the Eagle Creek Reservoir.

PRIVATE OPEN SPACE

In addition to public parks and open space, private open space exists within the Town. Primarily, private open space is provided by private golf courses, private and public schools, homeowners associations, religious institutions, and private clubs such as the Brownsburg Conservation Club.

PARKS & OPEN SPACE PLAN



ENVIRONMENTAL FEATURES

Wooded areas, rolling terrain, and streams and creeks characterize much of the undeveloped land in the Town's unincorporated growth areas. Local waterways such as White Lick Creek, the East and West Forks of White Lick Creek, the South Branch of Eagle Creek, related floodplains and wetlands, and other environmental features provide a scenic setting in the Town's environs that could be impacted by future growth and development.

WOODED AREAS

The Town of Brownsburg has been a Tree City USA community since 2015. Tree City USA celebrates the importance the tree canopy and emphasizes care of this vital resource. Several mature wooded areas are located throughout the Town and its planning area on both developed and undeveloped land. In some instances, the wooded areas are owned by public agencies such as the Brownsburg Parks, and many wooded areas are located throughout residential neighborhoods and within rural portions of unincorporated Brown and Lincoln Townships. White Lick Creek and the School Branch of Eagle Creek form continuous wooded corridors within the central and eastern portions of the planning area.

FLOODPLAINS & WETLANDS

The White Lick Creek corridor is the predominant natural feature within Brownsburg and the planning area. There are also several other creeks, tributaries and related wetland areas, and small lakes throughout Brown and Lincoln Townships. In addition to these sensitive natural areas, the Environmental Features figure illustrates FEMA designated floodways and areas within the 100-year floodplain that are to remain free of development.

The Town should continue to preserve, protect, and improve streams, wetlands, lakes, and water bodies within the community and ensure the health of its local waterways. Future developments should protect these environmental features, and wherever feasible, these features should be included in the overall design of the project.

Where wooded areas adjacent to waterways cannot be preserved, vegetated buffers should be established to protect local waterways from unmitigated stormwater run-off and the potentially damaging pollutants and erosion associated with run-off. Trail amenities should also be established within these greenway corridors to serve as an amenity to local residents while protecting local waterways.

SUSTAINABILITY FRAMEWORK PLAN

The Sustainability Framework Plan strives to strengthen the Town as a sustainable community by emphasizing the three "pillars" of sustainability:

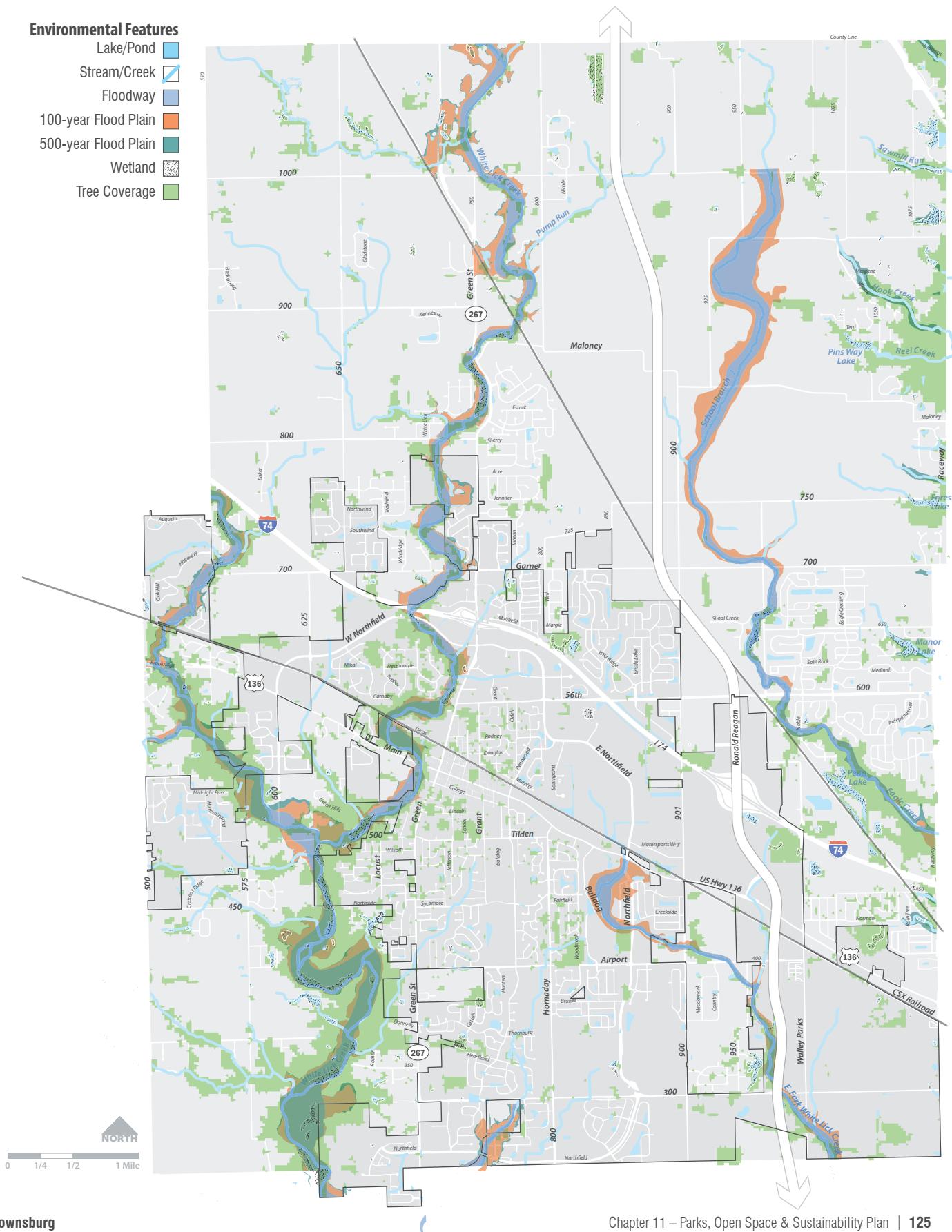
- » Environmental sustainability
- » Economic sustainability
- » Social sustainability

These pillars are not mutually exclusive, but rather mutually reinforcing. As development proposals are brought to the Town for consideration, decision-makers should identify how the proposed project is expected to affect these three pillars. The Town should work with the applicant to ensure that the project is environmentally, socially, and economically sustainable. The Sustainability Plan provides an overall approach for the Town's sustainability efforts and initiatives.

ENVIRONMENTAL FEATURES

Environmental Features

- Lake/Pond
- Stream/Creek
- Floodway
- 100-year Flood Plain
- 500-year Flood Plain
- Wetland
- Tree Coverage





ENVIRONMENTAL

Protect Environmental Features

The Town of Brownsburg and Brown and Lincoln Townships have several significant environmental features, including creek corridors, related floodplains and wetlands, small lakes, and heavily wooded areas, that add significantly to the character of the community. The Town should work to preserve these areas and to improve them through ongoing maintenance programs. Brownsburg Parks is working towards the development of a Natural Resources Management Plan that will link the Town's urban forestry management plan with the protection of the natural environment. Environmental management integrates with Parks land and conservation easement acquisitions which enable the community to balance development in sensitive areas and retain natural areas. New developments along or within natural areas should also incorporate the environmental features into their design whenever feasible. As new developments occur in the potential growth areas, future developments should be designed to incorporate existing environmental features such as wooded areas and greenways into their site design.

Water Conservation/Reuse

The Town should promote development practices or techniques that lessen the amount of water used and wastewater generated by the community. The Town can take a leadership role in this effort by working with residents, businesses, and public agencies to design and implement programs and policies that reduce initial water use and encourage water reuse.

The Town should also continue to be proactive in addressing local stormwater quality and quantity issues through targeted stormwater infrastructure improvements and the incorporation of low-impact development (LID) and green infrastructure (GI) components into Town projects, such as the construction of new Town facilities. In addition to Town-led projects, the Town should also update its development regulations and controls to encourage the use of LID practices throughout the Town and Brown and Lincoln Townships. This topic is discussed further in smart growth technologies section of this plan.

ENERGY

Support Energy Efficiency

The Town and partner agencies are in the position to lead by example, using public buildings to showcase sustainable development techniques and best practices, including energy and resource saving construction, energy efficient design, and the integration of renewable energy sources. The construction of new community facilities and the renovation and expansion of existing structures provide an opportunity to promote the use of sustainable development practices.

For example, the Town might consider pursuing Leadership in Energy and Environmental Design (LEED) certification from the U.S. Green Building Council (USGBC) for a new project.

The Town should also consider the creation of an environmental policy which deals specifically with energy-efficient building design and construction. Such a policy should outline the need to upgrade the energy efficiency of existing buildings and assure energy efficiency in new construction.



Renewable Energy

The Town should encourage residents and businesses to use renewable energy sources, such as solar, wind, and geothermal energy. To encourage alternative energy use, the Town should work with partner agencies, such as the Brownsburg Community School Corporation, to educate the public regarding the benefits of alternative energy and work with the development community to incorporate renewable energy technologies into future projects. For instance, Brownsburg Parks has replaced old light fixtures with LED luminaries in Town parks, and as part of the commitment to a reduced carbon footprint, the Natural Resources Management Plan should include energy-efficiency standards for the Town. The Town's development regulations could also be revised to accommodate renewable energy technologies and infrastructure.

The following are examples of how the Town could utilize renewable energy for municipal services and equipment.

Hybrid Vehicles

The Town could purchase hybrid and/or electric vehicles to replace the fleet vehicles of various departments. Hybrid and electric vehicles have greater fuel economy and generate fewer air polluting emissions than vehicles powered by conventional gas engines. As the Town's fleet is expanded or existing vehicles need to be replaced, the Town could initiate a pilot program to evaluate the potential cost savings hybrid or electric vehicles offer the Town.

Solar Powered Traffic Control Signs

The Town could upgrade traffic control signs throughout its jurisdiction to solar powered traffic control signs. Solar powered systems are clean, silent and more cost-effective to operate than traditional signals. Solar powered pedestrian and bike crossing signals could also be installed at previously unsignalized intersections and crossings where traditional electricity infrastructure may be absent.

Led Signalized Intersections

The Town could upgrade its traffic signals to use light emitting diode (LED) technology. LED arrays are more energy-efficient and have a longer life than traditional light bulbs. In addition to upgrading local roadways, the Town should work with INDOT to convert all signalized intersections to LED arrays along state routes. The Town should be aware that these lights require snow removal since they do not produce as much heat as traditional bulbs.

Support Public Transportation

The Town of Brownsburg should continue to work with Indianapolis MPO and INDOT to encourage the development of public transit services within the community. Although there are not any public transportation services currently within Brownsburg, the community has expressed an interest in creating transit service in the area, and there will likely be a higher demand for such services as the Town continues to grow. The Indianapolis MPO has identified the intersection of Main Street (US 136) and Green Street in Downtown Brownsburg as a potential area for a regional transit hub.

Additionally, the area surrounding the Ronald Reagan Parkway interchange at I-74 represents an opportunity to incorporate public transportation infrastructure within an area of emerging regional importance. As the downtown, Ronald Reagan Parkway area and other significant districts are developed or redeveloped, mass transit infrastructure, technologies, and facilities, such as bus stops, bus pull-offs, transit signal priority, ridesharing stops, and commuter parking should be considered at the design stage. Future development near transit infrastructure should apply transit-oriented planning principles.

MONITOR & UPDATE DEVELOPMENT PRACTICES

Update Ordinances & Development Controls

Town ordinances and development controls, such as the Unified Development Ordinance, are important tools to promote sustainable development practices in the community. As the Town continues to update codes, ordinances, and other development controls, it should strive to ensure that “green building” and sustainable site design techniques are supported. The Town should continuously monitor its ordinances and development controls to ensure they include and support the most up-to-date development techniques and construction methods. For instance, the Town’s adoption of the Unified Development Ordinance prevents barriers to development, such as:

- » Requiring large lot sizes and setbacks that prevent a compact development pattern.
- » Requiring parking space minimums that exacerbate the footprint of commercial development.
- » Excluding innovative-site stormwater management features, such as raingardens or bioswales (a vegetated, shallow stormwater channel), from a list of acceptable stormwater improvements.
- » Excluding a vertical mix of uses (i.e. a mixed use building) within a defined list of permitted uses.

Use Best Management Practices & Low Impact Development

As development occurs, the Town should encourage developers to use Best Management Practices (BMPs) to preserve the watershed area and reduce runoff and soil erosion. BMPs aim to address two key challenges the Town is facing: 1) erosion and capacity issues related to increasing volumes of stormwater runoff, and 2) water quality issues related to pollutants contained in stormwater runoff. BMPs are a combination of conservation measures and management practices designed to minimize negative impacts on surface and groundwater flow and serve to minimize adverse impacts on neighboring land or water systems. The Town should also “lead by example” and utilize these strategies when renovating, adding to, or constructing new municipal facilities.

In encouraging the use BMPs, the Town should consider a low impact development (LID) approach to stormwater management. Simply put, the goal of LID is to make a developed site (complete with buildings, sidewalks, parking lots, and driveways) function like the natural environment by using low-cost, simple techniques to contain and use stormwater close to where it falls and allow the ground to absorb water and filter pollution as it would before development occurred.

Rather than disposing of stormwater by funneling it off site, LID advances the principle that stormwater is a natural resource that should be used to recharge natural systems at the site level. Allowing the natural processes of infiltration, filtering, storage and evaporation to occur on-site can reduce or eliminate the need for stormwater detention areas and drainage piping while improving overall water quality.

Examples of LID include the use of:

- » Pervious pavers and rain gardens that allow rainwater to infiltrate the ground surface;
- » Native plantings and vegetated buffers that minimize runoff and prevent erosion along waterways; and,
- » Bioswales that convey water to a naturalized channel where it can be partially treated and allowed to infiltrate the ground surface.

Collectively, BMPs and LID policies can help address stormwater management and quality to minimize stress on municipal infrastructure (e.g. treatment facilities or regionalized detention), mitigate damage related to erosion, flooding and water pollution, and maintain healthy natural groundwater resources.

ENCOURAGE LEADERSHIP IN ENERGY & ENVIRONMENTAL DESIGN (LEED)

In addition to encouraging developers to pursue LEED accreditation for their projects at the site level, the Town can also have influence on the overall design and construction of larger districts and neighborhoods. LEED for Neighborhood Development (LEED-ND) is a USGBC system that integrates principles from traditional planning practices, new urbanism, smart growth, conservation design, green building technology, and other LEED rating systems into the first national standard for neighborhood design.

The following credit categories are included in the LEED-ND rating system:

- » Smart Location and Linkage encourages communities to consider location, transportation alternatives, and preservation of sensitive lands while also discouraging sprawl.
- » Neighborhood Pattern and Design emphasizes vibrant, equitable communities that are healthy, walkable, and mixed-use.
- » Green Infrastructure and Buildings promotes the design and construction of buildings and infrastructure that reduce energy and water use, while promoting more sustainable use of materials, reuse of existing and historic structures, and other sustainable best practices.
- » Innovation and Design Process recognizes exemplary and innovative performance reaching beyond the existing credits in the rating system, as well as the value of including an accredited professional on the design team.
- » Regional Priority Credit encourages projects to focus on earning credits of significance to the project's local environment.

(Source: U.S. Green Building Council)

Support Recycling

The Town should work to increase recycling opportunities for residents and businesses to lessen the amount of recyclable materials that go to landfills. The Town of Brownsburg hosts two One Stop Drop Offs, free recycling events, a year that are open to residents and businesses, providing residents and businesses with an opportunity to drop off appliances, electronics, and other hard to recycle items at the town's fleet maintenance facility. Curbside recycling is provided throughout the Town via private contractors. The Town should continue to explore opportunities to partner with recycling service providers to expand recycling participation throughout the community. The Town should also work with the school system to ensure that the benefits of recycling are taught to students.

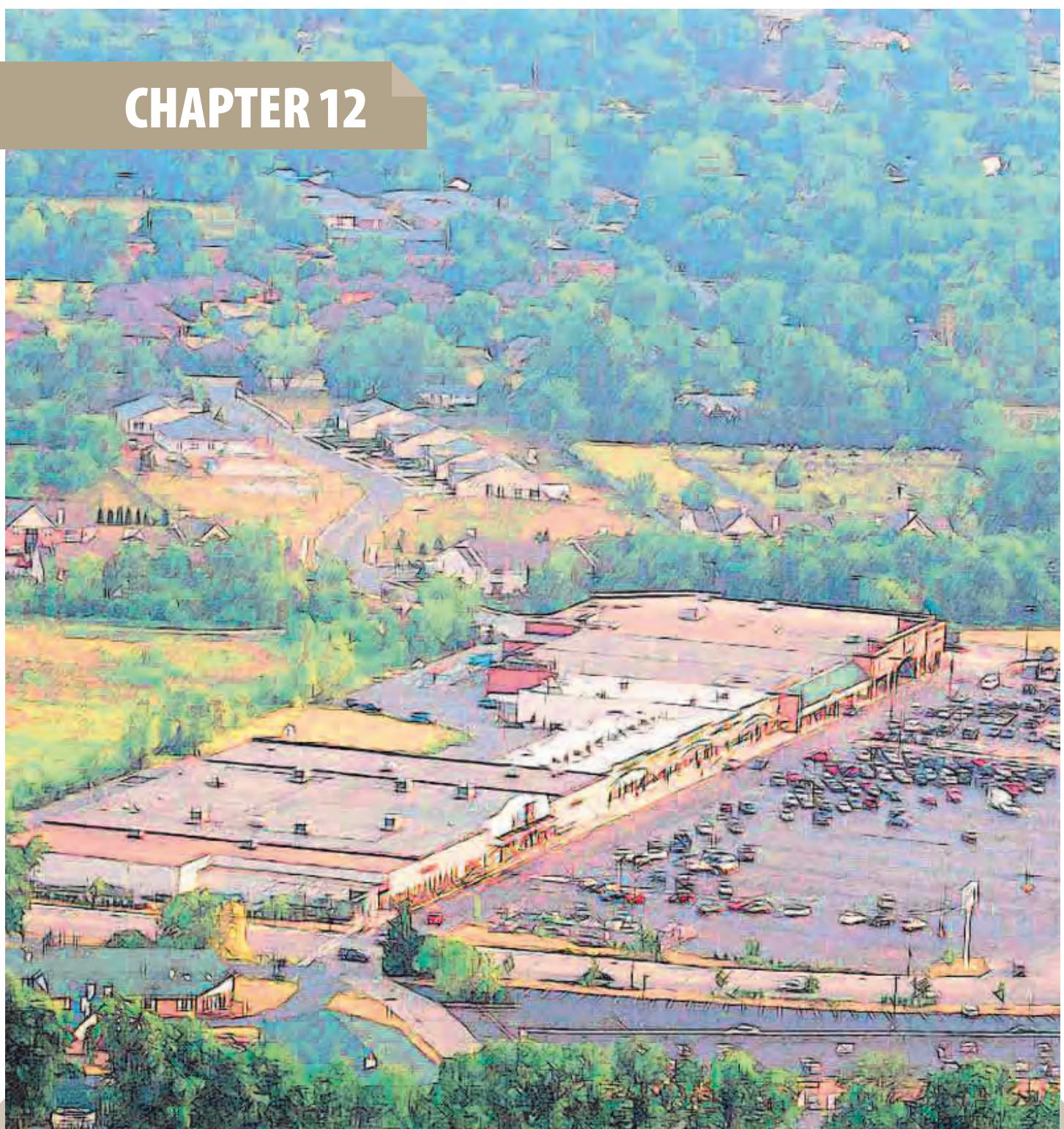


The Town should promote the economic benefits of recycling to the business community who can reduce their overall use of materials while increasing their reliance on recycled materials. Commercial, office, and industrial buildings could also be encouraged to provide an easily accessible area that serves the entire building and is dedicated to the collection and storage of non-hazardous materials for recycling.

Educate

The Town should take a leadership role in coordinating educational opportunities for the public, as well as elected and appointed officials about the importance of sustainability. In addition to working with partner organizations, such as the Brownsburg Community School Corporation, the Town has numerous tools at its disposal with which to educate the community. For example, the Town's website could be used to highlight sustainable practices (e.g. how to build a rain garden) and community-led efforts to improve the environment. The Town could also host educational sessions such as training seminars or workshops and provide educational materials. Keeping the public and officials current on the latest techniques used to create sustainability communities will assist the Town in future decision making.

CHAPTER 12



IMAGE, IDENTITY & COMMUNITY CHARACTER PLAN

IMAGE, IDENTITY & COMMUNITY CHARACTER PLAN



The Image, Identity, and Community Character Plan recognizes that the identity, appearance, and character of the Town of Brownsburg has far-reaching implications for the way in which the community is perceived by potential residents, businesses, patrons, and developers. Brownsburg can, through the implementation of a comprehensive Image, Identity, and Community Character Plan, create a unique brand for the Town which will help it attract new investment, tourism, employers, and residents.

While elements such as a logo and a town slogan can be important components of the Town's identity, physical elements such as streetscaping, pedestrian amenities, and overall appearance and attractiveness can speak louder than a symbolic brand or logo. This section serves as a foundation for the continued development of Brownsburg's unique identity through physical improvements as well as conventional branding efforts. This section provides steps that can be taken to craft an image for Brownsburg that sets it apart in the region and lays a foundation for healthy growth and a high quality of life for residents.

COMMUNITY CHARACTER & IMAGE

Brownsburg ranked among Money Magazine's 100 Best Places to Live twice in the past 10 years. Despite its positive attributes, including quality housing and neighborhoods, desirable schools, and proximity to Indianapolis, some feel that there is a lack of community identity and that, in general, there is no unifying community image or consensus for "who Brownsburg is." Others feel that Brownsburg is losing a small-town feel that it once had. This section of the Plan aims to assist the Town in fostering that unique sense of character and identity and to better define what makes Brownsburg, "Brownsburg".

The Image, Identity and Community Character Plan is organized under the following categories: (1) streetscaping, (2) establishing an image and identity, (3) gateways and wayfinding, and (4) image and appearance.

STREETSCAPING

An attractive streetscape can have a tremendous impact on the overall character, image, and identity of a community, and how the Town is viewed by visitors. The Town of Brownsburg should develop and implement a detailed streetscape plan that delineates such elements as street and sidewalk dimensions, uniformly-designed and adequately deployed street furniture, trash receptacles, lamp posts, railings, and street trees in sufficient bulk and quantity to provide shade on hot summer days.

The type and intensity of streetscape improvements will vary considerably from one portion of the community to the next, with the most frequented areas, such as the downtown, receiving the most streetscape attention. Greenfield development sites, such as the area surrounding the I-74 interchange at Ronald Reagan or portions of the Northfield Drive corridor, represent unique opportunities to integrate streetscaping elements into initial construction and establish a cohesive design that is not possible in previously developed areas where piecemeal streetscape implementation is required.



Downtown Streetscape

In addition to the community's appearance, some feel that Brownsburg lacks a defining character or identifiable community focal point. The Downtown Subarea Plan, which is included in Section 13: Key Focus Area Plans, can help address this concern. As the historic core of Brownsburg, it is important that the downtown serve as unique community focal point and district with an identifiable character that can help shape positive perceptions of the Town as a whole.

The Downtown streetscape should be focused on a pedestrian scale, while also creating an attractive atmosphere for passing automobiles. Streetscape elements such as benches, bicycle racks, trash receptacles, planters, wayfinding, and more should be placed and well-maintained throughout the downtown to serve as amenities to pedestrians visiting the district. These elements should also be designed to complement one another and create a consistent aesthetic within the downtown.



Sense of Enclosure

Downtown Brownsburg has a small section of zero-lot-line, mixed use buildings that form a streetwall along the northeast corner of the intersection of Main and Green Streets. When buildings form a streetwall along both sides of a street, a sense of enclosure is created that makes a downtown area more inviting to pedestrians and yields a more friendly and intimate downtown experience. In portions of Downtown Brownsburg, however, a streetwall only exists along one side of the street and a new building on the opposite side of the street does not mirror a similar street wall.

While redevelopment of some areas of the downtown is desirable and could occur over the long term, in the interim, streetscaping elements including street trees could be used to "fill in" the other sides of the Main and Green Street corridors. Trees can be planted in a manner that mimics a street wall and provides a sense of enclosure otherwise absent in the downtown.

Pedestrian Traffic

Sidewalks within a downtown should foster a sense of safety and protection from passing traffic and allow visitors to walk comfortably side-by-side. Streetscaping elements such as planters can be used to buffer pedestrians from adjacent travel lanes but should not obstruct pedestrian flow. While not always possible, lane narrowing and sidewalk widening in a downtown area can slow traffic, increase safety, and encourage people to walk.

On-street parking offers a substantial buffer to traffic, in addition to the functional benefits it provides to downtown patrons and business owners. Where possible, on-street parking should be preserved. Continued maintenance of crosswalks, including the re-striping of worn down or erased markers, can yield significant returns for pedestrian safety.

These simple enhancements serve as a reminder to automobiles that pedestrians are present and/or might be attempting to cross. In addition to enhancing pedestrian safety, crosswalk treatments such as lighted bollards or paving materials that contrast with the roadway, can also provide a visual element that adds to the character of the downtown as a unique district.



Street Lighting

Pedestrian scaled lighting should be installed to illuminate downtown sidewalks and public areas. Lampposts can serve a dual function of lighting both the roadway as well as pedestrian ways, but pedestrian lamps should be located at 10 to 12 feet in height. Streetlights should also be attractive in style and design to serve both a functional and aesthetic purpose. Ornamental, pedestrian scaled lighting complements streetscapes, and combination light standards (pedestrian and vehicular) may be the solution to best address street lighting along the Town's key commercial corridors. Banners that announce events or the change or seasons can be incorporated into lampposts. Street light canopies, or strings of lights across streets, are a decorative and impactful way to create a sense of enclosure on a busy street at night.

Ronald Reagan Parkway Interchange Area Streetscape

The area surrounding the Ronald Reagan Parkway represents an opportunity to implement a comprehensive streetscape treatment that welcomes visitors and residents as they enter the community. To the extent possible, major commercial developments should incorporate on-site streetscape elements that complement the overall character of the community. Commercial development sites should also create a welcoming pedestrian environment. As development within this area may include housing and a residential population, it is especially important that streets be designed to accommodate automobile, bicycle, and pedestrian traffic.

As a predominantly commercial area with a regional focus, the Ronald Reagan Parkway area may not require the same level of streetscape intensity as the other areas such as the downtown. For example, benches or trash receptacles might be less frequently spaced and pedestrian wayfinding may not be necessary due to commercial signage associated with development. However, the pedestrian environment should be well-designed, comfortable, and safe, with adequate lighting, shade trees, pavement treatments, crosswalks, plazas, and other pedestrian-scaled elements.

Corridor Streetscape

It is important that key corridors leading into and through the Town be improved with streetscaping to better reflect the desired image and character of the Town. For many traveling through the community, these corridors may be a person's only impression of the Town. Enhancements should include "complete streets" elements, such as sidewalks or multi-use trails, transit facilities, vehicular and pedestrian scaled lighting, street trees, wayfinding signage, landscaped medians, and attractive and welcoming building façade, wherever feasible.

Although streetscapes along major corridors require a scale that is different from areas in pedestrian areas such as downtown, similar designs and themed components should be utilized wherever possible. This consistency in design is important and will help achieve a more unified character and identity across all areas of the Town. Working cooperatively with INDOT is essential when considering streetscaping enhancements along INDOT roadways.