CITY OF DES MOINES	Council Communication Office of the City Manager	Date:	October 25, 2010
		Agenda Item No.	59
		Roll Call No.	[]
		<b>Communication No.</b>	<u>10-629</u>
		Submitted by:	Jeb E. Brewer, P.E.
			City Engineer

# AGENDA HEADING:

Traffic Analysis of Ingersoll Avenue Restriping Project.

# SYNOPSIS:

The Traffic and Transportation Division has made a detailed study of the operation of Ingersoll Avenue following the conversion to a three-lane roadway with bike lanes. Traffic conditions have been generally as anticipated following the implementation of the restriping project. There has been some increase in congestion and delay, although the actual increases are not higher than expected. The overall daily traffic volumes on Ingersoll are steady to a slight increase. These traffic counts show that there has not been a substantial diversion of traffic from Ingersoll to Grand or other parallel streets.

The crash history shows a reduction of over 50% of crashes compared to the previous three-year average for the same months, and also over 50% reduction in the number of injuries reported for the after period. There have been no reported crashes involving pedestrians, bicycles, or buses during the trial period. Traffic and Transportation staff have monitored traffic flows and conditions on a regular basis, including trips through the corridor by both vehicle and bicycle, as well as using traffic observation cameras. No major traffic problems have been observed during the study period.

Staff has also conducted and reviewed public opinion surveys regarding the lane configuration on Ingersoll, both before and after the conversion. Based on the before and after public opinion surveys, the overall perception of the new configuration has changed to be more favorable in the after survey compared to the before survey. Overall, 56.4% of the responses in the after survey are in favor of keeping the three-lane configuration with the bike lanes. In addition, a majority of responses (52.4%) believe that the change has made Ingersoll safer.

Based on the analysis of traffic conditions, safety and public opinion as detailed in this study, staff strongly recommends that the City Council approve the new three-lane configuration with bike lanes as the safest and most appropriate traffic control for Ingersoll Avenue from ML King, Jr. Parkway to Polk Boulevard.

## FISCAL IMPACT: NONE

<u>Amount</u>: \$0.

<u>Funding Source</u>: 2010-11 Operating Budget, Page 97, Engineering Department Traffic & Transportation – Street Markings Maintenance, ENG100416.

# **ADDITIONAL INFORMATION:**

The Traffic and Transportation Division has made a detailed study of the operation of Ingersoll Avenue following the conversion to a three-lane roadway with bike lanes on May 1, 2010. This study analyzed the traffic conditions that had been listed as warranting changing Ingersoll back to the previous four-lane configuration, and analyzed extensive before and after public opinion survey results.

As shown in the analysis, traffic conditions in the Ingersoll Corridor have been generally as anticipated following the implementation of the restriping project. There has been some increase in congestion and delay, although the actual increases are much less than the perceived increases. Overall travel times during the morning and noon peak periods showed negligible changes, while the greatest increase in travel time occurred in the afternoon peak period, but was only approximately 20 seconds higher for westbound traffic traveling from ML King to 42<sup>nd</sup> Street. Therefore, congestion and delays were not higher than expected.

The overall daily traffic volumes on Ingersoll are steady to a slight increase. Some reduction in traffic volumes has occurred during the morning and evening peak periods, but this has been offset by additional traffic during the remainder of the day, including the noontime period. In addition, traffic volumes on Grand Avenue did not show an increase. These traffic counts show that there has not been a substantial diversion of traffic from Ingersoll to Grand or other parallel streets.

The crash history shows a reduction of over 50% of crashes compared to the previous three-year average for the same months, and also over 50% reduction in the number of injuries reported for the after period. There have been no reported crashes involving pedestrians, bicycles, or buses during the trial period.

Traffic and Transportation Division staff have monitored traffic flows and conditions on a regular basis, including trips through the corridor by both vehicle and bicycle, as well as using traffic observation cameras. No major traffic problems have been observed during the study period. In addition, staff has not received reports from businesses or residents along the corridor, from motorists or bicyclists using the corridor, or from the general public, indicating any major problems.

In addition to reviewing the traffic conditions, staff has also conducted and reviewed public opinion surveys regarding the lane configuration on Ingersoll, both before and after the conversion. This survey information was obtained through an on-line survey using Survey Monkey, and was limited to one survey response per computer address. The before survey was taken in March and April, just prior to the restriping. The after survey was taken from September 16 to October 4, after approximately five months of operation with the new lane configuration.

The surveys were not intended to be statistically precise, which would have required much greater sampling controls. Instead, they were intended to measure and track public input and opinion about the changes on Ingersoll Avenue. Staff did meet with Ann Selzer, a nationally renowned, Des Moines based public opinion polling expert, and received some valuable information and advice on how to conduct the surveys to avoid bias in the questions and the analysis of the results.

A total of 721 responses were compiled in the before survey, and that total increased substantially in the after survey to 1,501. The large increase in the after survey responses raised a concern that those in favor of or opposed to the new configuration may have made a concerted effort to complete the survey and skew the results. However, a total of 335 persons in the after survey indicated that they had also taken the previous survey, and their survey results were very similar to the results of those who did not take the

previous survey. Therefore, it appears that the surveys were not biased or skewed, but provides a good measure of public opinion about the restriping.

Based on the before and after public opinion surveys, the overall perception of the new configuration has changed to be more favorable in the after survey compared to the before survey. Overall, 56.4% of the responses in the after survey are in favor of keeping the three-lane configuration with the bike lanes, with 46.3% definitely and 10.1% probably. There is still opposition to the changes, with 42.7% in favor of changing Ingersoll back to four lanes, (35.5% definitely and 7.2% probably). In addition, a majority of responses (52.4%) believe that the change has made Ingersoll safer, and those who responded that they had biked on Ingersoll had the highest safety rating, with 86.3% stating that they think Ingersoll is now safer with the three lanes for traffic and separate bike lanes.

Based on the analysis of traffic conditions, safety and public opinion as detailed in this study, staff strongly recommends that the City Council approve the new three-lane configuration with bike lanes as the safest and most appropriate traffic control for Ingersoll Avenue from ML King, Jr. Parkway to Polk Boulevard.

Staff presented the findings of this review at the October 12<sup>th</sup> Traffic Safety Committee meeting. The Traffic Safety Committee concurred with staff's recommendation at the meeting.

# **PREVIOUS COUNCIL ACTION(S):**

Date: September 14, 2009

Roll Call Number: 09-1674

<u>Action</u>: <u>Amending</u> Chapter 114 of the Municipal Code regarding proposal for a three-lane restriping project including bicycle lanes and additional parking on Ingersoll Avenue. (<u>Council Communication</u> <u>No. 09-662</u>) Moved by Hensley that this ordinance do now pass, <u>#14,884</u>. Motion Carried 5-1. Nays: Coleman. Mayor Cownie declares a conflict of interest and abstains from voting.

Date: August 24, 2009

Roll Call Number: 09-1578

<u>Action</u>: Amending Chapter 114 of the Municipal Code regarding proposal for a three-lane restriping project including bicycle lanes and additional parking on Ingersoll Avenue. (<u>Council Communication</u> <u>No. 09-594</u>) Moved by Hensley that this ordinance be considered and given second vote for passage; refer to the City Manager to form a committee of Ingersoll business owners to work with the City on creation of an Exit Strategy, if necessary. The City Manager will work on a plan to help educate the community about Complete Streets. This ordinance will go into effect in spring 2010. Motion Carried 6-0. Mayor Cownie declares a conflict of interest and abstains from voting.

Date: August 10, 2009

Roll Call Number: 09-1474

<u>Action</u>: Amending Chapter 114 of the Municipal Code regarding proposal for a three-lane restriping project including bicycle lanes and additional parking on Ingersoll Avenue. (<u>Council Communication</u> <u>No. 09-554</u>) Moved by Hensley that this ordinance be considered and given first vote for passage; refer to Traffic and Transportation to report back with data on current traffic counts, schedule a meeting with business owners to view computer model and submit a written evaluation after 6 months. Motion Carried 6-0. Mayor Cownie declares a conflict of interest and abstains from voting.

Date: January 5, 2009

#### Roll Call Number: 09-021

<u>Action</u>: Amending Chapter 114 of the Municipal Code submitting traffic regulation changes as follows: (<u>Council Communication No. 09-001</u>) Moved by Hensley that this ordinance be considered and given first vote for passage; refer item (A) back to City Manager, Planning and Traffic and Transportation for review and recommendation. Motion Carried 7-0.

## **BOARD/COMMISSION ACTION(S): TRAFFIC SAFETY COMMITTEE**

<u>Date</u>: October 12, 2010

#### Roll Call Number: N/A

<u>Action:</u> George Robinson moved that the Committee approve staff's recommendation that the City Council approve the new three-lane configuration with bike lanes as the safest and most appropriate traffic control for Ingersoll Avenue from Martin Luther King Jr. Parkway to Polk Boulevard. Consensus of the members present concurred with the motion.

## ANTICIPATED ACTIONS AND FUTURE COMMITMENTS: NONE

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