



TRANSPORTATION COMMISSION
Monday, August 7, 2017 6:00 PM
City Commission Room, City Hall, 6 E. 6th Street

MEETING AGENDA

- I. Approve of July 10, 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. **Traffic Calming & Speed Limit Request: Forrest Avenue – Barker Ave. to Larnard Ave.**

Consider staff recommendation to deny the request for Traffic Calming on Forrest Avenue from Barker Avenue to Larnard Avenue.

Consider staff recommendation to deny the request to reduce the speed limit.
- IV. **Traffic Calming: Lincoln Street – 3rd to 7th Street.**

Consider staff recommendation to approve the request for Traffic Calming on Lincoln Street from 3rd Street to 7th Street.
- V. **School Area Traffic Control: Harvard Rd. & Crestline Dr. Crosswalk**

Consider staff recommendation to deny request for marked crosswalk at the intersection of Harvard Road and Crestline Drive.
- VI. **Highway Safety Improvement Program – 13th & Massachusetts Street**

Consider recommendation to approve highway safety improvement funds for the intersection of 13th & Massachusetts and provide direction on scope of project.
- VII. **Pedestrian and Bicycle Prioritization Criteria**

Discuss criteria to evaluate and score pedestrian and bicycle projects.
- VIII. Commission Items
 - Update on Complete Streets sub-committee
- IX. Calendar
 - August 10th Noon-1:30p Study Session



- August 24th Lawrence Transit Bus Ride – meet at 7:50a

X. Adjournment

Memorandum

City of Lawrence

Public Works Department

TO: David Cronin, City Engineer
FROM: Zach Baker, Project Engineer
DATE: 01 August 2017
RE: Agenda Item for Transportation Commission 8/7/2017:
Traffic Calming Request – Forrest Avenue, between Barker Avenue & Learnard Avenue

Background

In February, 2017, the Transportation Commission received a request for Forrest Avenue to between Barker Avenue and Learnard Avenue to be considered for traffic calming and/or speed limit reduction.

Details

Forrest Avenue, Between Barker Avenue and Learnard Avenue Information						
Street Classification	Speed Limit	Safe Route to School	Bus / Transit Route	Douglas County Bikeway Plan Route	Sidewalk along Street	Street Cross Section/Pavement Data
Local	30 mph	NO	NO	YES	NO	Residential area with Asphalt Pavement Width of 20 feet. Has V-Ditch cross section for drainage. There is no curb and gutter.

Traffic counts and 85th percentile speed data were obtained for Forrest Avenue midway between Barker Avenue and Learnard Avenue in May of 2017. The 85th percentile speed of traffic on Forrest Avenue is approximately 28 mph, and, the 24-hour two-way traffic volume is approximately 171. The City of Lawrence Traffic Calming Policy is listed below:

Traffic-Calming Devices may be permitted on “local” streets as designated by the City’s Major Thoroughfares Map, and under any one of the following conditions:

- The 85th percentile speed of traffic is 5 mph or greater over the speed limit, or
- The 24-hour two-way traffic volume is greater than 1000, or
- Cut-through traffic comprises more than 50% of the traffic during the peak hour of the day, or

Traffic Calming Request – Learnard Avenue, between 15th Street & 19th Street

- D. Where no single condition is satisfied, but where any two of A, B, C or D above are satisfied to the extent of 80% or more of the stated values.



The 85th percentile speed of 28 mph and the 24-hour traffic volume of 171 do not meet condition "A" or "B" of the traffic calming policy. Peak hour traffic volumes totaled 15 vehicles. The number of cut-through traffic during this peak hour was 8 vehicles. This gives a peak hour cut-through percentage of 53%, therefore, condition "C" is met.

Action Request

Traffic volumes for this street segment are well below the 1000 vehicle per day threshold for considering the installation of traffic calming devices. The cut-through traffic does exceed the 50% threshold by 3%. However, with the low amount of traffic on this street and the minimal exceedance of cut-through traffic, it is staff recommendation the Transportation Commission deny the request for installation of traffic calming devices on Forrest Avenue between 15th Street and 19th Street. The average speed of traffic down Forrest Avenue is 2 mph below the speed limit so generally traffic speeds are performing as designed. Therefore, staff recommends to deny the request to reduce the speed limit.

Traffic Calming Request – Learnard Avenue, between 15th Street & 19th Street

Attachments:

Forrest Avenue Photo

Traffic Calming Policy

Request Letter



312 Forrest Ave
Lawrence, Kansas





TRAFFIC CALMING POLICY

Resolution No. 6602, August 23, 2005

1. TRAFFIC-CALMING DEVICES may include but are not limited to Traffic-Calming Circles, Speed Humps and Speed Cushions, Speed Tables, Partial Diverters, Full Diverters, Center Island Narrowing, Chokers, and Road Closures; however, roundabouts are traffic management devices and are not subject to this policy.
2. TRAFFIC-CALMING DEVICES may be permitted on "local" streets as designated by the City's Major Thoroughfares Map, and under any one of the following conditions:
 - A. The 85th percentile speed of traffic is 5 mph or greater over the speed limit, or
 - B. The 24-hour two-way traffic volume is greater than 1000, or
 - C. Cut-through traffic comprises more than 50% of the traffic during the peak hour of the day, or
 - D. Where no single condition is satisfied, but where any two of A, B or C above are satisfied to the extent of 80 percent or more of the stated values.
3. TRAFFIC-CALMING DEVICES (except SPEED HUMPS) may be permitted on "collector" streets as designated by the City's Major Thoroughfares Map, under any one of the following conditions:
 - A. The 85th percentile speed of traffic is 5 mph or greater over the speed limit, or
 - B. The 24-hour two-way traffic volume is greater than 3000, or
 - C. Cut-through traffic comprises more than 50% of the traffic during the peak hour of the day, or
 - D. More than 50% of the frontage of the roadway consists of residential lots with the houses facing the roadway in question, or
 - E. Where no single condition is satisfied, but where any two of A, B, C or D above are satisfied to the extent of 80 percent or more of the stated values.
4. Traffic data will be collected with city personnel using city equipment only. In the event that a requested location does not meet the minimum requirements as stated in 2 or 3 above, subsequent requests will not be considered for a minimum of one year.
5. The Lawrence-Douglas County Fire & Medical Department, the Police Department, the Public Works Department and the Traffic Safety Commission must review all requests for TRAFFIC-CALMING DEVICES before being presented to the City Commission.
6. If a project is approved by the City Commission, the City Commission will determine financing of the construction. The City Commission may require 0-100% of the costs to be paid by the group or neighborhood making the request.
7. After a project is approved and funded by the City Commission, TRAFFIC-CALMING DEVICES will only be constructed at a location if 70% or more of the property owners within 300 feet measured along the centerline of the street in each direction approve of the installation or if directed by the City Commission. The individual, group or neighborhood making the request shall be responsible for obtaining the property owners' and residents' approval in writing and submitting it to the city.
8. Once installed, TRAFFIC-CALMING DEVICES may only be removed at a location if more than 70% of the property owners and residents within 300 feet measured along the centerline of the street in each direction approve of the removal or if directed by the City Commission. The individual, group or neighborhood making the request shall be responsible for obtaining the property owners' and residents' approval in writing and submitting it to the city.
9. TRAFFIC CALMING DEVICES may initially be landscaped (if appropriate) by the city, provided that the group or neighborhood making the request agrees in writing to maintain the landscaping or pursuant to the payment of a landscape maintenance fee. No privately installed landscaping is permitted unless approved by the city in writing.

[REDACTED]
[REDACTED]
Transportation Commission
City Hall
6 E. 6th Street
Lawrence, KS 66044

Dear Commissioners:

I am writing about an issue with traffic in the 400 block of Forrest Avenue, where my residence is located. The street is barely two lanes wide and there are no curbs or sidewalks, which requires pedestrians to walk on the pavement and deal with vehicle traffic. Owing to the limited number of east/west streets between 15th and 19th Streets, this block is a significant pedestrian thoroughway. A good number of those pedestrians are school aged children. The street is also a designated bike route.

When my family first moved onto the block thirty years ago, automobile traffic was not too heavy, but it has increased markedly since then. Drivers are using this block of Forrest Avenue as a cut-through to get between Barker and Learnard. The problem was significantly exacerbated some years ago when 15th Street was closed for an extended period of time. Cut-through traffic on the street became so bad that the city erected barricades mid-block to stop all through automobile traffic. Our street was never more peaceful than during the blockade. When 15th Street was reopened, the barricades were removed and through traffic was again allowed. Unfortunately, many drivers resumed their newly discovered short-cut. As a result, the number of cut-through traffic never went back to the previous levels.

This problem was added to when traffic on 19th Street was limited a year or so ago, which taught other drivers that there was a way to avoid the roundabout at 19th and Barker.

Having the volume of traffic that exists on a street that was not designed to accommodate it, added to the fact that pedestrians must walk in and share those streets with vehicles, makes for at best an unsafe situation.

I previously contacted David Woosley about the problem, and he sent me the traffic calming policy. I have reviewed it, and it is my opinion that the situation in the 400 block of Forrest Avenue more than adequately meets the criteria in section 2C. Although the problem is not consistent throughout the day, at peak traffic times, cut-through traffic likely comprises at least 90% of the total volume.

A good number of non-resident vehicles also drive at a speed that I believe, given the narrowness of the pavement and lack of sidewalks, to be excessive. As such, I believe that we could also meet the criteria in section 2B.

The noise generated by the volume of automobile traffic is also an issue, and is much more than should be tolerated on a street the size of Forrest Avenue.

I therefore request that the Transportation Commission order a traffic study of the 400 block of Forrest Avenue to determine what traffic calming is warranted. In addition, I request that the speed limit in this block be lowered to 20 mph, if not lower.

Thank you.

Sincerely,

Kerry Altenbernd (Mr.)

[REDACTED]
[REDACTED]

Memorandum

City of Lawrence

Public Works Department

TO: David Cronin, City Engineer
FROM: Abigail Bradshaw, Intern
DATE: August 1st, 2017
RE: Agenda Item for Transportation Commission 8/7/2017:
Traffic Calming Request – Lincoln Street, between 3rd Street and 7th Street

Background

In May 2017, the Transportation Commission received a request for Lincoln Street between 3rd and 7th Street to be considered for traffic calming measures. A few years ago, a request was made to lower the speed limit on Lincoln Street from 30 mph to 25 mph. New signs with a posted speed limit of 25 mph were installed on Lincoln Street between 3rd Street and 7th Street. Residents have recently stated that speed limits are still not being honored in this area.

Details

On Lincoln Street from 3rd Street to 4th Street, there are no sidewalks. From 4th Street to 7th Street, there is sidewalk on the south side of Lincoln Street.

Lincoln Street from 3rd Street to 7th Street						
Street Classification	Posted Speed Limit	Safe Route to School	Bus / Transit Route	Douglas County Bikeway Plan Route	Sidewalk along Street	Street Cross Section/Pavement Data
Local	25 mph	Yes	No	No	YES, SOUTH SIDE	Curb and Gutter, V-Ditch, Asphalt, 18 foot width, residential area

Traffic counts and 85th percentile speed data was obtained for Lincoln Street in this region during July of 2017. The 85th percentile speed of traffic on Lincoln Street between 3rd Street and 7th Street averages 34 mph, and, the 24-hour two-way traffic averages 356 vehicles. The City of Lawrence Traffic Calming Policy is listed below:

Traffic-Calming Devices may be permitted on "local" streets as designated by the City's Major Thoroughfares Map, and under any one of the following conditions:

- A. The 85th percentile speed of traffic is 5 mph or greater over the speed limit, or
- B. The 24-hour two-way traffic volume is greater than 1000, or

Traffic Calming Request – Lincoln Street, between 3rd Street and 7th Street

- C. Cut-through traffic comprises more than 50% of the traffic during the peak hour of the day, or
- D. Where no single condition is satisfied, but where any two of A, B, C or D above are satisfied to the extent of 80% or more of the stated values.



24-hour traffic volumes and cut-thru traffic numbers do not meet criteria for installing traffic-calming devices. Average 85th percentile traffic speeds on Lincoln Street between 3rd Street and 7th Street are 9 mph over the posted speed limit of 25 mph, and therefore meet condition "A" of the City of Lawrence Traffic Calming Policy.

Action Request

It is staff recommendation the Transportation Commission approve the request for installation of traffic calming devices on Lincoln Street between 3rd Street and 7th Street.

Attachments:

Traffic Calming Policy
Request Email



TRAFFIC CALMING POLICY

Resolution No. 6602, August 23, 2005

1. TRAFFIC-CALMING DEVICES may include but are not limited to Traffic-Calming Circles, Speed Humps and Speed Cushions, Speed Tables, Partial Diverters, Full Diverters, Center Island Narrowing, Chokers, and Road Closures; however, roundabouts are traffic management devices and are not subject to this policy.
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 - B. The 24-hour two-way traffic volume is greater than 3000, or
 - C. Cut-through traffic comprises more than 50% of the traffic during the peak hour of the day, or
 - D. More than 50% of the frontage of the roadway consists of residential lots with the houses facing the roadway in question, or
 - E. Where no single condition is satisfied, but where any two of A, B, C or D above are satisfied to the extent of 80 percent or more of the stated values.
4. Traffic data will be collected with city personnel using city equipment only. In the event that a requested location does not meet the minimum requirements as stated in 2 or 3 above, subsequent requests will not be considered for a minimum of one year.
5. The Lawrence-Douglas County Fire & Medical Department, the Police Department, the Public Works Department and the Traffic Safety Commission must review all requests for TRAFFIC-CALMING DEVICES before being presented to the City Commission.
6. If a project is approved by the City Commission, the City Commission will determine financing of the construction. The City Commission may require 0-100% of the costs to be paid by the group or neighborhood making the request.
7. After a project is approved and funded by the City Commission, TRAFFIC-CALMING DEVICES will only be constructed at a location if 70% or more of the property owners within 300 feet measured along the centerline of the street in each direction approve of the installation or if directed by the City Commission. The individual, group or neighborhood making the request shall be responsible for obtaining the property owners' and residents' approval in writing and submitting it to the city.
8. Once installed, TRAFFIC-CALMING DEVICES may only be removed at a location if more than 70% of the property owners and residents within 300 feet measured along the centerline of the street in each direction approve of the removal or if directed by the City Commission. The individual, group or neighborhood making the request shall be responsible for obtaining the property owners' and residents' approval in writing and submitting it to the city.
9. TRAFFIC CALMING DEVICES may initially be landscaped (if appropriate) by the city, provided that the group or neighborhood making the request agrees in writing to maintain the landscaping or pursuant to the payment of a landscape maintenance fee. No privately installed landscaping is permitted unless approved by the city in writing.

Zachary Baker

From: Tyra Crouch <littlebluestem.crouch@gmail.com>
Sent: Friday, May 26, 2017 5:03 PM
To: David Cronin
Subject: Speed Limit Challenges on Lincoln Street in North Lawrence

Categories: Transportation Commission

Hello,

My name is Tyra Kalman and I live at 408 Lincoln St in North Lawrence. Over the last two years I have been in contact with the Lawrence Police Department regarding the traffic issues on our street. Officer David Ernst called me today to chat and suggested I contact your office. A few years ago, the city put in several stop signs to slow traffic (which was helpful). We have a 25 mph speed limit on Lincoln but it's not being honored by many who drive on Lincoln between 3rd street and 7th. We have children on the street, nearly every other house and we (I am speaking collectively for my neighbors) are concerned for our children's safety. Yesterday, my neighbor and I witnessed a red truck with a Collin (I think) Drywall sign on the side driving well over the limit. When I pointed to the 25 mph sign and said slow down, he sped up and revved his engine. A few years ago we had a driver take out our mailbox. I promise, I'm not a crazy, but I am very concerned. The LPD has been pretty amazing at responding to my calls. They have sent officers out to sit in the church parking lot just east of my house to slow down traffic. It totally works! But only when they are there and obviously the LPD can't be there all the time. An officer came by yesterday and said that he lives on Lyons and understands first hand our concerns. I've noticed him patrolling the neighborhood a lot today and I am so grateful. Is there anyway we can start a conversation about some type of traffic control? Maybe a speed bump? With school out and all the kids home for the summer, I am worried that something awful could happen. Our kids know to stay out of the street but again, someone ran over our mailbox a few years back so there's that.

Thank you for your time. I appreciate the city taking community concerns to heart and I look forward to hearing how we can move forward.

Thank you again,
Tyra Kalman

Memorandum

City of Lawrence

Public Works Department

TO: David Cronin, City Engineer
FROM: Aaron Roberts, Engineering Intern
DATE: 31 July 2017
RE: Agenda Item for Transportation Commission 8/7/2017:
Traffic Calming – Request for marked crosswalk at the intersection of Crestline Drive and Harvard Road.

Background

In May 2017, the Traffic Safety Commission received a request for a marked crosswalk at the intersection of Crestline Drive and Harvard Road.

Details

Crestline Drive is classified as a “collector” street in a residential area, paved approximately 26 feet wide, with a speed limit of 30 mph as provided in State Law. Harvard Road is classified as a “collector” street in a residential area, paved approximately 26 feet wide, with a speed limit of 30 mph as provided in State Law. Both Crestline Drive and Harvard Road are identified as Safe Routes to School and are identified as bike routes on the Countywide Bikeway study. The intersection is located on the southeast corner of West Middle School and includes a 4-way stop.

Lawrence’s School Crossing Control Policy states, “a marked crosswalk may be provided at crossings adjacent to school property, and at other locations where the following minimum requirements are met: vehicles enter the crosswalk (without being required to stop) at a rate exceeding 150 vehicles per hour during any 5-minute increment of the morning or afternoon crossing period. Marked crosswalks shall be limited to one per street per school when practical. Unprotected crosswalks (absence of stop sign, traffic signal or adult crossing guard) may be marked if required by a school route plan or, if a school route plan does not exist, it is not practical for children to use a protected crosswalk.” The Manual of Uniform Traffic Control Devices states, “at locations controlled by traffic control signals or on approaches controlled by STOP or YIELD signs, crosswalk lines should be installed where engineering judgment indicates they are needed to direct pedestrians to the proper crossing path(s).”

The proposed crosswalk at Crestline Drive and Harvard Road is at a controlled intersection with a four-way stop. Pedestrians crossing Crestline Drive currently use the north side of the intersection of Crestline Drive and Harvard Road. The addition of crosswalk pavement markings at this location would not help direct pedestrians to the proper crossing path. In addition, a marked crosswalk with a school sign exists on the south leg of the intersection of Crestline Drive and Yale Road which is not stop controlled and is 500 feet north of the intersection of Crestline Drive and Harvard Road.

Action Request

Traffic Calming Request – Crestline Drive & Harvard Road

It is recommended that the Transportation Commission deny the request for a marked crosswalk at the intersection of Crestline Drive and Harvard Road.

Attachment

School Crossing Control Policy

Map of Proposed Crosswalk

Safe Routes to School West Middle School

Safe Routes to School Sunset Hill



CITY OF LAWRENCE, KANSAS SCHOOL CROSSING CONTROL POLICY

Resolution No. 5777, March 19, 1996

Resolution No. 6604, August 16, 2005

Resolution No. 6748, January 22, 2008

- Premises:
1. Traffic control signs, markings, and signals (other than School Advance and School Crossing signs, and Marked Crosswalks) will be provided for elementary students only. Junior and senior high students are capable of walking to-and-from school without special assistance from adults or traffic control devices.
 2. In order to consider an adult guard or other traffic control device, the number of children using a crossing during the crossing period must average at least 10 during either the morning or afternoon crossing period. The crossing periods to be studied shall be the 45 minutes prior to the beginning of school and the 30 minutes after school dismissal, in 5-minute increments. A minimum of 3 morning and/or 3 afternoon studies will be conducted to determine the average number of children.

SCHOOL ADVANCE SIGN

A School Advance Sign may be provided on each approach of each street adjacent to a school and in advance of every marked school crosswalk that is not adjacent to a school.

MARKED CROSSWALKS

A marked crosswalk may be provided at crossings adjacent to school property, and at other locations where the following minimum requirements are met: vehicles enter the crosswalk (without being required to stop) at a rate exceeding 150 vehicles per hour during any 5-minute increment of the morning or afternoon crossing period. Marked crosswalks shall be limited to one per street per school when practical. Unprotected crosswalks (absence of stop sign, traffic signal or adult crossing guard) may be marked if required by a school route plan or, if a school route plan does not exist, it is not practical for children to use a protected crosswalk.

REDUCED SPEED ZONE (20 MPH)

A reduced speed zone may be provided for each marked school crosswalk that is not protected by a stop sign, traffic signal or adult crossing guard. The reduced speed zone shall begin approximately 150-200 feet in advance of the crosswalk and shall end approximately 50-100 feet beyond the crosswalk. The reduced speed zone shall be in effect at times provided in the *Code of the City of Lawrence*. Any signs installed under this provision will be removed upon installation of a stop sign, traffic signal or adult crossing guard under other provisions of this policy.

REDUCED SPEED ZONE (20 MPH) WITH FLASHING BEACON

A reduced speed zone with flashing beacon may be provided for each marked school crosswalk that is not protected by a stop sign or traffic signal, if the following minimum requirements are met: the average number of students exceeds 40 and the available safe gaps in the traffic is greater than 1.5 per minute; or if the average number of students is 10 or greater and the available safe gaps in the traffic is 1.0-1.5 per minute. The reduced speed zone shall begin approximately 150-200 feet in advance of the crosswalk and shall end approximately 50-100 feet beyond the crosswalk. The reduced speed zone shall be in effect for 45 minutes prior to the beginning of school and for 30 minutes after the end of school. Any beacons installed under this provision will be removed upon installation of a stop sign or traffic signal under other provisions of this policy.

STOP SIGN AND TRAFFIC SIGNAL

A Stop Sign or Traffic Signal will only be provided in accordance with criteria established in the *Manual on Uniform Traffic Control Devices*, as published by the Federal Highway Administration, and adopted by the State of Kansas and the City of Lawrence.

ADULT CROSSING GUARD


An Adult Crossing Guard may be provided if any of the following minimum conditions are met:


1. At an unprotected crosswalk if:
 - (a) the average number of students exceeds 40 and the available safe gaps in the traffic is 1.0-1.5 per minute; or
 - (b) if the average number of students is 10 or greater and
 - (1) the speed limit on the street is over 35mph, or
 - (2) the street is marked for more than 3 lanes of traffic, or
 - (3) the product of the crossing time (in seconds) and the speed limit for approaching traffic (in feet per second) is equal to or larger than the measured sight distance, or
 - (4) the available safe gaps in the traffic is less than 1.0 per minute.
2. At a crosswalk protected by a Stop Sign (not an all-way stop) or a Traffic Signal, if the average number of students is 30 or greater; and
 - (a) the street is marked for 4 lanes or more lanes of traffic and vehicles enter the crosswalk without being required to stop at a rate exceeding 150 vehicles per hour during any 5-minute increment of the morning or afternoon crossing period; or
 - (b) the street is marked for less than 4 lanes of traffic and vehicles enter the crosswalk without being required to stop at a rate exceeding 300 vehicles per hour during any 5-minute increment of the morning or afternoon crossing period.
3. At a crosswalk at an All-Way Stop if the average number of students is 10 or greater and the all-way stop is warranted during the crossing period.

Crestline Drive Proposed Crosswalk



Legend

 = Proposed Crosswalk

0 15 30 60 90 120
 Feet

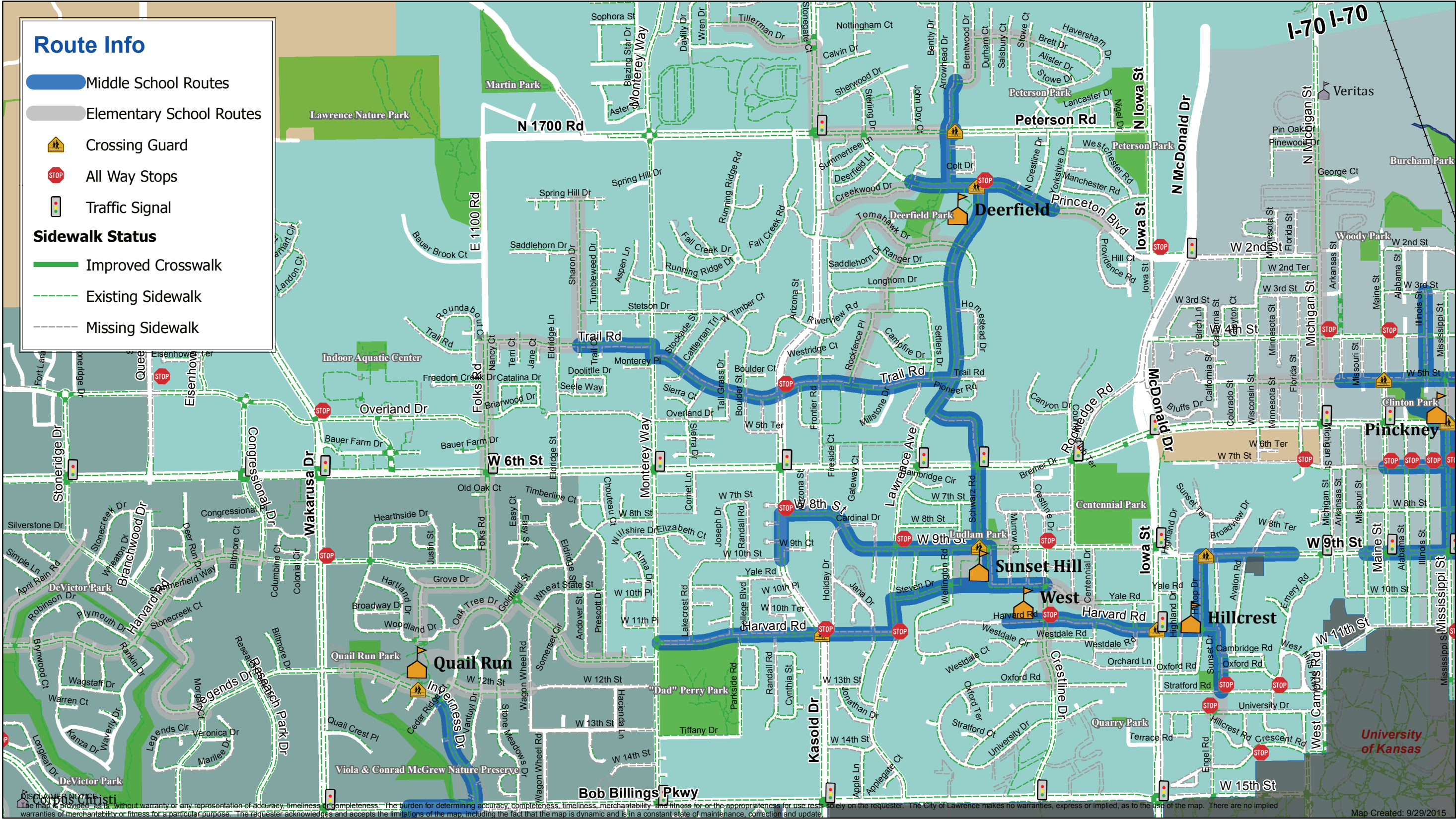
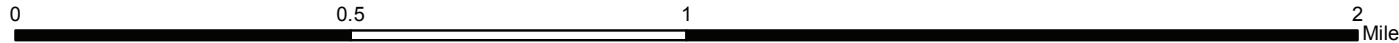


WEST MIDDLE SCHOOL

For more information visit: BeActiveSafeRoutes.com For all school maps: maps.BeActiveSafeRoutes.com

Information as of 2015-09

Suggested "Route to School" with school boundaries and other school's routes also indicated.



Memorandum

City of Lawrence

Public Works Department

TO: David P. Cronin, P.E., City Engineer
FROM: Nick Voss, P.E., Project Engineer
DATE: July 27, 2017
RE: Agenda Item for Transportation Commission 8/7/2017:
Highway Safety Improvement Program Funds – 13th and Massachusetts Street

Background

The Federal-Aid Highway Safety Improvement Program (HSIP) Funds is a federal program administered by the Kansas Department of Transportation (KDOT). Under this program, funding is made available to local communities for construction of safety improvements on highways and local streets. The program is competitive and award decisions are made based on life-cycle cost-benefit analysis of the proposed improvement measures. This is a 90/10 cost sharing program to pay for the construction cost of safety improvements; 90% Federal-Aid and 10% local match. The local entity is also responsible for 100% of the cost of engineering design and other miscellaneous expenses.

In July of 2016 city staff applied for a mill and overlay project including new lane configurations with bike amenities and a center left turn lane on Massachusetts Street from 11th Street to 14th Street. City staff submitted the application with crash history data for the area and a proposed scope. KDOT reviewed the data and allocated \$100,000 (max.) for this project with a 10% city match. This project is currently included in the 2018 budget with \$50,000 in city funds for a total budget of \$150,000.

Details

Massachusetts Street is an arterial roadway with sidewalks on both sides. The speed limit is posted at 30 mph. It is paved 46-foot-wide, is on the bike route, is on a bus route, and is not a safe route to school. From North Park Street to South Park Street on the west side parking is not restricted except for a loading zone for the Parks and Rec building. On the east side parking is restricted from 7am to 6pm except Sundays. This section has two northbound travel lanes and one southbound travel lane. From South Park Street to 14th Street parking is restricted on the west side and is restricted from 7am to 6pm except Sundays on the east side. This section has two northbound travel lanes and one southbound travel lane. From 12th to 14th Street there were 11 reported crashes during the past three years three of which involved pedestrians or bicycles.

Massachusetts Street has been identified as a bike route by the Metropolitan Planning Organizations Multimodal Studies Project. This bike route on Massachusetts Street connects to a bike route on 14th Street that connects to the University of Kansas and a

bike route on 13th Street that connects to the Haskell Rail to Trail. Throughout this corridor bike lanes, buffered bike lanes and sharrows are all options for bicycle infrastructure without replacing the existing curb, storm sewer, or traffic signals. Existing conditional parking during nights and Sundays would be removed for bike lane options to be constructed. As this project is further studied affected property owners and residents will be invited to provide input.

The bike lane option for this section of roadway would convert the existing roadway to include a travel lane in each direction with a two way left turn lane from South Park Street to 15th Street. The Federal Highway Administration states that roadways with a daily traffic of 20,000 vehicles or less make good candidates for this lane configuration. The most recent KDOT traffic counts on Massachusetts Street between South Park and 13th Street recorded 14,170 vehicles in a 24 hour period. Massachusetts Street currently functions with one lane southbound and one lane northbound when parking is present and does not have an existing center turn lane.

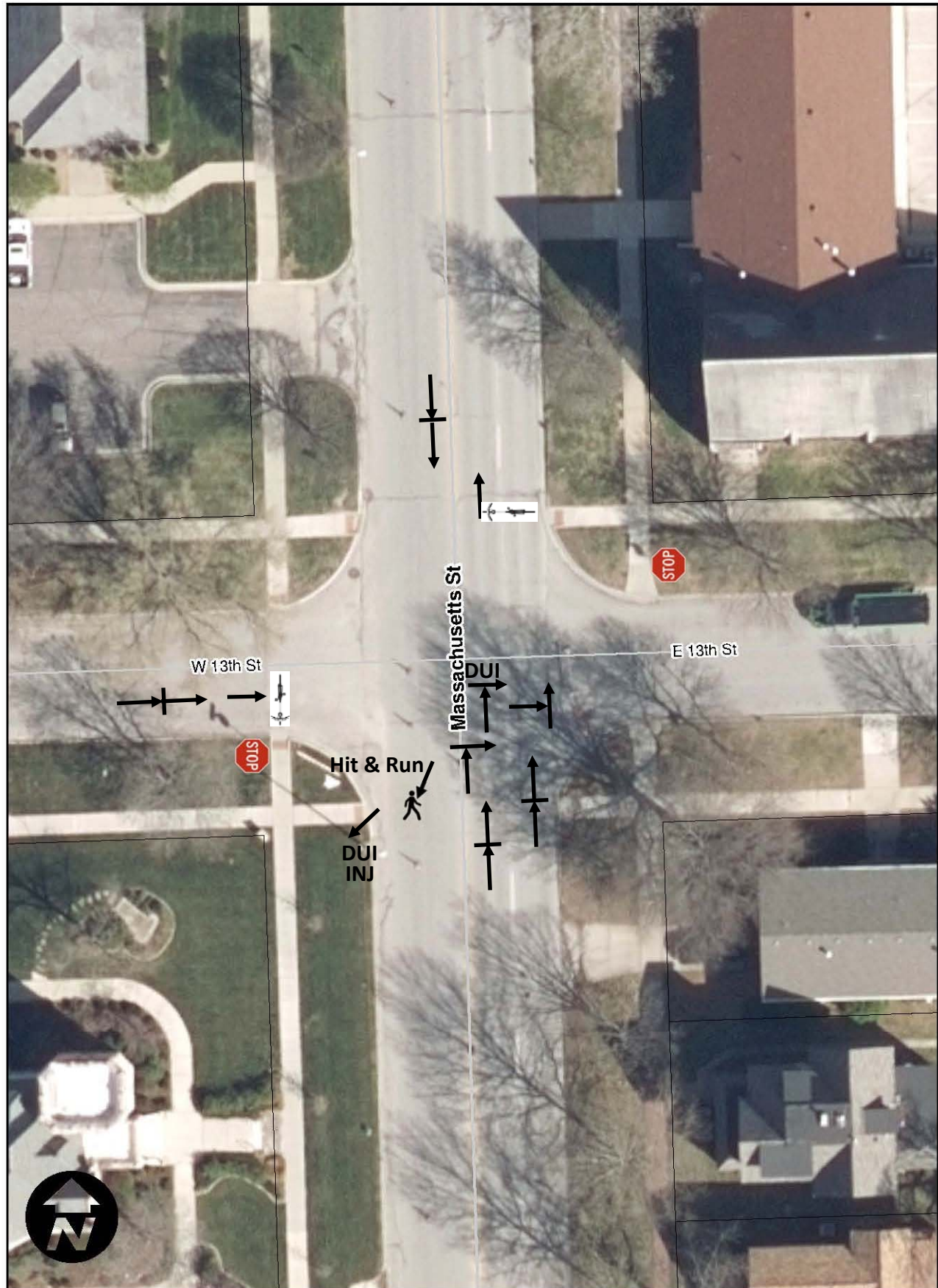
A parking option for this section of roadway would convert the existing roadway to include a travel lane in each direction with a two way left turn lane from South Park Street to 15th Street. The reduction from three to four lanes would allow for unrestricted parking (or bus stops) to be allowed on both sides of the street. The current scope of the HSIP includes bike lanes for this project. If this option is selected KDOT allocated monies may not be available.

In 2014 the City of Lawrence converted 9th Street from four lanes to three lanes. 9th Street has a similar traffic volume to Massachusetts Street at 16,755 vehicles per day. In the three years prior to 9th Streets conversion from four lanes to three lanes the corridor had 35 reported crashes per year. In the two years since the conversion 38 crashes have been reported per year.

Action Request


Recommend city staff accept Highway Safety Improvement Program Monies for a lane reconfiguration and mill and overlay project on Mass Street from 11th to 14th Street with construction contingent on acceptance of final design.

13th and Mass Collision Diagram



30 15 0 30 Feet

Massachusetts Street: Highway Safety Improvement Project (HSIP)



Multimodal Studies Project
Map 2: Lawrence Urban Area
Existing & Proposed Bikeways

Bike Lane

Bike Route

Shared Use Path

Recreational Trail

Shared Use Path

Bike Lane

Bike Route

Bike Route with Paved Shoulder

Cycle Track

Shared Lane Marking

Climbing Lane

Street / Highway

Railroad


City Limits

County Limits

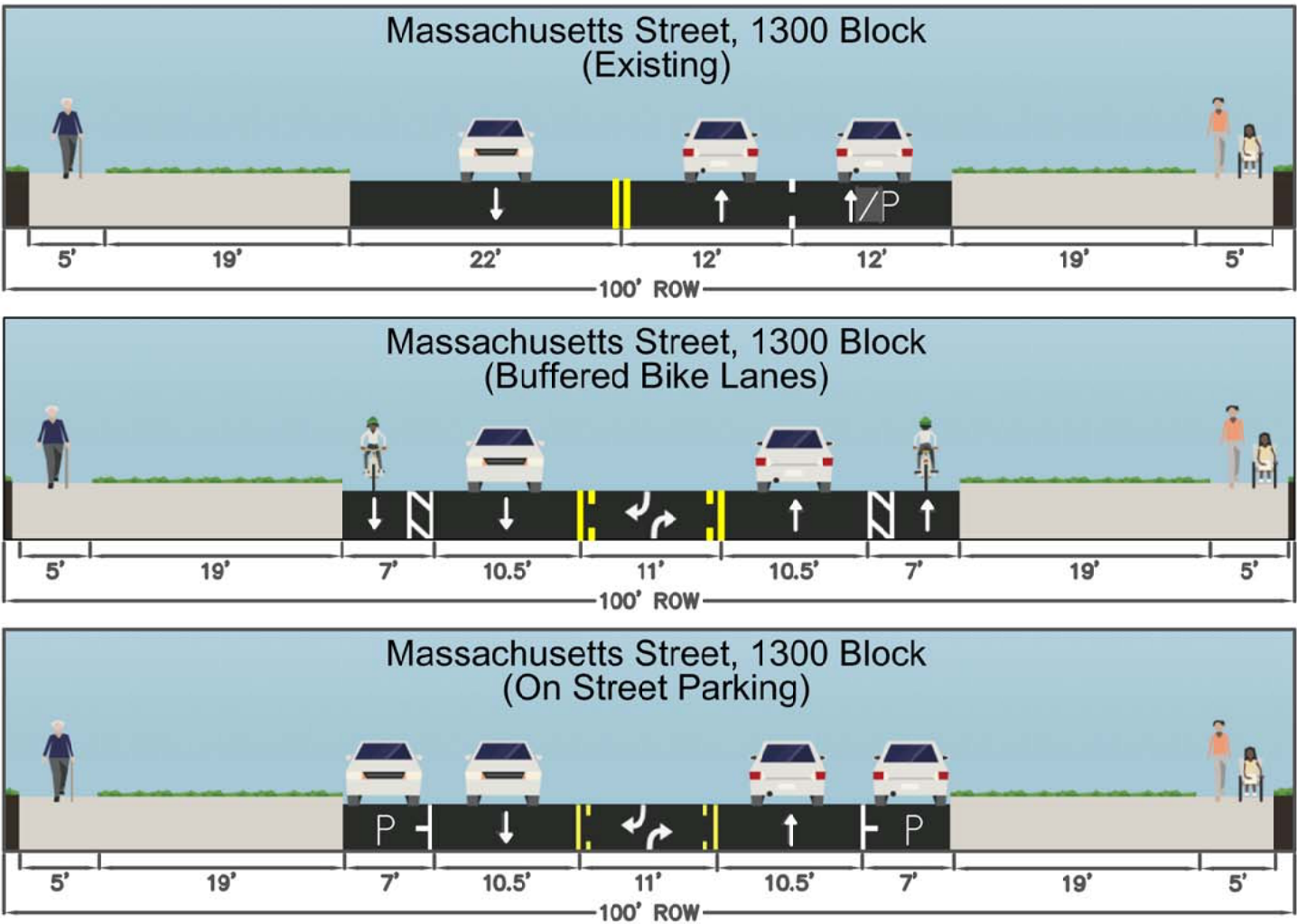
School / University

Park

Water



Existing and Possible Lane Reconfigurations





Memorandum

City of Lawrence

Public Works Department

TO: Transportation Commission
FROM: Dave Cronin, City Engineer
DATE: July 31, 2017
RE: Agenda Item for Transportation Commission 8/7/2017:
Pedestrian and Bicycle Prioritization Criteria

Background

The City Commission has budgeted \$450,000 in pedestrian/bicycle funding for 2017, 2018 and 2019. Staff has been directed to prioritize funds to identify standalone pedestrian and bicycle projects for the next three years.

The Pedestrian-Bicycle Issues Task Force recommended splitting funds 50/50 (ped/bike) and provided implementation priorities for pedestrian and bicycle projects. Pedestrian priorities were 1) Safe Routes to School, 2) Arterial/Collector sidewalk gaps and 3) Safety/ADA improvements. Bicycle Priorities were 1) Complete Lawrence Loop, 2) Safety Improvements and 3) Bicycle Boulevards.

Staff used the following considerations for developing the attached criteria to be used in a prioritization system:

- Using clear measurable criteria to highlight Pedestrian/Bicycle Task Force priority areas.
- Using easily obtainable data from previous plans, studies and current GIS data.
- Recognizing that an annual allocation of pedestrian funds would need to be set-aside for ADA ramps. All ramps would be prioritized separately using the pedestrian criteria.

Action Request

Discuss draft criteria and provide staff direction.

Attachments

Pedestrian and Bicycle Prioritization Criteria

Pedestrian Prioritization

Criteria for prioritizing pedestrian infrastructure projects is broken into three areas: 1. Priority Networks (5 max points) 2. Pedestrian Access to Priority Destinations (5 max points) and 3. Safety (20 max points). Safety is weighted the highest.

1. Priority Networks

Projects that improve connectivity along priority networks recognized in adopted plans have the highest weight. This criteria recognizes the [Regional Pedestrian Plan](#) Priority network and the priority network from the [Ped Bike Issues Taskforce Report](#). Safe Routes to School Routes are the highest priority, followed by Arterial and Collector Streets without sidewalks on either side followed by Arterial Streets, Collector Streets and finally Local streets.

2. Pedestrian Access to Priority Destinations

Projects within closer proximity to priority destinations receive higher priority to promote access around high demand pedestrian destinations. This score is symbolized on a map produced by creating buffers of identified locations.

3. Safety

Projects that address and improve locations with pedestrian crash histories have the highest priority. Higher volume roadways have greater priority as well as projects that improve crossing on roadways over 15,000 AADT.

Pedestrian Infrastructure Prioritization Criteria		Points
1	Priority Network (select one, max 5 pts)	
	Safe Routes to School Route	5
	Arterial/Collector Street Classification of Roadway and/or Parallel Roadway for Off-Road Facilities with no sidewalks on either side	4
	Arterial Street Classification of Roadway and/or Parallel Roadway for Off-Road Facilities	3
	Collector Street Classification of Roadway and/or Parallel Roadway for Off-Road Facilities	2
	Local Street Classification of Roadway and/or Parallel Roadway for Off-Road Facilities	1
2	Pedestrian Access to Priority Destinations (select one, max 5 pts)	
	Within ¼ mi of school or 1/8 mi of transit stop	5
	Within ½ mi of school, ¼ mi of transit stop, , ¼ mi of neighborhood or community retail (includes grocery store, farmers market and retail food outlets), 1/8 mi of park, 1/8 mi of library, or 1/8 of post office	3
	Farther than ½ mi of school, ¼ mi of transit stop, ¼ of neighborhood or community retail, 1/8 mi of park, 1/8 mi of library, or 1/8 mi of post office	1
3	Safety - Crash History (select all that apply, max 12 pts)	
	Project addresses reported pedestrian-related crash in the last five years (3 pts per crash -max 12)	12
	Safety - Roadway Volume (select one, max 5 pts)	
	Project on a road that has over 25,000 AADT on roadway	5
	Project on a road that has over 20,000 AADT on roadway	3
	Project on a road that has over 15,000 AADT on roadway	1
	Safety - Crossing (max 3 pts)	
	Project adds crossing improvements on a road over 15,000 AADT	3
Max Points - 30		

Bikeway Prioritization

Criteria for prioritizing bicycle infrastructure projects is broken into three areas: 1. Adopted Plan Priorities (5 max points) 2. Bicycle Demand (5 max points) and 3. Safety (20 max points). Safety is weighted the highest.

1. Adopted Plan Priorities

Projects that improve connectivity along networks recognized in adopted plans have the highest weight. This criteria recognizes the priority network from the [Ped Bike Issues Taskforce Report](#) and the [Countywide Bikeway Plan](#).

2. Bicycle Demand Model

A scoring system for mapping bicycled demand first provided to the MPO by URS consulting firm. GIS data provided by the consultant included the scores for various buffer distances to five different factors, listed below. The URS model did not include documentation. Therefore, city staff “reverse engineered” this data and scoring documentation and methodology.

The scoring system ranks areas based on 5 proximity factors: High density housing, medium density, K-12 schools, college/university, existing bike infrastructure.

Proximity Factors

High-Density Housing

A buffer of high-density housing. High-density housing as defined in the updated comprehensive plan is greater than or equal to 16 people per acre. The GIS model uses the latest TAZ boundary and population data to determine. Scores in this category carry a higher weight because of higher population.

Medium-Density Housing

A buffer of medium-density housing. Medium density housing as defined in the updated comprehensive plan is greater than or equal to 7 people per acre and less than 16 people per acre. The GIS model uses the latest TAZ boundary and population data to determine. Scores in this category carry a lesser weight than high-density housing.

Schools K-12

A buffer distance from the property boundaries of public and private kindergarten through 12th grade. The GIS model uses the Schools and Parcels layer to determine.

College / University

A buffer distance from college / university boundaries. The GIS model uses the University layer to determine.

Existing Shared Use Path or Bike Lane

A buffer distance from existing shared use path and bike lane infrastructure. The GIS model uses Shared Use Paths and Bike Lane line layers to determine.

(The possible range of scores with the bicycle demand model are 0 to 81)

Factor	Score
High Density Housing	
within 0.25 mile	16
within 0.5 mile	12
within 1 mile	8
within 2 miles	4
Medium Density Housing	
within 0.25 mile	9
within 0.5 mile	7
within 1 mile	3
within 2 miles	2
Schools K-12	
within 0.25 mile	18
within 0.5 mile	14
within 1 mile	6
within 2 miles	2
College/University	
within 0.25 mile	20
within 0.5 mile	18
within 1 mile	15
within 2 miles	7
Existing Shared Use Path / Bike Lane	
within 0.25 mile	18
within 0.5 mile	14
within 1 mile	6
within 2 miles	2

3. Safety

Projects that address and improve locations with bicycle crash histories have the highest priority. Higher volume roadways have greater priority as well as projects that improve crossing on roadways over 15,000 AADT.

Bicycle Infrastructure Prioritization Criteria		Points
1	Adopted Plan Priorities (select one, max 5 pts)	
	Along the Ped/Bike Issues Taskforce Report Long Term Bikeway Priority Network	5
	Along network identified in approved Countywide Bikeway Plan	4
	Arterial/Collector with no Shared Use Path	3
2	Bicycle Demand (select one, max 5 pts)	
	<i>Bicycle demand is calculated on the bicycle demand heat map which is a prioritization score based on proximity to housing density, K-12 private/public schools, college/university and existing bikeway infrastructure.</i>	
	score greater than 66 up to 81	5
	score greater than 49 up to 65	4
	score greater than 33 up to 49	3
	score greater than 17 up to 33	2
	score greater than 0 up to 17	1
3	Safety - Crash History (select all that apply, max 12 pts)	
	Project addresses reported bicycle-related crash in the last five years (3 pts per crash -max 12)	12
	Safety - Roadway Volume (select one, max 5 pts)	
	Project on a road that has over 25,000 AADT on roadway	5
	Project on a road that has over 20,000 AADT on roadway	3
	Project on a road that has over 15,000 AADT on roadway	1
	Safety - Crossing (max 3 pts)	
	Project adds crossing improvements on a road over 15,000 AADT	3
Max Points - 30		