PEORIA-PEKIN URBANIZED AREA TRANSPORTATION STUDY (PPUATS)

# Long-Range Transportation Plan 2045

2020-2045

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## ACKNOWLEDGEMENTS

This plan was prepared by Tri-County Regional Planning Commission (TCRPC) staff on behalf of the Peoria-Pekin Urbanized Area Transportation Study (PPUATS) in collaboration with its member agencies, partnership organizations, and local stakeholders.

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Approved by the PPUATS Policy Committee June 3, 2020.

# Executive Summary

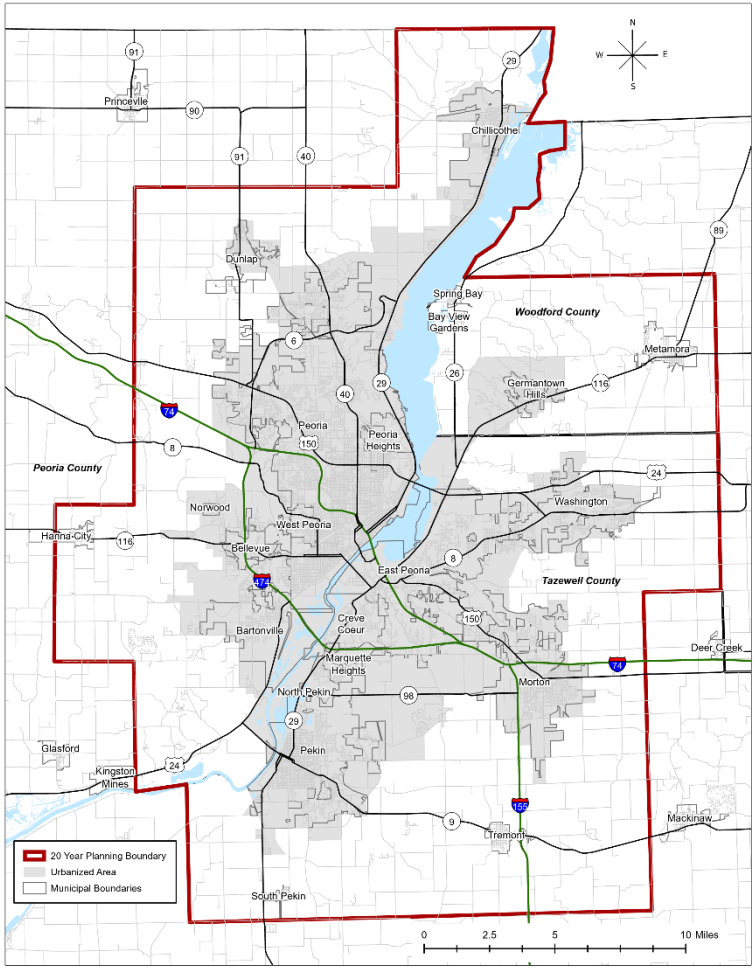
Transportation is an essential part of the Greater Peoria Area. It connects us to jobs, our families, entertainment, and necessary goods and services. The system also serves as the backbone to the region's commerce, quality of life, and economic prosperity, all of which depend on the efficient mobility of people and freight. Planning for future development and maintenance of our transportation network is therefore vital for creating a healthy, happy, and sustainable region.

# Planning for 2045

The Long-Range Transportation Plan (LRTP) is a federally required planning document. The LRTP addresses automobile, transit, bicycle, pedestrian, and freight infrastructure improvements in our region over the next 25 years. The LRTP covers the Metropolitan Planning Area (MPA). The MPA includes the Peoria-Pekin Urbanized Area as well as land beyond the urbanized area that may become urbanized by the year 2045 (see **Map ES-1**).

The Peoria-Pekin Urbanized Area Transportation Study (PPUATS) and its staff are responsible for updating the LRTP every five years, with guidance from the LRTP Blue Ribbon Committee. PPUATS has this responsibility because it is the metropolitan planning organization (MPO) for our region. The MPO is a federally required transportation planning agency for all regions with populations over 50,000. PPUATS is a member-based organization of municipalities, counties, and transportation agencies in our region.

The LRTP covers a broad range of issues as they relate to transportation, including the environment, land use, public health, the economy, safety, security, and connectivity. The LRTP also identifies regionally significant transportation projects. Projects included in the plan can be implemented with federal, state, and local dollars expected to be available through 2045.




**Map ES-1** Peoria-Pekin MPA
(US Census Bureau, PPUATS)

## Regional Vision

PPUATS staff began development of the LRTP 2045 update in July 2019. The plan was adopted in June 2020. Throughout the process, PPUATS staff used data and input from local agencies, area experts, and the public to develop our region's transportation vision for 2045.

This vision can be achieved through five long-term goals, which are **public health, mobility and connectivity, economy, freight, and environment**. These goals were not developed in secret—they are based on a combination of Federal and State transportation goals, feedback from area experts, local planning efforts, and input from the public. Action items and performance measures help us ensure that the actions we take in the short term are helping achieve our goals for 2045.

**LRTP 2045 Goal**

The Greater Peoria Area will have a safe, balanced, regional, and multi-modal transportation system that creates an attainable and economically sustainable solution to connect communities to Areas of Opportunity, increase access, maintain infrastructure, and enhance environmental justice for current residents and future generations.

| Public Health | Mobility & Connectivity | Economy | Freight | Environment |
|---|---|---|---|---|
| Promote active, healthy living in our region by striving for safety, security, and accessibility in our transportation system. | Enable people, goods, and information to travel efficiently throughout, to, and from our region. | Maintain a transportation system that builds prosperity throughout our region. | Provide strategic direction for freight movements to, from, and within our region's transportation system | Support the preservation of natural resources, build environmental resiliency, and improve quality of life through our transportation decisions. |

# PPUATS Membership and LRTP Blue Ribbon Committee

Representatives from the following communities, agencies, and organizations helped guide the LRTP 2045 planning process:

### PPUATS Policy Committee

- City of Peoria
- Peoria County
- Tazewell County
- Woodford County
- Village of Bartonville
- City of Chillicothe
- CityLink
- Village of Creve Coeur
- City of East Peoria
- Village of Germantown Hills
- Village of Morton
- Village of Peoria Heights
- City of Pekin
- City of Washington
- Village of West Peoria
- Illinois Dept of Transportation

### PPUATS Technical Committee

- City of Peoria
- Peoria County
- Tazewell County
- Woodford County
- Village of Bartonville
- City of Chillicothe
- CityLink
- Village of Creve Coeur
- City of East Peoria
- Village of Germantown Hills
- Village of Morton
- Village of Peoria Heights
- City of Pekin
- City of Washington
- Village of West Peoria
- Greater Peoria Metropolitan Airport District
- Tri-County Regional Planning Commission
- Illinois Dept of Transportation

### LRTP Blue Ribbon Committee

- City of Peoria
- Peoria County
- Tazewell County
- Woodford County
- Village of Bartonville
- City of Chillicothe
- CityLink
- Village of Creve Coeur
- City of East Peoria
- Village of Germantown Hills
- Village of Morton
- Village of Peoria Heights
- City of Pekin
- City of Washington
- Village of West Peoria
- Greater Peoria Metropolitan Airport District
- Tri-County Regional Planning Commission
- Illinois Dept of Transportation
- Federal Highway Administration

# Public Involvement

Public participation is an important component of any planning process. A planning process should both communicate information about the process to the general public and enable residents to provide input into the process. Effective public participation builds trust and buy-in from area residents, resulting in a better plan and a plan that is more likely to be embraced by the region.

## Public Participation and COVID-19

The geographic scope of the long-range transportation plan is the MPA, an area that consists of portions of Peoria, Tazewell, and Woodford Counties that encompass the densely developed areas of the region centered on the City of Peoria and land immediately surrounding the densely developed areas. Given the size and large population of this area, engaging residents in meaningful interaction is challenging.

Some of the most effective methods of public participation involve in-person, face-to-face encounters. In previous years, staff has utilized open houses and community events to receive vital feedback from the public on regional priorities and necessary improvements. In March 2020, Illinois Governor JB Pritzker instituted a stay-at-home order in response to the emerging COVID-19 pandemic. Part of the stay-at-home order forbid any gatherings of more than 10 people.

Due to the stay-at-home order, staff could not host a scheduled public open house for the LRTP 2045. Moreover, all scheduled community meetings identified by staff were cancelled due to the order. Due to federal requirements, the MPO could not postpone the LRTP 2045 to wait for opportunities to engage residents in person. Instead, staff used all reasonably available means to engage the public virtually.

To effectively engage the public remotely, the MPO used a variety of outreach methods to maximize the number and type of opportunities for residents to become involved in the process. These methods included a virtual open house, online public meetings, and a dynamic community engagement platform.

## Focus Groups

Greater Peoria's 2015-2040 LRTP update, *Envision HOI*, represented a major update to the plan document and PPUATS' planning process. Staff utilized recently published US Census data and new public input methods to transform our region's long-range planning process. PPUATS wished to build upon the foundation of *Envision HOI* for its LRTP 2045 update, engaging with expert stakeholder groups to hone the plan's regional goals and objectives.

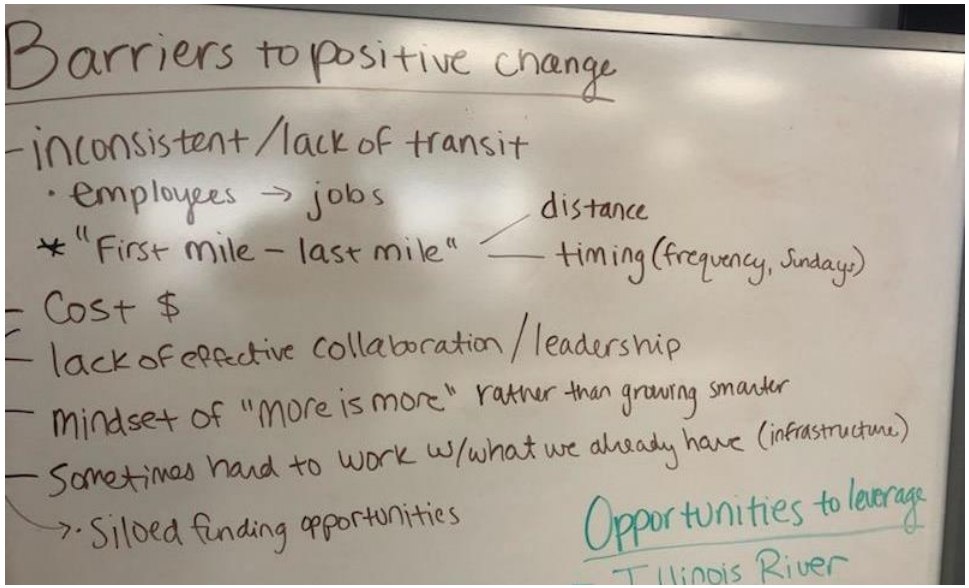



**Figure PI-1** Staff used large whiteboards on wheels to quickly capture discussion

Prior to the COVID-19 pandemic and subsequent stay-at-home order, staff organized and hosted focus group meetings. These meetings provided detailed input from regional experts on each long-term goal topic. Each group included several professional and citizen experts in their given field. Staff elicited feedback from the groups on a long-term goal, and then facilitated a two-hour discussion on the subject. Focus groups identified the region's strengths and weaknesses in their topic, then identified opportunities and threats to achieving the region's goal.

Focus group meetings and their findings are summarized on the following pages.

## Public Health

The Public Health focus group met on October 7, 2019. Public health administrators, educators, park district officials were in attendance.

Public health focus group members stressed that accessibility to transportation has significant ripple effects throughout nearly every aspect of a person's life. This access could be in the medical realm, whether the resident is elderly, on their way to prompt care, dental care, or mental health appointments. Accessibility could refer to education from day care through college. As a person ages, accessibility comes in the form of employment connections—some locations, such as larger campuses on the outskirts of town, all but require their employees to own a car because they are not on a bus route. Focus group members also noted that some residents who attempt to work and go to school simultaneously cannot rely on public transit all the time due to unreliable bus schedules.

Transportation accessibility reaches into still more areas that the public health group listed: Food, parks and recreation, economic development, quality of life, and edges of the urbanized area. With all these crucial elements dependent on reliable transportation, the group noted that access to transportation equates to access to opportunity in life—this particularly applies to minorities and underserved populations. Therefore, transportation is crucial to public health as a whole.

Furthermore, public health focus group members also highlighted critical safety aspects of the transportation system: The need for sidewalks, crosswalks, lighting, and if there are no adequate sidewalks, wider road shoulders for walkers and bikers. All these elements are especially important near schools, group members said. See **Figure PI-2** for a breakdown of topics discussed during the Public Health focus group.

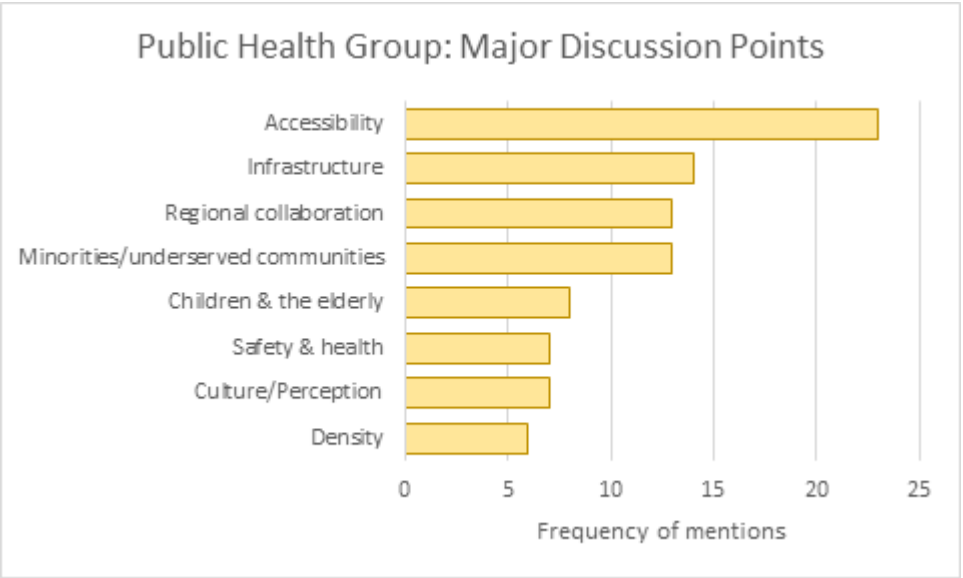



**Figure PI-2** Frequent Topics, Public Health Focus Group

## Environment

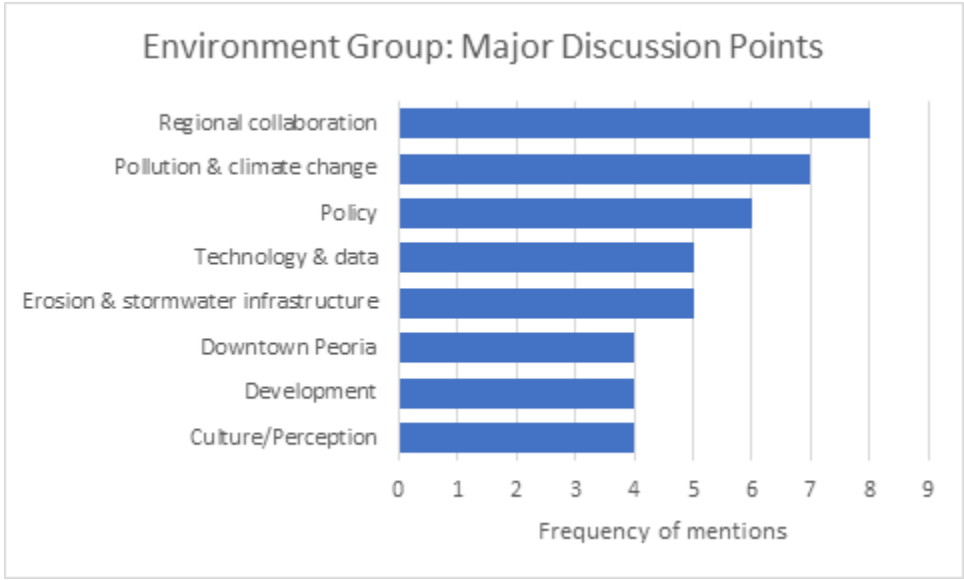
The Environment focus group met on October 15, 2019. Attendees included representatives from conservation groups, area businesses, local municipalities, and the Illinois Environmental Protection Agency. Deliberate regional collaboration, the environmental subcommittee found, was the most pressing aspect when it comes to tackling environment and transportation issues in the region. Subcommittee members felt that there is a current lack of regional focus on the environment, and good intentions from transportation decisions can have unintended consequences and ripples throughout the region. This, the group said, would be addressed in careful planning and cooperation across all three counties.

These ripple effects are shown clearly in the example of motorized vehicles, subcommittee members noted. Emissions from motorized vehicles lead to noise and air pollution, specifically ground-level ozone. These air quality issues then create respiratory issues, making this topic also of public health concern. In the long run, this pollution leads to climate change and further health issues.

To mitigate these problems, policy measures are necessary. One member of the group said that developers favor projects that have fewer environmental barriers. But regulations that mandate or incentivize environmental precautions, such as idling policies, would make it more difficult for developers, planners, and lawmakers to skirt environmental regulations. However, subcommittee members noted that just because policies are in place, it does not mean that there will be compliance. Inconsistent regulation, they noted, has been an issue in the past.

A group member also discussed the issue of erosion and stormwater infrastructure, that Peoria's stream buffer ordinance is a step in the right direction, but lack of funding or access to funding remains a struggle. See **Figure PI-3** for a list of major topics from the Environment focus group.

**Figure PI-3** Frequent Topics, Public Health Focus Group



## Economy

The Economy focus group met on October 21, 2019. At the table were representatives of regional economic groups, chambers of commerce, major employers, and local municipalities.

Employment was a hot topic discussed in the Economy focus group. The group discussed the need to focus on minorities, other underserved populations, and millennials to ensure that the transportation systems in the tri-county area can connect all people to their jobs. The group pointed at the need for employers and employees to collaborate further regarding transit stops near businesses, vans bringing people to their jobs, and changing the culture around how people commute to work. Closing these workforce-related transportation gaps would allow the region to be proactive rather than reactive, a key concept that the Economy subcommittee highlighted.

Further, the group discussed the importance of regional branding—thinking broadly in terms of "world class" status while still creating regional pride. However, subcommittee members felt that the current mindset of "more is more," meaning that the perception of growth is to build out rather than in, is hindering the region. Taking small steps to solve problems, they said, is key.

To do so, technology would be paramount. Continuing to explore broadband, green technology, and e-commerce would propel the region forward, they noted. These technology- and data-based solutions would pave the way for autonomous vehicles and higher-density outcomes in the tri-county area.

Finally, as was noted in other focus groups, the Economic subcommittee underscored the significance of regional collaboration. This planning-based approach, which includes connections among different sectors, employers and employees, and referencing best practices in other cities, is crucial. See **Figure PI-4** for a breakdown of the major topics mentioned during the Economy focus group.

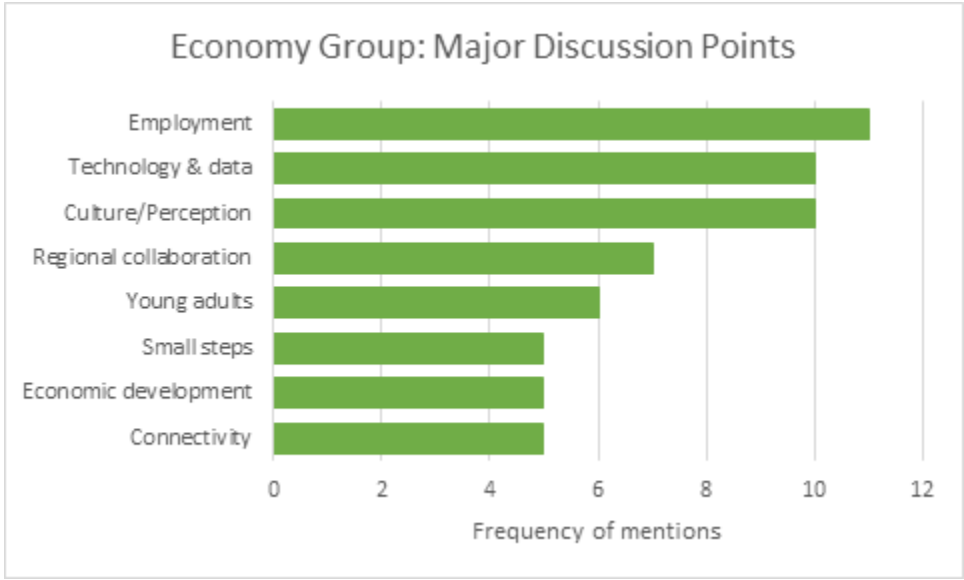



**Figure PI-4** Frequent Topics, Economy Focus Group

## Mobility and Connectivity

The Mobility and Connectivity focus group met on November 4, 2019. In attendance were representatives from fixed-route and rural transit agencies, workforce development organizations, human service organizations, and local municipalities.

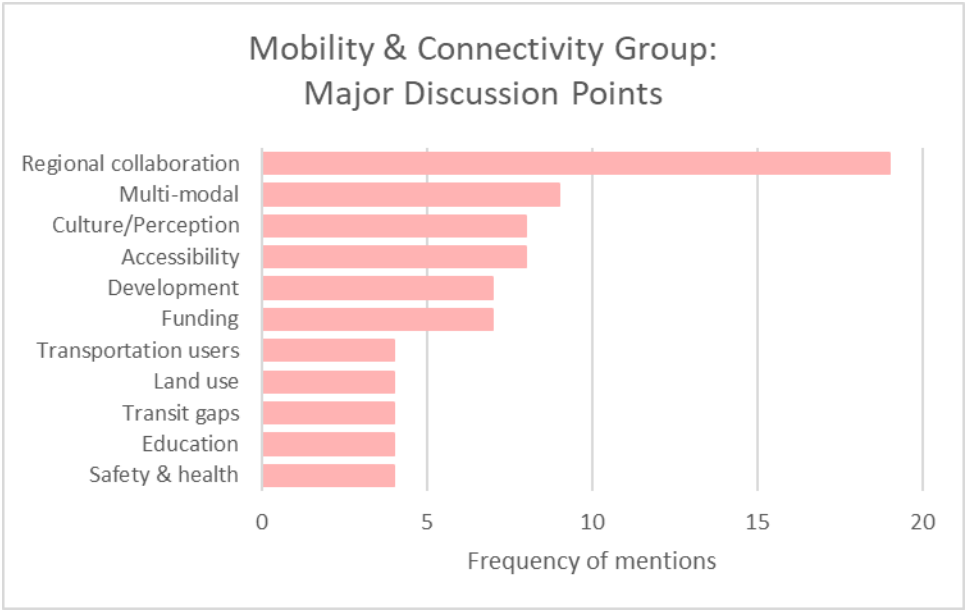
The most pressing topics regarding mobility, connectivity, and region-wide transportation were multi-modality and accessibility throughout the system. A consistent theme within the Mobility/Connectivity group was the need for regional collaboration and a culture shift—reframing public transportation and the importance of wide-scale mobility.

Urban and rural transit, the group noted, should inherently be linked by regional collaboration. Ideally, a regional transit authority would help receive and allocate funding and create regional alliances. Or, group members felt that the region would benefit from broader-level collaboration. Using ideas from other regions with more cohesive branding, such as the Quad Cities or Des Moines, the tri-county area could be considered a regional transit hub.

On this same note, the group discussed large-scale systems such as rail and bus rapid transit as ideal considerations. However, some group members said that policymakers do not feel such an investment is worth it.

From an accessibility standpoint, the group felt it was crucial to accommodate residents in the peripheral areas of the region who may not have enough transportation options, such as people with disabilities and the elderly. Group members noted that limited transportation options lead to limited opportunities in life, meaning that connecting the tri-county area is crucial to bolstering the region's most underrepresented populations. One idea was to have multi-modal options to increase mobility. This would mean actively providing such options, making areas more conducive to walking and biking, and prioritizing pedestrian safety throughout the system. See **Figure PI-5** for a list of topics that the Mobility & Connectivity group mentioned most often.

**Figure PI-5** Frequent Topics, Mobility & Connectivity Focus Group



## Freight

The Freight focus group met on November 26, 2019. At the table were high-level stakeholders representing every mode of transportation impacting the Greater Peoria area.

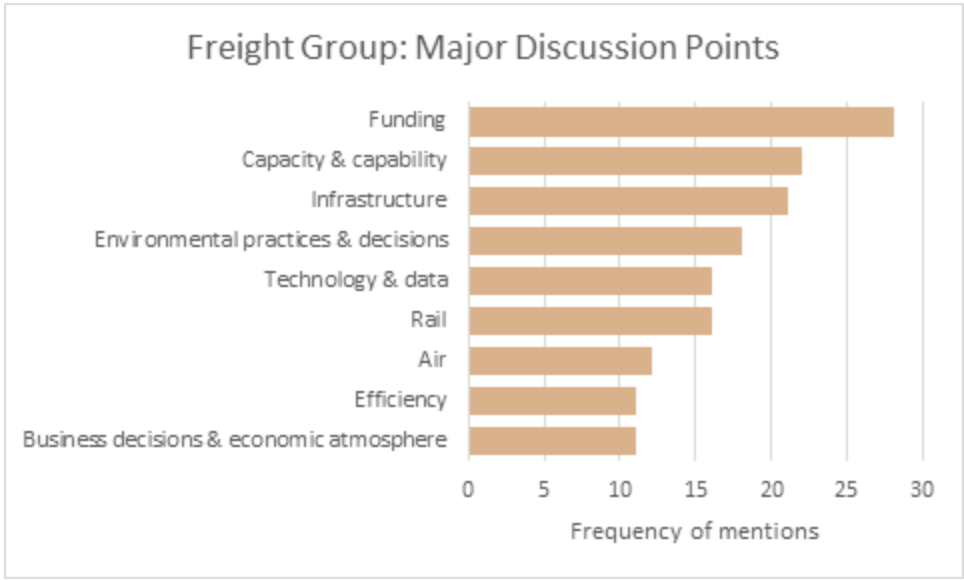
The freight group discussed a variety of transportation system topics, but funding dominated the conversation. Several members mentioned funding from the capital bill as an opportunity to help ports, bolster the port district, and diversify funding to modes other than highways. They highlighted the need to identify the most cost-effective method to transport different freight goods, though the high cost of fuel and alternative fuel was a sticking point for any mode.

Federal funding, the group highlighted, was lacking. This results in uncertainty and a burden on the state to cover costs. Group members explained that these costs—for example, maintenance—have continued to rise while prices decrease. One individual offered the idea of tolls to help alleviate these funding requirements.

Additionally, the group discussed the environment and how it has affected freight funding. The group noted that environmental regulations and requirements have created a cost burden on the system. A freight group member noted that used tires from trucking and agriculture can be recycled, but it is not a viable practice, since it costs less to buy new ones.

Finally, freight group participants talked in detail about system capacity and capability. This, more likely than not, was a positive—group members noted the region's capability to grow and take on more freight. However, some issues arose regarding the logistics of this possible growth. One group member asked if the region is capable of handling equipment and storage as demand increases. Refer to **Figure PI-6** for the most mentioned topics from the freight focus group.

**Figure PI-6** Frequent Topics, Freight Focus Group



## MindMixer

A website was established with the sole intent of engaging residents in the LRTP process. The website was developed in cooperation with MindMixer, a company devoted to building stronger relationships between communities and residents through transparent, meaningful, and productive interactions. TCRPC worked with MindMixer to establish an online platform through which residents could provide input into the LRTP process from their own homes and on their own schedules. The website URL was tricountyrpc.mindmixer.com, and the website enabled residents to:

- Click on a map of the region to identify locations where a transportation issue or challenge exists
- Click on a map and identify needed transportation improvements
- Submit ideas on innovative transportation policies that the region should explore

Participants on the MindMixer site put forward 58 ideas for improving the region's transportation system. In order to continue the conversation through the stay-at-home order, staff intends to keep the MindMixer site active and pose new prompts for users throughout the year.

## Virtual Public Meetings

TCRPC hosted four virtual, online public meetings to enable residents to learn about the LRTP and provide input. One meeting, held May 26, 2020 from 2:00pm to 3:30pm, functioned like a public open house. More than 30 area residents received a presentation from staff and took part in a discussion on the future of transportation in the region.

During the discussion, staff received feedback on regional priorities and projects, as well as answered questions about the LRTP and MPO functions. Attendees were encouraged to follow up with staff or on the MindMixer site with more input.

The remaining three meetings took place during regularly scheduled meetings of the Tri-County Regional Planning Commission, PPUATS Technical Committee, and PPUATS Policy Committee. Participants at these meetings received a presentation from staff and were provided the opportunity to comment.

# Existing Conditions

Analyzing current and historical information is a vital step in defining future transportation needs for individuals living and working in the Metropolitan Planning Area. The following section provides an overview of trends in demographics, land use, and infrastructure.

## Demographics

The Peoria-Pekin Urbanized Area contains a population of 266,693 across 237 square miles in Central Illinois. The urbanized area is the population and economic center of Greater Peoria, which includes Peoria, Tazewell, and Woodford Counties. Greater Peoria is located 120 miles southwest of Chicago, 140 miles northeast of Saint Louis, and 180 northwest of Indianapolis.

The Peoria-Pekin Urbanized Area includes 16 municipalities across three counties:

- Village of Bartonville
- Village of Bellevue
- City of Chillicothe
- Village of Creve Coeur
- Village of Dunlap
- City of East Peoria
- Village of Germantown Hills
- Village of Marquette Heights
- Village of Morton
- Village of North Pekin
- Village of Norwood
- City of Pekin
- City of Peoria
- Village of Peoria Heights
- City of Washington
- City of West Peoria

The Metropolitan Planning Area (MPA), the 25-year planning area for the LRTP, spans 603 square miles. The MPA includes 6 municipalities along with those in the urbanized area. They are:

- Village of Bay View Gardens
- Village of Germantown Hills
- Village of Hanna City
- Village of Metamora
- Village of South Pekin
- Village of Spring Bay
- Village of Tremont

## Age

The 2015 Census American Community Survey (ACS) shows a great amount of parity between many age groups in the urbanized area. The largest age group of residents is between 30 and 39 years of age, but all age groups between 0 and 59 years old have very similar populations. This distribution is like what was seen in the 2000 and 2010 Census data for the urbanized area. In 2015, the median age for the urbanized area was 37.6 years, up slightly from the median age of 37.2 in the 2010 Census.

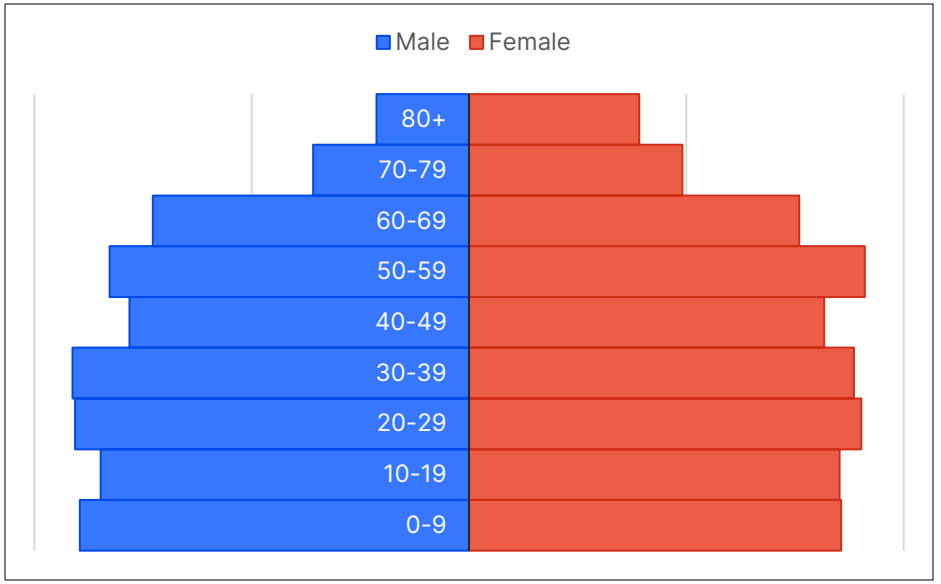



**Figure EC-1** Age and Gender in the Urbanized Area (UA), 2013-2017

## Race and Ethnicity

A large majority of the urbanized area's population is white, although the percentage of white residents decreased slightly between 2010 and 2015. The racial makeup of the region has remained steady since 2010, with small percentage increases in Asian and Two or More Races.

The urbanized area saw an increase in population identifying as Hispanic or Latino between 2010 and 2015, increasing approximately 0.5%.

**Table EC-1** Race and Ethnicity in the UA, 2013-2017 (US Census Bureau)

| **Race** | **2010** | **2013-2017** |
|---|---|---|
| White alone | 80.7% | 79.6% |
| Black or African American alone | 12.8% | 12.8% |
| American Indian and Alaska Native alone | 0.3% | 0.2% |
| Asian alone | 2.5% | 3.0% |
| Native Hawaiian and Other Pacific Islander alone | 0.0% | 0.0% |
| Some other race alone | 1.3% | 1.3% |
| Two or more races: | 2.4% | 3.1% |
| **Ethnicity** | **2010** | **2013-2017** |
| Hispanic or Latino | 3.4% | 3.9% |
| Not Hispanic or Latino | 96.6% | 96.1% |

## Disability Status

Identifying segments of the population with limited mobility is essential to building and maintaining a transportation network that is accessible to the greatest number of residents in our region. A key aspect of planning for transit use is identifying the needs of elderly individuals, individuals with disabilities, and individuals in poverty. **Table EC-2** shows these groups of residents.

| Population | % with a disability |
|---|---|
| Total civilian noninstitutionalized population | 12.0% |
| Under 18 years | 3.4% |
| 18 to 64 years | 9.7% |
| 65 years and over | 34.1% |

**Table EC-2** Disability Status in the UA, 2013-2017
(US Census Bureau)

## Education

In 2015 just over 90% of residents of the urbanized area have a high school diploma (see **Table EC-3**). The percentage of urbanized area residents with at least a bachelor's degree was almost 30%. These numbers demonstrate that the urbanized area has a well-educated population that should continue to become better-educated in the future.

| Educational Attainment | 2013-2017 |
|---|---|
| Less than 9th grade | 2.7% |
| 9th to 12th grade, no diploma | 6.6% |
| High school graduate (includes equivalency) | 28.5% |
| Some college, no degree | 23.0% |
| Associate's degree | 10.1% |
| Bachelor's degree | 18.8% |
| Graduate or professional degree | 10.3% |
| **Percent high school graduate or higher** | **90.8%** |
| **Percent bachelor's degree or higher** | **29.1%** |

**Table EC-3** Educational Attainment in the UA, 2013-2017
(US Census Bureau)

## Household Income

Income is a large determinant of available travel options for families. **Table EC-4** shows the median household income for all households in the urbanized area and for different ages of householder. Generally, incomes are lowest for householders under the age of 25 and rise in the 25-44 and 45-64 age groups. As householders retire, incomes begin to decrease. Due to potential financial constraints, travel options are likely to be limited for householders under 25 and over 64.

| Age of householder | Median household income |
|---|---|
| 15 to 24 years | $28,689 |
| 25 to 44 years | $59,550 |
| 45 to 64 years | $62,168 |
| 65 years and over | $42,603 |

**Table EC-4** Median Income (Past 12 Months) in the UA, 2013-2017 (US Census Bureau)

## Poverty

In 2015 the largest impoverished population in the urbanized area were those under five years old, with almost one quarter of people in that age group in poverty. Approximately one-fifth of young adults (ages 18 to 34) and one tenth of older adults (35 to 64) were in poverty.

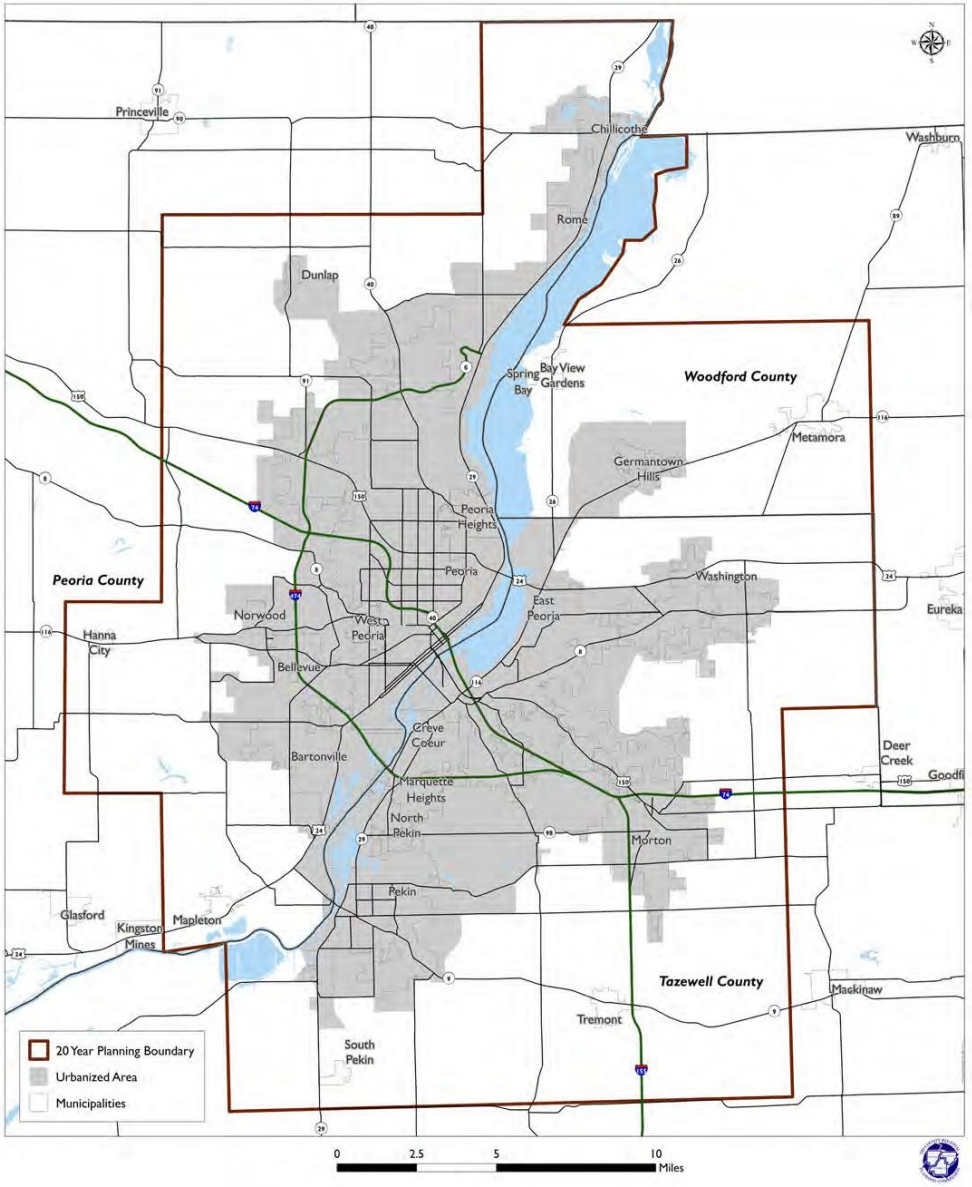
| Population | 2013-2017 |
|---|---|
| Under 5 years | 23.50% |
| 5 to 17 years | 17.80% |
| 18 to 34 years | 19.00% |
| 35 to 64 years | 10.90% |
| 65 years and over | 6.90% |

**Table EC-5** Poverty Status by Age in the UA, 2013-2017 (US Census Bureau)

## Land Use in the Urbanized Area

The land within the 20-year planning boundary consists of urban areas, rural areas, and significant environmental resources. **Map LU-1** on the opposite page shows the area within the 20-year planning boundary. The Illinois River bisects the planning area, and steep forested bluffs line the River to the east and the west. Land along the Illinois River is primarily urbanized, with the three largest communities in the region – Peoria, Pekin, and East Peoria – located on the River's shores. The edges of the planning area are primarily rural, with small towns and villages situated among agricultural land.

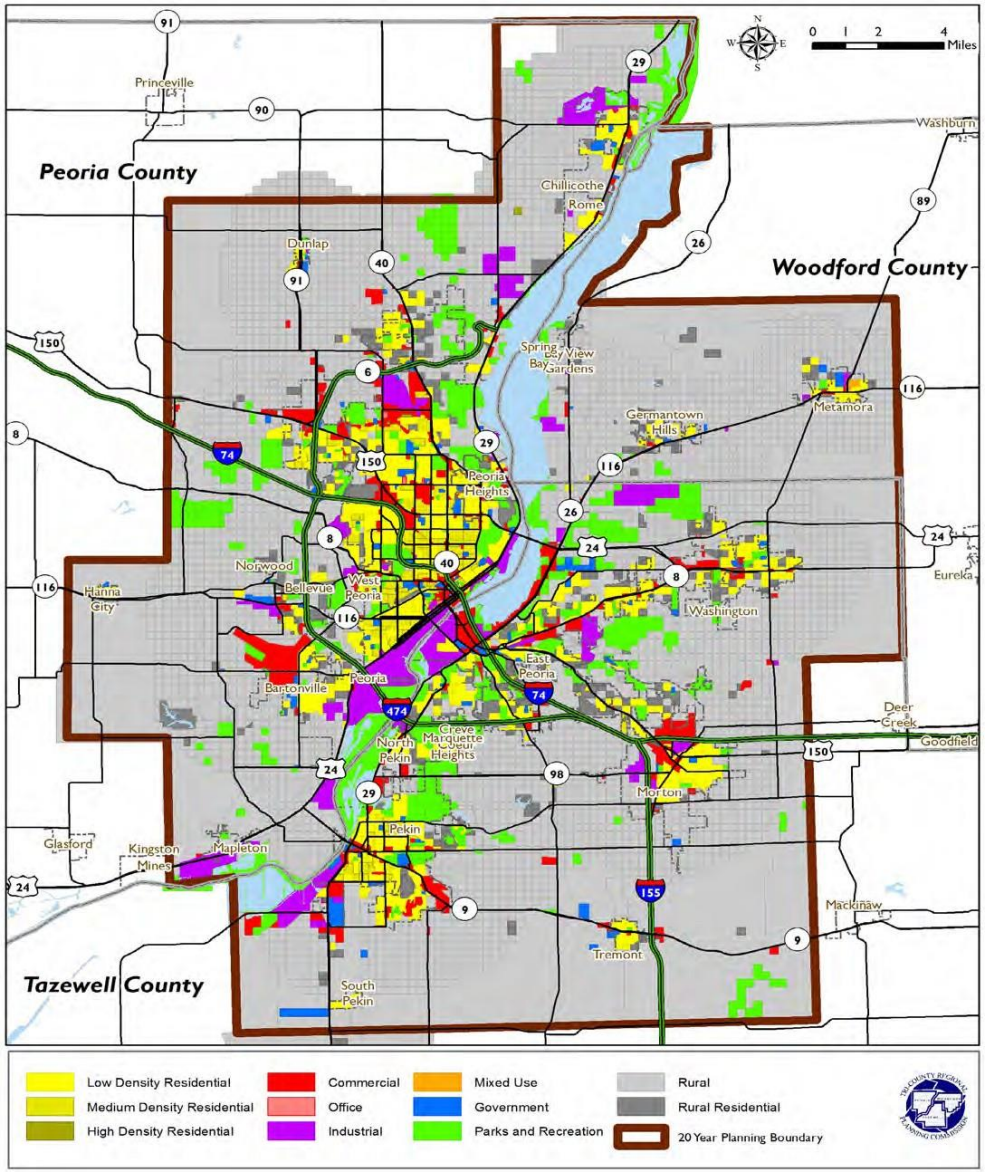
A land use map for the area within the 20-year planning boundary was recently developed as part of a scenario planning process for the Tri-County region. This mapping work was completed by identifying the primary land use for each traffic analysis zone (TAZ) and assigning a single land use to each TAZ. Since this land use map is based on TAZs rather than individual parcels, it is not a completely accurate representation of current land use. However, it does provide an approximate breakdown of land use within the 20-year planning boundary.




**Map LU-1** PPUATS 20-Year Planning Boundary, 2014

Rural land accounts for about three-fourths of all land within the 20-year planning boundary. Land within the "Low Density Residential" category and the "Parks and Recreation" category each account for about 7% of land within the planning boundary. All other land uses account for less than 4% of land within the planning boundary. **Map LU-2** shows land use within the 20-year planning boundary and **Table LU-1** lists the number of acres in each land use category.

The quantity of urbanized land in the Tri-County region increased from 86,760 acres in 1990 to 91,903 acres in 2000 according to data provided by the US Department of Housing and Urban Development (HUD). The increase in urbanized land is not surprising; therefore, a more useful statistic for understanding land development in the region is the quantity of urbanized land per capita. According to HUD, urbanized land per capita increased from 0.256 acres per resident in 1990 to 0.265 acres per resident in 2000. This statistic suggests that development is becoming less dense, or that more land is being developed per resident over time. There are costs and benefits to this pattern of growth. This Long-Range Transportation Plan process presents an opportunity to consider different land development patterns for the region and plan for a transportation system that can facilitate and complement desired development patterns.




**Map LU-2** Land Use within the PPUATS MPA, 2013

| Land Use | Acres | Percentage |
|---|---|---|
| Rural | 282,305 | 74.5% |
| Low Density Residential | 25,806 | 6.8% |
| Parks and Recreation | 24,548 | 6.5% |
| Rural Residential | 13,130 | 3.5% |
| Commercial | 11,659 | 3.1% |
| Industrial | 11,488 | 3.0% |
| Medium Density Residential | 5,474 | 1.4% |
| Government | 4,286 | 1.1% |
| Office | 184 | 0.0% |
| High Density Residential | 143 | 0.0% |
| Mixed Use | 95 | 0.0% |
| Total | 379,118 | 100% |

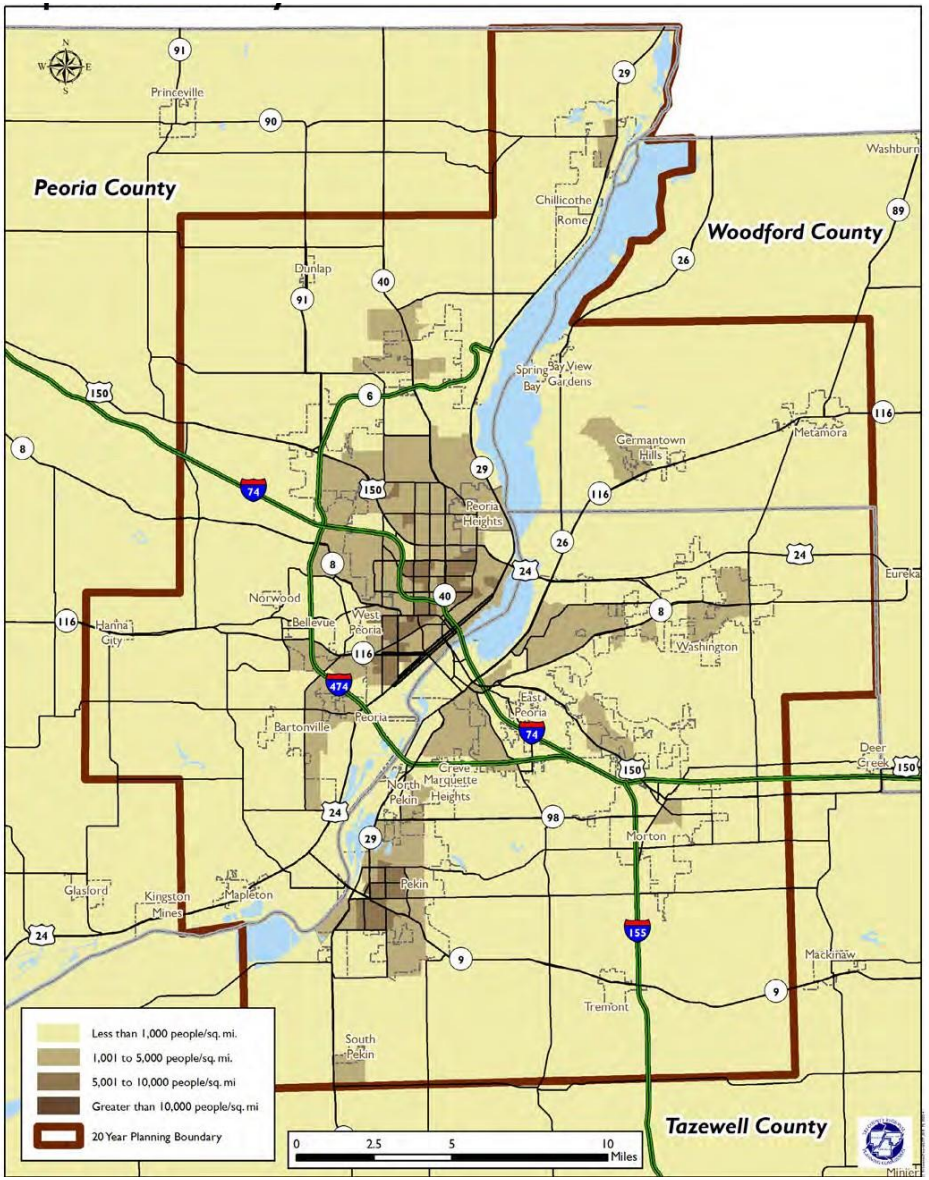
**Table LU-1** Land Use in the PPUATS MPA by Acre and Percent, 2013

## Population Density

The population density of the 20-year planning area is presented in **Map LU-3**. Population density is shown by block group, a unit of geography defined by the US Census Bureau for purposes of data collection and analysis. Data are from the 2010 US Census.

The most densely populated areas – block groups with a population density greater than 5,000 residents per square mile – are located within Peoria and Pekin, the region's two largest communities. Areas with a population density of greater than 1,000 residents per square mile and less than or equal to 5,000 residents per square mile are located within Peoria, Pekin, and other communities such as East Peoria, Washington, Morton, Creve Coeur, and Germantown Hills. Most of the planning area has a population density less than or equal to 1,000 residents per square mile. These areas are located outside of communities and are rural in nature.

The population density of any given area impacts the desirability of different transportation modes. For example, walking and bicycling are more prevalent in densely developed areas than in sparsely developed areas. Yet transportation improvements can also impact future population density. For example, pedestrian improvements in commercial cores can help spur retail business development and attract residents and shoppers to an area. Thus, the existing population density and the preferred future population density of different areas should be considered as transportation improvements are proposed for the Tri-County region.



## Historic Resources

The impact of transportation improvements on historic resources must be carefully considered. According to Section 4(f) of the Department of Transportation Act of 1966, any federally assisted transportation projects may not use land from a historic site unless the following conditions are satisfied:

**Map LU-3** Population Density in the PPUATS MPA, 2010 (US Census Bureau)

1. There is no feasible and prudent alternative to the use of land from the historic site.
2. The action includes all possible planning to minimize harm to the property resulting from use.

Historic sites include properties of national, state, or local significance. Section 4(f) applies to properties listed or eligible for listing in the National Register of Historic Places. In some cases, the law also applies to properties identified by state and local governments as historically significant.

The definition of "use" in this legislation is broadly applied and includes physical harm as well as detrimental impacts to the historic site. Therefore, this legislation applies not just to the proposed demolition of a historic site but to potential adverse impacts to the historic site such as noise and pollution.

There are 55 properties in the Tri-County region listed in the National Register of Historic Places. These properties include buildings, objects, structures, sites, and historic districts. There are an additional 18 properties that have been determined to be eligible for listing in the National Register. **Table LU-2** below provides a breakdown of historic properties listed in and eligible to be listed in the National Register by county.

| County | Listed Properties | Eligible Properties |
|---|---|---|
| Peoria | 32 | 5 |
| Tazewell | 15 | 8 |
| Woodford | 8 | 5 |
| Total | 55 | 18 |

**Table LU-2** Properties Listed in and Eligible for Listing in National Register of Historic Places (Illinois Historic Preservation Agency; National Park Service)

There are other historic resources in the region that have been designated as local landmarks by local units of government that have historic preservation ordinances. The City of Peoria, City of Washington, and Peoria Park District each have a historic preservation ordinance. A historic preservation ordinance asserts the importance of preserving historic resources for a unit of government and provides a mechanism by which historic properties can be preserved.

The Tri-County region has a unique history, and the region's historic resources can help contribute to the region's sense of place, stimulate economic development and tourism, and contribute to a high quality of life. While federal transportation law provides protection for some historic resources when transportation improvements are being considered, a broader view of the region's historic resources should be taken when changes to the transportation system are proposed. Broadly examining the region's historic resources can help achieve the goals of providing a quality transportation system while preserving historic resources to promote a high quality of life.

# System Overview

Understanding how the transportation system currently works regarding infrastructure quality and frequency of use, planners can better assess how the system should evolve. Furthermore, providing active transportation options and multi-modal access to different parts of the region is paramount to developing thriving communities, increasing economic competitiveness, and improving local health.

## Major Infrastructure Elements

The Long-Range Transportation Plan's main purpose is to analyze and assess the existing and future transportation infrastructure for the urbanized area. Without an efficient and user-friendly transportation system, congestion, delay, and additional crashes could occur. The metropolitan planning area's transportation system can be characterized by interlocking grid patterns, transected by a major US Interstate (I-74), and partially circumvented by a major bypass (I-474) stretching over a land area of nearly 200 square miles.

The data in this section of the LRTP were collected by the Tri-County Regional Planning Commission (TCRPC), Peoria-Pekin Urbanized Area Transportation Study (PPUATS), PPUATS member agencies, the Illinois Department of Transportation (IDOT), and the US Department of Transportation (US DOT), and the US Census Bureau. The transportation system of the Peoria-Pekin Metropolitan Area includes these infrastructure elements, seen in **Table SO-1**.

| Type | Amount/Number Regionwide |
|---|---|
| Class I Trails | 35.6 miles |
| Bicycle infrastructure | 62 miles |
| Traffic signals | 362 signals |
| CityLink buses | 53 buses |
| CityLink routes | 36 routes |
| CityLink bus stops | 865 signed bus stops and approx. 24 flag stops |
| Miles of roadway | 4,910.9 miles |
| Passenger rail routes | 0 routes |
| Rail freight carriers | 10 carriers |
| Commercial airports | 1 airport |
| General aviation airports | 2 airports |

**Table SO-1** Major Infrastructure Elements in the Peoria-Pekin Urbanized Area

This section will detail infrastructure, safety, and ridership data for the following modes of transportation within the urbanized and metropolitan planning area:

- Roadways and motor vehicles
- Bus transportation
- Access for people with disabilities
- Bicycles and pedestrians
- Freight (Truck, River, Air, Rail)
- Air travel

# Assets and Barriers

In 2014, TCRPC completed a three-year planning process for the HUD Regional Sustainability Grant, "Brilliant Bright Community." The grant provided the opportunity for an in-depth review of transportation conditions in the metropolitan area. Through interviews, public outreach, surveys, and data collection, TCRPC staff developed a regional transportation assessment. The assets and barriers identified in that process are listed below.

## Transportation Assets

Our region has been largely unaffected by systemic congestion issues faced by many other metropolitan areas across the nation.

The Cities of Peoria, East Peoria, and Pekin have access to quality bus service from CityLink.

The region has two rural public transportation providers that provide access and mobility primarily for populations who are disabled, elderly, and low-income.

The region has over 60 miles of existing bicycle trails, with several additional trails planned throughout the region.

Quality access to railroad service for freight, including access to four Class I carriers (e.g. Union Pacific), three regional Class II carriers, and several short-line operators.

The Peoria-Pekin Union Railroad, located in Creve Coeur and East Peoria, is the largest switching and classification yard in Central Illinois, having over 100 miles of track with the capacity of 2,500 cars.

Tri-County regional leaders are committed to establishing a connection to the high-speed rail network.

Due to the significant channel depth of the Illinois River, barges can navigate the river year-round.

The Illinois River provides a cheaper alternative for transporting freight. It is estimated that cargo can be moved by barge for one-third the cost of rail and one-fifth the cost of truck.

The Peoria region has access to an international airport, which provides direct flights to Nonstop destinations include Chicago, Dallas, Las Vegas, Mesa, Punta Gorda, Destin, St. Petersburg, Atlanta, Minneapolis, Charlotte, and Orlando (PIA, n.d.). Nashville nonstop service is to start in June 2020 (WEEK, 2020).

## Transportation Barriers

Several communities within the urbanized area are not served by public transit.

Though public transportation is gaining support – especially among younger generations – there continues to be a stigma surrounding bus as a form of transportation.

Many bus stops in the region are not accessible, particularly to individuals who are disabled.

Rural public transportation is not well understood by the general public and has not been fully recognized as an essential component to the transportation network.

For a variety of reasons, use of alternative transportation modes is lacking in the region.

Retrofitting streets for bike lanes and acquiring land for bike trails can be expensive.

The built environment does not encourage walking. Many stores cannot be accessed without traveling through a parking-lot.

Many sidewalks are inaccessible to people with disabilities. Some are too narrow, some are blocked by light poles, and some have a severe slant towards the street.

While the region enjoys rail infrastructure access, rail service is limited strictly to freight; the region currently does not have direct access to Amtrak passenger rail service.

Significant delays occur in the lock and dam system along the Illinois River. Plans are underway to improve the locks, but construction is many years away.

Sedimentation from eroding ravines within the Illinois River watershed is reducing the depth of the river, making it more difficult for barges to navigate through the channels.

Airport strikes and the recession have caused inconsistency from airlines.

# Roadways and Motor Vehicles

Roadways are an integral component of Greater Peoria's transportation system. To maximize economic and social benefits and enhance mobility, the roadway system must be safe, efficient, and well-maintained. This section will describe the current state of the Greater Peoria Area roadway system, including roadway usage, safety, and stewardship, and will discuss public comments concerning our roadway system.

## Road Types

For planning purposes, roadways are grouped into separate classes according to the character of service they are intended to provide. Basic to this process is the acknowledgment that individual roads and streets do not serve travel independently. Rather, most travel involves movement through a network of roads. Descriptions of each roadway classification are listed below.

**Interstate**: Interstates are the highest classification in the system, and they are designed and constructed with mobility, high speed, and long-distance travel in mind. All roadways in this functional classification category are officially designated as Interstates by the Secretary of Transportation and are part of the National Highway System.

**Freeway or Expressway**: Roadways in this category look very similar to Interstates. Freeways and expressways may traverse the urban area from one boundary to another or may simply join with another connecting link. These roadways may also provide access to circumferential routes around the city or provide links to the central city.

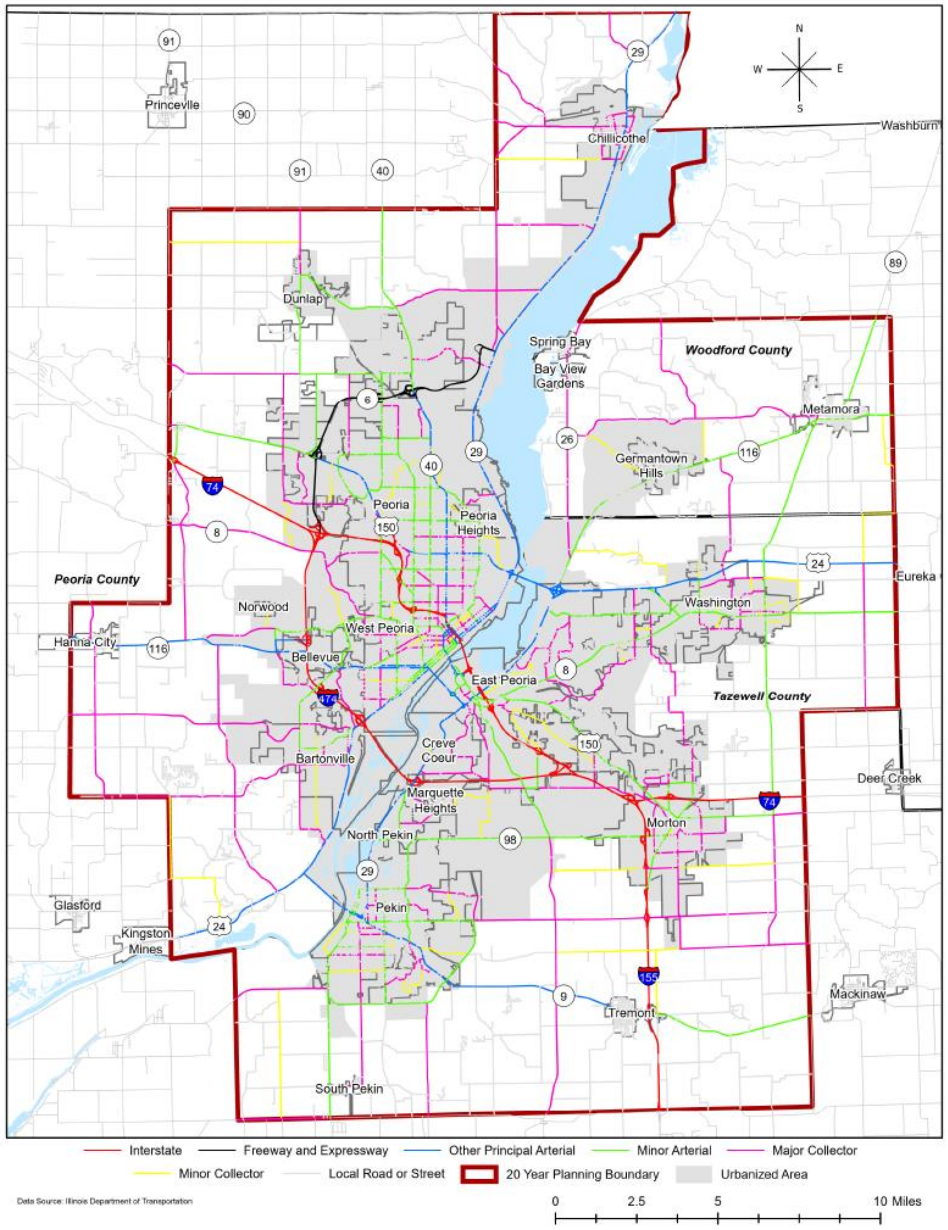
**Principal Arterial:** Limited access highways to semi-limited access roadways that carry high volumes of traffic make up this roadway functional classification. Principal arterials are typically used for long trips within the region and provide for an integrated network serving the entire urban area. They connect central business districts and outlying residential areas, major inner-city communities, and/or major suburban centers.

**Minor Arterial**: Minor arterials provide service for trips of moderate length, serve geographic areas that are smaller than their higher Arterial counterparts, and offer connectivity to the higher Arterial system. In comparison to principal arterials, minor arterials provide lower travel speeds and traffic volumes, but provide more access to property. Often, these roadways carry local bus routes.

**Collectors**: These roadways are designed for lower speed and traffic volumes than arterials. They collect the traffic from neighborhoods and direct it to the nearest arterials (or disperse the traffic from the arterials into neighborhoods). Collectors are often less continuous than arterials and a complete trip on a single collector is not usually possible.

**Local Streets**: Local streets include all roadways not covered in one of the classes above. These roadways allow direct access to homes and businesses; through-traffic is generally discouraged. To minimize construction and maintenance costs, local streets are designed with less concern for connectivity from street to street, narrower geometrics, and other lesser standards.

**Map SO-1** shows the current system of interstate, principal arterial, minor arterial, and collector roadways in the MPA. As the map shows, the system has a high degree of connectivity.

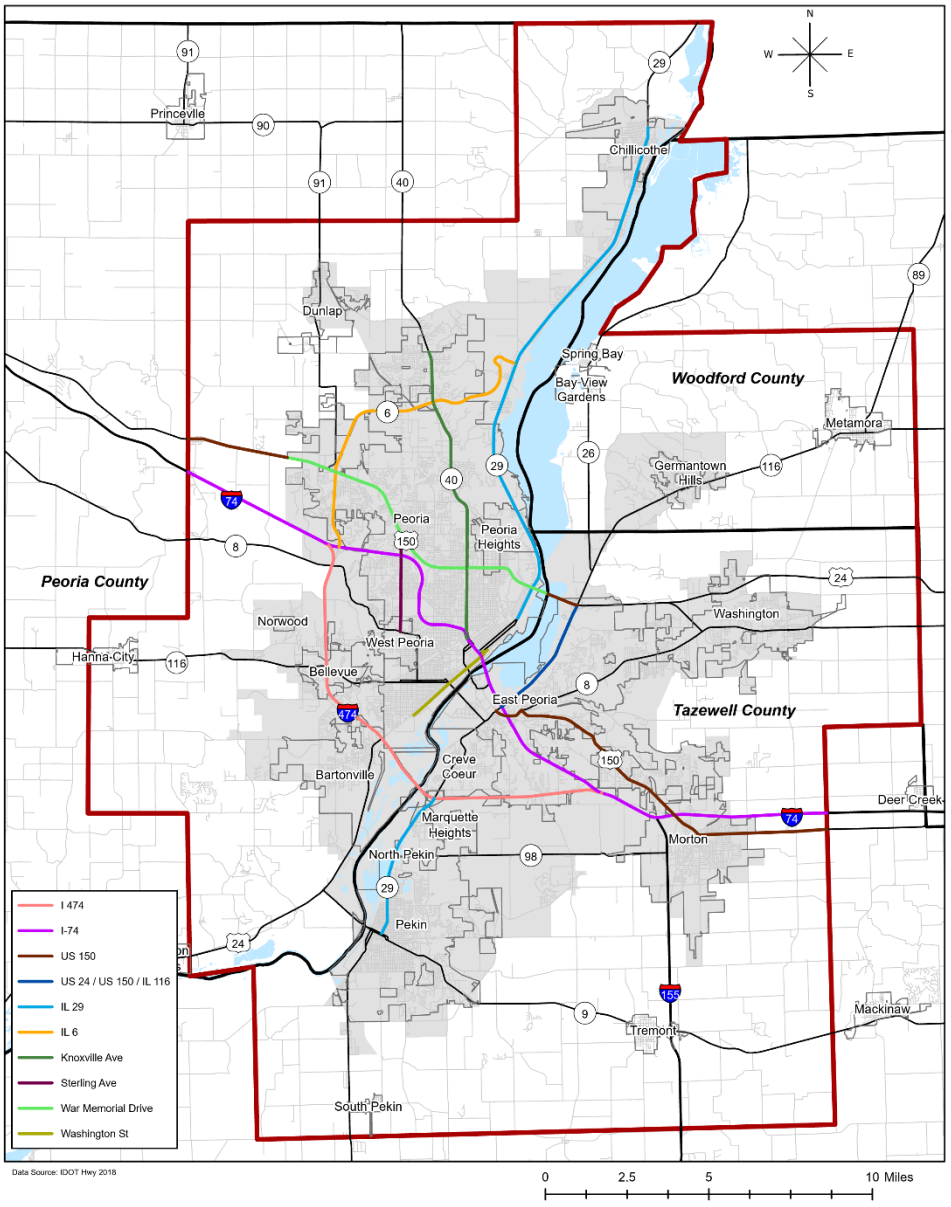



**Map SO-1** Road Network in the Metropolitan Planning Area

## Average Annual Daily Traffic

The Illinois Department of Transportation collects various travel statistics, including roadway average daily traffic (ADT). **Map SO-2** shows the roadways in the region with some of the highest recent traffic counts. These roadways provide the major east-west and north-south connections between the urban core (Peoria and East Peoria) and smaller suburban and rural communities across the Metropolitan Planning Area.

Note: The most recent ADT counts from a mixture of sources for major roadways can be explored throughout the state on the Annual Average Daily Traffic map from http://gettingaroundillinois.com.




**Map SO-2** Highest AADT Roadways in the Metropolitan Planning Area

## Vehicle Miles Traveled

IDOT also collects data on average vehicle miles traveled (VMT). **Figure SO-1** shows total VMT in the urbanized area across all road types. **Table SO-2** shows total VMT in the urbanized area by road type.

Despite trending downward recently, VMT in the urbanized area is considerably higher than it was ten years ago. VMT remained stable from 2009 to 2013 before increasing sharply in 2014. This increase may be attributed to several factors, including economic recovery following the 2008 downturn and lower fuel prices. Both encourage people to take more automobile trips, either to work or to recreation.

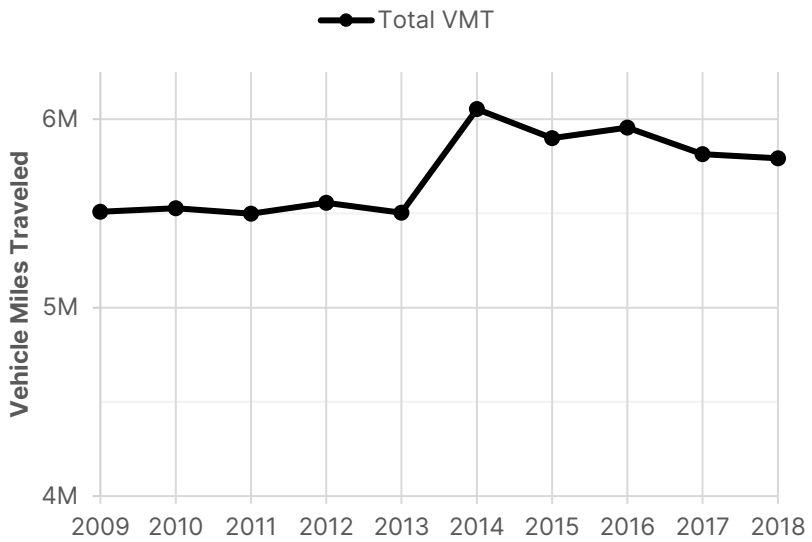



**Figure SO-1** Total Vehicle Miles Traveled in the Urbanized Area, 2009-2018 (IDOT, 2018)

| Vehicle Miles Traveled in the Urbanized Area | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Road Type** | **2009** | **2010** | **2011** | **2012** | **2013** | **2014** | **2015** | **2016** | **2017** | **2018** |
| Interstate | 1,148,309 | 1,176,557 | 1,157,954 | 1,184,650 | 1,151,796 | 1,222,001 | 1,217,652 | 1,260,859 | 1,246,603 | 1,272,697 |
| Principal Arterial | 1,929,713 | 1,927,390 | 1,822,025 | 1,808,511 | 1,813,129 | 1,795,485 | 1,665,712 | 1,465,737 | 1,454,711 | 1,440,951 |
| Minor Arterial | 1,267,834 | 1,261,440 | 1,232,025 | 1,200,416 | 1,218,696 | 1,475,108 | 1,458,164 | 1,557,412 | 1,469,112 | 1,463,320 |
| Collector | 475,930 | 476,123 | 462,754 | 456,412 | 461,035 | 504,248 | 515,969 | 572,120 | 534,173 | 511,227 |
| Local | 687,127 | 686,813 | 695,944 | 779,356 | 735,166 | 805,857 | 811,330 | 812,577 | 823,601 | 813,143 |
| **Total** | **5,508,913** | **5,528,323** | **5,498,557** | **5,555,821** | **5,504,055** | **6,053,538** | **5,899,945** | **5,954,909** | **5,814,145** | **5,791,884** |

**Table SO-2** Urbanized Area Vehicle Miles Traveled 2009-2018 (IDOT, 2018)

## Congestion Management

Because roadways are an essential component of our transportation system for buses, trucks, and automobiles, they are bound to become congested in certain areas. To manage and plan for congestion and to comply with federal requirements, the region has adopted a Congestion Management Process (CMP). The CMP (2011) is intended to serve as an organized and transparent way for our planning area to identify and manage congestion, connect performance measures to funding support for projects, and evaluate recommended strategies to ensure the region is effectively addressing congestion. The plan recommends actions such as improving intersections and traffic signals, signal timing, adding left turn lanes, implementing roundabouts where appropriate, upgrading signage, expanding, and improving public transportation services, and encouraging the construction of sidewalks and bikeways.

TCRPC's Travel Demand Model can identify current and future congestion along the MPA roadways. To see where roadways are most likely to be congested in the future, visit the Travel Demand Model Section.

## Roadway Safety

Maintaining a safe roadway system is essential to sustaining and enhancing the quality of life for regional residents. Deaths and injuries resulting from traffic crashes are a serious public health concern and substantially impact local communities with medical costs, lost wages, insurance costs, taxes, police, fire, and emergency medical services, legal and court costs, and property damage. More details about traffic crashes in the region can be found in the Public Health system of this document.

## State Safety Plans and Initiatives

To address major roadway safety concerns, IDOT created the Bureau of Safety Engineering and completed a Statewide Comprehensive Highway Safety Plan (CHSP) in 2005. Since then, IDOT has implemented the Highway Safety Improvement Program (HSIP), began dedicating more money to safety projects, and started taking a system improvement approach versus a spot improvement only approach. This has included installing safety measures such as rumble strips, chevrons, safety shoulders, flashing lights for stop signs, and offset left turn lanes at signalized intersections at various locations.

IDOT now publishes an annual Strategic Highway Safety Plan (SHSP). Similar to the CHSP, the SHSP emphasizes 16 focus areas (IDOT, n.d.b):

- Distracted/Fatigued/Drowsy Driver
- Heavy Vehicle
- Highway-Railroad Grade Crossings
- Impaired Driver
- Information Systems
- Intersections
- Motorcycle
- Older Driver
- Pedalcyclist
- Pedestrian
- Roadway Departure
- Speeding/Aggressive Driver
- Traffic Incident Management
- Work Zone
- Unrestrained Occupants
- Younger Driver

The SHSP builds upon and improves data, data systems, safety analysis and evaluation, and is the overarching plan used to implement various safety programs and initiatives.

## ITS Security & Safety

The region's original ITS system was installed during the reconstruction of Interstate 74 in Peoria. This system has since grown from having just 25 cameras to now including well over double that. Additionally, the system interconnects more cities, additional dynamic message signs have been installed, and more miles of fiber optic cable have been put in the ground.

This system allows IDOT to share up-to-the-minute data with police, fire, and public works departments of various agencies in the area. IDOT receives data from the Computer Aided Dispatch (CAD) from the Peoria County 911 center, which provides notifications of incidents without the police having to send updates. This information helps IDOT respond to incidents more quickly and with the right equipment. These quick response times allow traffic lanes to become unobstructed faster, thus reducing traveler delay and secondary crashes.

ITS information is also disseminated to the public via a website that shows video images, weather updates, and lane closures caused by incidents and construction. Cameras at critical bridge and river locations (not shown to the public) are shared with the Illinois Emergency Management Agency (IEMA) and the coast guard.

In the future, IDOT plans to connect to additional police and public works departments and state districts, as well as receive CAD data from other 911 centers.

# Transportation Asset Management

Asset Management is part of a performance-based method to ensure resources are invested as effectively as possible.

Renewed focus on asset management has been approached both from the top-down and the ground-up. The concept has gained momentum largely because of recent (MAP-21) and current (FAST Act) federal legislation requiring a performance-based approach to investments in the National Highway System. However, local and state resources to maintain such assets have also been dwindling in recent years to the point that an average person will readily agree there has been a more notice-able, widespread decline in the condition of our roads and bridges. This section will detail the recent efforts at the state, regional, and local levels to better manage transportation assets.

## Illinois DOT Transportation Asset Management Plan: Raising the Bar

Part of the MAP-21 rulemakings include a requirement that all states develop a Transportation Asset Management Plan (TAMP). Illinois' first such plan was released in April 2018. The document outlines how a state will develop and implement long-term strategies for proper maintenance of highway and bridges to ensure a longer life. The plan addresses all state-maintained pavements and bridges – not just those that are part of the National Highway System.


**Figure SO-2** Example Maintenance Education Visual (IDOT TAMP, 2018)

This is notable change for the agency, moving from previous "worst-first" treatment and programming decision strategies to instead focus on system preservation. To many, it seems confusing to invest finite (and sometimes scarce) resources in an asset that appears to be in better condition than one that is obviously in bad shape. Communication strategies have focused on using analogies like the importance of oil changes for vehicles to maximize their useful life (**Figure SO-2**). A more specific visual in **Figure SO-3** describes the relationship between a pavement's deterioration process and the costs associated with restoring a pavement to good condition at different points in that process. In summation, it is more cost effective to intervene earlier rather than waiting to replace an asset at the end of the useful life.

## Bridges

As of 2019, there are nearly 27,000 bridges across the state. IDOT and local agencies inspect these structures on a bi-yearly basis as designated by National Bridge Inspections Standards (NBIS). This assessment is critical for maintaining, repairing, and rehabilitating the state's bridges in a cost-effective manner, as well as keeping the general public safe.

Each bridge is assigned a computer-generated sufficiency rating. This is a numeric value that is a result of a method used to evaluate data by calculating four different factors: Structural Adequacy and Safety; 2) Serviceability and Functional Obsolescence; 3) Essentiality for Public Use; and 4) Special Reductions (based on certain limiting features). This value is a percentage that is indicative of the bridge's sufficiency to remain in service. A rating of 100% represents an entirely sufficient bridge, and a rating of zero represents an entirely insufficient or deficient bridge. Only structures that carry a highway receive a sufficiency rating.

Since the final rulemaking of MAP-21 performance measures for Infrastructure, FHWA has shifted to classifying bridges into Good, Fair, and Poor. These terms are defined in accordance with the Pavement and Bridge Condition Performance Measures final rule, published in January of 2017. "Bridge Condition is determined by the lowest rating of National Bridge Inventory (NBI) condition ratings for Item 58 (Deck), Item 59 (Superstructure), Item 60 (Substructure), or Item 62 (Culvert). If the lowest rating is greater than or equal to 7, the bridge is classified as Good; if it is less than or equal to 4, the classification is Poor. Bridges rated 5 or 6 are classified as Fair."

From FHWA's 2019 NBI ratings of bridges in each county and the state have been compiled in **Table SO-3**. To be clear, these bridges are listed by location, not maintenance responsibility.

In the last version of this document, 2014 data indicated Peoria County had the fourth lowest sufficiency rating in the state. Furthermore, the Tri-County Region also had a disproportionate number of bridges, 18.4%, categorized as "structurally deficient" compared to the state as a whole, 8.4%. Because of this previous analysis, the 2019 NBI data from **Table SO-3** was further scrutinized to show the proportion of bridges in each condition in **Table SO-4**.

| | Bridge Counts | | | | Bridge Area Square Meters | | | |
|---|---|---|---|---|---|---|---|---|
| **Location** | **All** | **Good** | **Fair** | **Poor** | **All** | **Good** | **Fair** | **Poor** |
| Peoria County (143) | 351 | 88 | 175 | 88 | You | 23,136 | 88,461 | 79,158 |
| Tazewell County (179) | 358 | 91 | 213 | 54 | 309,832 | 29,014 | 205,434 | 75,384 |
| Woodford County (203) | 219 | 64 | 129 | 26 | 59,922 | 9,226 | 36,988 | 13,708 |
| Tri-County Region | 928 | 243 | 517 | 168 | 560,509 | 61,376 | 330,883 | 168,250 |
| Illinois | 26,825 | 13,084 | 11,334 | 2,407 | 13,515,434 | 4,834,270 | 7,014,931 | 1,666,233 |

**Table SO-3** Bridge Conditions
(FHWA National Bridge Inventory, 2019)

| | Percent of Bridges by Rating | | | |
|---|---|---|---|---|
| **Location** | **All** | **Good** | **Fair** | **Poor** |
| Peoria County (143) | 351 | 25.07% | 49.86% | 25.07% |
| Tazewell County (179) | 358 | 25.42% | 59.50% | 15.08% |
| Woodford County (203) | 219 | 29.22% | 58.90% | 11.87% |
| Tri-County Region | 928 | 26.19% | 55.71% | 18.10% |
| Illinois | 26,825 | 48.78% | 42.25% | 8.97% |

**Table SO-4** Percent of Bridges by Rating
(FHWA National Bridge Inventory, 2019)

Though 2019 data uses "Good," "Fair," and "Poor" rather than "structurally deficient," the Tri-County region still reports bridges in poor condition at a higher proportion than Illinois as a whole. Again, bridges in Peoria County are noticeably worse off when comparing the proportion of bridges in poor or good condition with the state totals. The proportion of bridges in good condition is also significantly lower for the whole region when compared to the percent of all Illinois bridges in good condition. Current bridge conditions are concerning. However, the eastbound span of the McCluggage Bridge (carries US 150) is currently being replaced, Murray Baker bridge is closed to the public for maintenance and re-decking, and the Bob Michel bridge has been included in the Rebuild Illinois Capital Program. It is encouraging to see this large investment in critical river crossings, but clearly more bridges need repair or replacement throughout the region.

PPUATS has supported IDOT targets for National Highway System bridge conditions. To review this information, see **Appendix A**.

## Pavements

In any community, pavement is the largest transportation asset to maintain. Recently, local and state agencies have faced an increasing burden to maintain acceptable driving conditions. Some of this can be attributed to a flat (not indexed to inflation) gas tax from 1993-present at the federal level and 1990 to 2019 at the state level. However, it should also be noted that in the same time frame, more expansion projects increased the pavement miles in many communities and the entire state. Across the board, the de-prioritization of maintenance in favor of system expansion or prioritizing reconstruction of the roads in worst condition has slowly built up a serious maintenance debt to tackle.

**Figure SO-3** below describes the general reasoning behind embracing maintenance as a major long-term cost savings. This approach, referred to as pavement management, is defined by American Association of State Highway Transportation Officials (AASHTO) as "…the effective and efficient directing of the various activities involved in providing and sustaining pavements in a condition acceptable to the traveling public at the least life cycle cost" (1985).

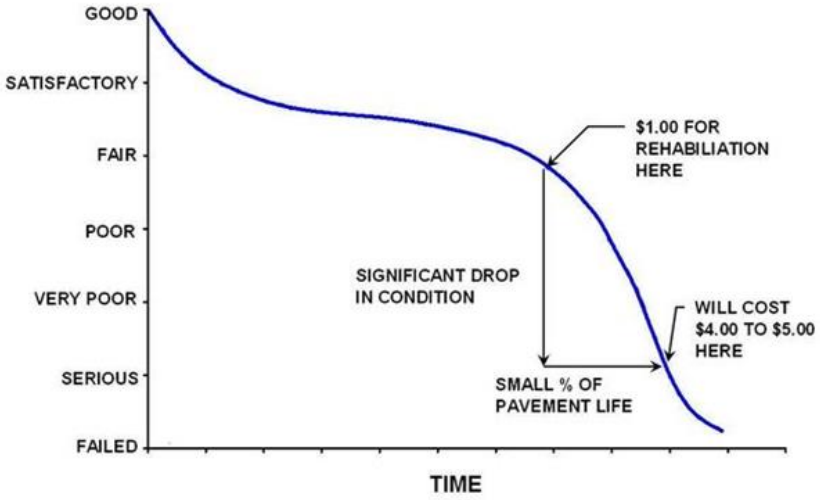



**Figure SO-3** Pavement Condition Over Time
Compares earlier intervention rehabilitation costs with reconstruction (IDOT, 2018)

### National Highway System

Per MAP-21 rulemakings about highway performance measures, pavement distress data must be collected and rated as good, fair, and poor. This system is largely maintained by IDOT, however both State DOTs and MPOs are required to set targets for National Highway System (NHS) pavement condition and report on progress toward meeting those targets. More about this topic can be found in **Appendix A – Transportation Performance Management**.

**State Roadway System**

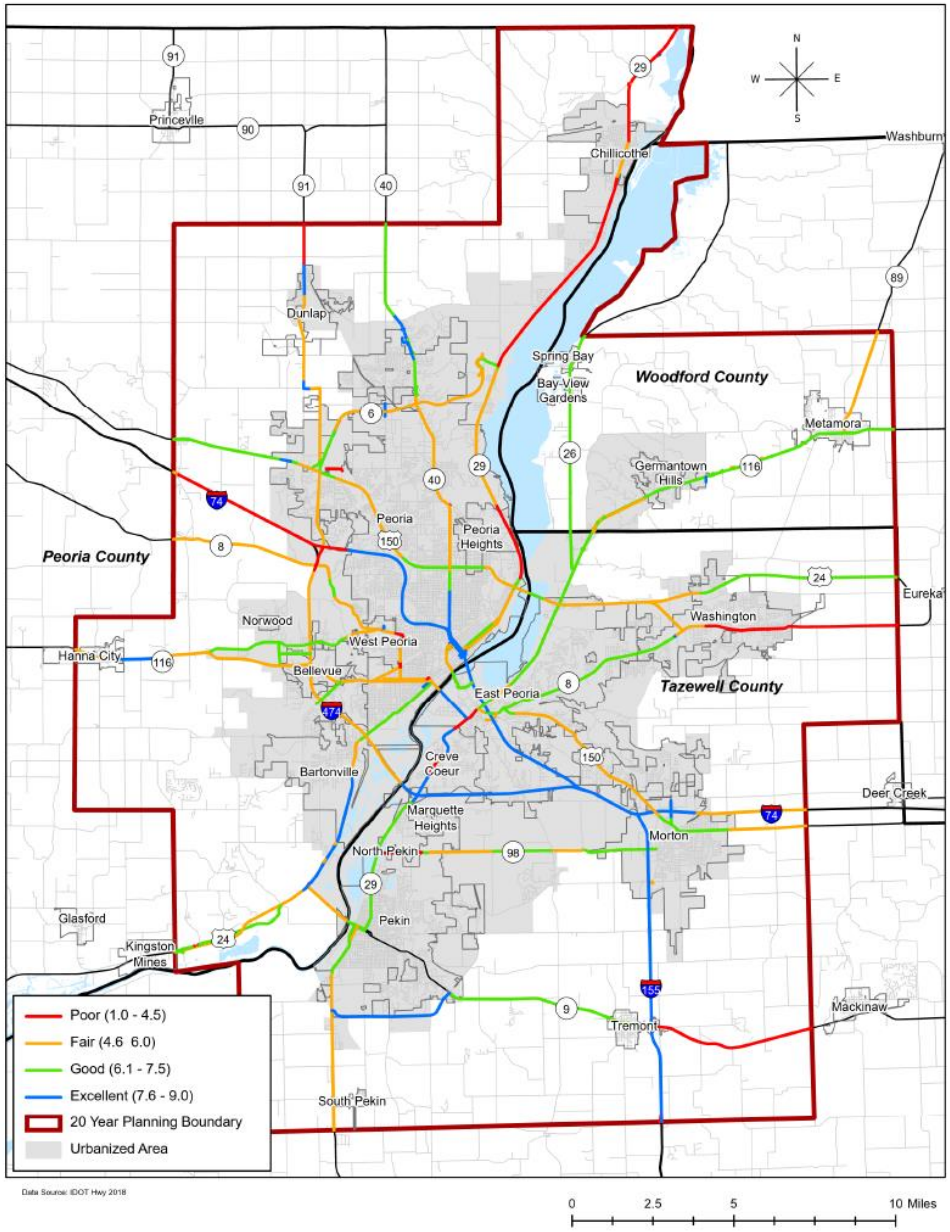
IDOT has a long history of completing pavement assessments for the roadways it is responsible to maintain: Interstates, U.S. Highways, marked state routes, and unmarked state routes. Data is collected for the described state system every two years – half of the state per year.

Since 1974, Illinois has used the Condition Rating Survey (CRS) method to evaluate pavement condition. It is based on pavement distress, such as International Roughness Index (IRI), rutting, cracking, and deterioration. The CRS is a numerical rating that ranges from 0 to 9, with ratings 7.6 and higher classified as "excellent" condition. **Figure SO-4** is taken from the IDOT's Bureau of Local Roads and Streets (BLRS) Manual and outlines the ranges of CRS ratings where pavement preservation is or is not feasible.

| **CRS Condition Ranges** | | | |
|---|---|---|---|
| Excellent | | 9.0 – 7.6 | **9.0 – 6.1** Feasible for pavement preservation |
| Satisfactory | | 7.5 – 6.1 | |
| Fair | | 6.0 – 4.6 | **6.0 – 1.0** Not feasible for pavement preservation |
| Poor | | 4.5 – 1.0 | |

**Figure SO-4** CRS Pavement Condition Ranges (IDOT, 2018)

In **Map SO-3** CRS values from the 2018 Illinois Roadway Information Systems GIS data were used to map conditions of the roads IDOT must maintain, as well as a few major roadways maintained by local partners.




**Map SO-3** Pavement Condition Ranges
(Illinois Roadway Information Systems, 2018)

**County/Municipal Roadway System**

Locally, the struggle to maintain roads in an acceptable condition has advanced from municipalities and counties to the MPO. During committee meetings to address Surface Transportation Block Grant (STBG) criteria, there was a rising desire to use funds to assist MPO communities that are struggling to even maintain roadways at their current condition. Deeper discussions illuminated the lack of consistent data to provide a regionally comprehensive understanding of these maintenance needs.

With wide support among the members, the MPO began exploring pavement management in 2017. Beyond addressing STBG programming, there were several other benefits to undertake this effort at the regional level (see **Figure SO-5** for a visualization).

1. As the MPO is a public, but member-based organization, this is an opportunity to provide a service that many had championed and would benefit all.
2. The project provides increased transparency to taxpaying residents of our region regarding the investment in public infrastructure.
3. Comprehensive assessment of roadway conditions helps estimate current and future costs for the regional network. These assessments would make progress toward a state of good repair, help prioritize allocation of near-term federal investments (STBG) and understand future estimates of federal funds coming to the region in the LRTP.
4. Aligning all the pavement assessments for communities into one regional project prevents the costs associated with mobilizing multiple assessment equipment and operator teams.
5. Many smaller MPO communities do not have a network large enough to attract companies with the equipment to do more detailed automated pavement assessment. Incorporating larger communities with more miles to assess makes acquiring this service easier for all partners.

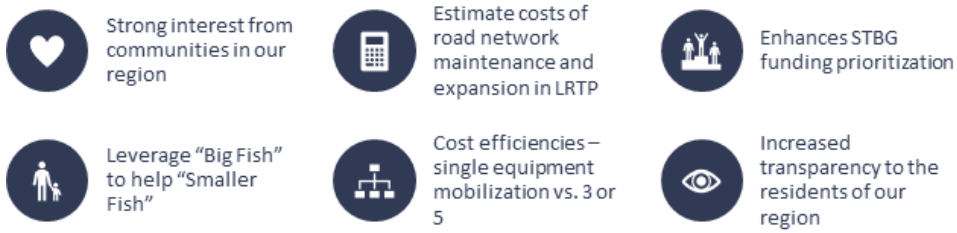
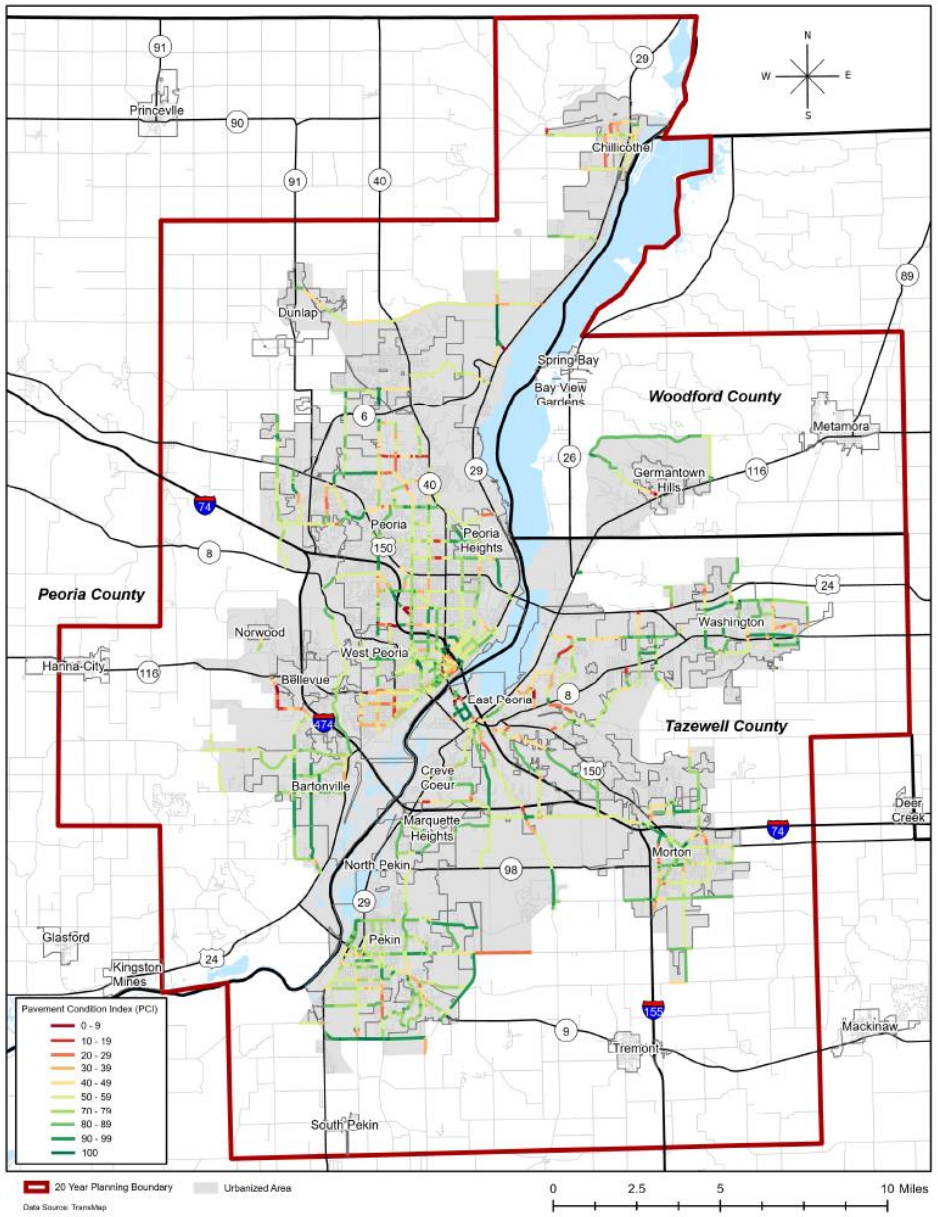



**Figure SO-5** Visualization of Pavement Management Benefits

The first phase of the regional pavement management program focused strictly on the roads classified as minor collectors or higher under municipal or county jurisdiction in the urbanized area. TCRPC contracted with a vendor to use specially equipped vehicles to collect pavement distress data as they drove the roads. This took place largely over the summer and fall of 2018 for 342 centerline miles in the region. **Map SO-4** shows the resulting condition ratings from that assessment.

Distress data was collected and processed per ASTM D6433 standards to give each segment of the 342 centerline miles a Pavement Condition Index (PCI) value. IDOT's Bureau of Local Roads and Streets Manual describes the PCI system in the following way:

> **A PCI score encompasses components of the pavement that reflect its structural integrity, environmental damage, and other associated performance factors (e.g. safety). … the final calculated PCI score is a number from 0 to 100, with 100 representing a pavement in excellent condition (IDOT, 2018, pg. 45-4(3)).**




**Map SO-4** Regionally Significant Roadway Conditions (PCI) (PPUATS Urban Pavement Survey, 2018)

In the end, the weighted average PCI for the roads studied was a 65. This indicates many miles of roadways are in a precarious position. At a PCI rating of 65, the possibility of using preservation treatments to extend useful life of the pavement is regarded as not feasible, according to IDOT's BLRS Manual. As seen earlier in **Figure SO-2**, the cost to bring that pavement back up to a "good" condition will likely be far costlier at this point in the life of many roads in the region. **Figure SO-6** is from the BLRS Manual and outlines the PCI rating ranges where pavement preservation is or is not feasible.

| **PCI Condition Ratings** | | | |
|---|---|---|---|
| Excellent | | 100 – 86 | **100 – 65**<br>Feasible for pavement preservation |
| Very Good | | 85 – 71 | |
| Good | | 70 – 56 | |
| Fair | | 55 – 41 | **64 – 0**<br>Not suitable for pavement preservation |
| Poor | | 40 – 26 | |
| Very Poor | | 25 – 11 | |
| Failed | | 10 – 0 | |

**Figure SO-6** PCI Pavement Condition Ratings (IDOT, 2018)

TCRPC is currently working with a vendor to complete a second phase of pavement assessments targeted at roads not addressed in Phase 1. For participating communities in the urbanized area, this includes roads with the functional classification of "Local Road or Street" (see descriptions for the functional classification system found earlier in this chapter for more information). The project also includes communities who did not participate at all in Phase 1. These are largely small communities that lie outside the urbanized area but are still served by the regional planning commission.

This second phase is important to complete as it provides a more comprehensive understanding of an entire system under county or municipal jurisdiction. Once complete, communities will have baseline information to help local policymakers better understand infrastructure needs and make more informed resource allocations. It has been rewarding to see interest in asset management continue to swell in the region.

## Other Transportation Assets

While bridges and roads are by far the largest and costliest infrastructure to maintain, the idea of asset management can and should be applied to all assets. Many assets, though small, play a big role in keeping the entire transportation system functioning reliably—sidewalks, stop signs, utility shut-offs, directional/route signage, culverts, and guardrails to name a few. Since 2012, TCRPC has helped many communities start their asset management journeys by providing equipment, labor, expertise, or all of the above from the GIS department. **Table SO-5** provides a summary of these projects.

| Community | Projects |
|---|---|
| City of East Peoria | sidewalk inventory |
| City of El Paso | sidewalk inventory, asset management projects |
| City of Elmwood | utility mapping, asset management projects |
| City of Minonk | sanitary, water, storm sewer mapping |
| City of Peoria | sidewalk inventory |
| Hollis Park District | asset mapping |
| Limestone Township | asset mapping, maintain sealcoat road inventory |
| Peoria Park District | asset management assistance |
| Tazewell County | guardrail inventory |
| Village of Bartonville | guardrail inventory, asset mapping |
| Village of Creve Coeur | sign inventory |
| Village of Delavan | sidewalk inventory |
| Village of Hanna City | sidewalk inventory |
| Village of Morton | guardrail inventory |
| Marquette Heights | asset mapping |
| Village of North Pekin | asset mapping |
| Village of Peoria Heights | asset management assistance |
| Village of Tremont | asset mapping |
| Woodford County | highway department sign inventory |

**Table SO-5** Tri-County Community Asset Management Projects

# Information and Data Sources

AASHTO. (1985). Guidelines on Pavement Management, American Association of State Highway and Transportation Officials, Washington D.C., 9p

Federal Highway Administration (FHWA). (2019). Download NBI ASCII files 2019. Retrieved May 28, 2020 from https://www.fhwa.dot.gov/bridge/nbi/ascii2019.cfm

Federal Highway Administration (FHWA). (n.d.a). Bridges & Structures. Retrieved May 5, 2020, from https://www.fhwa.dot.gov/bridge/nbi/no10/county19a.cfm#il

Federal Highway Administration (FHWA). (n.d.b). Bridges & Structures. Retrieved May 5, 2020, from https://www.fhwa.dot.gov/bridge/britab.cfm

Illinois Department of Transportation (IDOT). (2018). Illinois Travel Statistics. Retrieved May 5, 2020 from http://www.idot.illinois.gov/transportation-system/Network-Overview/highway-system/illinois-travel-statistics

Illinois Department of Transportation (IDOT). (2018b, December). Bureau of Local Roads and Streets Manual. Retrieved May 5, 2020 from http://www.idot.illinois.gov/Assets/uploads/files/Doing-Business/Manuals-Guides-&-Handbooks/Highways/Local-Roads-and-Streets/Local%20Roads%20and%20Streets%20Manual.pdf

Illinois Department of Transportation (IDOT). (n.d.a). Getting Around Illinois. Retrieved May 5, 2020 from http://www.gettingaroundillinois.com/gai.htm?mt=aadt

Illinois Department of Transportation (IDOT). (n.d.b). Strategic Highway Safety Plan. Retrieved May 5, 2020 from http://www.idot.illinois.gov/transportation-system/transportation-management/planning/SHSP

Peoria International Airport (PIA). (n.d.) General Wayne A. Downing Peoria International Airport. Retrieved May 5, 2020 from https://www.flypia.com/

Tri-County Regional Planning Commission (TCRPC). (2011, July). Congestion Management Process. Retrieved May 5, 2020 from https://tricountyrpc.org/wp-content/uploads/CMP_Final__6.16.11-1.pdf

WEEK. (2020, January 14). PIA offering nonstop flights to Nashville starting June 4. Retrieved May 5, 2020 from https://week.com/2020/01/14/pia-now-offering-nonstop-flights-to-nashville/

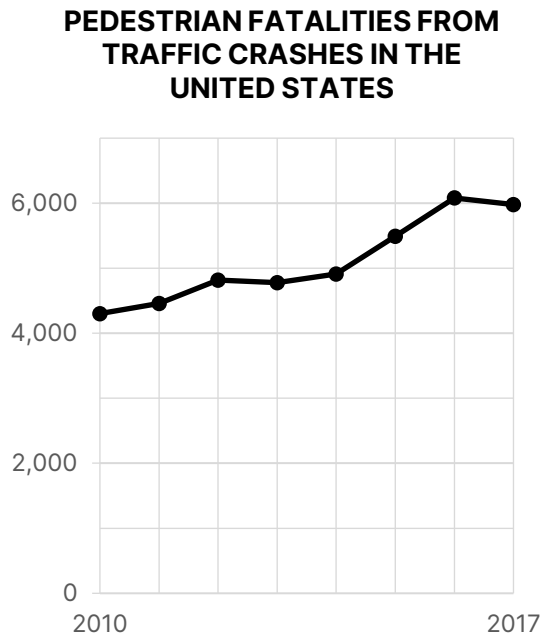
# Public Health

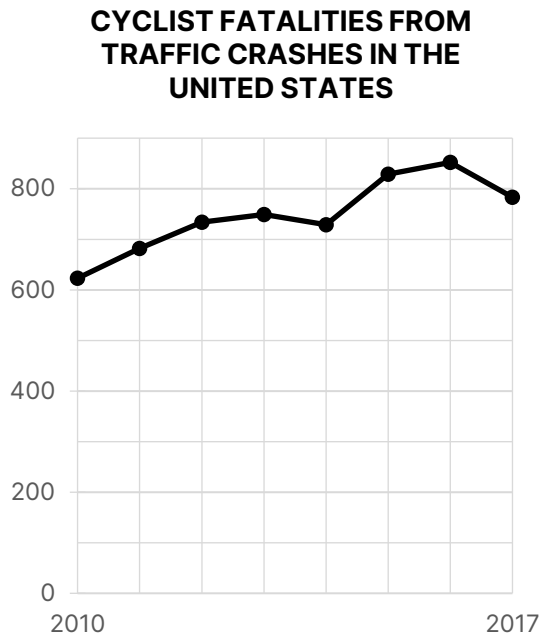
The link between transportation and public health is a topic of continuing research. In fact, residents' health is impacted by the way transportation systems are built and how these systems are used (APHA, 2009). It is therefore crucial to examine our regional transportation system in the context of public health and safety, understand these impacts, and ensure the future system promotes a healthy population.

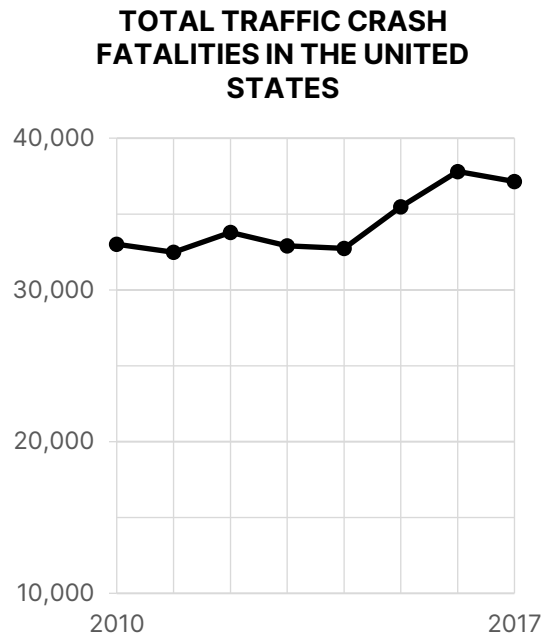
A transportation system that provides a range of affordable, safe, and efficient options for getting around will minimize negative public health impacts. By investing in transit, bicycle, and pedestrian infrastructure, and introducing more policies and system enhancements that address safety issues, our system will be better able to support a healthy population.

## Public Safety

Automobile crashes and bicycle and pedestrian crashes can result in fatalities and injuries. In 2017, there were 37,133 individuals killed in traffic crashes in the United States, including nearly 6,000 pedestrians and almost 800 bicyclists (NHTSA, 2019). See Figures PH-1 through PH-3 for a visual representation.




**Figures PH-1, PH-2, and PH-3** Pedestrian, cyclist, and total fatalities due to traffic crashes nationwide between 2010 and 2017 (NHTSA, 2019)

Locally, the data are mixed. From 2008-2018, the number of crashes resulting in injury and the number of fatal crashes in Greater Peoria have fluctuated (see **Figures PH-4** and **PH-5**). Between 2014 and 2018 there has been a 6.1% decrease in fatal crashes, but a 9.2% increase in crashes resulting in injuries (IDOT, 2019). Based on transportation trends, a portion of this decline in fatal crashes could be a result of safer automobiles, improved driver education, increased limitations for young drivers, increased law enforcement, and harsher drunk driving laws (GTC, 2016).

However, part of the decline can also be attributed to system enhancements such as the Illinois Department of Transportation's Highway Safety Improvement Program (HSIP) and the Bureau of Safety Engineering. Both were created in 2005. These programs have allowed for the installation of safety measures such as rumble strips, chevrons, safety shoulders, flashing lights for stop signs, and offset left turn lanes at signalized intersections, among others.

On the other hand, distracted driving may have contributed to this increase in crash injuries, with the increased usage of cell phones and the need for people to be constantly connected (GTC, 2016). While non-hands-free cell phone usage while driving was previously considered illegal before 2018 in the State of Illinois, in August 2018, Governor Bruce Rauner created higher penalties for texting while driving. The following summer, in July 2019, Governor J.B. Pritzker signed yet a harsher law for using cell phones while driving (WILL, 2019).

Finally, the quality of the sidewalks in an area (or lack thereof) can be a safety issue for people who walk as a form of transportation or just for leisure. They could also affect a person's health, as outlined in the "physical activity" subsection. Sidewalk quality can contribute to the number of people who are comfortable using them or are able to use them at all. For example, a highly degraded sidewalk or one without updated American Disability Act (ADA) requirements could hinder, or even provide a solid barrier to, someone who uses a wheelchair or other mobility device. Tri-County staff have conducted sidewalk inventories of several communities throughout the region, among them the City of Peoria in Peoria County, the City of Eureka in Woodford County, and the City of East Peoria in Tazewell County.

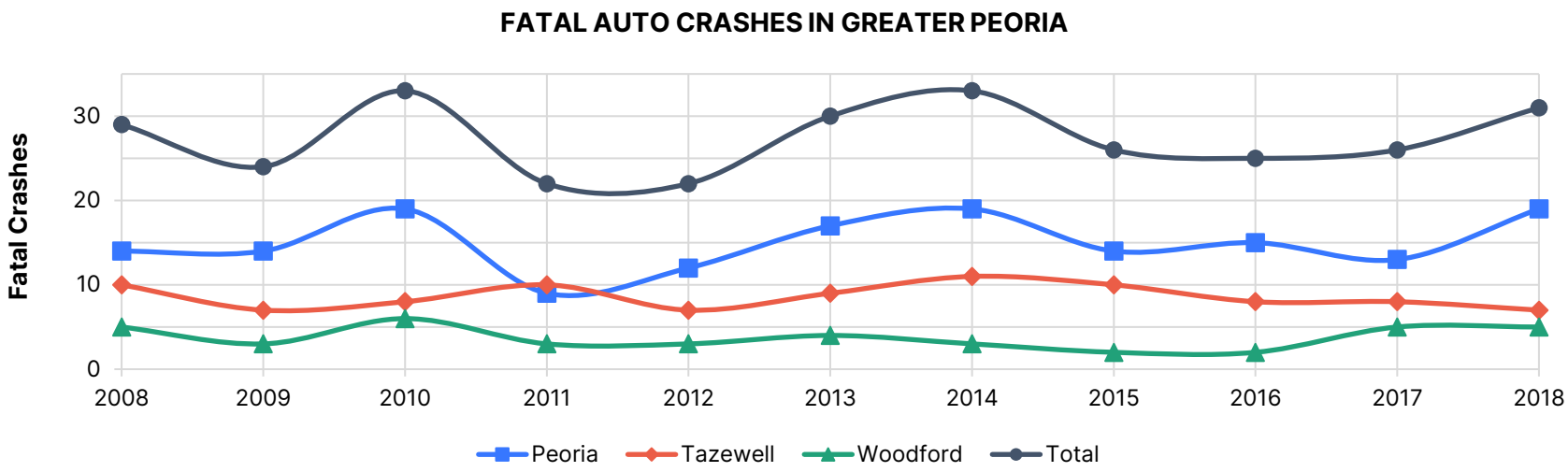



**Figure PH-4** Fatal Auto Crashes in Greater Peoria
(IDOT, 2019)

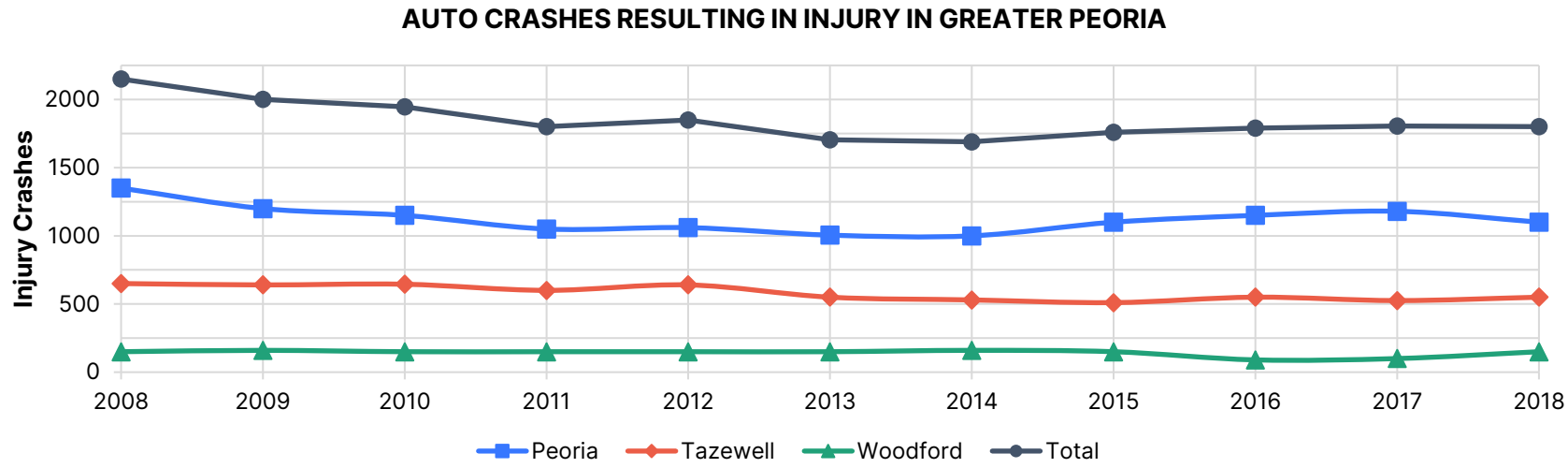



**Figure PH-5** Auto Crashes Resulting in Injury in Greater Peoria
(IDOT, 2019)

## Air Quality

Our regional transportation system has a direct impact on the air quality of our region. In the Midwest, ozone is the primary contributor to air pollution, and according to national averages, motor vehicle emissions account for about one-third of ozone in the air. Besides ozone, other transportation-based emissions that can lead to adverse health effects include: Particulate matter, sulfur dioxide (SO2), and lead (the levels and effects of these pollutants can be found in the Environment section of this plan). Therefore, with all these pollutants in mind, a reduction in motor vehicle emissions can lead to improved air quality.

Air pollution is associated with several health issues, including asthma and respiratory illness, heart disease and lung cancer. Asthma is a growing public health problem in the United States. In 2018 in the U.S., there were nearly 25 million people with asthma, and 860,007 of them were in Illinois (CDC, 2018a; CDC, 2018b). Research has shown that air pollution can make asthma symptoms worse and trigger attacks. Additionally, though the risk of lung cancer associated with air pollution is lower in the United States than in other parts of the world, the International Agency for Research on Cancer (IARC) has confirmed that it remains a risk and should not be ignored (Simon, 2013).

Locally, both asthma and cancer incidence in the tri-county area are outlined in detail in the 2019 Tri-County Community Health Needs Assessment. According to the Assessment, cases of asthma decreased in Peoria and increased in both Tazewell and Woodford counties between 2007-2009 and 2010-2014. Statewide asthma averages increased. Cancer, along with heart disease, is the leading cause of mortality in the tri-county region, and lung cancer is one of the top three types of cancer. Peoria County's rates for lung cancer (and breast and prostate cancer, for that matter), were higher between 2009 and 2013 than those of the State of Illinois. Lung cancer rates in Tazewell were the highest of the three counties, as seen in **Figure PH-6** on the following page (CHNA, 2019). Of course, air pollution is just one of many factors that could be contributing to these high rates; however, its effects should not be overlooked.

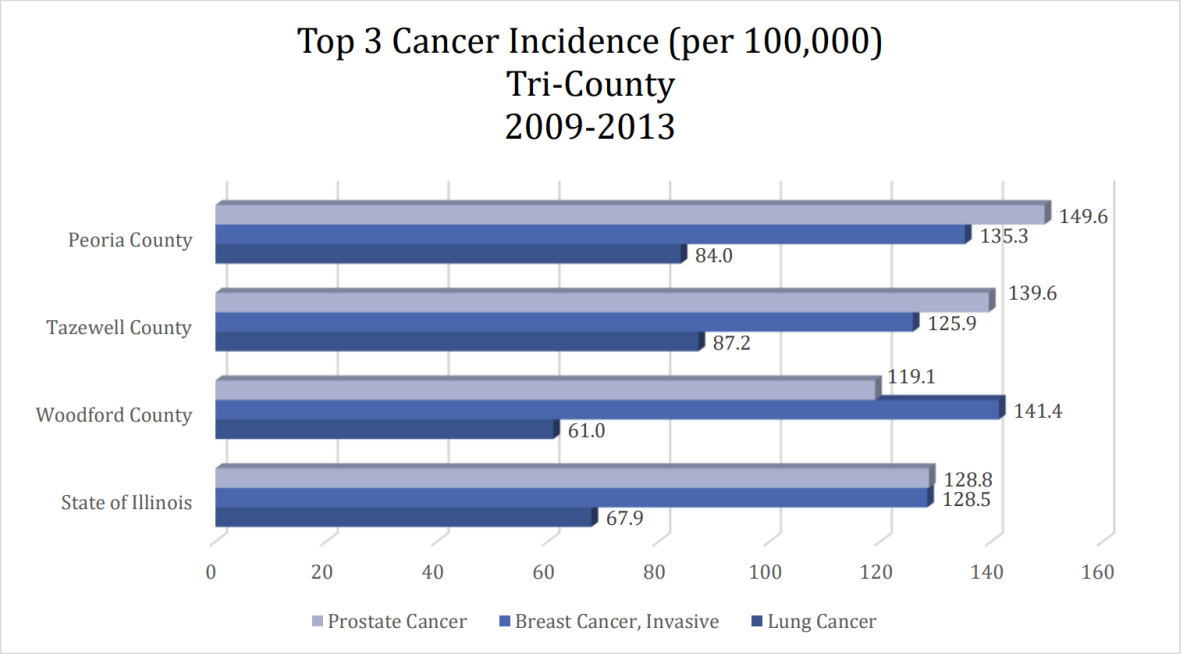



**Figure PH-6** Cancer incidence throughout the tri-county area, compared to the State of Illinois
(CHNA, 2019)

The Greater Peoria Area, like most communities in the United States, has been designed and built to favor automobile use. This has led to a population that is dependent on the automobile to access goods and services across the region. In fact, according to the 2018 American Community Survey, nearly 85% of workers across the Tri-County area drove alone to work, and almost 8% carpooled. This statistic – though it does not include educational, medical, and shopping trips – provides a sense of how auto-dependent the region is. As referenced above, dependence on the automobile can lead to poor air quality, fewer opportunities to be active, and lack of options for residents who are transportation insecure.

While individual actions and motor vehicle technology contribute to improving air quality, so too can improvements to our regional transportation system. Developing a system that enables more users to walk, bike, or use mass transit can help reduce motor vehicle emissions, improve air quality and, subsequently, minimize the effects of air pollution on physical health issues.

## Physical Activity and Obesity

Obesity is a growing public health concern in the United States. According to the Centers for Disease Control and Prevention (CDC), the prevalence of obesity was over 40% in 2017-2018 in the US, and 18.5% of children and adolescents aged 2-19 were obese (CDC, 2019). The Illinois statewide adult obesity rate was 31.8% (CDC, 2020). In addition, research has shown a direct link between automobile-oriented communities and low rates of physical activity (APHA, 2009). These findings suggest that transportation systems in which physical activity (such as walking or biking) is difficult or discouraged could be a contributing factor to obesity in the United States.

According to the CDC, adults need at least 150 minutes of moderate-intensity aerobic activity every week, as well as full body muscle-strengthening activities at least twice per week (CDC, 2018c). This regular physical activity, which ideally would be broken up throughout the week, increases people's well-being overall, according to research (CHNA, 2019). However, as reported by the 2019 Tri-County Community Health Needs Assessment, 23% of residents do not exercise at all, while the majority (65%) are able to exercise 1-5 times per week (See **Figure PH-7**). As for why 23% of the tri-county population do not exercise, over half—57%—said it was because they either were too tired or did not have enough time. This could give a snapshot into the business and lifestyles of area residents. This lifestyle can be related to weight: the overweight and obesity rates in the tri-county region are, on average, 65.9% (CHNA, 2019).

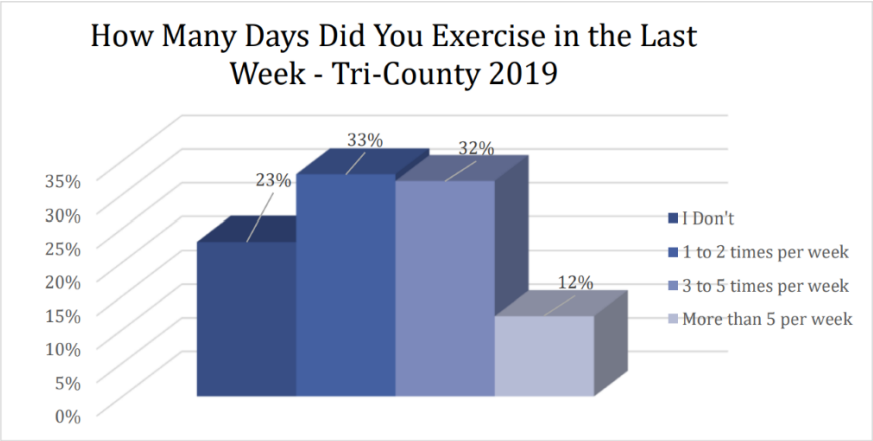



**Figure PH-7** Amount of exercise tri-county residents get per week, as found in a survey from the Tri-County Community Health Needs Assessment
(CHNA, 2019)

While poor diet choices contribute significantly to obesity and increased weight gain, lack of physical activity also plays a part. A transportation system that enables the use of a variety of modes, including walking and biking, provides greater options for individuals to engage in physical activity and improve their physical health. With that in mind, it is worth noting that seven percent of people who said they do not exercise in the Tri-County area said that lack of accessibility prevented them from doing so (CHNA, 2019). When it comes to exercise, this accessibility could refer to facilities to exercise as well as safe streets to walk along, bike through, and generally be active in. Therefore, access to safe and reliable transportation, particularly active transportation, becomes a gateway to a healthier lifestyle (Sallis et al., 2012). This is especially true in areas of low socioeconomic status (SES) and minority populations:

> **In a review, light traffic, safety from crime, and sidewalks were most consistently associated with physical activity among Black Americans. However, low-SES or high-minority neighborhoods appear to have less supportive environmental conditions for active transportation. (Sallis et al., 2012)**

## Accessibility

Millions of individuals in the US are unable to transport themselves or purchase transportation due to physical and/or mental disabilities, income status, or age. These individuals, often referred to as "transportation insecure," must depend on others to obtain access to fresh foods, medical care, employment, and educational opportunities. Transportation access can have major effects on both the physical and emotional health of these individuals.

According to the 2018 American Community Survey five-year estimates, 12.4% of the Tri-County population is living below the poverty level, and 8% of the population in poverty lives in Peoria (ACS, 2018c). Additionally, 11.5% of all Tri-County residents have some type of disability—this number is slightly lower in Woodford County, at 9.8% (ACS, 2018b). Furthermore, the youngest and oldest residents in the area make up a considerable percentage: 21% are under the age of 15, and nearly 17% are 65 years or older, for a total of about 38% of the Tri-County population (ACS, 2018a). All these individuals have a higher chance of being transportation insecure—and many of the above percentages may overlap as well, depending on each resident's situation.

Another form of accessibility relates to fresh food in the region—or lack thereof. Municipalities across all three counties, urban and rural, have felt the sting of losing essential grocery access. This has been a sticking point in the past few years: Two Kroger stores closed in 2018 in Peoria; Delavan's only grocery store burned down in Tazewell County in 2014; and in Woodford County, Minonk's grocery store closed in 2019 (Peoria Public Radio, 2019). This forces locals to find other places to shop, places which may not carry fresh food like regular grocery stores, therefore limiting the amount of accessible healthy food items. The closing of these grocery stores also forces residents to travel further to for food access. This results in higher vehicle miles traveled by car, or a need for residents to take longer, more out-of-the-way bus trips. This causes food insecurity in the region (see **Figure PH-8**), hinging on accessible transportation.


**Figure PH-8** Food Insecurity Pyramid (Feeding America, 2019)

Many transit and paratransit rides in the region either involve bringing passengers to and from health appointments or to buy food. CityLink is tri-county's regular bus service, and the following paratransit organizations provide rides for the public in this region: CityLift, within the Peoria city limits; CountyLift, within Peoria County limits; and WeCare, in rural parts of Tazewell and Woodford counties. These services cater to residents of all abilities, with ramps available for those with mobility devices. More information about transit and paratransit services can be found in the Mobility & Connectivity section of this plan.

# Goal, Objectives, and Action Items

**GOAL FOR PUBLIC HEALTH**

Promote active, healthy living in our region by striving for safety, security, and accessibility in our transportation system.

| Objectives and action items | Also applies to: |
|---|---|
| **Improve safety for all users of the transportation system** | |
| • Identify specific means of reducing fatal crashes in the tri-county area. | |
| • Identify specific means of reducing crashes resulting in injury in the tri-county area. | |
| • Prioritize the funding of projects with definitive measures to reduce crash deaths or injuries. | |
| • Continue collecting sidewalk condition data to understand gaps in the system. | |
| • Take steps to improve the breadth and condition of the region's sidewalk network. | Mobility & Connectivity |
| • Reduce physical obstructions/barriers that impede safe bicycle/pedestrian travel. | Mobility & Connectivity |
| • Continue to prepare applications for Highway Safety Improvement Program (HSIP) funds. | |
| • Provide improved public transit stop locations for pedestrian safety and security (e.g. lighting, sheltered benches). | Mobility & Connectivity |
| • Support expanded local Safe Routes to School programs. | Mobility & Connectivity |
| • Encourage the development of safety education programs to inform the public of bicycle/pedestrian rules and regulations. | Mobility & Connectivity |
| • Increase pedestrian signal crossing time. | Mobility & Connectivity |
| **Improve transportation security for all users of the transportation system** | |
| • Pinpoint sources of air and water pollutants that affect humans most adversely and reduce them. | Environment |
| • Understand the type of populations (i.e. demographics, socioeconomic status) who are most affected by transportation-derived environmental pollutants. | Environment |
| • Prioritize the funding of projects that reduce environmental burdens on underserved populations. | Environment |

| Objectives and action items | Also applies to: |
|---|---|
| **Improve transportation accessibility for all users** | |
| • Encourage non-motorized travel. | Mobility & Connectivity, Environment |
| • Prioritize funding of walking and biking trails to promote healthy lifestyles and lower emissions. | Environment |
| • Integrate expanded and improved bicycle and pedestrian facilities into new and existing developments. | Mobility & Connectivity |
| • Work with food, healthcare, and other organizations in the region to ensure adequate transportation accessibility to vital services. | Mobility & Connectivity |

# Information and Data Sources

American Public Health Association (APHA). (2009, April). At the Intersection of Public Health and Transportation: Promoting Healthy Transportation Policy. Retrieved May 5, 2020 from http://www.apha.org/~/media/files/pdf/topics/transport/at_the_intersection.ashx

Centers for Disease Control and Prevention (CDC). (2018). Most Recent National Asthma Data. Retrieved May 5, 2020 from https://www.cdc.gov/asthma/most_recent_national_asthma_data.htm

Centers for Disease Control and Prevention (CDC). (2018). Most Recent State or Territory Asthma Data. Retrieved May 5, 2020 from https://www.cdc.gov/asthma/most_recent_data_states.htm

Centers for Disease Control and Prevention (CDC). (2018). Physical Activity Guidelines for Americans: 2nd Edition. Retrieved May 5, 2020 from https://health.gov/sites/default/files/2019-09/Physical_Activity_Guidelines_2nd_edition.pdf#page=56

Centers for Disease Control and Prevention (CDC). (2019, June 24). Prevalence of Childhood Obesity in the United States. Retrieved May 5, 2020 from https://www.cdc.gov/obesity/data/childhood.html

Centers for Disease Control and Prevention (CDC). (2020, February 27). Obesity is a common, serious, and costly disease. Retrieved May 5, 2020 from https://www.cdc.gov/obesity/data/adult.html

Community Health Needs Assessment (CHNA). (2019). Retrieved May 5, 2020 from https://www.pcchd.org/DocumentCenter/View/705/2019-Tri-County-Community-Health-Needs-Assessment-PDF-

Feeding America. (2020). Understand Food Insecurity. Retrieved May 22, 2020 from https://hungerandhealth.feedingamerica.org/understand-food-insecurity/

Genesee Transportation Council (GTC). (2016). Integrating Safety into Transportation Planning. Retrieved May 5, 2020 from https://www.gtcmpo.org/16

Illinois Department of Transportation (IDOT). (2019, October 8). Illinois Roadway Crash Data. Retrieved May 5, 2020 from http://www.idot.illinois.gov/transportation-system/safety/Illinois-Roadway-Crash-Data

National Highway Traffic Safety Administration (NHTSA). (2019, April 23). Traffic Safety Facts Annual Report Tables. Retrieved May 5, 2020 from https://cdan.nhtsa.gov/tsftables/tsfar.htm

National Highway Traffic Safety Administration (NHTSA). (2019, APRIL 23). Traffic Safety Facts Annual Report Tables. Retrieved May 5, 2020 from https://cdan.nhtsa.gov/tsftables/tsfar.htm

Peoria Public Radio. (2019, June 28). Draining the Food Swamp: Bringing Fresh Food Back to Rural Towns. Retrieved May 5, 2020 from https://www.peoriapublicradio.org/post/draining-food-swamp-bringing-fresh-food-back-rural-towns#stream/0

Sallis, J. F., Floyd, M. F., Rodríguez, D. A., & Saelens, B. E. (2012). Role of built environments in physical activity, obesity, and cardiovascular disease. Circulation, 125(5), 729–737. https://doi.org/10.1161/CIRCULATIONAHA.110.969022

Simon, Stacy. (2013, October). World Health Organization: Outdoor Air Pollution Causes Cancer. Retrieved May 5, 2020 from https://www.cancer.org/latest-news/world-health-organization-outdoor-air-pollution-causes-cancer.html

United States Census Bureau, American Community Survey (ACS). (2018). Age and Sex. Retrieved May 5, 2020 from https://data.census.gov/cedsci/table?q=dp&g=0500000US17203,17179,17143&tid=ACSST5Y2018.S0101&vintage=2018&t=Age%20and%20Sex

United States Census Bureau, American Community Survey (ACS). (2018). Disability Characteristics. Retrieved May 5, 2020 from https://data.census.gov/cedsci/table?q=dp&g=0500000US17143,17203,17179&tid=ACSST5Y2018.S1810&t=Disability&vintage=2018

United States Census Bureau, American Community Survey (ACS). (2018). Selected Economic Characteristics. Retrieved May 5, 2020 from https://data.census.gov/cedsci/table?q=dp&g=0500000US17203,17179,17143&tid=ACSDP5Y2018.DP03&vintage=2018&t=Income%20and%20Poverty

United States Census Bureau, American Community Survey (ACS). (2018). Selected Economic Characteristics. Retrieved May 5, 2020 https://data.census.gov/cedsci/table?q=dp&g=0500000US17203,17179,17143&tid=ACSDP5Y2018.DP03&vintage=2018&t=Commuting

United States Government Accountability Office (US GAO). (2012, June). Retrieved May 5, 2020 from http://www.gao.gov/assets/600/591708.pdf

WILL. (2019, August 12). New Texting and Driving Laws in Illinois. Retrieved May 5, 2020 from https://will.illinois.edu/legalissuesinthenews/program/new-texting-and-driving-laws-in-illinois

# Environment

It is critical to consider the natural environment when accounting for the short- and long-term impacts of transportation decisions. In connection with new approaches to how we maintain and enhance the livability of our region, the FAST Act reconfirms the need to enhance the performance of transportation systems while protecting and enhancing the natural environment as one of its primary goals for the nation. The natural environment provides the region with several ecosystem services which are fundamental to urban livability. Managing these environmental resources in conjunction with transportation planning is crucial to improving the region's overall health.

Key environmental assets can be described as:

- Clean air: Essential to both human and ecosystem health.
- Rivers and water bodies: Provide drinking water, recreation, and scenic views, and act as natural pollution filters.
- Biodiversity: Essential for food, material, and improved quality of life, and increases the region's resilience.
- Forests: Serve as watersheds, habitats, carbon sinks, leisure amenities, and tourist destinations. If managed sustainably, forests are also a source of energy and building materials.
- Wetlands: Filter and process stormwater and waste and act as a nursery for aquatic life.

## Habitats and Endangered Species

Local species rely on often sensitive natural areas like grasslands, woodlands, and wetlands. The Illinois Natural Areas Inventory (INAI) provides information about high-quality natural areas, habitats of endangered species, and other significant natural features. The INAI is used to guide land acquisition and protection programs by all levels of government, private landowners, and conservation organizations. The INAI breaks elements of the inventory into seven categories, found in **Table EV-1**. There are 53 INAI sites in the tri-county region. See **Appendix B** for a detailed listing of the sites.

| Seven INAI Categories | |
|---|---|
| Category I | High quality natural community and natural community restorations |
| Category II | Specific suitable habitat for state-listed species or state-listed species relocations |
| Category III | State dedicated nature preserves, land and water reserves, & natural heritage landmarks |
| Category IV | Outstanding geological features |
| Category V | Not used at this time |
| Category VI | Unusual concentrations of flora or fauna and high-quality streams |
| Category VII | Not used at this time |

**Table EV-1** Categories of the Illinois Natural Areas Inventory(IDNR, 2019a).

As of 2019, land use within the tri-county area consisted of 745,521.46 acres of agricultural uses; 204,363.70 acres of urban landscape; 131,737.84 acres of woodlands; 60,187.59 acres of wetlands; and 29,187.79 acres of all other uses (Peoria, Tazewell, and Woodford Land Use Data; US Fish and Wildlife Service National Wetlands Inventory). The total acreage within the tri-county area is 1,170,998.38 acres.

The total critical habitat constitutes less than 1% of the total land area in the region (IDNR, 2019a). Some of the most significant sites by size and category include the Mackinaw River (Categories I, II, III, VI; 2159.52 acres), Parkland Sites (Categories II, III, VI; 649.24 acres), and Singing Woods (Categories I, II, II; 748.22 acres). Wetlands retain stormwater during times of heavy precipitation, reduce the effects of regional flooding, and provide habitat for vegetation and animals not found in other environments.

Information on woodlands, urban areas, grasslands, and agriculture uses was obtained from aerial photography. Wetland information for the Peoria-Pekin Urbanized Area is based on data from the United States Fish and Wildlife Services (USFWS) National Wetland Inventory classification system, as well as from local agencies. To track preservation (or exploitation) of natural systems over time, land cover acreage should be mapped every five years during the development of the LRTP.

As of October 2019, there were 15 endangered species and 28 threatened species living in Peoria, Tazewell, and Woodford counties according to the Illinois Natural History Database (**Appendix B**). Those critical species rely on 10,905.98 acres of significant habitat and geologic features (IDNR, 2019b).

# Peoria Lakes Comprehensive Conservation Plan

The Peoria Lakes are Greater Peoria's most precious natural resource, and they are a significant landmark in a glacial landscape that defined the region for thousands of years. The Peoria Lakes are the two natural riverine lakes in the widened portion of the Illinois River. The Lakes were formed by tributary deltas that narrowed the valley and pinched the river to form two shallow broad basins. The natural beauty of the 16,000-acre Lakes and their bluffs continue to attract people to Greater Peoria, just as they have for centuries.

Historically, Peoria Lakes were remarkably productive, which attracted Native Americans and European settlers who benefited from abundant, river-derived resources, such as fish and wildlife, pristine water, and expansive wetlands. However, as increasing urban development, conversion of prairie lands to agricultural fields, and industrialization occurred over time, water quality declined, habitat was lost and degraded, and sedimentation has steadily filled in the Lakes. Today, most areas of the Peoria Lakes are less than three feet deep.

The Peoria Lakes Basin Alliance (PLBA), comprised of Heartland Water Resources Council, The Nature Conservancy, and Tri-County Regional Planning Commission, led an effort to develop a Comprehensive Conservation Plan (see Figure EV-1) in conjunction with the US Army Corps of Engineers (USACE). On behalf of the PLBA, TCRPC applied for and received funding from the USACE Planning Assistance to States program, which is authorized under the provision of Section 22 of the Water Resources Development Act of 1974, as amended.

The goal of the planning process, the geographic scope of which spans from blufftop to blufftop, was to reach a regional consensus on future Peoria Lakes conservation strategies. Concurrently, the collaborative also gathered regional support to take needed action on conservation efforts. In the long run, the Greater Peoria area will be well-positioned to move forward to conserve its iconic Lakes.

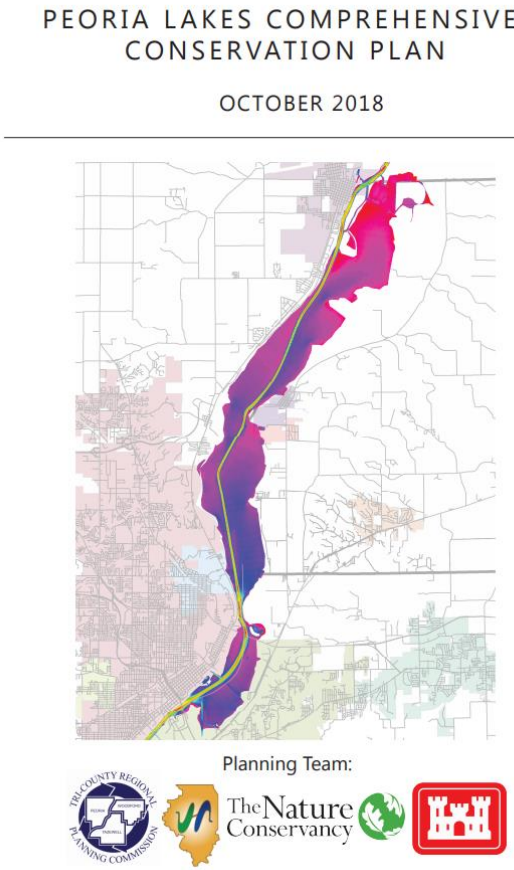



**Figure EV-1** Cover page of the Peoria Lakes Comprehensive Conservation Plan, October 2018

## Air Quality

Air quality and transportation are intimately connected through federal regulation. The Clean Air Act, enacted in 1970 and amended in 1990, requires the United States Environmental Protection Agency (US EPA) to set National Ambient Air Quality Standards (NAAQS). These standards regulate pollutants that are harmful to the environment and to public health (US EPA, 2016c). The EPA Office of Air Quality Planning and Standards has set NAAQS for six "criteria," or principal, pollutants. The transportation system most affects two of these six: particulate matter and ozone. While particulate matter is well under the standard in the Peoria-Pekin area, ozone remains a contaminant of concern. This section will outline both particulate matter and ozone as well as sulfur dioxide (SO2) and lead levels in the tri-county area. **Table EV-2** displays the US EPA Air Quality Index (AQI), which was developed to help explain air pollution levels to the public.

| Air Quality Index (AQI) Values | Levels of Health Concern | Colors |
|---|---|---|
| **When the AQI is in this range:** | **...air quality conditions are:** | **...as symbolized by this color:** |
| 0 to 50 | Good | Green |
| 51 to 100 | Moderate | Yellow |
| 101 to 150 | Unhealthy for Sensitive Groups | Orange |
| 151 to 200 | Unhealthy | Red |
| 201 to 300 | Very Unhealthy | Purple |
| 301 to 500 | Hazardous | Maroon |

**Table EV-2** A listing of all air quality index values, levels of concern to human health, and representative colors (US EPA, 2017b)

According to the 2018 Illinois Air Quality Report from the IL EPA, the Peoria region has been designated as "Good" (green) 69.9% of the time, "Moderate" (yellow) 29.3% of the time, and "Unhealthy for Sensitive Groups" (orange) 0.8% of the time. These numbers have changed slightly from the 2017 report, which listed a green-yellow-orange ratio of 70.7%, 28.5%, and 0.8%, respectively, while the green has decreased slightly between the two years, the frequency of orange days has remained the same.

## Particulate Matter

Both PM10 and PM2.5 refer to a measurement of air particle size: 10 micrometers and 2.5 micrometers, respectively. Contamination at these levels is typically the result of chemical reactions such as vehicular combustion, power generation, and certain industrial processes (US EPA, 2018). Major components measured by the Illinois State EPA include: Sulfur dioxide, carbon monoxide, and nitrogen dioxide. The exact chemistry is complex, and particle formation is dependent on other pollutants and atmospheric conditions. In the context of the Peoria-Pekin Urbanized Area, it is important to note that ammonia from surrounding agricultural sources such as fertilizer and animal feed operations contribute to the formation of sulfurous and nitrogenous particulate matter that exists in the atmosphere such as ammonium sulfate and ammonium nitrate (US EPA, 2004).

According to the US EPA, the Peoria-Pekin Urbanized Area is not designated as a nonattainment zone for either PM10 or PM2.5. As a snapshot of PM 2.5 levels, **Figure EV-2** shows the 24-hour PM 2.5 levels between January 1, 2020 and April 22, 2020 in Peoria (IL EPA, 2020). The majority of readings hover between 5 and 10 micrograms per cubic meter (mcm), but a few jump above 15 mcm. Still, all these readings are below 35.5 mcm, which is the threshold for "Unhealthy for Sensitive Groups," or orange as seen in **Table EV-2**.

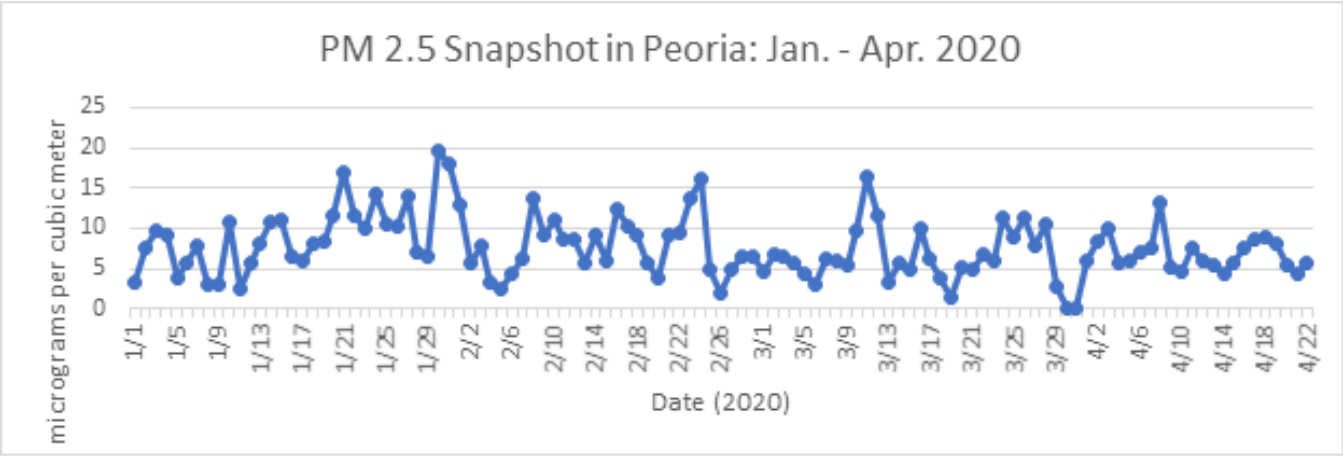



**Figure EV-2** Snapshot of 24-hour particulate matter 2.5 levels between January and April of 2020 (IL EPA, 2020)

## Ozone

Ozone is the combination of volatile organics, nitrogen oxides, carbon monoxide, and sunshine that result in harmful and powerful oxidants. There is a great deal of evidence that indicates high concentrations (ppm) of ozone created by high concentrations of pollution and daylight UV rays at the earth's surface can harm lung function and irritate the respiratory system (US EPA, 2016b). Additional effects of pollutants on human health can be found in the Public Health Section. Three majority contributors of ozone are transportation, individuals (lawnmowers, boats, etc.), and industry.

As sunlight is a variable in the ozone equation, the weather greatly affects ozone levels. Potential for high levels occurs on hot days with lots of sunlight and low winds. Ozone season is April through November, when ozone levels are the highest. Ozone is measured at various sites throughout the nation. All sites are chosen based on EPA standards of site selection (US EPA, 2016b).

Readings are taken every hour and are averaged over an eight-hour span. Annual site readings are calculated by selecting the fourth-highest eight-hour reading of the year and averaging this reading with those from the previous two years. IL EPA has placed two reading stations in the Peoria-Pekin area. One station is in the City of Peoria and another in Peoria Heights. US EPA calculated levels for years 2008–2017 are in **Figure EV-3** and **Table EV-3**.

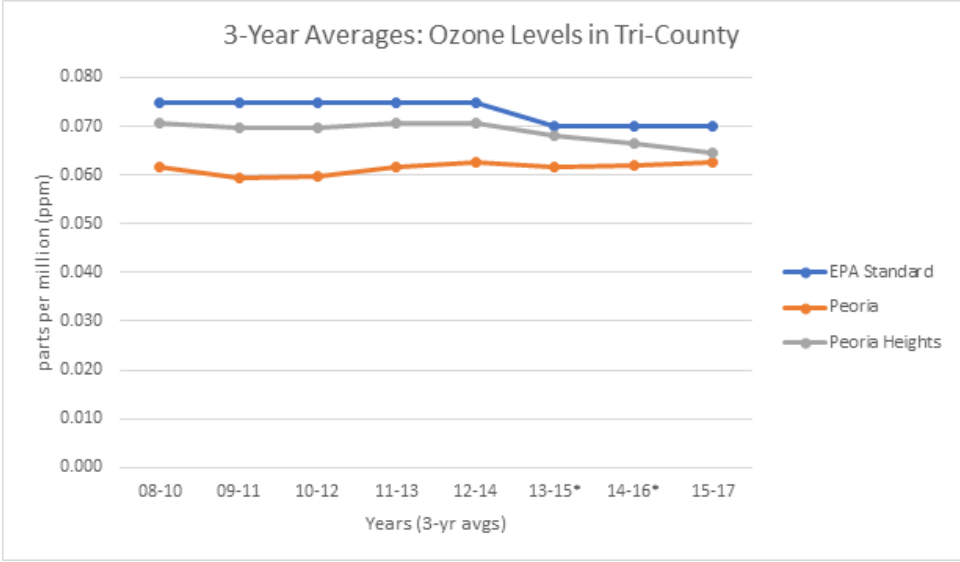



**Figure EV-3** 3-Year Ozone Average, 2008-2017 (US EPA, 2018)
*US EPA NAAQS standards decreased from 0.075 ppm to 0.070 ppm in 2015

**Greater Peoria 3-Year Ozone Averages, 2008-2017**

| | 08-10 | 09-11 | 10-12 | 11-13 | 12-14 | 13-15* | 14-16* | 15-17 |
|---|---|---|---|---|---|---|---|---|
| **EPA Standard** | 0.075 | 0.075 | 0.075 | 0.075 | 0.075 | 0.070 | 0.070 | 0.070 |
| **Peoria** | 0.062 | 0.059 | 0.060 | 0.062 | 0.063 | 0.062 | 0.062 | 0.063 |
| **Peoria Heights** | 0.071 | 0.070 | 0.070 | 0.071 | 0.071 | 0.068 | 0.067 | 0.065 |

**Table EV-3** 3-Year Ozone Averages, 2008-2017 (US EPA, 2018)
*US EPA NAAQS standards decreased from 0.075 ppm to 0.070 ppm in 2015

The US EPA has continued to lower the required ozone limit throughout the years. Before 2008, the limit was 0.08 ppm. From 2008 until 2015, the US EPA regulated ozone limit decreased to 0.075 ppm. Most recently, in 2015, the US EPA tightened the ozone standards further to 0.070 ppm. The 3-year average peak daytime concentrations for the Peoria and Peoria Heights ozone monitors reached 0.063 and 0.065 parts per million (ppm), respectively, in 2015-2017 (US EPA, 2018). This means that the local contributions of ozone can only increase 0.005 to 0.007 ppm for the tri-county area to remain in attainment.

It is not clear when, or if, the US EPA will continue to lower ozone standards, but if so, the PPUATS area may be at risk for being a non-attainment zone, since the current numbers are currently just below the EPA standard of 0.070 ppm. If there is a decrease in ozone standards and the region falls into non-attainment, actions to reduce air pollution become mandatory for transportation officials and industries. Transportation officials must design new construction projects to accomplish emissions reductions and must implement programs to reduce emissions from individual citizens. Industry will be subject to more stringent emission restrictions as well.

## Sulfur Dioxide

Sulfur dioxide (SO2) is emitted largely from fossil fuel-based power plants and other such industrial facilities. However, other sources of SO2 emissions include large transportation vessels such as ships that use high-sulfur fuel to transport heavy equipment. SO2 can have adverse effects on both the environment and human health (health impacts can be found in the Public Health section of this plan). SO2, which is part of a larger family of sulfur oxides (SOx), in large concentrations can create acid rain and hinder plants' and trees' growth (US EPA, "Sulfur Dioxide Basics," 2019).

The US EPA requires SO2 modeling or monitoring in areas with high SO2 concentrations. According to the Illinois Ambient Air Monitoring 2019 Network Plan from the IL EPA, "In 2017, US EPA approved the discontinuation of SO2 monitoring at the Peoria location." Therefore, one SO2 monitoring station remains in the PPUATS area. This monitor, located at Pekin Fire Station #3, has been in non-attainment status for the past several years, and is still listed as such on the US EPA Green Book (2020). However, in February 2020, both the US EPA and the IL EPA have proposed that Pekin be removed from the non-attainment list. This is because recent monitoring data shows a lower SO2 concentration. This re-designation has not been officially enacted, as it is still awaiting comment from the public (US EPA, "News Releases from Region 5," 2020).

## Lead

Lead, found in small traces in the earth's crust, is toxic to humans and can cause lead poisoning. While this element is naturally occurring in the water, soil, and air, it is exacerbated through the burning of some lead-based fossil fuels, the use of lead paint, and in some industrial operations (US EPA, 2019a).

Motor vehicles were once the major contributor of lead emissions. EPA began to phase out lead in gasoline starting in the 1970's and leaded gasoline was fully prohibited after 1995. As a result, levels of lead in the air decreased by 94 percent between 1980 and 1999 (US EPA, 2020a).

This decrease in lead-based gasoline, as shown in **Figure EV-4**, heavily contributed to lower average blood lead levels.

While today's gasoline no longer includes lead, the element can still be found in the environment as a result of lingering past and present uses. For this reason, lead is still strictly monitored across the United States. However, there are currently no lead monitors in the PPUATS area. As noted in the IL EPA's Ambient Air Monitoring 2020 Network Plan (currently in a public comment period), there had been a lead monitor near the Keystone Steel & Wire Corporation in Bartonville, but it currently has a lead monitoring waiver in place with the US EPA. Past monitoring has shown relatively consistent lead concentrations between 2010 and 2013 in that location, and "reported lead emissions … have either decreased or remained steady since monitoring was discontinued" from 2013-2016 (IL EPA, 2018c).

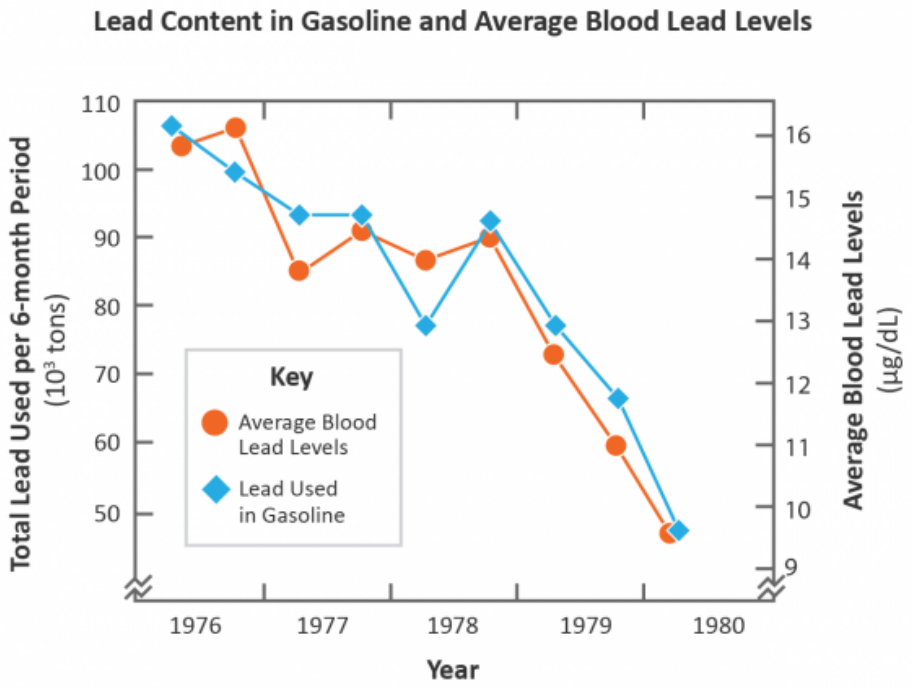



**Figure EV-4** Lead Levels in Blood and Gasoline (US EPA, 2020a)

*EPA standards led to parallel decreases in lead content of gasoline and blood lead level of the average American.*

## Water and Land

At one time, the Illinois River was one of the most biologically productive rivers in the world. Since the dawn of industrialization, however, the river's water quality has significantly degraded. What do things like siltation and impaired waterways mean for the transportation system in the tri-county area? **Table EV-4** outlines the list of impaired waterways, and the following sub-sections go into detail about major water issues related to transportation.

| Priority | Water Name | Designated Use | Cause |
|---|---|---|---|
| Medium | Eureka | Aesthetic Quality | Cause Unknown, Phosphorus (Total), Total Suspended Solids (TSS) |
| Medium | Fargo Run | Aquatic Life | Cause Unknown |
| Medium | Farm Creek | Aquatic Life | Oxygen, Dissolved |
| Medium | Illinois River | Fish Consumption, Primary Contact Recreation | Polychlorinated biphenyls, Mercury, Fecal Coliform |
| Medium | Kickapoo Creek | Fish Consumption | Polychlorinated biphenyls, Mercury |
| Medium | Lake of the Woods | Aesthetic Quality | Phosphorus (Total), Polychlorinated biphenyls, Mercury |
| Medium, Low | Mackinaw River | Fish Consumption | Polychlorinated biphenyls, Mercury |
| Medium | Tenmile Creek | Aquatic Life | Cause Unknown, Dissolved Oxygen |

**Table EV-4** Impaired Waterways in Greater Peoria (IL EPA, 2018a)

## Water Quality

The City of Peoria has a combined sewer located downtown. A combined sewer collects and transports both sanitary wastewater and stormwater to the Greater Peoria Sanitary District. During periods of heavy rain or snow melt, the combined sewer system can be overwhelmed, causing untreated sanitary wastewater mixed with stormwater to be released into the Lower Peoria Lake. This is known as a Combined Sewer Overflow (CSO). During a heavy rain event, water requires an escape route to help avoid raw sewage backup into basements and sewers.

**Combined Sewer Overflow (CSO)**

The first sewers were installed in the City of Peoria in the 1880s to collect and transport stormwater away from the built environment (City of Peoria, 2018). These sewers were constructed before indoor plumbing was common. As indoor plumbing technology became more prevalent, property owners started connecting their sewage lines to the original stormwater sewers, creating a combined sewer system. These sewer systems were discharged directly into the Peoria Lakes, which was typical for the time period.

From the 1920s to 1930s, the Greater Peoria Sanitary and Sewage District was formed, and it constructed a large interceptor (City of Peoria, 2018), a component of a sewer network that transports sanitary wastewater and stormwater runoff to a wastewater treatment plant (Louisville MSD, 2012). The 1948 Water Pollution Control Act went through sweeping amendments to become the 1972 Federal Clean Water Act (CWA). The CWA regulates sources of water pollution by requiring permits to discharge pollutants into waterways. This permit is known as the National Pollutant Discharge Elimination System (City of Peoria, 2018).

In the 1980s, the City of Peoria undertook an effort to reduce sewer overflows by reducing the average annual CSO volume from 840 million gallons to 160 million gallons. This undertaking required approximately $10 million in infrastructure improvements. In the early 2000s, the Municipal Separate Storm Sewer System (MS4) designation was applied to the City of Peoria. A MS4 designation requires the City to develop, implement, and enforce a stormwater management program (SWMP), which describes how it will reduce the discharge of pollutants from its sewer system. In 2006, Peoria's NPDES permit required the City to develop a Long-Term Control Plan to reduce the number of CSO events (see **Figure EV-5**). In November 2008, the USEPA determined the Peoria CSO area as environmentally sensitive. This designation mandates a higher level of protection than previously required. This

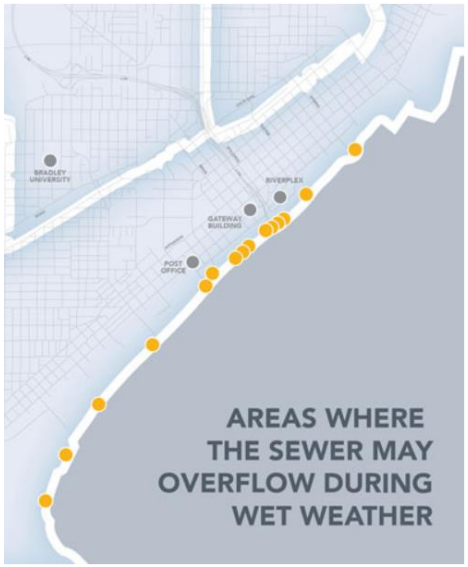



**Figure EV-5** Peoria CSO Areas (City of Peoria, 2018)

means that the Peoria CSO must be eliminated or relocated to an extent financially possible (City of Peoria, 2018).

**Green Infrastructure Solution**

When land is developed for residential, commercial, industrial, and agricultural uses, there are serious consequences for water bodies. Impervious surfaces conflict with stormwater management because they decrease the amount of natural groundcover available to absorb rainwater. The stormwater, now carrying soil and pollutants, washes into streams and rivers.

In 2015, the City of Peoria submitted a draft plan to the USEPA that outlines a CSO solution using 100% green stormwater infrastructure (GSI). The idea behind GSIs is to collect and slow down stormwater runoff from impervious surfaces such as buildings, parking lots, and roadways and allow the runoff to naturally seep into the ground (See**Figure EV-6**). This process helps reduce the burden of the CSO during wet weather events by reducing peak volume and velocity. It is feasible, in part, because Peoria is situated on a glacial sand terrace with high natural drainage capacity. In addition, GSIs help reduce the amount of sediment and pollutants transported into local tributaries and ultimately the Peoria Lakes. To help fund the plan, the City of Peoria looked at alternative funding sources, such as stormwater utility fees, which are dedicated funding mechanisms for stormwater solutions. In 2017, the City Council passed the utility fee to fund stormwater improvements. The stormwater utility fee launched citywide in the summer of 2018 (CSO Overview 2018).

**Figure EV-6** Green Infrastructure in Peoria's Warehouse District (City of Peoria, 2018)

The Peoria CSO project will issue approximately $300 million in bonds to immediately fund USEPA mandated infrastructure improvements, while stormwater management fees assessed considering landowner's stormwater footprint will repay the bond over time. Rates are based on land area and land use to account for residential ($8/month) and commercial

impacts from impervious surfaces like roofs, roads, and parking lots. Such plans are complex and, like a long-range transportation plan, require a long planning horizon to achieve multiple objectives.

## Erosion and Runoff

Two other major issues that the tri-county area has experienced are erosion of steep slopes and runoff from non-permeable surfaces. Erosion is the wearing away of materials from the earth due to natural triggers such as rain and water (National Geographic, n.d.). See **Figure EV-7** for an example of erosion. While it is a natural effect, erosion is further augmented by human impact—this is evident in the design of the highway road network. Roadways add to the total amount of impervious surface in the region. Stormwater runoff, or rainwater that flows from roadways instead of permeating into the soil, must be managed in an environmentally sensitive manner so that it does not pick up soil and pollutants that flow into streams and rivers.

**Figure EV-7** Example of Erosion in a Natural Area of Peoria County

GSIs are also relevant solutions to both erosion and runoff, and in fact, soil erosion control efforts on uplands in the past three decades have been successful in the tri-county region. Looking forward, GSIs can be integrated into roadway projects in numerous ways, such as:

- The use of vegetative bioswales and wetland retention to filter and absorb stormwater from the road system
- Natural habitat management to compensate for lost systems, such as planting native vegetation in swales
- Minimizing land disturbance during road construction
- The use of porous pavement

Reducing the amount of herbicides and chemical agents used for road maintenance

The concept and associated technology of green infrastructure has been evolving for decades, and engineers and scientists are becoming more and more confident in the applicability and effectiveness of these technologies for erosion and runoff.

**Sedimentation**

According to the IL EPA, many tributaries in Peoria, Tazewell, and Woodford counties are suffering from poor water quality (2018a). Ravine and stream erosion are threatening properties and transportation infrastructure throughout the region. The Peoria Lakes, a common resource to all three counties, have lost 77 percent of their 1900-level volume due to sedimentation, half of which originates from local sources. Sections of the Illinois River that were eight feet deep 80 years ago are now just 18 inches deep (Demissie and Bhowmik, 1986).

Sedimentation, also called siltation, affects barge transportation. Barges need a depth of eight to nine feet to navigate. Currently, only a narrow channel is kept open at the nine-foot depth. Barges must stay within this channel or risk running aground (USACE, n.d.). This means that when two barges going in opposite directions must pass, one barge must pull over. There are only certain places along the river where a barge can safely pull over to let another barge pass. This leads to delays in the river transport of freight.

Besides water depths, continued sedimentation in the Peoria Lakes has deteriorated aquatic resources in the area and increased the potential for maintenance dredging of the navigation channel. Land use around the Peoria Lakes has significantly changed over time. These changes have caused the local watershed to contribute to the sediment load within the Lakes and have contributed to the decline in habitat and water quality. See **Figure EV-8** for a visual representation of river sedimentation.

**Figure EV-8** Visible sedimentation on the Peoria Lakes, Illinois River

**Beneficial Use of Dredged Material**

TCRPC, along with several community partners, have proposed a mechanism to derive value from Peoria Lakes sediment by dredging it and blending it with other waste products. While this project is still in the early conceptual phases, custom-engineered drainage soil could be used in highway construction, stormwater management, and potentially other applications in Peoria or by barge to Chicago or St. Louis.

The idea is that a non-profit entity could coordinate contractors with sites, equipment, and interest to manufacture soil in a regional context. Soil sales and tipping fees for yard waste or biosolids management is an element of the business structure that incentivizes dredging and customer savings. This mechanism would be an alternative financing model for implementing parts of the PLCCP, described earlier in this section.

Sand and dredged sediment, as part of larger ecosystem projects, is usually treated as a waste product that must be managed rather than a commodity that can be used. However, in some regions, commercial river sand and gravel dredging is a significant economic and natural resource management concern. A stakeholder group including delegates from the University of Illinois at Urbana-Champaign and the USACE were tasked with creating a model to determine the logistics and economics of distributing this material. Moving and storing the dredged material is not a simple task and delivering the material to the right spot at the right time calls for careful planning. This Beneficial Use of Dredged Material, or BUDM, project is still underway.

**Figure EV-9** Beneficial Use of Dredged Material Symposium

In early September 2019, TCRPC hosted a symposium with nearly 100 attendees and several speakers throughout a two-day program.

## Water Supply Planning

It is crucial to ensure dependable regional water access for residents and organizations. For that reason, the Middle Illinois Basin planning team conducted a water supply planning process across a seven-county region that included regulatory, research, and public outreach elements to identify gaps between water supply and demand. To ensure a comprehensive process, this endeavor involved collaboration among the Illinois Department of Natural Resources (IDNR), Illinois State Water Survey (ISWS), Illinois State Geological Survey (ISGS), and TCRPC.

In November of 2017, TCRPC received funding from the IDNR for this project. The team contacted and assembled the MIBC, which included representatives from water-related groups, industries, municipalities, agriculture, the public, and others from seven counties: LaSalle, Livingston, Marshall, Peoria, Putnam, Stark, and Woodford (see **Figure EV-10**). After forming this committee, MIBC members attended meetings, learned about ISWS draft reports and modelling, and submitted comments and questions to the planning team.

The planning team analyzed data from both closed- and open-ended responses from the questionnaire developed by the previous team, plus additional comments. The planning team categorized open-ended feedback: Between two years' worth of data, 214 distinctive comments were collected, spanning 13 codes including Industry and Development, Infrastructure and Engineering, Education, Water Quantity, and Water Quality. Above all, the depth and breadth of the data underscored the necessity to continue the planning process in the future. Additional funding has become available to continue the process and create a list of recommendations based on the results of this planning endeavor.

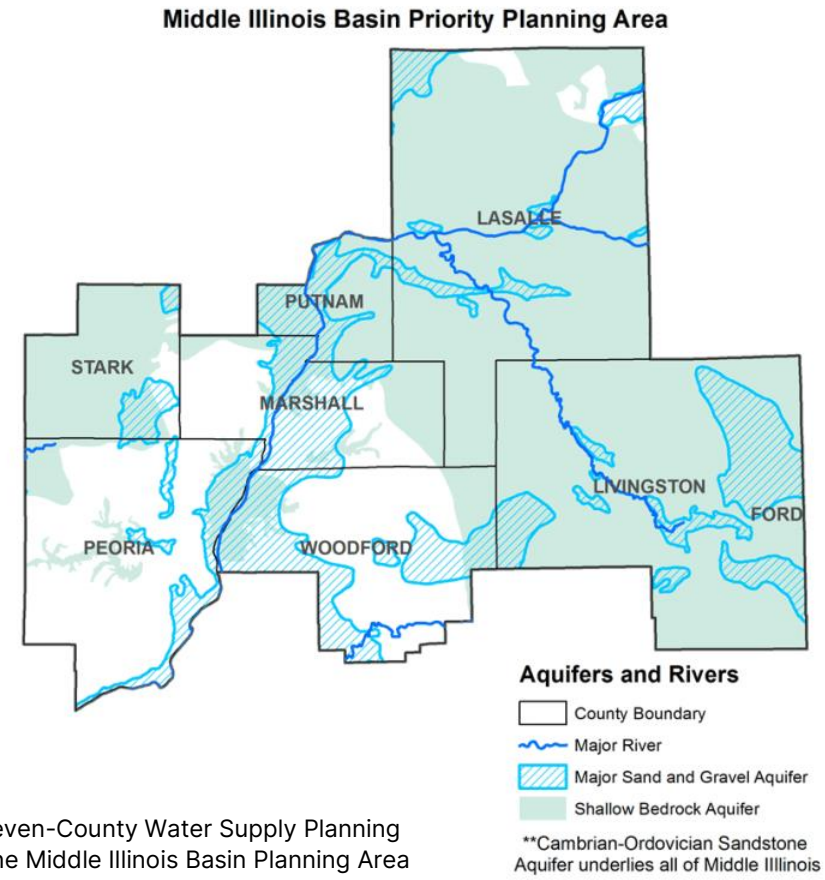



**Figure EV-10** Seven-County Water Supply Planning Region, called the Middle Illinois Basin Planning Area

# Environmental Justice

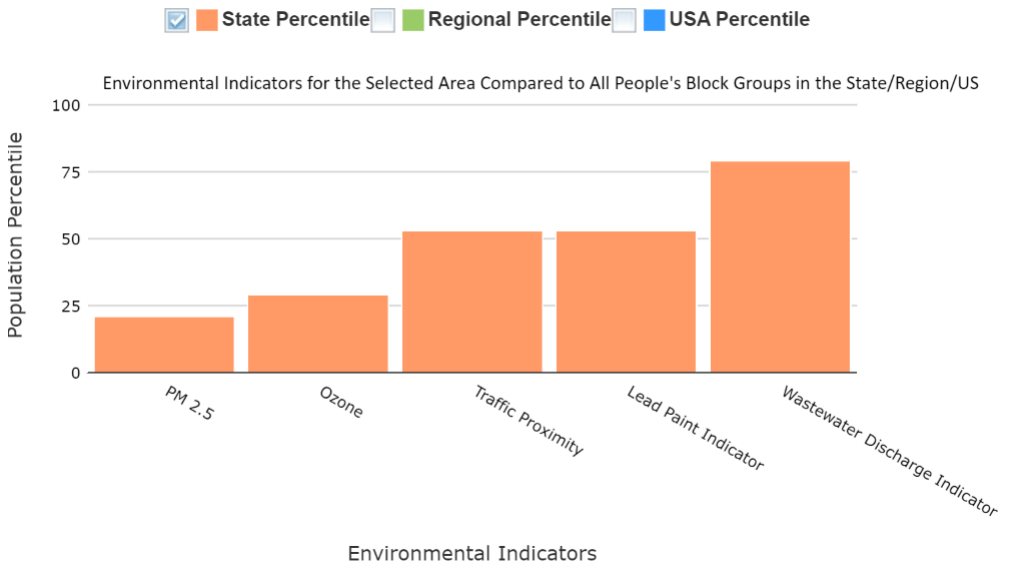
The term Environmental Justice, or EJ, refers to a disproportionately negative environmental and/or human health impact in vulnerable communities (US EPA, 2017a). These communities can be overburdened by a large proportion of minorities and/or low-income citizens. In the context of transportation, EJ indices consider the levels of PM2.5, Ozone, traffic proximity, lead paint[1], and wastewater discharge. Refer to above sections for further details on these elements.

The US EPA's EJSCREEN tool merges demographics with environmental indicators to show the level of disparity in a particular geography. Comparing tri-county's regional numbers to state data shows the level of excess risk that is posed in this area. **Figure EV-11** below and **Figure EV-12** on the following page outline this data.

Note that these numbers are in percentiles out of 100, when compared to the state, so to interpret them, use the following example: A value of 35 percentile for a given pollutant would read as, "This region has a higher pollutant level than 35% of the rest of the state," or, "This region has a lower pollutant level than 65% of the rest of the state." In this scenario, lower values are more favorable than higher values.

First, **Figure EV-11** outlines environmental indicators alone. For PM2.5 levels, this region falls at the 21st percentile when compared to the State of Illinois. For ozone, the number is 29th, and 53rd for both traffic proximity and lead paint. However, the wastewater discharge indicator in tri-county is the highest comparative number, in the 79th percentile in the state, meaning that it is higher than 79% of communities throughout the state.

**Figure EV-11** Environmental Indicators (US EPA EJSCREEN, 2019)




[1] While lead paint is not directly related to transportation, large transportation vessels in the region could plausibly contribute to lead levels, so it is worth noting lead paint levels as part of the larger scope.

When both environmental and public health indicators are combined, however, the data changes. The EJSCREEN tool uses what is called an EJ Index, a number which takes both environmental data and demographic data into account. As seen in **Figure EV-12**, in this scenario, the percentile of PM2.5, ozone, and lead paint are all between 28th and 30th percentile when compared to the state. The EJ Index for traffic proximity is in the 43rd percentile statewide. It is interesting to see that the wastewater discharge indicator is at the 11th percentile, even though **Figure EV-11** (previous page) showed a significantly high environmental percentile for that same indicator.

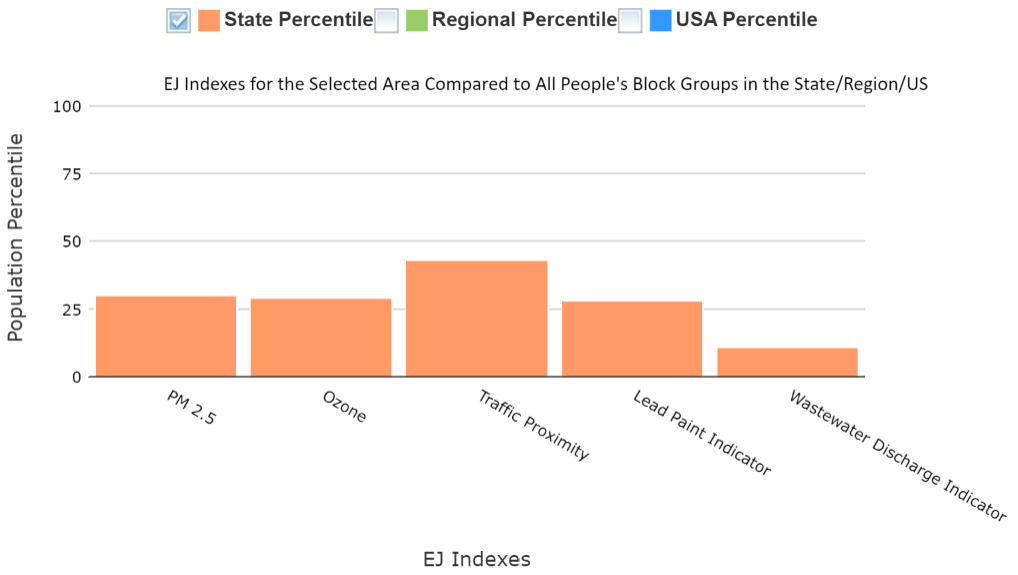



**Figure EV-12** Environmental Justice Indicators (US EPA EJSCREEN, 2019)

This could mean that while there is significant wastewater discharge in the area—which makes sense with the CSO—the most vulnerable populations are not nearly as affected by it. Regardless, this EJ data underscores the excess risk, however extreme, posed to underrepresented populations throughout the tri-county area. As transportation projects are planned around the region, it is imperative to not only consider environmental factors, but also demographic factors.

# Goal, Objectives, and Action Items

**GOAL FOR ENVIRONMENT**

Support the preservation of natural resources, build environmental resiliency, and improve quality of life through our transportation decisions.

| Objectives and action items | Also applicable to: |
|---|---|
| **Support the preservation of natural resources** | |
| • Preserve Illinois Natural Areas Inventory (INAI) sites. | |
| • Reduce the water quality impacts of herbicide and other chemical agents used for road maintenance. | |
| • Aim for zero run-off from road projects by utilizing best management practices (BMPs). | |
| • Pinpoint sources of air and water pollutants that affect humans most adversely and reduce the pollutants. | Public Health |
| • Reduce emissions from city, municipal, and state operated vehicles. | |
| • Reduce emissions from sanitation vehicles (garbage trucks and sanitary sewer fleet) by using ultra-low sulfur diesel (ULSD) fuels. | |
| • Reduce emissions from non-road vehicles such as construction equipment by upgrading to ULSD vehicles. | |
| • Encourage non-motorized travel. | Public Health,<br>Mobility & Connectivity |
| • Prioritize funding of walking and biking trails to promote healthy lifestyles and lower emissions. | Public Health |
| **Build environmental resiliency** | |
| • Identify green infrastructure improvement opportunities in existing transportation project plans. | |
| • Integrate new stormwater management technologies into the construction of all new roadways. | |
| • Utilize green infrastructure watershed best management practices such as vegetated bioswales and wetland retention basins to filter and absorb stormwater from the roadway system. | |
| • Avoid future impacts of new roadway construction on environmental corridors. | |
| • Encourage local jurisdictions to adopt environmental protection ordinances such as the model ravine overlay protection or the stream buffer ordinance. | |
| • Minimize land disturbance during construction, particularly on steep slopes to prevent erosion. | |
| • Study the economic viability of the beneficial use of dredged material (BUDM). | Economic Development |

| Objectives and action items | Also applicable to: |
|---|---|
| **Build environmental resiliency (continued)** | Economic Development |
| • Use sustainable materials in road construction. | |
| • Collect data on existing efforts to incorporate low energy lighting into projects. | |
| • Encourage CityLink to continue acquiring hybrid and electric buses. | Mobility & Connectivity |
| • Reduce idling through projects such as traffic signal synchronization and creating idling policies for loading zones, school zones, etc. | |
| • Encourage public entities to install LED street and parking lot lighting. | |
| • Encourage public agencies and businesses to install Electric Vehicle Charging Stations at their parking facilities. | Mobility & Connectivity |
| • Use timers or occupancy sensors to reduce the need to light parking lots in low to no-traffic hours. | |
| • Encourage improved engine efficiency in rolling stock, airplanes, and water freight vehicles. | Freight |
| • Continue monitoring the region's water supply through stakeholder group collaboration. | |
| **Improve quality of life in the region** | |
| • Understand the type of populations (i.e. demographics, socioeconomic status) who are most affected by transportation-derived environmental pollutants. | Public Health |
| • Prioritize the funding of projects that reduce environmental burdens on underserved populations. | Public Health |

# Information and Data Sources

City of Peoria. (2018). CSO Overview. Retrieved May 4, 2020 from https://peoriastormwater.com/learn-the-issues/cso-overview/

Demissie, M., & Bhowmik, N. G. (1986). Peoria Lake Sediment Investigation. *Illinois Department of Energy and Natural Resources*, *371*. Retrieved May 5, 2020 from https://pdfs.semanticscholar.org/3dda/657607bcea20f44ae883361edc312c6fad20.pdf

Illinois Department of Natural Resources (IDNR). (2019a, October). Illinois Natural Areas Inventory (INAI) Sites. Retrieved May 4, 2020 from https://www2.illinois.gov/dnr/conservation/NaturalHeritage/Documents/Database/INAICountyList.pdf

Illinois Department of Natural Resources (IDNR). (2019b, October). Illinois Threatened and Endangered Species by County. Retrieved May 4, 2020 from https://www2.illinois.gov/dnr/conservation/NaturalHeritage/Documents/Database/etcountylist.pdf

Illinois Environmental Protection Agency (IL EPA). (2018a). Appendix A-2. Illinois' 2018 303(d) List (sorted by name). Retrieved May 4, 2020 from https://www2.illinois.gov/epa/Documents/iepa/water-quality/watershed-management/tmdls/2018/303d-list/appendix-a-2.pdf

Illinois Environmental Protection Agency (IL EPA). (2018b). Illinois Air Quality Report. Retrieved May 4, 2020, from https://www2.illinois.gov/epa/topics/air-quality/air-quality-reports/Documents/2018%20Annual%20Air%20Quality%20Report%20Final.pdf

Illinois Environmental Protection Agency (IL EPA). (2018c, June 26). Illinois Ambient Air Monitoring 2019 Network Plan. Retrieved May 4, 2020 from https://www.epa.gov/sites/production/files/2019-07/documents/2019_illinois_network_plan.pdf

Illinois Environmental Protection Agency (IL EPA). (2019, May 14). Illinois Ambient Air Monitoring 2020 Network Plan. Retrieved May 4, 2020 from https://www2.illinois.gov/epa/topics/air-quality/outdoor-air/air-monitoring/Documents/2020%20Network%20Plan%20%28For%20Comment%20Period%29.pdf

Illinois Environmental Protection Agency (IL EPA). (2020). 24-hour Standard - 35 Micrograms per Cubic Meter. Retrieved May 4, 2020 from http://www.epa.state.il.us/air/pm25/index.html

Louisville/Jefferson County Metropolitan Sewer District (MSD). (2012). Components of a Wastewater Collection System. Retrieved May 4, 2020 from https://louisvillemsd.org/programs/programs-and-projects/what-happens-after-you-flush/components-wastewater-collection-system

National Geographic. (n.d.). Erosion. Retrieved May 4, 2020 from https://www.nationalgeographic.org/encyclopedia/erosion/

United States Environmental Protection Agency (US EPA) EJSCREEN. (2019). EPA's Environmental Justice Screening and Mapping Tool (Version 2019). Retrieved May 4, 2020 from https://ejscreen.epa.gov/mapper/

United States Environmental Protection Agency (US EPA). (2004, December). The Particle Pollution Report: Current Understanding of Air Quality and Emissions through 2003. Retrieved May 4, 2020 from https://www.epa.gov/sites/production/files/2017-11/documents/pp_report_2003.pdf

United States Environmental Protection Agency (US EPA). (2016a). Green Book Lead (2008) Area Information. Retrieved May 4, 2020 from https://www.epa.gov/green-book/green-book-lead-2008-area-information

United States Environmental Protection Agency (US EPA). (2016b). What is Ozone? Retrieved May 4, 2020 from https://www.epa.gov/ozone-pollution-and-your-patients-health/what-ozone

United States Environmental Protection Agency (US EPA). (2016c, December 20). NAAQS Table. Retrieved May 4, 2020, from https://www.epa.gov/criteria-air-pollutants/naaqs-table

United States Environmental Protection Agency (US EPA). (2017a). Office of Environmental Justice in Action. Retrieved May 4, 2020 from https://www.epa.gov/sites/production/files/2017-09/documents/epa_office_of_environmental_justice_factsheet.pdf

United States Environmental Protection Agency (US EPA). (2017b). Patient Exposure and the Air Quality Index. Retrieved May 4, 2020 from https://www.epa.gov/pmcourse/patient-exposure-and-air-quality-index

United States Environmental Protection Agency (US EPA). (2018a). Nonattainment Areas for the 2015 Ozone Standards. Retrieved May 4, 2020 from https://epa.maps.arcgis.com/apps/MapSeries/index.html?appid=d37c4a84a023422e8a24272dd8875f56

United States Environmental Protection Agency (US EPA). (2018b, November 14). Particulate Matter (PM) Basics. Retrieved from https://www.epa.gov/pm-pollution/particulate-matter-pm-basics

United States Environmental Protection Agency (US EPA). (2019a). Learn about Lead. Retrieved May 4, 2020 from https://www.epa.gov/lead/learn-about-lead

United States Environmental Protection Agency (US EPA). (2019b). Sulfur Dioxide Basics. Retrieved May 4, 2020 from https://www.epa.gov/so2-pollution/sulfur-dioxide-basics

United States Environmental Protection Agency (US EPA). (2020a). History of Reducing Air Pollution. Retrieved May 4, 2020 from https://www.epa.gov/transportation-air-pollution-and-climate-change/accomplishments-and-success-air-pollution-transportation

United States Environmental Protection Agency (US EPA). (2020b, April 30). PM-10 (1987) Designated Area/State Information. Retrieved May 4, 2020, from https://www3.epa.gov/airquality/greenbook/pbtc.html

United States Environmental Protection Agency (US EPA). (2020c, April 30). Sulfur Dioxide (2010) Designated Area/State Information. Retrieved May 4, 2020, from https://www3.epa.gov/airquality/greenbook/tbtc.html

United States Environmental Protection Agency (US EPA). (2020d, February 19) EPA and Illinois Propose Pekin Area Now Meets Federal Air Quality Standard for Sulfur Dioxide. Retrieved May 4, 2020 from https://www.epa.gov/newsreleases/epa-and-illinois-propose-pekin-area-now-meets-federal-air-quality-standard-sulfur

Water Resources Development Act, 93-251, 88 Stat. 12-49. H.R. 10203. Retrieved May 4, 2020 from https://www.govinfo.gov/content/pkg/STATUTE-88/pdf/STATUTE-88-Pg12.pdf

# Mobility and Connectivity

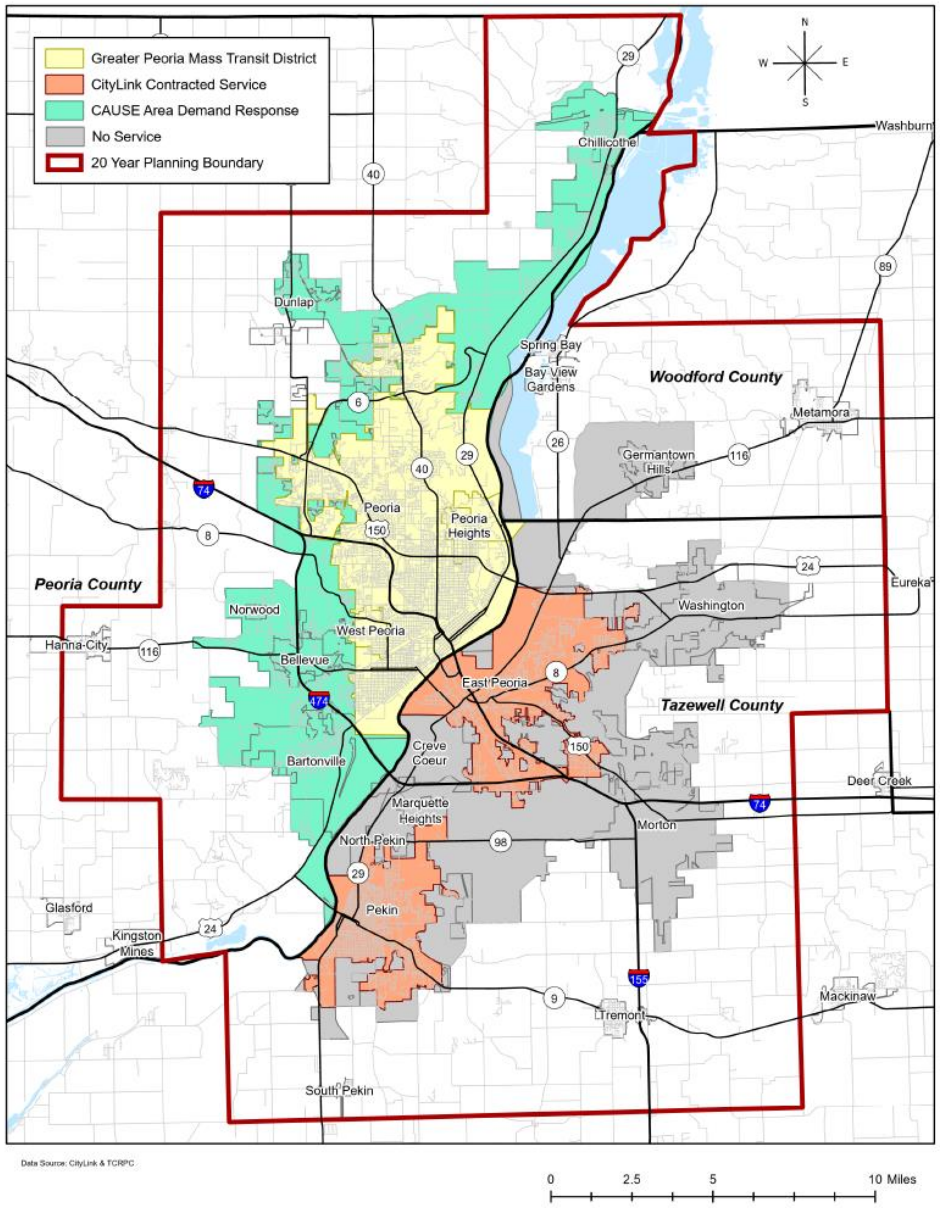
The purpose of this chapter is to highlight the developments of three different transportation modes: buses, , bicycles, and pedestrians. Improving these services and facilities is key to ensuring public investments in transportation can benefit every resident of the region.

# Public Transportation

Public transportation, especially bus transportation, is a critical part of the transportation system and is essential to the economic and social wellbeing of all residents. Its benefits are far reaching; the system connects workers to jobs, conserves energy, reduces oil dependence, relieves congestion, improves air quality and health, provides access for all ages and incomes, and offers a vital link to people with disabilities. In the Greater Peoria Area, bus transportation includes local public transit and paratransit services, human services agency client transportation, and intercity bus service.

## Urbanized Area

The Peoria-Pekin Urbanized Area has one key public transportation service operated by the Greater Peoria Mass Transit District (GPMTD). They operate fixed-route bus service and complementary para-transit service under the names of CityLink and CityLift, respectively. GPMTD is funded with state sales tax revenue and federal funding, as well as a local match generated through a dedicated property tax for residences within the transit district boundaries. The transit district covers the City of Peoria, West Peoria Township, and the Village of Peoria Heights. CityLink also provides service under contract to the City of Pekin and the East Peoria Mass Transit District. **Map MC-1** visualizes the entire CityLink service area.




**Map MC-1** CityLink Service Area, 2020

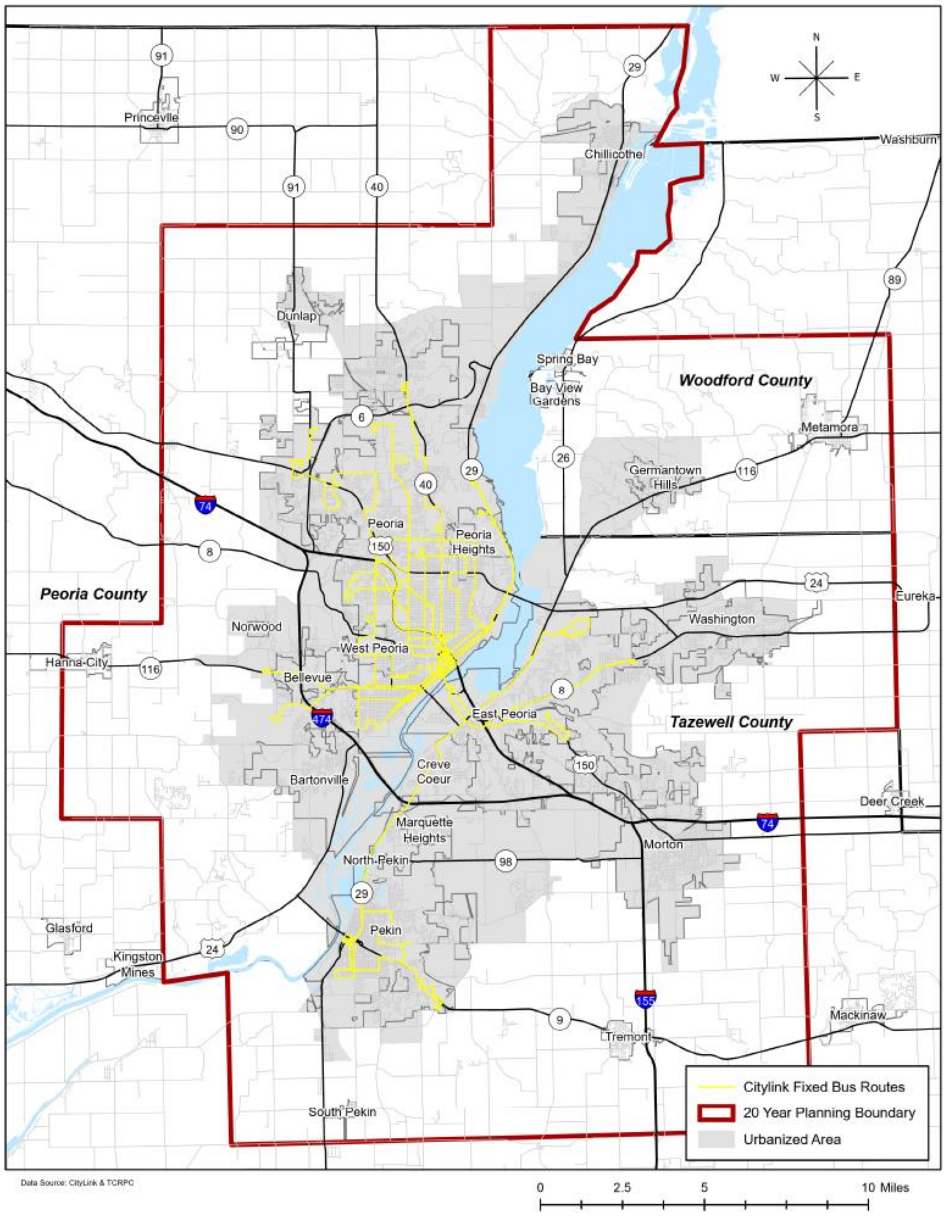
**Fixed Route Service**

CityLink operates 20 fixed routes that radiate from downtown Peoria. In late 2019, CityLink adopted an updated Comprehensive Operations Analysis: CityLink On the Move. The following notable information about our region's public transportation service are highlights from an Existing Conditions Report completed for CityLink On the Move in May 2019:

Overall, the system runs from 5:15 a.m. to 12:30 a.m., but routes differ in their exact service hours and days. To help differentiate this, the Existing Conditions Report classified routes in four "tiers" based on hours and days of service. CityLink has nine Tier 1 routes, five Tier 2 routes, three Tier 3 routes and three Tier 4 routes.

- Tier 1 routes operate daily and every 30 minutes during weekday peak periods. These routes operate late night service on weekdays and Saturdays.
- Tier 2 routes operate six days a week and every 30 minutes during weekday peak periods. Most Tier 2 routes do not operate late night service.
- Tier 3 routes operate six days a week and hourly during weekday peak periods.
- Tier 4 routes operate five days a week and hourly during weekday peak periods.

**Map MC-2** visualizes all of CityLink's fixed routes.




**Map MC-2** CityLink Fixed Bus Routes, 2020

Based on ridership numbers in the report, the top five performing routes (in order of titled route number) are: Route 1: University; Route 4: Knoxville; Route 5: Main St.; Route 12: Heights; and Route 16: Northwest Express.

Over the last five years of available data, fixed-route ridership for CityLink service was in FY 2015 at 3,420,700 unlinked passenger trips, but it has since declined. It reached a low in FY 2018 of 2,685,742 trips. This is not alarming, as ridership has been declining nationwide as well in recent years. Locally, impacts of policy decisions may have also contributed to the lower numbers. In 2016, CityLink eliminated free transfers. Because trips are recorded based on each singular boarding, it is possible the decreased trip counts can be attributed to this new fare policy.

Historical Ridership counts based on unlinked trips reported to National Transit Database as part of Annual Agency Profiles are displayed in **Figure MC-1** below.

Riding CityLink is relatively affordable. A one-way regular adult ticket costs $1; students, veterans, and the people with disabilities ride for $0.50; and seniors ride for free. In 2016, CityLink eliminated free transfers, so riders pay each time they board a bus. For riders who transfer regularly, an unlimited-ride day pass for $3.00 and 30-day pass for $40.00 are available for purchase. This fare structure is similar to other transit districts in downstate Illinois.

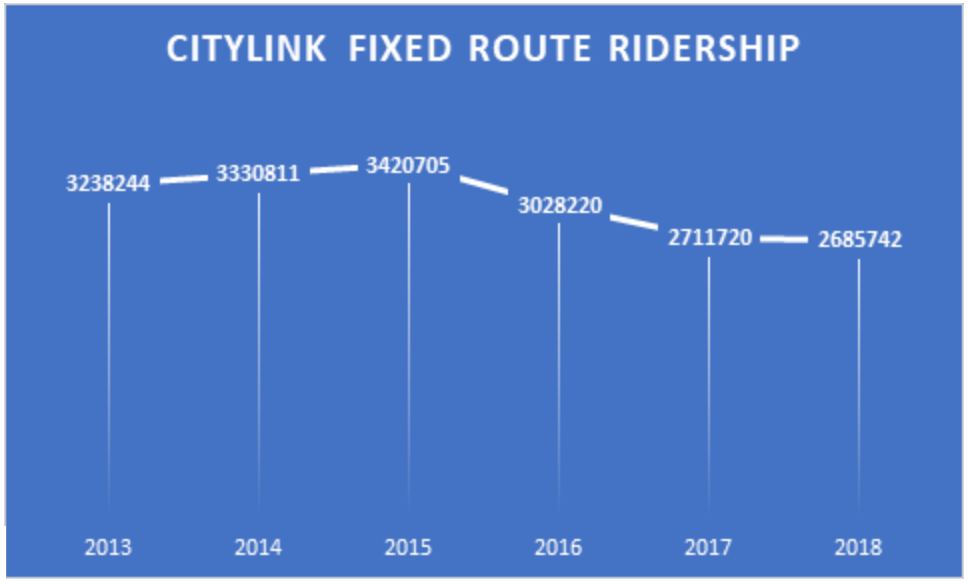


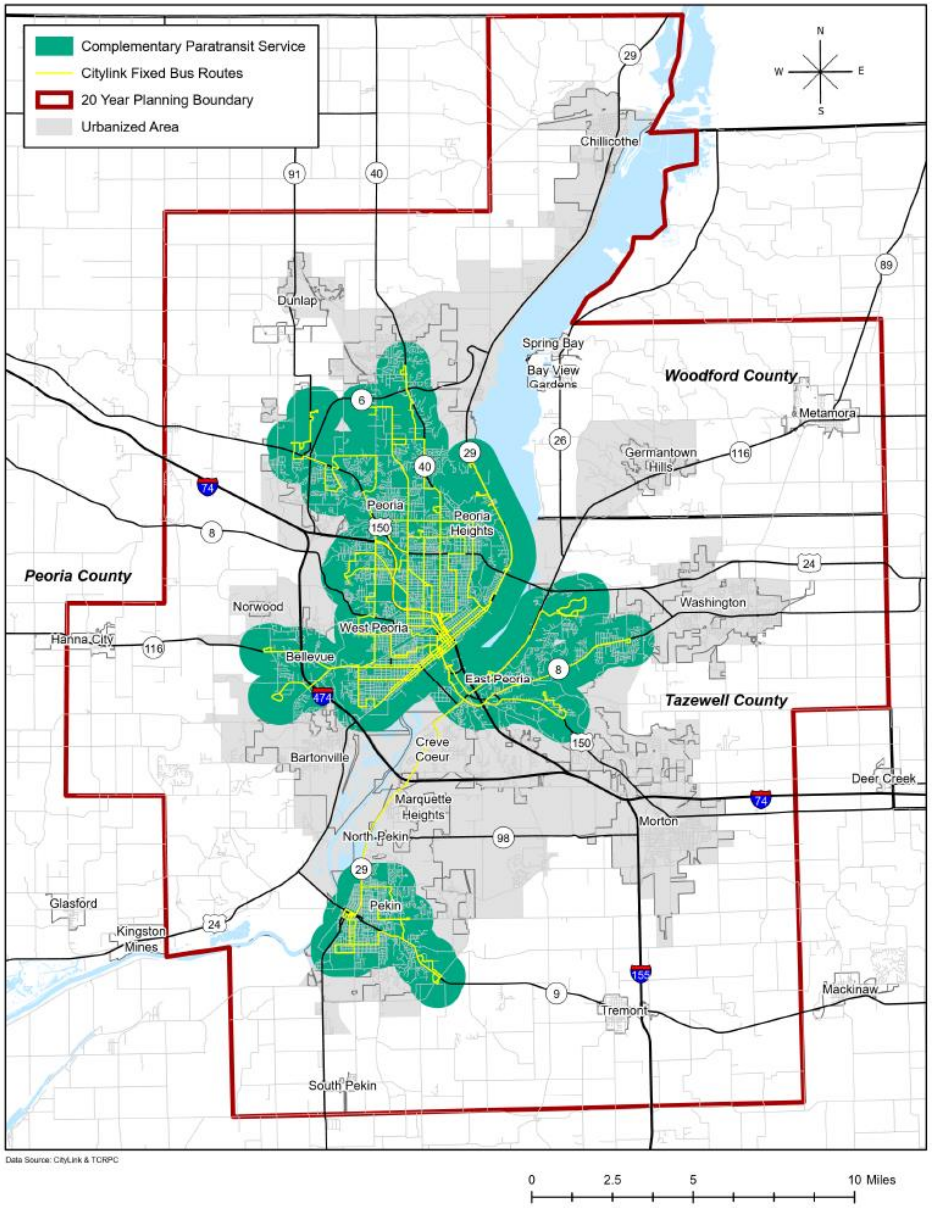

**Figure MC-1** Historical CityLink Ridership

**Complementary Paratransit**

In addition to providing fixed route general public transportation, GPMTD contracts with a third-party provider to operate demand-response paratransit service for individuals who are unable to use the fixed route system due to a disability. This service, referred to as CityLift, uses accessible vehicles to provide service to individuals who live within three-quarters of a mile from the fixed route bus lines (**Map MC-3**). The provision of this complementary service is a federal requirement for all public entities operating fixed route transportation services for the general public.

CityLift paratransit service is limited to individuals who are eligible under the requirements of the Americans with Disabilities Act of 1990 (ADA). Eligibility is determined through an evaluation and certification process. Once deemed eligible, individuals can ride CityLift for a cost of $2.00 one-way and are provided with “door-to-door” service. In door-to-door service, the vehicle driver offers assistance from the rider’s door to the vehicle and provides comparable assistance at the destination. Individuals must make reservations for this service 24 hours before the scheduled trip per federal guidelines.

Within the City of Peoria, Peoria Heights, West Peoria, and East Peoria, CityLift service is available Monday through Friday from 5:30 a.m. to 1:00 a.m., Saturday from 7:30 a.m. to 10:30 p.m., and Sunday from 7:30 a.m. to 7:30 p.m. Currently, Sunday service to East Peoria is unavailable. Within Pekin, service is available Monday through Friday from 6:45 a.m. to 5:40 p.m. and is unavailable on Saturday and Sunday.




**Map MC-3** CityLink Complementary Paratransit Service, 2020

**CAUSE Area Demand Response Service**

The 2010, the US Census expanded the PPUATS boundaries, which led to the addition of Chillicothe, Dunlap, and Germantown Hills to the urbanized area. Prior to this expansion, Peoria County's rural public transportation service, CountyLink, serviced Chillicothe and Dunlap; and Woodford County's rural public transportation service, WeCare, serviced Germantown Hills. Due to federal regulations, CountyLink and WeCare, as rural service providers, are unable to provide transportation service that both originates and terminates within an urban area. Therefore, Germantown Hills, Dunlap, and Chillicothe were newly without public transportation service to take residents into urban communities.

To temporarily resolve this issue, GPMTD has taken over transportation services within the expanded Urbanized Area. Currently, the service is only available in Peoria County. The service began with funding in part through two federal grant programs, Section 5316 Job Access and Reverse Commute (JARC) and Section 5317 New Freedom. Unfortunately, these grant programs have been consolidated and restructured in 2012 under federal legislation, Moving Ahead for Progress in the 21st Century (MAP-21) and are no longer available. For now, GPMTD continues service.

The service, referred to as CAUSE Area (CityLink Area Urban Service Expansion) demand response, is currently available to anyone living or working within the grey urbanized area outside of complementary paratransit boundaries (See **Map MC-3**). The service operates Monday through Saturday from 5:30 a.m. to 6:00 p.m. and is unavailable on Sundays. A one-way passenger fare is $6.00. Individuals are encouraged to schedule their rides at least 24 hours in advance; however, same-day reservations are sometimes accepted.

Through the Greater Peoria Grey Area Mobility Enhancement and Expansion Study, TCRPC, GPMTD and community partners are actively exploring ways to more permanently secure funding for this service to remain available to affected communities. The study will also comprehensively examine the feasibility of expanding service to other communities (besides those receiving the CAUSE service) in the urbanized area that are not currently served by a public transportation operator – Bartonville, Creve Coeur, Marquette Heights, and North Pekin.

**Operations and Service**
GPMTD received funding from Tri-County to implement General Transit Feed Specification (GTFS). This integrated route information with Google Maps was a big step to making the system easier for riders to use. CityLink also implemented a signed-stop policy to help improve on-time performance of its fixed route service.

**Capital & Planning**
In 2017, CityLift and CountyLink acquired 35 new vehicles, which have been used for service. GPMTD has also acquired four new hybrid diesel-electric 40-foot buses and put them into service, rotating through all routes (GPMTD, 2019).

In 2019, GPMTD received a federal grant fund award for two new electric buses through the Low-No Emission program. The same year, GPMTD selected a contractor and began working to equip all buses with Automatic Vehicle Locator (AVL), Automatic Passenger Counter (APC) and Automated Voice Announcements. This equipment will allow for better data collection to inform operations improvements and provide better service to riders. Once fully implemented, live bus position information that more accurately indicates arrival times at bus stops can be shown in Google Maps and a CityLink app (currently in development).

By early 2020, Phase 1 of renovations to the Downtown Transit Center were complete. These improvements enhanced main floor facilities: Customer service office, public restrooms, driver break room, and the waiting area. Phase 2 will continue in 2020 and address the second-floor spaces where GPMTD staff work to support operations at the Transit Center.

Over the past three years, GPMTD has also began laying the groundwork to complete much-needed renovations to their maintenance facility and administration office. The current vision includes constructing a new building at the back of the property to house administration and maintenance offices, relocating CityLift and CountyLink offices to the current Administration building (with planned renovations), and improving the current maintenance buildings that are crucial to effectively perform maintenance on newer vehicles (hybrid and electric buses) as well as current buses.

GPMTD made small, but crucial bus stop improvements to help connect stops with nearby existing sidewalk networks. During Summer 2019, 39 concrete pads were installed throughout the district. GPMTD received funds for this project through Tri-County's Federal Transit Administration (FTA) Section 5310 grant program.

## Metropolitan Planning Area

The metropolitan planning area that lies outside the urbanized area is eligible for rural public transportation. Service to this area is provided by CountyLink (rural Peoria County) and WeCare (rural Tazewell and Woodford Counties).

CountyLink provides demand-response service, which allows individuals to be picked up and dropped off at a pre-scheduled time and place. The service is available Monday through Friday from 5:00 a.m. to 6:00 p.m. and costs $6.00 one way.

In recent years, Peoria County has put an intergovernmental agreement (IGA) in place with GPMTD to operate this system. GPMTD uses a third-party contractor to provide CountyLink service. Because of the IGA, a coordinated dispatch effort has made both systems more productive. CountyLink and CityLift are using the same third-party contractor to provide the service, same ride scheduling software and equipment, and same dispatching office. Such improvements make it possible for more rides to be provided in more areas. This can be seen in the growing ridership since 2016 as reported to the National Transit Database and displayed in **Figure MC-2** (FTA, 2018a).

WeCare, a not-for-profit organization, is the public transportation provider for rural Tazewell and Woodford Counties (FTA, 2018b, 2018c). Like CountyLink, WeCare provides demand-response service. Transportation is available Monday through Friday from 6:00 a.m. to 5:00 p.m. and costs $3.00 one way. Seniors ride on a donation-only basis. WeCare ridership has remained stable, but may continue to trend upward, especially in rural Tazewell County (FTA, 2018b).

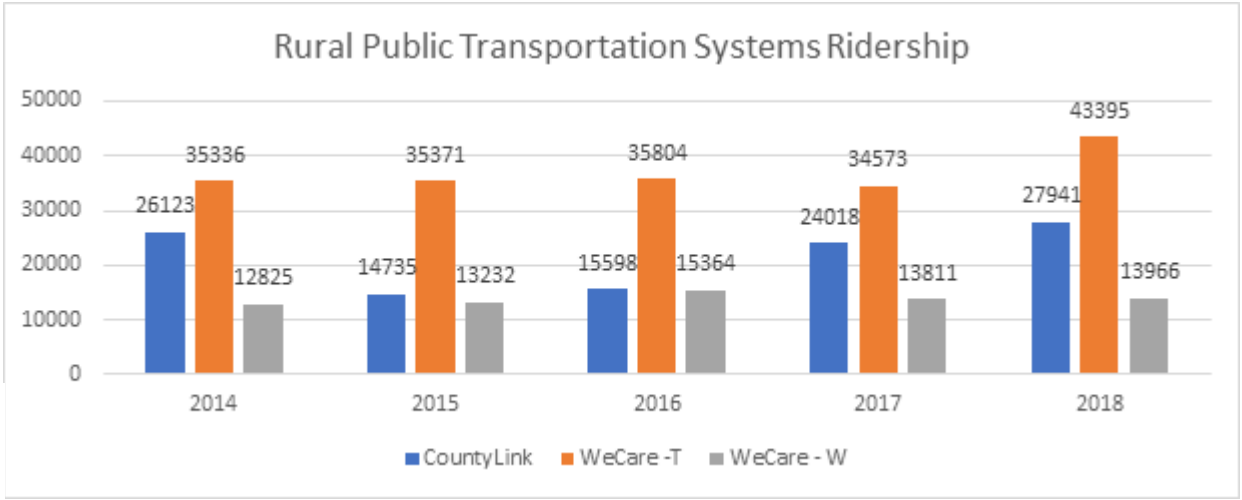



**Figure MC-2** Rural Public Transportation Systems Ridership (FTA 2018a, 2018b, 2018c)

## Human Services Agencies Client Transportation

Throughout the metropolitan planning area, several human services agencies that provide client transportation. These services, while not available to the general public, greatly support the transportation needs of low-income individuals, the elderly, and individuals with disabilities.

In the metropolitan planning area, a number of human services agencies have been granted vehicles through IDOT's Consolidated Vehicle Procurement (CVP) program to support their transportation services. **Table MC-1** lists these agencies and identifies their principal clients and nature of service. Please note that this table is not a comprehensive list of all human services agencies with client transportation programs. Many human services agencies fund transportation programs with private donations, fundraising, and other means.

Often, the transportation programs of human services agencies are not enough to satisfy all transportation needs. In these cases, agencies have succeeded in coordinating with CityLink, CityLift, CountyLink, and WeCare to provide additional rides. This effort is one of the primary goals of the Heart of Illinois Human Services Transportation Plan (HSTP) committee. More information about the HSTP program can be found later in this section under the Coordinated Planning header.

**Table MC-1** Peoria Area Human Service Agencies

| Peoria Area Human Service Agencies | | | |
|---|---|---|---|
| **Organization** | **Location** | **Principal Clients** | **Nature of Service** |
| Central Illinois Agency on Aging | Peoria | Seniors | To provide resources to help elderly persons and their caretakers |
| Central Illinois Center for the Blind and Visually Impaired (CICBVI) | Peoria | Blind and Visually Impaired | To provide services and support for the blind and visually impaired |
| Community Workshop Training Center (CWTC) | Peoria | People with Disabilities | To provide day training for people with disabilities |
| Council for Disadvantaged People, Inc. | Peoria | Low-income | To help individuals and families overcome poverty, homelessness, unemployment, substance abuse, and teen violence |
| EP!C | Peoria | People with Disabilities | To provide day training for people with disabilities |
| Snyder Village | Metamora | Seniors | Retirement community and nursing home |
| Tazewell County Resource Center (TCRC) | Tremont | People with Disabilities | To provide day training for people with disabilities |

## Intercity Bus

The Greater Peoria Area has access to four different intercity bus lines. These are: Peoria Charter Coach, Burlington Trailways, Greyhound Lines, and an Amtrak Thruway Bus Service. The departure/arrival point for all these services is the CityLink Transit Center in Downtown Peoria.

Peoria Charter Coach runs a daily airport shuttle that travels from Peoria to Chicago O'Hare and Midway Airports four times per day. Along with the CityLink Transit Center, the Peoria Charter Coach also has departure/arrival points at Peoria Charter plaza and Bradley University in the City of Peoria (Peoria Charter, 2020).

Burlington Trailways provides service to Peoria with access to over fifty communities throughout the upper Midwest and Plains states, including destinations in Illinois, Indiana, Iowa, Missouri, Nebraska, and Colorado (Burlington Trailways, 2020). Greyhound Lines similarly provides service to Peoria with access to communities nationwide (Greyhound, 2020).

Since 2014, Amtrak has operated a thruway bus service from Peoria to Normal and Peoria to Springfield. It coordinates times with the Amtrak's Lincoln Service (Amtrak, 2020). This service came about after several attempts to acquire passenger rail between Peoria and Bloomington-Normal. Though passenger rail is a preferred alternative for many in the region, thruway bus service was deemed more financially feasible.

## Coordinated Planning

An increasing number of individuals are unable to transport themselves or purchase transportation due to physical and/or mental disabilities, income status, or age. While this plan aims to address mobility in all forms, for all users, more attention to these specific mobility needs can be found in the regional Human Services Transportation Plan (HSTP).

The HSTP is a federally required document that aims to increase the number of options and affordability of public transportation for people with low income, people with disabilities, older adults, and the general public. The plan contains an inventory of available transportation providers, an assessment of transportation needs and gaps, and strategies to address those identified shortcomings.

To guide the HSTP document development and implementation, a committee composed of urban and rural transportation providers, transit users, human services agencies, and elected officials meets regularly. The goals of the HSTP plan and input from the HSTP committee have informed the goals of this long-range transportation plan.

# Mobility of People with Disabilities

Transportation and mobility play key roles in the struggle for equal opportunity in the disability community. Affordable and reliable transportation allows people with disabilities to access important opportunities in education, employment, healthcare, housing, and recreation. Because national, state, and local investments in transportation infrastructure have disproportionately favored cars and highways, those who cannot drive cars often lack viable transportation options.

According to the 2018 American Community Survey, approximately 11.5% of the Peoria, IL metro area residents are living with a disability.  The disability rate is expected to increase in the coming years due to an aging population and increases in chronic health conditions, among other causes.1 It is therefore vital that the needs of this community are addressed.

## National Policy

The Americans with Disabilities Act (ADA) was passed in 1990 to ensure that people with disabilities have equal opportunities to participate in society. The law required all new public transportation vehicles to be accessible. Additionally, transit operators had to begin providing paratransit services for those who cannot use the fixed route system. Other modes of transit that are covered include commuter transit, subway, and intercity rail systems. The law also addresses the accessibility of public places, including restaurants, hotels, theaters, doctor's offices, grocery stores, entertainment venues, schools, and daycare facilities, among others. All new construction and modifications to existing public facilities must be made accessible, and existing facilities must try to remove as many barriers as possible. Though the ADA improved conditions for people with disabilities, transportation choices are still limited, as the law does not address private transportation such as taxis.

## Statewide Coordination

Access to reliable transportation is an integral catalyst for independent living. Since 2016, additional focus has been placed on connecting state and regional representatives of transportation services with their peers in the disability advocacy organizations. This manifests as quarterly calls and annual meetings with Illinois' Rural Transit Assistance Center, Statewide Independent Living Center, regional HSTP Coordinators, and Centers for Independent Living. During such meetings, the discussions focus on the transportation goals of the Statewide Plan for Independent Living (SPIL). As a small success, these connections have brought greater visibility of the transportation options available through the state to those disability advocates assisting people with accessing transportation. In the longer term, this group hopes to make progress on the following objectives from the SPIL:

1. Expand the availability of rural and suburban transportation for people with disabilities in Illinois.
2. Increase collaboration between state departments of government and local townships and municipalities to improve the efficiency and effectiveness of public transportation.
3. Establish reciprocity for paratransit services across Illinois.
4. Educate transit providers and people with disabilities on transportation issues that impact people with disabilities resulting in a more effective use of public transportation.

## Local Efforts

The CityLink ADA Committee meets every other month to discuss the CityLink, CountyLink, and CityLift paratransit service and issues facing individuals with disabilities. The meetings are a good opportunity to hear perspectives of persons with disabilities when CityLink is introducing changes to service or vehicles. Feedback from advocates and persons with disabilities is important for making the right improvements to the service.

Starting in Spring 2020, TCRPC and CityLink began working with Lochmueller Group to more deeply study the urbanized area's mobility issues. The primary focus is on unserved and underserved areas where people cannot reliably travel independently. Those issues are more detailed in the following paragraphs. Outcomes of this study should identify priority areas for transit and/or paratransit service expansion, improvements for existing services, and funding sources to pilot mobility services to new, currently "grey," areas (see **Map MC-3**).

## Current Conditions

Public transportation access for individuals with disabilities varies across the Peoria-Pekin Urbanized Area. Within the communities of Peoria, Pekin, East Peoria, West Peoria, and Peoria Heights, paratransit coverage is comprehensive. However, the service is unavailable during early morning and late-night hours and is unavailable in Pekin on weekends. Many communities within the urbanized area are underserved or not served at all by either fixed-route or paratransit transportation service. These communities include Creve Couer, North Pekin, Marquette Heights, Washington, and Germantown Hills.

In addition to transit, individuals with disabilities rely on pedestrian infrastructure to safely travel to bus stops, places of employment, commercial centers, and other public spaces. In some areas of the region, sidewalk infrastructure is non-existent, and in others, the infrastructure is poorly maintained. Incomplete or poorly maintained sidewalks, difficult street crossings, lack of curb ramps, and obstacles in the pathway such as utility poles create barriers for people with disabilities, limiting their ability to move throughout the region. To better meet the needs of the disabled community, improved coordination with the area engineering and planning departments, transit district and disability advocate groups is needed.

## Bicycles and Pedestrians

Over the past several decades, walking and bicycling as a means of transportation and recreation have increased in popularity. This has led to a surge in the construction of trails and on-road accommodations for these travel modes. Compared with other metropolitan areas in the state, the tri-county region does not have as extensive of a trail system. However, IDOT and local jurisdictions have demonstrated an increased focus on improving bicycle and pedestrian accommodations and conditions are showing improvement. While finishing the current off-road trail system and establishing new trails remains important, priorities in the metropolitan area are also focused on maintenance of the existing system and the provision of on-road accommodations, such as bike lanes. The growing movement in planning for bicycle and pedestrian facilities is that walking and riding a bike are regarded as active transportation, as well as recreational activities.

### National Policy

Planning for bicycle and pedestrian facilities and transportation enhancements was strongly supported in the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) transportation legislation. Support is reinforced since then in the TEA-21, SAFETEA-LU, MAP-21, and FAST bills[2]. In addition to providing funding opportunities, the U.S. Department of Transportation (DOT) has taken a proactive approach in encouraging non-motorized transportation as an efficient and environmentally sound alternative for commuter travel. The DOT issued a Policy Statement on Bicycle and Pedestrian Accommodation Regulations and Recommendations in 2010, which reflects their support for the development of fully integrated active transportation networks. The policy statement is:

> **The DOT policy is to incorporate safe and convenient walking and bicycling facilities into transportation projects. Every transportation agency, including DOT, has the responsibility to improve conditions and opportunities for walking and bicycling and to integrate walking and bicycling into their transportation systems. Because of the numerous individual and community benefits that walking and bicycling provide — including health, safety, environmental, transportation, and quality of life — transportation agencies are encouraged to go beyond minimum standards to provide safe and convenient facilities for these modes (FHWA, 2017).**

[2] Transportation Equity Act for the 21st Century; Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users; The Moving Ahead for Progress in the 21st Century Act; Fixing America's Surface Transportation Act

## State Planning

In 2013, IDOT developed the Illinois Bike Transportation Plan, the first state-wide bicycle plan in Illinois history. The plan is a document aimed at guiding the future development of trail corridors of regional, statewide, and national significance. The document provides an array of resources which can be used by state, local, and regional governments during trail planning and implementation. This plan is built upon five foundational principles: Access, Choices, Connectivity, Safety, and Collaboration. These principles guided the development of the plan, supported the analysis of existing bicycling conditions in the state, and drove the development of the recommendations and performance measures presented in the plan.

To continue bringing more focus to bicycle and pedestrian concerns in statewide planning, IDOT also created a Bicycle and Pedestrian coordinator position in the Bureau of Planning. Since 2017, the coordinator position has been a helpful liaison between the state and regional groups as activity around bicycle and pedestrian improvements continues to grow.

## Local Efforts

The Greater Peoria region has a long history of planning for system improvements that enhance bicycle and pedestrian travel through the area. In more recent years, the momentum has been increasing as efforts shift from trail planning to on-road accommodations for bicycle and pedestrian transportation.

Since the construction of the Rock Island Trail in 1989 and the River Trail of Illinois (Carl "Bud" Schmitt Trail) in 1991, area residents have shown an increasing interest in both bicycling for recreation and for transportation. To help organize and encourage bicycle trail planning within the region, Tri-County, along with a Regional Greenways Task Force, developed the first Peoria Metro Area Greenways and Trails Plan in 1997.

Additionally, Tri-County conducted studies on the feasibility of converting the Elm Industrial Lead Rail Line into a recreational trail, a nearly 25-mile rail corridor that stretches from Farmington to Bellevue. Today, this corridor is known as the Hanna City Trail and Peoria County, who has taken the lead on the project, is currently working to develop this corridor into a usable recreational trail. Presently, stakeholders have applied for grants to acquire right of way and eventually build the trail.

Beginning in 2015 with the City of Peoria's Master Bicycle Plan, enthusiasm for bicycle and pedestrian planning has spread contagiously. This has been aided largely by specially set-aside planning funds from PPUATS, but many communities contribute their local funds as well. Since FY2016, at least $90,000 annually has been available to PPUATS members to complete studies and planning projects that support the goals of the region's LRTP. The following are projects from this program that aim to directly improve bicycle and pedestrian transportation or comprehensive improvements as part of the project:

- City of Peoria Bicycle Wayfinding Study
- City of Peoria Downtown Wayfinding Study
- Tazewell County Communities Wayfinding Study
- Chillicothe 4th St Corridor Study
- Pekin Derby Street Corridor Study
- Peoria Heights Commercial Corridors Study
- Regional Complete Streets Symposium

Finally, TCRPC staff completed a regional bicycle and pedestrian transportation plan in recent years, which PPUATS adopted in May 2017. As a regional plan, BikeConnect HOI's emphasis was placed on identifying connections between communities rather than planning for accommodations within the communities of the region. This robust plan won an award from the American Planning Association – Illinois Chapter in 2019. Explore it on TCRPC's website to learn about the existing network, proposed connections and accommodations, and best practices to support bicycle and pedestrian travel throughout the region.

## Bicycle & Pedestrian Projects

While TCRPC is responsible for creating this plan, each jurisdiction is accountable for implementing projects to improve bicycle and pedestrian travel. The timing of various accommodations and projects depends upon the cost and amount of work required to create them. For example, this could mean adding signage, sharrows, or bike lanes when the pavement is already wide enough and only requires re-striping. These are projects that can be undertaken in the near future. However, if adding bike lanes to a road would require widening the road to construct them, that improvement would likely only be completed as part of a major reconstruction project.

A Complete Streets Policy helps ensure that the design of major construction and reconstruction projects considers needs of bicyclists and pedestrians. Illinois legislature adopted such a policy at the state level in 2013. The City of Peoria has developed and adopted their Complete Streets Policy in late 2015. TCRPC encourages other communities in the region to explore doing the same. To aid this process, it has been recommended that TCRPC could assist in creating a sample policy that could be adjusted to reflect each community's unique needs.

**PPUATS Programming Process**

PPUATS receives federal funding it can program region-wide—this is one of the metropolitan planning organization's main tools to implement planned bicycle-related projects. PPUATS is large enough in population to be a designated recipient of direct Transportation Alternative (TA) funds to program specifically for trail projects. These amounted to approximately $290,000 for FY 2020.

The State of Illinois operates a similar program called the Illinois Transportation Enhancement Program (ITEP). The federal government continues to distribute Safe Routes to School (SRTS) funds through IDOT for programming. MPOs are not allowed to apply for or sponsor SRTS or Illinois Transportation Enhancement Program (ITEP) applications, but local projects from these sources must be in the Transportation Improvement Program (TIP).

Current road projects programmed in the TIP are also anticipated to include bicycle and/or pedestrian elements. The exact types of accommodations these projects include will be determined as they are under design. These projects include:

- New eastbound span of the McCluggage Bridge in FY 2022
- Northmoor Road from University to Hamilton in Peoria in FY 2017
- Northmoor Road from Hamilton to Allen in Peoria in FY 2018
- Dirksen Parkway from Airport to Middle in Peoria in FY 2019
- Detroit Avenue at US 150 in Morton in FY 2016

| TIP No. | Project | Funding Source | Project Cost |
|---|---|---|---|
| ITEP-18-01 | Rock Island Greenway | ITEP | $507,200 |
| PEO-20-03 | US-150/War Memorial Dr Sidewalk | ITEP | $329,510 |
| PEO-20-04 | Pedestrian Infill | TAP | $119,055 |
| PEO-20-05 | Willow Knolls Pedestrian Improvements | TAP | $239,227 |
| PEK-20-02 | Jefferson Elementary & Washington Middle | Safe Routes | $197,932 |
| TAP-15-01 | Rock Island Greenway Bridge | TAP | $406,800 |
| W-20-01 | US-24 Business Multi-Use Path | TAP | $418,578 |
| W-20-02 | Washington District 51 Safe Routes to School | Safe Routes | $200,000 |
| W-20-03 | Washington District 52 Safe Routes to School | Safe Routes | $200,000 |

**Table MC-2** Greater Peoria Federally Funded Bike-Ped Projects, FYs 2020-23

**Additional Bicycle and Pedestrian Considerations**
Creating a complete and user-friendly system for all users must emphasize the connections between modes. Proper networks involve more than sidewalks, trails, and on-road accommodations. To fully incorporate these modes into the metropolitan area's transportation system, there are several important elements to consider:

**Sidewalk connections:** Many parts of the metropolitan area have gaps in the sidewalk system. This is especially problematic along bus routes, as pedestrians can have difficulty reaching the transit stops. Too often, there are benches along bus routes for people who are waiting to catch a bus, but there are many locations where these benches are in the middle of grass with no sidewalk connection. Commercial areas are another unfortunately common area where gaps in sidewalk networks present challenges for non-vehicular travel.

**Traffic signal design:** Traffic signals are not always capable of responding to the presence of a cyclist. In areas where signals change due to the presence of vehicles, a bicyclist may have to wait an excessive amount of time for a green light, or cross on a red light. Where appropriate, upgrading traffic signal detectors should be implemented to recognize the presence of cyclists.

**Bicycle parking:** While providing the route to get to a destination is often the primary consideration, the bicyclist must have a place to secure their bike once there. Areas that should provide bicycle parking include all public buildings, parks, transit stops, and places near businesses and multi-unit residential dwellings.

**Bicycle racks on buses:** Bicycle racks on buses increase the mobility of bicyclists as it enables them to travel across the metropolitan area. CityLink has space for two bicycles on all its fixed route transit buses.

# Goal, Objectives, and Action Items

**GOAL FOR MOBILITY AND CONNECTIVITY**

Enable people, goods, and information to travel efficiently throughout, to, and from our region.

| Objectives and action items | Also applicable to: |
|---|---|
| **Improve the public transportation experience and options** | |
| • Encourage non-motorized travel. | Public Health, Environment |
| • Establish a Regional Transit Authority. | |
| • Improve perceptions of public transportation. | |
| • Improve bus shelters and bus pads (standing pads). | |
| • Prioritize the construction and maintenance of sidewalks near high-traffic bus stops. | |
| • Encourage CityLink to continue acquiring hybrid and electric buses. | Environment |
| **Improve and expand pedestrian and bicyclist accommodations** | |
| • Complete a continuous trail system of on- and off-road facilities and provide for connections to the developing regional trail system. | |
| • Provide efficient non-motorized access between major traffic generators. | Economy |
| • Increase the availability of bike racks. | |
| • Take steps to improve the breadth and condition of the region's sidewalk network. | Public Health |
| • Reduce physical obstructions/barriers that impede safe bicycle/pedestrian travel. | Public Health |
| • Provide improved public transit stop locations for pedestrian safety and security (e.g. lighting, sheltered benches). | Public Health |
| • Support expanded local Safe Routes to School programs. | Public Health |
| • Encourage the development of safety programs to inform the public of bike/ped rules and regulations. | Public Health |
| • Increase pedestrian signal crossing time. | Public Health |
| • Integrate expanded and improved bicycle and pedestrian facilities into new and existing developments. | Public Health |
| • Work with food, healthcare, and other organizations in the region to ensure adequate transportation accessibility to vital services. | Public Health |

| Objectives and action items | Also applicable to: |
|---|---|
| | |
| **Improve transportation access for people with disabilities** | |
| • Upgrade the sidewalk network to be ADA compliant. | |
| • Support training programs for disability sensitivity. | |
| • Encourage new mobility vehicles and programs to prioritize accessibility. | |
| • Encourage local governments to adopt ordinances for the removal of snow and ice from sidewalks, bus stops, and driveway entrances. | |
| **Provide options for other alternative transportation modes** | |
| • Increase the presence of car sharing programs like Zimride or Zipcar. | |
| • Support development of shared mobility options. | |
| • Support the establishment of passenger rail connecting Peoria and other jurisdictions and/or research alternative strategies to increase Peoria's access to passenger rail centers. | |
| • Explore international passenger destinations from the Peoria International Airport. | |
| • Encourage public agencies and businesses to install Electric Vehicle Charging Stations at their parking facilities. | Environment |
| • Continue exploring rapid passenger transport options between Peoria and Bloomington-Normal. | Economic Development, Freight |
| • Actively pursue rail-banking of abandoned rail lines to preserve rail corridors for future uses. | Economic Development, Freight |

# Information and Data Sources

Amtrak. (2020). Reservations - Fare Finder. Retrieved May 5, 2020 from https://tickets.amtrak.com/itd/amtrak

Burlington Trailways. (2020). Find bus fares from Peoria, IL. Retrieved May 5, 2020 from https://trailways.com/schedules/bus-from-peoria-il/

Federal Highway Administration (FHWA). (2017, July 7). United States Department of Transportation Policy Statement on Bicycle and Pedestrian Accommodation Regulations and Recommendations. Retrieved May 5, 2020 from https://www.fhwa.dot.gov/environment/bicycle_pedestrian/guidance/policy_accom.cfm

Federal Transit Administration (FTA). (2015, August 28). Greater Peoria Mass Transit District. Retrieved May 5, 2020 from https://www.transit.dot.gov/ntd/transit-agency-profiles/greater-peoria-mass-transit-district

Federal Transit Administration (FTA). (2018a, February 19). Peoria County. Retrieved May 5, 2020 from https://www.transit.dot.gov/ntd/transit-agency-profiles/peoria-county

Federal Transit Administration (FTA). (2018b, February 19). Tazewell County. Retrieved May 5, 2020 from https://www.transit.dot.gov/ntd/transit-agency-profiles/tazewell-county

Federal Transit Administration (FTA). (2018c, February 19). Woodford County. Retrieved May 5, 2020 from https://www.transit.dot.gov/ntd/transit-agency-profiles/woodford-county

Greater Peoria Mass Transit District (GPMTD). (2019). CityLink On the Move: Existing Conditions Report. Retrieved May 5, 2020 from https://www.ridecitylink.org/wp-content/uploads/CityLink-On-the-Move-Existing-Conditions-Report_MedRes.pdf

Greyhound. (2020). Bus Stations in Peoria, Illinois. Retrieved May 5, 2020 from http://greyhound.com/en-us/bus-stations-in-peoria

United States Census Bureau, American Community Survey (ACS). (2018). Disability Characteristics. Retrieved May 5, 2020 from https://data.census.gov/cedsci/table?q=dp&g=0500000US17143,17203,17179&tid=ACSST5Y2018.S1810&t=Disability&vintage=2018

World Health Organization. (n.d.). Disability and Health. Retrieved May 5, 2020 from https://www.who.int/en/news-room/fact-sheets/detail/disability-and-health

# Economy

The relationship between transportation and the economy is vital. Mobility, the moving of people and goods as efficiently as possible is fundamental for economic prosperity. The Peoria-Pekin region is diverse in economic sectors with some segments of the economy having a global focus and importance, while other economic activity is regional in nature. In either case, transportation plays a key role in sustaining economic activity.

As our economy continues to advance, transportation improvements must keep pace to sustain economic development rather than impede progress. Regional infrastructure conditions can significantly impact the efficiency and quality of economic trade. Therefore, an LRTP is crucial to ensure that long-term transportation improvements align with the job growth, population fluctuations, and freight movement. Another need is to provide mobility for those with workforce participation challenges. A key facet of sustainability in all sectors is to maximize the use of resources, particularly financial resources.

This LRTP advances the financial sustainability principle by, among other things:

1. Investing in economically and financially viable transit endeavors
2. Shaping the plan via public input and involvement in all parts of the urbanized area to shape the plan
3. Improving bicycle and pedestrian safety, as many rely solely on these modes to access jobs and school
4. Focusing on responsible land use and smart transportation
5. Advancing projects that improve transportation efficiency and operations
6. Expanding funding for transit operations and maintenance
7. Investing in projects that are deemed to have the greatest return on investment
8. Aligning project investments with the resources expected to be available

A critical transportation-economic sustainability link is through a coordinated approach to land use and development. The inter-relation of transportation and land use can positively impact economic sustainability and yield more efficient results. Transit-Oriented Development (TOD) is a classic example of how coordinated transportation and land use can result in greater transportation efficiency while bolstering economic development. Land use and transportation continue to become increasingly linked. Compact, efficient, and urban areas are supported by transit, biking, and walking and provide livable communities while reducing greenhouse gas emissions.

## Regional Economic Development Efforts

In 2019 and 2020, the Greater Peoria Economic Development Council (GPEDC) held a series of five meetings, called The Big Table, throughout the region (see **Figures EC-1** and **EC-2**). 240 participants discussed major topics from food availability to diversity and inclusion. Transportation was another hot topic. The fuel for these discussions was economic development and what it means to weave it through all the topics discussed. At the end of the day 96% of surveyed participants noted that they would be interested in attending a similar region-wide event in the future. Such community events underscore the need to develop a region-wide Comprehensive Economic Development Strategy (CEDS) document (GPEDC, 2020). Many of the goals and objectives developed for the LRTP correspond to the current initiatives in the CEDS effort.

**Figure EC-1** A photo from The Big Table Peoria, hosted by GPEDC (GPEDC, 2020)

**Figure EC-2** A photo from The Big Table Delavan, hosted by GPEDC (Brumfield, 2020)

## Comprehensive Economic Development Strategy and Economic Development District (CEDS)

As its name implies, a CEDS lays out a regional strategy for economic development with the goal being a stronger, more diverse regional economy. While the CEDS' most critical function is to provide a regional economic development framework, it also serves as a required vehicle through which some federal agencies (especially the US Economic Development Administration, or EDA) evaluate requests for project grant assistance (CEDS, 2019). Without having an EDA-approved CEDS, various entities in the region may not be eligible to receive Economic Development Assistance Grants, including the Stimulus Funds for economic development (EDA, 2020). Having a CEDS in place has become more important than ever. The Greater Peoria Economic Development Council (GPEDC) is in the process of updating its CEDS document at this time (Spring/Summer 2020) which will be more diverse and comprehensive than before.

**ASSETS**

The CEDS process expanded to include each county within this area's Economic Development District (EDD), which includes the tri-county region. During the initial planning meetings, community focus group members identified regional opportunities. Top choices included:

1. Transportation (roads, river, rail, air)
2. Abundant water resources, including the Mahomet and Sankoty Aquifers
3. Illinois River
4. Central location
5. Rural and urban mix
6. TransPort port district

**BARRIERS**

Focus groups also identified the region's challenges and barriers. Their answers were:

1. Infrastructure
2. River siltation
3. Lack of process inclusion
4. Mass transit
5. Too many governmental entities
6. No vision – No structured strategic plan
7. Individualism of each of our communities
8. Lack of unified government, especially on local levels
9. Our quality of place is unknown from the outside, and we need "pride" within ourselves

## Greater Peoria Economic Development Council

The Greater Peoria Economic Development Council (GPEDC) drives economic growth within the Greater Peoria Area in collaboration with local economic development partners through targeted business assistance and attraction, workforce development, and regional marketing. The council publishes data and information used by industries and investors seeking to locate, expand, or invest in the Peoria region. Among these publications are lists of sites actively being marketed for sale and/or development, as well as buildings available for lease or sale.


**Figure EC-3** Greater Peoria Economic Development Council's logo (GPEDC, n.d.)

## Economic Development District (EDD)

An Economic Development District is a federally designated organization charged with the maintenance and implementation of the CEDS plan (EDA, 2019). Application for designation involves several steps including written support by the State of Illinois, Peoria, Tazewell, Woodford, Logan, and Mason counties, and a plan of operation as a nonprofit organization. GPEDC has been designated the EDD for the Peoria metropolitan planning area. Through this, the EDD is eligible for a 50% matching planning grant to fund the program and staff.

Central Illinois' EDD is a multi-county non-profit organization. It is bridge between the private and public sectors to allow area leaders to network and align economic development goals. The EDD helps identify economic development projects potentially eligible for grant funding. This crucial service helps match local dollars to state and federal to bring more funding and jobs to the region. This, in turn, extends the economic development capabilities of Peoria, Tazewell, Woodford, Logan, and Mason counties (GPEDC, 2019).

## Relationship with Economic Development Administration (EDA)

The mission of the Economic Development Administration (EDA) is: "To lead the federal economic development agenda by promoting innovation and competitiveness, preparing American regions for growth and success in the worldwide economy" (EDA, n.d.). Additionally, the EDD serves as the point of contact when local projects are submitted for EDA grants. When local economic development projects arise that align with EDA funding priorities and CEDS goals, the EDA assists governments and non-profits in submitting grant proposals. Further, EDD staff coordinates the CEDS Strategy Committee, a group of local private and public sector leaders charged with the annual oversight of the CEDS plan. TCRPC is represented on this Committee to address its mission focus on transportation, environmental, and community development issues. The CEDS/EDD tasks include the annual update of the data and projects within the plan. Other responsibilities of the EDD include:

1. Maintain CEDS for the region.
2. Submit funding request to the EDA for its three-year planning grant.
3. Annually report on the goals, strategies, project prioritization, and completion of EDD scope of work.
4. Hold open meetings at least once a year.
5. Assist qualified eligible governments and nonprofits with EDA grant applications.
6. Serve as the contact point for the CEDS Strategy Committee and EDA for organizations applying for funding.
7. Provide ongoing technical assistance to area governments and nonprofits to align regional economic development goals.
8. Provide grant and loan research, writing, and administration to both the EDA and other federal and non-federal funding sources.
9. Provide a "request for assistance program" serving area organizations through the development of materials such as maps, fact sheets, and planning information.
10. Assist CEDS Committee in developing several key issue-oriented sub-committees for which they have expressed an interest.
11. Maintain ongoing relationships. Ongoing public and private relationships are crucial to the CEDS process.

# Goal, Objective, and Action Items

**GOAL FOR ECONOMY**

Maintain a transportation system that builds prosperity throughout our region.

| Objectives and action items | Also applicable to: |
|---|---|
| **Support incremental development and mixed use in the built environment** | |
| • Build mixed-use, compact development. | |
| • Increase density in the urbanized area. | Environment |
| **Reduce household transportation costs** | |
| • Favor policies and projects that encourage greater fuel efficiency. | Environment |
| • Support projects that improve commute options for disadvantaged workers. | Mobility & Connectivity |
| • Provide transportation mode choices including public transit, bicycling, walking, and ridesharing. | Mobility & Connectivity |
| **Explore new initiatives linking economy and transportation** | |
| • Encourage data collection relating to freight movement throughout the region. | Freight |
| • Encourage emerging container-on-barge efforts. | Freight |
| • Support expansion and updates to the Peoria lock and dam system. | Freight |
| • Actively pursue rail-banking of abandoned rail lines to preserve rail corridors for future uses. | Mobility & Connectivity, Freight |
| • Continue exploring rapid passenger transport options between Peoria and Bloomington-Normal. | Mobility & Connectivity, Freight |
| • Study the economic viability of the beneficial use of dredged material (BUDM). | Environment |
| • Use sustainable materials in road construction. | Environment |

## Information and Data Sources

Brumfield, R. (2020, January 13). Neighbors meet in Delavan, discussing ways to propel rural areas forward. Peoria Journal Star. Retrieved May 19 from https://www.centralillinoisproud.com/news/rural-matters-greater-peoria-edc-continues-to-hold-big-table-discussions-for-regional-participation/

Greater Peoria Economic Development Council (GPEDC). (2019, May 14). About Us. Retrieved May 4, 2020, from https://hellogreaterpeoria.us/about/

Greater Peoria Economic Development Council (GPEDC). (2019). Focus Forward Greater Peoria. Retrieved May 4, 2020, from https://greaterpeoriaedc.org/wp-content/uploads/2016/08/CEDS-update-20162.pdf

Greater Peoria Economic Development Council (GPEDC). (2020). The Big Table Greater Peoria. Retrieved from https://data.greaterpeoria.us/wp-content/uploads/2020/03/The-Big-Table-Greater-Peoria-Full-Report-1.pdf

US Economic Development Administration (EDA). (n.d.). Overview. Retrieved May 4, 2020, from https://www.eda.gov/about/

US Economic Development Administration (EDA). (2019, March). Economic Development Districts. Retrieved May 4, 2020, from https://www.eda.gov/edd/

US Economic Development Administration (EDA). (2020, February 12). Overview. Retrieved May 4, 2020, from https://www.eda.gov/ceds/

# Freight

Whether it is by truck, train, barge, or air, freight transport is an integral part of the overall transportation system in the Greater Peoria area. Identifying the type of freight, its means of transport, and the logistics around it is key to understanding how it fits into the bigger picture. The following section is an in-depth look at freight movement in the Greater Peoria region, statewide, and even some wider-reaching ripple effects.

# Freight Movement Overview

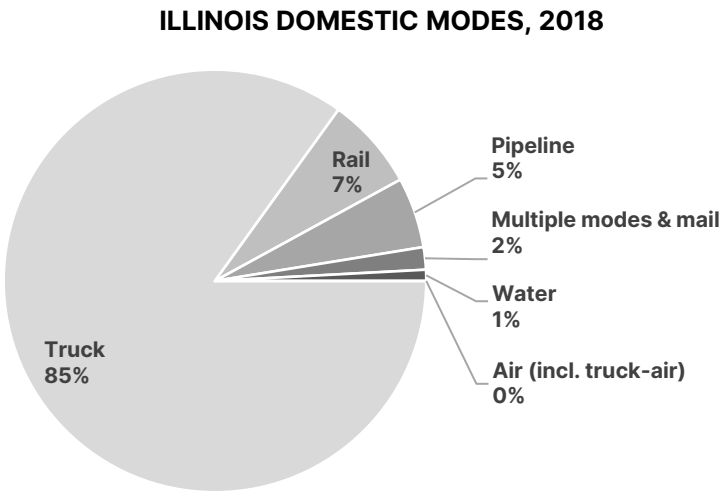
Since specific data on the freight movements within the tri-county region does not exist, **Table F-1** provide insights into the types of commodities and modes of transport throughout the State of Illinois. **Figures F-1 – F-6** show both documented 2018 and projected 2045 data; the latter provides an idea of what is to come. Additional freight data, including more detailed import and export data, can be found in **Appendix C**.

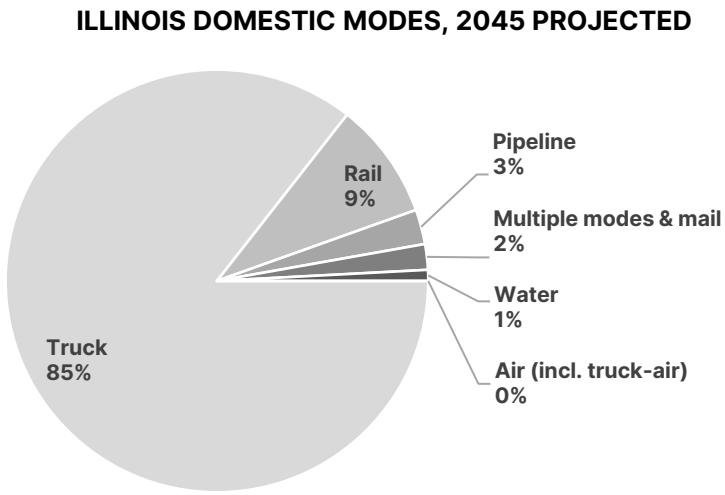
The Greater Chicagoland market accounts for much of the activity reflected in the data. There are, however, narrow markets and modes of freight movement that significantly impact the tri-county area and, in turn, Illinois' freight markets. Peoria and the surrounding communities' location on the Illinois River offers excellent opportunities to ship commodities by barge north to the Chicago markets, South to the Gulf of Mexico, and beyond to global markets. One of the commodities shipped from Peoria area quarries to the Chicago area by barge is sand. Sand is critical to Chicago's construction markets. In return, stone aggregate from quarry sources in the Chicago area is shipped South to meet regional concrete supplier needs here.

Another locally produced product from the area's vast agricultural market is ethanol. Most of the ethanol is shipped by rail tanker cars to meet market demand throughout the United States and internationally. In the spring, large quantities of fertilizer are shipped into, out of, and through the tri-county region are transported by barge and trucks to meet the demands of Central Illinois farmers.

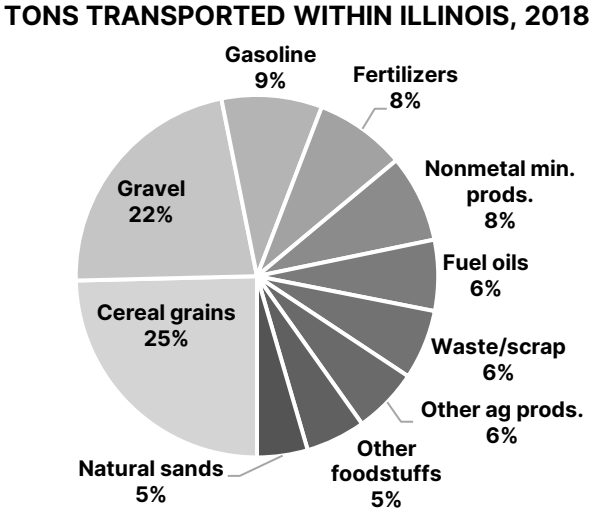
| **Commodities transported** | | **Modes of domestic transport** |
|---|---|---|
| Cereal Grains | Other foodstuffs | Air (including truck-air |
| Gravel | Natural sands | Multiple modes and mail |
| Gasoline | Basic chemicals | Pipeline |
| Fertilizers | Coal | Rail |
| Nonmetal mining products | Crude petroleum | Truck |
| Fuel oils | Base metals | Water |
| Waste/scrap | Alcoholic beverages | Other and unknown |
| Other agricultural products | Chemical products | |

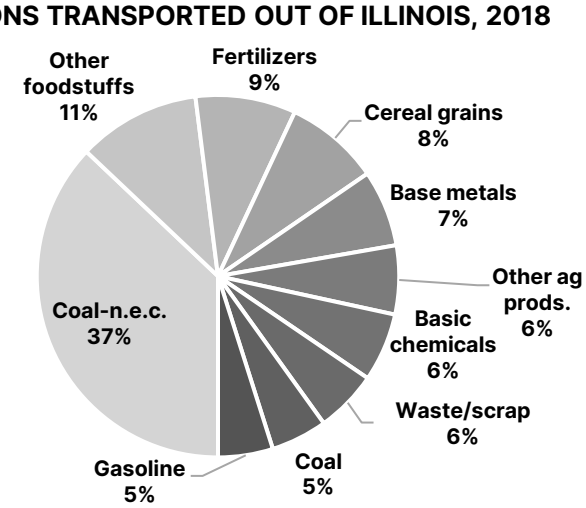
**Table F-1** A list of commodities transported and modes of domestic transport into, out of, and within the State of Illinois (FAF, 2019)



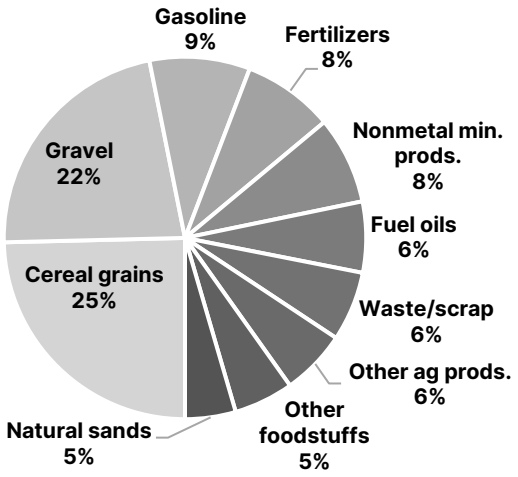

**Figures F-1 and F-2** Shipments within Illinois – Tons by Trade Type & Transportation Mode, 2018 and 2045 (FAF, 2019). Full table with values in thousands of tons may be found in **Appendix C**.



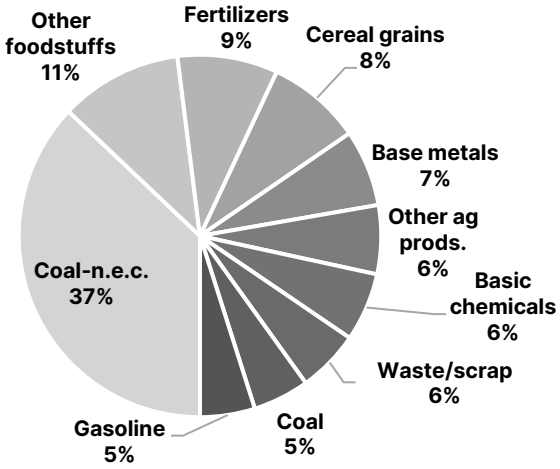




**Figures F-3 and F-4** Top Commodities Within and Outbound for Illinois in 2018, Ranked by Tons (all grades combined) (FAF, 2019). n.e.c. is "not elsewhere classified." Full table with values in thousands of tons may be found in **Appendix C**.

**TONS TRANSPORTED WITHIN IL, 2045 PROJECTED**




**TONS TRANSPORTED OUT OF IL, 2045 PROJECTED**




**Figures F-5 and F-6** Top Commodities Within and Outbound for Illinois in 20 in 2045, Ranked by Tons (all trades combined) (FAF, 2019). n.e.c. is "not elsewhere classified." See **Appendix C**.

## Freight Transported Via Truck

Goods and materials produced in the Peoria area and throughout Illinois are transported across the country via freight trucks. In the metropolitan planning area, national and state highways facilitate the movement of heavy machinery, crops, and other products to their local, national, or global destinations. Understanding the importance and nature of on-road freight transport is essential to keeping the region economically competitive in the future.

The Federal Highway Administration (FHWA) funds the Center for Transportation Analysis, which releases freight statistics via its Freight Analysis Framework (FAF) system. These FAF statistics are shown in **Tables F-1 through F-6**.

## Commercial Trucking

One Primary Interstate Highway (I-74), one Auxiliary Interstate Highway (I-474), and several national and state routes pass through the Greater Peoria area. These routes allow industries and businesses to move freight on local, state, and national scales via regional trucking.

Freight carriers rely on the region's road system working in concert with freight modes to meet deadlines and maintain inventory. Commercial trucking is a major aspect of the region's economy, and many transportation decisions are made with on-road freight transport in mind.

Engineers design truck routes with the size, weight, maneuverability, and clearance requirements of large trucks and tractor trailers in mind. Without these extra design measures, roads used heavily by trucks would rapidly deteriorate. A system of designated truck routes is in place to restrict heavy truck traffic to highways and roads built to accommodate them. The State of Illinois classifies truck routes using a system of three classes (see map in **Appendix C** for truck routes in the Tri-County area).

- **Class 1** truck routes are limited access, divided highways built to accommodate regional and national traffic
- **Class 2** routes are not limited access highways, but they have the same size and weight restrictions as Class 1
- **Class 3** routes have more restrictive size and weight limits, and they are generally rural roads used for transporting agricultural materials and equipment (Transport Chicago, 2013)

The heaviest amount of commercial truck traffic generally occurs on large highways and arterial roads, away from heavily populated areas. Truck traffic in the core of the urbanized area is generally limited to controlled-access highways.

# River Transportation

The Illinois River has long been the signature landmark for the Central Illinois region with its beautiful landscapes and magnificent views. Many people use the river for recreation purposes, such as boating and fishing. However, the Illinois River is also a working river.

## Freight by Water

The river has provided the area with the ability to create business and distribute products around the globe, serving as a major link for the transport of goods into and out of the Illinois heartland. From the whiskey distilling era to the growth of manufacturing in Central Illinois, the Illinois River has indeed been productive.

The Illinois River is used for the transportation of goods into and out of the region. To the south, it connects with the Mississippi River and from there to deep draft ports in New Orleans to allow for international trade. To the north, the river connects with Lake Michigan, and from there to the Atlantic Ocean (via the St. Lawrence Seaway), again allowing for international trade.

## Barge Transportation

River freight is moved by barge, which is a shallow-draft container pushed by a towboat. Barges have plied the Illinois River since the 1930s, carrying freight into and out of the region. All barge freight has three things in common: They are high in bulk, low in value compared to their weight, and are not time sensitive. As far as the major commodity groups that utilize the river for freight transportation in the region, farm products (corn and soybeans) dominate traffic on the system.

Freight travels both upriver and downriver. For example, grain from Central Illinois is shipped downriver to New Orleans, and from there to international markets. Coal, on the other hand, is shipped upriver from its place of origin.

Cost is one reason freight is moved by barge. It is estimated that large quantities of cargo can be moved by barge for one-third the cost of rail and one-fifth the cost of truck. Secondly, cargo that is too big or too heavy to be transported over the highways or by rail can be efficiently moved by water. See **Figure F-7** for a visual representation of how many units are needed to carry certain amounts of cargo for trucks, rail, and barge. It is evident that barge transportation can transport more at one time (USACE, n.d.).

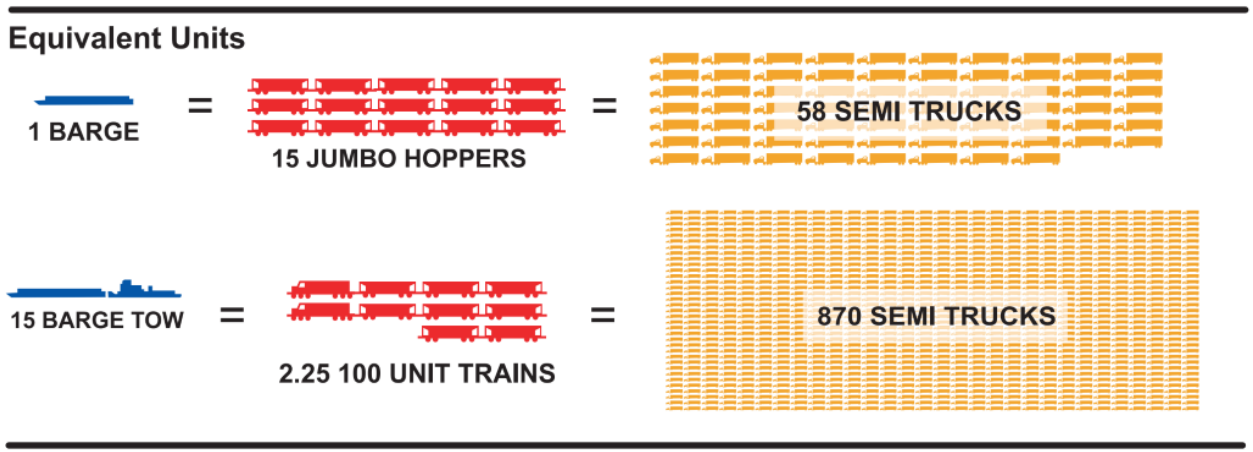



**Figure F-7** Number of units needed to transport cargo via truck, rail, and barge (USACE, n.d.)

## Locks and Dams

Barge transportation is possible only because of the system of locks and dams on the Illinois River. Locks and dams are constructed to overcome the natural fall of the river from its headwaters to its mouth. Between Lake Michigan to the north and the Mississippi River to the south, there is a 163-foot drop in elevation (USACE, n.d.). There are eight locks and dams along this stretch of the river. One of them, the Peoria Lock and Dam, is in the tri-county area (USACE, n.d.).

River transportation depends on the lock and dam system to operate. According to the US Army Corps of Engineers (USACE), the maintenance needs of the system are increasing at a faster rate than the available funding. Maintenance is needed for the Peoria Lock & Dam, and the Lock will close from July to September 2020 (Waterways Council, 2020).

The capacity of river transportation is directly related to the capacity of locks and dams. The lock and dam located in this region is typical of locks on the Illinois River. It is 600 feet in length and can handle one towboat with eight barges (USACE, 1991). Most towboats, however, push up to 15 barges at a time on the Illinois River. To navigate the lock and dam, the barges must be divided into two sections, with each section passing through the lock separately.

Perhaps the most critical issue facing the Peoria Lock & Dam (and other locks & dams on the system) is lock size. The system's 600-foot locks do not accommodate today's modern tows without the need to split and pass through the lock in two operations (USACE, 1991). This procedure triples lockage times.

**Commodities Shipped by Barge**

In 1994, the tonnage of freight shipped throughout the region was 35 million tons (TCRPC, 2005). In 2015, 23.4 million tons of commodities passed through the Peoria Lock and Dam.[3] In fact, the tonnage shipped through Peoria and the nearby LaGrange and Starved Rock locks, has decreased steadily since the mid-1990s, except for an uptick in 2014 (see **Figure F-8**). The entire State of Illinois has seen freight tonnage decrease through its locks over the years (Tioga, 2017). In fact, this trend reaches throughout numerous states. In addition to Illinois' decreasing waterway freight tonnage, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania, and Wisconsin all saw declines between 2011 and 2015 (Ginsburg and Dirks, 2017).

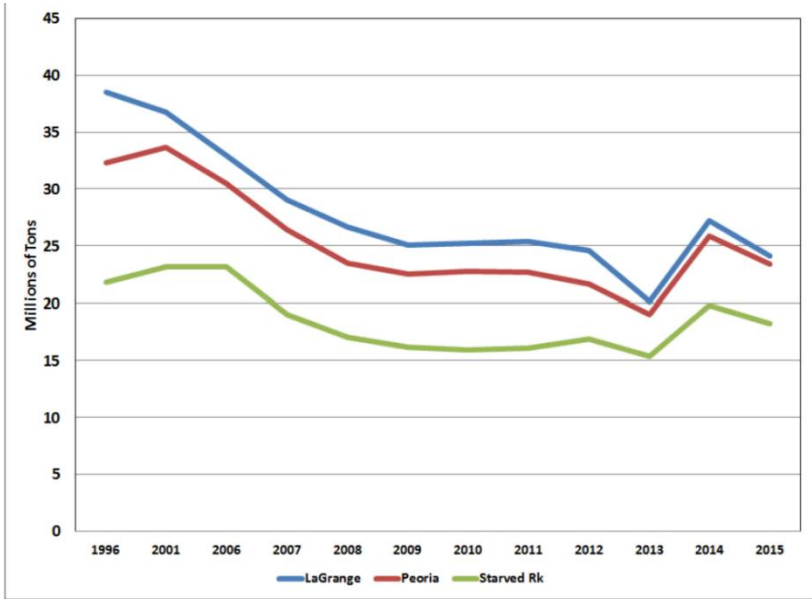



**Figure F-8** Millions of tons shipped in Peoria and its two nearest locks, LaGrange to the south and Starved Rock to the north
(Tioga, 2017, pg. 4)

[3] While data as recent as 2018 are available for statewide freight tonnage, region-specific data is not as straightforward. The reasoning is explained by Ginsburg and Dirks (2017):

"More detailed information on total quantities of materials shipped through Illinois Port Districts is not readily available because Port Districts are involved in a variety of economic activities with only a limited number operating docks and terminals involved in maritime freight shipping. This leads to incomplete data on totals."

According to a report by Tioga for TCRPC (2017), in Illinois, this decrease is due to the following:

> **The trend is driven by declines in movements of coal, crude materials (sand & gravel) and manufactured goods (cement). Movements of chemicals (fertilizer and alcohol) have increased while other commodities, including farm products (corn and soybean products) have remained relatively unchanged (pg. 3).**

Further, because of deferred maintenance on the locks and dams, delays have increased, and shippers are looking for alternate freight modes, such as railroads. As for whether this trend will continue, according to the Illinois Freight Mobility Plan (IDOT, 2018), cited in Ginsburg and Dirks (2017), the percentage of freight shipped on water is expected to decrease due to an expected truck freight tonnage increase. However, statewide freight tonnage is expected to increase by 2045 (FAF, 2019).

The USACE is predicting that the current amount of barge traffic will remain steady or slightly increase in the next 20 years. Grain yields will continue to increase, and may again be shipped south to be exported, as domestic oil production, with its lower cost, makes ethanol less competitive.

**Container-On-Barge Transportation**

A new use for barges is on the horizon. Container-on-barge (COB), also known as "short sea shipping," means transporting cargo by water over short distances, therefore connecting waterways to highways (Ginsburg and Dirks, 2017). This method will potentially increase the freight moved by barge in the Tri-County area:

> **Great Lakes ports have available capacity to move freight and short sea transportation can help alleviate highway and rail congestion. Roll on-roll off (RORO) vessels that seamlessly transport trucks over short distances by ship are successfully being used in many areas of the world and represent a particularly attractive option to grow short sea shipping while reducing freight's environmental footprint (Ginsburg and Dirks, 2017).**

COB can take advantage of recent trends: The increase of containers being shipped into the country, the growing percentage of freight transported via truck, and the resulting rise in traffic congestion. COB can help alleviate some of this. Further, as shown in **Figure F-7**, barge transfer can be significantly more efficient in transporting cargo than trucks, so COB can add a layer of efficiency in the supply chain process (Tioga, 2017).

Currently, COB operations exist mostly in the Lower Mississippi River in Louisiana, with "shippers who have recognized the commercial and environmental benefits of container-on-barge service" (Moore and Hocke, 2018). In 2018, a St. Louis based stakeholder group received a $96,000 grant from the US Maritime Administration (part of the US DOT) to study the effectiveness of COB among New Orleans, Chicago, and Minneapolis. Planning is indeed the key to COB success; community stakeholders must be involved across several modes, and an economic analysis must show that COB would be more efficient than, for example, trucking alone (Moore and Hocke, 2018). Further discussions and planning would therefore have to continue regionally to consider COB in Tri-County.

# Air Travel

Three airports are located within the PPUATS area: Peoria International, Mt. Hawley, and Pekin airports. Air travel connects this community to numerous destinations across the country and the world, facilitating national and international social, political, and economic relationships. Air transportation should be integrated with other modes of transportation within the community. Planning for a safe and reliable network that coordinates different transportation modes to support all travel will help increase the region's mobility.

## General Wayne A. Downing Peoria International Airport

The General Wayne A. Downing Peoria International Airport (PIA) serves Peoria and surrounding communities. The airport is serviced by four passenger airlines (United, American, Delta, and Allegiant Air) and numerous cargo carriers. Nonstop destinations include Chicago, Dallas/Ft. Worth, Las Vegas, Phoenix/Mesa, Punta Gorda, Destin, St. Petersburg, Atlanta, Minneapolis, Charlotte, and Orlando (PIA, n.d.).

PIA has a 10,104-foot fully instrumented primary runway and an 8,004-foot secondary runway (Airport Technology, 2014). These runways are the largest in Illinois outside of O'Hare International Airport in Chicago. The airport is reporting record high totals with 689,416 passengers using the Airport in 2019 (Vlahos, 2020). Other regional airports such as Bloomington and Springfield have also experienced gains over this time.

The airport's original terminal building was constructed in 1959, but it has received multiple facelifts. In 2011, the Metropolitan Airport Authority of Peoria (MAAP) celebrated the opening of PIA's new state-of-the art terminal facility, replacing its old counterpart. The airport was then named after General Wayne A. Downing. Yet another new terminal was added in 2016 and named after the former US Secretary of Transportation and Congressman Ray LaHood (PIA, 2017). These new additions resulted in a modern look and feel of the airport, as seen in **Figure F-9**.

**Figure F-9** Picture of the newly updated Peoria International Airport (PIA, n.d.).

**Figure F-9** The newly updated Peoria International Airport (PIA, n.d.)

## Mt. Hawley Airport

Also operated by MAAP, the Mt. Hawley Airport provides convenient access to the businesses and growing residential areas in northern Peoria County. It has a 4,000-foot runway, rentable hangars, and is located near North Peoria's business district. Its location makes it reachable via the Route 6/I-474 interchange with Knoxville Road (Route 40). Mt. Hawley Airport also has a flight school, free courtesy car, and mechanical services available (Mt. Hawley Airport, n.d.). See an image of the airport in **Figure F-10**.


**Figure F-10** Outside photo of Mt. Hawley Airport, located in North Peoria (Mt. Hawley Airport, n.d.).

## Pekin Municipal Airport

Pekin Municipal Airport also serves the region's general aviation needs. The airport has a 5,000-foot runway, which was re-paved as part of a Summer 2019 renovation (Kramer, 2019). Owned by the City of Pekin, the airport boasts 24/7 accessibility to terminals, three instrument approaches, and self-service fueling. Other services such as a courtesy car, free amenities like coffee and snacks, a pilot's lounge, and wireless internet access, are included within Pekin's airport features (City of Pekin, n.d.). See **Figure F-11** for a photo at Pekin Airport.


**Figure F-11** Photo of an aircraft on the runway at Pekin Airport (PekinAirport, 2016).

## Air Cargo

Air transportation is focused on moving lightweight, high-value goods and time-sensitive materials. However, the demand for air cargo is typically cost-based. Air cargo can cost five times more than road-transported cargo, and up to 16 times more than sea-transported cargo. Whether it is through cargo-only carriers, charter operators, or combination carriers transporting cargo and passengers together, airports still play an integral role in the overall transportation chain (Global Green Freight, n.d.). Regionally, a major air cargo hub is the Peoria International Airport. PIA serves two cargo carriers, UPS and DHL, and the airport is a US Customs Port of Entry for air cargo (PIA, n.d.).

# Rail Transportation

Metro Peoria is served by nine common carrier railroads. Four are Class I/Continental railroads: Burlington-Northern Santa Fe (BNSF), Canadian National (CN), Norfolk Southern (NS), and Union Pacific (UP). One Class II/Regional railroad, Iowa Interstate, serves Peoria, coming out of Bureau, Illinois. Four Class III/Shortline railroads service the region: Illinois & Midland Railroad (IMRR); Keokuk Junction Railway (KJRY); Toledo, Peoria, and Western Railway (TPW); and the Tazewell and Peoria Railroad (TZPR). This complex regional railroad system can be seen in **Table F-2** and as a map in **Appendix C**. See below for definitions of each railroad class (Illinois State Rail Plan, 2012):

- **Class I** Railroads are defined by the Federal Surface Transportation Board as having more than $398.7 million of annual carrier operating revenue. They primarily operate long-haul service over high-density intercity traffic lanes.
- **Class II** and Regional railroads are railroads of similar size with slightly different definitions. Class II railroads are defined as having annual revenue of between $31.9 million and $398.7 million. Regional railroads are defined as operating over at least 350 miles of track and/or having revenue of between $40 million and the Class I threshold.
- **Class III** or Short-line railroads are defined as having annual revenue of less than $31.9 million per year.

| Abbreviation | Full Name | Class/Type |
|---|---|---|
| BNSF | Burlington-Northern Santa Fe | Class I/Continental |
| CN | Canadian Northern | Class I/Continental |
| IAIS | Iowa Interstate Railroad | Class II/Regional |
| IMRR | Illinois & Midland Railroad | Class III/Shortline |
| KJRY | Keokuk Junction Railway Company | Class III/Shortline |
| NS | Norfolk Southern | Class I/Continental |
| TPW | Toledo, Peoria, & Western Railway | Class III/Shortline |
| TZPR | Tazewell & Peoria Railroad | Class III/Shortline |
| UP | Union Pacific | Class I/Continental |

**Table F-2** List of railroads in the Tri-County area, with abbreviations and classes
(IDOT Highway Data)

Illinois' rail system is the second largest in the country, with the first being Texas (IDOT, 2012). Freight shipments via rail make up 37% of the total tonnage of freight shipped statewide (IDOT, 2020). Illinois rail has vital connections to a multitude of other freight modes, allowing cargo to be shipped efficiently:

> **Illinois' expansive rail freight network, its 16,500 mile highway system and 300 port terminals, together with over 200 intermodal freight transfer facilities between these modes, provide the State's businesses and industries with cost and transportation-efficient means to utilize the most effective and competitive combination of modes to meet their needs (Illinois State Rail Plan, IDOT, 2012).**

Despite the positive aspect of having multi-modal options, the maintenance of the infrastructure is an issue. It is estimated that freight rail traffic will grow, which will require substantial rail updates and repairs. Funding for such repairs come from state and federal funds, though there has been a major decline in these revenues (IDOT, 2020). Deteriorating infrastructure is a trend not only in rail, but across the board of freight modes.

## Passenger Rail

There is no passenger rail connecting Peoria to other urban centers, although there is regional interest. However, the region has a history of high-speed rail: The Peoria Rocket train ran between Peoria and Chicago for 42 years until 1979, and the Prairie Marksman feebly began and ended service within a year in 1981 (Tarter, 2019).

The Central Illinois region, consisting of the Peoria metropolitan area and the Bloomington-Normal metropolitan area, has identified commuter rail services as a strategic goal. The two urban areas are approximately 45 miles apart and share employment opportunities, services, and educational institutions. An Amtrak station is located in Normal, Illinois. However, “Peoria stands as the largest metropolitan area in the state without passenger rail service” (Tarter, 2019). Commuter rail service between Peoria and Normal would allow Peoria residents to take advantage of Amtrak service to Chicago, St. Louis, and beyond.

In 2012, a Passenger Rail Study was performed to investigate the feasibility of a commuter rail line between Peoria and Bloomington-Normal. Passenger rail would make Central Illinois more accessible and competitive in the national and world economy. In addition, it would reduce private automobile VMT, thus reducing carbon emissions and improving the region’s air quality. The results of that study recommended a development of a commuter rail line from Peoria to Bloomington that generally follows I-74 on what is currently an NS freight line. At either end of the line, the use of infrastructure provided by other railroads will be required. Other rail lines at either end of the study area, including TZPR, TPW, and BNSF or UP Railroad ROWs are recommended to be utilized as well (IDOT, 2012).

There are currently no plans to move forward to connect Peoria and Normal with passenger rail service, nor are there initiatives to seek funding for additional studies or construction.

## Railroad Crossings

There are nearly 7,600 highway-grade rail crossings in the State of Illinois. This number is the second highest in the nation after Texas. The type of crossings varies among state and local roads, private and public property, and road and pedestrian crossings (ICC, 2019). Within the tri-county area, there are 267 crossings, and 165 of them are within the 20-year planning boundary (IDOT highway data). See **Table F-3** for the breakdown of rail crossing locations, and **Appendix C** for a map of railroad routes and crossings in the region.

| Type of crossing | Number |
|---|---|
| State road rail crossings | 763 |
| Local road rail crossings | 6,832 |
| **Total highway-grade rail crossings** | **7,595** |
| Rail crossings on bridges | 2,667 |
| Private property rail crossings | 3,589 |
| Private bridge structures | 136 |
| Pedestrian grade crossings | 323 |
| Pedestrian grade separated crossings | 104 |

**Table F-3** Breakdown of the number and type of railroad crossings in Illinois (ICC, 2009)

Between 2014 and 2018 in the Tri-County area, there have been 29 total crashes associated with railroad crossings, resulting in 10 injuries (IDOT, 2019). The Illinois Commerce Commission (ICC) is responsible for overseeing the safety of public highway-rail crossings across the state. IDOT funds most railroad safety costs from the State Road Fund, and the Illinois General Assembly uses the Grade Crossing Protection Fund (GCPF) to pay for local roads (ICC, 2019).

In 2019, the GCPF received $39 million from MFT funds. These are used to implement and improve safety structures such as the following project types (ICC, 2019):

- **Warning Device Upgrades:** Installation of automatic flashing light signals and gates at public grade crossings currently not equipped with automatic warning devices; installation of automatic flashing light signals and gates at public grade crossings currently equipped only with automatic flashing light signals; signal circuitry improvements at public grade crossings currently equipped only with automatic warning devices
- **Grade Separations:** Construction, reconstruction, or repair of bridges carrying a local road or street over railroad tracks (overpass); construction, reconstruction, or repair of bridges carrying railroad tracks over a local road or street (subway)
- **Grade Separations:** Vertical Clearance Improvements: Lowering the existing highway pavement surface under a railroad bridge to improve vertical clearance for motor vehicles
- **Pedestrian Grade Separations:** Construction of a bridge to carry pedestrian or bicycle traffic over or under railroad tracks
- **Interconnects:** Upgrading the circuitry at grade crossings where warning signals are connected to the adjacent traffic signals, so the two systems operate in a synchronized manner
- **Highway Approaches:** Improvements to the portion of the public roadway directly adjacent to the crossing surface
- **Connecting Roads:** Construction of a roadway between a closed crossing and an adjacent open, improved crossing; and
- **Remote Monitoring Devices:** Sensor devices in the circuitry of grade crossing warning devices which immediately alert the railroad to any failures in warning device operations
- **Low Cost Improvements at Unsignalized Crossings:** Installation of new, more reflective crossbuck warning signs and yield signs at crossings that do not require automatic warning devices
- **Crossing Closures:** Provide an incentive payment to local agencies for the voluntarily closure of public highway-rail grade crossings

## Emerging Trends

Numerous emergent trends could shape the future of freight. It is not clear how exactly these trends will emerge onto the freight scene and what ripple effects they may cause, but it is crucial to be aware and track them as they arise. The following are the six major freight trends, from the Illinois State Freight Plan Executive Summary (2018):

- **Commercial and Automated/Autonomous Vehicles:** Technological advances in self-driving trucks could have a profound significance, but implementation still faces many challenges.
- **Truck Platoons:** Platoons consist of two or more trucks traveling closely behind one another, using automated sensors and controls to maintain short headway distances between vehicles. This allows the vehicles behind the lead truck to reduce fuel consumption by air drafting.
- **Rail Intermodal Developments:** Containers and trailers on rail flatcars have been a growth market for freight railroads for many years and, intermodal rail traffic is expected to continue to grow.
- **Warehouse Location and Automation:** The number of distribution centers has tripled in the past four years, and warehouse automation is dramatically increasing and expected to grow even more.
- **Retail Home Delivery:** Within last ten years, online shopping has risen from 2.1% of the total retail in 2004 to 6.4% in 2014. The result of this shift in how consumers shop affects the number of trucks on the roadways, including on rural routes and in residential communities.
- **Supply Chain Sourcing:** The outlook for supply chain source is speculative, and the outcome makes a difference for freight planning. Therefore, Illinois planners must observe trends closely to better understand the implications.

## Goal, Objective, and Action Items

**GOAL FOR FREIGHT**

Provide strategic direction for freight movements to, from, and within our region's transportation system.

| Objectives and action items | Also applicable to: |
|---|---|
| **Support the linkage of all freight types** | |
| • Encourage data collection relating to freight movement throughout the region. | Economic Development |
| • Establish a multi-modal freight facility. | |
| **Support and improve freight movement throughout the region** | |
| • Maintain or improve current truck route systems and ensure they are not being degraded at a faster than normal pace. | |
| • Invigorate the port district to ensure more effective collaboration. | |
| • Encourage emerging container-on-barge efforts. | Economic Development |
| • Support expansion and updates to the Peoria lock and dam system. | Economic Development |
| • Ensure airports in the region are improved or maintained. | |
| **Support and encourage future freight improvements** | |
| • Continue exploring rapid passenger transport options between Peoria and Bloomington-Normal. | Mobility & Connectivity, Economic Development |
| • Actively pursue rail-banking of abandoned rail lines to preserve rail corridors for future uses. | Mobility & Connectivity, Economic Development |

# Information and Data Sources

City of Pekin. (n.d.). About the City of Pekin Municipal Airport. Retrieved May 12, 2020 from http://www.ci.pekin.il.us/departments/airport/airport.php

Freight Analysis Framework (FAF). (2019, December 17). Freight Analysis Framework Version 4. Retrieved May 5, 2020 from https://faf.ornl.gov/fafweb/

Ginsburg, R., and Dirks, L. (2017, August 30). An analysis of the Illinois maritime transportation system. University of Illinois at Chicago. p. 26. Retrieved May 8, 2020 from https://utc.uic.edu/wp-content/uploads/Illinois-Maritime-Transportation-System-Report-__Final-Report-8302017.pdf

Global Green Freight. (n.d.) Air Cargo. Retrieved May 12, 2020 from http://www.globalgreenfreight.org/transport-modes/air/air-cargo

Illinois Commerce Commission (ICC). Crossing safety improvement program. Retrieved May 14, 2020 from https://www.icc.illinois.gov/rail-safety/crossing-safety-improvement-program

Illinois Department of Transportation (IDOT). (2012, December). Illinois State Rail Plan. Retrieved May 13, 2020 from https://idot.illinois.gov/Assets/uploads/files/Transportation-System/Reports/OP&P/Plans/Illinois%20State%20Rail%20Plan%202012.pdf#page=23

Illinois Department of Transportation (IDOT). (2018, June). Illinois State Freight Plan Executive Summary. Retrieved May 5, 2020 from http://www.idot.illinois.gov/Assets/uploads/files/Transportation-System/Reports/OP&P/Freight/IDOT_Freight_Plan_ExecSummary_v9.pdf

Illinois Department of Transportation (IDOT). (2019, October 8). Illinois Roadway Crash Data. Retrieved May 5, 2020 from http://www.idot.illinois.gov/transportation-system/safety/Illinois-Roadway-Crash-Data

Kramer, M. (2019, July 15). Pekin Airport to celebrate renovations at Friday ribbon cutting. Pekin Times. Retrieved May 12, 2020 from https://www.pekintimes.com/news/20190715/pekin-airport-to-celebrate-renovations-at-friday-ribbon-cutting

Moore, K. and Hocke, K. (2018, April 18). Boxed in: Container-on-barge services fight to fit into the transportation industry. WorkBoat. Retrieved May 14, 2020 from https://www.workboat.com/news/coastal-inland-waterways/boxed-in/

Mount Hawley Auxiliary Airport. (n.d.). Mount Hawley Auxiliary Airport. Retrieved May 12, 2020 from http://www.fly3my.com/

PekinAirport. (2016, August 18). #business #aviation at the #Pekin #airport in #Illinois - #avgeek #hashtag [Twitter]. Retrieved May 13, 2020 from https://twitter.com/pekinairport/status/766319608877948928/photo/1

Peoria International Airport (PIA). (n.d.) General Wayne A. Downing Peoria International Airport. Retrieved May 5, 2020 from https://www.flypia.com/

Peoria International Airport (PIA). (2017). PIA looks back at 2016. Retrieved May 8, 2020 from https://www.flypia.com/news.php?i=49

Tarter, S. (2019, March 30). High speed trains get set for Illinois—but not Peoria. Peoria Journal Star. Retrieved May 13, 2020 from https://www.pjstar.com/news/20190330/high-speed-trains-get-set-for-illinois---but-not-in-peoria

Tioga. (2017, April 5). Greater Peoria multimodal freight growth study. Tri-County Regional Planning Commission.

Transport Chicago. (2013, June 7). Chicago Truck Route Planning Study. Retrieved May 7, 2020 from http://www.transportchicago.org/uploads/5/7/2/0/5720074/2c3_truckroute.pdf

Tri-County Regional Planning Commission (TCRPC). (2005, December). Supply chain logistics and transportation indicator study. transPORT: Heart of Illinois Regional Port District.

United States Army Corps of Engineers (USACE). (n.d.). Locks & the River. Retrieved May 6, 2020 from https://www.mvr.usace.army.mil/Portals/48/docs/Nav/LocksAndRiver.pdf

United States Army Corps of Engineers (USACE). (1991, January 1). Water Resources Development. United States Army Engineer District, Chicago. p. 62

Vlahos, N. (2020, January 30). Peoria International Airport sets passenger records, upgrades Chicago service. Peoria Journal Star. Retrieved May 8, 2020 from https://www.pjstar.com/news/20200130/peoria-international-airport-sets-passenger-records-upgrades-chicago-service

Water Resources Development Act of 2007. Pub. L. No. 110-114, 121 Stat. 1041 (2007).

Waterways Council, Inc. (2020, January 29). Five of eight locks on Illinois Waterway set to close for maintenance in July. Retrieved May 7, 2020 from https://www.waterwayscouncil.org/media/in-the-news/article/2020/01/marinelog

# Funding Analysis

By Federal law, the LRTP must be fiscally constrained. This means that transportation projects included in the plan must have reasonably guaranteed funding sources for them to be included.

# Funding and Revenue

This chapter will discuss revenue sources and estimate the amount of federal funding that will be available for transportation projects over the next 25 years in the Peoria-Pekin Metropolitan Planning Area. The purpose of this analysis is to determine whether or not the region has adequate resources to operate and maintain the existing transportation system, while also having the resources to build future capacity into the transportation system. There are many types of transportation addressed in this analysis, including highways and bridges, mass transit, and non-motorized transportation, such as bicycle trails and pedestrian accommodations.

There are many sources of funds that IDOT, counties, and municipalities use to maintain and expand their transportation systems. They include federal, state, and local sources. This document will focus only on the federal sources of funds.

The primary source of federal funds for transportation projects is the Fixing America's Surface Transportation Act, commonly known as the FAST Act. The FAST Act is set to expire on September 30, 2020.

IDOT relies primarily on federal funds to build and maintain roads and bridges on the state and federal system. IDOT also relies on the State of Illinois to provide the matching funds needed for these projects, as most federal transportation programs require a 20% match. The State uses funds received from the Motor Fuel Tax to provide the match.

There are several federal funds that IDOT can use. Some funds, such as the Major Bridge Fund, can be used only for bridges, while other funds are unrestricted. Certain funds, such as STBG-Urban (formerly referred to as STU), can be used only in the urbanized area. Other funds, such as STBG-Rural, must be used outside the urbanized area, but can also be used within the 20-Year Planning Boundary.

Counties also receive dedicated federal funds. Peoria, Tazewell, and Woodford Counties receive an annual allotment of federal bridge funds known as HBP (Highway Bridge Program). Each county's allotment is based on the total need of deficient local bridges in the county as compared to that which exists statewide. These funds are limited to use on existing local structures within the county which meet eligibility criteria based solely on their deficient need and only when authorized by counties in coordination with IDOT regardless of whether or not they are within the urbanized area or the 20-Year Planning Boundary. Counties also receive an allocation of federal STBG-Rural funds which may only be used to address needs on county highways or other rural federal-aid eligible routes throughout the county that are outside of the urbanized area and only when authorized by counties in coordination with IDOT. Counties may compete for other statewide transportation funds such as Major Bridge funds. They are also eligible to apply for STBG-Urban funds that are programmed by the MPO and must be used within the 20-Year Planning Boundary.

Municipalities do not receive automatic individual allocations of federal funds to build and maintain infrastructure. Municipalities are eligible to apply for STBG funds that are allocated to the MPO and can also apply for competitive grants such as BUILD, HSIP, and HPP[4]. The required match for these grant programs comes from the jurisdiction's share of Motor Fuel Tax revenues, and a combination of sales taxes and/or property taxes.

Mass Transit Districts rely on federal funds allocated through the Federal Transit Administration (FTA). In addition, they receive funding through the state of Illinois and property tax revenue to fund the required match.

In addition to the federal funding sources discussed above, there are other, smaller sources of federal funds for transportation projects. For example, local jurisdictions can compete for funding through the Transportation Alternatives (TA) program for projects related to transportation enhancements and the former Safe Routes to School program.

[4] Better Utilizing Investments to Leverage Development, Highway Safety Improvement Program, High Priority Project grants

## Project Listings

This section will be broken down into three sub-sections: Federal funding for IDOT to build and maintain federal and state highways and bridges; federal funding for municipalities and counties to build and maintain local streets and bridges; and federal funding for mass transit. Each sub-section will be further divided into three categories of projects based on timing: short-term projects (usually within six years), intermediate projects (seven to 10 years), and long-term projects (11 to 25 years). In addition, a category known as Illustrative is used for projects that do not have an identified source of funding.

**Short Term (0-6 Year) Projects**

An estimate has been made of the total amount of funds that IDOT will receive in the next six years, including federal and state funds based on historical averages. Federal funding to the region fluctuates yearly, often differing by millions of dollars. In addition, the expiration of the FAST Act in September 2020 makes estimating future funding levels particularly difficult.

All federal programs require a match. IDOT has estimated that the $397,400,000 of total project cost results in $320,620,000 of federal funding. Federal funds expected to be available in this time frame is $320,620,000. Therefore, the plan is fiscally constrained. **Table FA-1** contains a list of the projects that IDOT plans to undertake in the 0-6 Year period.

**Table FA-1** Short Term (0-6 Year) IDOT Projects

| Project | County | Location | Description | Federal | State | Total |
|---|---|---|---|---|---|---|
| IL 8/IL 116 (Cedar St Extension) | Tazewell | Over TZPR RR & IL 29 in East Peoria | Bridge Replacements | $36,000,000 | $9,000,000 | $45,000,000 |
| I 474 | Peoria | I-74 to Illinois River | Resurfacing (3R) | $19,800,000 | $2,200,000 | $22,000,000 |
| IL 116 (Harmon Highway) | Peoria | Over C&NW RR/Kickapoo Cr | Structure Replacement | $20,000,000 | $5,000,000 | $25,000,000 |
| IL 6 | Peoria | North of US 150 to I 474 | Resurfacing (3R) | $13,040,000 | $3,260,000 | $16,300,000 |
| IL 8 (Western Avenue) | Peoria | Farmington Road to Lincoln Avenue | Reconstruction | $17,680,000 | $4,420,000 | $22,100,000 |
| US 150 (War Memorial Drive) | Peoria | West of Orange Prairie Road to West of Sterling Avenue | Resurfacing (3R) | $24,000,000 | $6,000,000 | $30,000,000 |
| IL 40 (Knoxville Avenue) | Peoria | I-74 to US 150 | Reconstruction | $16,800,000 | $4,200,000 | $21,000,000 |
| IL 29 (Adams Street) | Peoria | South of US 150 to Abington Street | Reconstruction | $13,600,000 | $3,400,000 | $17,000,000 |
| US 24-Business | Tazewell | West of Legion Road to East City Limits of Washington | Reconstruction | $34,400,000 | $8,600,000 | $43,000,000 |
| IL 40 | Tazewell | Bob Michel Bridge at Illinois River | Bridge Rehabilitation | $14,400,000 | $3,600,000 | $18,000,000 |
| US 24/IL 29/IL 116 | Tazewell | North of Wesley Road to south of Camp St | Reconstruction | $10,400,000 | $2,600,000 | $13,000,000 |
| IL 29 | Peoria | Gardner Lane to Lorentz Avenue | Resurfacing (3R), turn lanes | $43,600,000 | $10,900,000 | $54,500,000 |
| Adams St | Peoria | Over BNSF RR & UP RR at west city limit of Peoria | Bridge Replacement | $20,000,000 | $5,000,000 | $25,000,000 |
| US 150 (Westbound) | Peoria | Over Illinois River and IL 29 | Bridge Rehabilitations | $16,400,000 | $4,100,000 | $20,500,000 |
| Safety Improvements | All | Various | Safety Improvements | $4,500,000 | $500,000 | $5,000,000 |
| Resurfacing/ Bridge Rehab | All | Various | Resurfacing/ Bridge Rehab | $16,000,000 | $4,000,000 | $20,000,000 |
| **Total** | | | | **$320,620,000** | **$76,780,000** | **$397,400,000** |

**Intermediate Term (7-10 Year) Projects**

The amount of federal funding available to IDOT in years seven to 10 has been estimated based on current funding levels. The amount of federal funding for this period is $186,100,000. The projects in IDOT's 7-10 Year plan can be found in **Table FA-2**. Projects totaling $186,100,000 of federal funds are anticipated; therefore, the plan is fiscally constrained.

**Table FA-2** Intermediate Term (7-10 Year) IDOT Projects

| Project | County | Location | Description | Federal | State | Total |
|---|---|---|---|---|---|---|
| IL 98 | Tazewell | N. Pekin to Morton | Resurfacing (3R) | $16,000,000 | $4,000,000 | $20,000,000 |
| IL 29 | Peoria | Abington to Spalding | 3R with Bike/Ped Accom | $20,000,000 | $5,000,000 | $25,000,000 |
| IL 29 - Chillicothe viaduct | Peoria | N of Truitt to Senachwine Cr | Additional Lanes, bridge | $30,400,000 | $7,600,000 | $38,000,000 |
| IL 8/Farmington Rd | Peoria | East of Kickapoo Creek to Main St. | Resurfacing (3R), Bike/Ped Accom | $20,000,000 | $5,000,000 | $25,000,000 |
| US 150 | Tazewell | East Peoria to Morton | 3R with Bike/Ped, Turn Lane | $24,000,000 | $6,000,000 | $30,000,000 |
| IL 6 | Peoria | IL 29 to IL 40 | Resurfacing (3R) | $9,600,000 | $2,400,000 | $12,000,000 |
| IL 116 - Lincoln & Howett | Peoria | Washington St to Griswold St | Reconstruction | $21,600,000 | $5,400,000 | $27,000,000 |
| Safety Improvements | All | Various | Safety Improvements | $4,500,000 | $500,000 | $5,000,000 |
| Resurfacing & Bridge Rehab | All | Various | Resurfacing/ Bridge Rehab | $40,000,000 | $10,000,000 | $50,000,000 |
| **Total** | | | | **$186,100,000** | **$45,900,000** | **$232,000,000** |

**Long Term (11-25 Year) Projects**

The amount of federal funding available to IDOT in Years 11-25 has been estimated to be $684,000,000. This figure was arrived at by consulting historical funding amounts. It is anticipated that the future amount of funds for Major Bridge and Interstate programs will be reduced as the backlog for these types of projects is reduced; therefore, the conservative figure of $684,000,000 has been used.

The projects in IDOT's 11-25 Year plan can be found in **Table FA-3**. The amount of federal funds expected to be available in Years 11 to 25 is $684,000,000. Projects totaling $684,000,000 of federal funds are anticipated; therefore, the plan is fiscally constrained.

**Table FA-3** Long Term (11-25 Year) IDOT Projects

| Project | County | Location | Description | Federal | State | Total |
|---|---|---|---|---|---|---|
| I 74 | Peoria | UP RR to W of Sterling | Reconstruction | $18,000,000 | $2,000,000 | $20,000,000 |
| I 74 | Peoria | Il 78 to Kickapoo/ Edwards Rd | Reconstruction | $72,000,000 | $8,000,000 | $80,000,000 |
| I 74 | Peoria | Kickapoo/Edwards Rd to I474 | Reconstruction | $36,000,000 | $4,000,000 | $40,000,000 |
| IL 40 (Knoxville Ave) | Peoria | US 150 to IL 6 | Resurfacing (3R) | $28,000,000 | $7,000,000 | $35,000,000 |
| US 150/IL 40 | Peoria | Intersection of War Memorial Dr & Knoxville Ave | Intersection Reconstruction | $20,000,000 | $5,000,000 | $25,000,000 |
| I 74 | Tazewell | Washington St to Mueller Rd | Reconstruction | $76,500,000 | $8,500,000 | $85,000,000 |
| IL 29 | Peoria | IL 6 to Chillicothe | Reconstruction | $80,000,000 | $20,000,000 | $100,000,000 |
| IL 8/IL 116 | Peoria | Cedar St over Illinois River | Bridge replacement | $240,000,000 | $60,000,000 | $300,000,000 |
| IL River Bridges | All | Over Illinois River | Bridge preservation/ rehabilitations | $32,000,000 | $8,000,000 | $40,000,000 |
| Safety Improvements | All | Various | Safety Improvements | $13,500,000 | $6,500,000 | $20,000,000 |
| Resurfacing/ Bridge Rehab | All | Various | Resurfacing/ Bridge Rehab | $68,000,000 | $17,000,000 | $85,000,000 |
| **Total** | | | | **$684,000,000** | **$146,000,000** | **$830,000,000** |

### Illustrative Projects

The Illinois Department of Transportation, in its role of constructing and maintaining state and federal highways, often looks out past the 25-year planning horizon. Projects which IDOT has identified as likely to be necessary in the future, but for which no source of funding has been identified, are called Illustrative. See **Table FA-4** for the list of IDOT's Illustrative projects.

**Table FA-4** Illustrative IDOT Projects

| Project | County | Location | Description | Federal | State | Total |
|---|---|---|---|---|---|---|
| I-74 (Murray Baker Bridge) | Peo/Taz | Over Illinois River | Bridge Replacement | $315,000,000 | $35,000,000 | $350,000,000 |
| IL 336 | Peoria | I-474 to Taylor Rd | New Construction | $72,000,000 | $18,000,000 | $90,000,000 |
| IL 336 | Peoria | Taylor Rd to Hanna City | New Construction | $82,400,000 | $20,600,000 | $103,000,000 |
| IL 29/IL-6 extension | Peoria | IL 6 to Cedar Hills | New Construction | $56,000,000 | $14,000,000 | $70,000,000 |
| **Total** | | | | **$525,400,000** | **$87,600,000** | **$613,000,000** |

## Local Projects

Each county, municipality, and road district within the 20-Year Planning Boundary has transportation infrastructure needs. IDOT maintains only state and federal routes; it is up to each local jurisdiction to maintain their current systems and provide needed improvements when possible. Local jurisdictions rely on a combination of federal, state, and local funds for this purpose.

Transportation infrastructure for local jurisdictions generally falls into three categories: roadways, bridges, and enhancements such as sidewalks and trails. This document estimates the amount of federal funds expected to be made available over the life of the LRTP for the three types of transportation projects (within the 20-Year Planning Boundary), and compares it to the need for federal funds identified by local jurisdictions.

Each type of funding is further divided into Short-Term Projects (0 – 5 Years), Intermediate-Term Projects (6 – 10 Years), and Long-Term Projects (11 – 25 Years). In addition, projects for which funding is not currently expected to be available are listed as Illustrative Projects (**Tables FA-8** and **FA-9**).

Counties receive a direct allocation of federal funds for maintenance and improvement of county highways and other rural federal-aid eligible roads throughout the county as authorized by the counties in coordination with IDOT. These funds, called STBG-Rural and previously STR, are primarily to be used outside the urbanized area but can be used within the 20-Year Planning Boundary. This document is concerned only with STBG-Rural funds that are used within the 20-Year Planning Boundary.

Municipalities do not receive direct federal funding for transportation infrastructure. Any federal funding received by a municipality is obtained through a competitive grant process. Federal funds require a match, which typically ranges from 10% to 30%. Both counties and municipalities rely on Motor Fuel Tax funds to provide the required match.

An estimate has been made of the amount of federal funds that will be available in the following time periods for counties and municipalities. The estimates are calculated based on historical figures with a 2% inflation factor added in later years.

**Short Term (0-5 Year) Roadway Projects**

An estimate has been made of the total amount of funds that local agencies will receive in the next five years, largely based on the FYs 2020-2023 Transportation Improvement Program (TIP). Federal funding to the region fluctuates yearly, often differing by millions of dollars. In addition, the expiration of the FAST Act in September 2020 makes estimating future funding levels very difficult.

The amount of federal funds expected to be available in Years 0 – 5 is $43,121,993. Projects totaling $26,415,557 are anticipated; therefore, the plan is fiscally constrained.

**Table FA-5** Short-Term (0-5 Year) Local Roadway Projects

| Project | Jurisdiction | Description | Location | Source of Funds | Proposed Alloc. |
|---|---|---|---|---|---|
| Camp St and River Rd Roundabout | East Peoria | Reconstruction | Intersection | STP-U, Local | $800,000 |
| Camp St and Riverside Dr | East Peoria | Reconstruction | Intersection | STP-U, Local | $1,470,000 |
| Courtland St | Morton | Improvement | Morton Ave to Main St | STP-U, Local | $1,855,000 |
| Glen Ave | Peoria | Reconstruction | Knoxville Ave to Sheridan Ave in Peoria | STP-U, Local | $1,400,000 |
| Pekin Front St | Pekin | Reconstruction | Fayette St to Distillery Rd in Pekin | NHFP, Local | $4,664,000 |
| Parkway Dr | Peoria | Maintenance | Sheridan Rd to N City Limit | STP-U, Local | $268,000 |
| Adams St and Jefferson St Signal Upgrades | Peoria | Maintenance | SW Adams St at Harrison, Liberty, Fulton, & Main; SW Jefferson St at Liberty, Fulton, Main, & Hamilton | HSIP, Local | $67,500 |
| Western Ave | Peoria | Reconstruction | N of Howett St to Adams St | HSIP, Local | $2,353,423 |
| Section 130 Rail Upgrade Alta Rd | Peoria County | Maintenance | AAR DOT Crossing #175630D, on Alta Ln between Rte 91 and Radnor Rd | Section 130, Railroad | $205,200 |
| Allen Rd | Peoria | Maintenance | 1,200 ft N of Pioneer Pkwy to Walton St | STP-U, Local | $550,000 |
| Adams St and Jefferson St Signal Upgrades | Peoria | Maintenance | SW Adams St at Harrison, Liberty, Fulton, & Main; SW Jefferson St at Liberty, Fulton, Main, & Hamilton | HSIP, Local | $1,737,051 |
| Broadway Rd | Pekin | Maintenance | Veterans Dr to Springfield Rd | STP-U, STP-R, Local | $4,112,000 |

**Intermediate Term (6-10 Year) Roadway Projects**

The estimate for federal funds anticipated to be available for Intermediate Term Projects (Years 6-10) was determined using historical data. A 2% inflation factor was added to the average annual amount available in Years 0-5. The federal amount expected to be available for roadway projects is $43,121,993.

As part of the LRTP process, counties and municipalities were asked to identify local projects to be funded with federal funds. Projects submitted would require a total of $212,373,000 in federal funds. In order to make the project list fiscally constrained, the list was reduced to correspond to the amount of federal funds expected to be available. Several factors were used to reduce the number of projects in order to make the plan fiscally constrained, including regional significance, local priority, and public input.

Larger projects were divided into phases. It is important to note that the dollar amounts associated with these phases are only estimates; jurisdictions can still apply for other grants in order to fund the project in its entirety. Projects totaling $38,067,000 are anticipated; therefore, the plan is fiscally constrained.

**Table FA-6** Intermediate Term (6-10 Year) Local Roadway Projects

| Project | Jurisdiction | Description | Location | Proposed Alloc. |
|---|---|---|---|---|
| Cloverdale Road | Chillicothe | Reconstruction | IL 29 to White Clover Dr | $2,170,000 |
| Pinecrest Drive Ext | East Peoria | New Roadway | Muller to Springfield Rd | $1,750,000 |
| Detroit Ave | Morton | Improvement | 2,000 ft south of US-150 to IL-98 | $1,925,000 |
| Court Street Revitalization | Pekin | Reconstruction | Valle Vista to 8th Street | $3,500,000 |
| Derby Street Revitalization | Pekin | Reconstruction | 14th St to IL-29 | $3,500,000 |
| Adams St & Jefferson Street | Peoria | Improvement | SW Camblin Ave to Western Ave | $3,500,000 |
| Allen Road | Peoria | Improvement | War Memorial Dr to Willow Knolls Road | $3,500,000 |
| Main Street | Peoria | Improvement | North St to Water St | $3,500,000 |
| Nebraska Avenue | Peoria | Improvement | Sterling Rd to University St | $3,000,000 |
| Wisconsin Avenue | Peoria | Improvement | Nebraska Avenue to Forrest Hill Ave | $3,000,000 |
| University Street | Peoria | Maintenance | Glen Ave to Pioneer Parkway | $2,772,000 |
| Gale Ave | Peoria Co & Peoria | Improvement | Sterling Ave to Forrest Hill | $3,150,000 |
| Sheridan Rd | Peoria Co & Peoria | Improvement | Glen to Knoxville | $2,800,000 |
| Cty Hwy 23 (Douglas Rd) | Woodford County | Improvement | Box culvert replacement | $350,000 |

**Long Term (11-25 Year) Roadway Projects**

The estimate for federal funds anticipated to be available for Long-Term Roadway Projects (Years 11-25) was determined using historical data. A 2% inflation factor was added to the average annual amount available in Years 6-10. The federal amount expected to be available for roadway projects is $156,061,075.

All projects submitted for years 11 – 25 would require $467,356,500 in federal funds to complete. In order to make the list of projects fiscally constrained, the list of projects was reduced to correspond to the amount of federal funds expected to be available. As with the Intermediate Term projects, a number of factors were used to reduce the number of projects in order to make the plan fiscally constrained. Again, larger projects were divided into phases so that no one project was allocated a disproportionate amount of funding.

**Table FA-7** on the following page shows the Long-Term local roadway projects. $153,000,000 in projects are anticipated in this time frame. Therefore, the plan is fiscally constrained.

**Table FA-7** Long Term (11-25 Year) Local Roadway Projects

| Project | Jurisdiction | Description | Location | Proposed Alloc. |
|---|---|---|---|---|
| Garfield Extension | Bartonville | New Roadway | Airport Road to Smithville Road | $5,250,000 |
| Fischer Av. | Creve Coeur | Improvement | IL 29 to New Veterans Drive | $4,200,000 |
| Highview Road | East Peoria | Improvement | City of East Peoria near ICC | $1,750,000 |
| Spring Creek Rd | Fondulac Road Dist. | Improvement | Spring Crk Rd from IL116 to Washington Rd Dist | $5,670,000 |
| Fourth St. | Morton | Improvement | E. Queenswood Rd to Broadway Rd | $5,600,000 |
| Main Street | Morton | Improvement | Jackson (US150) to Highland | $3,500,000 |
| Tennessee Ave | Morton | Improvement | Jackson (US150) to Broadway | $7,840,000 |
| Veterans Rd | Morton | Improvement | W. Courtland St to Wildlife Dr | $350,000 |
| 5th Street Widening | Pekin | Improvement | Koch St to VFW Road | $2,800,000 |
| Hamilton Blvd | Peoria | Improvement | North St. to Crescent Ave | $2,940,000 |
| Martin Luther King Dr. | Peoria | Improvement | Western to RB Garrett | $6,000,000 |
| Nebraska Avenue | Peoria | Improvement | University St to Prospect Ave | $8,000,000 |
| Prospect Road | Peoria | Improvement | Glen Oak to War Memorial | $21,350,000 |
| SW Adams St | Peoria | Improvement | Edmund St to I-474 | $7,000,000 |
| Big Hollow Rd | Peoria Co & Peoria | Improvement | US 150 (War Mem Dr) to Charter Oak Rd | $8,000,000 |
| Cedar Hills Drive | Peoria County | Improvement | IL Route 29 to Dunlap Village Limits | $5,000,000 |
| Charter Oak Road | Peoria Co & Peoria | Improvement | Koerner Road to Big Hollow Road | $7,700,000 |
| Old Galena Road | Peoria County | Improvement | Cedar Hills Drive to Truitt Ave. | $6,000,000 |
| Radnor Road | Peoria Co & Peoria | Improvement | Willow Knolls to Fox Rd | $8,000,000 |
| Reservoir Boulevard | Peoria Co & Peoria | Improvement | Richwoods Blvd. to IL Route 8 | $4,000,000 |
| Richwoods Boulevard | Peoria Co & Peoria | Improvement | Sterling Ave, to Reservoir Blvd. | $8,000,000 |
| Sterling Ave (CHR55) | Peoria County | Improvement | Frm MLK Dr to Manor Pkway | $800,000 |
| Willow Knolls Rd | Peoria Co & Peoria | Improvement | War Memorial to University | $8,000,000 |
| Manito Rd | Tazewell County | Improvement | Wagonseller to IL29 | $7,000,000 |
| Cruger Road Phase IV | Washington | Improvement | N. Main to Diebel | $1,750,000 |
| Guth Road Phase II | Washington | Improvement | Hunzicker Rd. to S. Main St. | $700,000 |
| Sterling Avenue | West Peoria | Improvement | Sterling to Manor Parkway | $2,800,000 |
| Douglas Road | Woodford County | Improvement | IL 116 to Tazewell County Line | $1,000,000 |
| IL Rte 116, CH23 & CH25 | Woodford Co & IDOT | Traffic Signals | At CH23 and CH25 | $2,000,000 |

**Table FA-8** Illustrative Local Roadway Projects (0-10 Years)

| Project | Jurisdiction | Description | Location | Time Frame | Est. Federal Cost |
|---|---|---|---|---|---|
| Sycamore St | Chillicothe | Reconstruction | Prairie Springs Dr to western city limits | 0-5 Years | $250,000 |
| Allentown Road | Pekin | Maintenance | Allentown Road | 0-5 Years | $486,000 |
| Glen Avenue | Peoria | Improvement | War Memorial Drive to University St | 0-5 Years | 8,400,000 |
| Main Street | Peoria | Improvement | University to North | 0-5 Years | 5,600,000 |
| Main Street | Peoria | Improvement | Farmington Rd to University St | 0-5 Years | 2,800,000 |
| Sheridan Rd | Peoria | Improvement | War Memorial Dr to I-74 | 0-5 Years | 10,850,000 |
| Western Avenue | Peoria | Improvement | Howett St to Adams St | 0-5 Years | 10,500,000 |
| Charter Oak Road | Peoria County | Improvement | S.N. 072-3077 | 0-5 Years | 630,000 |
| Lake St | Peoria Co & Peoria | Improvement | Sheridan Rd to Knoxville | 0-5 Years | 3,010,000 |
| Middle Road | Peoria County | Improvement | Dirksen Pkway to Maxwell Rd | 0-5 Years | 1,400,000 |
| Kickapoo Creek Rd Culvert | Peoria County | Maintenance | Along Kickapoo Cr Road | 0-5 Years | $2,400,000 |
| Maxwell Road | Peoria County | Reconstruction | Il 116 to Middle Road | 0-5 Years | $5,600,000 |
| Old Galena Road | Peoria County | Reconstruction | State Street to Boy Scout Road | 0-5 Years | $3,500,000 |
| Old Galena Road | Peoria County | Reconstruction | Il 29 to State Street | 0-5 Years | $700,000 |
| Nofsinger/US 24 | Washington | Intersection | Intersection | 0-5 Years | 4,550,000 |
| Eagle Avenue Extension | Washington | New Roadway | New Roadway | 0-5 Years | $1,400,000 |
| Freedom Parkway | Washington | New Roadway | New Roadway | 0-5 Years | $3,150,000 |
| Lakeshore Drive | Washington | New Roadway | New Roadway | 0-5 Years | $2,100,000 |
| Bass Pro Drive Ext | East Peoria | New Roadway | Bass Pro Drive to Il 116 | 6-10 Years | $14,000,000 |
| Veterans Dr Ext North | Pekin | New Roadway | Verteran's Drive North to I-474 | 6-10 Years | $24,500,000 |
| Allen Road | Peoria, Medina Twp | Improvement | Hickory Grove Road to Cedar Hills Drive | 6-10 Years | $5,796,000 |
| Alta Road | Peoria | Improvement | Allen Road to Knoxville Avenue | 6-10 Years | $4,410,000 |
| Orange Prairie Road | Peoria | Improvement | Charter Oak Rd to War Memorial Dr | 6-10 Years | $11,340,000 |
| Pioneer Parkway | Peoria | Improvement | Knoxville Ave to Allen Rd | 6-10 Years | $13,475,000 |
| Washington Street | Peoria | Improvement | Maple Street to Edmond Street | 6-10 Years | $4,900,000 |
| Mapleton Road | Peoria County | Improvement | Mapleton Road | 6-10 Years | $3,500,000 |
| Dallas Rd | Washington | Improvement | Westminster Rd to Cruger Rd | 6-10 Years | $1,225,000 |
| Intersection & Signal Upgrades | Washington | Intersection | Various Locations | 6-10 Years | $1,015,000 |
| W Jefferson St | Washington | New Roadway | Wilmor Rd to Eagle Ave | 6-10 Years | $91,000 |

**Table FA-9** Illustrative Local Roadway Projects (11-25 Years)

| Project | Jurisdiction | Description | Location | Time Frame | Est. Federal Cost |
|---|---|---|---|---|---|
| Airport Road | Peoria County | Improvement | Pfeiffer Road to Tuscarora Road | 11-25 Years | $10,500,000 |
| Cameron Lane | Peoria County | Improvement | IL Route 116 to US 24 | 11-25 Years | $20,300,000 |
| Grange Hall Road | Peoria County | Improvement | Orange Prairie Road to Princeville Jubilee Road | 11-25 Years | $12,600,000 |
| Hanna City - Glasford Road | Peoria County | Improvement | IL Route 116 to Glasford Village Limits | 11-25 Years | $21,700,000 |
| Kickapoo Edwards Road | Peoria County | Improvement | US 150 to IL Route 8 | 11-25 Years | $7,700,000 |
| Koerner Rd | Peoria County | Improvement | US 150 to Il 8 | 11-25 Years | $9,800,000 |
| Lancaster Road | Peoria County | Improvement | Pfeiffer Road to Hanna City - Glasford Road | 11-25 Years | $12,600,000 |
| Mossville Road | Peoria Co & Peoria | Improvement | IL Route 29 to IL Route 40 | 11-25 Years | $8,400,000 |
| Park Road | Peoria County | Improvement | Farmington Road to Nebraska Ave. | 11-25 Years | $2,800,000 |
| Parks School Road | Peoria County | Improvement | IL Route 40 to Princeville Jubilee Road | 11-25 Years | $20,300,000 |
| Rome West Road | Peoria County | Improvement | IL Route 29 to Old Galena Road | 11-25 Years | $7,700,000 |
| Smithville Road | Peoria County | Improvement | Bartonville Village Limits to Hanna City - Glasford Road | 11-25 Years | $20,300,000 |
| Staab Road | Peoria County | Improvement | S.N. 072-4801 Medina Twp. | 11-25 Years | $560,000 |
| State Street | Peoria County | Improvement | Old Galena Road to IL Route 6 | 11-25 Years | $3,500,000 |
| Swords Ave | Peoria County | Improvement | Farmington Rd. to Alice | 11-25 Years | $2,100,000 |
| Taylor Road | Peoria County | Improvement | IL Route 8 to IL Route 116 | 11-25 Years | $9,100,000 |
| Trigger Road | Peoria County | Improvement | US 150 to Grange Hall Road | 11-25 Years | $9,800,000 |
| Truitt Road | Peoria County | Improvement | Chillicothe City Limits to IL Route 40 | 11-25 Years | $16,800,000 |
| Tuscarora Road | Peoria County | Improvement | Airport Road to US 24 | 11-25 Years | $2,800,000 |
| East Glen Avenue | Peoria Heights | Improvement | N. Prospect to N. Knoxville | 11-25 Years | $1,400,000 |
| N. Boulevard Ave. | Peoria Heights | Improvement | East War Memorial Dr. to East Lake Ave | 11-25 Years | $1,750,000 |
| N. Prospect Rd | Peoria Heights | Improvement | N Village boundary to East War Memorial Dr. | 11-25 Years | $3,150,000 |
| Diebel Road Phase I | Washington | Improvement | US-24 to US-24 Business | 11-25 Years | $2,450,000 |
| Diebel Road Phase II | Washington | New Roadway | US-24 Business to Guth | 11-25 Years | $1,050,000 |
| Guth Road Phase I | Washington | New Roadway | S. Main to S. Cummings | 11-25 Years | $2,800,000 |
| S. Cummings Lane Extension | Washington | New Roadway | Guth to Schuck Rd. | 11-25 Years | $3,500,000 |
| Intersection & Signal Upgrades | Washington | Traffic Signals | Various Locations | 11-25 Years | $1,080,000 |
| Heading Avenue | West Peoria | Improvement | Western to Sterling | 11-25 Years | $1,750,000 |

**Bridges**

An important element of the roadway system is bridges. Federal funding for bridges comes from two primary sources. The first is the Highway Bridge Program (HBP) which was formerly known as the Bridge Replacement and Rehabilitation Program. Each county gets an annual allocation of HBP funds based on total need of deficient local bridges in the county as compared to that which exists statewide. These funds are limited to use on existing local structures within the county which meet eligibility criteria based solely on their deficient need and only when authorized by counties in coordination with IDOT, regardless of whether or not they are within the Urbanized Area or within the 20-Year Planning Boundary. (Only those HBP funds used in the 20-Year Planning Boundary are considered in this document). The second source of federal funding is the Major Bridge program. These funds must be applied for and are awarded on a statewide competitive basis.

Due to the limited number of bridges that were identified by counties and municipalities, they have been grouped into one category that covers years 0-10. No bridge projects were submitted for Years 11-25. An estimate has been made of the amount of federal bridge funds from both sources that will be available in the 20 Year Planning Area in years 0-10. The estimate is based on historical data. $7,646,497 of federal funding is estimated to be available for bridges in the 20-Year Planning Area for bridges during this period of time. An estimated $6,870,000 in projects are expected over that time. Therefore, the plan is fiscally constrained.

**Table FA-10** Local Bridge Projects (0-10 Years)

| Project | Jurisdiction | Description | Location | Time Frame | Proposed Alloc. |
|---|---|---|---|---|---|
| Kickapoo Creek Rd Structure Replacement | Peoria County | Bridge | I-474 to SW Adams St | 0-5 Years | $1,600,000 |
| Voorhees Road | Peoria County | Bridge | S.N. 072-4708 Radnor Twp. | 0-5 Years | $1,000,000 |
| Dickison Lane | Peoria County | Bridge | S.N. 072-4804 Medina Twp. | 0-5 Years | $800,000 |
| Johnson Farm Road | Peoria County | Bridge | S.N. 072-5508 Limestone Twp. | 6-10 Years | $640,000 |
| Old Charter Oak Road | Peoria County | Bridge | S.N. 072-5005 Kickapoo Twp. | 6-10 Years | $640,000 |
| Riekena Road Bridge | Peoria County | Bridge | S.N. 072-5404 Logan Twp. | 6-10 Years | $800,000 |
| State Street Bridge | Peoria County | Bridge | S.N. 072-0066 Medina Twp. | 6-10 Years | $480,000 |
| Hickory Point Rd | Woodford County | Bridge | CH-27 | 6-10 Years | $910,000 |

### Short Term (0-5 Year) Enhancements

Enhancements are projects that add value to the transportation system. They are not the same as roadway projects but may be constructed as part of a roadway project. Examples of enhancements include but are not limited to trails for non-motorized transportation, sidewalks, transit stops, landscaping, street furniture, street lighting, and public art.

While some of the federal programs described earlier can be used to fund enhancements (for example, STU funds), enhancements are primarily constructed with a separate federal funding source dedicated to enhancement projects. Under the FAST Act, this source is known as Transportation Alternatives (TA). In the recent past, enhancements have been funded through the Illinois Transportation Enhancement Program (ITEP), and Safe Routes to School (SRTS).

A number of short-term enhancement projects have confirmed sources of funding and have been programmed for FY20 – FY23. See **Table FA-11**.

**Table FA-11** Short Term Enhancement Projects (0-5 Years)

| Project | Jurisdiction | Location | Proposed Alloc. |
|---|---|---|---|
| Dunlap Valley Middle Safe Routes to School | Dunlap | Near Dunlap Valley Middle School in Dunlap | $200,000 |
| Jefferson Elementary & Washington Middle Safe Routes to School | Pekin | Near Jefferson Elementary and Washington Middle Schools in Pekin | $197,932 |
| Rock Island Greenway | Peoria | Harvard Ave to Park Ave | $427,000 |
| Pedestrian Infill | Peoria | N Allen Rd from Wilhelm to 325 ft N -and- N Orange Prairie Rd from Landens to War Memoria | $16,142 |
| Willow Knolls Pedestrian Improvements | Peoria | University St to 900 ft E of Allen Rd | $32,438 |
| US-150/War Memorial Dr Sidewalk | Peoria | Charter Oak Rd to Cannes Dr | $263,606 |
| Pedestrian Infill | Peoria | N Allen Rd from Wilhelm to 325 ft N -and- N Orange Prairie Rd from Landens to War Memorial | $95,244 |
| Willow Knolls Pedestrian Improvements | Peoria | University St to 900 ft E of Allen Rd | $191,382 |
| Rock Island Greenway | Peoria | Over US-150/War Memorial Dr | $283,000 |
| US-24 Business Multi-Use Path | Washington | Gillman Ave to Eagle Ave | $293,959 |
| Washington District 51 Safe Routes to School | Washington | Near Central Intermediate School in Washington | $200,000 |
| Washington District 52 Safe Routes to School | Washington | Near Washington Middle School in Washington | $200,000 |
| Washington Square | Washington | North leg: Walnut St to Peoria St South leg: Peoria St to Walnut St | $56,010 |

### Intermediate (6-10 Year) and Long Term (11-25 Year) Enhancements

For Years 6-25, $23,393,718 is expected to be available for enhancement projects. This figure was calculated using historical data and adding an inflation factor of 2%. Projects totaling $14,980,000 in federal funds have been identified. Therefore, the Enhancement plan is fiscally constrained. The projects may be found in **Table FA-12**.

**Table FA-12** Intermediate and Long Term Enhancement Projects (6-25 Years)

| Project | Jurisdiction | Location | Time Frame | Proposed Alloc. |
|---|---|---|---|---|
| Il Rt 29 | Creve Coeur | Through Creve Coeur | 6-10 Years | $1,500,000 |
| Germantown Hills/Metamora Trail | Germantown Hills | Germantown Hills to Metamora | 6-10 Years | $1,500,000 |
| IL-116 Pedestrian Overpass | Germantown Hills | Germantown Hills Grade School to MTCO Park | 6-10 Years | $800,000 |
| Radnor Rd Trail | Peoria Park District | North of Alta Rd | 6-10 Years | $200,000 |
| Legion Rd Trail Extension | Washington | IL-8 to Meadow Valley Park | 6-10 Years | $120,000 |
| US-24 Business Trail Extension | Washington | Wilmor Rd to Cummings Ln | 6-10 Years | $1,040,000 |
| Centennial/Summit Trail | East Peoria/Washington | Construction | 6-10 Years | $1,840,000 |
| Washington Trail Extension | Washington | N Main St to Glendale Cemetery | 6-10 Years | $1,000,000 |
| School St Trail Extension | Washington | Centennial Dr to IL-8 | 6-10 Years | $400,000 |
| Bicycle Facilities | Peoria | Various | 6-10 Years | $800,000 |
| Rock Island Trail | Peoria | Harvard Ave to Bond | 6-10 Years | $3,200,000 |
| Centennial Dr/Freedom Pkwy Rec Trail Extension | Washington | Centennial Rd and Freedom Pkwy | 6-10 Years | $240,000 |
| Griffin Trail Ext | Pekin | Allentown Rd to Veterans Dr | 11-25 Years | $360,000 |
| IL River Bluff Trail | Peoria Park District | Detweiler Park to Forest Park | 11-25 Years | $272,000 |
| IL River Bluff Trail | Peoria Park District | Camp Wokanda to Cedar Hills Drive | 11-25 Years | $108,000 |
| Rock Island Greenway Tunnel | Peoria Park District | Under Rt. 6 | 11-25 Years | $1,000,000 |
| School Street Rec. Trail Extension | Washington | Beverly Manor School to TP&W RR tracks | 11-25 Years | $600,000 |

## Mass Transit

A critical part of any transportation system is mass transit. Mass transit provides an alternative to the use of private vehicles. In the Peoria-Pekin Urbanized Area, the Greater Peoria Mass Transit District, also known as CityLink, provides this service.

CityLink receives federal funding from the FTA. The primary FTA programs used by CityLink are:

- 5307 - Urbanized Area Formula Program
- 5308 - Discretionary Grants
- 5309 - Bus and Bus Facilities
- 5310 - Transportation for Elderly Persons and Persons with Disabilities
- 5313 - Transit Cooperative Research Program

Federal transit funding has match requirements, typically 20% for capital programs and 50% for operating. These funds come from fare box revenue, property taxes, and programs through the State of Illinois.

**Short-Term Transit Projects**

An estimate of the amount of federal funds available for mass transit was determined by looking at the amounts budgeted by CityLink for the next five years, and then extrapolating the average annual amount over the next 25 years. **Table FA-13** on the following page shows the projects that CityLink has identified for the next four years.

It has been estimated that there will be $36,230,000 in federal funds available for short-term projects. CityLink has identified projects totaling $36,229,495 in federal funds. Therefore, the short-range transit plan is fiscally constrained.

**Table FA-13** Short-Term Transit Projects (0-4 Years)

| TIP No. | Fiscal Year | Project Title | Federal |
|---|---|---|---|
| CL-20-01 | 2020 | Capital Cost of Contracting | $533,600 |
| CL-20-02 | 2020 | Preventative Maintenance | $1,351,200 |
| CL-20-03 | 2020 | Collision Avoidance System | $500,000 |
| CL-20-04 | 2020 | Voice Paging Emergency System | $60,000 |
| CL-20-05 | 2020 | Paratransit Software | $150,000 |
| CL-20-06 | 2020 | Tire Lease | $36,400 |
| CL-20-07 | 2020 | 40' Low Transit Coaches (2) & Charging Station | $1,760,000 |
| CL-20-08 | 2020 | Maintenance Facility | $3,600,000 |
| CL-20-09 | 2020 | Maintenance Facility Prebuild | $600,000 |
| CL-21-01 | 2021 | Capital Cost of Contracting | $544,272 |
| CL-21-02 | 2021 | Preventative Maintenance | $1,405,248 |
| CL-21-03 | 2021 | Tire Lease | $37,856 |
| CL-21-04 | 2021 | Medium Duty Cutaways (7) | $510,000 |
| CL-21-05 | 2021 | Driving Simulator | $375,000 |
| CL-21-06 | 2021 | 35’ Low Floor Transit Coaches (2) | $400,000 |
| CL-21-07 | 2021 | Maintenance/ Operations | $1,200,000 |
| CL-21-08 | 2021 | Maintenance Facility | $5,200,000 |
| CL-21-09 | 2021 | Mobile Camera System | $68,000 |
| CL-22-01 | 2022 | Capital Cost of Contracting | $544,272 |
| CL-22-02 | 2022 | Preventative Maintenance | $1,405,248 |
| CL-22-03 | 2022 | Tire Lease | $37,856 |
| CL-22-04 | 2022 | 35’ Low Floor Transit Coaches (5) | $1,600,000 |
| CL-22-05 | 2022 | Maintenance Equipment | $500,000 |
| CL-22-06 | 2022 | Maintenance Facility | $8,000,000 |
| CL-23-01 | 2023 | Capital Cost of Contracting | $544,272 |
| CL-23-02 | 2023 | Preventative Maintenance | $1,405,248 |
| CL-23-03 | 2023 | Tire Lease | $37,856 |
| CL-23-04 | 2023 | Facility Cameras | $600,000 |
| CL-23-05 | 2023 | 35’ Low Floor Transit Coaches (5) | $1,600,000 |
| CL-23-06 | 2023 | Maintenance Facility | $7,200,000 |

**Intermediate- and Long-Term Transit Projects**

An estimate has been made of the amount of federal funds that will be available to CityLink for years five through 25 of the Long-Range Transportation Plan. Based on the amount available in Years FY2020 to FY2023, the estimated amount available will be $180,000,000. The projects submitted by CityLink for Years 5-25 can be found in **Table FA-14**. Projects and capital improvements totaling $130,500,000 have been identified for this time frame. Therefore, the intermediate and long-term transit plan is fiscally constrained.

**Table FA-14** Intermediate- and Long-Term Transit Projects (5-25 Years)

| Capital Item | Est. Cost |
|---|---|
| 35' & 40 foot Transit Coach Buses- Replacement (75 Buses) | $37,875,000 |
| 35' & 40 foot Transit Coach Buses- Expansion (25 Buses) | $12,625,000 |
| Paratransit Vehicles- Replacement (50 Buses) | $3,600,000 |
| Two-Way Communication System | $925,000 |
| New Maintenance Facility | $30,000,000 |
| Intelligent Transportation System | $2,550,000 |
| Support Equipment | $5,000,000 |
| Second Maintenance Facility | $22,025,000 |
| North Side Transfer Center | $6,500,000 |
| Security Cameras for Buses | $900,000 |
| Transit Center East Side of River | $5,000,000 |
| Park-N-Ride Facilities | $3,500,000 |

# Travel Demand Modeling

A Travel Demand Model (TDM) is a computerized simulation used to develop information that informs decisions on future development and management of transportation systems. TDM is part of an overall transportation planning process that involves a forecast of travel patterns 10 to 25 years into the future, in an attempt to develop a future transportation system that works effectively.

# TDM Documentation

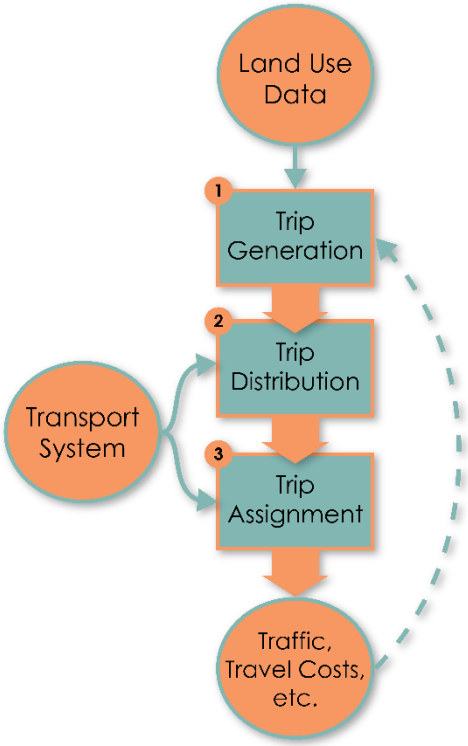
Transportation has significant effects on land use, mobility, economic development, environmental quality, government finance, and quality of life. Effective transportation planning is needed to help create high quality transportation services at a reasonable cost with minimal environmental impact. Failure to plan can lead to severe traffic congestion, dangerous travel patterns, undesirable land use patterns, adverse environmental impact, and wasteful use of money and resources. Models are important because they are the basis of transportation plans and investments. Models are used to estimate the number of trips that will be made on an alternative transportation system at some future date. These estimates are the foundation for transportation plans and are used in major investment analysis, environmental impact statements, and in setting priorities for investments (infrastructure and land use).

The Tri-County TDM follows three basic steps in the traditional travel demand forecasting process.

1. Trip generation: forecasts the number of trips that will be made.
2. Trip distribution: determines where the trips will go.
3. Trip assignment: predicts the routes that the trips will take, resulting in traffic forecasts for the highway system.

## The Three-Step Model

Trip generation is the first step of the travel demand modeling process. Within each Traffic Analysis Zone (TAZ), productions and attraction are generated for existing and future land use development. This future land use scenario was created by analyzing regional and national trends. Future population data was gathered from estimates by the Illinois Department of Commerce and Economic Opportunity. Population changes were allocated amongst TAZs proportionally according to regional trends and consulting future land use maps. Future employment data was obtained from the Land Use Evaluation and Assessment Model (LEAM) data developed by the University of Illinois. Each TAZ has a specific number of trip productions (trips generated by individuals and households) and trip attractions (work, retail) calculated for it in each scenario. All trips are expressed as a “person trip,” and trip productions and trip attractions are brought into balance.



Trip distribution is the second step of the modeling process. Once person trips have been generated, they are distributed on the transportation system by purpose (i.e. traveling from home to work) to approximate the trips between TAZs. How person trips are distributed is based largely on the land use and trip generation characteristics in each TAZ, along with the travel time between zones.

**Figure TM-1** Travel Demand Model Process

An intermediate step, mode choice, is not used for the purposes of the Tri-County model. Mode choice refers to determining the number of trips that use each particular mode of transportation (i.e. automobile, transit, bicycle, walking, etc.). Because automobile travel is the heavily dominant form of transport in the region, the added complexity and cost of incorporating mode choice into the model is not appropriate to consider. All trips between TAZs are treated as automobile trips for modeling purposes.

The final step in the process is trip assignment. After all person trips are distributed among TAZs, auto trips are then assigned to the transportation network. The existing transportation system is used for the initial trip assignments, which includes the current street and highway configurations. Iterative assignments are conducted to determine the shortest travel time path from one TAZ to another so that all routes reach an equilibrium state relative to the alternative travel routes. The assignment technique most widely used is called the equilibrium assignment.

## Planning Use

This TDM is being used as a tool to forecast existing and future travel demands given the land use and proposed roadway improvement scenarios in the Tri-County region. This model is focused on forecasting the effects of these scenarios on average daily automobile trips over the study area network. This travel demand model is intended to be a tool to help develop policies that promote strategic investments throughout the Tri-County area. Cube Voyager is a well-known and respected transportation modeling system, and is the software used for the Tri-County model.

## Methodology

A total of 10 projects listed in the LRTP were identified for long-range modeling. These projects were selected for their regional significance and the ability of the Cube software to properly model them. After being run individually in their own scenarios, the projects were divided into two "bins." Bin 1 contained projects to be completed within 10 years, and Bin 2 contained projects to be completed within 11-25 years. Once run separately, all the projects in a bin were placed together in one scenario to determine their collective impact. All Bin 1 (0-10 year) projects were assumed completed for the Bin 2 (11-25 year) analysis.

Future land use and socioeconomic data was projected for the year 2045 for the purposes of the model. Using existing data and the 2045 projections, growth rates were calculated for each TAZ. These growth rates were used to calculate 2025 data, which was used for the baseline "business as usual" scenario (comprising only existing and committed roadways) and the Bin 1 project scenarios. The Bin 2 scenarios were run using the 2045 data, with the Bin 1 aggregate scenario serving as the baseline.

| Bin | Project | Jurisdiction | Description | Location |
|---|---|---|---|---|
| 1 | Adams and Jefferson | Peoria | Improvement | SW Camblin Ave to Western Ave |
| 1 | IL-29 Chillicothe Viaduct | IDOT | Improvement | N of Truitt to Senachwine Cr |
| 1 | Detroit Ave | Morton | Improvement | 2,000 ft south of US-150 to IL-98 |
| 1 | Freedom Parkway | Washington | New Roadway | New Roadway |
| 1 | Main Street | Peoria | Improvement | Farmington Rd to North St |
| 2 | 5th Street Widening | Pekin | Improvement | Koch St to VFW Road |
| 2 | IL-29/IL-6 Extension | IDOT | New Roadway | |
| 2 | Garfield Extension | Bartonville | New Roadway | Airport Road to Smithville Road |
| 2 | Fourth St. | Morton | Improvement | E. Queenswood Rd to Broadway Rd |
| 2 | Willow Knolls Rd | Peoria Co & Peoria | Improvement | War Memorial to University |

**Table TM-1** Travel Demand Model Projects

## Travel Costs and Benefits

The regional travel demand model was used to determine changes in vehicle miles and vehicle hours traveled were each project completed. The costs associated with adverse travel include:

- $15/hour for passenger vehicle time,
- $50/hour for truck time,
- $0.565/mile,
- 0.000025 tons of Volatile Organic Compound (VOC) pollutants per hour at $1,813 per ton, and
- 0.000005 tons of Nitrogen Oxide (NOx) pollutants per hour at $7,147 per ton.

Values for passenger vehicle time, truck time, VOC pollutants, and NOx pollutants are the values recommended for use by the US Department of Transportation. The mileage value is the current AAA reimbursement rate. It was assumed that 5% of the system was trucks, as the costs associated with the vehicle types are different.

## Volume to Capacity Ratio

A common method of measuring a road's utilization is examining its volume to capacity ratio (V/C). V/C is calculated by dividing the volume of traffic a road receives by the total capacity it is designed for. A V/C of 1 means that a road is receiving its maximum desired load, while a V/C of 0.5 means that daily traffic on a road could double before reaching maximum capacity. A road with a V/C less than 0.25 is generally considered to be underutilized.

Most of the transportation system in the MPA currently operates far below its capacity, and is expected to do so in the future. However, problem areas do exist. The stated purpose of the travel demand model is to inform transportation decisions based on existing conditions and proposed changes. The introduction of these projects addresses several the transportation system's problems and does not exacerbate others. While the model results show some potential issues with projects as proposed, these issues are minor and can be managed with proper planning. These projects serve to maintain the integrity and efficiency of the transportation network into the future.

# Appendix A: Transportation Performance Management

## Federal Legislation

Incorporating Performance Measures in the federally mandated transportation planning process is a recent, still-developing, but overall beneficial activity. MAP-21 legislation first introduced these performance measures and performance-based planning and programming in 2012. The FAST Act continues to emphasize this approach. FHWA's website cites the following national policy in support of performance management:

> **Performance management will transform the Federal-aid highway program and provide a means to the most efficient investment of Federal transportation funds by refocusing on national transportation goals, increasing the accountability and transparency of the Federal-aid highway program, and improving project decision-making through [§1203; 23 USC 150(a)]. (FHWA, 2013)**

Shown in **Table PM-1**, The national Federal-aid Highway Program performance goals as established by Congress are, according to the FHWA (2013):

| Goal Area | National Goal |
|---|---|
| Safety | To achieve a significant reduction in traffic fatalities and serious injuries on all public roads |
| Infrastructure Condition | To maintain the highway infrastructure asset system in a state of good repair |
| Congestion Reduction | To achieve a significant reduction in congestion on the National Highway System |
| System Reliability | To improve the efficiency of the surface transportation system |
| Freight Movement and Economic Vitality | To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development |
| Environmental Sustainability | To enhance the performance of the transportation system while protecting and enhancing the natural environment |
| Reduced Project Delivery Delays | To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices |

**Table PM-1:** National Goals, from the FHWA (2013). [23USC §150(b)]

# Performance Measures

As of May 27, 2018, performance areas and their targets must be addressed in this document and the Transportation Improvement Program. The following describes how IDOT and PPUATS have approached the implementation of performance measures. The US Department of Transportation (US DOT) has established performance measures for four categories:

- Safety
- Pavement and Bridge Condition
- System Performance
- Transit Asset Management

## Target Setting and Coordination

Every MPO is responsible for coordinating with their state Department of transportation and local transit district or authority to set targets for applicable FHWA and FTA performance measures on their regular basis. In Illinois, this has led to statewide data and purchases of data and tools that inform all MPOs equally. IDOT also started hosting several National Highway Institute workshops with staff from MPOs, transit systems, and IDOT to learn more about target setting and implementation in the planning process. These efforts continue to develop as implementation proceeds and feedback on these early efforts becomes available.

An MPO also decides whether to support the state target for each measure, or if they want to set their own. MPOs have 180 days to make this decision. This option can be helpful especially if planning areas are spread across multiple states or if the transportation system in that area is notably different than much of the state's transportation system. However, there is a bit more scrutiny on the target setting process if MPOs choose to set them differently than the state. In either case, they must report progress toward achieving the chosen targets based on local projects in the TIP and LRTP.

The US DOT assesses whether "significant progress" to achieving the targets has been made at the end of a performance period. This period varies depending on the measure. States that fail to make significant progress must submit documentation to FHWA addressing the gap and how the targets can still be achieved. Other "penalties" may include reduced flexibility in relevant federal program funding. MPOs and transit systems do not face such repercussion, but their targets will be monitored by State DOTs.

## Safety (PM1)

State DOTs and MPOs must establish safety targets as five-year rolling averages on all public roads for the following:

1. Number of fatalities
2. Number of serious injuries
3. Rate of fatalities
4. Rate of serious injuries
5. Number of non-motorized fatalities and serious injuries

**Approach**

At each opportunity so far, the MPO has chosen to support the state's target for Safety. Their approach has consisted of analyzing the five-year rolling averages of safety data, then choosing the more aggressive of the two methods: a 2% annual reduction as compared to the five-year rolling average baseline data, or ordinary least square projection. **Table PM-2** shows IDOT's safety targets.

| Performance Measure | Approach to target setting | 2018 Target | Approach to target setting | 2019 Target | Approach to target setting | 2020 Target |
|---|---|---|---|---|---|---|
| Number of Fatalities | 2% annual reduction | 951 | 2% annual reduction | 977.5 | 2% annual reduction | 985 |
| Rate of Fatalities per 100 million Vehicle Miles Traveled (VMT) | 2% annual reduction | 0.9 | 2% annual reduction | 0.92 | 2% annual reduction | 0.91 |
| Number of Serious Injuries | Ordinary least square projection | 11231.1 | 2% annual reduction | 11727.4 | 2% annual reduction | 11668.7 |
| Rate of Serious Injuries per 100 million Vehicle Miles Traveled (VMT) | Ordinary least square projection | 10.83 | 2% annual reduction | 11.04 | 2% annual reduction | 10.8 |
| Number of Non-Motorized Fatalities and Serious Injuries | 2% annual reduction | 1508.6 | 2% annual reduction | 1431.7 | 2% annual reduction | 1456.2 |

**Table PM-2** IDOT Safety Targets

**Progress**
Activities undertaken by the MPO to improve safety since the last LRTP was adopted include:

- Participation in the 2018 Illinois Safety Summit
- Guardrail inventories for nine local partners
- HSIP grant applications for Limestone Township, Hallock Township (Peoria), Bartonville, City of Peoria, Greene Township (Woodford), Pekin, Morton, and Tazewell County in 2020

**Timeline**
Safety performance measure targets are established, monitored, and updated according to the following schedule:

- IDOT first established targets in the August 2017 and August 2018 HSIP Reports.
- Annually, IDOT must adopt targets for each safety measure by August 31.
- State Metropolitan Planning Organizations establish targets within 180 days after IDOT.

## Infrastructure Condition (PM2)

State DOTs and MPOs must establish infrastructure condition targets for the following:

1. Percentage of pavements of the Interstate System in Good condition
2. Percentage of pavements of the Interstate System in Poor condition
3. Percentage of pavements of the non-Interstate National Highway System (NHS) in Good condition
4. Percentage of pavements of the non-Interstate NHS in Poor condition
5. Percentage of NHS bridges classified as in Good condition
6. Percentage of NHS bridges classified as in Poor condition

**Approach**

The MPO has chosen to support the state's targets. Pavement assessments are based on distress data such as Internal Roughness Index (IRI), cracking, rutting or faulting, and Present Serviceability Ratings (PSRs) where speed limits are below 40 miles per hour. Bridge assessments use National Bridge Inspection Standards to examine the condition of decks, superstructures, substructures, and culverts. Transportation Asset Management Plan requirements include baseline standards for both interstate pavements and bridge deck area:

- No more than 5% of the Interstate system lane miles may be in poor condition, using performance measures established by FHWA, without penalty (23 CFR 490.315).
- No more than 10% of the bridge deck area on the NHS may be considered Structurally Deficient, using performance measures established by the FHWA, without penalty (23 CFR 490.411).

As shown in **Table PM-3**, IDOT has set targets that aim to maintain current conditions as much as possible, given practical estimates of available resources at the time (May 2018).

**Table PM-3** IDOT Infrastructure Condition

| Metric | Baseline | 2020 | 2022 |
|---|---|---|---|
| % of Interstate Pavement in Good condition | 65.96% | 65% | 65% |
| % of Interstate Pavements in Poor condition | 0.27% | <5% | <5% |
| % of non-Interstate NHS pavements in Good condition | 27.71% | 27% | 27% |
| % of non-interstate NHS pavements in Poor condition | 4.94% | 6% | 6% |
| % of NHS bridges classified as in Good condition | 29.40% | 28% | 27% |
| % of NHS bridges classified as in Poor condition | 11.60% | 13% | 14% |

**Progress**
MPO activities to improve infrastructure conditions since the last LRTP was adopted include:

- Development of a Regional Asset Management Program:
  - **Phase 1** – All roadways under local jurisdiction eligible for federal funding were assessed to provide a uniform baseline pavement condition (2018)
  - **Phase 2** – Over 1,100 miles of roadways not previously assessed in Phase 1 to give local partners the comprehensive data they need to better plan road maintenance (2020)
- Application to SPR program for asset management software to benefit local partners and MPO
- Focus on system maintenance in programming of MPO STBG funds
- Two rounds of programming have set aside 20% of funds strictly for pavement preservation activities. In FY23/24 funding round, three such projects were awarded.
- No STBG funds in FY23/FY24 were awarded to expansion projects.
- Staff presentations about regional asset management efforts to MPO, RPC, and conference audiences

**Timeline**
Infrastructure condition performance measure targets are established, monitored, and updated according to the following schedule:

- **January 1, 2018** – Initial four-year performance period begins.
- **May 20, 2018** – Initial two- and four-year targets established.
- **October 1, 2018** – Baseline Performance Period Report for the first performance period due. IDOT reports baseline, two-year, and four-year targets. Within 180 days of established IDOT targets, MPOs must commit to support IDOT targets or establish separate quantifiable targets.
- **October 1, 2020** – Mid-Performance Period Progress Report for the first performance period due. IDOT report two-year condition/performance; progress toward achieving two-year targets.
- **December 31, 2021** – Initial four-year performance period ends.
- **October 1, 2022** - Full Performance Period Progress Report for first performance period due. IDOT report four-year condition/performance; progress toward achieving four-year targets.
- **October 1, 2022** – Baseline report due for second performance period due. IDOT report two- and four- year targets; baseline condition.

## System Performance (PM3)

State DOTs and MPOs must establish system performance targets for the following:

1. Percent of reliable person-miles traveled on the Interstate
2. Percent of reliable person-miles traveled on the non-Interstate NHS
3. Percentage of Interstate system mileage providing for reliable truck travel time: Truck Travel Time Reliability Index

Please note that the state also monitors three other system performance measures for congestion (2) emissions reduction (1) currently only for urbanized areas in the state in areas designated as nonattainment or maintenance for ozone, carbon monoxide, or particulate matter (PM10 and PM2.5). Currently, these do not apply to the PPUATS planning area.

**Approach**

Percent of person-miles traveled on the Interstate that are reliable (#1), percent of person-miles traveled on the non-Interstate NHS that are reliable (#2), and Truck Travel Time Reliability Index (TTTRI) (#3), all required the use of the National Performance Management Research Data Set (NPMRDS). IDOT has procured The Regional Integrated Transportation Information System (RITIS) to analyze the NPMDRS with an easy-to-use interface. IDOT has provided access to RITIS for the MPOs within the state to use.

| Metric | Baseline | 2020 | 2022 |
|---|---|---|---|
| % of person-miles traveled on the Interstate that are reliable | 80.8 | 79 | 77 |
| % of person-miles traveled on the non-Interstate NHS that are reliable | 87.3 | 85.3 | 83.3 |
| Truck Travel Time Reliability Index | 1.3 | 1.34 | 1.37 |

**Table PM-4** IDOT System Performance Targets

**Progress**

Activities undertaken by the MPO to improve system performance since the last LRTP was adopted include:

- Staff participation in two Freight Planning workshops (one featured exercise using RITIS)
- Regional Travel Demand Model used to guide the development of construction detour routes due to two NHS bridges being under construction in the same season
- 2 signal timing studies – Sterling Ave in Peoria and Court St in Pekin – to improve travel time reliability

**Timeline**

System performance measure targets are established, monitored, and updated according to the following schedule:

- **January 1, 2018** – Initial four-year performance period begins.
- **May 20, 2018** – Initial two- and four-year targets established.
- **October 1, 2018** – Baseline Performance Period Report Target report for all measures for the first performance period is due. DOTs submit MPO Congestion Mitigation and Air Quality (CMAQ) Performance Plans (as applicable) as an attachment to the State Baseline Performance Period Report. Within 180 days of established IDOT targets and IDOT GHG measures — MPOs set four-year targets.
- **October 1, 2020** – Mid-Performance Period Progress Report due. IDOT reports two-year progress and adjusted four-year targets. DOTs submit MPO CMAQ Performance Plans (as applicable) as an attachment to the State Mid-Performance Period Progress Report.
- **October 1, 2022** – Full Performance Period Progress Report due. IDOT reports four-year progress. DOTs submit MPOs' CMAQ Performance Plans (as applicable) as an attachment to the State DOT Full Performance Period Progress Report.
- **October 1, 2022** – Baseline report due for second performance period due. IDOT reports two- and four-year targets, baseline condition.

## FTA Transit Asset Management Performance Targets

Transit providers must establish transit asset management (TAM) targets for the following:

1. Rolling Stock: The percentage of revenue vehicles (by type) that exceed the useful life benchmark (ULB)
2. Equipment: The percentage of non-revenue service vehicles (by type) that exceed the ULB
3. Facilities: The percentage of facilities (by group) that are rated less than 3.0 on the Transit Economic Requirements Model (TERM) Scale

**Approach**

The National Transit Asset Management System Final Rule (49 USC 625) requires all agencies that receive federal financial assistance under 49 USC Chapter 53 and own, operate, or manage capital assets used in the provision of public transportation to create a Transit Asset Management (TAM) Plan. Agencies can meet this requirement either through an Individual or Group TAM Plan. Group TAM Plans are meant to collect TAM information about groups (typically small subrecipients of 5311 or 5310 grant programs) that do not have a direct financial relationship with FTA.

The TAM planning process uses asset condition to guide optimal funding prioritization at transit agencies to keep transit networks in a State of Good Repair (SGR). TAM plans require participants to set one or more targets of the asset types below based on SGR measures. See Table PM-05 for asset types and definitions.

| Asset Type | Definition |
|---|---|
| Facilities | The percentage of facilities within an asset class and for which agencies have capital rehab and replacement responsibility, rated below condition 3 on the FTA TERM scale |
| Rolling Stock (Revenue Vehicles) | The percentage of revenue vehicles by asset class that either meet or exceeded their Useful Life Benchmark (ULB) |
| Equipment (Service Vehicles) | The percentage of non-revenue, support-service and maintenance vehicles that either meet or exceeded their ULB |

**Table PM-5** Asset types and definitions

IDOT, Illinois Public Transportation Association (IPTA), and Illinois Rural Transit Assistance Center (RTAC) cooperatively supported the development of the Illinois Group TAM Plan for all Tier II agencies. This state plan includes the four required elements for MAP-21 compliance, leveraging the current and historic CNA (Capital Needs Assessment) work to develop:

1. An inventory of capital assets, including all assets already reported through the CNA annual survey process
2. A condition assessment, including conditions estimated by the existing CNA model and new facility condition assessments being done by grantees
3. A decision support tool, through modification of the existing CNA model
4. Investment prioritization, including grantee input on prioritizing transit investments utilizing the improved data available in the annual CNA process and modified CNA model

**Table PM-6** shows facility types and ratings.

| **Facility Type** | **Facilities Rated Below 3.0** | **Total Facilities** | **% Rated Below 3.0** |
|---|---|---|---|
| Admin/Maintenance | 15 | 88 | 17% |
| Passenger/Parking | 4 | 33 | 12% |
| Total | 19 | 121 | 16% |
| **Revenue Vehicle Type** | **# of Vehicles At/Beyond ULB** | **Total Vehicles** | **% Vehicles At/Beyond ULB** |
| Articulated bus | 12 | 16 | 75% |
| Automobile | 8 | 8 | 100% |
| Bus | 181 | 547 | 33% |
| Ferryboat | 3 | 3 | 100% |
| Minibus | 82 | 171 | 48% |
| Minivan | 163 | 243 | 67% |
| Other rubber tire vehicles | 8 | 8 | 100% |
| Van | 447 | 852 | 52% |
| Total | 904 | 1,848 | 49% |
| **Service Vehicle Type** | **# of Vehicles At/Beyond ULB** | **Total Vehicles** | **% Vehicles At/Beyond ULB** |
| Automobile | 52 | 112 | 46% |
| Minivan | 28 | 50 | 56% |
| Other rubber tire vehicles | 6 | 6 | 100% |
| Van | 0 | 4 | 0% |
| Total | 86 | 172 | 50% |

**Table PM-6** Tier 2 Group Plan State Targets – Facilities, Revenue Vehicles, and Service V

**Progress**
Activities undertaken by the MPO and Greater Peoria Mass Transit District to improve Transit Asset Management since the last LRTP was adopted include:

- Greater Peoria Mass Transit District – multiple applications to FTA grants for funds to renovate and build new maintenance facilities, and procure diesel hybrid and electric buses (revenue vehicles)
- TCRPC – Letters of support for GPMTD grant applications for facilities and vehicles
- TCRPC – Facilitated applications to IDOT's CVP program for public systems to acquire new revenue vehicles

**Timeline**
TAM performance measure targets are established, monitored, and updated according to the following schedule:

- **October 1, 2018** – Providers established initial targets.
- **Within four months of the end of a provider's FY** – Submit to National Transit Database (NTD) their Asset Inventory Module (AIM); and performance targets for next FY.
- **No later than October 1, 2018** – Complete TAM Plan (covers four years; updated at least every four years).
- **October 1, 2018** – IDOT reflect performance measures and subsequent targets in LRTP and STIP for all providers.
- **180 days later** – MPOs either accept or develop their own TAM performance targets

## Information and Data Sources

Federal Highway Administration (FHWA). (2013, September 12). Performance Management. Retrieved May 5, 2020 from https://www.fhwa.dot.gov/map21/factsheets/pm.cfm

# Appendix B: INAI Sites and Endangered Species

# INAI Sites in Greater Peoria

| Peoria County INAI Sites | | | |
|---|---|---|---|
| **INAI Name** | **INAI Number** | **Categories** | **Acreage** |
| Boyds Hollow Woods | 0209 | I | 56.53 |
| Brimfield Railroad Restoration Prairie | 1679 | III | 6.11 |
| County Line Hill Prairie | 0213 | I | 71.95 |
| Detweiller Riverfront Prairie | 1733 | I, II | 18.88 |
| Detweiller Woods | 0208 | I, III | 360.15 |
| Dickison Run Hill Prairie | 0142 | I | 13.31 |
| Forest Park | 0207 | I, III | 670.41 |
| Grandview Woods | 0205 | I | 65.37 |
| Jubilee College State Park | 0117 | I, III | 63.40 |
| Mossville Road Hill Prairie | 0143 | I, III | 4.90 |
| Robinson Park Hill Prairie | 0233 | I, II, III | 161.94 |
| Rock Island Trail Prairie | 1419 | I, III | 7.38 |
| Rocky Glen | 0204 | I | 134.10 |
| Root Cemetery | 1494 | I, III | 2.63 |
| Singing Woods | 1634 | I, II, III | 748.22 |
| Spoon River Laura Segment | 1943 | VI | 71.66 |
| Springdale Cemetery Savanna | 0210 | III | 18.03 |
| St. Mary's Cemetery Hill Prairie | 0206 | I, III | 14.42 |
| Trivoli Northwest Geological Area | 0776 | IV | 5.56 |
| Wokanda Camp | 0212 | I | 35.80 |
| Total Acreage | | | 2,530.75 |
| Total Number of Sites | | | 20 |

IDNR, 2019a

| Tazewell County INAI Sites | | | |
|---|---|---|---|
| **INAI Name** | **INAI Number** | **Categories** | **Acreage** |
| Caterpillar Hill Prairies | 0134 | I | 9.96 |
| Clear Lake Rookery | 1064 | II | 1,593.71 |
| Cooper Park North | 1139 | II, III | 96.44 |
| Dirksen - McNaughton Woods | 1741 | III | 836.46 |
| Farm Creek Geological Area | 0852 | IV | 2.05 |
| Fondulac Seep | 0851 | I, III | 19.48 |
| Fort Creve Coeur Hill Prairie | 0133 | I, III | 27.39 |
| Green Valley Site | 1136 | II | 1,090.06 |
| Independence Park Woods | 1825 | III | 264.11 |
| Indian Creek Woods | 0130 | I, III | 32.70 |
| Log Cabin Hill Prairie | 0129 | I, III | 8.64 |
| Mackinaw River | 0788 | I, II, III, VI | 2,159.52 |
| Manito Prairie | 0131 | I, II, III | 31.94 |
| McCoy Woods | 0132 | I, III | 40.78 |
| Middle Fork Sugar Creek - Standford/Armington Seg | 1628 | VI | 29.43 |
| Neumann Park Hill Prairie | 1934 | I | 0.29 |
| Parklands Site | 1138 | II, III, IV | 649.24 |
| Spring Lake Seeps | 0850 | I, II | 211.22 |
| West Fork Sugar Creek - Minier/Morgan Bridge Segm | 1629 | VI | 39.03 |
| Worley Lake Area | 1137 | II | 419.50 |
| Total Acreage | | | 7,561.95 |
| Total Number of Sites | | | 20 |

IDNR, 2019a

| Woodford County INAI Sites | | | |
|---|---|---|---|
| **INAI Name** | **INAI Number** | **Categories** | **Acreage** |
| Black Partridge Park Woods | 1738 | III | 294.16 |
| Blalock Creek Site | 1143 | II | 9.01 |
| Caterpillar Hill Prairies | 0134 | I | 9.96 |
| Crow Creek Bluff Forest | 1624 | II, VI | 202.52 |
| East Branch Panther Creek El Paso Reach | 1937 | VI | 13.15 |
| Letcher Basin | 1852 | III | 172.35 |
| Mackinaw River | 0788 | I, II, III, VI | 2,159.52 |
| Mackinaw River Hill Prairie | 0250 | I, III | 11.52 |
| Mackinaw River Hill Prairie South | 1933 | I | 2.69 |
| Partridge Creek Hill Prairies | 1935 | I | 4.31 |
| Ridgetop Hill Prairie | 0249 | I, III | 23.76 |
| Spring Bay Fen | 0928 | I, II, III | 54.29 |
| West Branch Panther Creek Roanoke Reach | 1948 | VI | 16.56 |
| Total Acreage | | | 2,973.80 |
| Total Number of Sites | | | 13 |

IDNR, 2019a

# Endangered Species in Greater Peoria

| Peoria County Endangered Species | | | | |
|---|---|---|---|---|
| **Scientific Name** | **Common Name** | **State Protection** | **# of occurrences** | **Last Observed** |
| *Acipenser fulvescens* | Lake Sturgeon | Endangered | 2 | 2016-06-22 |
| *Agalinis skinneriana* | Pale False Foxglove | Threatened | 1 | 2011-07-13 |
| *Anguilla rostrata* | American Eel | Threatened | 6 | 2014-08-24 |
| *Apalone mutica* | Smooth Softshell | Endangered | 2 | 2007-09-18 |
| Boltonia decurrens | Decurrent False Aster | Threatened | 5 | 2019-09-13 |
| *Bombus affinis* | Rusty Patched Bumble Bee | Endangered | 6 | 2016-07-19 |
| *Corallorhiza maculata* | Spotted Coral-root Orchid | Endangered | 1 | 2007-06 |
| *Cypripedium parviflorum* | Small Yellow Lady's Slipper | Endangered | 1 | 2012-04-28 |
| *Elliptio crassidens* | Elephant-ear | Endangered | 1 | 2012-08-19 |
| *Filipendula rubra* | Queen-of-the-prairie | Threatened | 1 | 2011-08-05 |
| *Fundulus diaphanus* | Banded Killifish | Threatened | 1 | 2018-06-25 |
| *Fundulus dispar* | Starhead Topminnow | Threatened | 1 | 1989-07-05 |
| *Fusconaia ebena* | Ebonyshell | Endangered | 1 | 2012-08-04 |
| *Ixobrychus exilis* | Least Bittern | Threatened | 1 | 2004-06-19 |
| *Lanius ludovicianus* | Loggerhead Shrike | Endangered | 1 | 2006-07-27 |
| *Lepomis miniatus* | Redspotted Sunfish | Endangered | 1 | 2010-10-28 |
| *Lepomis symmetricus* | Bantam Sunfish | Threatened | 1 | 1998-10-14 |
| *Myotis septentrionalis* | Northern Long-eared Myotis | Threatened | 2 | 2016-06-07 |
| *Myotis sodalis* | Indiana Bat | Endangered | 1 | 2017-08-09 |
| *Pandion haliaetus* | Osprey | Endangered | 4 | 2019-07-25 |
| *Poliocitellus franklinii* | Franklin's Ground Squirrel | Threatened | 1 | 2017-07-19 |
| Rallus elegans | King Rail | Endangered | 1 | 1988-05-26 |
| *Speyeria idalia* | Regal Fritillary | Threatened | 1 | 1961-07-14 |
| Viburnum molle | Arrowwood | Threatened | 2 | 2017-07-01 |

IDNR, 2019b

| Tazewell County Endangered Species | | | | |
|---|---|---|---|---|
| **Scientific Name** | **Common Name** | **State Protection** | **# of occurrences** | **Last Observed** |
| *Acipenser fulvescens* | Lake Sturgeon | Endangered | 2 | 2016-06-22 |
| Anguilla rostrata | American Eel | Threatened | 4 | 2014-08-24 |
| *Asio flammeus* | Short-eared Owl | Endangered | 1 | 2015-02-10 |
| *Aster furcatus* | Forked Aster | Threatened | 1 | 1987 |
| *Astragalus tennesseensis* | Tennessee Milk Vetch | Endangered | 1 | 2018-05-22 |
| *Besseya bullii* | Kittentails | Threatened | 3 | 2016-07-28 |
| *Boltonia decurrens* | Decurrent False Aster | Threatened | 2 | 2017-10-13 |
| *Caprimulgus carolinensis* | Chuck-will's-widow | Threatened | 1 | 1998-06-08 |
| *Circus cyaneus* | Northern Harrier | Endangered | 1 | 2015-02-10 |
| *Cypripedium parviflorum* | Small Yellow Lady's Slipper | Endangered | 2 | 2017-05-06 |
| *Dendroica cerulea* | Cerulean Warbler | Threatened | 1 | 2010-06-06 |
| *Elliptio crassidens* | Elephant-ear | Endangered | 1 | 2012-08-19 |
| *Fundulus dispar* | Starhead Topminnow | Threatened | 2 | 1967-07-21 |
| *Fusconaia ebena* | Ebonyshell | Endangered | 1 | 2012-08-04 |
| *Heterodon nasicus* | Plains Hog-nosed Snake | Threatened | 1 | 1905-06-29 |
| *Kinosternon flavescens* | Yellow Mud Turtle | Endangered | 4 | 2009-07-14 |
| *Lanius ludovicianus* | Loggerhead Shrike | Endangered | 2 | 1990-07-05 |
| *Lepomis miniatus* | Redspotted Sunfish | Endangered | 2 | 2010-10-20 |
| *Lethenteron appendix* | American Brook Lamprey | Threatened | 2 | 1999-07-29 |
| *Moxostoma carinatum* | River Redhorse | Threatened | 1 | 1905-06-07 |
| *Necturus maculosus* | Mudpuppy | Threatened | 1 | 2018-10-30 |
| *Notropis chalybaeus* | Ironcolor Shiner | Threatened | 1 | 1963-07-01 |
| *Nycticorax nycticorax* | Black-crowned Night-Heron | Endangered | 1 | 2008-06-26 |
| *Orobanche ludoviciana* | Broomrape | Threatened | 1 | 2014-08-15 |
| *Pandion haliaetus* | Osprey | Endangered | 2 | 2019-07-25 |
| *Plantago cordata* | Heart-leaved Plantain | Endangered | 1 | 2000-06-02 |
| *Poa wolfii* | Wolf's Bluegrass | Endangered | 1 | 1998-05-28 |
| *Polanisia jamesii* | James' Clammyweed | Endangered | 1 | 2012-08-31 |
| *Pseudacris illinoensis* | Illinois Chorus Frog | Threatened | 3 | 2019-03-27 |
| *Speyeria idalia* | Regal Fritillary | Threatened | 1 | 2019-06-29 |
| *Terrapene ornata* | Ornate Box Turtle | Threatened | 1 | 2008-06-06 |
| *Tetraneuris herbacea* | Lakeside Daisy | Endangered | 1 | 2013-05-02 |
| *Tyto alba* | Barn Owl | Threatened | 1 | 2017-07-03 |

IDNR, 2019b

| Woodford County Endangered Species | | | | |
|---|---|---|---|---|
| **Scientific Name** | **Common Name** | **State Protection** | **# of occurrences** | **Last Observed** |
| Anguilla rostrata | American Eel | Threatened | 2 | 1982 |
| Bartramia longicauda | Upland Sandpiper | Endangered | 1 | 2010-07-01 |
| Boltonia decurrens | Decurrent False Aster | Threatened | 4 | 2019-09-13 |
| Bombus affinis | Rusty Patched Bumble Bee | Endangered | 1 | 2019-08 |
| Coccyzus erythropthalmus | Black-billed Cuckoo | Threatened | 1 | 2009-06-28 |
| Cypripedium reginae | Showy Lady's Slipper | Endangered | 1 | 1999-06-10 |
| Elliptio dilatata | Spike | Threatened | 1 | 2001-08-31 |
| Filipendula rubra | Queen-of-the-prairie | Threatened | 1 | 2013-07-25 |
| Fundulus dispar | Starhead Topminnow | Threatened | 1 | 1989-07-05 |
| Lanius ludovicianus | Loggerhead Shrike | Endangered | 1 | 2007-06-30 |
| Lepomis symmetricus | Bantam Sunfish | Threatened | 1 | 1998-10-14 |
| Mimulus glabratus | Yellow Monkey Flower | Endangered | 1 | 1989-06-23 |
| Myotis septentrionalis | Northern Long-eared Myotis | Threatened | 1 | 1985-06-13 |
| Myotis sodalis | Indiana Bat | Endangered | 1 | 2011-04-14 |
| Necturus maculosus | Mudpuppy | Threatened | 1 | 2017-11-07 |
| Pandion haliaetus | Osprey | Endangered | 2 | 2019-07-25 |
| Spiranthes lucida | Yellow-lipped Ladies' Tresses | Endangered | 1 | 1968-05-25 |
| Viburnum molle | Arrowwood | Threatened | 1 | 1999-09-02 |

IDNR, 2019b

# Information and Data Sources

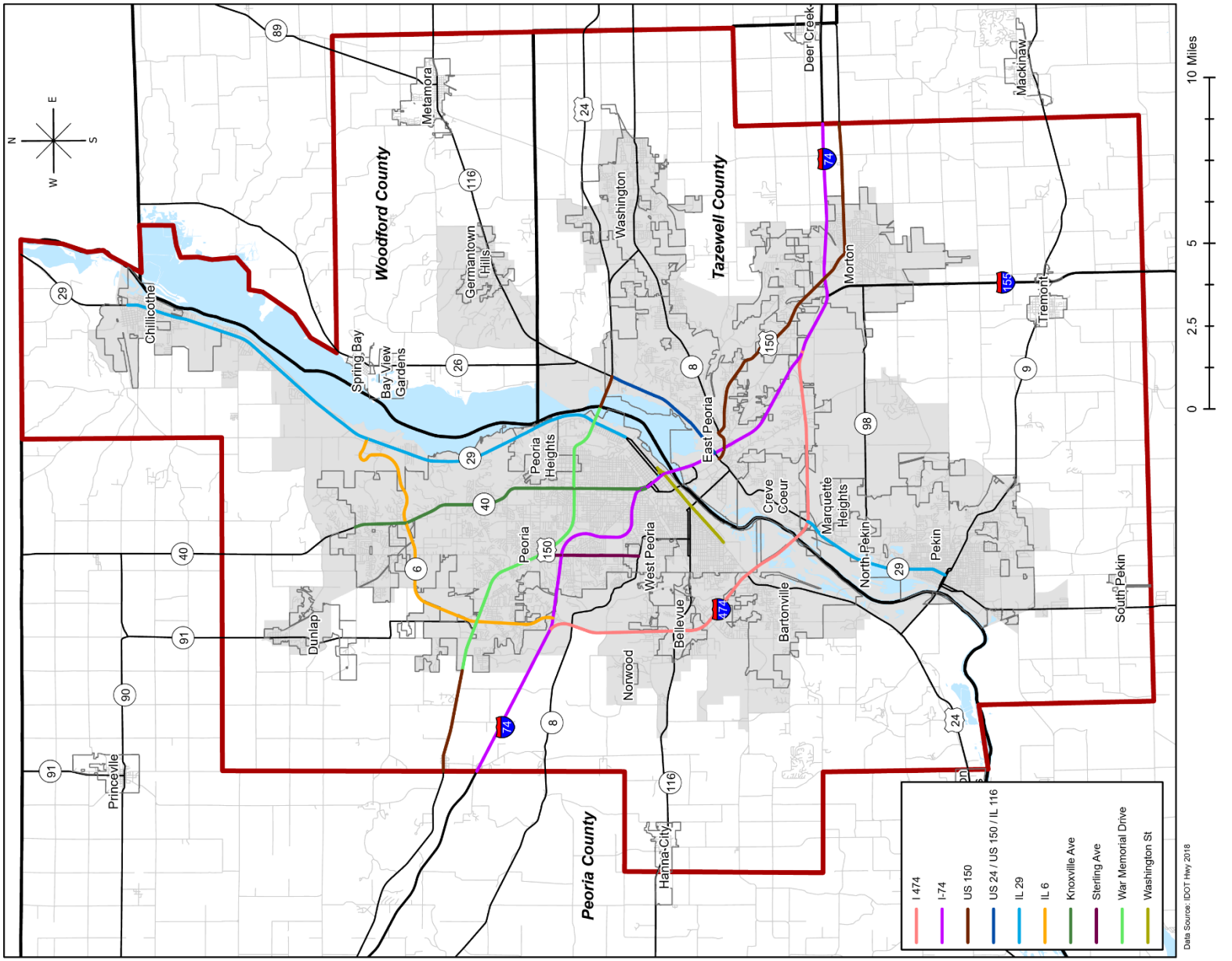
Illinois Department of Natural Resources (IDNR). (2019a, October). Illinois Natural Areas Inventory (INAI) Sites. Retrieved May 4, 2020 from https://www2.illinois.gov/dnr/conservation/NaturalHeritage/Documents/Database/INAICountyList.pdf

Illinois Department of Natural Resources (IDNR). (2019b, October). Illinois Threatened and Endangered Species by County. Retrieved May 4, 2020 from https://www2.illinois.gov/dnr/conservation/NaturalHeritage/Documents/Database/etcountylist.pdf

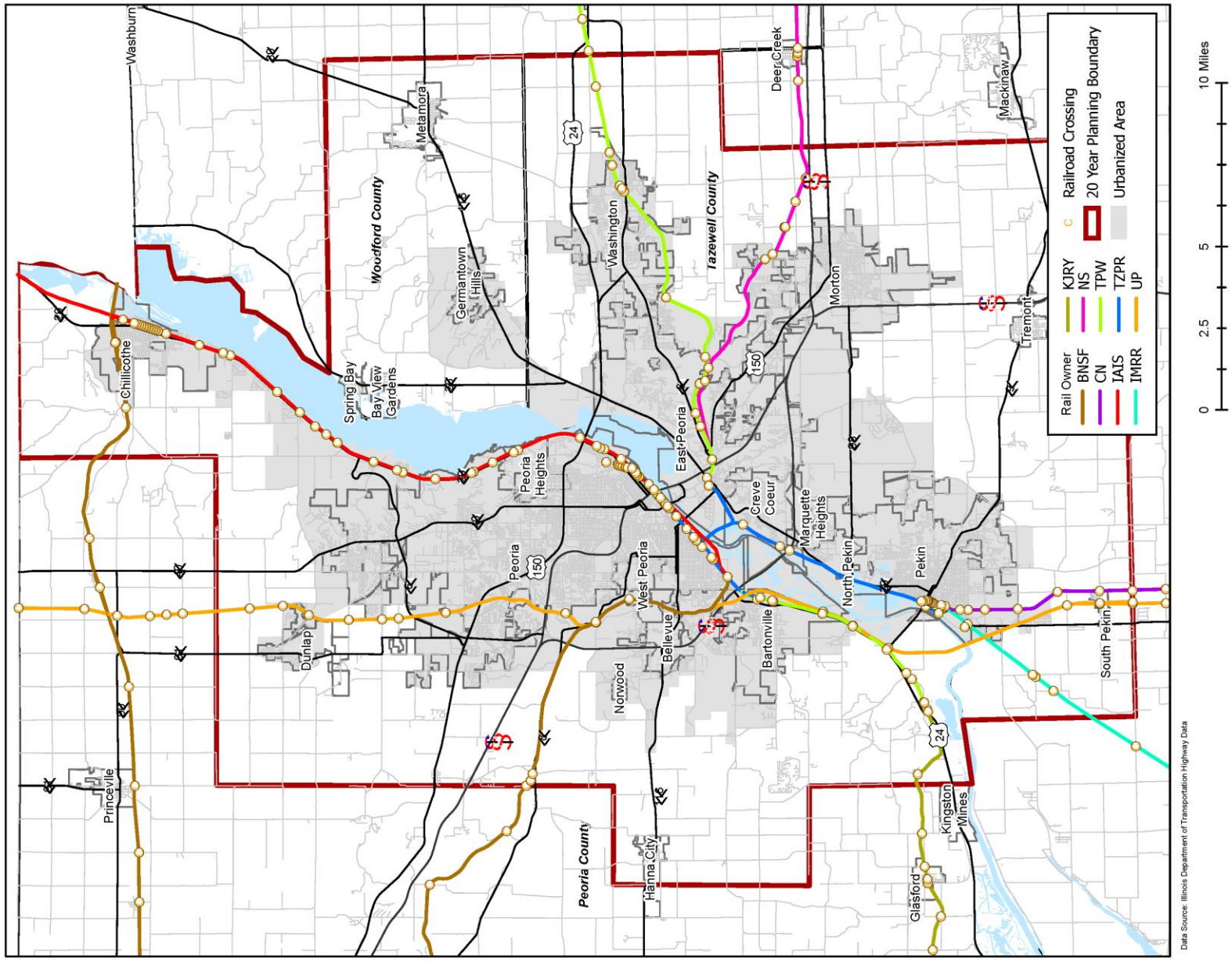
# Appendix C: Freight Maps and Tables

1. Designated truck routes in the Tri-County Area
2. Railroad crossings and routes in the Tri-County region
3. Shipments Within, Outbound, and Inbound U.S. States

**DESIGNATED TRUCK ROUTES IN THE TRI-COUNTY AREA**



**RAILROAD CROSSINGS AND ROUTES IN THE TRI-COUNTY AREA**



**SHIPMENTS WITHIN, OUTBOUND, AND INBOUND U.S. STATES - TMILES BY TRADE TYPE & TRANSPORTATION MODE: 2018**

Data from the Freight Analysis Framework Version 4.5.1. Unit of measure is million ton-miles.
Outbound: Outbound flow from the given state to all other states (not including Within).
Inbound: Inbound flow all other states to the given states (not including Within).
**Source: FAF, 2019 in the Freight section of this plan**

| State (S) | Trade Type | Domestic Mode | Within the state (S to S) tons_within | Outbound from the state (S to all other states) tons_out | Inbound to the state (all other states to S) tons_in |
|---|---|---|---|---|---|
| **Illinois** | **Domestic Only** | | **574,518.4** | **283,659.1** | **340,547.1** |
| | | Air (include truck-air) | 0.4 | 107.5 | 50.0 |
| | | Multiple modes & mail | 9,869.4 | 16,155.8 | 9,732.5 |
| | | Pipeline | 30,986.8 | 59,483.1 | 108,524.4 |
| | | Rail | 40,751.3 | 70,892.8 | 88,774.5 |
| | | Truck | 488,032.9 | 116,739.5 | 129,087.9 |
| | | Water | 4,877.7 | 20,280.4 | 4,377.8 |
| **Illinois** | **Export** | | **593.9** | **33,163.7** | **496.2** |
| | | Air (include truck-air) | 0.0 | 62.1 | 272.5 |
| | | Multiple modes & mail | 0.6 | 4,347.4 | 11.3 |
| | | Other and unknown | 421.7 | 16.8 | 0.1 |
| | | Pipeline | 0.0 | 4,602.1 | 0.0 |
| | | Rail | 2.0 | 9,978.5 | 20.2 |
| | | Truck | 103.1 | 10,891.9 | 156.2 |
| | | Water | 66.5 | 3,264.8 | 35.9 |
| **Illinois** | **Import** | | **4,098.2** | **4,499.0** | **105,109.9** |
| | | Air (include truck-air) | 0.0 | 290.5 | 79.9 |
| | | Multiple modes & mail | 28.4 | 27.6 | 6,023.5 |
| | | Other and unknown | 12.1 | 0.7 | 0.1 |
| | | Pipeline | 0.2 | 0.0 | 76,829.9 |
| | | Rail | 128.7 | 1,649.3 | 14,136.8 |
| | | Truck | 1,346.8 | 600.9 | 8,013.1 |
| | | Water | 2,582.0 | 1,930.0 | 26.6 |
| **Illinois** | | | **579,210.5** | **321,321.8** | **446,153.3** |

**SHIPMENTS WITHIN, OUTBOUND, AND INBOUND U.S. STATES - TMILES BY TRADE TYPE & TRANSPORTATION MODE: 2045 PROJECTED**

Data from the Freight Analysis Framework Version 4.5.1. Unit of measure is million ton-miles.
Outbound: Outbound flow from the given state to all other states (not including Within).
Inbound: Inbound flow all other states to the given states (not including Within).
Source: FAF, 2019 in the Freight section of this plan

| State (S) | Trade Type | Domestic Mode | Within the state (S to S) tons_within | Outbound from the state (S to all other states) tons_out | Inbound to the state (all other states to S) tons_in |
|---|---|---|---|---|---|
| **Illinois** | **Domestic Only** | | **641,923.2** | **440,319.8** | **452,453.5** |
| | | Air (including truck-air) | 0.6 | 156.2 | 86.9 |
| | | Multiple modes & mail | 12,573.2 | 22,069.9 | 13,867.7 |
| | | Pipeline | 17,031.5 | 129,503.0 | 141,549.4 |
| | | Rail | 57,608.8 | 87,200.8 | 93,239.4 |
| | | Truck | 549,324.6 | 185,153.4 | 198,093.3 |
| | | Water | 5,384.5 | 16,236.6 | 5,616.8 |
| **Illinois** | **Export** | | **455.1** | **74,554.8** | **2,317.6** |
| | | Air (include truck-air) | 0.6 | 352.2 | 1,555.1 |
| | | Multiple modes & mail | 0.0 | 18,626.0 | 3.8 |
| | | Other and unknown | 0.5 | 21.1 | 47.2 |
| | | Pipeline | 0.1 | 2,965.3 | 0.0 |
| | | Rail | 0.0 | 23,565.9 | 25.6 |
| | | Truck | 352.2 | 28,933.1 | 61.9 |
| | | Water | 101.6 | 91.3 | 623.9 |
| **Illinois** | **Import** | | **30,783.7** | **18,724.7** | **111,823.5** |
| | | Air (include truck-air) | 19.9 | 2,102.8 | 139.1 |
| | | Multiple modes & mail | 221.9 | 130.6 | 13,228.4 |
| | | No domestic mode | 15,138.6 | 0.0 | 0.0 |
| | | Other and unknown | 269.4 | 149.5 | 364.2 |
| | | Pipeline | 0.0 | 0.0 | 36,105.8 |
| | | Rail | 449.2 | 6,733.5 | 39,572.1 |
| | | Truck | 7,769.8 | 2,952.6 | 22,029.7 |
| | | Water | 6,915.0 | 6,655.6 | 384.2 |
| **Illinois** | | | **673,162.0** | **533,599.3** | **566,594.5** |

# Appendix D: Acronyms and Abbreviations

| Acronym | Phrase |
|---|---|
| AASHTO | American Association of State Highway Transportation Officials |
| ACS | American Community Survey |
| ADA | Americans with Disabilities Act of 1990 |
| ADT | Average Daily Traffic |
| AIM | Asset Inventory Module |
| APC | Automatic Passenger Counter |
| APHA | American Public Health Association |
| AQI | Air Quality Index |
| AVL | Automatic Vehicle Locator |
| BLRS | IDOT Bureau of Local Roads and Streets |
| BNSF | Burlington-Northern Santa Fe Railroad |
| BUILD | Better Utilizing Investments to Leverage Development |
| CAD | Computer-aided dispatch |
| CAUSE Area | CityLink Area Urban Service Expansion Area |
| CDC | Centers for Disease Control and Prevention |
| CEDS | Community Economic Development Strategy |
| CHNA | Community Health Needs Assessment |
| CHSP | Comprehensive Highway Safety Plan |
| CMAQ | Congestion Mitigation and Air Quality |
| CMP | Congestion Management Process |
| CN | Canadian National Railroad |
| CNA | Capital Needs Assessment |
| CRS | Condition Rating Survey |
| CVP | IDOT'S Consolidated Vehicle Procurement |
| CWA | Federal Clean Water Act of 1972 |

| Acronym | Phrase |
|---|---|
| DOT or US DOT | United States Department of Transportation |
| EDA | US Economic Development Administration |
| EDD | Economic Development District |
| EJ | Environmental justice |
| FAF | Freight Analysis Framework |
| FAST Act | Fixing America's Surface Transportation Act |
| FHWA | Federal Highway Administration |
| FTA | Federal Transit Administration |
| FY | Fiscal year |
| GCPF | Grade Crossing Protection Fund |
| GPEDC | Greater Peoria Economic Development Council |
| GPMTD | Greater Peoria Mass Transit District |
| GSI | green stormwater infrastructure |
| GTC | Genesee Transportation Council |
| GTFS | General Transit Feed Specification |
| HBP | Highway Bridge Program |
| HPP | High Priority Projects |
| HSIP | IDOT's Highway Safety Improvement Program |
| HSTP | Human Services Transportation Plan |
| HUD | US Department of Housing and Urban Development |
| IAIS | Iowa Interstate Railroad |
| ICC | Illinois Commerce Commission |
| IDNR | Illinois Department of Natural Resources |
| IDOT | Illinois Department of Transportation |
| IEMA | Illinois Emergency Management Agency |

| Acronym | Phrase |
|---|---|
| IGA | Intergovernmental agreement |
| IL EPA | Illinois EPA |
| IMRR | Illinois & Midland Railroad |
| INAI | Illinois Natural Areas Inventory |
| IPTA | Illinois Public Transportation Association |
| IRI | International Roughness Index |
| ISGS | Illinois State Geological Survey |
| ISTEA | Intermodal Surface Transportation Efficiency Act of 1991 |
| ISWS | Illinois State Water Survey |
| ITEP | Illinois Transportation Enhancement Program |
| ITS | Intelligent Transportation Systems |
| JARC | Section 5316 Job Access and Reverse Commute |
| KJRY | Keokuk Junction Railway Company |
| LEAM | Land Use Evaluation and Assessment Model |
| LRTP | Long-Range Transportation Plan |
| MAAP | Metropolitan Airport Authority of Peoria |
| MAP-21 | The Moving Ahead for Progress in the 21st Century Act |
| mcm | micrograms per cubic meter |
| MFT | Motor Fuel Tax |
| MIBC | Middle Illinois Basin Committee |
| MPA | Metropolitan Planning Area |
| MPO | Metropolitan Planning Organization |
| MS4 | Municipal Separate Storm Sewer System |
| NAAQS | National Ambient Air Quality Standards |
| NBI | National Bridge Inventory |

| Acronym | Phrase |
|---|---|
| NBIS | National Bridge Inspections Standards |
| NEPA | National Environmental Policy Act |
| NHS | National Highway System |
| NHTSA | National Highway Traffic Safety Administration |
| NPDES | National Pollutant Discharge Elimination System |
| NPMRDS | National Performance Management Research Data Set |
| NS | Norfolk Southern Railroad |
| PCI | Pavement Condition Index |
| PIA | Peoria International Airport |
| PLBA | Peoria Lakes Basin Alliance |
| PLCCP | Peoria Lakes Comprehensive Conservation Plan |
| PM10 | Particulate Matter, 10 micrometers |
| PM2.5 | Particulate Matter, 2.5 micrometers |
| ppm | parts per million |
| PPUATS | Peoria-Pekin Urbanized Area Transportation Study |
| PSR | Present Serviceability Rating |
| RITIS | Regional Integrated Transportation Information System |
| RORO | Roll on-roll off (refers to container-on-barge freight) |
| ROW | Right of way |
| RTAC | Illinois Rural Transit Assistance Center |
| SAFETEA-LU | Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users |
| SES | Socioeconomic status |
| SGR | State of Good Repair |
| SHSP | Strategic Highway Safety Plan |
| SO2 | Sulfur Dioxide |

| Acronym | Phrase |
|---|---|
| SPIL | State Plan for Independent Living |
| SRTS | Safe Routes to School |
| STBG | Surface Transportation Block Grant |
| SWMP | stormwater management program |
| TA | Transportation Alternative |
| TAM or TAMP | Transit Asset Management Plan |
| TAZ | Traffic Analysis Zone |
| TCRPC or RPC | Tri-County Regional Planning Commission |
| TDM | Travel Demand Management |
| TEA-21 | Transportation Equity Act for the 21st Century |
| TERM | Transit Economic Requirements Model |
| TIP | Transportation Improvement Plan |
| TOD | Transit-Oriented Development |
| TPW | Toledo, Peoria, & Western Railroad |
| TTTRI | Truck Travel Time Reliability Index |
| TZPR | Tazewell and Peoria Railroad |
| ULB | Useful life benchmark |
| ULSD | Ultra-low sulfur diesel |
| UP | Union Pacific Railroad |
| US EPA | United States Environmental Protection Agency |
| USACE | United States Army Corps of Engineers |
| USFWS | United States Fish and Wildlife Services |
| VMT | Vehicle miles traveled |