

TRANSPORTATION COMMISSION Monday, June 5, 2017 6:00 PM City Commission Room, City Hall, 6 E. 6th Street

MEETING AGENDA

- I. Approve of May 1, 2017 meeting minutes
- **II. General Public Comment** (The public is allowed to speak to any items or issues that are not scheduled on the agenda)
- III. Project Presentation: Queens Road 6th Street to Eisenhower Drive Receive project design concept.
- **IV. Staff Presentation:** 2017 Bike/Ped Funding Priorities

Discuss budget and priorities for 2017 CIP pedestrian and bicycle improvements.

- V. Commission Items
- VI. Calendar

Approve rescheduling of meetings. Staff recommends rescheduling the July 3, 2017 to July 10, 2017 and the September 4, 2017 meeting to September 11, 2017.

- Study Session Thursday June 8, 2017 12:00 PM 1:30 PM
 - i. KDOT Transportation Alternatives Program
 - ii. <u>Lawrence Loop / Ped-Blke Issue Task Force Recommendations</u>
- VII. Adjournment

City of Lawrence Transportation Commission May 1, 2017 Minutes

MEMBERS PRESENT: Charlie Bryan, David Hamby, Chris Storm, Jeff

Severin, Kathryn Schartz, Mark Hurt, Steve Evans,

John Ziegelmeyer, Erin Paden

MEMBERS ABSENT: Ron May, Michelle Dillon

STAFF PRESENT: David Cronin, Public Works Department

Nicholas C. Voss, Public Works Department Zach Baker, Public Works Department

PUBLIC PRESENT: Bonnie Uffman, Michael Almon

A complete video recording of the meeting is available on the City's website at https://lawrenceks.org/boards/transportation-commission/

The meeting was called to order by Charlie Bryan at 6:03 p.m. in the City Commission Room, City Hall, 6 E. 6th Street.

ITEM NO. 1:

Approve of April 3, 2017 Meeting Minutes

Date on Meeting Minutes to be changed from March 6, 2017 to April 3, 2017.

Moved by Commissioner Hamby, second by Commissioner Storm, to approve minutes. The motion carried, 9-0.

ITEM NO. 2:

Recognition of Walk Friendly Silver designation for the City of Lawrence

<u>David Cronin Presentation</u>: Walk Friendly Communities is a national program developed to encourage cities across the United States to prioritize promoting safer walking environments. This is the first time the City of Lawrence has applied for the Walk Friendly Communities designation. A ranking system is used of (Bronze, Silver, Gold, and Platinum) which are given to cities based on how well they fulfill certain criteria. The city earned a "Silver" ranking discussed in detail on the <u>report card</u> the Walk Friendly Communities program provided. This makes Lawrence the only city in Kansas that has been recognized at any level.

Commissioner Evans: Asked how often will this occur. Is this an annual designation or every 3

or 5 years?

David Cronin: Says designation lasts for 5 years before you would need to apply for another

ranking.

ITEM NO. 3

General Public Comment

Public Comment:

Bonnie Uffman is concerned about topics the commission is discussing. She applauds traffic calming talks; however, she would like to see an increase in budget talk for bicycle and pedestrian funding.

Micheal Almon is concerned about topics the commission is discussing as well. He would like the Transportation Commission to be a body that provides recommendations for how we prioritize projects and spend monies budgeted for non-motorized transportation projects.

ITEM NO. 4:

Traffic Calming Items

Carson Place & Campbell Drive

Staff Presentation: Nick Voss stated that in June 2016 city staff received a traffic calming request on Campbell Drive. City staff is recommending that the request be denied as it did not meet the requirements set by the traffic calming policy.

Commission Discussion: No commission discussion

Public Comment: No public comment.

Moved by Commissioner Hurt, second by Commissioner Schwartz, to deny the request for traffic calming. The motion carried, 9-0

ITEM NO. 5

No Parking Request

George Williams Way & Rock Chalk Drive

Staff presentation: Nick Voss presented on the no parking request. City staff is recommending both George Williams Way & Rock Chalk Drive be designated as no parking on either side of the streets north of 6th Street.

David Cronin stated the city is preparing for the Junior Olympics event that is happening at Rock

Chalk Park later this July. The city is trying to plan options for overflow parking for that large event, but wanted to get this request on an agenda and approved before that event in July.

Commission Discussion:

Commissioner John Ziegelmeyer asked if the plan will be to have satellite parking offsite for big events and then have buses take people to Rock Chalk Park? David Cronin stated in the future there may be more parking built near the site to accommodate larger event parking, however, in the meantime other arrangements will need to be made. Busing may be an option.

Commissioner Steve Evans asked if 902 Road gets any overflow parking? David Cronin said he believes it does. He knows buses do stage there.

Commissioner Bryan asked if it was a county road? David Cronin stated it is in city limits and maintained by the city.

Public Comment: No public comment

Moved by Commissioner Zeiglmeyer, second by Commissioner Hurt, to install no parking signs on both sides of Rock Chalk Drive from George Williams Way to E 902 Road. The motion carried, 9-0

ITEM NO. 6:

Speed Limit Request

Staff Presentation: Nick Voss presented the speed limit reduction request for Harvard Road between Crestline Drive and Centennial Drive. City staff is recommending the request to reduce the speed limit to 25 mph on Harvard Road between Crestline Drive and Centennial Drive be denied based on the 85th percentile speed.

Commission Discussion:

Commissioner Steve Evans stated he did not think reducing the speed limit would have much effect on how fast people drive through the area, people will drive what they want to drive. He pointed out the sidewalk on the north side of Harvard between Crestline and Centennial is very narrow.

Commissioner Charlie Bryan asked if there was any history of traffic calming in this area? Nick Voss stated that he did not know if there was any traffic calming requests for this specific portion of roadway, but that the neighborhood has made requests in the past based on the mix of students and residents that live in the area.

Commissioner Mark Hurt asked about accident data. City staff did not look up accident data for this road.

Commissioner Erin Paden stated she drives this portion of road maybe twice a week. She found

it hard to believe that anyone could get up above 25 mph in this area with cars parked on both sides of the street.

Commissioner Chris Storm asked about school zone signing policy. Is it just around grade schools where there are school zone signs? In this area, there is a middle school. Nick Voss stated the school zone policy is currently being revised. Middle schools will be included to have school zones with reduced speeds. Chris Storm asked how the Safe Routes To School policy effects the school zone policy. Nick Voss stated that the safe routes designated should be factored in to decisions for zone locations with reduced speed limits. Chris Storm asked when the school zone policy revisions were supposed to be complete. David Cronin stated city staff prepared the revisions and the school district is currently reviewing. Chris Storm said he did not think this was so much a speed limit issue as much as it is a sidewalk issue in regard to the narrow sidewalks leading to the school.

Commissioner Erin Paden asked if Harvard and Crestline was a 4-way stop? The intersection is a 4-way stop.

Commissioner Mark Hurt asked if this met the criteria for traffic calming concerning driveways along the street. Because Harvard Road is a collector street in this area, that traffic calming criteria would apply.

Public Comment: No public comment.

Moved by Commissioner Storm, second by Commissioner Schartz, to deny the request for a 25 mph speed limit on Harvard Road between Crestline Drive and Centennial Drive. The motion carried, 8-1. Commissioner Erin Paden voted no. She stated it is a SRTS route, it is on the county wide bikeway plan, and slower roads tend to be safer. Maybe speed limit change is not the best approach but maybe traffic calming would be a better option.

Commission Discussion:

Commissioner Charlie Bryan asked city staff about commission recommendation policy regarding action items that are passed but do not receive a unanimous vote. David Cronin said staff would need to receive direction from the City Commission, but believed recommendations from the Transportation Commission would go on the consent agenda for city commission meetings. Also, any abstentions or votes against an action item would be noted with an explanation for why the abstention or nay vote was made.

ITEM NO. 7:

Speed Limit & Intersection Ahead Request

Staff Presentation: Nick Voss presented to commission about a request for a 35 mph speed limit for Kasold Drive between Tam O'Shanter Drive and Clinton Parkway as well as a request for an intersection warning sign on Kasold Drive one block north of Augusta Drive for southbound traffic. City staff is recommending denying the request for a 35 mph speed limit on Kasold Drive between Tam O'Shanter Drive and Clinton Parkway and an intersection warning sign one block

north of Augusta Drive.

Commission Discussion:

Commissioner Chris Storm asked about where placement of an intersection warning sign might be related to the current back of curb and sidewalk configuration at the requested location. Nick Voss said a sign would have to be placed right on the line between where the exposed aggregate buffer and the edge of the existing sidewalk meet.

Commissioner David Hamby asked about city liability for signs located within a roadway clearzone. David Cronin said the city would not necessarily be accepting liability for signs located within the 2 ft clearzone for either side of a 10 foot recreation path, like the one that is in this requested sign location. In this section the city has placed object marker signs already within this 2 foot clearzone area. However, with the size and dimensions of an intersection warning sign there would have to be care taken to design a post mounting height high enough to not interfere with pedestrians on the recreation path.

Commissioner Erin Paden asked if there is any evidence that the advanced intersection warning signs are effective or paid attention to. Nick Voss stated he has not seen information for or against effectiveness of those signs, however, he did mention the more information you can provide a driver is generally a positive. David Cronin stated that the city typically places intersection warning signs at locations where intersection sight distance is a factor or an intersection is obstructed.

Commissioner Erin Paden stated it seems like Kasold Drive north of Clinton Parkway is one of the examples of where travel speeds are more dictated by the design or overdesign of a road rather than how its speed limit is signed. She asked staff if it would agree with that assessment. David Cronin stated it can be subjective as to the cause for certain stretches of road to have higher travel speeds than others base on a variety of conditions, but that this was an area of road that is long, straight, and has wide pavement area which is conducive to potentially higher speeds.

Commissioner Jeff Severin stated in addition to the wide pavement area in this location this is also a downhill stretch of the road, which would also be favorable to higher speeds. Adding a sign with a reduced speed would likely not affect the actual travel speeds for someone driving downhill. He also stated that he could see the advantage of having an intersection warning sign at the proposed location but worried about if it would be in the way of pedestrians.

Commissioner David Hamby said that there has not been any accidents at this location in 2016. Not to say that there is not a problem here, but a problem is not evidencing itself by way of repeated accidents.

Commissioner Mark Hurt stated he was concerned that lowering the speed at the proposed location would increase the likelihood of police pulling speeders over at the bottom of the hill where sight distance is already an issue. Might not be a safe situation.

Commissioner Erin Paden stated that she did not think adding a sign reducing the speed would have an effect on lowering speeds at the proposed location.

Commissioner Chris Storm stated he did not think adding a sign reducing the speed would have an effect on lowering speeds at the proposed location as well. Himself and Erin Paden agreed that without a change of the roads geometry in this section that likely higher speeds will remain.

Commissioner Charlie Bryan asked city staff when this stretch of roadway would be reconstructed in the future. David Cronin stated it will be a long time before any potential changes or reconstruction of this section would take place, since it was redone recently and is in good condition.

Public Comment:

Micheal Almon asked who submitted the request? City Staff received an email request from Daniel Dannenberg. Micheal Almon asked if the request in 2 parts, the speed limit question and then an intersection sign? Can we consider them separately? Nick Voss stated that the items can be viewed separately and have two separate action items. Micheal Almon asked where was the data collection taken from? The water tower? Micheal Almon questions the data and recommends dropping the speed limit to 35 mph. The speed is 40 mph south of Bob Billings; people typically go 50+ mph especially when they go over the hill to the south. The speeds at the bottom of the hill are greater than that near the 22nd Street intersection where the stop light is by HyVee. The new construction of Kasold north of Bob Billings will encourage drivers to go faster as well.

Commissioner Bryan asked why the decision to collect the data at the water tower? Nick Voss stated he wanted to take data a location that best represented the entire corridor. There are additional locations that may have contributed to give more accurate speed readings, but with just one place to take counts the area near the water tower seemed to be sufficient.

Commissioner Steve Evans asked if police enforcement would be a more effective tool to control the speeds at this location rather than posting a lower speed limit sign that will likely have no major effect at reducing speeds. David Cronin commented that two best ways to control speeds is through geometric design of the street and traffic enforcement. Stated more regular police enforcement can be challenging as the police department has limited resources to cover the entire city.

Commissioner Mark Hurt commented that a certain percentage of drivers will abide by the new regulation. Now you have a larger difference in speeds 35 mph to 60 mph than what was there before with 50 mph to 60 mph. The larger the differential in speeds traveled that greater risk to accidents.

Commissioner Steve Evans stated the use of large letters of pavement markings to help identify speed limits may be helpful.

Moved by Commissioner Hurt, second by Commissioner Hamby, to deny the request for a 35 mph speed limit on Kasold Drive between Tam O'Shanter Drive and Clinton Parkway. The motion carried, 8-0. Commissioner Paden abstained. She had previously read where the idea that changing the speed limit does not have an effect may be inaccurate. She would need more

data on the subject to make a vote on that issue.

<u>Moved by Commissioner Ziegelmeyer, second by Commissioner Storm</u>, to deny the request for an intersection warning sign on Kasold Drive between Tam O'Shanter Drive and Clinton Parkway. The motion carried, 9-0.

ITEM NO. 8:

Staff Update: 2016 & 2017 traffic calming projects

Staff is proposing to use the 2016 and 2017 traffic calming funds for the construction of traffic calming at University Place and speed humps/cushions along Trail Road and Ousdahl Road. Previously proposed 2017 projects will be proposed for 2018 construction with 2018 traffic calming funds.

Commissioner Charlie Bryan asked if the storm sewer portion of the projects were going to be funded by traffic calming funds. Nick Voss stated that the storm sewer work would be funded by a storm water utility account.

David Cronin stated that our original engineering estimates for the projects costs were a little lower than what the 2016 project bids came in. Adjusting the estimates for the 2017 project left our budgeted amounts a little low. We plan on bidding the 2017 projects as scheduled with the same order and will construct the projects that are budgeted. Once 2017 funds are used up any remaining projects will be pushed to construction for a future year.

John Ziegelmeyer stated that under the executive summary it indicates that the streets need to be deemed a main traffic ways. How does that fit into the terms the transportation commission use? David Cronin stated in order to issue debt for a roadway it needs to be designated a main traffic way. That language needs to be inserted to issue debt for that project.

Public Comment: No public Comment.

ITEM NO. 9:

Study session discussion and scheduling

David Cronin recapped previous meeting's discussion over whether we would be meeting each month at noon to discuss various commission items. David stated the 2nd Thursday of every month was the most open to have these meetings about policies, schedules, budgets, etc...City staff proposed at this first mid-month meeting May 11, 2017 we would have a roundtable to get feedback about what each commissioner brings to the table with their experience/background/priorities to this commission. Also during these meetings the commission can put together potential topics to discuss i.e. Safe Routes to School, MUTCD, and perhaps a bike ride around town. The commission can discuss the best time of year to discuss these topics during actual transportation commission meetings. Meetings would be at noon and end by 1pm. These meetings would also be open to the public. However, no action items would be required.

Steve Evans commented that he likes the idea of an informal meeting. He asked if staff can put together a list of the topics and give to the commissioner prior to the May 11^{th} meeting.

<u>Moved by Commissioner Severin, second by Commissioner Hamby</u>, to approve of the proposed calendar dates of the second Thursday of each month for an informal Transportation Commission meeting. The motion carried, 9-0.

ITEM NO. 10:

Commission Items

Commissioner Chris Storm commented that this body has the power to reduce the areas in question but not to expand a study area beyond a request, because then you change a notification area. Expanding would require a new request.

Commissioner Jeff Severin asked about how the transportation commission handles issues that are not necessarily yes or no issues. The commission may vote yes or no on a request, but might still have other questions and might come up with other things that need to be studied. David Cronin state that at any time the commission decides further data collection or other items need to be studied to direct city staff to look into those items to prepare reports for future commission agendas.

Commissioner Charlie Bryan stated that part of what the transportation commission needs to figure out is what is the commission's role in determining scope and direction of these various transportation items. He said this might be a good discussion topic during the mid-month meetings. He stated the commission can be effective if it is responsive to the public but also proactive.

Commissioner Steve Evans agreed with Charlie Bryan that this is a great discussion to have to best serve the public and their requests regarding transportation.

Commissioner Erin Paden commented that for most of the traffic items brought to the table her first inclination was to vote the same as the rest of the body. However it is difficult to vote yes or no on a request because of the recommendation, but then not recognized that maybe something else still needs to be done at that location.

Commissioner Erin Paden read an email she drafted to the Transportation Commission.

David Cronin commented about budget questions and priorities. Some of these funding decisions are still being made at the City Commission level. Once more information is passed down from that body this transportation commission can have a better sense of direction it needs to go.

Commissioner Jeff Severin commented that the \$450,000 budgeted for 2017 bicycle and pedestrian projects still does not have a list of projects earmarked for that money. He stated this transportation commission would be a good body to discuss those potential projects and asked if that would be the case. David Cronin said ultimately the city commission would make the decision on which projects would be built, however, staff would like to present them to this

transportation commission first and with approval from this body take those recommendations to the city commission meeting.

Commission Charlie Bryan commented that City and County is declaring this month of May as a Bike Month. This month is also the beginning of a City national Bike Challenge. The Health Department is sponsoring a complete streets workshop June 20th, 2017 at the Carnegie Building from 8:30am-3pm.

ITEM NO. 11:

Calendar

- a. Next Mid-Month Meeting Thursday May 11, 2017 12:00 PM
- b. Next Meeting Monday June 5, 2017 6:00 PM

ITEM NO. 12:

<u>Adjournment</u>

<u>Moved by Commissioner Evans, and second by Commissioner Hamby</u>, to adjourn at 7:48 p.m.. The motion carried, 9-0.

Memorandum City of Lawrence Public Works

TO: Transportation Commission

FROM: David P. Cronin, P.E., City Engineer

DATE: May 30, 2017

RE: Design concept: Queens Road - 6th Street to Eisenhower Drive

Project Description

Queens Road is classified as a future collector street from 6th to Wakarusa and a future arterial north of Wakarusa in the 2040 Transportation Plan. It is currently an unimproved county road in the city limits but not built to city street standards. Development in the surrounding area warrants the improvement of Queens Road for increasing traffic volumes and reliable emergency access. In July 2016 the City Commission authorized staff to begin design plans.

Project Scope

The scope includes improving Queens Road from 6th Street to Eisenhower Drive to meet the city's Complete Streets policy. The design is a two-lane street (one-lane northbound and one-lane southbound) with a raised median/center turn lane for intersecting streets. The project will include on-street bike lanes, a shared-use path on the west side of Queens and sidewalk on the east side of Queens. A traffic signal will be installed at the intersection of 6th & Queens Road and a roundabout at Queens and Overland. A new waterline, storm sewer, sanitary sewer, and landscaping is included in the project.

Public improvements are currently being constructed for the "LINKS addition" that includes extension of Rock Chalk Drive east to connect to Wakarusa at Queens Road. The LINKS project includes construction of a roundabout at Wakarusa and Queens that will tie into this project.

Project Schedule

Engineering Design and Construction Plans 2017
Construction Spring 2018

Project Funding

The project is included in the 2018 CIP with an estimated construction cost of \$4.5M.

<u>Action</u>

Receive project design concept.











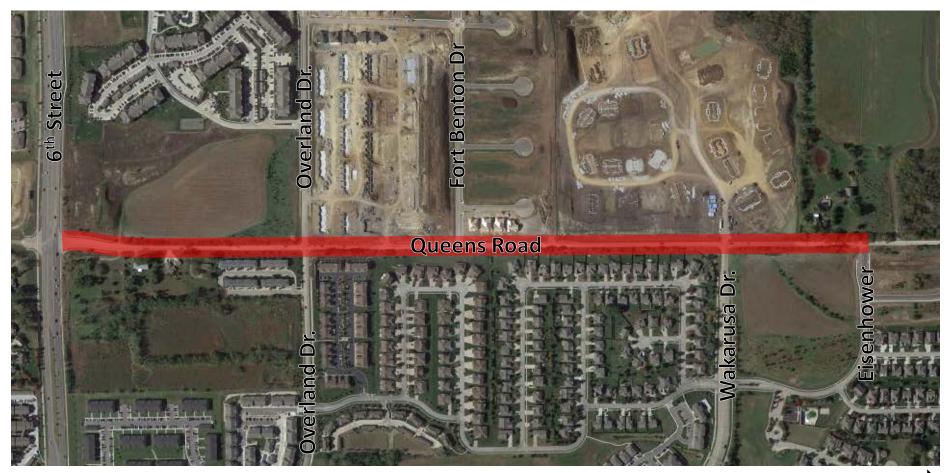
QUEENS ROAD PUBLIC IMPROVEMENTS 6th Street to the North City Limits

Transportation Commission Update – June 5, 2017



PROJECT LIMITS

Construction Limits

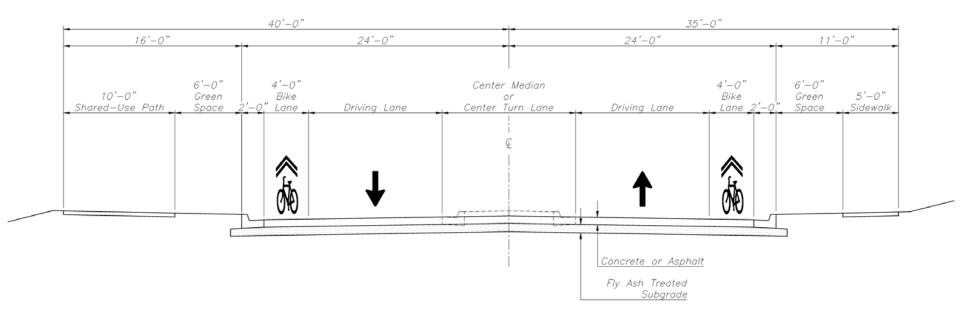


NORTH ■





TYPICAL STREET CROSS SECTION



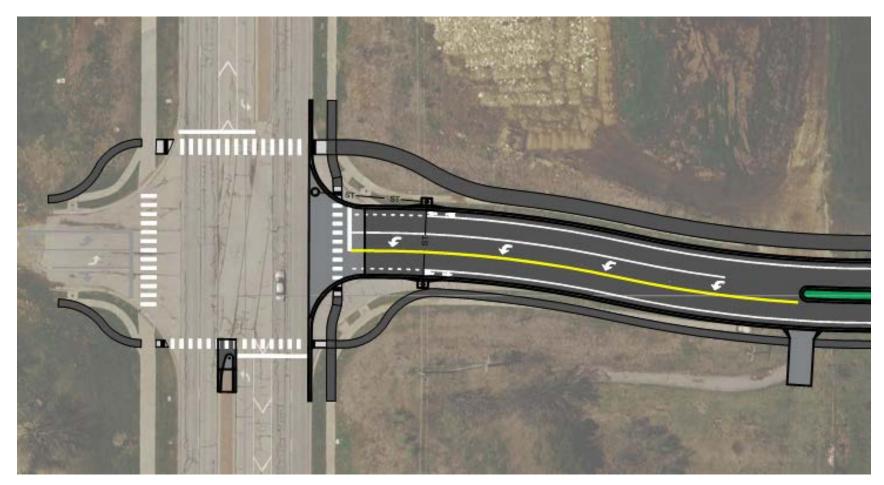






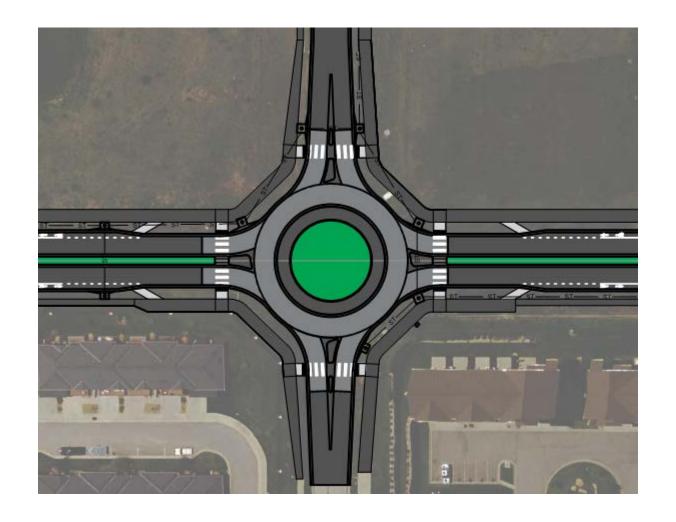


QUEENS RD / 6TH ST — NEW TRAFFIC SIGNAL CONTROL





QUEENS RD / OVERLAND DR — 1-LANE ROUNDABOUT





QUEENS RD / WAKARUSA DR — 1-LANE ROUNDABOUT





TRAFFIC CONTROL / CONSTRUCTION PHASING





QUESTIONS/DISCUSSION





Memorandum City of Lawrence Public Works

TO: Brandon McGuire, Assistant to the City Manager FROM: Charles F. Soules, Director of Public Works

CC: David Cronin, City Engineer

DATE: April 26, 2017

RE: 2017 Sidewalk and Bike Lane Budget

In the 2017 Capital Improvement Plan is funding for Pedestrian and Bicycle Facility Improvements in the amount of \$450,000.

The following discussion provides options for projects for this year (2017 budget).

• The recommendations from the Pedestrian Bicycle Task Force included priorities for funding options in their final report.

Pedestrian funding priorities included:

- Safe Routes to Schools (SRTS) sidewalks
- Gap sidewalks (areas without a sidewalk on either side of the street) specifically: Princeton from Iowa to Yorkshire Drive; Kasold from 5th Terrace to Peterson; and McDonald Drive from Princeton to Bluffs Drive
- ADA (Americans with Disabilities Act) ramps

Bicycle Network Funding priorities included:

- 21st Street Bike Boulevard from Iowa to Massachusetts
- Shared use path on the north side of 6th Street from Monterey to Wisconsin
- Pavement markings and signage
- Lawrence Loop Project
- In June the City will hold a Public Hearing for the establishment of a Benefit District for Queens Road from 6th Street north to Eisenhower Drive. The improvements will include a multiuse path and bike lanes. The City's development policy requires the developments to pay for sidewalks and street improvements however the policy includes that the City at Large will pay for additional street and sidewalk widths. The additional street width includes 10 feet for bike lanes and the additional sidewalk width is 5 feet for the multiuse path.

The estimated cost for the additional pavement for bike lanes is \$226,000 and for the multiuse path is \$122,500.

 The City has maintenance responsibility for accessible ramps (ADA) at street intersections. There are approximately 7,500 ADA ramps with more than half (53%) that are non-compliant or non-existent. The estimated cost for the repairs and reconstruction is over \$3.2 million dollars.

Additionally, the City has identified approximately 4,100 linear feet of sidewalk that have settled or heaved adjacent to storm sewer inlets and other manholes that need to be repaired or replaced. The estimated cost of these repairs is approximately \$180,000.

Staff would recommend that before we construct additional sidewalks, for which the City struggles to define how to maintain, that the budgeted funds be used to repair and maintain existing areas for accessibility.

The 2017 budgeted funds could reconstruct 350–400 ADA ramps or a couple hundred (200) ADA ramps and make repairs around manholes and storm sewer inlets. The areas of focus could be along SRTS sidewalks which would align with the Task Force's priorities.

Respectfully Submitted,

Charles F. Soules, P.E. Director of Public Works

Attachments: Pedestrian Funding Illustrations

Bicycle Network Funding Illustrations

Pedestrian Funding Illustrations

The following illustrations were created to demonstrate the impact two different levels of funding may have on the walking and wheeling environment in the next five years. The selected projects are based on the implementation strategies.

Illustration 1

Funding Commitment: \$500,000/year

Identified Projects	2017	2018	2019	2020	2021	
Safe Routes to School						
Install missing sidewalk on SRTS	\$230,000					
Sidewalk maintenance on SRTS	\$150,000	\$150,000	\$150,000	\$250,000	\$150,000	
ADA compliant curb ramps on SRTS	\$70,000	\$100,000	\$100,000	\$120,000	\$100,000	
Gap sidewalk - on single side of streets with no sidewalks on either side of street						
Princeton - Iowa St. to Yorkshire Dr.	\$50,000					
Kasold - 5th Terrace to Peterson Rd.		\$250,000				
McDonald Dr Princeton Blvd to Bluffs Dr			\$150,000			
Gap sidewalk - on single side of streets with no sidewalks on one side of street						
23rd St - Ohio St. to Vermont St.			\$75,000			
Crescent Rd - Strong Ave. to Naismith Dr			\$25,000			
Naismith Dr 19th St. to 23rd St.				\$80,000		
Fambrough Dr. (11th St) - Missouri to						
Mississippi St.				\$50,000		
Sidewalk Maintenance on Mass. St 6th to						
23rd St.					\$250,000	
TOTAL	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	

Illustration 2

Funding Commitment: \$250,000/year

Identified Projects	2017	2018	2019	2020	2021	
Safe Routes to School						
Install missing sidewalk on SRTS	\$230,000					
Sidewalk maintenance on SRTS	\$20,000	\$125,000		\$75,000	\$150,000	
ADA compliant curb ramps on SRTS		\$75,000		\$25,000	\$100,000	
Gap sidewalk - on single side of streets with no sidewalks on either side of street						
Princeton - Iowa St. to Yorkshire Dr.		\$50,000				
Kasold - 5th Terrace to Peterson Rd.			\$250,000			
McDonald Dr Princeton Blvd to Bluffs Dr				\$150,000		
TOTAL	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	

The map on the following page shows work that could be completed based on these illustrations.

Bicycle Network Funding Illustrations

The following illustrations were created to demonstrate the impact two different levels of funding may have on the bicycle environment in the next five years. The selected projects are based on the implementation strategies.

Illustration 1

Funding Commitment: \$500,000/year

Identified Projects	2017	2018	2019	2020	2021
21st St bike boulevard between Iowa and					
Massachusetts	\$120,000				
Install shared use path on the north side of 6th					
St between Monterey and Wisconsin	\$135,500	\$98,000	\$208,000	\$136,500	\$122,000
Pavement markings and signage	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
5th St bike boulevard between Wisconsin and					
Constant Park Trail		\$104,000			
13th St bike boulevard between Haskell and					
Massachusetts					\$136,000
Lawrence Loop - Santa Fe Depot - City Hall					
segment			\$106,000		
Lawrence Loop - Woody Park Trail segment	\$224,500				
Lawrence Loop - Rock Chalk Park segment		\$278,000			
Lawrence Loop - W 2nd Street segment			\$166,000		
Lawrence Loop - McDonald Dr - Peterson					
Park segment					\$150,000
Forrest Ave/17th St bike boulevard between					
Burroughs Creek Trail and Massachusetts					\$72,000
South Massachusetts protected bikeway			_	\$343,500	_
TOTAL	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000

Illustration 2

Funding Commitment: \$250,000/year

Identified Projects	2017	2018	2019	2020	2021
21st St bike boulevard between Iowa and					
Massachusetts		\$120,000			
Install shared use path on the north side of 6th					
St between Monterey and Wisconsin		\$110,000	\$230,000	\$230,000	\$130,000
Pavement markings and signage	\$25,500	\$20,000	\$20,000	\$20,000	\$16,000
5th St bike boulevard between Wisconsin and					
Constant Park Trail					\$104,000
Lawrence Loop - Woody Park Trail segment	\$224,500				
TOTAL	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000



Crossing Ninth Street at Vermont.

The map on the following page illustrates projects that could be completed at \$500,000 per year and \$250,000 per year.