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that they would only go in at locations that currently have a marked cross walk (an indication that there is, in fact, a significant pedestrian movement at the location in question) and don't have an abutting bus stop (the bus can't get back out into traffic with a bump out in the way). These criteria are only met at Oregon and Pierce Street. Bump outs would need to be funded through a BID which is not yet in place.

Regarding traffic volumes and narrowing to one lane in each direction, please consider the following from our traffic engineering section:

The Department of Public Works recommendation of maintaining a four traffic lane cross section on S. 2nd St. between W. National Ave. and W. St. Paul Ave. is based on historical traffic counts as well as projections of future traffic demand on this segment of roadway. It was necessary for the DPW to base its projections on historical traffic counts, not traffic counts taken in the last two years. The reason for this is that with the reconstruction of the Marquette Interchange many freeway ramps in the area were closed and this has had a significant impact on the traffic using S. 2nd St. Specifically, the closure of the old eastbound I-794 off-ramp at Hinman St. and the elimination of access to St. Paul Ave. at the new eastbound off-ramp at Plankinton Ave. has significantly reduced traffic volumes on S. 2nd St. Therefore, we based our projections on the most recent historical counts(2002) that were representative of normal traffic conditions. We believe that with completion of the Marquette Interchange work in 2008 and other changes to the area, traffic volumes on S. 2nd St. will not only return to levels seen in 2002, but increase significantly. We believe this to be true for the following reasons: Opening of the new I-794 eastbound off-ramp to St. Paul Ave. west of 6th St., two-way traffic operation on E/W St. Paul Ave. and new development in the area such as the Hack Building and other condo projects etc.

As far as access during construction is concerned, the City would proceed with those efforts once the construction date is closer...most-likely next fall.

Chad Chrisbaum to Ursula Twombly
11/6/08

From: Wantoch, Clark
Sent: Mon 11/3/2008 5:26 PM
To: Chrisbaum, Chad T
Cc: Gresl, Lois; Bryson, Robert; Loughran, Michael
Subject: RE: Drawings and traffic count

Chad

I called Ursula. I mentioned it is too early to provide the plans for locating the planters. I did offer the

<https://webmail.milwaukee.gov/Exchange/cwanto/Inbox/Fwd:%20FW:%20Drawings%20a...> 3/10/2009

S. 2ND ST.

2

Wantoch, Clark

From: Bryson, Robert
To: Polenske, Jeffrey
Cc: Wantoch, Clark
Subject: RE: 2nd St
Attachments:

Sent: Mon 3/9/2009 3:27 PM

Jeff:

When looking at traffic volume requirements as they relate to number of lanes required, guidance that is given in a number of planning documents usually suggests to use a demand of 450 to 500 vehicles per lane on a typical street for the maximum amount of traffic carried before additional lanes or other treatments should be looked at. Obviously, capacity can be increased by heavily favoring 2nd Street traffic with the signal splits. However, this will create other negative situations for pedestrians and cross street traffic operation. So the 500 vph threshold is usually a good rule of thumb to indicate a need for 2 traffic lanes.

In the situation on S. 2nd Streets between National and St. Paul, the best available data we have shows existing traffic demand in the morning peak hour ranging from 420 to 670 vehicles per hour northbound, and 610 to 820 vehicles per hour southbound during the during the evening peak hour. When looking out at design year, these design hourly volumes increase to about 880 vehicles per hour during the peaks.

While the existing northbound traffic demand marginally warrants two lanes during the morning peak under existing conditions, two lanes are definitively shown to be needed in the southbound direction under existing conditions. Additionally, design year traffic demand also clearly indicates a warrants for two lanes in each direction during the design year conditions. Further, with the continued growth in traffic that will be associated with improvements and expansion of land uses in this area, two lanes will also clearly be required in the near term in the southbound direction to support land use improvements anticipated.

Bob

Robert W. Bryson
 Chief Traffic and Lighting Engineer
 City of Milwaukee
 Department of Public Works
 841 N. Broadway, Room 920
 Milwaukee, WI 53202
 Phone: (414) 286-3244
 Fax: (414) 286-3693
 E-Mail: robert.bryson@milwaukee.gov

From: Polenske, Jeffrey
Sent: Sun 3/8/2009 9:08 PM
To: Bryson, Robert
Cc: Wantoch, Clark
Subject: FW: 2nd St

Bob,

If you could get this info to me sometime tomorrow I would appreciate it. I want to respond back to Jennifer before I leave for the week (Tues. afternoon).

Thanks,
 Jeffrey S. Polenske
 City Engineer
 City of Milwaukee
 (414)286-2400

From: Wantoch, Clark
Sent: Wed 3/4/2009 4:44 PM
To: Polenske, Jeffrey; Bryson, Robert
Cc: Loughran, Michael; Gresl, Lois; Chrisbaum, Chad T
Subject: RE: 2nd St

Bob

Chad and Mike already responded. The existing cross section is 7-11-11-11-11-7 for a total of 58 feet which from the state's standpoint is already sub-standard for two lanes and a parking lane in each direction. Please provide the traffic data and threshold justifying the need for two traffic lanes as mentioned by Jeff below. Put this as an attachment to your response so Jeff can forward it to Jennifer.

Thanks
Clark

From: Polenske, Jeffrey
Sent: Wed 3/4/2009 4:00 PM
To: Wantoch, Clark
Cc: Loughran, Michael; Gresl, Lois; Chrisbaum, Chad T
Subject: RE: 2nd St

Clark,

Jennifer called me and needs a little more detail as to why a bike lane can't be accommodated. Not so much for her verification but for who ever it is that's making the request. Please provide the current street/lane widths to show why the bike lane can't be accommodated without eliminating a traffic lane. Also provide the traffic volumes that justify a second lane, as well as, the volume threshold that requires the second lane in each direction north of National.

Thanks,
Jeffrey S. Polenske
City Engineer
City of Milwaukee
(414)286-2400

From: Wantoch, Clark
Sent: Tue 3/3/2009 1:11 PM
To: Gonda, Jennifer
Cc: Polenske, Jeffrey; Loughran, Michael; Gresl, Lois; Chrisbaum, Chad T
Subject: RE: 2nd St

Jennifer

South 2nd Street from a point south of W. St. Paul Ave. to W. National Ave. has traffic volumes that require two lanes of traffic in each direction. Businesses have expressed a need to retain parking on both sides of the street. The project as proposed is to resurface the existing roadway at its current width. As a part of the project, the city wants to add trees. The existing fully paved sidewalk area leaves very little room for the trees. We are including special tree box-outs to allow the trees to grow. There is no room to widen the street.

With regard to resurfacing, it is the most cost effective pavement strategy. Any narrowing of the roadway would require complete reconstruction, including the removal of the track zone that exists under the pavement. This would be very costly.

Therefore, South 2nd Street will be resurfaced at its existing width. To account for bikes, the roadway will be signed as a bike route. The portion from Maple to Pittsburg is part of the Oak Leaf Trail and the portion north of Pittsburgh is a preferred route. A painted bike lane will not fit into the existing width of the roadway.

I hope this helps clarify the situation. Any questions, please give me a call.

Clark
x-2401

From: Gonda, Jennifer
Sent: Mon 3/2/2009 2:51 PM
To: Wantoch, Clark
Subject: 2nd St

Hey Clark-

Don't forget to send me that info.

Thanks a million,

Jennifer

Jennifer Gonda Birnbaum

Sr. Legislative Fiscal Manager

City of Milwaukee - Intergovernmental Relations Division

Office: (414) 286-3492

Cell: (414) 708-7680

Fax: (414) 286-8547

5.2ND ST.

30

Wantoch, Clark

From: Wantoch, Clark
To: Bryson, Robert
Cc:
Subject: RE: Alderman Witkowiak
Attachments:

Sent: Sun 3/15/2009 10:35 AM

2 LANES VS 1 LANE
IN EACH DIRECTION

You can put the details together like you did for me after the meeting. We will provide this to the Aid. However, I first want to know the state's position on funding. Lois and Chad are looking into it.

Clark

From: Bryson, Robert
Sent: Sat 3/14/2009 3:11 PM
To: Wantoch, Clark
Subject: RE: Alderman Witkowiak

Clark: If the decision on what to do here is going to be left up to the Alderman to dictate, he is going to have to be advised of ALL of the reasons that the four lane road is recommended here. The adverse impacts of two lane roadways far outweigh those of the four lane roads, and he has to at least be made aware of what goes on in the thought process. In the sketch I gave you after the meeting, the traffic volume consideration is only one minor component of the consequences to implementing what Ms. Kaufman and Ms. Twombly are suggesting. I would be more concerned with the consequences to pedestrian safety, vehicle speeds, and the overall traffic circulation considerations involved here. Unfortunately, traffic flow is not constant over the entire project length, and I'm sure I can find a block where traffic is lower, too. And I still can't understand how he would consider that we are mistaken in our ability to read and interpret a traffic count. If you want a discussion of the potential impacts on traffic operation of the neighborhood plan, as well as a rebuttal to their claims of our traffic data being incorrect, please let me know, and I would be happy to do another 6 to 8 page dissertation on the matter. This is very disappointing to see. Bob

Robert W. Bryson
 Chief Traffic and Lighting Engineer
 City of Milwaukee
 Department of Public Works
 841 N. Broadway, Room 920
 Milwaukee, WI 53202
 Phone: (414) 286-3244
 Fax: (414) 286-3693
 E-Mail: robert.bryson@milwaukee.gov

From: Wantoch, Clark
Sent: Thu 3/12/2009 1:38 PM
To: Gresl, Lois
Cc: Bryson, Robert; Polenske, Jeffrey; Mantes, Jeffrey
Subject: FW: Alderman Witkowiak

Lois

I need to know the funding implications by going to a one lane road. Please contact the state and get a response from them.

Thanks
 Clark

From: McGuire, Michael
Sent: Thu 3/12/2009 11:27 AM

S. 2nd ST. NATIONAL TO ST. PAUL

4

Attachments can contain viruses that may harm your computer. Attachments may not display correctly.

Wantoch, Clark

From: Chrisbaum, Chad T
To: jason.roselle@dot.wi.gov
Cc: Gresl, Lois; Polenske, Jeffrey; Wantoch, Clark
Subject: RE: S. 2nd Street Issues
Attachments: traffic design data.pdf(1MB)

Sent: Mon 3/23/2009 8:07 AM

2 LANES TO ONE

Sorry Jason,

The earlier email did not have the attached traffic data.

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PLEASE NOTE NEW EMAIL ADDRESS

Chad Chrisbaum
chad.chrisbaum@milwaukee.gov
Project Engineer
City Of Milwaukee
841 N. Broadway, RM 902
Milwaukee, WI 53202
Phone: 414-286-0470

From: Chrisbaum, Chad T
Sent: Mon 3/23/2009 8:03 AM
To: jason.roselle@dot.wi.gov
Cc: Gresl, Lois; Polenske, Jeffrey; Wantoch, Clark
Subject: RE: S. 2nd Street issues

ATTACHMENT ADDED ABOVE

Jason,

The South 2nd Street improvement project (Project ID 2245-01-00) from W. National Avenue to a point north of the Menomonee River is scheduled for an August 1, 2009 final PS&E with a corresponding January 12, 2010, let date. We submitted a 60% plan and draft Design Study Report (DSR) to DAAR in a letter dated February 10, 2009. This document proposed a rehabilitation project involving the removal of the existing pavement surface, and a subsequent overlay with 3.5 inches of asphalt with full replacement of the adjacent concrete curb and gutter, sidewalk, and driveway approaches. The roadway currently operates with two lanes of traffic and a parking lane in each direction. The DSR proposes to keep that configuration the same as it is now based upon the attached traffic data and sign as a bike route.

Local residents and politicians have continued to question the traffic data as to peak hourly volumes and they want to see a roadway striped with one lane in each direction. You can see from the attachments, traffic information was collected in 2002 and 2008. We have mentioned the counts meet the state's requirements of two lanes in each direction. Recently, however, there has been an earnest plea from local stakeholders and their elected representatives to consider a cross section that includes one lane of traffic, one bike lane, and one parking lane in each direction of travel.

Given the attached traffic data (that was submitted for the project as part of the Pavement Type Selection Report and Design Study Report), would the WisDOT continue its participation both logistically and monetarily, if the City decided to change the proposed typical section to reflect the aforementioned request? Please include in your response if there would be any special requirements that would have to be met if the state would fund the project with one lane in each direction. This would include such things as current or future peak hour parking bans. We need to know this because we may wish to redesign the roadway resurfacing to accommodate the one lane, bike lane and parking in each direction.

Your timely consideration of this issue is greatly appreciated.



Department of Public Works
Infrastructure Services Division

Jeffrey J. Mantas
Commissioner of Public Works

James P. Purko
Director of Operations

Jeffrey S. Polenske
City Engineer

S. 2nd St. (11' lane) LEG
⑤

April 24, 2009

Mr. Dewayne Johnson, Director
Southeast Region,
Wisconsin Department of Transportation
PO Box 798
Waukesha, WI 53187-0798

Attention: Mr. Jason Roselle

Subject: Project ID #2245-01-00
South 2nd Street
Capacity/Quality of Service Analysis

AS A FOLLOW-UP TO
E-MAIL SENT BY
RWB ON 6/9/09. - CALLED STAN @ DPWR
6/12/09
TO CONFIRM THEY
HAVE THE INFO
NEEDED FOR THE DOT
TO RESPOND ON FUNDING
IF DESIGNED AS
ONE LANE IN EACH
DIRECTION.
CAW

Dear Mr. Johnson:

In response to Mr. Roselle's email from March 24, 2009, additional analysis was performed by the City of Milwaukee to determine the operation of South 2nd Street from West National Avenue to the Milwaukee River.

Three configurations were analyzed (see Attachments 1-3) under proposed 2029 traffic volumes, including the existing configuration and two configurations with one lane and bicycle lanes in each direction. This analysis includes the proposed chapter for the Highway Capacity Manual (HCM) which takes into effect the quality of service to transit, bicycles, and pedestrians which is used to formulate a level of service (LOS) for three segments on South 2nd Street for each of those modes. The LOS for vehicles at the traffic signals at the end of each segment was determined using the existing methodology in the HCM, Chapter 16.


The results of the analysis indicate that the performance measures for pedestrians, transit, and bicycles will improve slightly, within the same LOS. However, the removal of a lane on South 2nd Street will result in the LOS degrading from LOS A under the existing configuration to LOS B with 16' lanes and LOS C with 11' lanes. In addition, the volume to capacity ratio of the southbound approach at West National Avenue will degrade from 0.62 to 0.82 with 16' lanes and 0.96 with 11' lanes. These ratios indicate that under normal traffic variance within the peak period, the southbound approach at West National Avenue will become oversaturated, resulting in sporadic congestion.

- 11' lane is
DPW current
plan

Mr. Dewayne Johnson
April 24, 2009
Page 2

We hope this information will define the anticipated conditions during the design year for each of the four travel modes under the three design alternatives being considered. While this analysis indicates the **best operating conditions can be achieved overall under the current geometric configuration**, please advise if federal cost participation will be available for any of the single lane alternatives being considered.

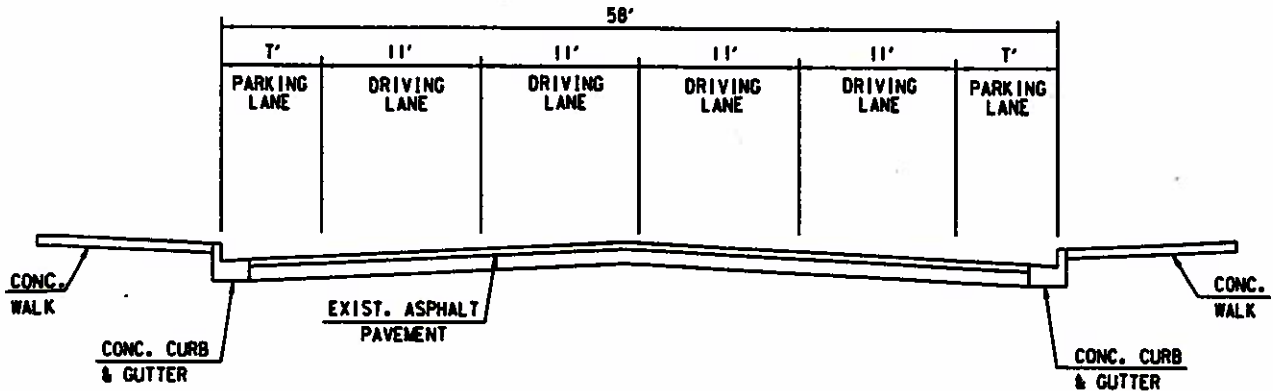
Very Truly Yours,


Jeffrey S. Polenske, P.E.
City Engineer

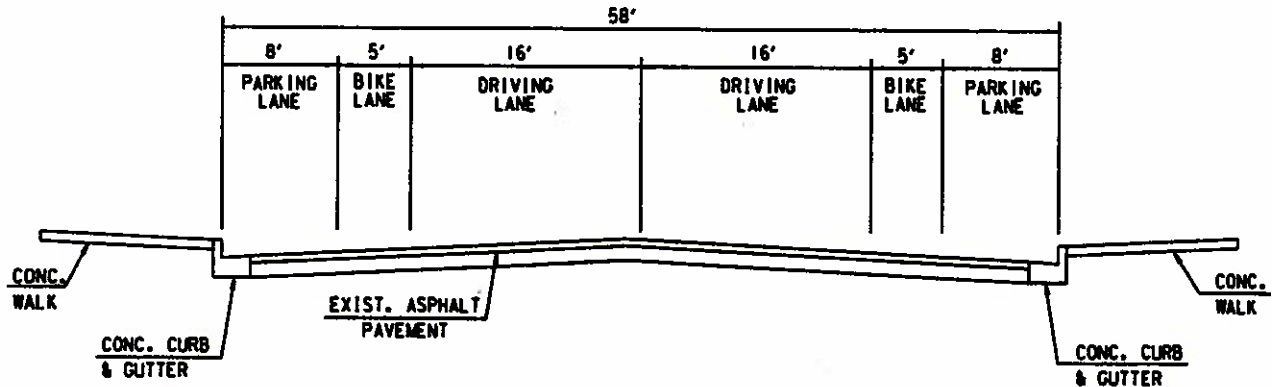
 RBW: ns

c: Ms. Lois Gresl
Mr. Chad Chrisbaum

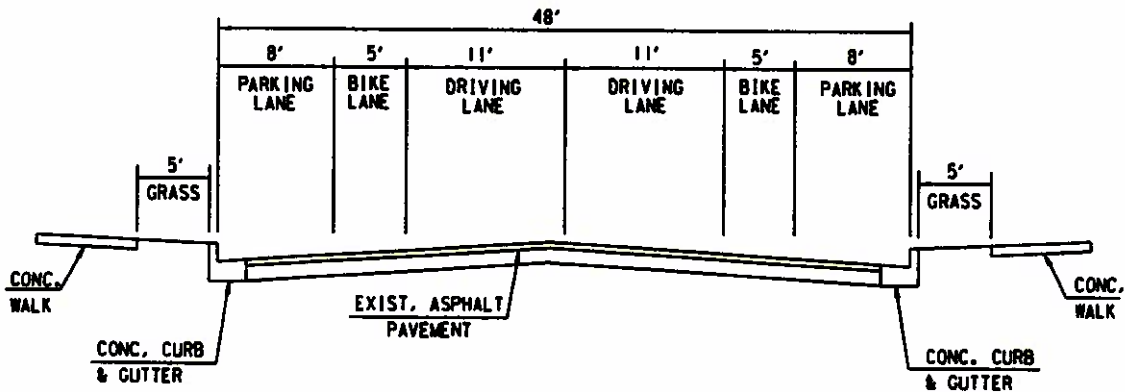
EXISTING TYPICAL CROSS SECTIONS



EXISTING CONFIGURATION
(CITY OF MILWAUKEE PREFERRED)



PROPOSED CONFIGURATION #1



PROPOSED CONFIGURATION #2
(CITIZEN PREFERRED)

MAD

6

From: Runner, Alex**Sent:** Friday, May 01, 2009 12:47 PM

To: Juli Kaufmann; ursula.twombly; Mei-Lyn; Lori Gensch; Ann Pieper; Anne E. Summers; Nancy and Jim Ketchman; Lynde B. Uihlein; Beth Dufek; dan.beyer; Brad Ambelang; Beier, Ann; Baylor Studio; Monique Charlier; Colon, Pedro; Chris Socha; Marcia Caton Campbell; Karl M. Dickson; Dad; Martha Davis Kipcak; Dave Swanson; Eric Krueger; David Fockel; Ben Gramling; Emily Green; Christine Harris; Ivan Gamboa; Jeremy Spurgin; Jeramey Jannene; Witkowiak, James; Janssen, Andy; Michael Kaufmann; Karen LeSage; Dan Knauss; Melissa K. Scanlan; danjcollins; Casanova, Dan; Maierle, Michael; Peter McAvoy; Megan Carr; Servais; Serge; Sarah Szurpicki; Julia Taylor; John Vetter; Victor Ray; Wasserman, Lanie; Bridget Williams; d'Andre Willis; young@fondymarket.org; Zetts. Corey; Steve Zimmerman; Mayor Tom Barrett; sen.carpenter@legis.wisconsin.gov

Cc: Dave Reid; Kieran Sweeney**Subject:** RE: Complete Street Makeover for S. 2nd Street, Milwaukee

We've been part of these discussions -- mostly it's Ald. Witkowiak's baby, though. I know the majority of the Council sees this plan as Dave (and many of you) do. I think the biggest hold up is coming from bureaucratic, car-focused red tape. (As the piece suggests.) I'll check on the status again, but contacting WisDOT and DPW seems appropriate. (I do see the Mayor is on here, and he's the one who can direct DPW to make it happen...if the problem isn't with the WisDOT.)

--Alex

From: Juli Kaufmann [mailto:juli.kaufmann@gmail.com]**Sent:** Friday, May 01, 2009 12:30 PM

To: ursula.twombly; Mei-Lyn; Lori Gensch; Ann Pieper; Anne E. Summers; Runner, Alex; Nancy and Jim Ketchman; Lynde B. Uihlein; Beth Dufek; dan.beyer; Brad Ambelang; Beier, Ann; Baylor Studio; Monique Charlier; Colon, Pedro; Chris Socha; Marcia Caton Campbell; Karl M. Dickson; Dad; Martha Davis Kipcak; Dave Swanson; Eric Krueger; David Fockel; Ben Gramling; Emily Green; Christine Harris; Ivan Gamboa; Jeremy Spurgin; Jeramey Jannene; Witkowiak, James; Janssen, Andy; Michael Kaufmann; Karen LeSage; Dan Knauss; Melissa K. Scanlan; danjcollins; Casanova, Dan; Maierle, Michael; Peter McAvoy; Megan Carr; Servais; Serge; Sarah Szurpicki; Julia Taylor; John Vetter; Victor Ray; Wasserman, Lanie; Bridget Williams; d'Andre Willis; young@fondymarket.org; Zetts. Corey; Steve Zimmerman; Mayor Tom Barrett; sen.carpenter@legis.wisconsin.gov

Cc: Dave Reid; Kieran Sweeney**Subject:** Complete Street Makeover for S. 2nd Street, Milwaukee

Efforts to re-imagine S. 2nd Street in Milwaukee are getting local and national attention (thanks to Dave Reid). Be sure to check out the new visual concepts for the street (thanks to Kieran Sweeney). Add your comments to continue the dialogue about how we can use this opportunity to continue to improve Milwaukee.

See "Complete Street Makeover for S. 2nd Street" here:



7

TECHNICAL MEMORANDUM

www.daarengineering.com

Analysis

Multimodal Level of Service Analysis was conducted by using NCHRP 3-70 Report and NCHRP 3-70 computational engine, which is proposed as one of the chapters for the upcoming 2010 Highway Capacity Manual.

- NCHRP 3-70 methodology is still under the process of refinement and upgrade;
- Auto LOS computation sheet is not included;
- Per our understanding NCHRP 3-70 Computational Engine Excel Spreadsheets are used for computation, therefore computational engine spreadsheet may provide better insight and will assist in understanding various input and default parameter values used for LOS computation;

1 – Auto LOS Computation: No computational sheets available;

2 – Pedestrian LOS Computation:

- On Street Parking – 100% seems to be high (please verify);
- Cross Street - X Street vph – Peak hour volume (please verify with peak hour volumes used in HCS software)?
- Roadway crossing difficulty factor – Average waiting time of 1382 seconds is quite high in Section 3;
- For Segments 1, 2 and 3 volume of 1,166 vehicles per hour (vph) is used. This number is not compatible with intersection peak hour turning movement counts as used in HCS analysis of Signalize Intersection;
- Pedestrian LOS remains the same in all alternatives (please comment)?

will be higher w/ one lane traffic line will be longer

3 – Transit LOS Computation: No comments.

4 – Bicycle LOS Computation

- Combined total of northbound and southbound volume does not match the combined total of the two directions (northbound and southbound) used in pedestrian computation.
- Northbound and southbound traffic volumes remain the same for all 3 segments?
- Heavy vehicle (%) is 4% for all segments. Based on review of 2007 traffic classification counts heavy vehicle % is high – sometimes as high as 10% (please tabulate as suggested and modify in computation).
- Bicycle LOS remains D in all three alternatives. This conclude that LOS remains same after segregating bicycle traffic from main stream, which can be debatable and raise red flag on NCHRP 3-70 methodology (please comment).

↳ Bike lane will have no effect on level of service provided for bicycles.

HCS Analysis

- Most of the time 2 phases or 3 phases are used in the corridor;
- Peak hour factor of 0.90 is used, which is a default value; Peak hour factor from the actual data should be preferred (please tabulate as suggested and modify in computation);
- Right Turn on Red (RTOR) volume 0 (Zero) used throughout the analysis (Pls. check with WisDOT Traffic Signal Design Manual, HCM 2000, or any other authentic source available);
- Pedestrian Travel distance 0 (Zero) ft is used, which is not a case;
- Pedestrian phase is not selected;
- Percentage Heavy Vehicle used 4% (please tabulate as suggested and modify in computation); and

lots of trucks/buses traffic



TECHNICAL MEMORANDUM

www.daarengineering.com

- Conflicting pedestrian and bicyclist volume used as 0 (zero) throughout the analysis.

Conclusion

Based on preliminary review of available information the following is concluded:

- 2nd Street operational/safety analysis is conducted by using analytical/computation tools provided in NCHRP 3-70 and Highway Capacity Software. Adopted methodology is analytical and under development/refinement, which provides multimodal LOS and capacity based on developed regression equation and probability functions.
- Southbound approach for National Ave is operating at LOS C per HCS analysis. (Note – The approach LOS can be improved by changing signal phasing pattern and green time which may not affect the proposed geometrics)
- Analysis concludes that all alternatives are operating at more or less the same LOS except for the National Avenue southbound approach.

Recommendations

- Proposed review comments if implemented will assist in better understanding the Capacity/Quality of Service analysis for 2nd Street corridor;
- Adopted methodology is analytical and under development/refinement, which provides LOS and capacity based on developed regression equations and probability functions considering users' perception; therefore, use of this methodology for final decision making is questionable;
- Micro simulation can be better tool for studying the integrated affects of all modes and changed geometric and traffic control conditions. Also, this will provide flexibility to test different Measures of Effectiveness (MOEs) and conduct Cost Benefit analysis for different operating and geometric conditions.
- The Report should include of format to provide:
 - Executive Summary/Recommendation for designer use
 - Narrative regarding Study methodology
 - Study diagrams and supporting attachments
 - Discussion regarding each alternative, rationale for alternatives not selected and rationale regarding selection of the preferred alternative

Wantoch, Clark

From: Chrisbaum, Chad T
To: Fornal, Chris
Cc: Blakeman, Joseph C; Gresl, Lois; Bryson, Robert; Wantoch, Clark
Subject: South 2nd Street Traffic Forecast Report
Attachments:

Sent: Wed 7/8/2009 1:16 PM

8

Chris,

As you are aware, the internal go-ahead has been given for South 2nd Street to be narrowed to a 50-foot cross section with one 12-foot lane of traffic, one 5-foot bike lane, and one 8-foot parking lane in each direction. Left-turn lanes will be introduced on either side of National and two through lanes will go north at St. Paul.

I need you to tell me what, if anything, needs to change as part of your traffic forecast report under this new configuration. We cannot finalize any of our design reports without this information. I am assuming that some of your numbers will change. As such, we will have to back through the sign-off process for the traffic forecast report with the WisDOT and DAAR. Also, please be aware that the detailed capacity analysis that Joseph did recently for the WisDOT made certain assumptions that your report should be consistent with.

I would like to have these revised numbers as soon as possible. As always, let me know if there is anything that I can do to help facilitate this process.

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*Cooking the
report to justify
narrowing?*

PLEASE NOTE NEW EMAIL ADDRESS

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 City Of Milwaukee
 841 N. Broadway, RM 902
 Milwaukee, WI 53202
 Phone: 414-286-0470