

Corridors serve multiple functions, sometimes within a single location or pathway. All corridors have the basic purpose of connection across the community.

Normal corridors create networks by which people access employment and commercial centers, entertainment and recreational opportunities, and vital services, and by which we protect and enjoy the natural environment within the urban area. They are categorized within three types:

- **Transportation Corridors** are the streets, roads, railroads, and pedestrian and bicycle facilities that physically connect our centers and neighborhoods.
- **Cultural Corridors** are historically and culturally significant pathways, embodied in Normal primarily by Route 66 and the Constitution Trail.
- **Natural Corridors** are the streams, riparian buffers, detention basins, and other natural or quasi-natural areas that serve as wildlife habitats and pathways.

Each corridor is assigned to only one category for simplicity. For example, Constitution Trail is classified as a cultural corridor while it could fit under transportation corridor or natural corridor (as a significant greenway). This section analyzes each of these three sets of corridors as they exist today and provides a common set of recommendations.

### **Transportation Corridors**

Transportation corridors today are overly focused on facilitating the efficient movement of cars, with not enough provision for other modes of transportation. This can be seen in:

- **Urban Sprawl:** Many of our neighborhoods located on the fringes of the community and our Centers designed with too much parking and poor internal circulation, making walking, biking, or transit difficult for most people.
- Street designs and patterns: are biased toward wide roads with several traffic lanes and few opportunities to cross safely. Newer parts of town tend to lack an interconnected street grid that would allow efficient multimodal transportation.



Transportation Corridors



**Cultural Corridors** 

F3.4



**Natural Corridors** 

F3.12

F3.17

The Town must ensure that its transportation corridors permit safe, convenient, and comfortable travel by all users, in all modes of transportation. Where the Town lacks jurisdiction—most notably, in its two primary corridors, Main Street and Veterans Parkway—it should strive to establish a strong partnership with the Illinois Department of Transportation (IDOT) in order to meet the goals of this *Plan*.

### **Cultural Corridors**

The Constitution Trail and Rt. 66 are the Town's primary cultural corridors and are serving as major community attractions, drawing recreational users and even tourists.

The Town should continue to be a key regional partner in expanding the Constitution Trail, highlighting Rt. 66 history locally, and embracing Rt. 66 tourism.

### **Natural Corridors**

Sugar Creek is the Town's primary natural corridor. A significantly underutilized asset, the creek has been altered by human activity in such a way that it does not meet its potential as an environmental or recreational asset. The Regional Greenways Plan calls for the establishment of a continuous network of natural and manmade corridors, including Sugar Creek and the Constitution Trail, that link parks and natural areas, providing wildlife habitat corridors and enhanced recreational opportunities for area residents.

The Town should continue to implement the recommendations of the Greenways Plan and use green infrastructure practices to maximize the greenway network's positive environmental impact.

While specific recommendations may differ across categories and specific corridors, it must be stressed that the common theme is connectivity. One of the greatest strengths of the Town of Normal, identified by numerous community members in the Outreach phase of the planning process, is that it combines many of the advantages of a larger city with the feel of a small town. At the core of that sentiment is a feeling of interconnectedness—that even as the Town grows, people still feel connected to their neighbors and can experience all of the Town's advantages comfortably and conveniently. The long-term trend toward urban sprawl and auto-centric design has made the community less connected. While the Constitution Trail represents a significant achievement, the Town must continue to take deliberate action to preserve our shared history and make Normal's Rt. 66 a cultural destination. Environmentally sensitive development can re-establish our connection to nature.

# **METRICS**

**STREETS** 

425 Lane Miles of Street

Miles of Classified Streets under the Town's control (potential Complete Streets)

U.3
Miles of Complete Streets
(Concentrated in Uptown)

**SIDEWALKS** 

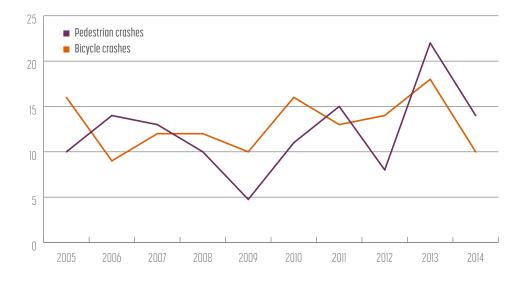
200 Miles of Sidewalk ~75%
Streets with Sidewalk
(at least on one side)

**TRAIL ACCESS** 

40%
Parks with Trail Access
(8 parks have direct access to Constitution Trail)

15% Schools with Trail Access (2 schools have direct access to Constitution Trail)

Pedestrian and Bicycle Related Crashes in Normal



## TRANSPORTATION CORRIDORS



Normal's transportation corridors consist of an interwoven network of streets, highways, bicycle and pedestrian routes, railroad lines, transit routes, and other facilities. They provide access for all people throughout the community, specific access to important activity centers, cultural and social resources, and interaction with natural open space both within the Town and beyond.

While specific places such as Neighborhoods and Centers are enmeshed in their immediate surroundings, usually limited to one or two land use types, Corridors are mutable in character as they make their ways through the Town and to destinations, experiences or linkages to other corridors. For example, U.S. 51/Main Street shifts its primary function from its entrance to the Town on the north, through its position as a backbone of the Illinois State University campus and the ISU sports and entertainment venues and then provides access to Advocate BroMenn Campus.

Streets are typically described by their functional classification, a tool developed by the US Department of Transportation. [See Table FC1 for classification descriptions.] This classification is predominantly based on the number of vehicles they carry, the speed at which these vehicles move, and the number of destinations they connect. The majority of Normal's transportation infrastructure is built in conformance with this classification system that favors cars over any other mode of transportation. As a result, with the exception of the Uptown area, **most streets in Normal are far from being complete streets**, as envisioned by this plan.

Overlaid on the street network is the Town's transit network. This includes fixed routes and bus stops located roughly every quarter-mile.

The Town's transportation corridors also include railroads. The primary rail corridor in the Town is the Union Pacific line which carries Amtrak service to Uptown Station. Running diagonally through the Town, this rail line also carries substantial freight traffic.

These interwoven transportation corridors are owned and controlled by different public entities. The Town controls most of the minor arterials, major collectors, and local streets; the Illinois Department of Transportation (IDOT) controls the principal arterials and expressways; Connect Transit controls the transit system; and the railroad companies control the railroads. In many instances, the corridors connect Normal to Bloomington and the surrounding rural parts of McLean County. The complexities of the network and ownership demand high levels of cooperation. The Long Range Transportation Plan 2045, BN Mobile, developed concurrently with this plan, addresses regional coordination issues more thoroughly.

The discussion in this section focuses on how the Town can effect change in the transportation corridors within its jurisdiction. Corridors are organized by ownership and control. This section should be read in conjunction with the Transportation section in the Infrastructure Element.

TABLE FC1: Functional Classification, General Characteristics, and Use in Normal

Classification	Characteristics	Local Example
Interstate/ Other Freeways and Expressways	High speed travel with controlled access, no signals, wide lanes; freeways and expressways may have slightly greater direct access	Interstate 55/74 and I-39
Principal Arterials	Provide rapid travel through metro areas, serve major activity centers, connect with interchanges and intersections	Veterans Parkway
Minor Arterials	Serve trips of moderate length within an area, preferably spaced between 1/8 and 1/2 mile apart at lower speeds	Raab Road, College Avenue, Linden Street
Major Collectors	Serves both mobility and land access in higher density areas, providing connections through portions of the city but also direct land access to commercial and residential uses with signalized intersections	Parkside Road, Adelaide Street, School Street, Beech Street
Minor Collectors	Serves mobility and density in lower density areas.	Greenbriar Drive
Local Streets	Provides access to individual properties and uses, generally do not provide through travel	Residential streets

Smart Growth America defines complete streets as follows:

"Complete Streets are streets for everyone. They are designed and operated to enable safe access for all users, including pedestrians, bicyclists, motorists, and transit riders of all ages and abilities."



Uptown Circle, with its combined functions as an intersection and a sustainable central park plaza that fosters public interaction, is a national model for Complete Streets.

## Corridors under State (IDOT) control

Two critical corridors for the Town are controlled by the Illinois Department of Transportation: Veterans Parkway and Main Street/U.S. 51.

**Veterans Parkway,** a six-lane expressway on the east side of both Normal and Bloomington, is now the primary commercial corridor in the urban area. Entered from the Pipeline Road interchange with I-55 at Normal's northeast corner, Veterans Parkway provides access to numerous highway-oriented businesses, including big-box outlets, restaurants, local- and regional-scale shopping centers, and hotels. It is the most heavily traveled road in the Town of Normal. It provides entry points to the Town at a series of cross-streets, and to Bloomington.

Pedestrians and bicyclists actively avoid Veterans Parkway due to safety concerns. Crossing is not perceived as safe, with the exception of a branch of Constitution Trail that crosses under the highway. It is not useful for public transit routes, and only a small portion of the highway is used for fixed-route public transit service. There is a great need to study this corridor and identify ways to make it less of a barrier, as it is today, and more a part of the community.

**Main Street,** a four-lane highway, is a critical transportation link between Bloomington and Normal and to other downstate communities (most notably Decatur). Within Bloomington-Normal, it is the lifeline to major institutions of learning, businesses, healthcare facilities, and many social services in the community.

The City, the Town, and several public and private institutional partners along the corridor would benefit from converting this highway to a complete street, allowing for the highest and best use of this corridor. Accordingly, this transportation corridor has been the subject of a number of plans and studies over the last decade. The two most notable ones include Main Street: A Call for Investment (referred to here as the "Main Street Study," 2007) and the Main Street Transportation Improvement Feasibility Study (2012). The feasibility report concluded that it was both possible and desirable to pursue a restructuring of Main Street as recommended by the Main Street Study, and to incorporate Complete Streets concepts to make this principal corridor more responsive to transit, pedestrians, and bicycle users. In response, the Town of Normal created an optional Main Street Form Based Overlay District to enhance the livability, walkability, and appearance of the Main Street corridor.

In 2016, IDOT, in cooperation with the Town and the City, applied for but was not granted federal TIGER funding to more fully implement the recommendations of the Main Street Study. This plan recognizes the importance of implementing those recommendations and encourages the Town to continue to partner with IDOT to restructure Main Street.

This plan also encourages the Town to investigate the feasibility of jurisdictional transfer, to give the Town more control over this corridor. However, due to the structural challenges of the corridor and the potential costs associated with upgrading and maintaining it, local engineers have expressed concerns with this concept. As outlined in the Executive Summary, the state of the State is dire, and it may be many years, if not decades, before IDOT is able to follow through on the Main Street restructuring project. Given the importance of this corridor to Bloomington-Normal, this approach must not be completely ruled out without further investigation.

## Corridors under private or corporate control (Railroads)

The primary rail corridor is the Union Pacific line that traverses the Town from northeast to southwest, which also carries Amtrak passenger service to Uptown Station. Uptown Station is a major passenger station for Amtrak's high-speed passenger service, scheduled to reduce travel times for destinations such as Chicago, Springfield, and St. Louis. The Long Range Transportation Plan notes potential future use of Uptown Station as a hub for commuter rail linkages to other Central Illinois destinations, and as a station for very high speed passenger rail with service at 200–220 mph.

To reconcile the rail traffic through Uptown Normal with the mixed uses characterizing the area, the Town has requested Uptown be designated as a "Quiet Zone" for rail operations. Such a zone is defined by the Federal Railroad Administration as "[a] section of a rail line at least one-half mile in length that contains one or more consecutive public highway-rail grade crossings at which locomotive horns are not routinely sounded when trains are approaching the crossings."

The Union Pacific rail line also carries daily freight traffic. On the west side of Normal, the Norfolk Southern rail line serves the Mitsubishi/Rivian manufacturing complex and associated industrial locations (RC3 Center). There is a rail interchange in Bloomington which permits movement of traffic between the Union Pacific and Norfolk Southern lines.

[See the Regional Freight Study for more information on railroads, including recommendations.]

### **Public Transit operated by Connect Transit**

Normal and Bloomington are served by Connect Transit, which is chartered to provide service only in the incorporated areas of the Twin Cities. In recent years, Connect Transit has experienced considerable growth in its ridership. This increase is in part the result of universal access agreements with Illinois State University, Heartland Community College, and Illinois Wesleyan University.

On Connect Transit's fixed-route network, bus stops are located roughly every quartermile. Map H1 illustrates each stop location and the intensity of its use. In 2016, Connect Transit implemented changes to its route structure and frequency of service. More frequent service became available on some fixed routes, primarily those that serve the ISU campus, Uptown, and those linking Uptown to downtown Bloomington. Primary transit corridors include Main Street, portions of College Avenue, Linden Street, and streets leading to Uptown Normal.

Connect Transit's challenges include the constant need to upgrade its fleet at great expense. Current local funding levels cannot cover the cost of fleet upgrades and overall operations, and the State of Illinois has proven to be an unreliable source of revenue. Connect Transit expressed that in order for transit to serve the community most effectively, new development must be transit-oriented. This presents the Town with another partner in its efforts to pursue complete, connected, and compact development.

### Corridors under control of the Town of Normal

More than 400 lane miles of streets under the Town's control provide connections at all levels of use, from individual houses to institutional campuses. They are designed to maximize the efficiency of vehicular traffic. Some streets fall under a federally defined functional classification system as illustrated in Map FC 1. Retaining the functional classification system permits the use of federal transportation funding, which can be used to improve classified streets. This support for street improvements extends the Town's fiscal capacity to address transportation and other needs. Unclassified streets (also called local streets or residential streets) give access to individual locations, such as those within neighborhoods.

The classified corridors fully controlled by the Town present the greatest opportunity to become complete streets. Several of those corridors, such as Towanda Avenue, Hershey Road and College Avenue, extend into Bloomington's jurisdiction and hence need careful coordination for them to be fully functional complete streets.

### Recommendations

- 1. Pursue opportunities to implement the recommendations of the Main Street Feasibility Study.
- 2. Partner with IDOT, the City of Bloomington, and the McLean County Regional Planning Commission (MCRPC) to study the Veterans Parkway corridor.

### 3. Focus efforts on Transit Oriented Development

3a. Partner with Connect Transit to establish transit-supportive residential densities. Table FC2 provides examples of such density guidelines from other major cities. Given the sizes of these cities and the types of transit available, these guidelines do not apply to a smaller community like Normal but serve as a model to be scaled to Bloomington-Normal. It is important to work with Connect Transit and MCRPC to establish transit-supportive residential densities for Bloomington-Normal. Ideally, such work should result in density and design guidelines for residential and commercial developments along high-frequency fixed transit routes, with different guidelines for a) 15-minute or better service areas and b) 30-minute or better service areas.

[See Housing Element, Infrastructure & Public Safety Element, and LRTP for additional recommendations]

**TABLE FC2:** Sample of Gross Residential Densities from Station Area Planning Guidelines

	Urban Core (Downtown)	City Center	Suburban Center
Metropolitan Transportation Commission (Bay Area) Station Area Planning Manual	16-60 du/acre	10-30 du/acre	5-20 du/acre
City of San Diego TOD Guidelines		17-30 du/acre (avg) 12 du/acre (min)	13-20 du/acre (avg) 8 du/acre (min)
Sacramento Regional Transit Guide to TOD	36 du/acre (min)	1/4 mile: 20 du/acre (min) 1/4 mile: 15 du/acre (min)	1/4 mile: 15 du/acre (min) 1/4 mile: 10 du/acre (min)
City of Charlotte (standards for light rail)		25 (min)	25 (min)

Note: San Diego's TOD Design Guidelines provide net densities; they have been converted to gross densities using an average gross-to-net ratio of 0.67.

### 4. Codify the Complete Streets policy adopted by the Council in 2017.

Town staff should establish design guidelines for implementation of the Complete Streets Policy, and should use those standards for the redesign of existing corridors and design of new corridors. Having clear guidelines for various street types such as arterials, collectors, and local streets will help with effective implementation of the Complete Streets Policy. Given the number of streets that connect Normal to Bloomington and beyond, establishing these guidelines at the regional level in coordination with the City of Bloomington would help create a cohesive network of complete streets in the community. Until such codes are established the Town should use the guidance provided in the Design Expectations callout box and other resources identified in the Complete Streets Policy to achieve Complete Streets.

Example: **Woodbury, Minnesota** adopted a Complete Streets policy following a recommendation of their long-range transportation policy in 2008. Immediately after adoption of the policy, Woodbury established an interdisciplinary Task Force of city administrators, planners, engineers, environmentalists, parks and recreation staff, and safety professionals, to create design templates for roadway corridors using complete streets principles.

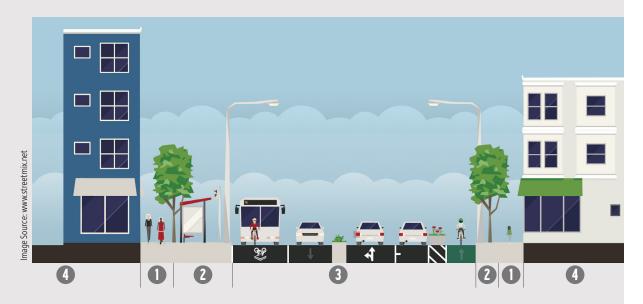
This Task Force developed 12 design templates for different types of roadway corridors, ranging from 180-foot-wide highways carrying high volumes of traffic at high speeds to 28-foot-wide residential streets with sidewalks on one or two sides. Specific guidelines for roadway elements such as driving lanes, medians, shoulders, turn lanes, bike and pedestrian facilities, transit lanes, boulevards, utility areas, and landscaping were included in each of the templates. In developing these guidelines, the Task Force used four key design principles of safety, mobility, sustainability, and livability.

Woodbury compared its existing design standards to the proposed templates, which resulted in many amendments to its standards.

### 5. Establish a multimodal Level of Service (LOS).

According to the Highway Capacity Manual, LOS is a quantitative stratification of a performance measure or measures that represent quality of service, measured on an A to F scale, with LOS A representing the best operating conditions from the traveler's perspective and LOS F the worse. Typically LOS computations only consider quality of service for cars. This plan recommends establishing multimodal LOS for accurate evaluation of the Town's transportation corridors.

### **Design Expectations For Transportation Corridors**

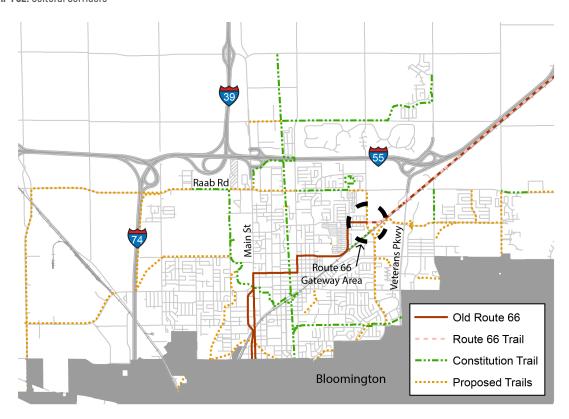


- Pedestrian Clearway: This zone is the portion of the sidewalk dedicated expressly to walking. The defined area must remain clear, both horizontally and vertically, for the movement of pedestrians. Materials should be smooth for wheel chair movement yet provide grip.
- 2. Landscape and Street Furnishing Zone: This zone should contain landscaping and hard furnishings that protect the pedestrian clearway from traffic. Landscaping selection should help curb stormwater runoff with elements such as bioswales, planters, rain gardens, and street trees. Such elements are beneficial for aesthetics, mobility, and ecology; lighting and signage should be human scaled; hard furnishings such as benches, art work and bicycle parking should enhance the pedestrian and bicycle environment.
- **3. Roadway:** This zone should safely and comfortably accommodate all users regardless of their travel mode of choice. This zone should include:
  - Driving lanes: Conventional driving lanes are designed for safe driving at or slightly above the posted speed limits. Calming the traffic on these lanes is crucial for accommodating all modes within the roadway. Simple traffic calming measures like restriping to narrow travel lanes and provide more room for bicycles and/or pedestrians; changing signal timing and adding pedestrian countdown signals; installing refuge islands, medians, and curb extensions; installing temporary curbside plazas;

- using on-street head-out angled parking, instead of parallel parking, to narrow wide, dangerous roadways should all be part of the tool box to make these lanes more accommodating to all modes of travel;
- Bicycling facilities such as bike lanes, paved shoulders, shared bicycle/parking lanes or bicycle/transit lanes.
   Bicycle blocks at the head of a traffic lane at a signalized intersection provide bicyclists with a safe and visible way to get ahead of queuing traffic during the red signal phase;
- **Transit stops** should be designed to discourage traffic conflicts and encourage pedestrian and bicycle connections;
- Medians/Boulevards: Medians are areas within a roadway that separate opposing lanes of traffic. These areas can also act as pedestrian islands and could feature decorative and sustainable landscaping, trees that provide shade and reduce the heat island effect and other environmental benefits. In some designs, medians can also help to decrease vehicle speeds to the desired level;
- Intersection design and material selection should minimize conflict among various modes and enhance accessibility for all users.
- **4. Context Sensitive Solution (CSS):** Planning and designing streets, roads and highways should always be sensitive to the communities and land uses through which they travel.

## **CULTURAL CORRIDORS**

### MAP FC2: Cultural Corridors



### Old Route 66

Cultural corridors are districts or routes that also serve as cohesive and dynamic public places with cultural and/or historic significance. They are special corridors, deserving of acknowledgment for their role in forming a community's identity. They add to a community's uniqueness, occupying local history and contributing to local culture, and can also become significant tourism generators. In Normal, two primary cultural corridors exist: Old Route 66 and the Constitution Trail.

Route 66 was one of the original highways of the US Highway System. It began in Chicago, Illinois and went west to Santa Monica, California, passing through Normal and Bloomington on its way to St. Louis, Missouri. It is acknowledged as one of the most famous roads in the country's history and played a vital role in westward migrations during the 1930s. With the creation of the Interstate Highway System in 1956, Route 66 was slowly replaced by new interstates and eventually removed from the US Highway System in 1985. However, many communities along its route have kept the spirit alive by honoring and celebrating its historic significance.

In Normal today, a number of historic assets exist along Old Route 66. Most notable is Sprague's Super Service on Pine Street—a unique gas station with a residence above it. Sprague's opened in 1931, went through several business changes over the years, and eventually fell into disrepair; however, the building was recently renovated and is now home to a Route 66 Visitor Center. Several other buildings on Pine Street also date back to the early 1900s. One Normal Plaza, including the historic Illinois Soldiers and Sailors Children's School buildings and surrounding parkland, is directly along Old Route 66, as is ISU's campus. The first Steak 'n Shake restaurant opened in 1934 on Main Street at the intersection with West Virginia Avenue; the building is now occupied by Monical's Pizza.

Several relatively new assets include Uptown and the Route 66 Trail. Uptown, while not directly along Old Route 66, is worth mentioning due to its cultural significance as the Town's center. The Route 66 Trail enters Normal from the northeast alongside the Old US Route 66 roadway and creates a multimodal gateway into the Town.



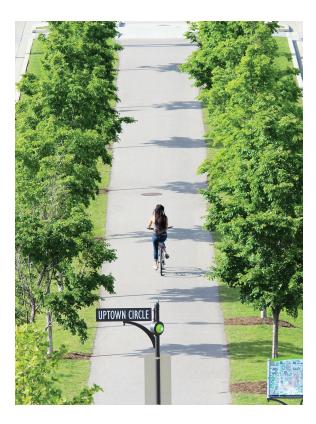
Sprague's Super Service (305 E. Pine Street)

### **Constitution Trail**

Repurposing about 4.5 miles of an abandoned Illinois Central Gulf Railroad corridor between Bloomington and Normal, the original segment of the Constitution Trail was dedicated and named on September 17, 1987 in honor of the 200th birthday of the US Constitution. It officially opened on May 6, 1989. In 2000, the Trail was designated as a Millennium Trail by the White House Millennium Council as part of its "Millennium Trails: Connecting America's Communities" initiative.

Expansions of the Trail have occurred since it opened, with today's Trail covering over 45 miles throughout Bloomington and Normal and connecting many neighborhoods and centers. Destinations along the Trail include Heartland Community College, the Corn Crib, ISU, Uptown Normal, Connie Link Amphitheatre, and a number of schools and parks. Benches, water fountains, bathrooms, bike repair stations, and bike parking line the Trail at various points; educational signage is also scattered along the trail, honoring the US Constitution and celebrating the history of the rail corridor. The recent introduction of a bike share system to Bloomington-Normal installed the vast majority of its stations near Constitution Trail. Camelback Bridge, a wooden bridge that crosses the Trail at West Virginia Avenue, is on the US National Register of Historic Places for its use of the patented Phoenix support columns.

Currently the Trail is seen as a linear park and is primarily used for recreation; however, as both Bloomington and Normal work to implement further trail expansions and on-street bicycle infrastructure it will likely be seen as a viable transportation corridor as well.







## Recommendations

### 1. Utilize art as a means to define cultural corridors.

1a. Design infrastructure along cultural corridors in a manner that promotes their character and theme.

Infrastructure can include a variety of elements; examples include benches, tables, street lights, signage, and shelters. Incorporating creative design into infrastructure can add to the cultural attractiveness of an area by giving it a unique environment.

1b. Partner with institutions, businesses, and others located along cultural corridors to promote placemaking.

[See the Community Identity & Public Places Element for more detail.]









- 1. The unique street lights of the Serenbe village in Chattahoochee, GA. Image Source: Robinson Iron
- 2. A fire hydrant in Springfield, IL was painted with a Route 66 theme. Image Source: Rt. 66 Hydrant Mural Project
- 3. A painted trail, part of a broader arts exhibit along the trail, in Hopkinton, MA. Image Source: Hopkinton Center for the Arts
- 4. The iconic Route 66 gateway mural in Pontiac, IL. Image Source: Flickr user Anna Harris

# 2. Ensure future development along cultural corridors is sensitive to the character and history of the corridors.

2a. Consider partnering with the City of Bloomington to implement a neon sign design overlay zone along the Old Route 66 corridor.

### Central Avenue Neon Design Overlay Zone in Albuquerque, New Mexico

In 2013, the City of Albuquerque introduced a neon design overlay zone for development along its Central Avenue as part of a larger Route 66 Action Plan. Central Avenue is the longest urbanized stretch of Route 66 in the country. The design overlay zone was established to encourage the use of neon signs to develop a neon theme along the corridor and facilitate destination tourism associated with Route 66. Neon signs were first developed around the same time that Route 66 gained popularity, resulting in the proliferation of the signs along the highway as businesses sprang up. The setting and atmosphere created by the signs became very iconic of that period in history.



Albuquerque's Central Avenue at night; Source: Flickr user tamasrepus

- 2b. Improve Normal's Old Route 66 gateway at the intersection of Shelbourne Drive and Towanda Avenue.
  - The gateway is currently quite informal and unremarkable, thus any improvements should aim to first identify the location as a gateway, and second beautify the area in a manner that is fitting with Route 66 characteristics and iconic themes.
- 2c. Continue expanding Constitution Trail along proposed routes [See Map FC2] and connect it to the Route 66 Trail.
- 2d. Encourage trail-oriented development along and near trails.

**Trail-oriented developments** are intentionally designed to facilitate the use of adjacent or nearby trails and accommodate trail users. They view trails as important transportation corridors and prioritize density and a mix of uses along them. Active modes of transportation are heavily encouraged, resulting in minimal amounts of parking offered.

### Example: The Flats At Bethesda Avenue (Bethesda, Maryland)



Apartments above help boost density in the area.

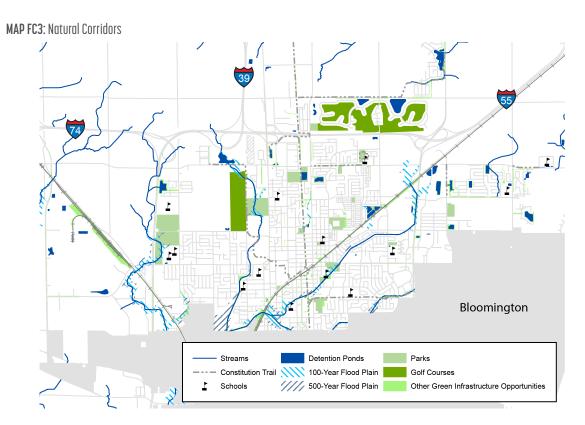
Retail and other commercial uses on the first floor have frontage along the trail.

The trail is clearly delineated from the sidewalk.

Building setback is close to the trail.

Benches, planters, and lamps create a transition zone between sidewalk and trail.

## NATURAL CORRIDORS



Natural corridors, or greenways, are the streams, riparian buffers, parks, detention basins, and other natural or quasi-natural areas that serve as urban wildlife habitats and pathways while also serving a recreational purpose. Map FC 3 shows these areas, many of which can be connected to the broader regional greenway system via existing and future corridors such as the Constitution Trail and the planned Sugar Creek trail. Creating a continuous regional greenway network is a long-established goal that is formalized in the Regional Greenways Plan, which was adopted 1997 by the City of Bloomington, Town of Normal, and McLean County, and updated in 2009.

**Sugar Creek** is the Town of Normal's most important urban watershed, and an integral part of the Natural Corridors system.

Significant stretches of Sugar Creek pass through Normal, primarily in the public right-of-way. Like many urban streams, Sugar Creek has been modified in a number of ways to accommodate growth. These modifications, including channelization and concrete beds and banks, have compromised the creek's ability to be hospitable to wildlife. Prior to the adoption of the Town's Stream Buffer Ordinance in 2008, development was allowed to encroach on the riparian area, making it impossible to let the creek follow its natural course. The creek is also subject to the effects of stormwater runoff, which is intensified in urban areas due to impervious surfaces (concrete, asphalt, etc.). This stormwater comes into contact with road salt, fertilizer, and other substances, carrying harmful chemicals into the creek. This pollution—which is, to some degree, an unavoidable consequence

of modern living, but can also be reduced through best management practices—has significant local and downstream effects on water quality.

In addition to its environmental importance, Sugar Creek is a potential recreational asset. The creek offers a number of potential linkages with the Constitution Trail and other greenway assets such as detention basins. Because of its geographic reach in the urban area and its unrealized potential as a natural resource, Sugar Creek has been recognized as a key natural corridor in a number of past planning efforts. It was identified as a priority greenway in the Greenways Plan, with an eye toward protecting the riparian area from urban runoff and constructing a Sugar Creek trail that would enhance the Constitution Trail network.

Despite this priority designation, most of these enhancements have not been carried out. Much of the right-of-way that would be required to implement a Sugar Creek greenway is owned by the Bloomington and Normal Water Reclamation District (BNWRD), which has expressed reservations about placing trails in certain areas due to liability concerns and the presence of its infrastructure. Any development of this greenway will thus require substantial intergovernmental coordination. Other development considerations include neighborhood privacy, flooding concerns, steep slopes, physical barriers such as bridges, and established development that has encroached on the riparian area.

None of these are necessarily insurmountable obstacles. BNWRD's record of environmental stewardship should make it an excellent partner in deciding the best way to integrate Sugar Creek with the rest of the greenway network, improving water quality without compromising safety or critical infrastructure. Privacy concerns are often expressed by residents prior to trail development—this has been the case, for example, for various segments of the Constitution Trail—but these concerns typically fade away as the benefits of the trail become more clear. As for flooding concerns, avoiding rigid channelization and concrete beds can actually reduce flood risk by slowing the flow of water during heavy storms. Other engineering issues should be examined on a case-by-case basis to determine whether they can feasibly be resolved.

Even if it proves infeasible to build the entire Sugar Creek greenway, incremental development of the trail—along the lines of what has been done with the Constitution Trail—could move the ball forward. A short trail segment along the creek could, for example, give residents of the Cedar Crest/Highland area (the neighborhood coded "Old3" in the Neighborhoods Chapter of the Planning Framework) better access to the Constitution Trail and Underwood Park. Similar examples can be found throughout the Town's neighborhoods and centers.

### Other (non-natural) corridors in the greenway network

The greenway system within the urban area also includes the Constitution Trail and pedestrian- and bike-friendly streets. These are more for the benefit of people than wildlife, and thus cannot be designated as natural corridors (although the Constitution Trail, which is lined with trees and other vegetation for much of its length, may be considered a quasi-natural corridor). Still, these corridors are important in fulfilling the recreational purpose of the greenway network, and should be considered along with the Sugar Creek greenway as links in the overall chain.

### Nodes on the greenway network: Detention basins, parks, and other green spaces

The greenway network is not only composed of linear features; it also includes a number of green spaces that can serve as waypoints or destinations. These are not, strictly speaking, corridors, but are more like nodes linked by greenway segments. Aside from the Sugar Creek right-of-way and floodplain, these encompass all of Normal's parks, detention basins, and green spaces, whether owned by the Town itself or by BNWRD, ISU, or Unit 5. Private landholders, including railroads and commercial and residential owners, also own land that could be improved using green infrastructure practices, providing aesthetic, recreational, and environmental benefits.

The easiest of these areas to improve will be those owned by the Town of Normal. As with Sugar Creek, the Town will have to establish partnerships with other owners to improve the green spaces not under its own control.

### **Town of Normal Stream Buffer Ordinance**

Town of Normal adopted a Stream Buffer Ordinance to protect riparian buffers, wetlands and other critical areas. This ordinance established minimum widths of buffers based on the stream order (shown below) and provided specifications for the establishment, protection and maintenance of vegetation along all stream systems. It further established acceptable requirements for the design of these buffers to protect critical environmental and land resources, water quality, and riparian and aquatic ecosystems.

### Stream Order 1

10 feet from the centerline on each side.

#### Stream Order 2

25 feet from the centerline on each side.

### Stream Order 3

50 feet on each side of the stream bank of the active channel and floodway.

### Stream Order 4

100 feet on each side of the stream bank of the active channel and floodway.

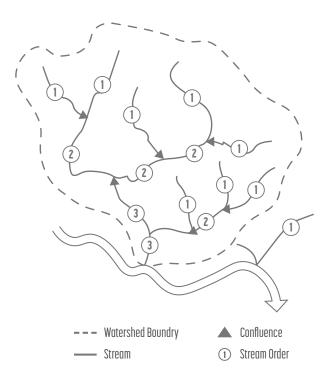
### Stream Order 5

100 feet on each side of the stream bank of the active channel and floodway.

#### Stream Order 6

100 feet on each side of the stream bank of the active channel and floodway.

The ordinance modifies the width requirements for steep slopes, flood plains, wetlands, and other environmentally critical areas.



## Recommendations

- 1. Monitor, protect, and restore Town waterways and watersheds, and support broader regional watershed protection.
  - 1a. Maintain an active role in the Greenways Advisory Committee and the Watershed Management Oversight Committee, which monitor and coordinate watershed protection and restoration activities.
  - 1b. Continue to invest in stream restoration and bank stabilization projects along Sugar Creek as called for in the Town's five-year Community Investment Plan (CIP).
  - 1c. Use a mix of regulations, incentives, and education programs to encourage best practices in the Conservation Zones, which include riparian buffers, floodplains, and other ecologically sensitive and valuable areas.
    - [See Health & Sustainability Element Goal HS2 for a list of partners to help implement these practices.]
  - 1d. Evaluate opportunities to reduce the use of road salt, fertilizer, and other chemicals that enter local streams through stormwater runoff (or groundwater through infiltration).
- 2. Identify opportunities for green infrastructure projects throughout Normal [See Map FC3 Natural Corridors].
  - 2a. Establish demonstration sites for green technologies and sustainable development.
  - 2b. Work closely with IDOT, railroads, BNWRD, and other entities with land in the public ROW to implement these recommendations where the Town does not have the ROW.
  - 2c. Prioritize such improvements—particularly with respect to the tree canopy—along high-priority bicycle and pedestrian routes.
- Enhance bicycle and pedestrian linkages by providing connections along Sugar Creek between multiple neighborhoods, maintaining a continuous path while minimizing roadway crossings.

# 4. Strive to make a net positive impact on the natural environment through Normal's parks.

- 4a. Perform a baseline analysis of the environmental sustainability of the Town's parks and recreation facilities. (Q)
- 4b. Expand areas with native plantings, minimal mowing, and no/low chemical use, particularly along waterways. (Q)
- 4c. Protect (and where appropriate, create) wildlife and pollinator habitat areas and other sensitive environmental areas within park boundaries.
- 4d. Consider seeking Audubon Cooperative Sanctuary Program certification for Ironwood Golf Course to guide development and maintenance practices. (Q)
- 4e. Explore the possibility of on-site renewable energy generation in parks.
- 4f. Consider expanding the use of park land for food production.

# 5. Support regional trail projects that connect to the Town's own natural corridors and the Constitution Trail.



# **Design Expectations For Natural Corridors**

