



I-29 CORRIDOR STUDY

Exit 73 to Exit 77




Newsletter #5

June 27, 2008

STIP Public Meeting Reminder

The annual Sioux Falls public meeting to gather public input for the development of the 2009-2013 Statewide Transportation Improvement Plan (STIP) will be held on July 16th at 7:00 pm at the Ramkota Hotel (3200 West Maple Street) in Sioux Falls. The STIP is the list of transportation projects anticipated to be constructed in the next 5 years.

SDDOT Upper Management and staff will be available to listen to public testimony on these and any other transportation projects desired to be included in to the Final STIP. The full list of projects within the Tentative 2009-2013 STIP is available from the SDDOT webpage http://www.sddot.com/pe/projdev/planning_stip.asp. 



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Study Public Meeting Set


Mark your calendars! A public meeting to seek input and provide information for the I-29 Corridor Study has been set for Thursday, July 17, 2008. The meeting will be held from 6:00 p.m. to 7:30 p.m. in Exhibit Hall 1 of the Sioux Falls Convention Center, located at 1101 N. West Ave. in Sioux Falls.

A brief, summarizing presentation will be given at approximately 6:15 p.m. Information will be available and displays set up for the potential options developed for each component within the study area. URS, City of Sioux Falls and SDDOT staff will be available to answer questions and receive input. The open house will be informal, with one on one discussion available. Opportunity will also be made to provide for formal, written comments on the study and/or its components.

Notice is further given to individuals with disabilities that this open house/public meeting is being held in a physically accessible place. Please notify the SDDOT ADA Coordinator at least 48 hours prior to the open house/public meeting if you have special needs for which this agency will need to make arrangements. The telephone number for making special arrangements is 605-773-3540 or 1-800-877-1113 (Telecommunication Device for the Deaf).

A concurrent public meeting will also be taking place on the I-90/I-229 System Interchange corridor preservation study. 

Study Advisory Team News

A Study Advisory Team meeting will be held on July 17, 2008, prior to the Public Meeting. Team members should have received an email with details. 



Travel Forecasting

Traffic, Traffic Everywhere

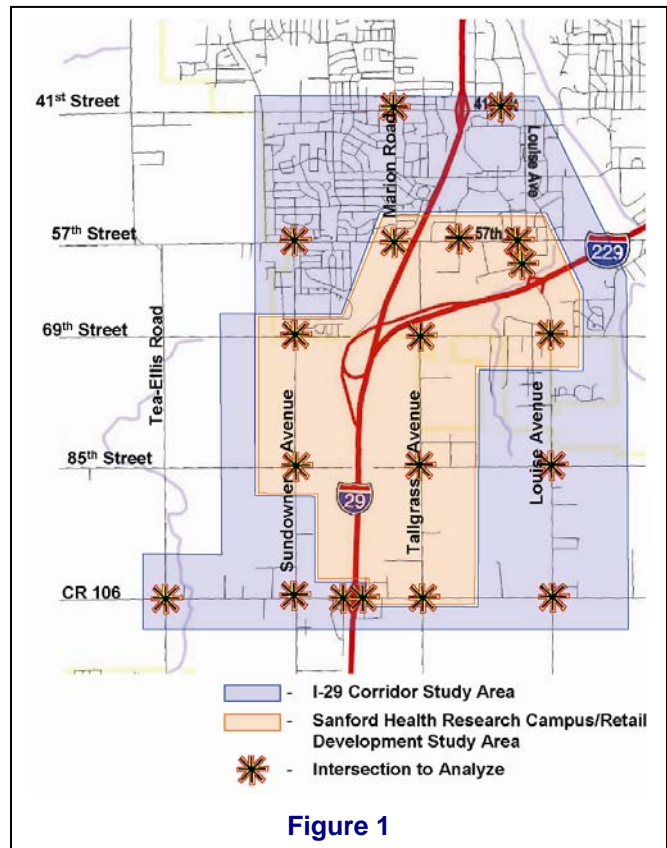
Overview

Expanding employment and housing opportunities in the I-29 Corridor Study Area is anticipated to bring along an increase in traffic in a range of environments from areas that today see only limited numbers of cars and trucks (example: Tallgrass Avenue south of 69th Street) to areas that presently experience stop-and-go traffic in the morning and afternoon peaks (example: 57th Street at Louise Avenue and Louise Avenue from 59th Street to I-229). Using the results of the assumed future intensity of residential, commercial, and industrial developments in the study area, estimates for the level of traffic and the potential for congestion from the traffic linked to the future developments are being prepared.

Parallel to the corridor study project being led by the SDDOT, the City of Sioux Falls is requiring a traffic impact study for the Sanford Health research campus project and the retail development concept to the south of the research campus. The interconnected nature of the range of projects in the study areas requires a coordinated effort between the city required traffic impact study and the state sponsored corridor study. Figure 1 displays the study limits for the Sanford Health research campus and the retail proposal development traffic impact study and the I-29 Corridor Study.

Traffic Forecast Horizon Year

While the level of traffic forecasted on each segment in the network and through each intersection reflects a unique level of development, it is standard practice to define a period into the future that the development level represents. For the coordinated forecasts for the traffic impact study and the corridor study, the horizon year represents 2033.



Urban Activity Forecasts

Urban activity forecasts provide estimates of where people will live and where businesses will locate in the future. These forecasts also include the intensity of activity, such as the number of households and number of employees of businesses. An actual forecast might include several additional factors and considerably more detail, such as employment by type and households by socioeconomic group.

These forecasts are done for small parcels of land called traffic analysis zones (TAZs). TAZs vary in size, with the smallest about the size of a block in the downtown area and the largest on the urban fringe being several square miles.

A graphical example of TAZ's for the study area is shown in Figure 2.

Continued on page 3



Travel Forecasting (cont. from page 2)



Figure 2

Separate the Study Area into Zones

Zonal urban activity forecasts are based on the following:

- ◆ total area population and employment estimates;
- ◆ location behavior of people and businesses; and
- ◆ local policies regarding land development, transportation, zoning, sewers, etc.

These activity forecasts are direct inputs the traffic forecasting process.

Steps in the Traffic Forecasting Process

Traditionally, the traffic forecasting process is divided into three steps that are completed in a series, which includes:

Trip Generation: Calculation of the number of daily

and/or hourly trips associated with a specific increment of a particular type of land use. For the traffic impact study, trips are generated based on the increment of developed area measured in thousands of square feet of building area. For the corridor study trips being generated is a function of the number of

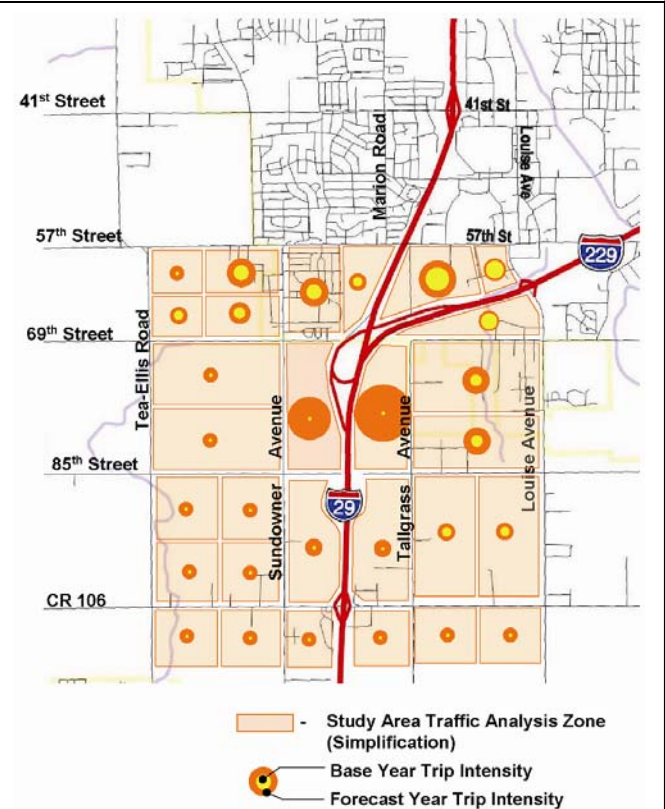


Figure 3

Estimate Trips in/from Each Zone (Base and Future)

employees and the number of households in an area.

Trip Distribution: The process of linking trips from one area to all other areas to form an origin-destination pattern of trips. Trip distribution is used to represent the process of destination choice for trips. For example, in trip generation the local desire to make shopping trips is quantified. In trip distribution, selection of where a traveler wants to go shopping is determined. If there are a number different choices of where the traveler could shop (as


Continued on page 4



Travel Forecasting (cont. from page 3)

there would be for grocery shopping), the travelers shopping trips may be divided between more than one of the possible choices. How many trips each shopping location option receives is dependent on the relative distance between the location where trips are generated and the various shopping location choices. The closer the shopping area, the more trips it will get from a complementary trip generation

area.

Trip Assignment: The process of allocating trip origin-destination sets developed in Trip Distribution to a specific path or series of paths. The path or paths is generally based on the minimizing the travel time and can take into account congestion that would be observed on specific links as more and more trips accumulate. 

Example Only – Each Area Likely Has at least One Trip to All Other Areas in Study Limits

I-29 and I-229 Width Represents All Zones Outside Study Area Accessed by the Routes

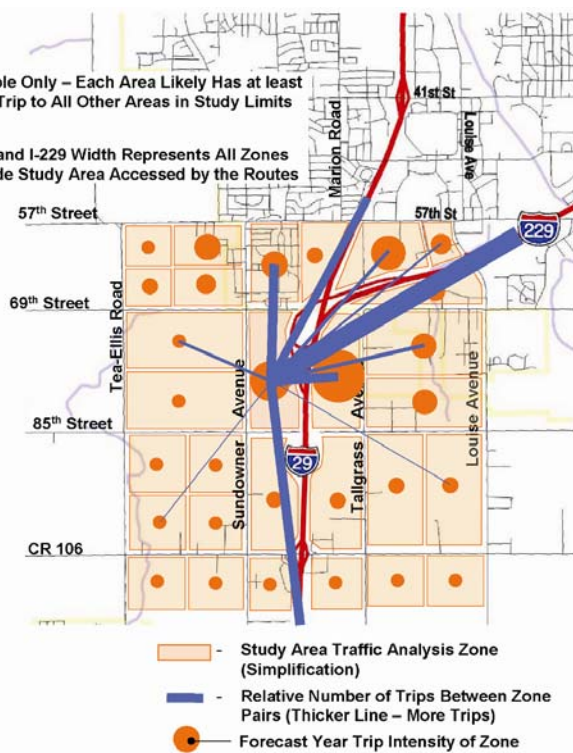


Figure 4

Characterization of Trip Distribution

Example Only – Distribution and Number of Trips Not Representative of Model

All Zones with Trips between them Will have a Connecting Line

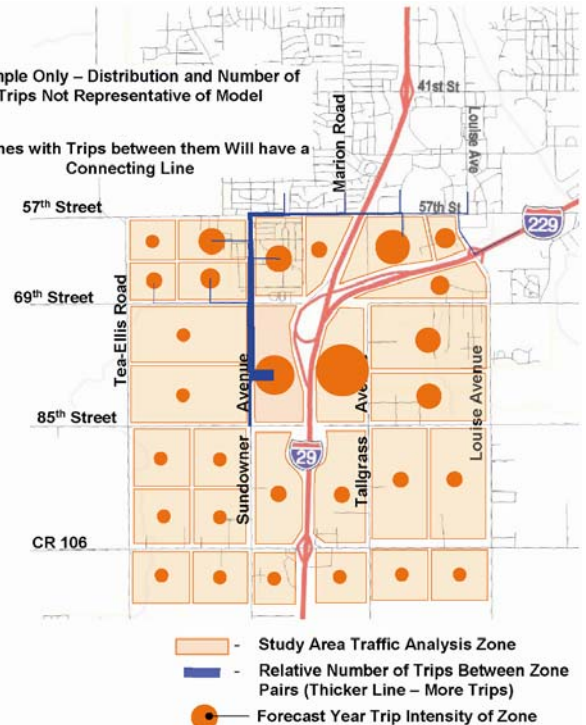


Figure 5

Characterization of Trip Assignment

The above article describes a basic 3-step method for travel forecasting. Many agencies include a fourth step, called mode choice, to distribute the trips to various travel modes (car, pedestrian, bus, etc.). More information on travel forecasting can be found at the following websites:

<http://ntl.bts.gov/DOCS/UT.html>

<http://tmip.tamu.edu/>

http://www.planning.kytc.ky.gov/traffic/traffic_files/Traffic%20Demand%20Model%20Frequently%20Asked%20Questions.pdf


http://www.cts.umn.edu/trg/research/reports/TRG_02.html



Traffic Forecasting Status Report

At the April 2008 Study Advisory Team meeting, the initial trip generation results were provided. Since that meeting, Sanford Health staff has continued to define and refine the research project focus for their proposed development. This step is important in the overall traffic forecasting and analysis process because different research projects can require substantially different building configurations and a relatively wide range of personnel by skill and numbers. As was covered in the Trip Generation section of the Traffic Forecasting article, the level of traffic a site produces is a function of the number of

employees. Through the refinement process in which Sanford Health staff has studied activities likely to be going on in each building, an employment forecast that can better be tied to the proposed activities has been developed.

The refined development plan was completed in early June. Trip generation was updated immediately following completion of the activity refinements and staff is now moving ahead with trip distribution and traffic assignment. Updates over the next couple of weeks will focus on the traffic forecasts. 



SCHEDULE OF UPCOMING EVENTS

85TH STREET OPTIONS

ANTICIPATED COMPLETION: MID JULY, 2008

NO BUILD FUTURE TRAFFIC VOLUMES

ANTICIPATED COMPLETION: LATE JULY, 2008

ADDITIONAL I-29/I-229 SYSTEM INTERCHANGE OPTIONS

ANTICIPATED COMPLETION: MID JULY, 2008

STUDY ADVISORY TEAM MEETING #3

SCHEDULED FOR JULY 17, 2008

PUBLIC MEETING #1

SCHEDULED FOR JULY 17, 2008

SDDOT CONTACT INFORMATION

The I-29 Corridor Study is being administered by Mr. Steven Gramm, P.E., from SDDOT's Project Development Office located in Pierre, SD. Steve can be reached via email at steve.gramm@state.sd.us or by phone at 605-773-6641.

URS CONTACT INFORMATION

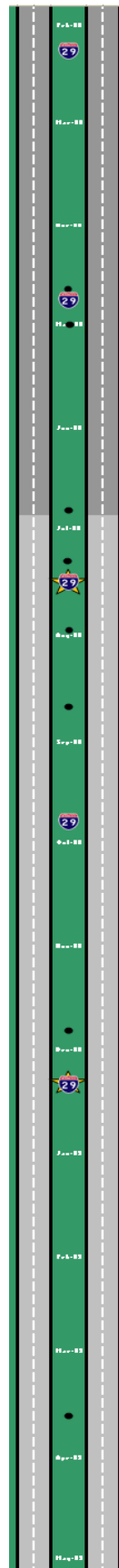
The I-29 Corridor Study is being coordinated by Mr. Bill Troe, AICP, from the Surface Transportation Group of the URS Division located in the Omaha, NE office. Bill can be reached via email at Bill_Troe@URSCorp.com or by phone at 1-866-671-5309.

STUDY WEBSITE

http://www.sddot.com/pe/projdev/planning_ss_l29.asp

STUDY NEWSLETTER

Requests to be added to the newsletter mailing list can be made with an email to steve.gramm@state.sd.us. Past newsletters can be downloaded from the study website.



Study Advisory Team Meeting #1
Held February 8, 2008

69th Street Options: April 24, 2008
Study Advisory Team Meeting #2
Held April 25, 2008
I-29/I-229 Options: May 1, 2008

No Build Future Traffic Operations: Early July, 2008
Additional I-29/I-229 Options: Mid July, 2008

85th Street Options: Mid July, 2008
Study Advisory Team Meeting #3
Scheduled July 17, 2008

Public Meeting #1: Scheduled July 17, 2008

Build Future Traffic Operations: Late July, 2008

Draft IJR: Late August, 2008

Study Advisory Team Meeting #4
Tentatively Scheduled Late September, 2008

Draft EA: Late November, 2008

Study Advisory Team Meeting #5
Public Meeting #2
Tentatively Scheduled Mid December, 2008

Final IJR: Mid March, 2009

