

CITY COMMISSION AGENDA MEMO
February 26, 2016

FROM: Jared Tremblay, Infrastructure Analyst, Staff Liaison to the Bicycle and Pedestrian Advisory Committee

MEETING: March 8, 2016

SUBJECT: City of Manhattan's Strategic Five-Year Plan for Bicycling Update

PRESENTER: Jared Tremblay, Infrastructure Analyst, Staff Liaison to the Bicycle and Pedestrian Advisory Committee

BACKGROUND

In 2011 the City of Manhattan, with the aid of the Bicycle Advisory Committee, created the Five-Year Strategic Plan for bicycling with the goal of increasing cyclist safety and awareness, and ultimately increase the number of cyclists. The main focus of this Plan was the construction of bicycle boulevards on low traffic, low speed roads that connect major destinations and are suitable for many types of cyclists. Bike boulevards have shared lane markings (a bicycle symbol with double chevron; often called sharrows) and updated street signs (a bicycle emblem added after the street name) to aid in awareness and identification. The first project, Moro Street from North 11th Street to North 4th Street, was constructed in 2012. Over the next several years the City added a total of 4.3 miles of bike boulevards. In 2014, the City, in conjunction with the Flint Hills Wellness Coalition and the Greater Manhattan Community Foundation, was awarded a Kansas Health Foundation's Healthy Living Grant to continue the efforts laid out in the Five-Year Strategic Plan. The grant paid for the construction of the 9th Grade Center path along the Houston Street Bike Boulevard, as well as the purchase of over 200 sharrows (budget item EN081P). Unfortunately, the City's 2014 budget for the Bike Boulevard Project (EN081P) was removed with the awarding of the grant. At the same time, contractor estimates came in high. Without funding to install them, the newly purchased sharrows were placed in storage, which delayed the completion of the Five-Year Strategic Plan for Bicycling.

Throughout summer 2015, a group of volunteers, lead by three City employees, donated their time and efforts on Saturday and Sunday mornings to install the stored sharrows. Because sharrows were available but funding was not, projects that required sharrows were completed and those that required other infrastructure were postponed. This can be

seen with the completion of the 2014 projects (Houston Street from South 16th Street to South 3rd Street and 8th Street from Yuma Street to Bertrand Street), followed by 2015's Vattier Street (North Manhattan Avenue to North 3rd Street), and finally 2016's Denison Avenue (Anderson Avenue to Leavenworth Street and North 18th Street from Leavenworth Street to Humboldt Street). The 2015 Yuma Street bike lane project was postponed.

With the original Five-Year Strategic Plan for bicycling scheduled to conclude at the end of 2016, City staff began working with the Bicycle and Pedestrian Advisory Committee to create an updated Strategic Plan. As with the previous Strategic Plan, and per the goals of the Manhattan Area Transportation Strategy (MATS), the goal of the new strategic bike plan is to create a safe, convenient, cohesive, and integrated network of bike routes where cycling becomes a viable form of daily transportation.

The process of creating the new Strategic Plan began by reviewing the pros and cons of the completed and uncompleted Five-Year Strategic Plan for bicycles projects, then researching recommendations and projects from various planning documents (MATS, Manhattan Bike Master Plan, Manhattan 2035, Flint Hills Metropolitan Planning Organization: Flint Hills Transportation Plan, and the City's Capital Improvement Program) to create a list of needed/potential projects. Each project in the list of over 140 was individually analyzed using GIS (Geographic Information Systems) and scored based on a comprehensive formula to find the most needed projects that have the highest return on investment. The formula used can be found in the enclosed Table 2.

City staff used the results to create a new Strategic Plan that will focus on cost effective and warranted projects that bring bike infrastructure to new parts of the city and increase city-wide connectivity. To accomplish this, a variety of bike infrastructure will be used. For centralized and high rider-demand areas, the use of bike boulevards (sharrows, wayfinding, modified street signs, and traffic calming) will continue. For more peripheral and lower rider-demand connections, bike routes (signs only) will serve as a cost effective option.

The project review also identified areas of improvement for existing infrastructure, in particular the installation of wayfinding along all routes. In 2016, existing bike boulevards will be improved to recommended levels with the installation of wayfinding signage. Future bike boulevards have wayfinding budgeted as part of project costs. Additionally, the new Strategic Plan allots annual funding to information and publicity through bike maps and signage, as well as to safety and education efforts through utility bill inserts.

City staff is also working to increase the efficiency and impact of biking in Manhattan. These efforts include using the full list of analyzed projects to incorporate bike infrastructure into larger scale projects by collaborating with various City departments. City staff is also working with many organizations to form a broader and more connected community to address bicycle and pedestrian issues. Organizations regularly meet, which include the Flint Hills Metropolitan Planning Organization, Kansas State University,

USD 383, Flint Hills Regional Transit Administration, Downtown Manhattan Inc., Greater Manhattan Community Foundation, Flint Hills Wellness Coalition, Riley County Health Department, and the Safe Routes to School Committee. Education and awareness are being addressed through seasonal appearances on KMAN radio, Bike Month events, as well as Parks and Recreation Department events.

FINANCING

City Administration recommends the following schedule of projects shown in Table 1, with their associated costs to be equally funded through the City’s Special Street and Highway Fund and General Fund through 2020. Figures 1 through 6 illustrate the projects completed during the first Five-Year Strategic Plan for bicycling, as well as the annual budgeted projects for the Five-Year Strategic Plan for bicycling update. The 50-50 split between Special Street and Highway Fund and General Fund has been proposed in the 2017 Capitol Improvements Plan (CIP) budget recommendation.

Table 1. Five-Year Strategic Plan for Bicycling Update

Year	Project	Estimated
2016	Bike Maps	\$0
	Wayfinding Signs	\$2,600
	Safety/Education (Utility Bill Insert)	\$1,000
	Bike Boulevard (North 5 th Street: Moro Street to Humboldt Street)	\$8,000
	Bike Boulevard (South 5 th Street: Poyntz Avenue to Yuma Street)	\$8,000
	Bike Boulevard (Jarvis Street: Claflin Road to Jardine Drive)	\$5,000
	Bike Boulevard (College Heights Road.: Denison Avenue to College Avenue)	\$20,000
	Bike Boulevard (Hayes Drive, Gross Street, & Judson Street: Casement Road to Allen Road)	\$7,400
	Bike Route Improvement (Denison Avenue: Anderson Avenue to Claflin Road)	\$200
	Bike Route Improvement (Vattier Street & North 3 rd Street to Tuttle Creek Boulevard & Bluemont Avenue)	\$4,000
	Intersection Improvement (North Manhattan Avenue & Moro Street)	\$1,500
	“Except Bikes” Signs	\$300
	Total for 2016	\$58,000
2017	Bike Maps	\$1,000
	Safety/Education (Utility Bill Inserts)	\$1,000
	Bike Boulevard (S Manhattan Avenue Phase 1: Poyntz Avenue to Linear Trail)	\$13,000
	Bike Boulevard (Colorado Street: South 3 rd Street to South 8 th Street)	\$8,000
	Bike Boulevard (Dickens Avenue: College Avenue to Oxford Place)	\$15,000
	Bike Boulevard (South Juliette Avenue (Colorado to Pottawatomie), Pottawatomie Avenue to Linear Trail)	\$15,000
	Bike Route (Beachwood Terrace)	\$1,000
	Bike Route (Stone Glen Drive, Highland Ridge Drive, and Hunter Avenue)	\$1,000
	Bike Route (Butterfield Road)	\$700
	Bike Route (Dickens Avenue: Wreath Avenue to Hudson Avenue)	\$500
	Bike Route (Snowbird Drive and Sunnymead Road)	\$1,200
	Bike Route (Plymouth Road, Londondery Drive: Plymouth Road to Hudson Trail)	\$1,200
Bike Route (Sharingbrook Drive, Lisa Lane, Westbank Way)	\$1,400	
	Total for 2017	\$60,000
2018	Bike Maps	\$1,000
	Safety/Education (Utility Bill Inserts)	\$1,000
	Bike Boulevard (South Manhattan Avenue Phase 2: Poyntz Avenue to Linear Trail)	\$38,000
	Bike Boulevard (Laramie Street: North 14 th Street to Fairchild Terrace)	\$20,000
	Total for 2018	\$60,000

2019	Bike Maps	\$1,000
	Safety/Education (Utility Bill Insert)	\$1,000
	Bike Lane (Sunset Avenue: Montgomery Street to Claflin Road)	\$52,000
	Bike Boulevard (College Avenue: College Heights Road to Claflin Road)	\$6,000
	Total for 2019	\$60,000
2020	Bike Maps	\$1,000
	Safety/Education (Utility Bill Inserts)	\$1,000
	Bike Lane (Poyntz Avenue: Sunset Avenue to 17 th Street)	\$50,000
	Sharrow Replacement (City-Wide)	\$8,000
	Total for 2020	\$60,000

RECOMMENDATION

City Administration is seeking feedback and direction on the implementation of the updated Strategic Bike Plan.

POSSIBLE MOTION

No motion is necessary as this is a work session.

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Enclosures:

1. Figure 1. – Completed Five-Year Strategic Plan for Bicycling
2. Figure 2. – 2016 Five-Year Strategic Plan for Bicycling Update projects
3. Figure 3. – 2017 Five-Year Strategic Plan for Bicycling Update projects
4. Figure 4. – 2018 Five-Year Strategic Plan for Bicycling Update projects
5. Figure 5. – 2019 Five-Year Strategic Plan for Bicycling Update projects
6. Figure 6. – 2020 Five-Year Strategic Plan for Bicycling Update projects
7. Table 2. – GIS Analysis Formula

Strategic Five-Year Plan for Bicycling: 2012-15 Completed Projects

Bike Route 

Bike Blvd 

Bike Lane 

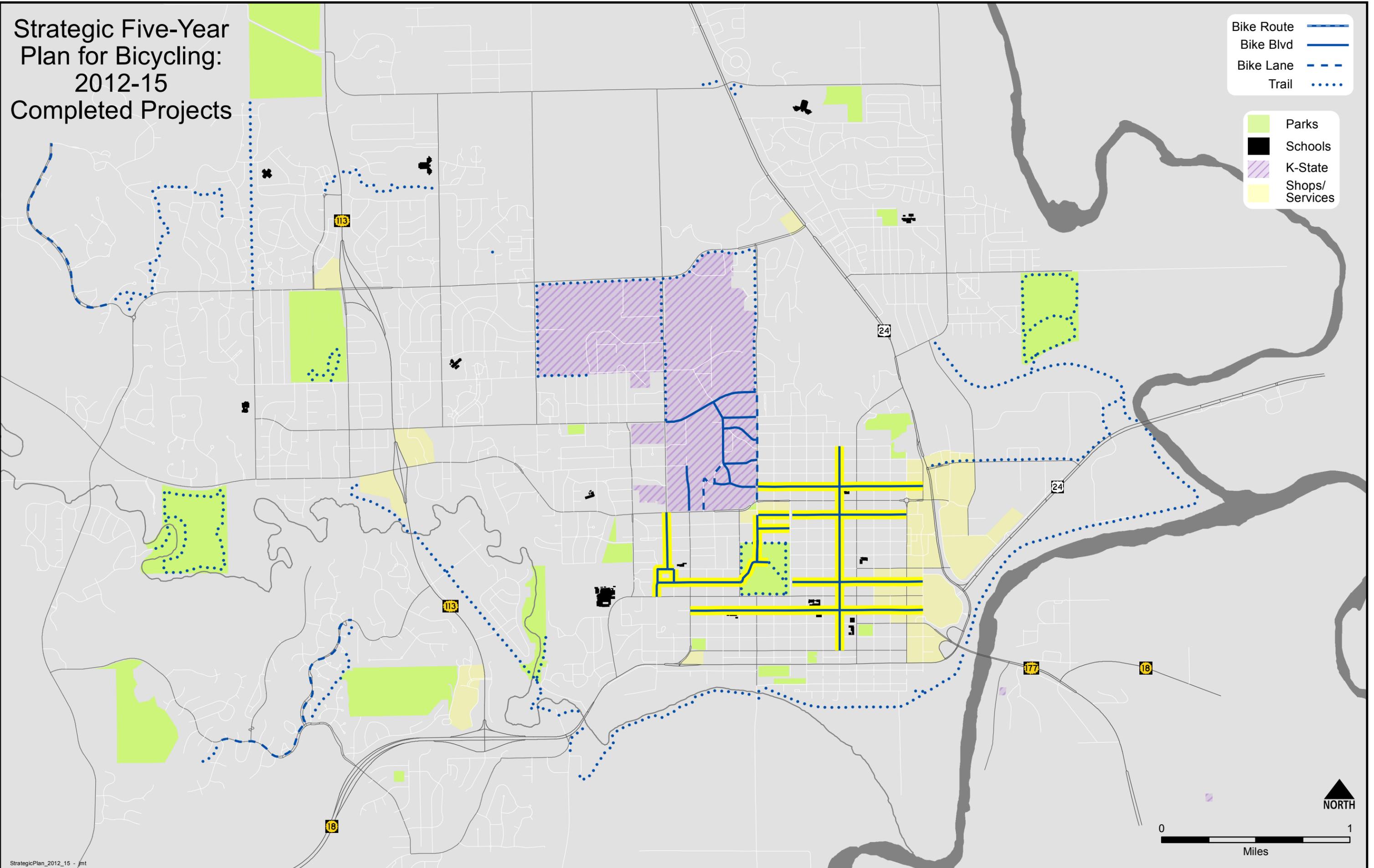
Trail 

 Parks

 Schools

 K-State

 Shops/
Services

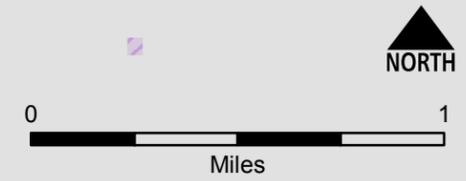
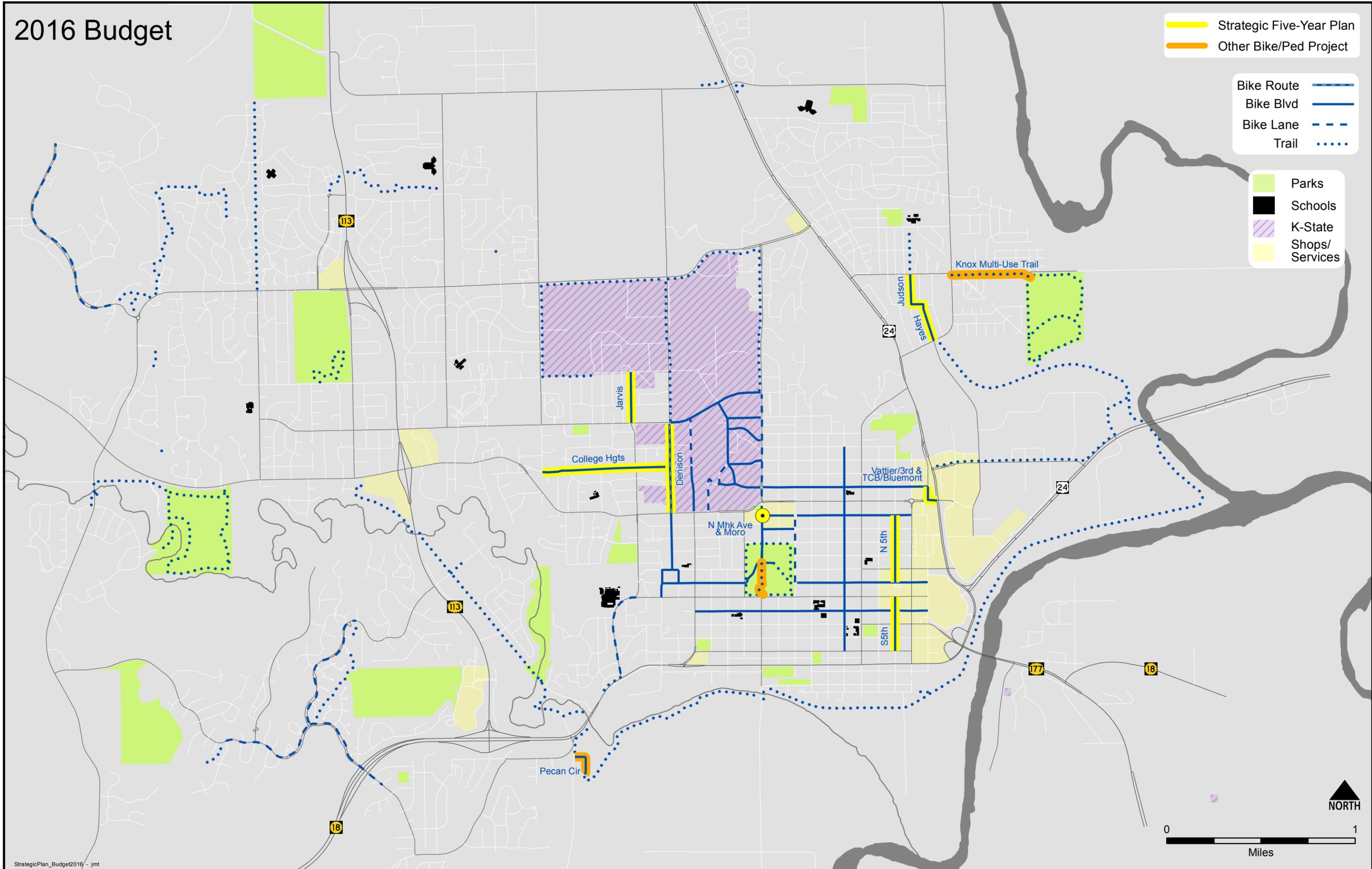


2016 Budget

- Strategic Five-Year Plan
- Other Bike/Ped Project

- Bike Route
- Bike Blvd
- Bike Lane
- Trail

- Parks
- Schools
- K-State
- Shops/Services

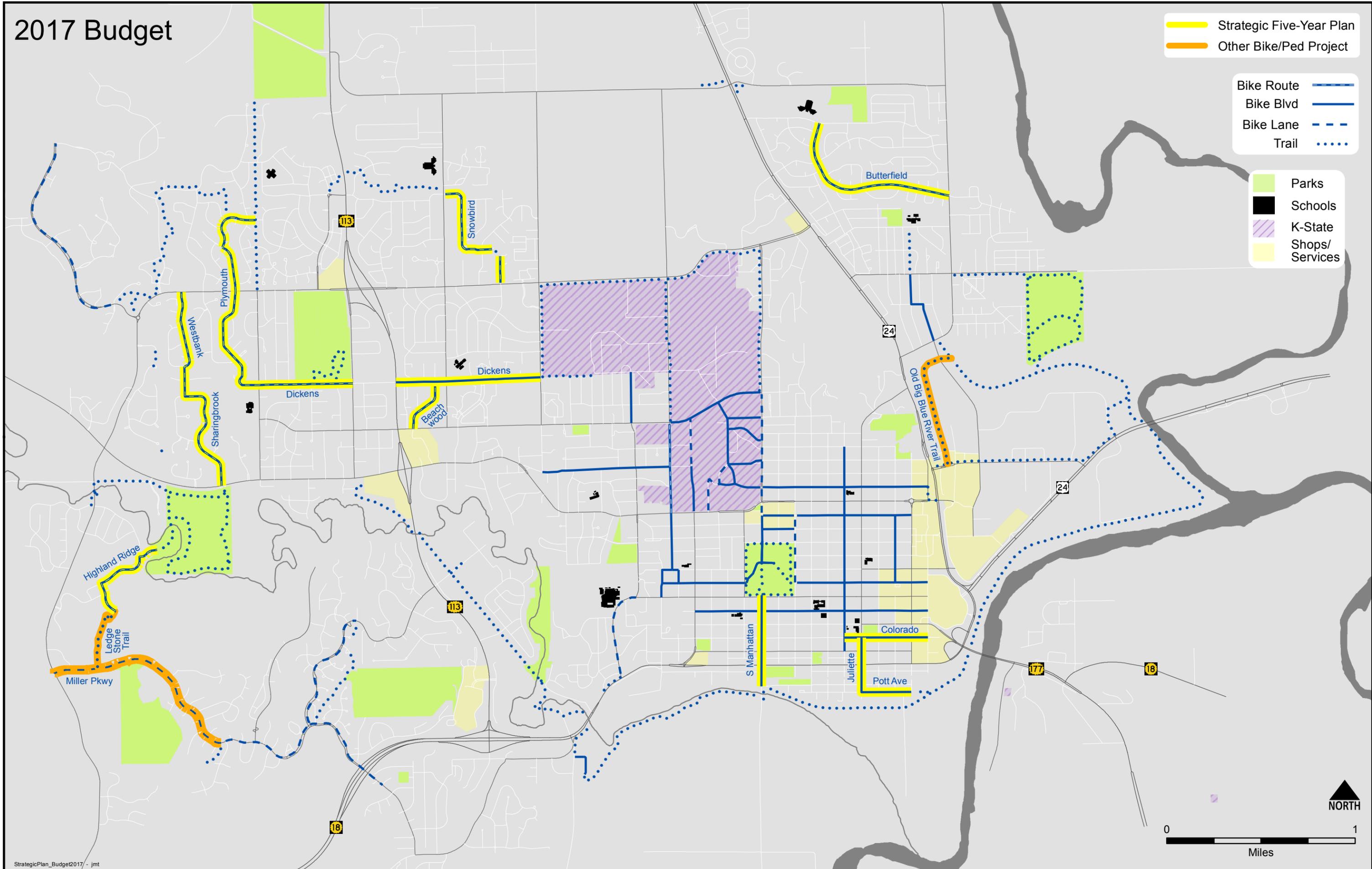


2017 Budget

- Strategic Five-Year Plan
- Other Bike/Ped Project

- Bike Route
- Bike Blvd
- Bike Lane
- Trail

- Parks
- Schools
- K-State
- Shops/Services

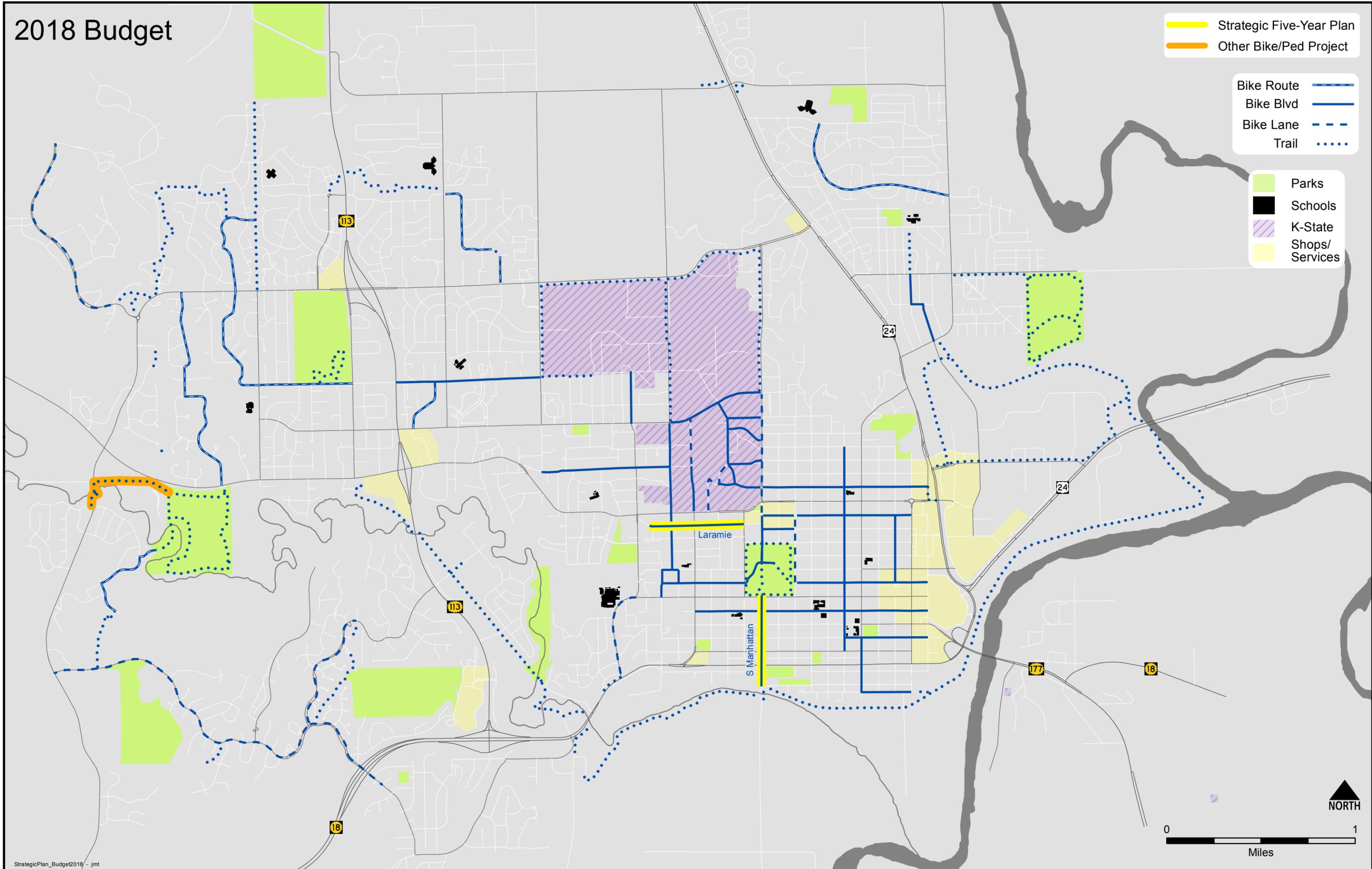


2018 Budget

- Strategic Five-Year Plan
- Other Bike/Ped Project

- Bike Route
- Bike Blvd
- Bike Lane
- Trail

- Parks
- Schools
- K-State
- Shops/Services

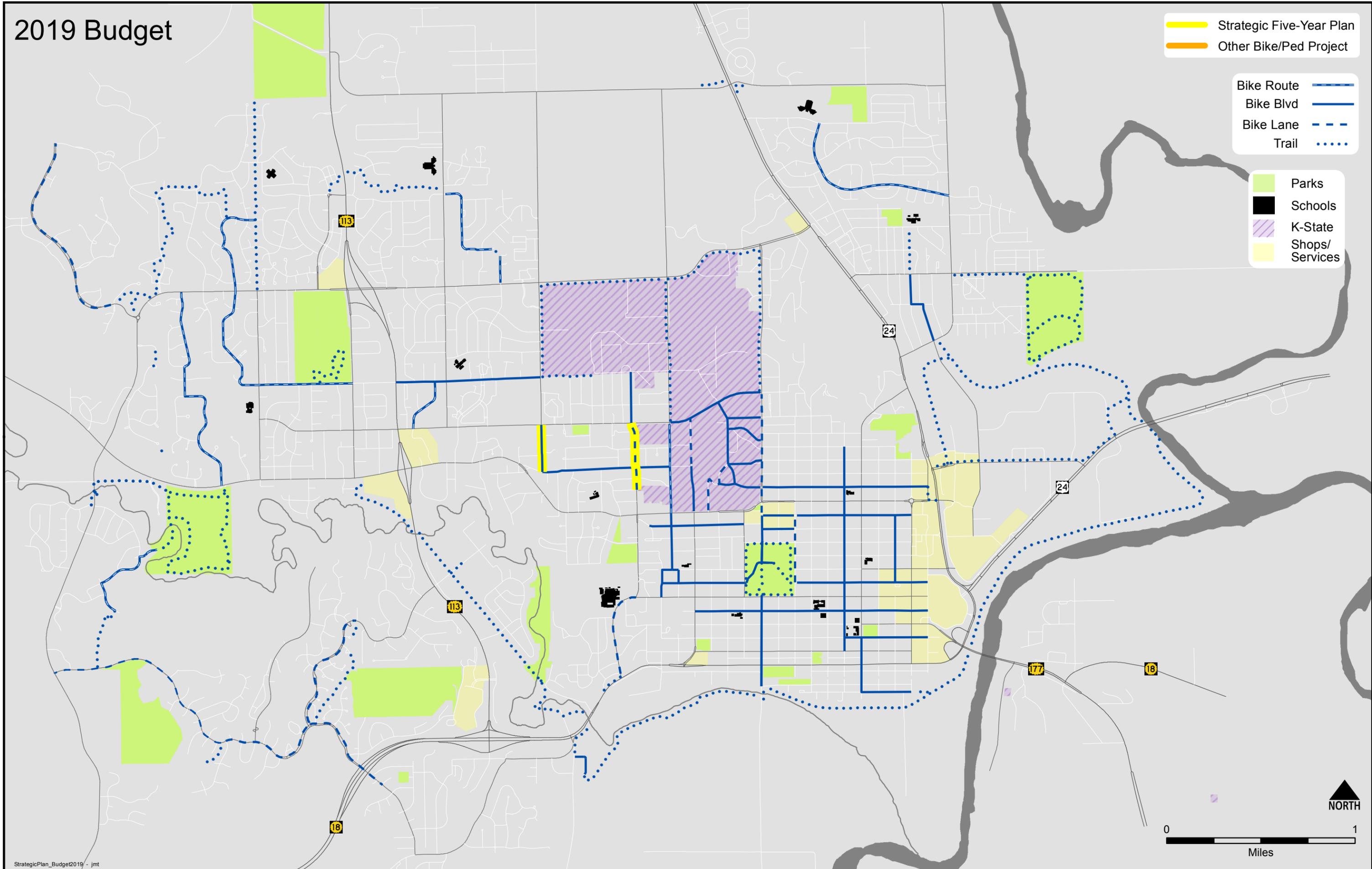


2019 Budget

Strategic Five-Year Plan
Other Bike/Ped Project

Bike Route
Bike Blvd
Bike Lane
Trail

Parks
Schools
K-State
Shops/
Services



2020 Budget

Strategic Five-Year Plan
Other Bike/Ped Project

Bike Route
Bike Blvd
Bike Lane
Trail

Parks
Schools
K-State
Shops/
Services

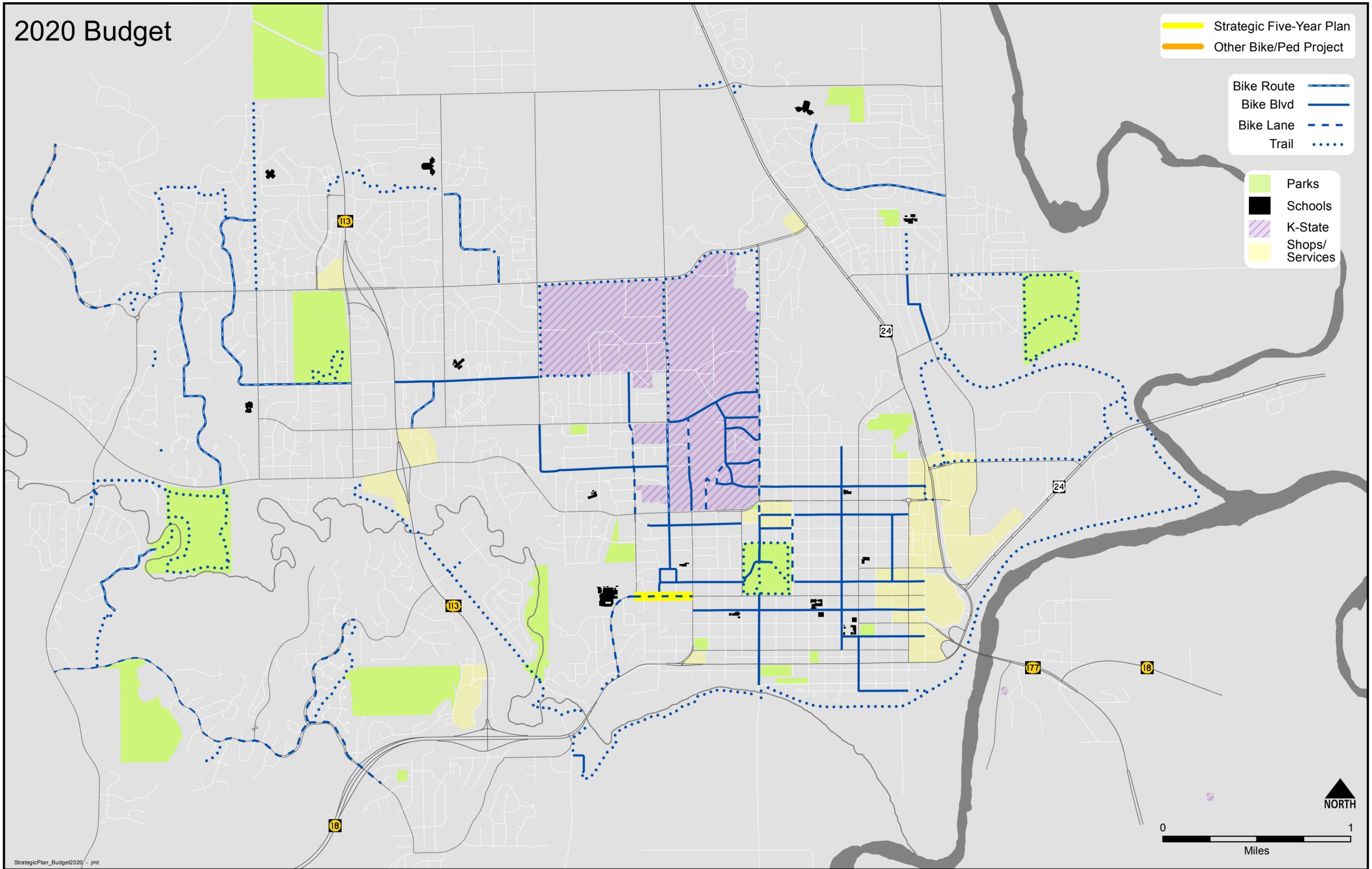
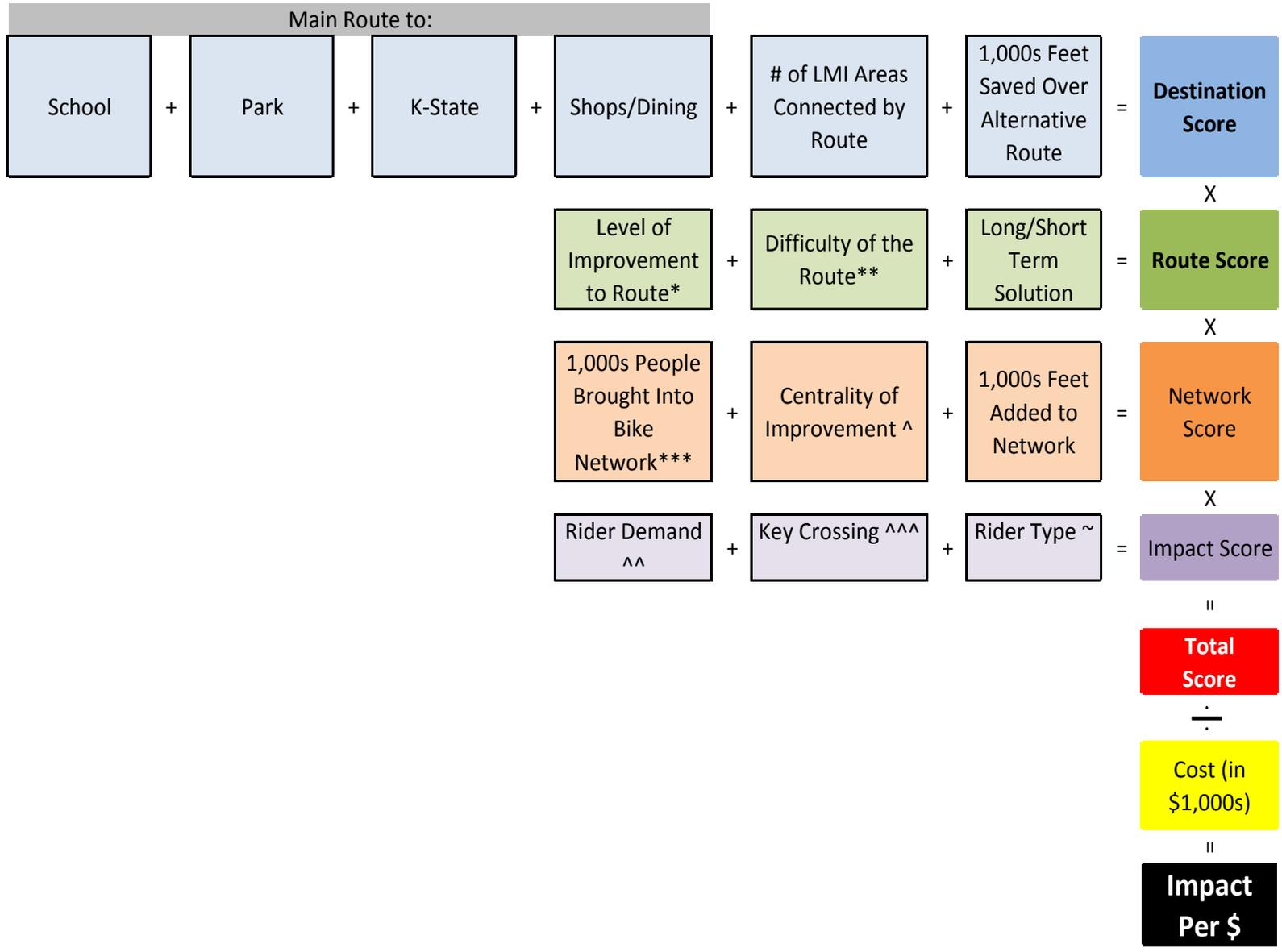


Table 2: Scoring Formula:
Strategic Five-Year Plan for Bicycling Update



*Level of rider before (Kids = 5, C = 4, B = 3, A = 2, No one = 1) - Level of rider after. **Easy/Flat, Moderate, Hills/Difficult ***(# residential addresses within ¼ mile of project, but not within 500 ft of current infrastructure) * (2.6 people per residence) ^ (5-(miles to center [N MHK & Bluemont] x 2)) ^^Rider traffic currently, based on MPO bike/ped counts ^^^Major Need/Highway, Important/Busy Street, No crossing/Minor Road ~Commuter/Daily Rider, Recreational/Occasional Rider