

Santa Fe Metropolitan Planning Organization

"Promoting Interconnected Transportation Options"



Santa Fe MPO Technical Coordinating Committee

Monday, April 25th, 2011, 1:30 P.M.

*Nambe Room, Santa Fe Community Convention Center
201 W. Marcy St., Santa Fe, NM*

AGENDA

CITY CLERK'S OFFICE

DATE 4-19-11 TIME 8:54 am

SERVED BY Keith Wilson

RECEIVED BY [Signature]

- ◆ Call to Order
- ◆ Roll Call
- ◆ Approval of Agenda
- ◆ Approval of Meeting Minutes from April 6th, 2011

1. Communications from the Public

2. Items for Discussion and Possible Action:

- a. Review and recommendation on the Revised Draft 2012-2015 Transportation Improvement Program – *MPO Staff*
- b. Review and recommendation on the Draft Amendment to the 2010-2013 Transportation Improvement Program – *MPO Staff*
- c. Presentations from the Worcester Polytechnic Institute (WPI) Teams – *MPO Staff*
 1. Mobility Team
 2. Miles Team
 3. Paths Team
 4. Lights Team

3 MPO Officer Report

4. Communications from TCC Members

5. Adjourn - Next TCC Meeting: Monday May 23rd, 2011

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SFMPO-TCC MEETING
April 25, 2011**

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**MINUTES OF THE
SANTA FÉ MPO
TECHNICAL COORDINATING COMMITTEE**

April 25, 2011

CALL TO ORDER

A regular meeting of the Santa Fé MPO Technical Coordinating Committee was called to order on the above date by Chair John Romero at approximately 1:30 p.m. in the Nambe Room, Santa Fe Community Convention Center, 201 W. Marcy St., Santa Fe, NM.

ROLL CALL

Roll call indicated the presence of a quorum as follows:

MEMBERS PRESENT:

John Romero, Chair - City of Santa Fé
Andrew Jandáček – Santa Fé County
Richard Macpherson for Reed Liming
Eric Martínez – City of Santa Fé
Robert Martínez – Santa Fé County
Tamara Baer for Greg Smith, City of Santa Fé

MEMBERS EXCUSED:

NCRTD Phil Gallegos – NMDOT District 5

MEMBERS ABSENT:

Jack Kolkmeier – Santa Fé County
Jon Bulthuis – Santa Fé Trails
Josette Lucero-NCRTD
Vacancy – Tesuque Pueblo
Vacancy - RPA

STAFF PRESENT:

Mr. Mark Tibbetts, MPO Officer
Mr. Keith Wilson, MPO Planner

OTHERS PRESENT:

Mr. Claude Morelli, NMDOT

APPROVAL OF AGENDA

Mr. E. Martinez moved to approve the agenda as presented. Mr. R. Martinez seconded the motion and it passed by unanimous voice vote.

APPROVAL OF MINUTES-April 6, 2011

Mr. R. Martinez moved to approve the minutes of April 6, 2011 as presented. Ms. Baer seconded the motion and it passed by unanimous voice vote.

1. COMMUNICATIONS FROM THE PUBLIC

There were none.

2. ITEMS FOR DISCUSSION AND POSSIBLE ACTION

- a. Review and recommendation on the Revised Draft 2012-2015 Transportation Improvement Program (TIP) – *MPO Staff*

Mr. Wilson said the Committee previously reviewed the document. At that time the 2012-2015 TIP (Transportation Improvement Program) was re-released for an additional 30 days until May 9, because of the County Road 62 (CR 62) Interchange project. The district shifted the majority of money from FY 2011 to FY 2012 and added an additional \$600,000 because of increased project costs.

Mr. Wilson said the Committee packets contained comments from Fred Pearson who attended earlier meetings. Mr. Pearson raised concerns that the TIP showed only the funding for the location study but funding had not been set aside for the right-of-way and design.

Mr. Wilson said he explained program funds couldn't be programmed until a substantial amount of the location study was completed and secondly, funds were not available.

He said an e-mail comment was received from Charles Brown prior to the amendment. Mr. Brown wanted to clarify the Terminus for the NE connective and requested an extension to Rancho Viejo to Sunshine Mesa and that was already done.

Mr. Wilson said TCC presented the draft documents to the policy board in April and recommended approval. No concerns were raised.

Ms. Baer asked Mr. Wilson to remind them of the NE/SE connector study.

Mr. Wilson said the NE connector was Rabbit Road from St. Francis Drive parallel to I-25 terminating short of Richards Avenue. The location study would identify an alignment to connect directly to Richards.

Mr. Wilson said the SE connector runs parallel to Richards Avenue and the East side of the community college coming from the Northeast connector south to the eastern edge of Rancho Viejo.

Mr. Jandáček said the County addressed the NE/SE connector with the Community College Task Force. The college wanted a bigger picture as far as the future road network.

Mr. E. Martinez said he understood there were project savings and that DOT would look at programs and money from another project to increase the funding on the CR 62 project.

Mr. Wilson said \$5.6 million was in FY 2011 for CR 62 and funding was needed for a project that was ready to go. He said the amount was reduced to \$396,000 for FY 11 and money was put back into FY 2012 from another project that added \$600,000. He thought the project was originally programmed for FY 2012 and was accelerated. He said the hope was to get a bid out by the end of the year and start construction next spring.

Mr. E. Martinez moved for approval of the Revised Draft 2012-2015 TIP. Mr. Jandáček seconded the motion and the motion passed by majority voice vote. Ms. Baer abstained.

- b. Review and recommendation on the Draft Amendment to the 2010-2013 Transportation Improvement Program – *MPO Staff*

Mr. Wilson said the 2010-2013 covered FY 11 through the end of September. The changes discussed about moving money from FY11 for CR 62 necessitated an amendment to the FY 2010-2013 TIP. Also a number of administrative changes were corrected to ensure the TIP and STIP matched.

Mr. Wilson said the other major change was on Page 2 under Transit Projects. A previous program that was statewide was listed and doesn't need to be in the TIP (page 4 of 8.)

Ms. Baer asked Mr. Wilson to explain where Richards Avenue was and how that was taken off.

Mr. Wilson said the Richards extension was in the Metropolitan Transportation Plan (MTP), never in the TIP. He said MTP was a long-range plan that outlines plans for the future and projects have to be in the MTP to be listed in the TIP. He said this program document was short term and funding was identified.

Ms. Baer moved to approve the Draft Amendment to the 2010-2013 TIP. Mr. E. Martinez seconded the motion and it passed by unanimous voice vote.

- c. Presentations from the Worcester Polytechnic Institute (WPI) Teams – *MPO Staff*

Mr. Wilson explained the TCC sponsors teams from Worcester Polytechnic Institute to help with the UPWP tasks. He said the teams gave presentations in early April that everyone enjoyed and the teams were asked to provide an update. The Mobility Team was called to present first.

1. Mobility Team- Justin Kahn, Joan Porambo, Johari Samuels and Ryan Wormald

The Mobility team introduced their members. The project was to organize and visualize traffic data in the Santa Fe Metropolitan area. A summary of their PPT presentation follows:

- Multiple organizations that collect traffic data in Santa Fe use different software and had no unified system to organize the data.
- The team's mission was to help the SFMPO and other traffic management organizations to develop a transportation platform that allows for maintenance, organization and modeling of traffic data in the Santa Fe Metropolitan area.
- There were four objectives; (1) to gather, organize and maintain traffic data; (2) to determine an appropriate approach to visualize the data; (3) to combine the first two objectives to create a knowledge-based platform for traffic planning and (4) to investigate the application of a future based model.
- The current platform is a website that allows the use of different methods and combines techniques so information could easily be organized from different organizations for the purpose of planning and to understand what the transportation network looks like.
 - Data collection organization was discussed. One online tool was called *drop box* (an online storage source) that all organizations could connect to and share information. Information could be uploaded via a map with labeled intersections. A point could be clicked to allow the site specific information to be uploaded and stored by the data collected. A form would be sent to allow information to be entered.
- Google-Docs, a tool similar to drop box, allows spreadsheets to be viewed and readily accessible.
- The current information system results in PRN files and the format was unusable because the data has to be converted. The team converted the PRN files to an Excel format to make the information easy to use and to allow visualization. The information would be on the Internet and could be accessible and shared and connected to maps etc.
- Google-Maps allow spreadsheet conversion to be shown and visualized with the map and a bar graph could be done. Peak hours and exact road segments could be viewed.
- Similar to Google-Docs and maps was GIS Cloud; a mapping system with layers that could be imported for others to view and share.
- A labeling system was created and made one format for the roads in Santa Fe. The system could be cross referenced: road IDs would have a four digit number; intersections and road segments, a 3x3 digit number.
- Tutorials were made for everything with step-by-step directions for each application.
- The format allows two views; normal or split screen. The split screen option has two separate operating windows and would allow the labeling system to be alongside the maps to make it easier to find the correct coordinates.

Mr. Wilson said the system would provide one location that people could be directed to so they could upload information. He said often people had to make four or five calls to find out that there was no data. Part of the system would be open to the public and developers, etc. would show information and people could see the data was current for the location.

2. Miles Team- Alison Earley, Curtis Guimond, Anton Kirschner, Rebekah Socha

The Miles team introduced themselves. The team said their title was Creating Connections and their mission was to assist the MPO with promoting innovative mobility solutions that connect public and private transportation. An overview of their PPT follows:

- The first objective was to look at public transportation currently available: NCRTD, the New Mexico Park and Ride, the Rail Runner, Santa Fe Trails and Santa Fe Pickup for hours of operation, locations and routes, ridership statistics and resources such as number of vans, drivers and peak hours.
- The second objective was to assess the travel demand. Santa Fe Trails was the focus since that covered the bulk of the City and had the most effect on travel within the City. An origin and destination survey was developed and passed out on routes 2, 4, and 6. The survey included bus use, stop accessibility and Smart Phone application and connections. Fifty surveys were received from each route which showed most people use the bus frequently (5-7 days a week) and rely on the bus to get to school, work, shopping etc. Riders were asked where they came from and their destination, how they got to their bus stop and how they got to their final destination if not right at the stop.
 - Ridership statistics were collected on where people got on and off the bus and peak times on each route. A customer satisfaction survey was included and the data would be provided to Santa Fe Trails. Most riders were year-round residents.
 - A comment and suggestion box was included and showed people want to keep the bus service; have later night service and increase the service. Most were pleased with the Santa Fe Trails service.
- The third objective was to develop a way to make the service more accessible. An attempt was made to develop a bus schedule but because there were 435 bus stops it resulted in too many problems for a printable schedule.
- The fourth objective was to integrate the information starting with Santa Fe Trails and Santa Fe Pickup and stops would be included from all of the services such as NCRTD and Rail Runner.
- The information would be provided through an interactive map (Google-Maps) to overlay bus routes, train and shuttle stops. A click on a stop would provide information on the next bus, train, etc.

Ms. Baer asked about the Smart Phone app.

The team said the app was considered but the scope of the project was to make the system more user-friendly before ridership was brought in. Most of the riders don't own Smart Phones and many who did, said they wouldn't use the app.

3. Paths Team- Kunal Chawla, Nikole Connor, Michael DeAnda, Julia Krebs

The team introduced themselves and said they were working on multi use trails in Santa Fe, accessibility and social networking. The project was sponsored by: the Santa Fe Complex, the SFMPO and a class from the Santa Fe University of Art and Design. The purpose of the project was to facilitate the

accessibility and use of the multiuse trails while promoting social interaction. A summary of their PPT presentation follows:

- Three objectives were developed for the project:
 - 1-To assess the existing multi use trails. Five trails were assessed: Acequia, the Arroyo Los Chamiso, Calle Lorca, the Rail Trail and the River Trail. The map would be broken into segments to provide trail surface, length of the segment and nearby amenities when clicked. Data would be collected to show the different bollard spacing for the map.
 - 2-The team worked with a class of 17 students at Santa Fe University of Art and Design in addition to the MPO. The class assisted the project and helped their syllabus by designing a symbol, a rack card, a sign sample for trails and a Smart Phone icon with the hope to implement them on the trail head signs.
- The Bikeways and Trails map was re-created and a layer of amenities (benches along the paths and bike parking) added.
- An analysis of trail head placements showed 10 places need a trailhead. An interactive map would be given to the MPO to show why.
 - 3-To facilitate social interaction on multiuse trails, a Smart Phone mockup would be designed with four main functions: navigation, a travel log, a profile and a social app.
 - Navigation would have 4 main functions-a GPS to report path obstructions; a location setting to navigate the coordinates and allow obstruction to be sent to the proper officials; a calorie-meter to allow users to enter their activity and weight and calculate the calories burned; to record tracks and to search for nearby places. The phone would also feature a travel log to create a calendar that would show the use of paths, the calories burned, the distance traveled and the tracks recorded day-to-day and monthly.
 - The social aspect of the app would be user profiles. People could enter outdoor interests and each user would be displayed as a color. A click would allow users to see others interests, search for a walking buddy, someone to chat with, etc.

Mr. Tibbetts asked when the assessment of the trail conditions was completed, how that would be tied to the information being sent to the proper agency for repairs, etc.

An example of overgrown vegetation was used to explain, that a user could take a picture of the overgrowth and coordinates would be documented by the phone and could be sent to a designated person in Parks. Once the mockup was completed the team would follow up with the Parks Division on a designated person.

Mr. Jandáček asked if the proximity to bus stops was addressed for those who might cut their walk short. He was told a layer would allow a person to see bus stops within a mile of each segment point.

4. Lights Team Christopher Pryor, Carl Curran , Mari Freitas and Mark Johnston

The Lights team introduced themselves. They worked with signalized intersections in Santa Fe. They explained that the current lighting is HPS (high pressure sodium) and considered outdated. The team

used LED technology that has a longer lifespan, a higher-quality light and was more energy-efficient. Comparisons were shown to the committee of HPS and LED and the costs of lumens per watt and light loss factor. A summary of the PPT presentation follows:

- LED lights would cost more but the majority of savings would be in the maintenance. The light loss factor was explained as a measure of light emitted after a period of time that decreases. An HPS light after half its life span (2.5 years) would drop to 59% light factor; LED lighting after 10 years would drop to 78% and has a better color index (CRI.)
- The goal of the project was to present the City with an analysis of its signalized intersections and to propose the current HPS lighting be replaced with LED lights. The City has a lot of 30 and 40 foot poles that project light inefficiently. LED light was shown to be more focused and a more efficient use.
- Physical measurements were taken at intersections and modeled using computer software and Google Earth. The measurements were loaded into AutoCAD and sidewalks and streets were developed and then imported into AGi 32 software to create the best optimal lighting for each intersection. The team would suggest a prioritized list of the signalized intersections they thought should be retrofitted.
- They would provide a GIS layer of data of all traffic control boxes and electrical meters at the intersections. A database of signalized intersections would include the GPS links to the AutoCAD file and the AGi file as well as a spreadsheet with each electrical meter and account number, pole height, etc.
- Lastly, an analysis of street lighting for future retrofits such as Agua Fria and Paseo de Peralta would be done.
- The data collected was used to model every intersection. Examples were shown as to show why the intersection should be LED lighting or not.
- The database listed all of the intersection information such as account number, meter number, pole height, etc. and linked to a Google-Map that could be generated on any webpage. Any intersection could be clicked on to link to AutoCAD and the AGi files and could be downloaded. The AutoCAD file has dimensions of the intersections and relevant distances and could be used for other projects and City planning purposes. The AGi file has different types of lighting; additional files could be imported to test what the intersection would look like if new lights were installed.
- The team was asked by Rick Divine to look at specific sections of lighting such as from Aqua Fria from Siler to Osage. There were 40 fixtures and data showed that replacing the 250 W HPS with 88 W fixtures could reduce the cost and reduce the lighting on surrounding houses.
- The team said they wouldn't anticipate the use of the entire budget of \$178,000. Three types of intersections were suggested for retrofit in the bid proposal. About 35-40 intersections met the LED lighting suggested guidelines but most intersections in the City could not meet them.

Chair Romero asked if the City should determine the extent the LED lights would be less compliant than HPS lighting.

The team said LEDs would be less compliant in some intersections but were safer and easier to see even with the lower foot candle ratings. HPS lighting has hotspots and varies in candle light rating of 7 to 1 or 2 in a few feet.

The committee discussed the intersection lighting problems with the team and how it could be resolved.

Ms. Baer asked who set the design standards that established the intersections that were recommended. She was told Nick Schiavo and Rick Devine made the suggestions; the guidelines were based on the foot candles.

Chair Romero said it was good information. He thought instead of lights at intersections the City should look at stretches of road. He asked if the 40 foot poles would be eliminated if LED lighting was used.

The team said none of the intersections with 40 foot poles could be recommended for retrofit because of the amount of light that was lost.

Mr. E. Martinez asked if there were a lot of differences in light manufacturers.

The team said LED Roadway the winning contractor and Beta, the company who did the original lighting were the only ones compared. LED Roadway projected lighting along the street more because of focus optics and Beta lighting was found to be horizontal and circular and more a flood light.

The final presentation would be given on Wednesday, May 4 at 11:45 a.m. at the Santa Fe Complex, 624 Agua Fria.

3. MPO OFFICER REPORT

Mr. Wilson said he would do a brief presentation that night to the Public Works Committee on the status of the Zia Station. A public input meeting would be held the following evening on the CR 62/599 interchange at 6 p.m. at the Nancy Rodriguez Community Center.

Mr. Tibbetts said he tried to confirm the TAB (Transit Advisory Board) meeting for the following evening but had not received a return call.

Mr. Wilson said the Rail Runner conducted a survey of passengers on the current service, new stations etc. He had heard the results would be released the following night but had not heard anything officially.

Mr. Morelli said the survey would be released soon.

4. COMMUNICATIONS FROM TCC MEMBERS.

There were none.

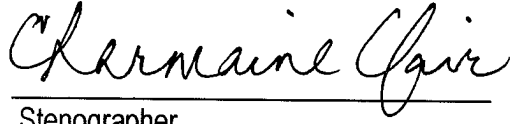
5. ADJOURN

The meeting adjourned at 3:10 p.m. The next meeting was scheduled for May 23, 2011.

Approved by:

John Romero, Chair

Submitted by:



Stenographer