

# 2015

Danville Area Transportation Study

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## [REGIONAL BICYCLE PLAN]

The 2015 Regional Bicycle Plan for the DATS is one component of the MPO's multipronged effort to promote bicycling and bicycle safety while reversing decades of automobile-oriented development.



## Chapter 1-Introduction

In the era of increasing awareness of the critical difference that wise transportation choices can make to the global environment and economy, the bicycle is reemerging as a legitimate mode of travel. To maximize the number of people utilizing a bicycle throughout Vermilion County, a myriad of infrastructure improvements, ongoing maintenance, and safety promotion programs are needed.



The *2015 Regional Bicycle Plan* for the DATS is one component of the MPO's multipronged effort to promote bicycling and bicycle safety while reversing decades of automobile-oriented development. *LRTP: Directions to 2035*- the regional long range transportation plan- established one of its core goals to "Create a safe, livable, environmentally aware community through the promotion of a responsible transportation system **with alternative modes available for all residents.**"

### What is the Danville Area Transportation Study?

The Danville Area Transportation Study (DATS) is a public organization serving several municipalities and townships in Vermilion County, Illinois (See *Map 1-1*), and designated to perform the following functions:

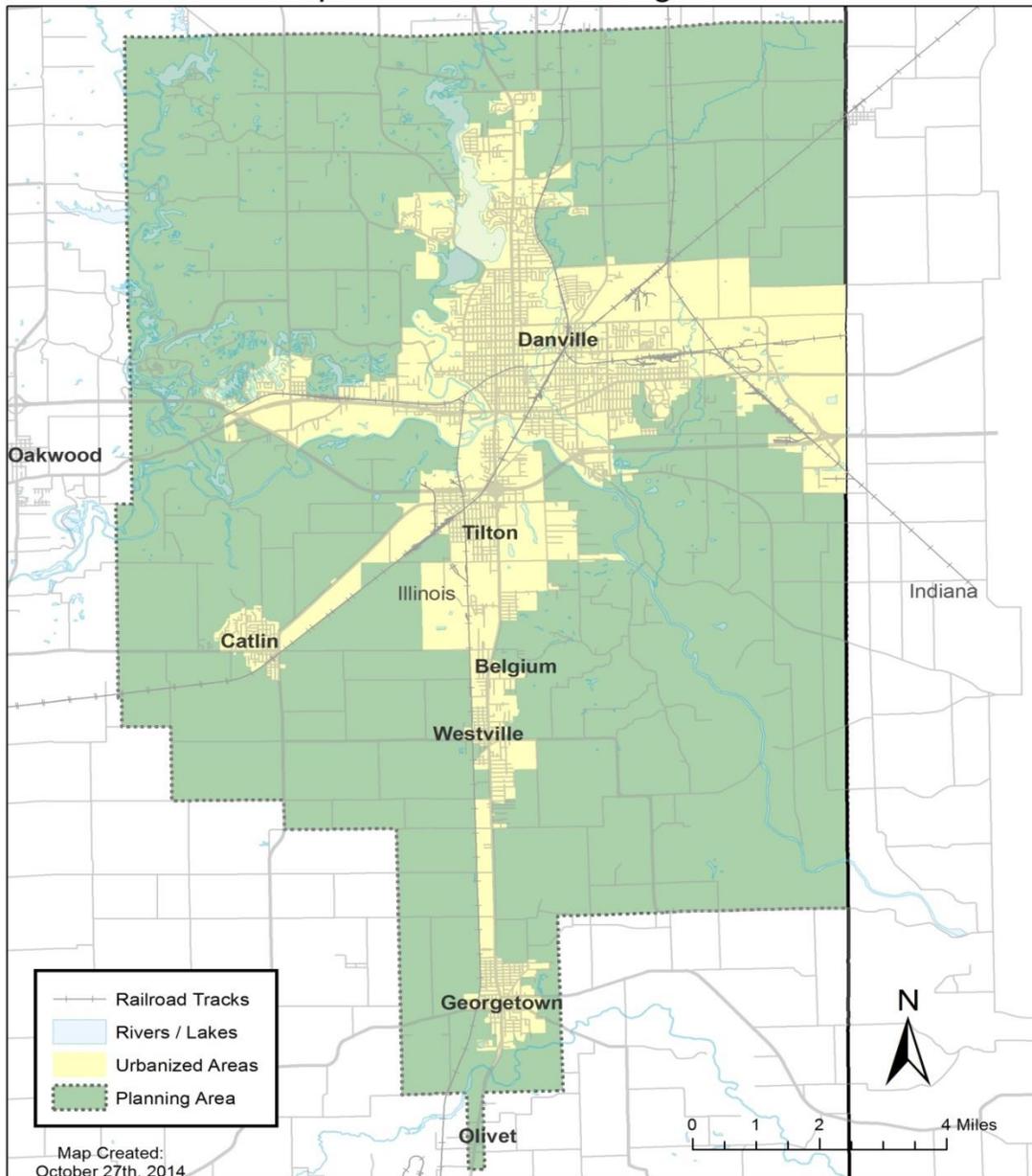
- Serve as the Metropolitan Planning Organization (MPO), with responsibility for comprehensive, cooperative and continuous planning for highways, public transit, and bikeways, as defined in our current transportation law *Moving Ahead for Progress in the 21<sup>st</sup> Century (MAP-21)*.
- Conduct transportation and environmental planning and related demographic, economic and land use research
- Serve as an information center for transportation and related planning



## Why a Regional Bicycle Plan?

As a component of the *Directions to 2035* plan, the *2015 Regional Bicycle Plan* seeks to support individuals who choose to shift modes from automobile to bicycle by making investments in the regional bikeway network, focusing growth in existing areas, and promoting connections between land-use and transportation. This plan presents data, provides guidance and suggests recommendations to help propel these efforts forward.

Map 1-1: DATS Planning Area





## Plan Update

Development of the Bike Plan began in June of 2014 with the assembling of the project team and outlining of the stakeholder and public engagement process. As the initial stages of the public engagement process were being carried out, the project team began an extensive analysis of both the physical conditions of the road network as well as the policy and planning framework of the region and the many jurisdictions that comprise it.

The original *Regional Bicycle Plan*, published in 2010, documented the region's bicycling environment, identified the links in a region wide bikeway network and summarized corresponding funding sources. This update to the *Regional Bicycle Plan* seeks to: encourage, increase and promote safer bicycling in Vermilion County; provide an analysis of bicycle trip making and collision data; summarize bicycle planning efforts throughout the Planning Area; and document advances in bicycle infrastructure and other important technologies.

While the 2010 plan provided a summary of the interaction between bicycle facilities and transit facilities, this update further investigates the relationship between bicycling and public transportation in recognition of the importance of bicycle-accessible transit and transit stations. Because safe and convenient bicycle access must include a place to securely store one's bicycle at destinations, bicycle parking is another focus of this plan update.

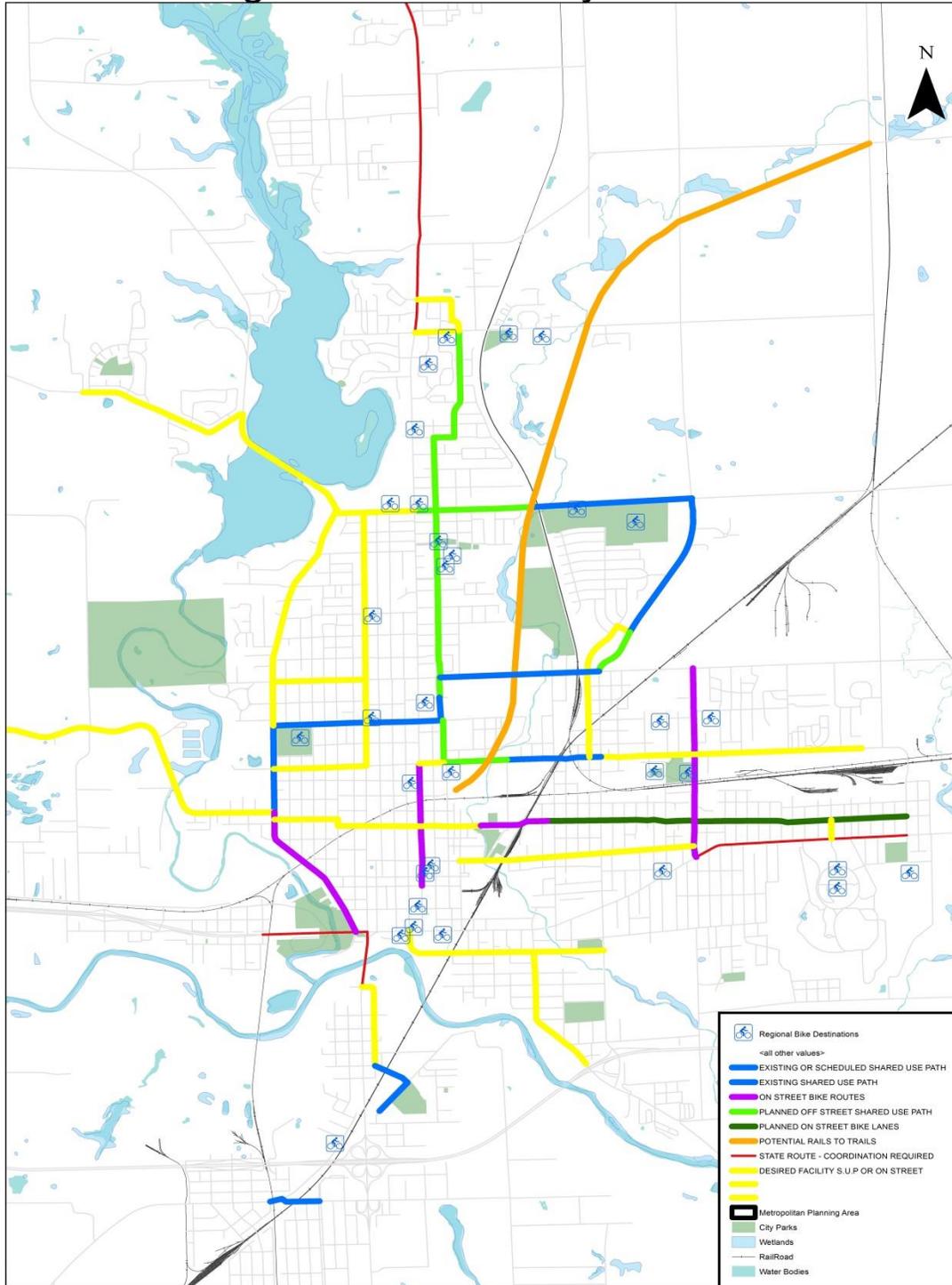
## The Regional Bike Network

A focus of the *2015 Regional Bicycle Plan* is the regional bike network, which defines the Planning Area's continuous and connected bicycling corridors of regional significance. A primary purpose of the network, which includes both built and unbuilt segments, is to focus regional bicycle-related funding on high-priority bicycle facilities that serve regional trips (See *Map 1-2: Existing and Planned Bicycle Facilities*).



**Map 1-2: Existing and Planned Bicycle Facilities, City of Danville**

**Existing and Planned Bicycle Facilities**



EXISTING OR SCHEDULED MILES OF BIKE ROUTES - 10.2  
 PLANNED OR CONCEPTUAL MILES OF BIKE ROUTES - 26.86  
 TOTAL MILES - 37.06

Date: 4/14/2015

BICYCLE CONCEPTUAL PLAN





The planning process focused on generating public involvement to form the foundation of the plan. Additionally, a bicycle advisory committee guided the development of the *Regional Bicycle Plan* (see “Credits” for membership list). The region’s transportation authorities, transit operators, bicycle advocacy groups and members of the public provided insight to help update The Plan.

## Chapter 2- Background

This chapter provides an in depth review of the existing conditions of the planning area. Topics covered include demographic information, bicycle trip-making trends, bicycle/motor vehicle collision data, and regional bicycle-related programs and policies as a backdrop to the remainder of the *Regional Bicycle Plan*.



In addition to the Planning Area’s generally hospitable topography is the grid like land-use pattern. Linking multiuse pathways, bicycle lanes, and other bicycle facilities with the region’s bus system will allow cyclists to use their bicycles at either or both ends of their trip, while using public transit to travel longer distances. Coordinating bicycle and public transit also allows transit systems to increase ridership without implementing additional routes.

## Chapter 3-Goals and Policies

This chapter documents the bicycle-related goals and policies of the Metropolitan Planning Organization (MPO), which guided the development of this updated *Regional Bicycle Plan*.

The goals of the MPO’s transportation blueprint for the next 30 years- *Direction to 2035*- address the three “C’s” of the planning process: Comprehensive, Cooperative, and Continuing. Corresponding policies address transportation investments, focused growth pricing and affordability, technology, and individual actions, such as bicycle transportation, that result in vehicle emissions reductions, reduced delay, and improved affordability for Vermilion County households. Increasing bicycle safety is another goal of *Directions to 2035*, which sets a goal of improving safety for all transportation users.

Supporting these goals, objectives and policies are recently adopted federal, state, and regional directives that place greater emphasis on considering the accommodation of pedestrians and bicyclists when designing roadway facilities.



For the region to make further strides toward improving bicycle travel, the routine accommodation of bicycles and pedestrians must be embraced by other implementing agencies as well, such as countywide transportation authorities, local jurisdictions, transit operators, and other partner agencies of DATS.

#### Chapter 4-Bicycle Facility Network

The Planning Area contains many components of a truly bikable region. A growing network of on-street bikeway facilities and paved multiuse paths that serve local and regional destinations; access to and on public transit to allow travel over longer distances than most people are able to bicycle; and safe bicycle parking options at regional destinations.

Areas that could improve the bikability of the region include: offering greater access to safe and convenient bicycle parking options throughout the community; programs that encourage and educate cyclists and other roadway users; and willingness to experiment with innovative roadway treatments and other bicycle facilities in the pursuit of a bikeway system that encourages safer and more frequent cycling.

One of the main goals of the Bike Plan is to create a fully interconnected, seamless, and safe bicycle network that connects areas within Vermilion County. The Plan focuses primarily on roadways functionally classified in the collector and arterial categories, although local roadways are considered. While facilities were recommended based on extensive stakeholder input, they are grounded in field review of existing roadway conditions and constraints.

The regional bike network is working to build continuous and connected bicycling corridors of regional significance. The primary purpose of the regional bike network, which includes both built and unbuilt segments, is to focus regional bicycle-related funding on the highest priority bicycle-related facilities that serve regional trips, including access to transit. This approach assumes that participating municipalities and Vermilion County prioritize the expenditure of locally generated funds and local discretionary funds for local-serving projects, leaving many intercity, intercounty and other important bikeways of regional significance (such as the Kickapoo Rail Trail) to be funded with regional discretionary sources.

Either way, the key is to implement a bicycle network of some type in order to encourage the use of bicycles for transportation. Bicycle facility improvements must be complemented by a robust policy, education, encouragement, and enforcement program that supports the physical network, and by performance measures to determine progress over the next 20 years.



This chapter defines a set of recommendations and actions to create an integrated bicycle network. They are visionary yet practical action strategies to make the Vermilion County region a great place for bicycling. They were developed with the following criteria in mind:

- **Connections to Destinations:** Streets chosen for inclusion in the bicycle network are intended to provide access to major employment centers, retail centers, transit, schools, regional parks, and other destinations. For this reason, the primary focus for developing on-street bicycle facilities is on arterial and collector roadways, which typically provide the most direct access to destinations.
- **Land Use and Facilities:** Recommended facilities and designs are intended to fit adjacent land use patterns. For example, on rural roadways with ample shoulders, bicycle route signage may be all that is required, while arterials with heavier ADT may require buffered bicycle lanes.
- **Traffic Conditions:** Recommended bicycle facilities reflect existing roadway traffic conditions, including traffic volume, speed, and roadway capacity. In some cases, excess capacity provides an opportunity to reduce the number of general purpose lanes and add bicycle facilities. In other cases, the lack of existing capacity may be a constraint that prevents the installation of bicycle facilities.
- **Interjurisdictional Connectivity:** Many points in the bicycle network connect adjacent communities.
- **End-of-Trip Facilities:** End-of-trip facilities like bike parking have the potential to increase usage and extend the network to include other modes. Allowing bikes on transit extends the network even further as bicycle travel can occur on both ends of the transit trip. The importance of extending the system by tying it into the transit network is reflected in the Existing and Planned Bike Facility Map which gives a high priority to on-street facilities that connect to transit stations.

The proposed bicycle network includes a variety of facility improvements that respond to the different types of bicyclists and their needs. Some of the facilities will be located along independent corridors and paths that are separated from roadways. Other parts of the network will require motorists and bicyclists to coexist in the same right-of-way.





## Chapter 2- Background

### 2.1 Benefits of Bicycling

Bicycle transportation will be an integral element of Vermilion County's future mobility, economic development, public health and environmental sustainability. Bikeability and walkability are important in attracting employers, employees and new residents. Investing in bicycling is an investment in safety, public health, a clean environment, quality of life and economic development that positively impacts all residents, bicyclists and non-bicyclists alike.

- Enhancing safety for all roadway users
- Addressing transportation congestion:
- Improving air quality and reducing energy consumption
- Reducing transportation costs
- Providing transportation options
- Expanding recreational opportunities for recreation and health
- Improving economic competitiveness
- Encouraging mixed-use development



### 2.2 Community Engagement

Development of the Regional Bike Plan began in August 2014 with the assembling of the project team and outlining of the planning process. A major focus of the Plan development process was engaging the public through a myriad of outreach methods.

The public engagement process targeted a variety of audiences with varying levels of interest in and knowledge about bicycling in Vermilion County. The project team strived to conduct a public engagement process that:

- Engaged the public in different ways to acknowledge and address concerns
- Defined key stakeholders, user groups, and organizations and included them in continued dialogue throughout the process
- Followed a transparent and meaningful process of communication
- Provided participants with key information and an opportunity to offer relevant and valued insight and opinions



- Used multiple methods of outreach, mixing traditional methods with newer technology to broaden the cross section of interested participants

### **Methods for Engaging the Public**

In order to engage a diverse public on multiple levels, the team focused on building trust, presenting information in a straight-forward manner, listening, and addressing concerns as they arose. The team worked on developing a variety of outreach strategies that would reach the widest audience possible. Strategies included:



#### **A. Branding the Planning Effort**

A visually appealing image was generated to help create a recognizable identity through printed materials, the Internet, and other communication materials over the planning process.

#### **B. Identifying the Stakeholders**

Identifying and including key stakeholders and interested citizens in a continued dialogue throughout the planning process was critical to the success of the Plan. These stakeholders were involved either through the Bicycle Advisory Committee or through participation in the DATS Technical Committee.

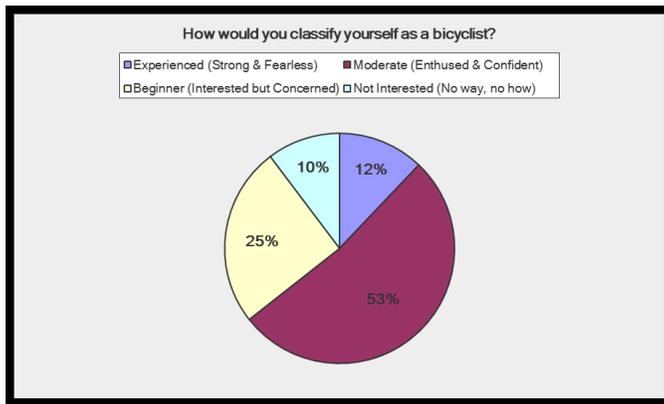
#### **C. Outreach to Agencies and Organizations**

The MPO held specific focus group meetings with public health officials, community well-being organizations, and law enforcement, to hear the various perspectives and build on efforts to encourage safer bicycling practices.

#### **D. Public Survey**

A survey was developed to garner information from the County about community ideas, needs and wants as it pertains to bicycle accommodations. The survey questions were developed with the goal of determining key issues in the study area related to bicycle facilities and the community's level of interest in updating those facilities and creating new ones.

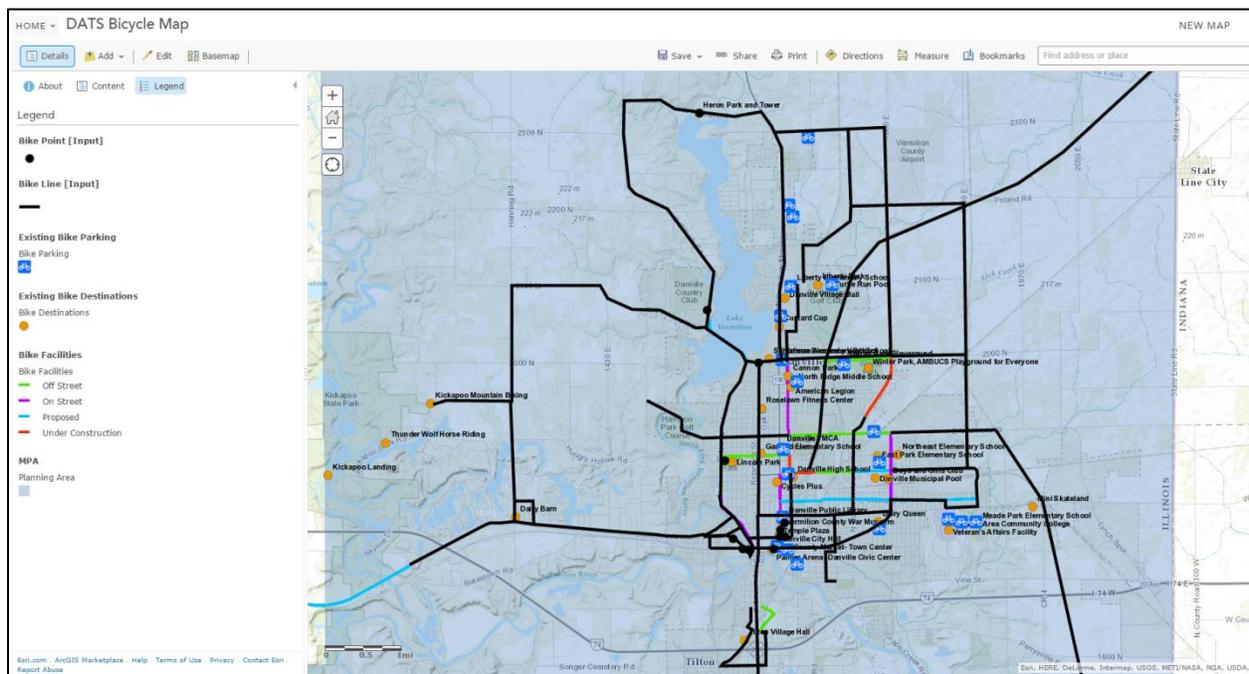
DATS staff distributed an e-mail with the survey link to over 70 contacts on December 12, 2014. Recipients of the e-mail included city administrators, elected officials, county representatives, private businesses, and citizens. Paper copies of the surveys were also placed in local libraries and the YMCA. Out of the 218 surveys received, 198 online surveys were recorded and 20 paper surveys were received. Appendix A shows the results of the regional bicycle survey.



### E. Communication Methods

Multiple means of communication were used throughout the Plan development process to make the process as transparent as possible. The team recognized the need to have both traditional and electronic outreach methods. The following is a list of the methods employed:

- Project Website
- Marketing and Media Releases
- Kickoff Letter to Stakeholders
- Online Mapping Tool (ArcGIS)
- Organization Presentations
- Online Survey
- Draft Plan Open House





## Chapter 3- Vision

The Plan's mission, vision and goals were developed through a series of exercises with the Bicycle Advisory Committee (BAC) and Technical Committee, as well as from information collected during the Plan's survey. For the many stakeholders that helped form this Plan, there is an overarching desire to have a Plan that is both visionary and concrete in terms of how it will be implemented over time.

**[Vision]** Plan for, promote, and provide a complete, connected, and efficient bicycle transportation network that accommodates all users, to encourage improved community health and bicycle safety.

**[Mission]** Increase the number of people using bicycles within the region while reducing the number of crashes involving bicycles.

**[Goal 1] Connectivity:** Provide a bicycle network that is contiguous and connected to other off- and on-street facilities.

**Objective:** Connect regional destinations via bicycle infrastructure facilities.

Providing a connected network of safe and accessible on-street bicycle facilities within the Planning Area is fundamental to achieving the goals of this Plan. On-street routes will connect people to jobs, shopping, transit, schools, parks, and other regional destinations, as well as tie together the region's growing system of shared-use paths.

**Action 1.1:** Connect the City of Danville to the Kickapoo Rail Trail via secure bicycle facilities.

**Objective:** Improve accessibility for bikes around barriers like intersections and rivers

Addressing barriers that impede accessibility and create unsafe bicycling conditions is critical to developing a continuous and connected bicycle network that invites a wide range of bicyclists.

**Action 1.2:** Prioritize and integrate identified barriers into appropriate state, county and local planning documents

Barriers that have been identified in the Plan should be prioritized in terms of how significant they are for making critical links in the network and improving safety.

**Action 1.3:** Include appropriate bicycle facilities in all new bridge projects and major rehabilitation of existing bridges.

The following are critical locations in the Regional Bicycle Network where there are existing bridges that present barriers to bicyclists, or where a new bridge should accommodate bicycles:

- Denmark Road- provides connection across Lake Vermilion to western Danville neighborhoods
- Memorial Bridge- Gilbert Street South Route 1
- 150 Bridge
- Route 1 Bridge Over I-74
- 14<sup>th</sup> Street Bridge Tilton



**Objective:** Promote more bicycling through route signage and end of trip facilities

Installing way-finding signage that provides directional information to major destinations, shared-use path connections, and around major barriers, assists bicyclists through complicated and confusing portions of the network, reaffirms route choice, and will help bicyclists feel more comfortable and confident using the bicycle network. End-of-trip facilities such as adequate and secure bike parking are also important for attracting ridership and making bicycle transportation more convenient.

**Action 1.3:** Install a Signed Bicycle Route System with uniform signage to create a unified and defined network.

A unified system of signage and pavement markings helps bicyclists navigate the bicycle network and also raises awareness of the presence of bicycles among motorists. A comprehensive set of bicycle route wayfinding signs should be developed to connect destinations in the region; this signage should be consistent with MUTCD.

**Action 1.4:** Require and install end-of-trip facilities

Bicycle parking is a key component to making our bicycle network functional. All public facilities, (parks, community centers, libraries, city halls, schools, etc.) should have sufficient bicycle parking to meet demand. Incentives or requirements should be put in place for new commercial and multi-family residential development to provide bicycle parking.

**[Goal 2] Safety:** Improve safety for all modes of transportation

**Objective:** Improve safety of existing roadways for all modes of transportation

The City of Danville and parts of Vermilion County have a number of planned and existing bicycle facilities in place. These facilities will be incorporated into the regional bicycle network, and in some cases, retrofitted based on the recommendations in this Plan.

**Action 2.1:** Prioritize on-street bicycle facilities

While the provision of on-street bicycle facilities identified in this Plan should be a part of all road projects, recommended facilities must be prioritized in order to identify near-term projects with the greatest benefits for bicyclists, such as making critical links to and among major destinations and addressing barriers that create significant impediments to safe and efficient bicycling.

**Action 2.2:** Implement on-street bicycle facilities identified in the Plan to improve accessibility and safety for bicyclists.

All entities involved in roadway planning, design, construction, and maintenance should consult the Plan when working on projects. On-street bicycle facilities identified in this Plan should be integrated into the work programs of these entities. The bicycle facilities should be implemented whenever major road projects are undertaken.



**Objective:** Reduce the frequency of bicycle-vehicle crashes

Reducing the bicycle-vehicle crash rate, while also increasing bicycle ridership through an expanded Bicycle Network, will hinge upon well-designed facilities, addressing problem areas where crashes are occurring, and building awareness among motorists and bicyclists about their respective rights and responsibilities for using the roadway. The Plan identifies a number of implementation actions to address each of these elements. (See Appendix B: Map of Crash Occurrences)

**Action 2.3:** Identify spot locations, corridors and neighborhoods where bicycle crashes are occurring, and focus resources on improving these locations.

On-the-ground assessments should be conducted in all areas where bicycle crashes are regularly occurring to identify necessary spot or network improvements. As a component of implementation prioritization and addressing problem areas, funding resources should be focused on areas where there are high rates of bicycle crashes.

**Action 2.4:** Develop a website where users report crashes, bad pavement, concerns about road conditions, etc. Use community bike tool in an ongoing basis.

DATS should host a website where Regional Bicycle Network users can interactively report conditions and crashes. Data should be compiled and distributed to the various entities involved in plan implementation and roadway maintenance.

**Objective:** Improve safety by designing all bicycle facilities to the latest AASHTO bicycle guidelines and MUTCD Standards.

Following the AASHTO and MUTCD standards will allow local agencies to move forward with confidence that what they are doing is consistent with the latest research on safely accommodating all modes of transportation.

**[Goal] 3 Education and Enforcement:** Educate, raise awareness, and continually remind residents that bicycling is an efficient transportation mode through directed programs and initiatives.

**Objective:** Promote safe and secure bicycle infrastructure

**Action 3.1:** Add lights along shared-use paths and bicycle facilities to increase safety and security

**Objective:** Improve safety and reduce the number of crashes involving bicyclists by developing and implementing education and enforcement programs through partnerships with community organizations.

The bicycle network is designed to provide safe, convenient access for bicyclists to travel throughout the planning area. Like facilities for other transportation modes, this network of bicycle facilities must be used appropriately to be effective. For example, bicycle facilities are designed under the assumption that bicyclists ride the correct direction on streets (with the flow of traffic) and adhere to all traffic control devices. Breaking these rules puts all roadway users at risk,



therefore efforts must be made to encourage a culture of respect and shared usage among bicyclists and motorists.

**Action 3.2:** Expand and support existing and new bicycle education programs through partnerships with community organizations and law enforcement agencies.

As the bicycle network is built and more people are encouraged to bicycle, new and expanded programs will be needed to educate bicyclists and motorists about how to coexist safely in the roadway environment.

**Action 3.3:** Expand safe routes to school programs, including curriculum and safety education programs, to encourage children to walk and bicycle to school and all school levels.

Local governments, school districts, public health organizations, parent associations, and local walking and bicycling advocacy groups should continue to work within the Illinois Safe Routes to School network, and explore new strategies for encouraging children to walk and bicycle to school.

**Action 3.4:** Encourage local police agencies to participate in outreach activities such as bicycle rodeos and school assemblies.

Police officers are seen as authority figures and respected by children, because of this, their involvement in programs and activities that promote safe cycling can help foster responsible riding for a lifetime. Local police agencies can get involved by being present at community bicycling events, developing bicycle and pedestrian safety messages for announcements, and being present on the street near schools during the morning and afternoon when kids are coming and leaving school.

**Objective:** Increase overall bicycle usage and non-recreational bicycle trips

**Action 3.5:** Develop and annual community "Bike Day". Encourage employers to participate in the national "Bike to Work Day".

**[Goal 4]** Increase the commitment of public officials to support or initiate public policy for bicycling in all levels of government- state, local and regional.

**Objective:** Increase intergovernmental cooperation on bicycle policy and projects

Given the number of agencies with influence and responsibility over the roadway network within the planning area, intergovernmental cooperation on bicycle policy and projects is critical for successful implementation of the Plan. This objective relates back to the Plan's vision for promoting consistent design and development of bicycle facilities across jurisdictions.

**Objective:** Establish funding sources for implementation and ongoing maintenance

Implementation of the Plan will be a collaborative effort between a number of jurisdictions and agencies. Every transportation project offers an opportunity to implement a part of this Plan. Therefore, institutionalizing bicycle improvements at all levels of government will be essential for successful implementation of this Plan.



## Chapter 4- A Network to Meet the Needs

Vermilion County has a number of qualities that make it a great place for bicycling. At the same time, the number of major highways and the Interstate system can make it hard to bicycle from one municipality to the next.

### 4.1 Physical Conditions

Physical conditions have a great effect on bicycling and largely determine who will ride and where they ride to. This section summarizes the regional bicycle network on a general level. The general landscape, development patterns, roadway conditions, trail conditions and barriers to bicycle travel have been considered. This assessment is based upon field observations, map study by the project team, and input from the Bicycle Advisory Committee (BAC) and public participants.

#### Existing Facilities

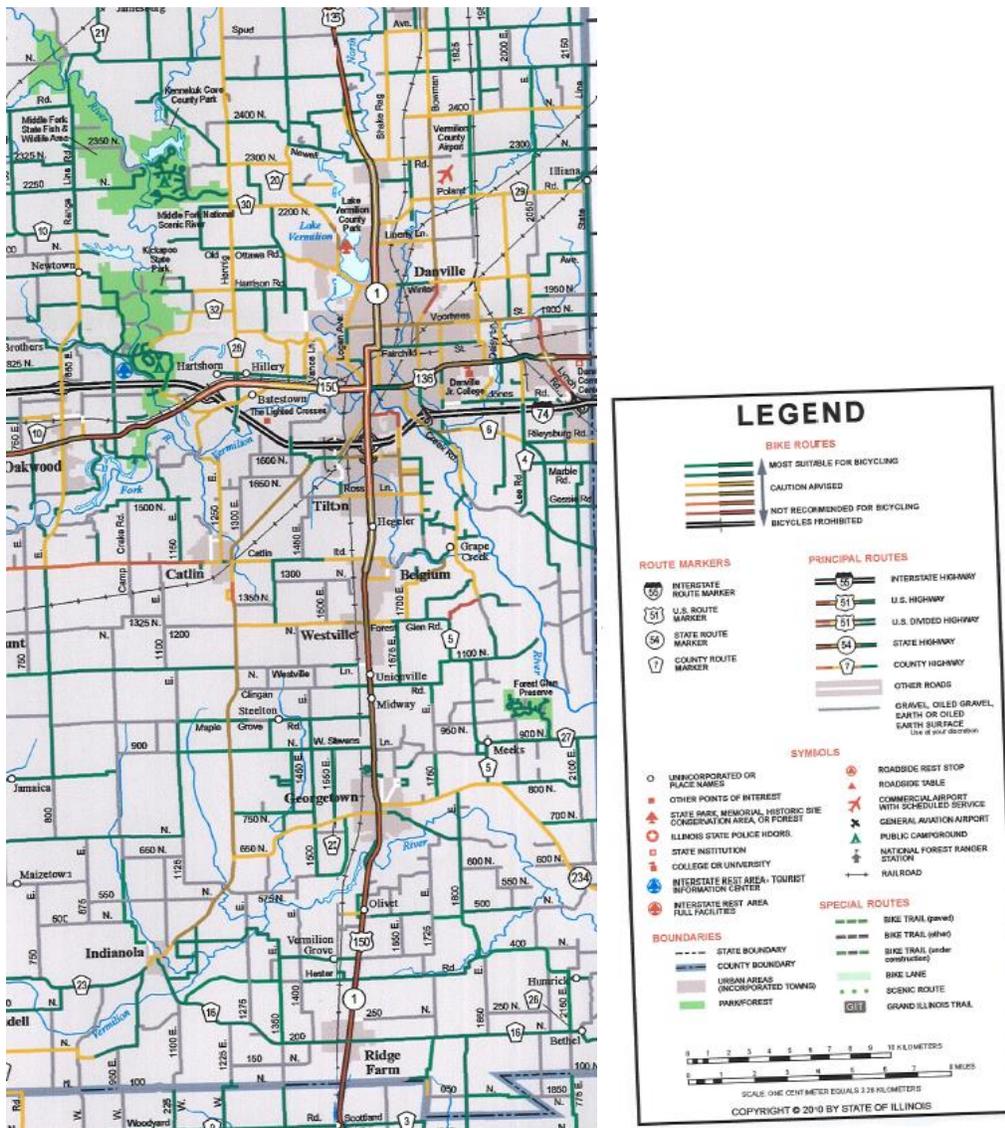
The 2015 Regional Bike Plan builds on existing bicycle routes and lanes that have already been developed through the 2010 Regional Bike Plan. A number of bicycle facilities are already in place in the City of Danville, however there is a lack of uniformity throughout the region with regard to marking and signage. Facilities should be retrofitted and new signs installed to improve safety and ensure consistency across the regional network.

Relevant existing data is available for bicycle-related crashes, but not bicycle counts. Bicycle-related crashes are reported to the Illinois Highway Patrol by county and local jurisdictions. While there is significant data provided, additional details on the type of crash and where they occur would be critical information in identifying exact locations of safety concerns, as well as providing more details about the causes of crashes involving bicyclists.

#### Bicycle Facility Network

The geographic scope of this Plan includes the City of Danville and the urbanized parts of Vermilion County. The facilities recommended by the Plan are designed to meet the needs of all types of bicyclists. One of the most important outcomes of the Plan is a thorough assessment of the Region's roadway network, which has resulted in detailed recommendations for on-street bicycle facilities as a part of the entire bicycle network. The Existing and Planned Bike Facilities Map identifies the location and initial facility recommendation for an additional 26 miles of bicycle facilities.

Map 2.1 County Bikable Routes and Regional Destinations



### Barriers to Bicycle Travel

Railroad tracks, Interstate 74, and the river system all create barriers for bicycles and other road users. Where these barriers exist, bicycles are often funneled into the same pinch points. In many cases, these pinch points are hostile environments for bicyclists because there is little or no excess space on the roadway and sidewalks. As cooperation among various agencies and local municipalities improves, there is potential for more opportunities to enhance bicycle safety and access in conjunction with other capital projects. As barriers are identified and removed, system connectivity is increased and opportunities for destination-based bicycling become viable.



Safe and convenient access across bridges is critical to creating a bicycle friendly region and providing continuity along cross-regional bicycle routes. In a region where there are multiple river and creek systems, in addition to many highway and rail corridors, bridges of all sizes provide the connectivity necessary to create a complete, integrated bicycle network that is truly a viable alternative to the automobile. The lack of adequate bicycle facilities on bridges presents a major barrier to increasing bicycle usage in the region.

There will be many opportunities to improve and expand bicycle access leading to and across bridges as the region moves forward in rehabilitating and replacing existing bridges and constructing new ones. Creating access to the bridge on both ends will be equally important.

Following is a sample of important community linkages for which bicycle travel is limited or precluded:

- Access to North Danville is severely limited, especially north of Liberty Lane
- Crossing State Route 1 is difficult and unsafe
  - Gilbert Street, south of Fairchild to south county boarder
  - Vermilion Street, north of Fairchild
- Crossing the Vermilion River (Memorial Bridge)
- Access west of Danville is limited
- Oregon Avenue Bridge has limited sidewalk availability
- Denmark Road (across Lake Vermilion) does not support bicycle or pedestrian connections
- County Road 7 (Catlin-Tilton Road) provides limited shoulder width

Barriers to bicycle travel can be addressed in a variety of ways, including the following:

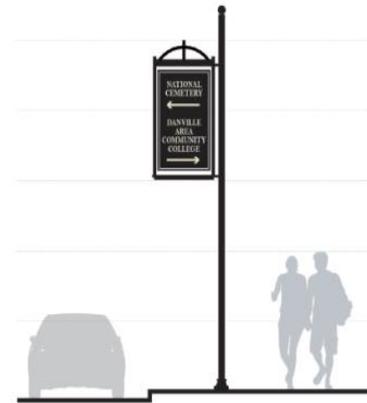
- Prioritizing improvements along roads that cross limited-access highways at locations where there is not an interchange;
- Improving bicycling conditions and ramp crossings (on-road, off-road, or both) through interchanges;
- Providing grade-separated bicycle and pedestrian crossings of highways, railroads, streams and rivers to make crossing safe and direct;
- Improving at-grade crossings of major arterials that are not limited-access;
- Providing wayfinding bike route signs along neighborhood routes that lead to preferred crossing locations or provide other options for circumventing barriers.



## 4.2 Future Facilities

The proposed Regional Bicycle Network includes a variety of facility improvements that respond to the different types of bicyclists and their needs. Providing a mix of bicycle facility types will allow the various types of bicycle users to reach all desired locations in a variety of ways, depending on skill and level of comfort.

It will be important to establish quick wins in the initial phases of implementing the Plan in order to demonstrate immediate progress and build momentum. These quick wins will likely be the “low hanging fruit” opportunities rather than the controversial or difficult to overcome barriers. It is equally important to understand the magnitude of the constraints that will need to be overcome in order to develop and continuous and connected Regional Bicycle Network. The main opportunities and constraints of the Plan are discussed below, including access to motor vehicle capacity on streets, intersection safety and access improvements, bicycle connectivity and safe access to transit and trails, and signage.



### Excess Street Capacity

The 2010 Census shows population decreases in both the City of Danville and Vermilion County. As a result of this population loss and general trends that show a decrease in vehicle miles traveled nationwide, some roadways within the planning area have excess motor vehicle capacity, while others are experiencing congestion. Natural features such as the Vermilion River, built features such as Interstate 74 and rail lines, and destinations such as employment centers often direct traffic toward a limited number of streets.

There is an opportunity to capitalize on this excess roadway capacity and create a robust bicycle network. A roadway with excess capacity means that street space can be more easily reallocated, often by simply using paint to channel traffic in ways that create space for on-street bicycle facilities.



## Intersection Safety and Access Improvements

Intersections are where most on-street bicycle crashes involving motor vehicles occur. Public input, verified by field review, identified numerous intersections that present safety and access challenges for bicyclists. In some cases, challenges exist because of intersection geometrics that allow for high speed vehicle movement. In other cases, crashes could be attributed to traffic control practices, pavement markings and signage. In all cases, problematic intersections discourage bicycling, especially by novice bicyclists who consistently identify fear of unsafe and unlawful motorist behavior as the number one reason for not bicycling more frequently.

## Bicycle Connectivity and Safe Access to Alternative Modes of Transportation

Providing bicycle facilities that connect neighborhoods to and from existing transit stops and bicycle facilities will help to address unmet bicycling demand for commuting, recreation and short trips.

## Signage

We have an opportunity to create a world-class signage system by taking advantage of lessons learned from the leading bicycle friendly communities. As facilities recommended in this Plan are implemented, existing route signs can be created and installed. The installation of signage could be accelerated if an aggressive wayfinding signage program were in place to “stake out” the entire Regional Bikeway System even before the on-street facilities are implemented.

## **4.3 Classifications for Bicycle Facility Recommendations**

The bicycle facility recommendations shown are organized by facility type or other classification category to assist map viewers. The following section defines each facility type, discusses their application and how they help cyclists, and explains generally where in the County there are located.

### **1. Bicycle Lanes**

**Definition:** Bicycle lanes are pavement markings (lane stripes, directional arrow, and bicycle symbol) that designate a portion of the roadway for the preferential or exclusive use of bicycles. They vary in width from four to six feet; however, IDOT standard is five feet (dependent on other variables such as ADT, lane width, and posted speed).

**Contribution to the Bicycle Network:** Bicycle lanes are most prevalent facility recommendation in the countywide bicycle network. This recommendation is applicable on a wide variety of roadway types, including collectors and minor arterials. Based upon an assessment of existing conditions and the potential for future development, a variety of actions may be employed to achieve bicycle lanes, including:



- Adding striping and bicycle symbols to existing pavements without impacts to motor vehicle travel;
- Reducing lane widths for motor vehicle travel lanes;
- Eliminating one or more motor vehicle travel lanes;
- Reducing on-street parking capacity; or
- Widening the roadway.

In general, many streets and roadways throughout the planning area were found to have excess pavement width available to reallocate to bicycle lanes.

## **2. Shared-Lane Markings**

**Definition:** Shared-lane markings (sharrows) are pavement markings that help position bicyclists in the most appropriate location to ride in order to safely share the travel lane with motor vehicles. The markings also provide a visual cue to motorists that bicycles have a right to use the road, and that the limited space available in the marked travel lane must be shared by motorists and bicyclists.

**Contribution to the Bikeway Network:** While shared lane markings are recommended in some locations, bicycle lanes may be more appropriate on roadways with more than 3,000 motor vehicles. This treatment should be viewed primarily as a retrofit facility that is used when bicycle lanes are not feasible, rather than a facility type that is optimal in its own right.

## **3. Striped Paved Shoulders**

**Definition:** Striped and paved shoulders should be at least three feet wide to provide enough space outside of a travel lane to be beneficial and safe for bicyclists.

**Contribution to the Bike Network:** In Vermilion County, striped paved shoulders are typically the best treatment along uncurbed roadways that serve lower density residential communities and pass through undeveloped landscapes. Volumes of bicyclists are typically lower in these settings and bicycle use may be more oriented towards recreational and fitness riding than daily transportation.

Where rumble strips are placed across the traffic lane in rural areas to warn motorists of upcoming traffic controls, a minimum 3 foot clear paved area on the shoulder should be provided to allow a bicyclist an opportunity to avoid riding on the rumble strip.

## **4. Shared-Use Paths**

**Definition:** Shared-use paths include paved and crushed stone paths and trails that are to be used by both pedestrians and bicyclists. In Vermilion County, these paths are found in a variety of settings, including trails in developed parks and recreation facilities, side paths along major roadways, and coming soon rail trails.

**Contribution to the Bikeway Network:** Recommendations for new and upgraded shared-use paths are distributed throughout the planning area. Trail system expansion and connection recommendations are geared to closing key gaps, improving access to between trails and their



surrounding neighborhoods, improving trail linkages to transit stations, and otherwise maximizing the utility of the trail system for transportation.

## **5. Grade Separation**

**Definition:** Grade separations include bicycle/pedestrian bridges, tunnels or underpasses. They are necessary for crossing railroads, streams and rivers, and other features of both the natural and built landscape. They are the preferred way to address bicycling barriers created by major highways.

## **6. Transit Station Improvements**

**Definition:** Recommendations to improve bicycle access to the DMT transit station address issues such as the quantity, quality, and security of bicycle parking, as well as on-road and off-road access issues in and around the station area.

**Contribution to the Bicycle Network:** Examples of recommended improvements include the following:

- Installing bicycle parking racks around the transfer zone;
- Installing covered bicycle parking to replace or complement uncovered bike parking equipment;
- Improving access to the station with short path improvements, crosswalks, curb ramps, on-road bike lanes along station access roads or through parking lots, or other facilities to enhance safety and accommodate cyclists; and
- Install bicycle wayfinding signage and include distances to the major destinations.

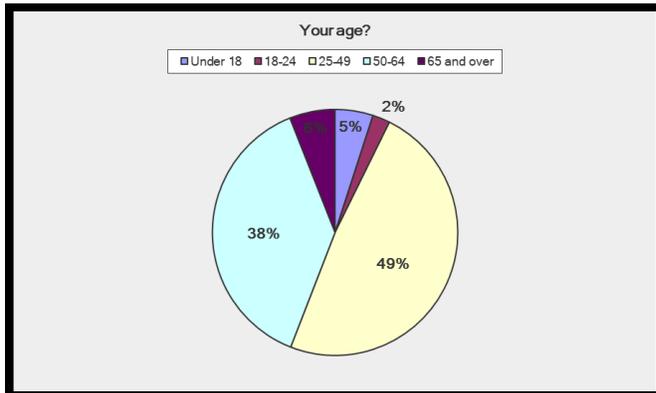
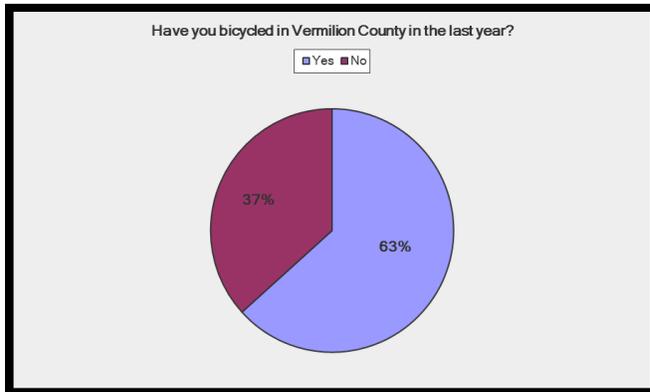


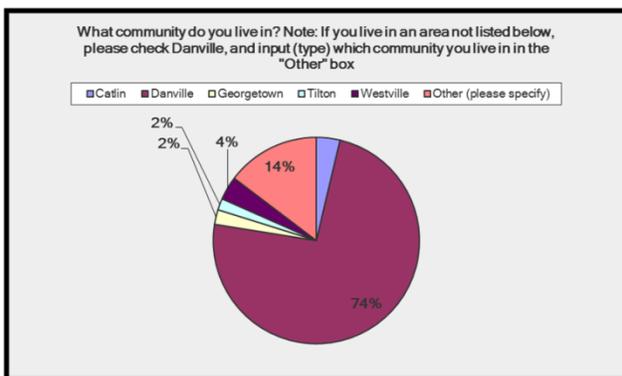
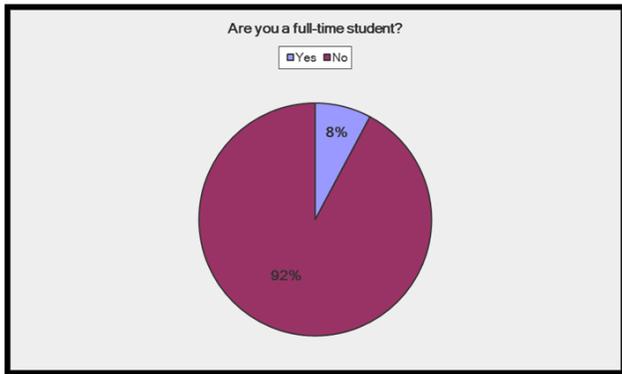
## Appendix A: Public Input Survey Analysis

This section summarizes the results of the Public Input Survey. The survey results establish the basis for how the community views and uses the existing bicycle network.

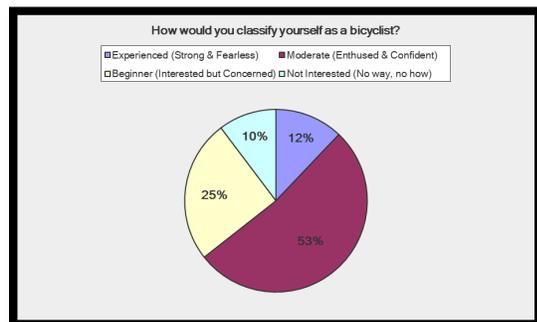
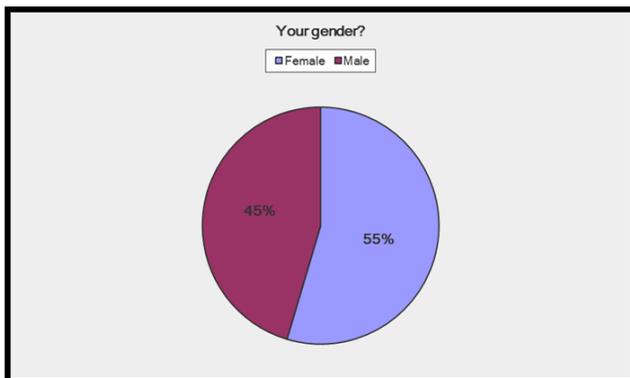
### Public Input Survey Results and Analysis

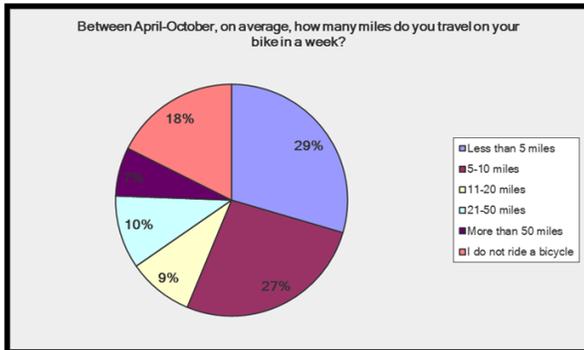
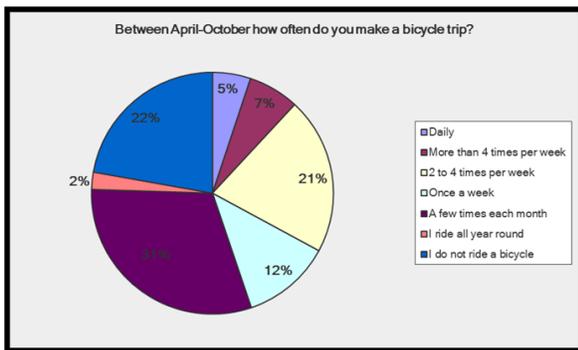
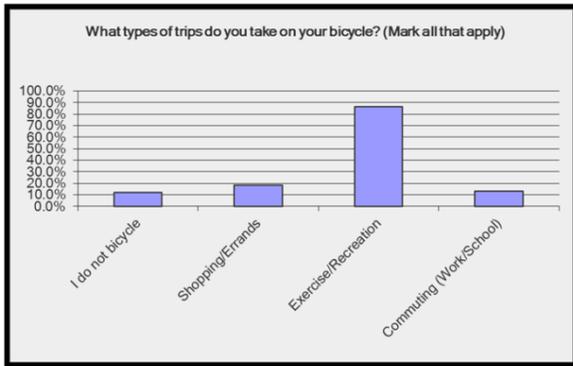
DATS staff sent an e-mail with the survey link to over 70 contacts on December 12, 2014. Recipients of the e-mail included city administrators, elected officials, county representatives, private businesses, and citizens. Paper copies of the surveys were also placed in local libraries and the YMCA. Out of the 218 surveys received, 198 online surveys were recorded and 20 paper surveys were received.





Other:	
Indiana- 2 responses	Champaign-Urbana- 2 responses
Oakwood- 6 responses	Rossville- 1 response
Hoopeston- 1 response	Danville unincorporated-1 response
Ridge Farm- 1 response	Rural- 2 responses
Fithian- 1 response	

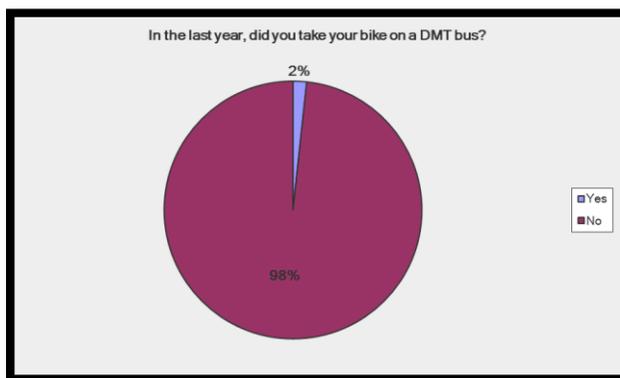
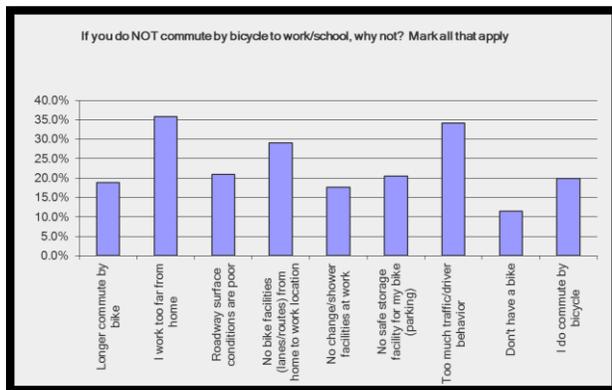
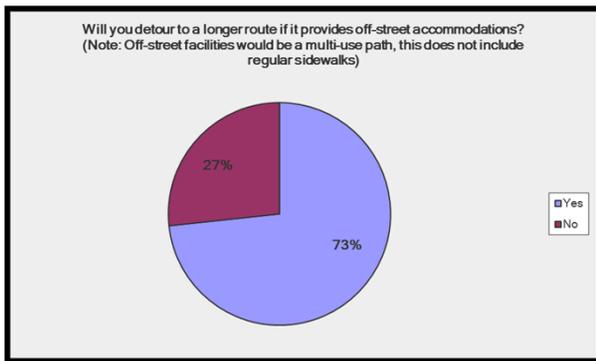
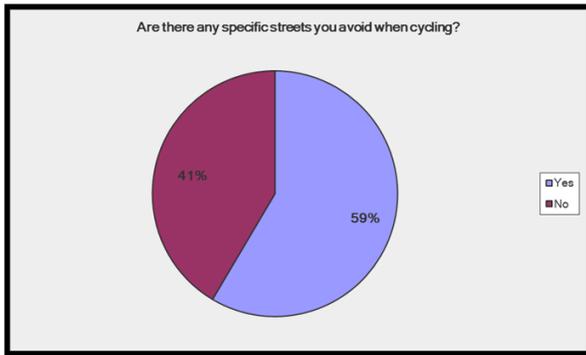


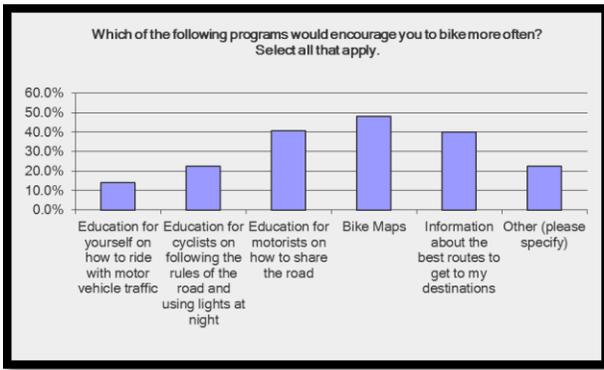
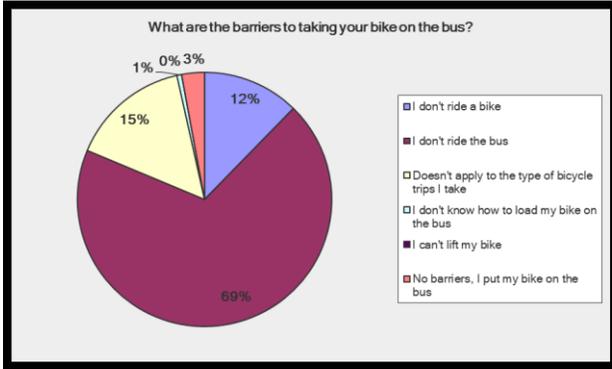


Streets Avoided:	
Gilbert south of Voorhees	Logan Street (North of Voorhees)
State Route 1	Main Street
State Route 9	Bowman Avenue
US 150	Vermilion Street
Gilbert & Main Intersection- and south of it	Fairchild
Denmark Road	Oak Street
High traffic areas	Seminary Street
High crime neighborhoods	Collett Street



Roughly paved streets	Henning Road
Georgetown Road	





“Bike paths” and “more bike lanes” were recorded several times on the survey results as write in suggestions.



# CERTIFICATE OF PUBLICATION IN The Independent News

The undersigned, THE NEWS-GAZETTE, INC. by its authorized agent, does hereby certify that said corporation is the publisher of The Independent News and that the same is the weekly secular newspaper of general circulation published in Georgetown, Vermilion County, Illinois, and said newspaper is a newspaper as defined by 715 ILCS 5/5 (1992) and 715 ILCS 10/1 (1992); said publisher further certifies that the annexed notice was published in said newspaper, on the following date(s);

04/29/2015

### DANVILLE AREA TRANSPORTA

Said publisher further certifies that the date of the first paper containing the said notice was on the first date hereinabove set forth and that the date of the last paper continuing the said notice was on the last date hereinabove set forth.

**Danville Area  
Transportation Study**  
The LRTP, TIP, UPWP, and Bike Plan have been placed on public review at these locations:  
Libraries of Georgetown, Catlin, Danville and Westville and also online at <http://www.dats-il.com>  
Leave comments in the documents or send to:  
Telephone: 217-431-2673; Mail: 1155 E. Voorhees Street, Danville, IL 61832; email: [marq@ci.danville.org](mailto:marq@ci.danville.org)  
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