

SPIRITWOOD ENERGY PARK EXPANSION TRUCK IMPACT STUDY

NDDOT Project Number AC-SPR-P028(008)



Technical Advisory Committee Meeting #1 Meeting Minutes

Stutsman County - Jamestown
North Dakota



Kadmas
Lee &
Jackson
Engineers Surveyors
Planners



The first meeting of the Spiritwood Energy Park Truck Impact Study Technical Advisory Team (TAC) was held January 25, 2007 in Jamestown, ND at the Stutsman County Courthouse. The meeting began at 9:00 A.M. and ended at approximately 11:30 A.M. The attendance sheet is attached. Following are the minutes from the meeting.

Preliminary Issues

Bob requested site aerials, proposed site layout, and anything else that would be of benefit for the study. Noel Johnson stated he would look into what information that Stutsman County could supply.

Project Overview - Bob Shannon, PE

- Project started out analyzing truck impacts of the 100 million gallons/year ethanol plant, 30 million gallons /year Biodiesel plant , expanding the malt plant 40% from 20 to 28 million bushels/year, and construction of a 40 megawatt coal fired power plant on site.
- Where is all this corn coming in from this ethanol plant, it is being trucked in: How is the going to effect the area roads? It goes far beyond just Stutsman County.
- Concentrated loads and impacts on local jurisdiction roads; how can we determine the impacts?
- As facilities are added it will not be only agricultural products coming in and agricultural and by products going out, there will also be coal; some by train. There will be other process additives, miscellaneous supplies, and other byproducts that may need to be considered...
- Upper Great Plains will estimate where the products will come from, estimate travel routes to the plant, and subsequently determine where roadway impacts will occur due to increased truck traffic.
- KL&J will use the truck forecast data in conjunction with existing roadway data and estimate the impacts to county roads and dollars needed to mitigate the impacts over the next 20 years within a 75 mile radius (Spiritwood Energy Park center) study area.
- The first thing KL&J will do is collect data on the existing road conditions. Our scope does not involve a windshield condition survey of each road. We are asking each of the counties to rate their roads with a uniform rating system and provide the data to us. We will then collect, compile, and analyze the data provided to us. That will provide the most cost productive, speedy analysis. The county staffs are the experts on their roadways.

- State highways will not be included; NDDOT will handle those as they normally do. We are only be evaluating county roads not township roads.
- The scope does not include analysis of bridges; each county has there own bridge system and the NDDOT has the master bridge inventory of all the bridges in the state. If we have a roadway which will be impacted by a lot more trucks and there is a structure that currently has a load restriction, the county and NDDOT will need to look into it.
- Survey will be sent to the 22 counties with potentially impacted roadways. Corn production in the state is produced primarily in the SE.
- There will be three more TAC Meetings. Should we invite the other counties? Barnes, Wells, and Dickey County have put money in the study.

The TAC determined that all 22 counties should be extended an invitation to attend future meetings. This will be done in the cover letter for the county data survey.

- We will need to determine what road improvements may be needed and how to estimate costs. For example; many county roadways can't add another HBP overlay. A 4:1 inslope is required for federal funding thus requiring that the roadway be widened. Some roadways may require complete reconstruction due to an inadequate base not having the structural capacity regardless of the amount of HBP applied on top.
- A cost/mile approach will be used. Estimates based on historic cost records. NDDOT has a schedule that we will use. Is this acceptable to the TAC?

The TAC agreed that this would be acceptable.

- We will need to consider ROW costs where necessary. Many county roads have only 66 feet of ROW; in many cases this is not enough to accommodate widening the roadway.
- Other considerations for cost; Wetland impacts; we can determine an average cost/mile of project based on historic records. We can do the same with ROW.

Data Form Survey - Mitch Steckler, PE

In putting together the survey the intent was to keep it simple and ask for as little information as possible while still getting what we need. In doing this, the hope was that the counties wouldn't find it too burdensome and we will get a good response.

- We are requesting county budget estimates for future roadway construction and maintenance. This is to compare future estimated funding to compare with future

estimated needs. We will use what we are given, extrapolate out and use a percentage increase to estimate future funding. Does this sound like information a county would be willing and able to supply?

Noel Johnson stated that this is readily available from Stutsman County and should be from others. Noel stated that Stutsman County roadways currently have a construction budget of \$800,000/year; \$450,000 federal funds, \$350,000 funded by property tax, mill levy.

KL & J can work with the NDDOT in regards to estimated future funding availability.

- **Roadway Data**

- A structural number will be applied to each roadway section to determine the existing condition. We will need to know what each roadway consists of from the top down. We will request:
 - Roadway designation and length
 - Roadway material, depth, and width of each layer from the top down in accordance with supplied criteria
 - Roadway year constructed
 - Show maintenance strategies such as seal coats as a separate layer

Question: What is the turnaround time for the information that you are looking for?

Response: A cover letter will be sent with the data form with a brief explanation of the project and contact information. March 14th is when I anticipate asking for the information to be back. KL&J will make a follow-up call to the counties two weeks after the forms are sent out to let them know that we are here to answer any questions.

Question: Do you want to add right of way width?

We had discussed doing estimation for ROW based on total costs. It may be advisable to request information from the counties to get a better idea of the ROW costs. We will look into this further.

KL & J has added a column for ROW width to the data form.

Bob Shannon, PE.

- Estimate impacts and present to the ND legislature.
- In developing the alternatives to mitigate those impacts the scope is to only identify what impacts can be anticipated and what the costs are estimated to be. We have not been directed to develop different strategies based on varied funding availability; we

could do that extra work if requested. However, that type of detail will take time and money and it is not currently within our scope to prioritize where money should be spent and what to do if there is a funding shortfall.

- The final report that will have an executive summary that can be given directly to congressional delegates.
- In the executive summary and final report we will point out some possibilities of what happens if funding is not available to maintain the roadways. For instance; there are counties that are grinding up pavement and turning it back to gravel because they don't have the money to maintain it. The result being that some counties no longer have roads on which they can travel 55 mph. This will be done in an overall, "Big Picture" type fashion; not by evaluating each individual road as to whether or not a lack of funding will require this or that road to be turned back to gravel, closed to trucks, etc. . .
- We are planning on four TAC meetings; this is the first one.
- Team meetings will be conducted as needed with Stutsman County, Upper Great Plains and NDDOT. It was proposed to use the interactive video network in the Valley City, Fargo and Bismarck NDDOT District offices when available.
- Question: Bob are you going to have some alternatives? Lets say your report comes back and this region is going to cost \$2 million or \$1 million or whatever it should be, if that is not obtainable are there going to be options, so we can use this document, all the counties can't afford to do all their roads, what can we do to survive in this environment?

Response: All we can do is what is on our scope. What the NDDOT has advised us to do is to talk about the big picture things and focus on developing truck routes and make recommendations on where the county would advise a truck route or discourage it.

Question: What is your maintenance commitment going to be? How much is the cost?

Response: Are you looking for policies for spring load restrictions? Yes, good point, we will need to put spring load restrictions into our factors.

Question: Truckers like to have the shortest route, have you considered or talked to trucking companies or elevators, are you considering that into your total project?

Response: We talked about sending letters to elevators and main shippers, that information will be valuable to us and Upper Great Plains.

- We will be giving a management presentation, a formal presentation of the draft report to the Stutsman County Commission and the DOT, and give you an opportunity to review and comment on the draft before we issue the final report.

- **Public involvement**
 - There will be two public input meetings. The first will be after the data surveys have been returned and information from Upper Great Plains has been received in the spring. We will compile the data and develop exhibits to show what we have found to that point.
 - The second public meeting will be held after the draft report has been developed. We will present the results from the study in report form for the public to review and comment on.
 - KL&J will prepare and submit news releases to announce the public meetings. These will be done utilizing newspaper ads and public service announcements on the radio. Local newspapers and the Fargo Forum will be used for the newspaper ads. We will also provide the announcements to Stutsman County for posting on the county website.
 - KL & J will prepare exhibits and handouts for the public meetings. Meeting minutes will be developed, distributed, and posted on the county website.
 - Project information will be posted on the Stutsman County website; contact person for this will be Noel Johnson. Our thoughts are to have a link on the county's main page for access to study related information. An email account will be set up so that public can respond and comment on the study by use of the website. The public will be made aware of the website available information by public notice utilizing the local media. Project contact information will be placed on the website.

Upper Great Plains Transportation Institute (UGPTI) – Alan Dybing, PE and Subhro Mitra

Al and Subhro discussed the methodology which will be used by UGPTI to estimate the traffic which will be generated by the energy park expansions.

- Trip generators based on a six square mile block centroid.

- Products will be received from local, statewide, and nationwide points of origin.

- Corn as well as other process related requirements.

- Impact of plant on local accommodations, impact of plant on a state and federal level.

- Crop production model based on product price, rotation, alternatives, competition, load restrictions, etc. . . . This will directly relate to trip generation.

- The model will be based on current conditions and predictions of change based on external factors.
- North Dakota production separated into 9 different averages.
- The model will be modified further to attempt to more accurately reflect regional similarities and differences.
- NDDOT current traffic volume counts will be used to validate/calibrate the model.

Please Sign In

Spiritwood Energy Park Truck Impact Study
TAC #1
January, 25, 2007

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