



INFRASTRUCTURE & PUBLIC SAFETY

“America’s infrastructure scores a D+. . . . Failure to act on the deteriorating infrastructure has a cascading impact on our nation’s economy, impacting business productivity, gross domestic product (GDP), employment, personal income and global economic competitiveness.”

—2017 Infrastructure Report Card Published by American Society of Civil Engineers (ASCE)

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Infrastructure forms the bones, circulation, and neural pathways of our community, the literal foundation of our quality of place.



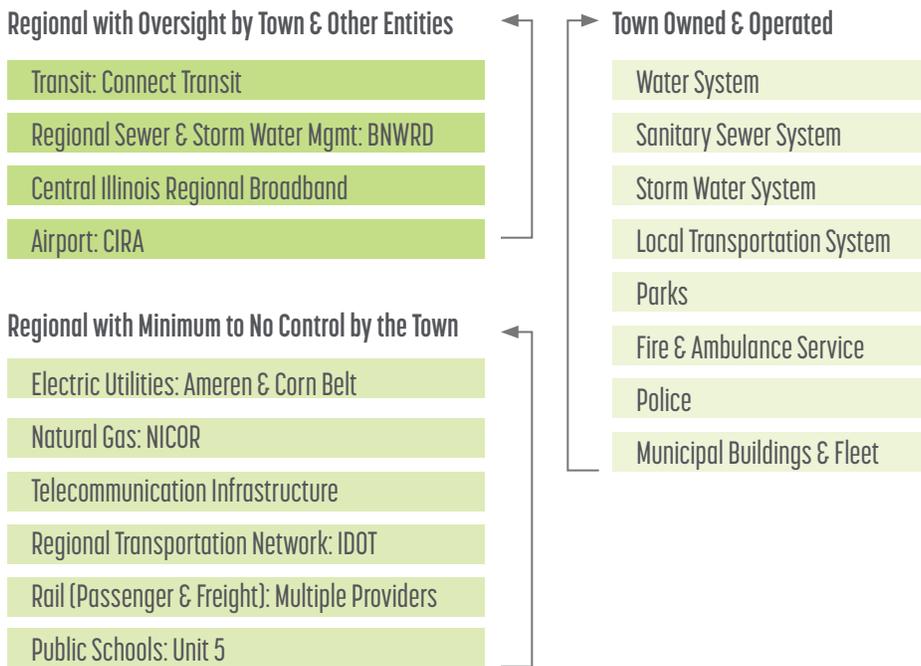
Timely and adequate infrastructure investment should be one of the top priorities of any community. In practice, however, such investment cannot always be taken for granted. In many places around the United States, a combination of economic, administrative, and political challenges have led to the infrastructure being systematically under-maintained.

The Town of Normal has largely kept ahead of the national curve in keeping its infrastructure in good condition. However, the Town faces many of the same difficulties as other communities, including rising costs, decreasing physical space for infrastructure in all three dimensions, large ongoing maintenance commitments resulting from decades of sprawl, and the disruptive effects of new technologies. The Town must be prepared to meet these challenges by maintaining and developing systems at a high standard, giving special attention to connectivity between these systems and the agencies that manage them, and anticipating changes on multiple fronts.

New technologies and their application to infrastructure elements and systems are a key factor in planning the future of these major civic structures. The technologies expected to appear in the near future are more data-driven and transparent, and they promise to make the operation of municipal infrastructure more efficient. But the breakneck pace of this change is not without its challenges. The Town must be prepared to act quickly to adopt new standards as needed to support emerging infrastructure technologies. As technologies change and emerge, it becomes more difficult to estimate costs over time. As public demand for new services and capabilities increases—for example, the expectation of free Wi-Fi access in public spaces—the need for creative and flexible approaches to funding will also increase.

These challenges heighten the need for a fiscally and environmentally sustainable approach to infrastructure investment. Compact, contiguous growth will allow the Town to focus on maintaining its existing infrastructure in good condition and avoid the need for new, expensive systems, while placing less stress on prime farmland and natural resources.

FIGURE IP1: Infrastructure in Normal is owned and operated by a complex web of public and private entities



Executing this strategy will require significant ongoing planning and investment by the Town itself and coordination with other infrastructure operators and institutional users. Infrastructure in Normal is owned and operated by a complex web of public and private entities [See Figure IP 1]. This chapter focuses primarily on Town-owned and -operated systems, where policymakers and staff have more direct control over outcomes. In its role as a regional partner and collaborator, the Town should be guided by the same overall principles of smart growth, sustainability, and responsiveness to change that animate the rest of this document.

It is important to note that while this chapter is more technical and concrete in its approach than other elements of the Comprehensive Plan, it shares those elements' basic DNA. The overall thrust of this plan is toward a more *complete, connected, and compact* Town of Normal that more fully embraces smart growth principles. The strategies and actions of the Infrastructure chapter are consistent with that vision.

A second important note is that most of the infrastructure systems discussed in this chapter have already been the subjects of more technically focused master planning processes that dealt with each of those systems exclusively. The purpose of this chapter is not to develop detailed plans for these systems, but to establish big-picture strategies for these systems that are in sync with the overall vision of the Comprehensive Plan.

Connection to the Vision

Supporting Framework: Technology

Core Value 2: Economy. Ours is an innovative and diverse economy in 2040 that has grown from what it was in 2016.

Core Value 3: Spaces. Ours is an inter-related community visible through safe and accessible spaces that people love.

Core Value 8: Well-being. Ours is an equitable health and wellness system, ensuring the healthy choice is the easy choice.

GOALS

Goal IP1: Provide reliable local infrastructure in the most efficient and equitable manner to promote compact and contiguous development.



Goal IP1: Provide reliable local infrastructure in the most efficient and equitable manner to promote compact and contiguous development.

In recent years, the Town has shifted toward emphasizing compact development that takes advantage of existing infrastructure. This has served as the basis for a variety of policies. For example, the new Fire Strategic Plan—including new station locations and response time calculations—was developed under the assumption that Normal will not grow significantly outward beyond its current boundaries. The preference for maintenance over unchecked expansion is also well-supported by public opinion both during the outreach processes for both the Comprehensive Plan as well as the BN Mobile- Long Range Transportation Plan.

While maintenance should be the primary emphasis, there will inevitably be a need to expand certain infrastructure systems as the Town evolves. As technology continues to reshape how the economy and the public sector work, a robust technology infrastructure will become as much of a determinant of economic growth as roads and sewers. As this new infrastructure is put in place, it will be necessary to find space for it in public rights-of-way, which are growing crowded in all three dimensions.

Fiscal considerations will complicate the picture somewhat. Deferred investment, while not as big a problem in Normal as elsewhere, is still taking a toll, limiting flexibility and the ability to think ahead. One significant challenge will be developing funding and financing strategies for a more sustainable era—in particular, resolving inherent conflicts between sustainability goals and how infrastructure is currently funded. Water infrastructure, for example, is maintained through user fees. If the Town succeeds in promoting water conservation, there will be less revenue available to maintain the system. Likewise, maintenance of streets and roads are primarily funded through the motor fuel tax, which will become a less reliable source of revenue if (as hoped) alternative modes of transportation gain wider use.

Positive Contributors

- Town's commitment to smart growth principles
- Existing inter-governmental and regional partnerships
- Infrastructure generally maintained in good condition
- Capital Investment Planning
- Mapping of assets in geographic information system (GIS)

Challenges

- Aging infrastructure
- Sprawling development patterns
- Dwindling revenue sources for capital investment

Indicators and Metrics

- Corporate area in square miles
- Population density
- Linear miles of streets, trails, on-street bicycle facilities
- Ratio of streets to sidewalks
- Linear miles of complete streets
- Number of households within 4-, 5- and 6-minute fire response zone
- Linear miles of water distribution, sanitary sewer and storm sewer
- Acres of parks per 1,000 population
- Number of LEED certified community facilities

Partners

- [See Figure IP 1.]
- City of Bloomington
- McLean County

Strategy IP1.1—Ensure that Infrastructure Systems Support Current and Future Growth in a Fiscally, Socially, and Environmentally Responsible Way

- IP1.1a Continue to Implement and Update Master Plans for Local Infrastructure Systems
- IP1.1b Protect Existing Infrastructure Investments over Funding New
- IP1.1c Structure Rates and Fees to Recover All Costs, Including Construction, Operation, and Maintenance
- IP1.1d Embrace Density in Land Development Practices to Accommodate More Intense Development Along Existing Corridors of Infrastructure
- IP1.1e Ensure that the Town's Public Rights-of-Way Provide a Multi-Purpose, Connected Physical Space for Movement and Travel, Public and Private Utilities, and Other Appropriate Public Purposes
- IP1.1f Reduce the Environmental Footprint of the Town's Infrastructure
- IP1.1g Pursue Integrated Asset and Operation Management Solutions
- IP1.1h Continue to Develop Regional and Inter-Jurisdictional Relationships for Effective Delivery of Services
- IP1.1i Continue to Work Cooperatively to Support Utilities and Other Partners Providing Regional Infrastructure
- IP1.1j Continually Educate and Engage Residents, Particularly the Development Community, on Infrastructure-Related Issues and the Need for Compact Development

Strategy IP1.2—Ensure Availability of Reliable and Adequate Water Supply and Delivery Systems to Provide Safe and High-Quality Potable Water at Adequate Pressures

- IP1.2a Continue to Be an Active Partner in Regional Water-Supply Planning and Protection Efforts
- IP1.2b Continue to Monitor and Maintain Existing Water Distribution Systems to Ensure Good Condition
- IP1.2c Explore Alternative Rate Structures that Protect Revenue Streams While Promoting Water Conservation Efforts
- IP1.2d Evaluate the Merits and Demerits, Efficient Routes, and Expansion Alternatives for Long-Term Capital Investment Projects
- IP1.2e Utilize Appropriate Technologies to Increase Efficiencies



Strategy IP1.3—Provide Reliable and Efficient Sanitary Sewer and Storm Water Collection Systems to Protect the Public Health, Safety, and the Natural Environment

- IP1.3a Fund the Implementation of the New Sanitary Sewer Master Plan
- IP1.3b Work with BNWRD to Identify and Mitigate I/I Issues in the Sanitary Sewer System
- IP1.3d Develop a Town-wide Stormwater Master Plan
- IP1.3e Continue to Require that All New Developments Provide Appropriate Storm Water Detention Facilities to Protect Water Quality
- IP1.3f Continue to Monitor and Mitigate Urban Stream Bank Erosion
- IP1.3g Utilize Green Infrastructure Solutions for Infrastructure Management, Where Feasible
- IP1.3h Encourage Low Impact Development
- IP1.3i Continue to Explore Opportunities to Establish a Regional Stormwater Detention Basin in the Area Bound by Shelbourne Avenue to the West, Veterans Parkway to the East, the Railroad to the South, and the Interstate to the North

Strategy IP1.4—Maintain a Safe, Reliable, and Efficient Transportation Network to Serve All Users

- IP1.4a Continue to Work with MCRPC and Other Partners to Address Transportation Issues at a Regional Level
- IP1.4b Provide Data and Support to MCRPC for Increased Utility of the Transportation Model, Transportation Dashboard, and Other Data-Driven Initiatives
- IP1.4c Advance the Objectives of the Forthcoming LRTP (BN Mobile)

Strategy IP1.5—Build Quality Technology Infrastructure

- IP1.5a Ensure Availability of Quality Broadband Infrastructure to All the Activity Centers for Their Long-Term Vibrancy
- IP1.5b Provide Free, Reliable, and Secure Wi-Fi in Parks and Public Places
- IP1.5c Partner with Connect Transit to Provide Free Wi-Fi Near Transit Stops



Strategy IP1.6—Provide Adequate Fire and Emergency Response Services to Protect the Lives, Health, Safety, and Livelihoods of Residents and Businesses

IP1.6a Ensure that Land Development Policies Support NFD's Goal of Responding to 90% of Calls Within a 6-Minute Response Time

Strategy IP1.7—Ensure that Normal's Community Facilities Continue to Serve the Town's Needs as It Grows and Develops

IP1.7a Ensure the Provision of Community Facilities in a Manner Consistent with the Vision and Goals of this Plan

IP1.7b Enhance Inter-Governmental and Regional Coordination in Locating and Sharing Community Facilities

IP1.7c Continue to Locate and Build Public Facilities in a Manner that Raises the Bar for Architectural Distinction, Placemaking and Energy Efficiency

IP1.7d Create a Comprehensive Strategic Plan for All Community Facilities Owned and Operated by the Town

Strategy IP1.1—Ensure that Infrastructure Systems Support Current and Future Growth in a Fiscally, Socially, and Environmentally Responsible Way

IP1.1a—Continue to Implement and Update Master Plans for Local Infrastructure Systems

Several local systems—such as parks, sewer, community facilities, and bicycle and pedestrian systems—currently have individual master plans. These plans provide strategic direction for the growth and maintenance of individual systems. It is important to fund their implementation adequately and update them periodically.

IP1.1b—Protect Existing Infrastructure Investments over Funding New

- Focus on upkeep and maintenance of existing infrastructure systems.
- Expand infrastructure, as needed, when such improvements result in overall efficiency within the system.
- Develop infrastructure assessments and establish acceptable levels of service for each local infrastructure system to guide their maintenance, upgrades, and expansion.

IP1.1c—Structure Rates and Fees to Recover All Costs, Including Construction, Operation, and Maintenance

Conduct periodic rate studies and adjust prices accordingly to ensure the long-term fiscal sustainability of each system. Consider social equity issues in those rate and fee structures.

IP1.1d—Embrace Density in Land Development Practices to Accommodate More Intense Development Along Existing Corridors of Infrastructure

- Prioritize new development projects in areas that are currently served by existing infrastructure or can be extended efficiently and economically. Consider infrastructure managed by other utilities/entities in the area, such as transit, while reviewing development proposals.
- Implement cost-sharing or up-sizing assistance programs for infill and redevelopment projects.

IP1.1e—Ensure that the Town’s Public Rights-of-Way Provide a Multi-Purpose, Connected Physical Space for Movement and Travel, Public and Private Utilities, and Other Appropriate Public Purposes

IP1.1f—Reduce the Environmental Footprint of the Town’s Infrastructure

- Consider energy efficiency, alternative energies, and reduction of maintenance costs when expanding, remodeling, or building new systems.
- Incorporate green infrastructure solutions that can improve the Town’s aesthetics while serving important functions such as providing clean air and water, improving storm drainage, and potentially improving habitat for wildlife and recreational space.
- Include life cycle costs that take long-term maintenance and repair into account for future infrastructure repairs and replacement decisions.

IP1.1g—Pursue Integrated Asset and Operation Management Solutions

Municipal assets are property owned, controlled or managed by the Town for delivery of its services. These include water, wastewater, stormwater, fire hydrants, streets/sidewalks, trails, parks, community facilities, vehicle fleet, and much more.

Integrated Asset Management is a comprehensive process of:

1. Inventorying current assets and their condition in Geographic Information Systems (GIS)
2. Establishing an appropriate and sustained level of service for each asset
3. Identifying assets critical to sustained performance
4. Identifying each asset's Capital Improvement Plan (CIP) and Operations and Management (O&M) strategies
5. Identification of best long-term financing strategy

The Town currently has aspects of the aforementioned process in place and is positioned well to migrate towards integrated asset and operations management. US EPA offers free tools and resources for municipal asset management.¹

IP1.1h—Continue to Develop Regional and Inter-Jurisdictional Relationships for Effective Delivery of Services

Costs shared are costs reduced. The Town should continue to collaborate with the City of Bloomington, McLean County, Unit 5 school district, and other taxing bodies to effectively deliver services.

IP1.1i—Continue to Work Cooperatively to Support Utilities and Other Partners Providing Regional Infrastructure

- Enhance coordination among Town departments and regional electric, gas, and telecommunication utilities while installing infrastructure underground. Such coordination, while difficult across agencies, can result in cost savings and minimize disruptions.
- To the extent possible, consider long-term or strategic plans developed by utilities during the development review process.
- Work with electric utilities to promote the use of energy efficient practices.
Example: energy-efficient street lighting.
- Coordinate with Nicor to ensure that their facilities are adequately protected. This should include coordination of land use and growth, particularly on the north side of Town.

IP1.1j—Continually Educate and Engage Residents, Particularly the Development Community, on Infrastructure-Related Issues and the Need for Compact Development

WATER SYSTEM

System Overview: The Town of Normal's water comes from 15 active groundwater wells that draw water from the Mahomet Aquifer, and six of those wells are outside the corporate limits. The wells have a combined capacity of nearly 12 million gallons/day (mgd). The existing municipal water distribution system consists of approximately 200 miles of water mains, four elevated tanks, two booster stations and one pump station, a reservoir, and a water treatment plant. The treatment plant is adequately sized to treat all the existing raw water capacity. Current usage is a little below four million gallons per day, so there is plenty of excess capacity for future growth. Staff continuously monitors the productivity of the wells to ensure efficiency. Staff also checks the distribution system for leaks every other year using acoustic technology. Given the benefits witnessed by this program, the department plans to continue doing this for the foreseeable future.

Capital Investments: The Water Department is currently focused on maintaining the existing system in good condition. Capital investment projects, both short and long-term, include:

- **Smart Meter Deployment:** In line with industry trends, the Water Department has begun deploying Advanced Metering Infrastructure (AMI), or Smart Meters. This technology allows staff to be more efficient by reading the meters remotely. The data gathered can be used to identify leaks, damaged or broken meters, and other issues more efficiently. In addition to their administrative benefits, this technology has the potential to help residents by providing real-time usage data and enabling them to be more efficient. Based on the Town's published Community Investment Plan FY 2017 to 2022, the water enterprise fund is the main source of funding for this project and is approved below the desired funding levels. At this rate, rolling out the program will take longer than expected.
- **Connecting the North and Northeast elevated tanks:** This is a long-term and lower priority issue. Staff identified a need to connect the elevated water tanks on the north and northeast sides of town to provide redundancy during maintenance and extra help with fire suppression.
- **Lead in water:** While lead has not yet been an issue in the Town of Normal, the national conversation on lead in drinking water highlighted the need for additional monitoring of water infrastructure in older neighborhoods. Any planned or emergency infrastructure improvements in these neighborhoods should take this into consideration.
- **Water distribution systems on the west side (old Metro Zone Area):** the City of Bloomington currently provides water on the west side of Normal as part of an inter-governmental agreement (Metro Zone). As of 2017, the Metro Zone has been unilaterally dissolved by Bloomington. However, the City of Bloomington agreed to service this area. While not a high priority, Town should investigate the merits and demerits of investing in its own water distribution infrastructure in the old Metro Zone area for future predictability.

Finances: Water department operations and infrastructure investments are funded by an enterprise fund (the Water Fund). The Water Fund's financial position has been and continues to be strong, both for operational needs and capital investment projects.¹ The Town Council just approved a 2% rate increase in FY 2016—2017 to help ensure the long-term financial stability of the Water Fund. Town staff continues to monitor the health of this fund closely and anticipates nominal increases, if any. A potential financial challenge could be protecting the revenue generated (tied to the amount of water used) while promoting water conservation efforts.

Strategy IP1.2—Ensure the Availability of Reliable and Adequate Water Supply and Delivery Systems to Provide Safe and High-Quality Potable Water at Adequate Pressures

IP1.2a—Continue to be an Active Partner in Regional Water-Supply Planning and Protection Efforts

IP1.2b—Continue to Monitor and Maintain Existing Water Distribution Systems to Ensure Good Condition

The Town of Normal does not have a master plan for water distribution systems. Given the general stability of the system, excess water capacity to accommodate both current and future growth, and staff's proactive approach to maintenance, a master plan may not be necessary at this time. However, Town staff should continue to monitor performance of the wells and leak-detection programs to ensure maintenance of these systems is in good repair.

IP1.2c—Explore Alternative Rate Structures that Protect Revenue Streams While Promoting Water Conservation Efforts

In line with the vision and goals of this plan and the Town's Sustainability Plan (2035 Report), staff currently promotes water conservation efforts. However, the inherent contradiction between water conservation efforts and the fiscal sustainability of the Water Fund must be recognized as a challenge. Staff should investigate alternative rate structures such as inclining block rates (water price increases with increasing blocks of water use) that protect revenue streams while promoting conservation.

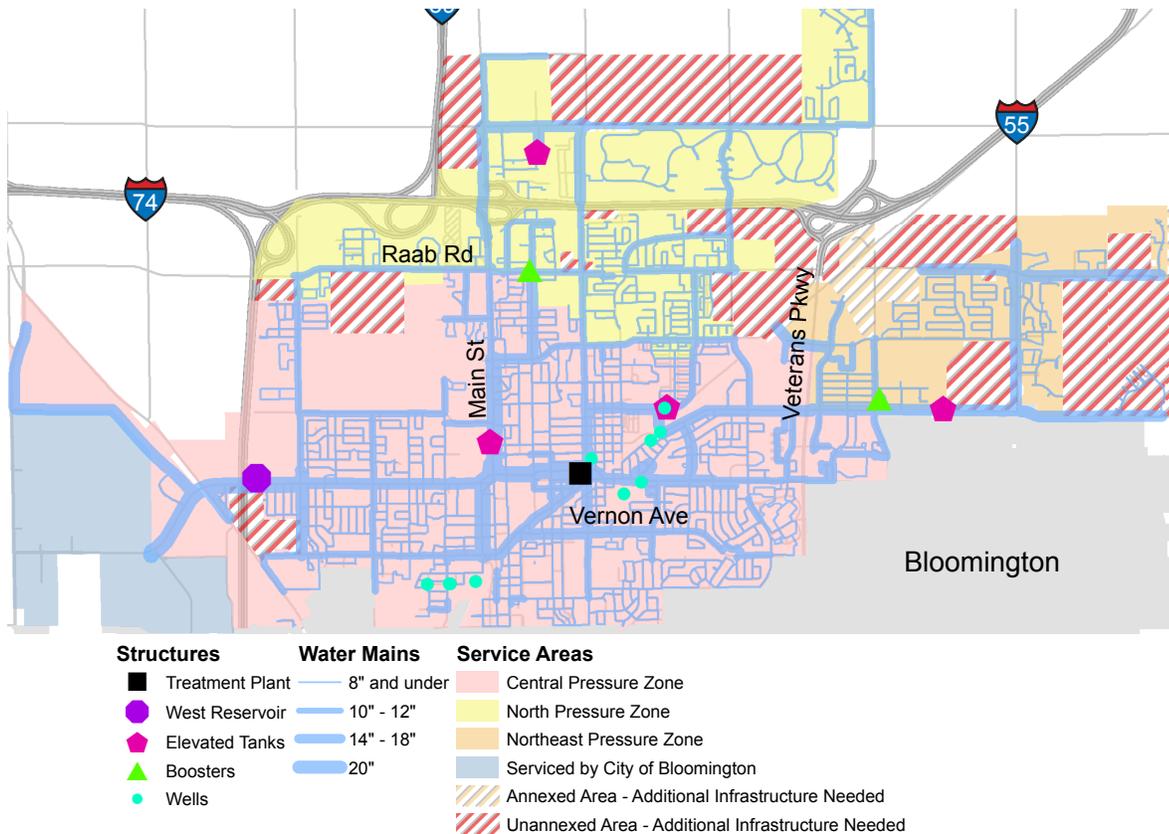
IP1.2d—Evaluate the Merits and Demerits, Efficient Routes, and Expansion Alternatives for Long-Term Capital Investment Projects

These include 1) connecting the North and the Northeast elevated tanks and 2) expanding the water distribution network to the old Metro Zone area currently being served by City of Bloomington.

IP1.2e—Utilize Appropriate Technologies to Increase Efficiencies

The Water Department is currently in the process of installing Advanced Meter Infrastructure (AMI). Currently this program is on a five-year roll-out but is underfunded. Staff should investigate grants and other funding sources in addition to the Water Fund for speedy roll out of AMIs throughout the Town. This project can greatly contribute to the Town's Smart City initiative.

MAP IPI: Town of Normal Water Service Areas



SANITARY SEWER AND STORM WATER SEWER SYSTEMS

System Overview: The Town of Normal Public Works and Engineering Departments manage separate sanitary sewer and storm water systems. The Town’s sanitary sewer collection system comprises nearly 180 miles of collector and trunk sewers and thousands of manholes. Collector sewers are small 8–16” pipes, collecting the sewage from the individual lateral to trunk sewers. The trunk sewers then connect collectors to interceptor sewers, owned and operated by the Bloomington Normal Water Reclamation District (BNWRD). The Town’s sewer system also includes seven sanitary sewer pump stations and force mains to serve areas that cannot be served by gravity—predominantly the northeastern part of town. Supporting developments with pump stations is an expensive endeavor, and staff wants to minimize such developments in the future.

The storm water system is made up of over 100 miles of storm sewers, 1 stormsewer pump station, 80 culverts, eight detention ponds spanning 2.3 acres (while there are a total of 52 wet and dry detention ponds within the Town, most are privately owned and operated), and over 5,000 inlets. Regulatory pressures have led to an increase in storm water program costs for all municipalities, including Normal. In 2006, the Town adopted a storm water utility fee, which is assessed to all Normal property owners, to address revenue shortfalls.

Capital Investment: The Public Works Department’s interest lies in maintaining the existing sewer and storm water systems in good condition. Staff prioritized the sanitary sewer investments over storm sewer investments based on the criticality of the sanitary systems.

Sewer: Normal recently completed its first Sanitary Sewer Master Plan. Recommendations include:

- Asset management: The plan identified a limited understanding of existing sewer infrastructure, some of which is over 100 years old, as a major challenge. It recommended creating an inventory of the entire sewer system in the Town’s GIS system and populating necessary attributes for efficient management; cleaning and televising all sewers, on a priority scale, over the next five years; and

rating the system using the Pipeline Assessment and Certification Program (PACP), with ratings linked to GIS. This project, when completed, will contribute to the achievement of the Town's smart city goals.

- Critical projects: The plan identified several critical projects, including force main overflow in the Ironwood area, the lining of brick sewers to address Inflow and Infiltration issues, and pump station improvements that need immediate attention. Inflow and infiltration (I & I) are terms used to describe the ways that groundwater and stormwater enter into dedicated wastewater or sanitary sewer systems.

Storm Water: There is no comprehensive understanding of the condition and needs of the Town's stormwater system. Some information was gathered as part of the feasibility study in 2005 that aided in establishing a storm water utility rate. Revenues generated by this fund are being used for projects geared toward improving water quality, such as Sugar Creek stream bank restoration and maintenance. Efficient storm water asset management necessitates a better understanding of asset conditions and future needs. Other short- and long-term projects include:

- Proposed National Pollution Discharge Elimination System (NPDES) regulations on Municipal Separate Storm Sewer System (MS4s) that would impose additional regulations regarding road salt and nitrates, adding costs to current operations and maintenance.
- Town staff prefers regional detention basins over smaller basins to achieve efficiencies. For example, a regional storm water detention basin may be the most efficient way to develop the currently un-annexed area by Towanda Avenue and Raab Road in the future.

Finances: Sanitary sewer operations and infrastructure investments are funded by an enterprise fund (the Sewer Fund). The Town's Finance Department rated this fund as "negative" in its FY 2015–2016 Financial Trends and Conditions Report and characterized it as being in a weak fiscal position to sufficiently meet the system's operational and capital needs in the future. The Sanitary Sewer Master Plan identified capital investment needs at \$6.1 million in the next five years (2017–2021) and \$9.5 million by 2026 and proposed a rate increase to cover these needs.

Storm water operations and infrastructure investments are funded by an enterprise fund (the Storm Water Fund). This fund appears to be stable. However, a comprehensive assessment of the system will be necessary to determine its fiscal stability.

Bloomington Normal Water Reclamation District (BNWRD) is a sanitary district that provides wastewater treatment for Bloomington and Normal. It operates two treatment plants, one on Bloomington's West Side (the "West Plant") and a newer one in Randolph Township (the "Southeast Plant," or "SE Plant" for short) that treats wastewater from east of Veterans' Parkway. BNWRD is anticipating the need to invest significantly in the West Plant within the next five years, an estimated \$150-160 million, to meet the new regulations. In addition, peak storm water discharges to the SE Plant exceed the plant's peak hydraulic capacity and necessitate expanding that capacity at a great expense to taxpayers [*See Community Snapshot and Outreach Report for more information*]. BNWRD staff believes that working closely with Town of Normal and City of Bloomington staff to reduce storm water I & I can save taxpayers this additional expense.



Anderson Park featuring a lush riparian buffer along Sugar Creek



Detention pond near the Blackstone Trails subdivision featuring native plants along its shore and an encircling bike trail

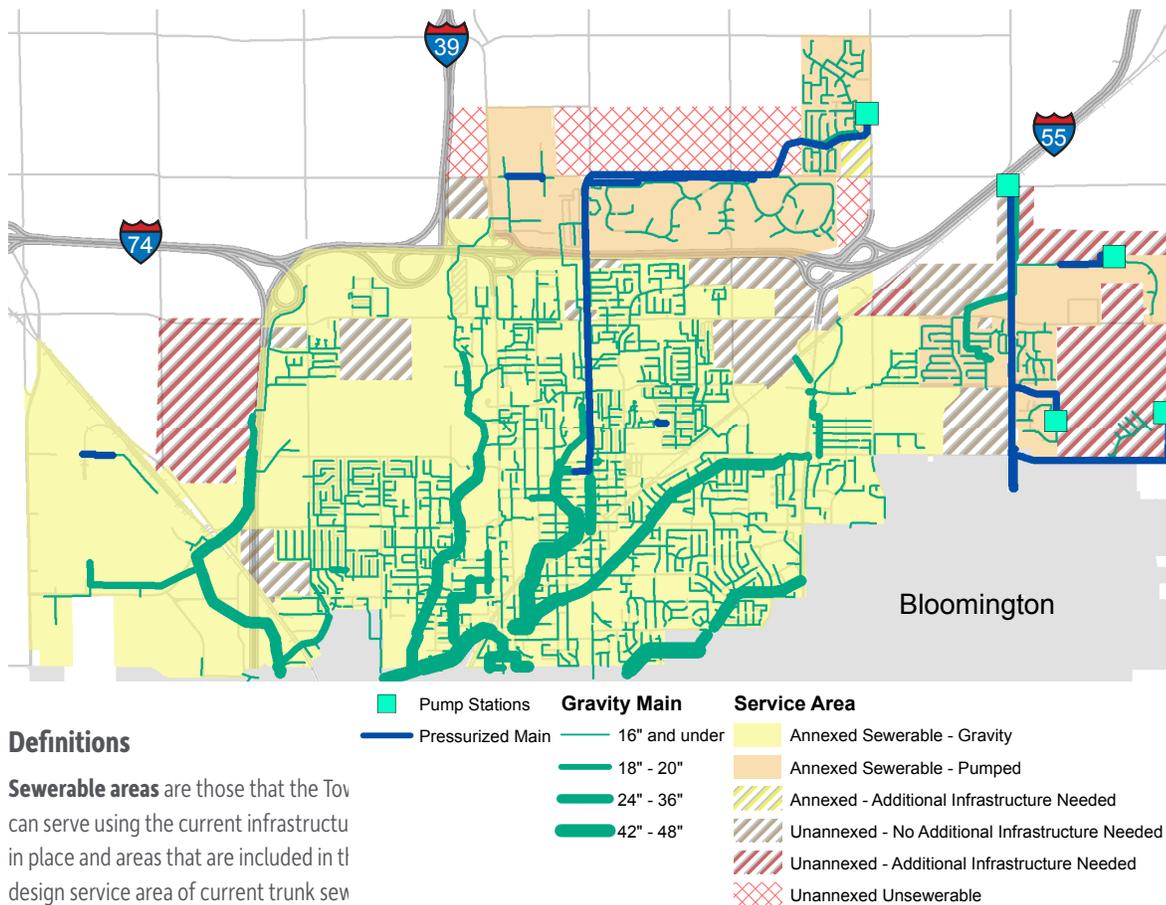
Strategy IP1.3—Provide Reliable and Efficient Sanitary Sewer and Storm Water Collection Systems to Protect the Public Health, Safety, and the Natural Environment

IP1.3a—Fund the Implementation of the New Sanitary Sewer Master Plan

This plan, adopted by the Council in July 2017, identifies several strategic and long-term improvements to the sanitary sewer system, to the tune of over \$15 million, within the next decade. Funding this plan adequately is important for the long-term growth and development of the community.

IP1.3b—Work with BNWRD to Identify and Mitigate I/I Issues in the Sanitary Sewer System

MAP IP2: Town of Normal Sewer Service Areas



Definitions

Sewerable areas are those that the Town can serve using the current infrastructure in place and areas that are included in the design service area of current trunk sewer or pump station service areas.

Unsewerable areas require significant additional investment on the Town's part to be served.

IP1.3d—Develop a Town-wide Stormwater Master Plan

Such a plan should comprehensively inventory and rate all storm water assets and related challenges using an industry standard rating system, identify improvements and prioritize implementation based on criticality.

IP1.3e—Continue to Require that All New Developments Provide Appropriate Storm Water Detention Facilities to Protect Water Quality

IP1.3f—Continue to Monitor and Mitigate Urban Stream Bank Erosion

The Town maintains 14.3 miles of creek within its boundaries. Beginning 2013, the Town implemented many streambank restoration projects to prevent erosion and protect water quality. The Town should continue to fund those projects.

IP1.3g—Utilize Green Infrastructure Solutions for Infrastructure Management,² Where Feasible

- The Town employs a no-mow policy along riparian buffers. This policy is both fiscally and environmentally responsible. The Town should encourage BNWRD to employ the same best practices to prevent erosion and improve water quality. (Q)
- The Town along with City of Bloomington and BNWRD should actively investigate the feasibility of green infrastructure solutions when the need for rebuilding the West Plant arises.

IP1.3h—Encourage Low Impact Development (LID) [See Figure IP2]

- Review existing ordinances and codes to determine opportunities for incorporating LID techniques. Example: Allowing commercial developments to build a portion of their “required” parking lot and leaving the rest as green space until such need arises. (Q)
- Identify appropriate LID standard engineering details as part of site development planning. (Q)
- Evaluate current construction methods to determine where LID techniques could be used to improve stormwater management.

Low Impact Development (LID) is an innovative approach to site planning, design and development that reduces stormwater impacts. Its basic principle is modeled after nature: manage rainfall at the source using uniformly distributed, decentralized micro-scale controls. LID's goal is to mimic a site's predevelopment hydrology by using design techniques that infiltrate, filter, store, evaporate, and detain runoff close to its source.

IP1.3i—Continue to Explore Opportunities to Establish a Regional Stormwater Detention Basin in the Area Bound by Shelbourne Avenue to the West, Veterans Parkway to the East, the Railroad to the South, and the Interstate to the North

FIGURE IP2: Low Impact Development

SOURCE: Origin of Man-Made Stormwater Runoff			
■ Parking and streets	■ Structure runoff	■ Alternative sources	
■ Hardscape areas	■ Landscape areas		
ACTION: Method of Managing Stormwater Runoff			
■ Convey	■ Infiltrate	■ Store	
■ Filter	■ Evapo-transporate	■ Reuse	
TOOLS: Means to Accomplish Actions with Technical Variations			
Green Street <ul style="list-style-type: none"> ■ Standard curb cut ■ Curb cut with sidewing ■ Concrete flush curb ■ Grated curb cut ■ Curb cut with sediment capture ■ Wheelstop curb 	Bioretention <ul style="list-style-type: none"> ■ Vegetated retention basin ■ Bioretention cell ■ Planter 	Constructed Wetlands <ul style="list-style-type: none"> ■ Constructed wetlands 	Landscape* <ul style="list-style-type: none"> ■ Tree Preservation ■ Soil Amendment ■ Impervious Surface Reduction ■ Plant Selection
Vegetated Swale <ul style="list-style-type: none"> ■ Meandering or linear ■ Restored wash 	Permeable Paving <ul style="list-style-type: none"> ■ Stabilized aggregate ■ Porous asphalt ■ Porous concrete ■ Structural grids ■ Permeable Pavers 	Green Roof <ul style="list-style-type: none"> ■ Rooftop garden ■ Downspout disconnection 	Rainwater Harvesting <ul style="list-style-type: none"> ■ Cisterns above ground ■ Cisterns below ground

Source: Mesa, Arizona LID Toolkit

TRANSPORTATION SYSTEMS

System Overview: The Town of Normal manages 425 lane-miles of streets. This extensive system includes arterial and collector streets providing connections to destinations throughout the community, and local streets primarily used to reach residential areas. The Town also maintains approximately 15 miles of Constitution Trail, 8 miles of on-street bicycle infrastructure and over 220 miles of sidewalks. The Town’s multimodal and intermodal transportation facility at Uptown Station brings together Amtrak passenger rail, Connect Transit public transit service and inter-city bus carriers. Public transit and private cabs also provide connections to the Central Illinois Regional Airport in Bloomington.

Capital Investments: The Engineering and Public Works departments oversee the management of the transportation system, with Parks and Recreation also participating in Constitution Trail management. This work requires ongoing interaction and coordination with the Illinois Department of Transportation, City of Bloomington, McLean County, Connect Transit, rail companies, and other private transportation providers. The Town attempts to align its capital investments with other jurisdictions and private entities to streamline transportation improvements and reduce costs. The Town prioritizes the maintenance of existing systems in good condition over transportation system expansion. Approximately \$3.8 million is budgeted in the current Transportation Improvement Program (TIP) for concrete street rehabilitation and street resurfacing at various locations. The Town also engages in ongoing improvements to sidewalks, including ADA compliance, and enhances safety through the installation of traffic signals at intersections where warranted. In addition, the following Capital Improvement Projects are documented in the TIP and/or the Town’s budget:

1. Uptown Underpass: The Town is obtaining environmental clearances and developing designs for a potential underpass to provide grade-separated access for Amtrak passengers and the general public crossing the Union Pacific railroad tracks, in the plaza between Uptown Station and the Children's Discovery Museum. This underpass is intended to provide safe passage between Uptown Circle and the area to the south now designated as Uptown 2.0, which is the next major redevelopment area in Uptown Normal. Development of the underpass will become increasingly important as freight train traffic grows and as high-speed rail service is fully implemented.
2. Sustainable modes of transportation: The Town continues to implement the Bicycle and Pedestrian Master Plan adopted in 2009. Ongoing capital investments include resurfacing the Constitution Trail, building additional trail connections within the Town, adding on-street bicycle improvements and extending the Historic Route 66 Bicycle Trail. The recent adoption of a Complete Streets Policy by the Town will mean increased focus on the implementation of bicycle, pedestrian and transit improvements to Normal streets.
3. East Side Highway: The final study regarding the proposed East Side Highway is complete, and as of this writing the resulting Environmental Assessment is being reviewed by the Federal Highway Administration. Given the scale of this project and the uncertainty of the necessary federal funding, there is no expectation that the highway would be built during this plan horizon period. In the meantime, both Normal and Bloomington will monitor traffic levels and patterns as called for in the East Side Highway Study. Presumably, if both Normal and Bloomington fully employ the smart growth development principles expressed in the land use plans, the highway may never be needed.

Finances: The majority of the transportation work is funded through state Motor Fuel Tax (MFT) revenues and the Roadway Fund along with local motor fuel tax, sales tax, and general fund revenues. State and local MFT funds are based on the amount of fuel used. This greatly reduces their ability to keep pace with the cost of transportation system maintenance as vehicles continue to be designed for greater fuel efficiency and as people drive fewer miles. There is also an inherent conflict between collecting revenue generated by fuel consumption while advocating for more sustainable, lower fuel consuming transportation. Outside sources of funding are also uncertain, as federal funding for transportation is also falling far behind the cost of maintaining the nation's infrastructure. This is particularly impactful as the cost of major projects such as the underpass continue to escalate.

Connect Transit

Connect Transit provides transit service for Normal and Bloomington. In recent years Connect ridership has dramatically increased following a re-branding initiative, new marketing strategies, and a complete overhaul of the route system. Connect has also begun to participate in local planning initiatives and has clearly indicated 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 compact, efficient development. 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 income.

Illinois Department of Transportation

The Town, often working with the City of Bloomington and the McLean County Highway Department, maintains a close working relationship with various departments within the Illinois Department of Transportation (IDOT). IDOT is the gatekeeper for much of the federal funding that the Town is eligible to seek, so preserving this connection is critical. For example, IDOT support and cooperation has been vital to securing resources for elements of the Uptown redevelopment, including Uptown Circle and Uptown Station itself. In addition, significant transportation corridors in the Town, such as Main Street and Veterans' Parkway, are under the state's jurisdiction, and thus outside of the Town's control. In order for essential work to be done, there must be continued cooperation and coordination with IDOT.

Metropolitan Planning Organization (MPO)

An MPO is a regional transportation policy-making organization composed of representatives from local government and transportation implementers. MPO's ensure that existing and future expenditures for transportation projects and programs are based on a comprehensive, cooperative, and continuing (3C) planning process at a regional level. Federal funding for transportation projects and programs are channeled through this planning process.

McLean County Regional Planning Commission (MCRPC) is the designated MPO for the Bloomington-Normal urbanized area. Current members include the City of Bloomington, Town of Normal, McLean County, Connect Transit and the Airport Authority, along with IDOT, the Federal Highway Administration, and the Federal Transit Administration.

Strategy IP1.4—Maintain a Safe, Reliable, and Efficient Transportation Network to Serve All Users

IP1.4a—Continue to Work with MCRPC and Other Partners to Address Transportation Issues at a Regional Level

- Participate in the Metropolitan Planning Organization’s (MPO) planning efforts, including the annual Transportation Improvement Program (TIP) and active membership on the Transportation Technical and Policy Committees.
- Participate actively in periodic updates of the Long Range Transportation Plan (LRTP) and other transportation studies (Example: Main Street Feasibility Study).

IP1.4b—Provide Data and Support to MCRPC for Increased Utility of the Transportation Model, Transportation Dashboard, and Other Data-Driven Initiatives

- Make relevant transportation data available to MCRPC at regular intervals.
Example: inventory of PASER³ street rating and other condition ratings on sidewalk and trail.
- Advise on structure and operability of MCRPC transportation data dashboard.
- Provide available data on trail counts.

IP1.4c—Advance the Objectives of the Forthcoming LRTP (BN Mobile)

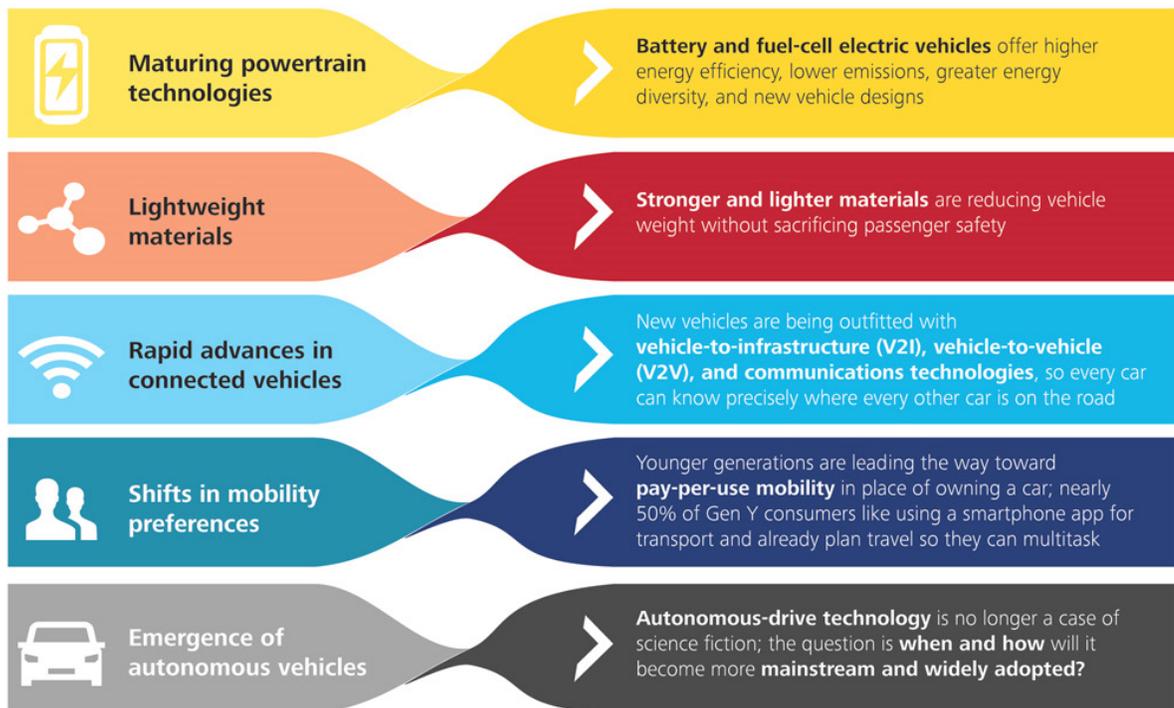
- Maintain the current transportation system in good condition.
- Focus resources on strategic improvements to the transportation system.
- Emphasize thoughtful expansion of options such as transit, bicycle and pedestrian facilities, noting their benefits for transportation sustainability and public health. *[See Health & Sustainability Element for detailed discussion on bicycle, pedestrian and transit improvements.]*
- Improve bicycle and pedestrian infrastructure.
 - The Town continuously improves its bicycle and pedestrian infrastructure in accordance with its bicycle and pedestrian master plan. *[See Infrastructure & Public Safety Element of the Community Snapshot and Outreach Report for a list of implemented projects.]*
 - This plan recommends implementing Complete Streets and Vision Zero policies more aggressively. Prioritize implementation near popular destinations such as parks, schools, transit stops, and Neighborhood Centers. *[See Health & Sustainability Element for further discussion.]*
- Promote programs that support walking, bicycling and transit.
- Focus efforts on Transit Oriented Development. This could include additional residential

development in Uptown and enhanced coordination with Connect Transit on transit-supportive residential densities through redevelopment or new development particularly in areas with 30 minutes or better transit service.

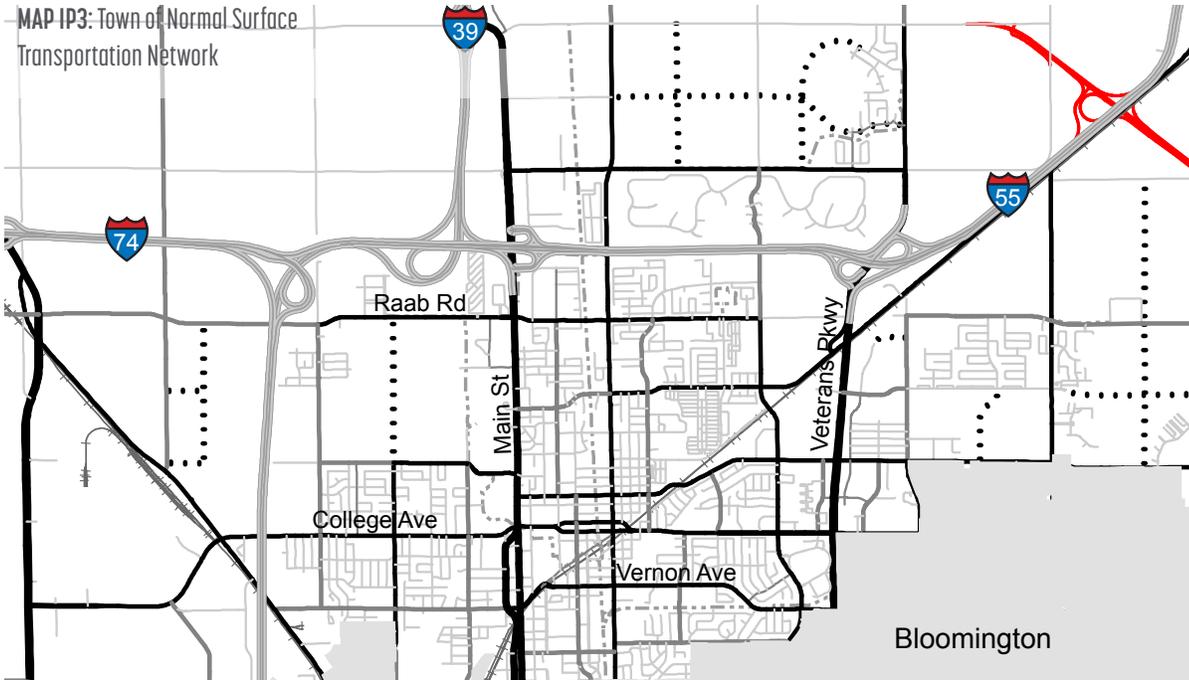
- Continue, and if possible expand, staff cooperation between Normal and Bloomington to:
 - Coordinate street and trail projects
 - Seek out opportunities to jointly participate in regionally significant projects that benefit the Town
 - Cooperate in sharing information and resources where feasible
 - Solicit the participation of people representing disadvantaged groups or areas in the design of transportation programs and opportunities
 - Create awareness among policy makers and public of the increasing transportation funding shortfall
 - Develop a project selection methodology and criteria which also support neighborhood redevelopment and economic revitalization in underserved areas
 - Continue to site, build and maintain transportation infrastructure with attention to environmental impact
 - Design transportation infrastructure to support intermodal freight and appropriate access for larger and fully loaded vehicles
 - Participate in the ongoing regional process to analyze transportation trends and technical advances, as well as their potential role as drivers of shifting transportation choices and economic and social change.

[See Corridors Chapter in the Planning Framework section for additional discussion on transportation corridors.]

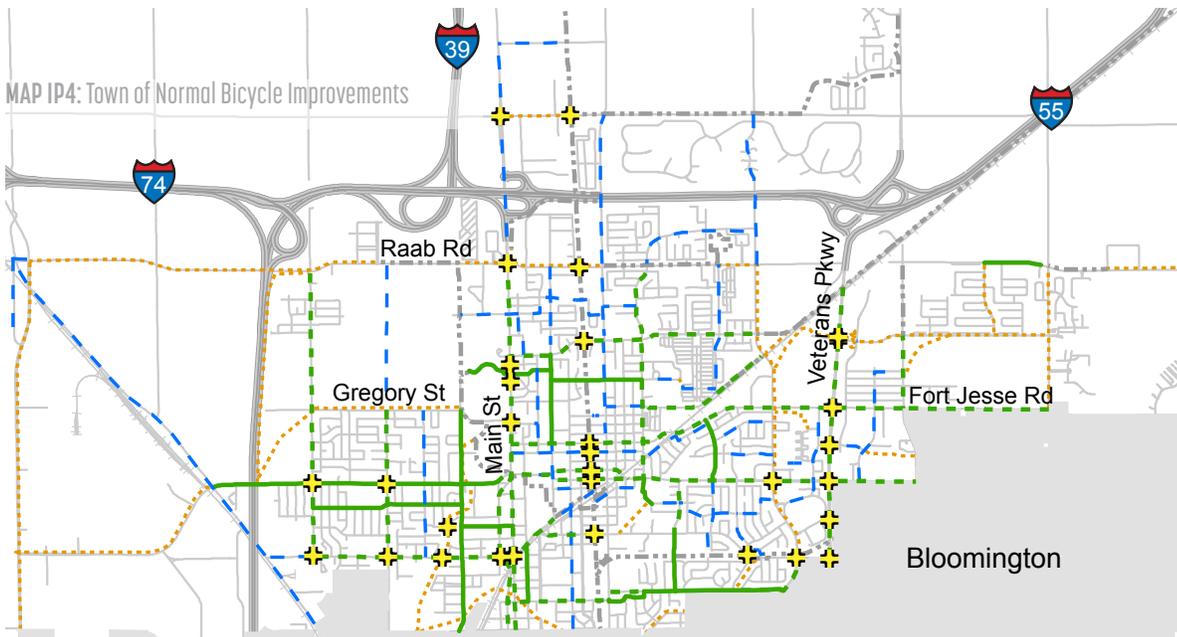
FIGURE IP3: Converging Forces Transforming the Future Evolution of Automotive Transportation and Mobility



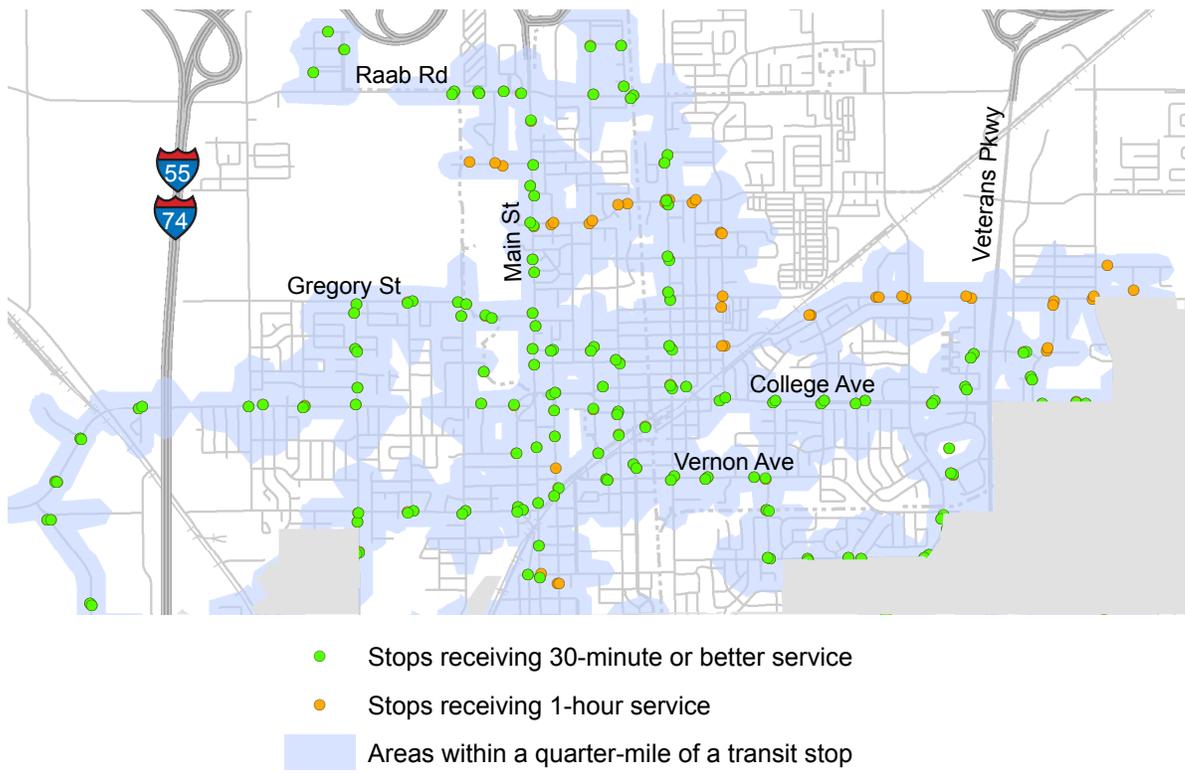
MAP IP3: Town of Normal Surface Transportation Network



MAP IP4: Town of Normal Bicycle Improvements



MAP IP5: Town of Normal Transit Service Areas



Technology Infrastructure

There are three main wired broadband residential service providers and many wireless service providers in Normal. Wired providers include Frontier (DSL), XFINITY from Comcast (CABLE) and the new provider MetroNet (Fiber). There are ten service providers in addition to the Central Illinois Regional Broadband Network (CIRBN) serving businesses in the community. Except for CIRBN, the Town has no control over any of the telecommunications providers. The public sector and educational institutions banded together and created CIRBN with American Recovery and Reinvestment Act (ARRA) funds in 2014. As one of the key founding partners of CIRBN, the Town of Normal continues to be a key stakeholder in the management and operations of the network. In this capacity, the Town should work in close collaboration with CIRBN to strategically expand its footprint in Normal. *[See Strategy EV 2.5 for additional discussion on this topic.]*

Strategy IP1.5—Build Quality Telecommunications Technology Infrastructure

IP1.5a—Ensure the Availability of Quality Broadband Infrastructure to All the Activity Centers for Their Long-Term Vibrancy

The majority of the Town’s Activity Centers are adequately served either by the Central Illinois Regional Broadband network (CIRBN) or other providers. The Town should work with CIRBN to strategically expand its network to areas that are currently not well served. These include:

- West side—Mitsubishi/Rivian Area (Regional Center): With the exception of Mitsubishi/Rivian property, this area is generally underserved by technology infrastructure. The expansion of CIRBN infrastructure to this area will ensure viability of this area as a regional employment center.
- Route 66 cultural center along Pine Street between Beech Street and Linden Street (Local Center): The expansion of CIRBN’s infrastructure to this area will help small local businesses as well as enhance the Town’s Route 66 tourism efforts.
- Hovey Avenue and Cottage Avenue (Neighborhood Center anchored by Jewel Osco)
- College Avenue and Garden Road (Neighborhood Center that is home to Carl’s Ice Cream)

These areas were discussed with CIRBN’s Executive Director at a cursory level and were deemed strategic growth opportunities for CIRBN as well. Expansions to the Neighborhood and Local Centers are estimated at approximately \$25K to \$50K. Expansion to the west side must be studied.

IP1.5b—Provide Free, Reliable, and Secure Wi-Fi in Parks and Public Places

Normal currently provides free Wi-Fi in a number of parks including One Normal Plaza, Anderson Park, Fairview Park, and Maxwell Park. The Town should strive to keep the infrastructure up to date to ensure reliable and secure Wi-Fi in these areas. When feasible, the Town should expand to other parks, particularly those located close to existing CIRBN infrastructure, such as Rosa Parks Commons, Shepard Park, and Fell Park.

The Town also provides free Wi-Fi in Uptown. Currently the Town, in partnership with CIRBN, is in the process of upgrading that technology to provide up to 1 Gigabyte Wi-Fi speeds. The Town must consider expanding this service to Uptown South when that development occurs.

IP1.5c—Partner with Connect Transit to Provide Free Wi-Fi Near Transit Stops

Wi-Fi availability near transit stops can serve multiple purposes and help position the Town of Normal as a Smart City. Coupled with a power supply, the right equipment and Wi-Fi, the transit stops can host many technologies such as interactive information stations. The Town should utilize the Innovation District as a pilot area to test this concept in partnership with Connect Transit, CIRBN, Illinois State University (ISU), and others.

The Town should also encourage Connect Transit to investigate the feasibility of providing free Wi-Fi on buses.

FIRE SYSTEMS

System Overview: The Town of Normal Fire Department (NFD) provides fire suppression, fire prevention, and Emergency Medical Services (EMS). NFD currently has three staffed fire stations with sixty firefighters to serve the community: the Headquarters station at 606 S Main Street, Fire Station 2 at 1300 E. College Avenue, and Fire Station 3 at 1200 E Raab Road. NFD is equipped with five engine/pumpers, two trucks, four paramedic ambulances, a Paramedic Chase Vehicle, a heavy rescue truck, four trailers (one each for technical rescue, educational, fire investigation, and heavy duty), three prevention vehicles, utility vehicles, and vehicles for chiefs.

ISO Rating: The Insurance Services Office (ISO) surveys communities on a regular basis to determine their Public Protection Classification. A classification of 1 to 10, 1 being the best and 10 being the worst, is assigned based on several factors including response times, equipment, certifications, water supply, and dispatch. ISO ratings are used by the insurance industry for determining insurance rates for properties within the Town. Per the ISO survey conducted in 2013, Town of Normal maintained a class 2 ISO rating. This puts Normal among the 1% of communities nationwide that have achieved this rating.

Fire Response Times: Response time is computed by adding alarm processing time, turnout time, and travel time. Alarm processing time includes the time from the minute the dispatcher received a call to the point of notification to the responding agency. Turnout time includes the time from when the call was received to when the vehicle leaves the station. Travel time is the time elapsed between leaving the station to arriving at the scene. The nationally accepted standard is a six (6) minute response time (one minute each for alarm processing and turnout time + four minutes travel time). NFD strives to accomplish this benchmark on 90% of its calls. In 2016, the NFD responded in under six minutes 92.3% of the time.

Capital Investments: A multi-year strategic planning process determined that the conditions and locations of the current fire stations did not adequately meet the requirements for emergency response services for the Town of Normal. After thorough analysis of calls for service volume, growth trends, and travel distances, the Town Council, in 2013, directed staff to pursue a plan to relocate its three fire stations over the next decade to optimize response times and effectively serve the community. Two key assumptions of the 2013 NFD fire station relocation plan include 1) the Town of Normal corporate limits will not grow much further in any direction and 2) Mitsubishi Motors, located in the community on the west side during the planning process, will continue to generate low call volume like it did until 2013. With that plan in place, the following capital investments are anticipated in the next decade

- Relocation of all three fire stations: The new headquarters was prioritized first and was completed in fall 2017. This new station (LEED Bronze certified) is located near ISU campus and Uptown, two areas with high call volumes, with easy access to major thoroughfares. Station 2 is scheduled to be relocated by 2019, and Station 3 by 2021 .
- Information Technology (IT) upgrades: NFD recently installed Automatic Vehicle Location (AVL) on all its apparatus, a technology that improved run times. NFD is committed to making other necessary software and hardware upgrades that improve internal operational efficiencies and external communications. To that effect, NFD will continue to incur some costs over the next few years to upgrade its own IT systems and those of its partner agencies *[METCOM related information below]*.

Finances: The Fire Department's operations are paid through the General Fund. The cost to relocate the fire stations is paid through the issuance of bonds. The Town issued approximately \$8 million dollars in general bonds to pay for the Headquarters station. The cost to relocate the other two fire stations has not been determined yet.

NFD's apparatus acquisition and maintenance is funded by the Vehicle and Equipment Reserve Fund, which is used to accumulate resources to fund the replacement of all the Town's vehicle and equipment needs. The Finance Department rated this fund as Positive with Caution for FY 2016.

FIRE SYSTEMS *continued—*

McLean County Emergency Telephone Communications (METCOM)

METCOM provides fire, EMS, and police dispatch services for the Town of Normal and the majority of McLean County aside from the City of Bloomington. The Town of Normal is a financial contributor and an active governing partner in METCOM operations. METCOM's capital investment needs will therefore have an impact on Town's budget. METCOM is currently in the process of investing over \$85K to upgrade its dispatch system. This upgrade will allow seamless integration and exchange of data across agencies.

No major capital improvements are planned in the near future. However, changes to the state 911 reauthorization legislation might necessitate additional investments that are currently unpredictable.

Emergency Management

The McLean County Area Emergency Management Agency (EMA), staffed by 30 people, serves to coordinate relief in the event of a disaster in McLean County. Town of Normal staff work closely with EMA and Illinois State University on community-wide emergency preparedness issues.

Intergovernmental Cooperation

There is a great deal of cooperation between the Town of Normal and the City of Bloomington fire departments. Both are part of the Mutual Aid Box Alarm System (MABAS), which provides mutual aid to all member agencies. Fire response times on the east aide (east of Veterans Parkway along Fort Jesse Road) are an issue for both communities and continue to present an opportunity for future collaboration.

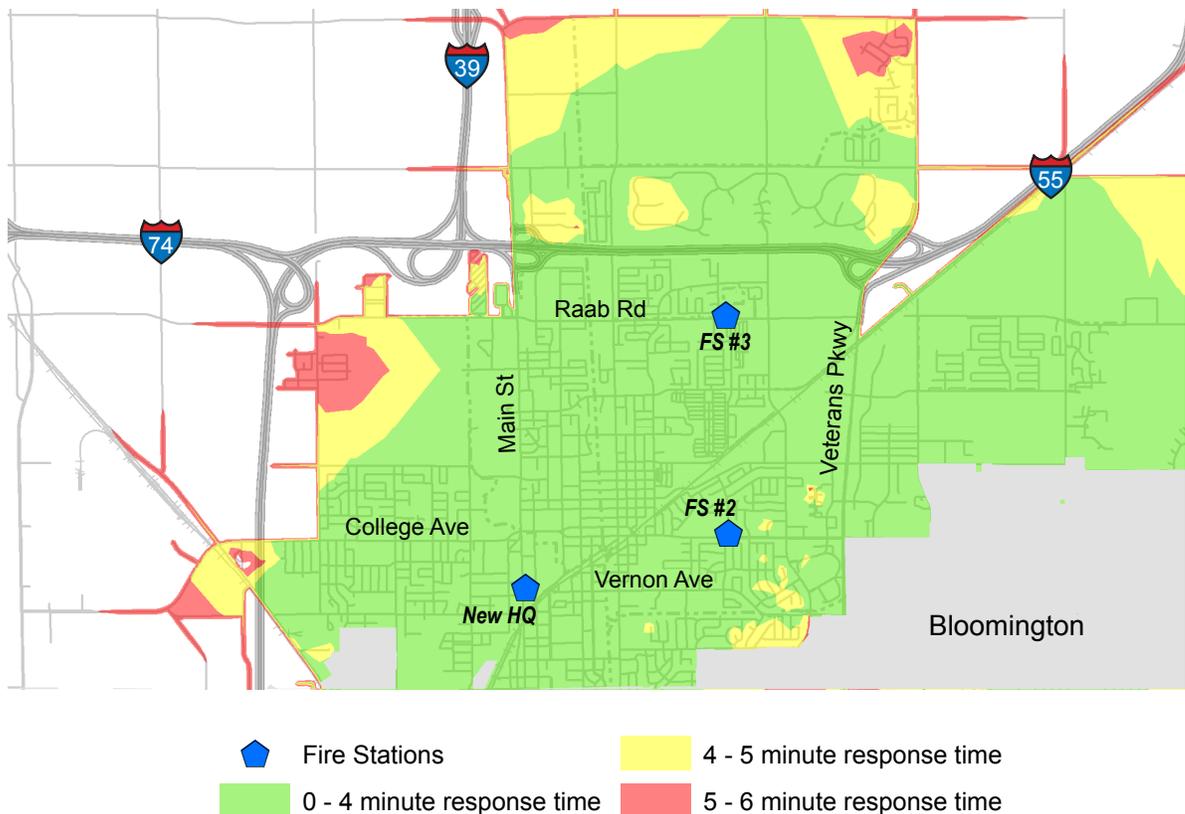


Strategy IP1.6—Provide Adequate Fire and Emergency Response Services to Protect the Lives, Health, Safety, and Livelihoods of Residents and Businesses

IP1.6a—Ensure that Land Development Policies Support NFD's Goal of Responding to 90% of Calls Within a 6-Minute Response Time

- The Town should adopt a comprehensive annexation policy consistent with the long-term vision and goals established in this plan. (Q)
- Ensure a connected street pattern, where possible. Such connectivity can improve emergency response times by providing several routes to any given address.
- The west side of Normal, particularly the Mitsubishi/Rivian area, is in need of major redevelopment. Any subarea planning to trigger development in this area should be carefully coordinated with the Fire Department.

MAP IP6: Town of Normal Fire Service Area



COMMUNITY FACILITIES

The Town's community facilities include a collection of buildings, open spaces, and service areas that comprise the Town's public service infrastructure and improve quality of life for everyone. This section also considers the role of certain community facilities like schools, which are not owned and operated by the Town but serve several important functions beyond their primary roles. When paired with playgrounds, sports fields, or Town parks, schools are a catalyst for neighborhood activities and development that create new choices for residents and create the flourishing atmosphere that enhances a sense of place. Map YY identifies the geographic locations of all community facilities addressed during the planning process.

- **Parks and Recreation:** The Parks and Recreation Department oversees and maintains all park properties. Improvements are predominantly guided by the Parks and Recreation Master Plan, updated in 2015. This plan includes a comprehensive inventory of all parks along with their conditions and needs, level of service, and geographic distribution. It identifies the west side of Normal as underserved by neighborhood parks based on a variety of criteria and recommends acquiring land in that area if and when it becomes available. Additional facility recommendations include more green space in Uptown, a new soccer complex, and an indoor community/aquatic center.
- **Fire Stations:** *[See Fire Systems for more discussion on capital improvements.]*
- **Water Department facilities:** The Water Department is responsible for the oversight and maintenance of its buildings. *[See Water Systems for more discussion on capital improvements.]*
- **Other Town facilities:** The Facilities Management Department is responsible for all other Town-owned and -operated facilities, including Uptown Station/City Hall, the Normal Theater, the Children's Museum, public works buildings, police facilities, parking decks, and other service buildings. The department completed a Facilities and Energy Management Master Plan in 2014 that included facility conditions assessments and energy audits for 11 Town facilities. This assessment revealed that many of the facilities were in good condition but identified a wide range of energy efficiency performance issues; identified the needs of each building at the component level and recommended systematic replacement; and recommended enhanced and ongoing data gathering to assist in dynamic facilities planning.

The Uptown South redevelopment may necessitate the relocation of the Police Department facility. Given that the department's functions are increasingly becoming mobile, meaning officers can conduct much of their business in their cars, the need for the administration building to be located in Uptown may not be as critical.

- **Normal Public Library (NPL):** The NPL's staff and Board of Trustees, a group of seven elected officials, oversee the operations and maintenance of this facility. The NPL has been the subject of much discussion and planning since 2015. Its current facility, located at 206 West College Avenue, is out of room to grow in place. After reviewing options thoroughly, it has been established that the new facility will become the anchor for development in Uptown South. The new facility will be double its current size, with a significant amount of space dedicated for community activities. This facility is currently in the design phase. Initial estimates for its construction were upwards of \$20 million. The Town Council and staff have voiced their strong support for the new library's Uptown location and have been integrally involved in the planning process of this facility.

- **Schools:** Unit 5 is the designated public school district serving the Town of Normal. It is governed by its own board, a group of seven elected officials. Town officials and Unit 5 work cooperatively in many ways. The most notable from a land use perspective is collocation of schools and parks—a model that has served the community well for many decades. However, there is room for improvement in other areas. Unit 5 does not have a formal process for involving Town staff on school siting issues. The Town has in the past had to reluctantly accommodate new schools along the edges of the community, against the spirit of their comprehensive plans. On the other hand, the Town does not have a formal process to alert Unit 5 of annexation agreements or development proposals being reviewed and approved. Too often the schools are faced with accommodating new growth with little to no opportunity to provide meaningful feedback. Neither of these situations is ideal, and there is a strong desire among current staff and policy makers on both sides to increase collaboration on these issues.

Unit 5 recently conducted a district-wide demographic study. This study revealed that several schools on the east side—where much of the growth of recent decades occurred—are either at capacity or overcrowded. These include Grove and Towanda Elementary Schools and Normal Community High School. Vacant land in this area continues to be positioned well for new growth, heightening the need for collaboration, particularly on land use issues, in this area.

- **Activity and Recreation Center (ARC):** The ARC center is located at 600 E Willow Street in Normal. It is managed by the Normal Township and primarily caters to residents over 55 years. The ARC includes fitness facilities and other community spaces, and since the opening of its new facility in April 2016, its membership has expanded from under 1,000 to nearly 4,000. Given the popularity and multifunctional nature of this space, it could serve as a valuable community resource even beyond its originally intended uses. Potential partnerships between the Town and the Township could include informational events, transportation programs, Parks and Recreation programming, and more.



Source: NPL



Strategy IP1.7—Ensure that Normal’s Community Facilities Continue to Serve Community Needs as the Town Grows and Develops

IP1.7a—Ensure the Provision of Community Facilities in a Manner Consistent with the Vision and Goals of this Plan [See Community Identity & Public Places Element]

- Facilities intended to serve the entire community—like Town offices and the Normal Public Library—should be located in Uptown, the centrally located and accessible Town Center. Those intended to function at a neighborhood scale—like neighborhood parks and schools—should be distributed equitably.
- Encourage compact and contiguous development patterns that allow for the provision of community facilities, like parks and schools, in an economically and socially responsible fashion.
- Explore funding models that allow the Town to equitably distribute the cost of community facilities. Example: Facilities which contribute to the welfare of all residents can reasonably be provided for through general revenue streams, while more localized facilities, such as parks that support one or two neighborhoods, may be supported by impact fees or Special Assessment Districts.
- Ensure that public facilities are designed and used for multiple purposes. Examples: A residential street becoming a park (“Play Street”) in underserved areas; a storm water detention pond doubling as a park with a trail along its periphery.

IP1.7b—Enhance Inter-Governmental and Regional Coordination in Locating and Sharing Community Facilities

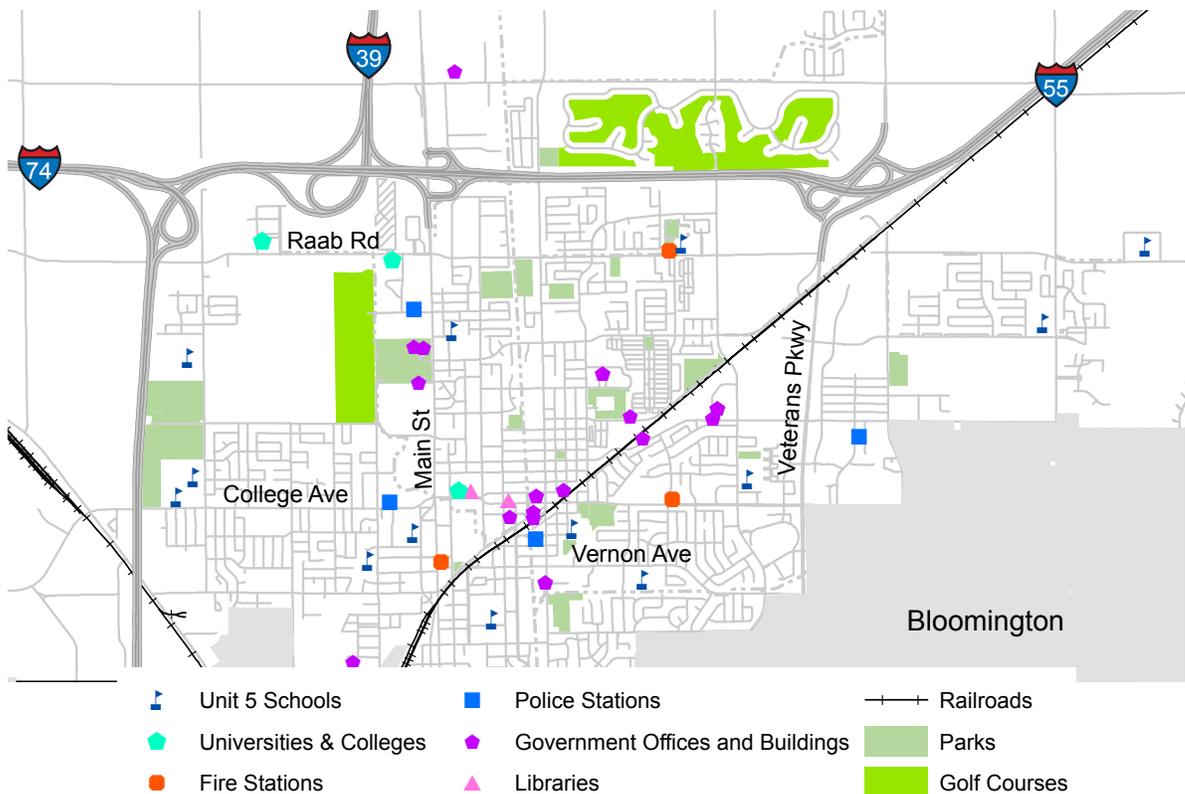
- Co-location of schools and parks has served the community well for many decades. The Town, in cooperation with Unit 5, should continue to explore additional opportunities for facility-sharing or colocation.
- Establish a formal process to ensure adequate input from Unit 5 on land use and development matters. Encourage Unit 5’s staff and board to reciprocate on school siting and improvement issues. The recent conversations about resurrecting a joint Unit 5 school board and Town of Normal joint committee would greatly assist with this process, when it comes to fruition. The regional consistency review process administered by MCRPC and the development review process administered by the Town staff can be the vehicles to formalize this process.
- The Town should continue to explore opportunities to share the services of one of the proposed future fire stations with the City of Bloomington.
- The Parks and Recreation Department should continue to explore opportunities to share facilities and programming with Bloomington Parks and Recreation, Normal Public Library, Normal Township’s Activity and Recreation Center, Illinois State University, Heartland Community College, and other entities when possible.
- The Town should continue to support the Normal Public Library’s efforts to relocate to Uptown South.

IP1.7c—Continue to Locate and Build Public Facilities in a Manner that Raises the Bar for Architectural Distinction, Placemaking, and Energy Efficiency [See CP2.1b for more discussion]

- Strive to build facilities that follow the principles of LEED certification, the Living Communities Challenge, or similar programs.
- Explore alternative energy sources such as solar, wind and geothermal.
- Locate public buildings in a manner that allows them to serve as anchors to Neighborhood Centers or Local Centers, promote mixed use developments, or promote neighborhood redevelopment.

IP1.7d—Continue Implementation of the Facilities and Energy Master Plan and Update It Periodically

MAP IP7: Community Facilities



Solid Waste Management

The Public Works Department manages solid waste disposal services. The Town partners with the Ecology Action Center (EAC), the City of Bloomington, and the County to effectively manage and dispose of solid waste at the regional level. The EAC updates the McLean County Integrated Solid Waste Management Plan every five years. The impending closure of the McLean County Landfill, significant changes in recycling and waste technologies, and a stagnating community-wide recycling rate all contributed to the need for an entirely new 20-year solid waste plan instead of a short-term update. The new plan prioritizes commercial recycling, construction and demolition recycling, multifamily recycling, food waste recycling, a permanent household hazardous waste facility, and increased outreach and technical assistance. [See the *Twenty-Year Materials Recovery and Resource Management Plan for McLean County, Bloomington, and Normal, Illinois* for more information]

INFRASTRUCTURE FUNDING SOURCES

Pay-As-You-Go Financing Cash and Savings	Pay-As-You-Use Financing Debt Financing	Other Financing
Taxation <ul style="list-style-type: none"> ■ General Taxes ■ Special Dedicated Taxes User Charges Capital Reserves and Fund Balance Federal Grands and Aid State Grants and Aid Local Option Taxes <ul style="list-style-type: none"> ■ Sales Taxes ■ Fuel Taxes ■ Income and Payroll Taxes ■ Vehicle Taxes 	Bond Financing <ul style="list-style-type: none"> ■ General Obligation Bonds ■ Revenue Bonds ■ Private Activities Bonds ■ Leasing-Revenue Bonds ■ Green Bonds Revolving Loan Funds <ul style="list-style-type: none"> ■ Environmental (State) ■ Transportation (State) 	<ul style="list-style-type: none"> ■ Joint Development of Public Private Partnerships (PPP) ■ Infrastructure Investment Funds ■ Private Non-Profit Philanthropic Partners ■ Crowd Funds

General taxes refer to broad-based taxes on residents and businesses. They consist of sales tax, property tax, and local income or wage taxes and are often used to finance local infrastructure projects that yield community-wide benefits.

Special dedicated taxes are more narrowly-based taxes and are deposited in many local governments' general fund or in special funds to finance local infrastructure.

User charges are fees imposed on local residents and businesses for their use of utilities and other public enterprises. These fees are typically collected into an enterprise fund that funds local infrastructure projects.

Capital reserves hold money saved and accumulated by local governments to be designated to pay for recurring and small capital projects. Under certain circumstances, general fund balances become a source for infrastructure financing.

Federal and state grants and aid programs are available to help fund many local infrastructure needs. These grants have the advantages of sharing the cost of infrastructure projects and enabling local governments to fund capital projects; however, federal and state governments often impose inflexible restrictions on the recipients' use of grants.

- **Transportation grants** can be used for a variety of different projects. Large-scale projects can seek funding from federal grants, such as the Transportation Investment Generating Economic Recovery grant. Smaller projects, such as work on Town streets, can seek funding under the urban subsection of the Surface Transportation Program. This program can also provide funding for bicycle programs, planning and research, and some categories of bridge funding. Additionally, the Federal Transit Administration provides funding in the form of formula grants for capital and operating costs. Along with the Downstate Operating Assistance Program, transportation such as Connect Transit can receive funding from these options.

General obligation bonds (GO bonds) are the long-term obligations of local governments backed by the issuer's full faith and credit and repaid from general tax revenues. GO bonds are traditionally used to finance projects that do not yield revenues.

Revenue bonds, also referred to as nonguaranteed debt, are typically issued to finance public facilities that have definable users with specific revenue streams. These bonds are secured by the pledge of defined revenue sources generated from the bond-funded projects.

Private activities bonds (PABs) are a type of municipal bond issued by local governments on behalf of a private business to build those projects that benefit private entities but also serve some public purpose.

Leasing-revenue bonds are used to finance local government operational expense through a contractual arrangement between private or nonprofit equipment and facility owners or construction builders which transfers the use and ownership of that equipment and/or facility for a negotiated period of time.

Green bonds are regular bonds but issued to finance specific “green” projects that have significant environmental benefits.

Example: In 2016, New York’s Metropolitan Transportation Authority issued \$500 million in Transportation Revenue Green Bonds for infrastructure renewal and upgrade projects on the New York City Transit.

Local option taxes are new tax options that can be authorized at the state or local level and levied at the county or municipal level for infrastructure-related purposes. Revenues from local option taxes can be earmarked for building special local infrastructure projects. Some forms of these taxes include:

- Local Option Sales Taxes
- Local Option Fuel Taxes
- Local Option Income and Payroll Taxes
- Local Option Vehicle Tax

Example: Like the local option sales tax rate increase approved by both Normal and Bloomington in 2015 for mental health services, many communities are using these options to pay for much needed transportation infrastructure improvements.

Value Capture

■ **Impact Fees** are one-time charges imposed on new businesses or property owners to pay for a share of the costs of new development activities. Improvements must benefit those who pay the fees.

Example: School and parkland impact fees imposed by Normal and Bloomington.

■ **Special Assessment Districts** are formed to include a specific area in which property owners or businesses agree to pay a special property tax assessment to fund a proposed improvement or service from which they expect to benefit.

Example: Kansas City, Missouri, recently established the Downtown Transportation Development District to collect a 1% sales tax on sales within the district. The sales tax revenue will be used to help fund a planned \$102 million streetcar line.

■ **Tax Increment Financing** is a mechanism to capture the new or incremental taxes that are created when underutilized and vacant properties are redeveloped. Future captured revenues can be used to finance the infrastructure improvements.

Joint Development is a formal agreement between local governments and private developers in which private developers contribute some benefits back to local governments or jointly share costs of infrastructure improvement with local governments.

Example: Miami-Dade County in Florida initiated joint development projects with private developers for the Dadeland North Metrorail Station. The agreements were structured in a way that benefited the involved parties in proportion to their stake and risk. One such agreement allows the Miami-Dade County transit agency to receive either \$400,000 or 5% of gross revenues annually from developed commercial projects near the station.

Public-Private Partnerships or joint developments can take many forms:

■ A **Design-Build** arrangement is an instance where a government agency establishes a contract with a private company that assumes the design and construction phases of the infrastructure projects.

■ In a **Design-Build-Operate-Maintain** arrangement, contracted private entities are responsible for project design and construction, as well as operation and maintenance after the project is complete.

■ In a **Design-Build-Finance-Operate-Maintain** arrangement, private entities take the responsibility of fully or partially funding infrastructure projects along with the design and construction phases, operation, and maintenance. Public entities still retain the ownership of the privately built transportation projects.

INFRASTRUCTURE FUNDING SOURCES *continued*—

State Revolving Loan Funds

- **Environmental State Revolving Funds (SRF)** are state-run entities capitalized by federal funds and state matching funds that offer loans with below-market interest rates to local jurisdictions. Currently there are two types of environmental SRFs, Clean Water State Revolving Funds and Drinking Water State Revolving Funds. The Illinois SRF Program identifies the following as eligible projects:
 - new drinking water or wastewater infrastructure construction;
 - upgrading or rehabilitating existing infrastructure;
 - stormwater-related projects that benefit water quality; and
 - a wide-variety of other projects that protect or improve the quality of Illinois's rivers, streams, and lakes.
- **State Infrastructure Banks** offer low-interest loans and non-grant forms of credit enhancement to public and private sponsors of local transportation projects. They are capitalized with seed money from federal transportation aid and state-matching funds. At the time of this writing, the State of Illinois has been investigating this option but has not yet established an Infrastructure Bank. Local governments should advocate for establishing this funding stream.

Infrastructure Investment Funds

An infrastructure investment fund is generally defined as an entity in which large investors pool their financial resources and employ experienced fund managers to invest their fund equity into various kinds of infrastructure assets. Large investors can include:

- Pension Funds
- Sovereign Wealth Funds
- Private Companies (Insurance and Investment Banks)

Example: In 2015, the Dallas, Texas, Police and Fire Pension System had an infrastructure asset allocation of \$197 million that was partly invested in hospital and water treatment plant projects in Asia and also in managed highway lanes in Texas.

Private and Nonprofit Philanthropic Partners

Donations or grants with a charitable purpose can be made to support building or operating local infrastructure. Foundations can also make Program-Related Investments to support local infrastructure. These investments allow the recipient to borrow capital at lower rates, or simply borrow less.

Example: In Detroit, Michigan, a coalition of private-sector philanthropic and business leaders committed \$100 million in 2014 toward building and operating a new streetcar line in the downtown area.

Endnotes

1. USEPA Resources - https://www.epa.gov/sites/production/files/2016-04/documents/am_tools_guide_may_2014.pdf
2. See Health and Sustainability for more information on Green Infrastructure Solutions
3. The Pavement Surface Evaluation and Rating (PASER) scale is a 1-10 rating system for road pavement condition. Visual inspection is used to evaluate pavement surface conditions. When assessed correctly, PASER ratings provide a basis for comparing the quality of roadway segments.

