Eco-Logical Pilot – Free Bridge Area Congestion Relief Project
DRAFT Stakeholder Team Meeting #1 Summary
Monday, November 18th, 2013, 4 – 7 p.m.
Burnley-Moran Elementary School, Charlottesville, Virginia

Facilitated by:
The Thomas Jefferson Planning District Commission and
The Institute for Environmental Negotiation, University of Virginia

---

Executive Summary

The first community and resource Stakeholder Team meeting of the Eco-Logical Pilot – Free Bridge Area Congestion Relief Project took place on November 18th, 2013 at the Burnley-Moran Elementary School in Charlottesville, Virginia. The purpose of the meeting was to begin the year-long process of testing the Regional Eco-Logical Framework (REF) tool and to recommend ways to reduce congestion in the Free Bridge area.

Frank Dukes and Kelly Wilder of the Institute for Environmental Negotiation (IEN) at the University of Virginia facilitated the meeting. During the meeting, Sarah Rhodes and Wood Hudson of the Thomas Jefferson Planning District Commission (TJPDC) presented information on the project's background and the Regional Ecological Framework (REF) tool. Members of the Stakeholder Team asked clarifying questions and made specific data requests. Team members also provided ideas for working together effectively and developed shared expectations for their participation in the process.

During the meeting, the following action items were noted:

- Action: Post information requested by Team members on the Eco-Logical Pilot – Free Bridge Area Congestion Relief website. Provide any such material in hard copy for anyone who requests it.
- Action: Develop a glossary of GIS terms to improve member understanding of the tool.
- Action: Create an online forum for members to collaborate and share information between meetings.

In addition, links to the following document were requested, and links are provided below:

- All meeting materials and presentations from the November 18th meeting: http://www.tjpdc.org/ecological/meetings/stakeholders_13_11_18.asp
- Eastern Connector study: www.tjpdc.org/ecological/PDF/Eastern_Connector_Final_Summary_Report.pdf.
- Pantops Master Plan update: www.albemarle.org/department.asp?department=cdd&relpage=3734

The Stakeholder Team will hold meetings every other month on the third Wednesday of the month through November 2014. In addition, field trips may be scheduled in off months, and larger public meetings will be scheduled approximately quarterly.

Upcoming Eco-Logical Pilot – Free Bridge Area Congestion Relief Project meetings:

- Field trip #1: Darden Towe Park, Friday, December 13th, 9:30 – 11 a.m.
- Stakeholder Team meeting #2: Wednesday, January 15th, 2014 from 4 – 7 p.m. (location to be determined)
- Stakeholder Team meeting #3: Wednesday, March 19th, 2014 from 4 – 7 p.m.

Meeting Summary

Introductions, Stakeholder Team Member Participation, and Project Process

Frank Dukes of the Institute for Environmental Negotiation (IEN) opened the meeting by giving an overview of the evening's agenda and asking Sarah Rhodes of the Thomas Jefferson Planning District Commission (TJPDC) to explain the project's goals. Sarah explained that the project has two main sets of goals. The first goals apply specifically to the Stakeholder Team and are twofold:

1) To develop viable options for improving congestion issues at US 250 Free Bridge area.
2) To enhance and improve the Regional Eco-Logical Framework (REF) tool.

The goals for the overall grant are separate from the Stakeholder Team goals. These goals are also twofold:

3) To test the Eco-Logical approach for infrastructure planning and development on a local scale.
4) To increase awareness of Eco-Logical approach among federal, state, and local transportation and resources agencies.

This pilot project seeks a consensus-based solution to improve congestion issues in the Free Bridge area by testing the Eco-Logical approach for infrastructure planning and development. In addition, the REF tool will be tailored as members advise changes and additions to the tool to make it more effective.

After Sarah presented on the project goals, Frank offered a brief overview of the process and opened the floor to questions from Team members. Several asked for clarification about how this project will differ from previous studies, including especially the Eastern Connector study, and whether it will have any real impact on congestion in the Free Bridge area. Sarah explained that the Stakeholder Team does not have decision-making power and there can be no guarantee that any consensus would be implemented. She noted that this project is different from previous studies because of its additional goal of testing the REF tool. This

project further differs from past efforts because members will assess various alternatives and the impacts of mitigation at the same time, in order to ascertain the option with greatest likelihood of success.

One member asked about the origin of the grant funding and how this project was chosen. Sarah explained that the funding is from the Federal Highway Administration (FHWA), clarifying that federal tax expenditures are being used for this grant. She also reassured the Stakeholder Team that nothing in the grant that is funding this process requires a built solution. This project is an opportunity to develop a solution using collaboration, consensus building, and transparent communication. But from the grantor's perspective, it would be an acceptable outcome if the Stakeholder Team did not reach consensus about any particular solution to the congestion issue.

Sarah explained that TJPDC is hoping that Team members come into this project with an open mind, be willing to utilize and test the REF tool, and work toward a consensus solution. There can be multiple solutions offered as a result of this project, and nothing is considered "off the table." Frank further emphasized that a consensus solution does not mean giving up individual goals. Rather, it requires listening and understanding in order to develop solutions that seek to meet all member needs and that are based on the highest quality information possible.

Before continuing, members were asked about possible future meeting times. IEN offered either the third Wednesday or the third Thursday of alternate months. One member is unable to attend the third Thursdays. It was therefore decided that the third Wednesday of every other month will be the designated meeting time. In addition, off-months may be used for field trips, including a first field trip in December.

Team members, TJPDC staff, and IEN facilitators then introduced themselves to one another.

Stakeholder Team Requests and Guidelines

Following introductions, members developed a list of recommendations for working together effectively. These include the following:

- Keep an accurate record of meeting events that is faithful to the speaker's expressed opinion.
- Respect others' ideas by actively listening, not interrupting, and offering constructive criticism to build upon.

- Ensure that members are well-prepared for meetings by having access to relevant data prior to meetings, receiving sufficient background information on relevant projects, and dispelling potential rumors or myths from facts early in the process.
- Encourage open dialogue to promote a positive group dynamic and relationship among members.
- Vary the structure of meetings for different communication styles by using small and large group activities so that members who are comfortable in different settings can express ideas and opinions.
- Members should be willing to move on to other subjects after expressing an opinion and being acknowledged by others.
- Be willing to share the floor with other members and refrain from dominating the meeting.
- Avoid put-downs of other people or of their opinions.

Free Bridge History: Presentation and Questions

Following introductions and the discussion of expectations, Sarah presented on the history of the Free Bridge area and projects that have been previously studied or proposed. For this project, congestion analysis data are based on the volume to capacity ratio of the bridge. The data used in the presentation are from the MPO's 2040 Travel Demand Model. This is a travel forecasting tool that the MPO uses to estimate future travel demand and issues arising from that demand. The travel demand model is based on 2010 Census data for population and was calibrated using 2009 traffic counts from VDOT. The model's validation and calibration was approved in 2010. (Note: the presentation is available on the TJPDC-MPO website at www.tjpdc.org/ecological.)

The data used in Sarah's presentation represent the estimated vehicular traffic on the bridge in 2040 based on the MPO's daily traffic model.[1] Population growth is included based on census data, anticipated forecasts, and future land use plans. The average traffic count data show that the bridge's volume is already over its designed capacity and that congestion will become worse in the future. Since the traffic estimates provided are based on a 24-hour average, the traffic flow is actually higher during peak congestion periods and lower during non-peak periods than the given number.

Several members expressed interest in having additional data and background information available to everyone prior to meetings, including access to the Eastern Connector study that

[1] *post-meeting correction*: At the meeting on November 18th Sarah noted that this model is a 12-hour model. While the transit component runs in a 12-hour fashion, it is more accurate to refer to this model as a 24-hour model.

was previously completed. (For the study's final report, see: www.tjpdc.org/ecological/PDF/Eastern_Connector_Final_Summary_Report.pdf.)

There were also several requests for data related to travel times (in addition to volume) across the bridge. Sarah stated that the MPO's regional travel demand model is unable to break out traffic into peak-hour. Sarah explained that peak-hour traffic information requires a considerable amount of data, specifically hourly traffic counts, which are not available for the region and are expensive to gather. Sarah did acknowledge that the peak-hour breakdown would be valuable and said she would work with the MPO's Travel Demand Modeler, as well as VDOT, to try and gather that data. Sarah also noted that there is some funding available through the grant to pursue other data needs. Members requested several additional items relevant to the project study area, including the following:

- Bi-directional traffic data to determine a better breakdown of where congestion is occurring.
- An analysis on where traffic would divert if Free Bridge did not exist.
- Traffic crash data in the area for safety analysis.
- Information from previous projects completed in the area such as a project from the University of Virginia School of Architecture.

One specific question was asked about changed traffic patterns with the future Meadow Creek Parkway and how much traffic will be moved from Free Bridge with the Parkway's completion. Sarah responded that the MPO has not specifically looked at that traffic movement using the travel demand model, but that it was possible to do so.

- ➢ Action: Post available information requested by Team members on the Eco-Logical Pilot – Free Bridge Area Congestion Relief website. Provide any such material in hard copy for anyone who requests it.

Regional Eco-Logical Framework Tool: Presentation and Questions

Wood Hudson of the TJPDC presented on the REF tool and responded to member questions. He indicated that this project is a means of testing and of expanding the model. He hopes to include other elements of interest to Team members in the analysis, such as cultural and historical elements. More specifically, the next Stakeholder Team meeting in January will identify gaps and other relevant data layers to use in the tool.

There will be opportunities to reevaluate the tool and adjust the rankings of ecological assets for specific areas. The REF map will change as different resources are added or removed. Layers such as viewshed can be added as a part of the analysis. Ultimately, the goals of the project for the REF tool are the following:

- Build social, cultural, historical, and socio-economic interests into the tool.

- Use Stakeholder Team feedback to analyze and improve the tool's utility.

The REF tool is data heavy, but it is a central part of the project. In response to a question, Wood noted that the smallest area examined in the data set is a 30x30 meter (98x98 foot) square.

- ➢ Action: Develop a glossary of GIS terms to improve member understanding of the tool.

Meeting Wrap-Up and Next Steps

After the presentations by Sarah and Wood, IEN asked Team members to share their goals for the project. Members' goals include the following:

- Improve pedestrian/cyclist access and safety in the Free Bridge area.
- Incorporate the results of this project into the Pantops Master Plan update (see www.albemarle.org/department.asp?department=cdd&relpage=3734), emphasizing that this project is larger in scope than just Free Bridge itself.
- Include a discussion of public transportation options.
- Offer multiple solutions to congestion.
- Embrace the Rivanna River/riverscape and create an opportunity to focus on the future of this resource.
- Enhance the natural resources of the area by going beyond what is legally required.
- Improve coordination and connectivity of transportation between Charlottesville and Albemarle County.
    - Use the Rivanna River as a way to unite the two jurisdictions.
- Consider all options as a solution, including those rejected in the past.
- Ensure that the group considers the regional impacts and represents the views of everyone potentially affected by decisions.

Members were invited to offer additional suggestions and questions about the project. One member asked about the study area and how it was selected. Sarah explained that it was selected based on previous study areas, and specifically census blocks, the smallest geographic unit of measurement used by the U.S. Census Bureau. The study area is the geographic area immediately affected by Free Bridge congestion, where something could potentially be built to alleviate the congestion.

Members expressed a desire for a way to communicate with each other between meetings and to be able to post ideas.

- ➢ Action: Create an online forum for members to collaborate and share information between meetings.

The meeting concluded with a "Plus/Delta" activity facilitated by IEN to share positive qualities (+) and things that could be changed for future meetings (Δ). These included the following:

+

- The meeting was civil and well-organized.
- The membership of the Stakeholder Team was "impressive."
- The meeting kept to a schedule and the timing was good.

Δ

- All materials online should be accessible from the same webpage.
- The location and time of the meeting needs to be better announced, and a new location should be used next time.
- More information about the role of IEN can be provided.

Meeting Attendees

NAME	REPRESENTING
Stephen Bach	City of Charlottesville – Citizen Representative
Kirk Bowers	Sierra Club
Ken Boyd	Albemarle Couty BOS
Donovan Branche	City of Charlottesville Staff
Morgan Butler	Southern Environmental Law Center
Blake Caravati	City of Charlottesville – Citizen Representative
Dave Davis	Department of Environmental Quality
Victoria Dunham	City of Charlottesville – Citizen Representative
Dennis Dutterer	Albemarle County – Citizen Representative
Bill Emory	City of Charlottesville – Citizen Representative
Mack Frost	FHWA
Chris Gensic	City Parks and Recreation
John Hacket	Albemarle County – Citizen Representative
David Hannah	Streamwatch
Anne Hemenway	Lewis and Clark Exploratory Center
John Jones	Charlottesville Area Transit
Michael Koslow	Charlottesville Bike and Pedestrian Safety Committee
Lucas Lyons	JAUNT
Dan Mahon	County Parks and Recreation
David Mitchell	Albemarle County – Citizen Representative
Cal Morris	County Planning Commission
Nina O'Malley	Department of Environmental Quality
Chuck Proctor	VDOT, Culpeper District
Mary Roberts	City of Charlottesville – Citizen Representative
Stanley Rose	Albemarle County – Citizen Representative
John Santoski	City Planning Commission
Mike Smith	City of Charlottesville Staff
Andy Sorrell	Albemarle County Staff
Jeff Werner	Piedmont Environmental Council
Clara Belle Wheeler	Albemarle County – Citizen Representative

Sarah Rhodes	Metropolitan Planning Organization
Wood Hudson	Thomas Jefferson Planning District Commission
Frank Dukes	Institute for Environmental Negotiation, UVa
Kelly Wilder	Institute for Environmental Negotiation, UVa
Danny Newman	Institute for Environmental Negotiation, UVa

Eco-Logical Pilot – Free Bridge Area Congestion Relief Project
DRAFT Stakeholder Team Meeting #2 Summary
Wednesday, January 15, 2014, 4 – 7 p.m.
Kessler Conference Room, Martha Jefferson Outpatient Center, Charlottesville, Virginia

Facilitated by:
The Thomas Jefferson Planning District Commission and
The Institute for Environmental Negotiation, University of Virginia

Goals of the Stakeholder Team
- To develop a viable project option for improving congestion issues at US 250 Free Bridge.
- To enhance and improve the existing Regional Ecological Framework (REF) Tool.

Goals of Eco-Logical Program Grant
- To test the Eco-Logical approach for infrastructure planning and development on a local scale.
- Increase awareness of Eco-Logical approach among federal, state, and local transportation and resources agencies.

Executive Summary

The second community and resource Stakeholder Team meeting of the Eco-Logical Pilot – Free Bridge Area Congestion Relief Project took place on January 15th, 2014 at the Kessler Conference Room in the Martha Jefferson Outpatient Center in Charlottesville, Virginia. The purpose of this meeting was to learn more about the Regional Eco-Logical Framework (REF) tool and to discuss modifying the REF to better address the goal of relieving Free Bridge congestion.

Frank Dukes and Kelly Wilder of the Institute for Environmental Negotiation (IEN) at the University of Virginia facilitated the meeting. During the meeting, Sarah Rhodes and Wood Hudson of the Thomas Jefferson Planning District Commission (TJPDC) presented information about the Regional Eco-Logical Framework (REF) tool and process updates. Members of the Stakeholder Team asked clarifying questions about the tool and worked in small groups to form suggestions for how to prioritize the importance of the datasets included in it.

The next meeting will be held on March 19, 4-7 p.m., at Charlottesville High School. Details will be provided later.

Introductions and Orientation

Frank Dukes and Kelly Wilder of the Institute for Environmental Negotiation (IEN) welcomed everybody and opened the meeting. After a brief round of introductions, Frank followed up on

a request from the previous meeting to explain more about IEN. He asked members to note the document that explains IEN's role, mentioning specifically that IEN takes no position on any outcomes and is both independent and impartial. If desired, IEN can speak confidentially with any meeting participants about the process. He also explained that the IEN team works with the TJPDC -to ensure that the meeting time is spent productively.

Kelly then gave a brief overview of the process thus far. She reviewed the guidelines and requests that were assembled by the stakeholder team at the last meeting to promote effective collaboration, which are as follows:

- Keep an accurate record of meeting events that is faithful to the speaker's expressed opinion.
- Respect others' ideas by actively listening, not interrupting, and offering constructive criticism to build upon.
- Ensure stakeholders are well-prepared for meetings by having access to relevant data prior to meetings, receiving sufficient background information on relevant projects, and dispelling potential rumors or myths from facts early in the process.
- Encourage open dialogue to promote a positive group dynamic and relationship among stakeholders.
- Vary the structure of meetings for different communication styles by using small and large group activities so that stakeholders who are comfortable in different settings can express ideas and opinions.
- Members should be willing to move on to other subjects after expressing an opinion and being acknowledged by the group.
- Be willing to share the floor with others and refrain from dominating the meeting.
- Avoid put-downs of other people or their opinions.

Kelly asked if any member had any guidelines or requests to add to the list, but none were suggested. She also mentioned that she put one copy of the November 18 meeting summary on each table and that the document is available online at the TJPDC Eco-Logical Pilot Project website for those who want to look at it. If any meeting participants are absent from a meeting, it's important to keep up with the group by reading the summaries online. Kelly then presented this meeting's agenda, which included time for:

- Introductions and Orientation
- Regional Ecological Framework Refresher Presentation
- Small Group Breakout Discussion
- Report Findings Back to Stakeholder Group
- Discussion of Next Steps and Outcomes from the Small Group Discussions
- Public Comments
- Meeting Wrap-up

Regional Ecological Framework Refresher Presentation

Before handing the floor to Wood Hudson, Sarah Rhodes thanked all meeting participants for coming to the meeting and for volunteering their time. Sarah talked briefly about the field trip to the Rivanna River Trailin December, mentioning that it went well. She also announced that, barring any unexpected developments, the process would stick to the bi-monthly Wednesday meetings.

Wood Hudson then began his presentation about the Regional Ecological Framework (REF) tool and about its application within this process. Both Wood and Sarah explained the importance of developing the REF as a tool that is well rounded and useful for this and future projects. The goal of the meeting, therefore, was to brainstorm as a group how to improve the tool for local use because it will help evaluate the alternatives that the stakeholder team can discuss later in the process. Wood's presentation slides can be viewed at the TJPDC Eco-Logical Pilot Project website in the "Meeting Archive" section (http://www.tjpdc.org/ecological/meetingarchive.asp).

Wood welcomed questions or comments at any point during his presentation. The following questions and comments were offered:

Question: In terms of the datasets, what do you mean by ranking?
Answer: Each attribute of each dataset was awarded a score from 1-10 depending on the determined importance of that dataset's representative environmental quality. Then, where those quality areas overlap on the map, the data layers' scores are added together to develop a rank of importance at each point of the REF cost raster. Although a scale of between 1 and 10 was used no attribute received a score of less than 2.

Question: What's the importance of this process? Remedying Free Bridge congestion or improving this tool?
Answer: Both. The purpose of working on the REF model now is to provide the group with a tool to work with later when different options for remedying Free Bridge congestion are needed. The project has two overall purposes when it comes to the tool and Free Bridge congestion. The first is to further develop and refine the REF tool, while at the same time applying and testing the tool and FHWA's Eco-Logical process to real world transportation issues. The second is to use this pilot project as an opportunity to identify a possible workable transportation solution that would address the current and future congestion issues in and around Free Bridge.

Question: What is this scoring? I don't understand these scores.
Answer: These ten data sets were evaluated by the agencies that provided the data. The data generally has a number of attributes, either qualitative or quantitative. The agency determined the environmental/ecological value of the land areas represented in the datasets based on their expertise of what is in or not in the area. The scores represent the importance of each area of land for local environmental health, with higher scores indicating more important areas that would best be protected from development. The scores or ranks provide

a common language for comparing and combining different but related environmental datasets spatially.

Question: If you look at the map, there is a high value of 52 in the northern areas. So those are the areas with the highest value environments, correct?
Answer: Yes, that is correct. However, the bounded MPO area doesn't include that northern density area. There are also some high value areas in the center of the MPO. According to the REF the northwestern areas of the planning district have the largest areas with the highest concentration of environmental resource. However, high score areas do exist outside of this area. For example, high scoring areas existing within the MPO and can be attributed to high concentrations of environmental resource present at sites such as Ivy Creek and Ragged Mountain.

Question: How is the urban ecology weighted? How do you gauge the impact on the urban ecology in these macro terms?
Answer: This is just a planning-level modeling tool. We would definitely want to explore the opportunity to add urban ecology to it, but the current model does not.

Question: A six is average. What does that mean?
Answer: That means that the average score of a certain area is six. That value shifts depending on the target area. This also indicates that areas with a score higher than six are significant impact areas that may be good targets for preservation. The mean average score of REF values in the Planning District is six. What this means is that areas with scores above the average (in the top 50% distribution) are the areas with higher ecological value. Those areas with scores above 14 or the 75th percentile have a significant concentration of resources and thus impact to those areas should likely be minimized.

Question: Shouldn't we look at this in terms of where it falls as a percentile? So what's the significance of a six when you say that above a six is a significant impact area?
Answer: We can look at the values in terms of a percentile, but the results are the same. Areas with values above a six occur less frequently in the dataset, indicating that they are of significant value to the local environment.

Sarah Rhodes also noted that any infrastructure improvement would cause an impact. The purpose of the REF Tool is not to find an alternative route that is impact free, but determine the potential impacts of the alternative route in order to more appropriately consider mitigation options and opportunities. This is how the REF Tool will be used later in the process.

Question: It seems like the point by point score is more important that the average point, and that we should know the impact of stretches of a road as it traverses the cost raster.
Answer: We can look at this map in terms of the raw numbers rather than the averages, but the result will be the same. The averages are simply a means of simplifying the data. Once the model is where we want it to be, we can certainly use it to analyze the impact of suggested roads. The intended use of the raster is to help avoid and minimize impacts and to provide a

framework for comparing the potential impacts of different project scenarios. Most likely we will find that making a comparison between scenario scores will be a better benchmark than looking at the region wide average. In addition to scoring the tool will also be used to identify the individual resources impacted by a project scenario.

Question: It's great that this framework is together and that we are hoping to enrich this tool. Is there a list of datasets that we can choose from to add to this tool?
Answer: There are a number of datasets that we can add to this tool to make it more accurate. Historic areas, parks, schools, neighborhoods, places of worship, and so forth can all be included. This is what we want the stakeholder team to do next.

Question: Those of us who were around last time talked about the Eastern Connector. We evaluated three paths and at the end of a large study we evaluated that none of those paths made sense, from any perspective. I think it would make better sense, than starting in a microcosm, to look down on a map from farther away to see how roads can better direct traffic.
Answer: These paths here are in no way indicative of what we may choose to do. They're just a demonstration. The staff will not actually be proposing any options, because that's up to the stakeholder team.

Question: Is this model something that can be used for later projects? What size area do we want to -this model to cover?
Answer: Yes, when the environmental and physical models are coupled this model will be useful for a number of purposes. By stacking the different data layers, the model can be used to assess projects from multiple perspectives, both now and later.

Question: Would the data sets in the second module be stacked on top of the environmental data sets? Or would they be incorporated into a separate model?
Answer: At this point, it seems best to do it separately and then use both models to determine best paths. This will develop as we work on reconstructing the tool. The most likely scenario is that the environmental model will remain separate from the cultural/historic/economic component.

Question: Is it accurate to say that the resource agencies determined the scores based on what is required by code or law?
Answer: Yes. For example, the rank 1 endangered species areas are given a value of 10 because they are supposed to be of the highest importance. The scores were given to assign importance of a dataset and an attribute importance may relate to code or law. However, the REF is designed to be reflective of environments that are regulated. The tool includes the location of wetlands, water bodies, endangered species and their habitats.

Question: What is important to the community? That sounds very subjective compared to the data right now. So how do we factor in what's important with the community?
Answer: Our process here is to have the stakeholder group figure out some of what is important for the community. The REF data is only a means of checking community values with environmental ones.

Question: Are we going to get a chance to suggest re-ranking the different datasets/land uses in terms of importance?
Answer: Yes, part of today's meeting involves group work where the stakeholder team will be able to suggest new ranks.

Small Group Breakout Discussion and Reporting Back

Stakeholder team members divided into five small groups to discuss the current rankings of the REF model datasets and to complete the REF ranking worksheet. This exercise ensured that all team members had an opportunity to analyze the current rankings and to suggest new rankings. The teams also assembled lists of new datasets that they thought should be incorporated into the model.

After fifty minutes of small group discussion, one member from each group recorded their group's suggested and displayed them on a chart for the other groups to see. When all suggestions were displayed, Frank explained that each group would get an opportunity to present the highlights of their discussion. The five groups presented the following highlights:

Group 1 – This group agreed that threatened and endangered species datasets were ranked accurately. In comparison, the group thought that the species observation dataset was ranked too high and that its rank should be lowered, although they did not want to specify what it should be lowered to. Additionally, in order to preserve the area's endangered species, the rank of the wildlife corridors dataset should be increased to a 6. The group also suggested changing the stream order ranking because they believed the Rivanna River rank should be higher. Finally, the group suggested that the following data sets, if available, should be added to the model:

- drinking water resources;
- floodplain areas;
- soil fertility;
- environmental justice issues;
- school locations;
- recreational areas;
- educational areas;
- sites of archeological importance;
- Native American history;
- historic impact; and
- socio-economic status.

The group was especially interested in the socio-economic data because they want to avoid targeting low income areas for road routes.

Group 2 – This group thought that the data for the DGIF species observations dataset needs to be closely inspected and reconsidered because they were unsure about how it was collected and about the significance of certain sightings. They suggested that the Audubon bird area dataset should be awarded a higher rank and increased it to 8. The group also expressed concern with the fact that none of their group members were familiar with any of the datasets. They explained that, since the datasets are all state level or larger in scale, there should be

some input from local expertise in order to apply them locally and that this process should identify local experts to look at the data and to contribute local datasets to the model.

Group 3 – Rather than suggest modifications to the original rankings, this group decided to weigh the datasets according to their importance, as decided by the group members. Since none of the group members believed they had sufficient knowledge of the datasets to change the rankings, they took the rankings as a given. Instead, the group ordered the ten datasets from most important to least important and weighted them on a curve (from 20% to 2%), relative to their identified importance. The threatened and endangered species dataset, for example, was deemed the most important dataset and awarded a weight of 20%. The group suggested that the following data should be added to the model:

- greenways;
- parks and recreation areas;
- historic and cultural sites;
- socioeconomic status;
- U.S. census; and
- business and economic corridor locations.

The group also supported Group One's notion that routing decisions should not disproportionately disadvantage people of lower socio-economic status.

Group 4 – This group suggested modifying the national hydrography dataset by either lowering its ranking or by decreasing the size of its river system buffers. They also explained that the watershed dataset should be checked to ensure that it is consistent with the local area and appropriate for use in an urban setting. The group expressed that the REF tool should be used only to figure out the more detailed path once the larger scale routing barriers are resolved. The main question, therefore, is about how to find another point to cross the river, so that Free Bridge is not the only route. The group suggested that a land conservation easement dataset be added to the model.

Group 5 – This group did not reach consensus on any suggestions to modify the datasets rankings. Much of the group was comfortable with the original rankings, and some group members did not feel comfortable changing or judging the rankings because they didn't think that they had sufficient knowledge. The group suggested that the following data should be added to the model:

- traffic;
- historic resources;
- existing land use;
- data about traffic accidents on existing roads, and economic analysis data.

Discussion

After all the groups presented, Frank opened the floor to the stakeholder team for a brief discussion and asked if any participants had any questions about the presented highlights.

One participant shared that he liked how group 3 weighted the datasets, rather than re-ranking them. He asked why the group seemed to prioritize the water datasets by awarding them greater weights and about the effect of such low weights awarded according to their curve (2% for the lowest priority dataset). A member from group three answered that his group identified local water features as the most important environmental elements. He also agreed that the weighting system they used might not be totally relevant or accurate, but explained that the method of assigning weights to the datasets could still work.

Another participant commented that he liked group 3's weighting system, but that it could result in extreme results if the weighting scale is not distributed carefully.

A third participant expressed that it is difficult to look at rankings that experts have already analyzed and expect to change them in a knowledgeable way. He indicated that perhaps it would be more important for the group to list what types of land uses are of greatest local importance more broadly, rather than working to modify the original professional analysis. The group could focus on determining what is important to the community first, and then provide that information to professionals who can assign new ranks with that knowledge in mind.

Participants in group 3 noticed that the datasets overlapped. They expressed that, on the one hand, this is good because it ensures depth of the data. However, this could be problematic because it could artificially boost the value of certain areas due to double counting. Wood responded that, since the datasets are for different elements, it is not likely that the final raster would be skewed by double counting. However, Wood said that he would look into this.

Discussion of Next Steps and Outcomes from the Small Group Discussions

Since the next steps of the process were discussed earlier in the meeting and the outcomes from the small groups were discussed during the findings report time, the stakeholder team decided to proceed through to the public comments agenda item. No public comments were offered.

Meeting Wrap-up

The meeting concluded with a "Plus/Delta" activity facilitated by IEN to share positive qualities (+) and things that could be changed for future meetings (Δ). These included the following:

+

- The meeting location was great.

Δ

- The information discussed might have been a little too complex.

The next meeting (Meeting 3) will be held on March 19th, 2014 from 4 – 7 p.m. at Charlottesville High School.

Meeting Attendees

- Stephen Bach – City of Charlottesville - Citizen Representative
- Kirk Bowers – Sierra Club
- Ken Boyd – Albemarle County BOS
- Morgan Butler – Southern Environmental Law Center
- Blake Caravati – City of Charlottesville - Citizen Representative
- Diane Caton – Albemarle County - Citizen Representative
- Ron Cottrell – Martha Jefferson Hospital
- Dennis Dutterer – Albemarle County - Citizen Representative
- Elaine Echols – County Staff
- Bill Emory – City of Charlottesville – Citizen Representative
- John Hackett – Albemarle County – Citizen Representative
- David Hannah – Streamwatch
- Anne Hemenway – Lewis and Clark Exploratory Center
- Satyendra Huja – City of Charlottesville CC
- John Jones – Charlottesville Area Transit
- Michael Koslow – Charlottesville Bike and Pedestrian Safety Committee
- David Mitchell – Albemarle County – Citizen Representative
- Cal Morris – County Planning Commission
- Nina O'Malley – DEQ
- John Pfaltz – City of Charlottesville – Citizen Representative
- Stanley Rose – Albemarle County – Citizen Representative
- Donna Shaunesey – JAUNT
- Mike Smith – City Staff
- Jeff Werner – Piedmont Environmental Council
- Clara Belle Wheeler – Albemarle County – Citizen Representative

Meeting Planners and Facilitators

Sarah Rhodes – Metropolitan Planning Organization
Wood Hudson – Thomas Jefferson Planning District Commission
Frank Dukes – Institute for Environmental Negotiation
Kelly Wilder – Institute for Environmental Negotiation
Jason Knickmeyer – Institute for Environmental Negotiation

Eco-Logical Pilot – Free Bridge Area Congestion Relief Project
Stakeholder Team Meeting #3 Summary
Wednesday, March 19, 2014, 4 – 7 p.m.
Charlottesville High School Library, Charlottesville, Virginia

Facilitated by:
The Thomas Jefferson Planning District Commission and
The Institute for Environmental Negotiation, University of Virginia

Executive Summary

The third community and resource member Stakeholder Team meeting of the Eco-Logical Pilot – Free Bridge Area Congestion Relief Project took place on Wednesday, March 19th, 2014 at Charlottesville High School. At this meeting, stakeholders suggested transportation alternatives to relieve congestion in the US 250 Free Bridge study area that they would like to see analyzed using the Regional Ecological Framework (REF) tool.

Frank Dukes and Kelly Wilder of the Institute for Environmental Negotiation (IEN) at the University of Virginia facilitated the meeting. Sarah Rhodes and Wood Hudson of the Thomas Jefferson Planning District Commission (TJPDC) opened the meeting with updates on progress rebuilding the REF tool, time of day trip modeling, meeting with state agencies, a new online forum, and an RFQ for engineering consulting services. Stakeholders then worked in small groups to develop eight priority transportation alternatives that will be run through the REF tool and forwarded to the chosen engineering firm to analyze feasibility and expense.

The next meeting will be held on May 21st from 4 – 7 p.m. (location to be determined).

Goals of the Stakeholder Team:
- Develop a viable project option for improving congestion issues at US 250 Free Bridge.
- Enhance and improve the existing Regional Ecological Framework (REF) tool.

Goals of Eco-Logical Program Grant:
- Test the Eco-Logical approach for infrastructure planning and development on a local scale.
- Increase awareness of Eco-Logical approach among federal, state, and local transportation and resources agencies.

Introductions and Orientation

Frank and Kelly welcomed everybody and opened the meeting. Frank spoke about the overall goals of the Free Bridge Area Congestion Relief Project process. Kelly then reviewed this meeting's agenda, which included time for:

- Introductions and orientation
- Updates from staff
- Work session: Identification of transportation alternatives
    - Rationale and instructions for work sessions
    - Small group work session
    - Medium group work session
- Reconvening and selecting of alternatives for feasibility analysis
- Wrap-up
- Public comments

Kelly also reminded the Stakeholder Team of the guidelines and requests that were assembled at the first meeting to promote effective collaboration, which are as follows:

- Keep an accurate record of meeting events that is faithful to the speaker's expressed opinion.
- Respect others' ideas by actively listening, not interrupting, and offering constructive criticism to build upon.
- Ensure stakeholders are well-prepared for meetings by having access to relevant data prior to meetings, receiving sufficient background information on relevant projects, and differentiating potential rumors or myths from facts early in the process.
- Encourage open dialogue to promote a positive group dynamic and relationship among stakeholders.
- Vary the structure of meetings for different communication styles by using small and large group activities so that stakeholders who are comfortable in different settings can express ideas and opinions.
- Be willing to move on to other subjects after expressing an opinion and being acknowledged by the group.
- Be willing to share the floor with others and refrain from dominating the meeting.
- Avoid put-downs of other people or their opinions.

Kelly asked if any member had any guidelines or requests to add to the list, but none were suggested.

After addressing the meeting protocols, Sarah reviewed the purpose of the process and its goals, listed above. Sarah concluded by indicating that this meeting is about developing options that can be tested using the REF tool to determine their feasibility.

Updates from Staff

During this part of the meeting, both Wood and Sarah presented on the progress made since the last meeting. Wood shared that he has been meeting with project stakeholders from the state Departments of Conservation and Recreation (DCR), Environmental Quality (DEQ), Game and Inland Fisheries, and Historic Resources (DHR); the U.S. Army Corps of Engineers; and others to get input on the Eco-Logical model and to gather some of the additional information requested during meeting two to be incorporated into the REF tool. He indicated that some of the participants had suggested additional datasets that could be included in the tool. State agency staff also made recommendations on analysis methods that could be used to recalibrate some existing data in the tool.

Sarah then updated the group about the ongoing effort to find an engineering firm to review the options proposed during this meeting's work sessions. A request for qualifications (RFQ) has already been released, and Sarah and Wood are waiting on proposals. Already, a number of groups have indicated that they are interested in becoming involved in the process, and whoever is selected will be at the May and July meetings to present their findings.

Sarah also shared updates on the TJPDC's efforts to incorporate traffic congestion information into the final REF tool. Early on in this process, meeting participants asked about whether some time-specific traffic data could be added to the model so they could consider the effects of congestion at peak hours on their proposed alternatives. A "time of day factors" model would provide time-specific data, but it would take months of staff time to incorporate it into the current model framework. Additionally, the available data are outdated and might no longer be representative of the current Charlottesville traffic patterns. At this time, given the difficulty of using the data and the possibility that it might not be useful, TJPDC concluded that it would be unrealistic to incorporate the "time of day factors" into the MPO's Travel Demand Model. One participant asked if it would be possible to get an idea of the effects of congestion on Free Bridge, even if it were just anecdotal. Given the area's turns and other problematic traffic patterns, it could be useful to get a feel for how the traffic patterns cause congestion during peak hours. Sarah responded that TJPDC is looking for additional information, like traffic light data on Pantops, that might be useful to this process but that at this point, there isn't a solid alternative. The MPO is currently trying to work with VDOT's Charlottesville residency to gather additional traffic data.

Finally, Wood shared that he had established an online discussion forum on the TJPDC website that would enable participants to communicate outside of meetings. The forum will only be accessible to people who have registered online as members. The forum can be accessed at http://forums.tjpdc.org/ by clicking on the "Eco-Logical Pilot Project – Stakeholders" link in the "Projects" menu. Directions for registering and using the forum are included in an appendix. One participant asked if this forum would run into problems with the Freedom of Information Act. TJPDC indicated that participants should expect that all information shared on the forum could be shared with the public if requested.

Work Session: Identification of Transportation Alternatives

After updates from the TJPDC, the meeting progressed into a work session. The purpose of this session was to give meeting participants time to discuss and develop a list of options for relieving Free Bridge congestion. These options will be evaluated by both the REF tool and the engineering firm.

As the groups were working, they drew their options onto a map of the study area, which facilitated the sharing of ideas. The maps already included the seven options evaluated during the Eastern Connector study as reference. These options would be the options analyzed if the stakeholder group is unable to develop options for consideration. MPO staff explained that the MPO needed to analyze project alternatives for this process.

Before starting the small group work session, Frank explained that it was acceptable if different groups had duplicate ideas because only one final list of options would be proposed. He also clarified that this session would not result in forming recommendations for relieving Free Bridge congestion, only in determining which options would be evaluated in this round.

Small group work session

In this session, meeting participants were divided into four groups of five people and given thirty-five minutes to discuss possible options and to draw those options on their maps or describe them in words. Each group was asked to come up with at least three, but no more than six, options.

Medium group work session

For this thirty-minute session, the initial four groups of five converged into two groups of ten. A clean map was given to each of the two newly formed, medium-sized groups, who were asked to merge the ideas generated by their small groups during the first work session. The medium groups were also asked to develop any new ideas that arose and to assemble a list of possible options to be presented to the group as a whole after this session.

Reconvening and selecting of alternatives for feasibility analysis

After the medium group session, all meeting participants reconvened in one group to collaboratively select a set of no more than ten options to be put forward for analysis by the REF tool and by the engineering firm.

Each group was given time to present its ideas to the whole group, and Wood mapped the options on a projector as they were presented. After discussion by the entire Stakeholder Team, nine options were selected for further analysis. These are not in any priority order:

A. Alleviating traffic turn delays at Free Bridge by retrofitting/engineering the current bridge, potentially including:
    i. Building express lanes that go over the entire existing bridge, as well as some of the turn-off roads on both sides of the bridge.
    ii. Jug handle/under-loop idea that would divert left-turning traffic under the existing bridge and directly onto the roads formerly accessible only by making a left hand turn after the bridge.
B. Converting a portion of Luck Stone Quarry into a parking garage and developing commuting options into the city from that point. These alternative commuting options from the quarry might include a rail line into the city, a bike train into the city, or a golf cart-type transportation network into the city.
C. Educating commuters to take I-64 to Exit 121 at Monticello Avenue to get into the city.
D. Splitting the road off of 250 to run along Route 20, Darden Towe Park, and Meadowcreek Golf Course, and reconnect with Rio Road.
E. Developing an alternative route north and west of Albemarle County by expanding Route 33 around Gordonsville and linking it up with I-64, perhaps via Route 15.
F. Reversing traffic lanes on Free Bridge to provide an extra lane in the rush hour direction. Potentially pair this with some kind of HOV incentive system.
G. A two-lane urban bridge that would connect Pantops Shopping Center with High Street.
H. Extending Olympia Drive to be parallel to 250 to potentially alleviate some of the traffic on 250.
I. Alleviating congestion at the 250/20 intersection, perhaps by developing dedicated right turn lanes going into and coming from Rt. 20 North. This alternative would focus on making intersection improvement within the existing road right of way.

After the presentations, Sarah said that the maps Wood was creating during the presentations would be distributed so that everybody could see the proposed options. It is hoped that TJPDC will have an engineering firm on board by mid-April, and they will evaluate the options soon thereafter. Finally, Sarah reiterated that these options are merely ideas to be evaluated and not recommendations for future alternatives.

Frank asked if anyone had comments or questions on the presentations or the process in general. The following comments and questions were shared:

- It seems possible to mix options A-i and F to implement a reversing lane policy on new, overpass express lanes.
- Can we try option F, to implement rush hour dependent reversing lanes, just to test how it could work? It seems like that would be cheap to test if it is a feasible option.
    - Another participant, however, mentioned that it is difficult to do that because, given the current circumstances, eliminating the turn lane to provide an extra rush-hour direction lane would force one person trying to turn left to really hold up traffic, rather than being able to just enter the turn lane and wait.
- Option H is very nearly a done deal already, but the exact placement of the road has not yet been determined.
- In terms of the jug handle idea, there is a sewer pipe that runs under the bridge where the jug handle/underpass (option A-i) idea is proposed. For this option to be implemented, it is likely that that pipe would need to be altered or moved.
- It is important that new lanes are provided at the 250/20 intersection. That provision might alleviate a lot of the congestion that happens at that intersection, which might help with congestion at the bridge.

Wrap-up

The meeting concluded with a "Plus/Delta" activity facilitated by IEN to share positive qualities (+) and things that could be changed for future meetings (Δ). These included the following:

+

- Best meeting we've had yet.
- Interaction and hands on approach with other people was very effective.

Δ

- Difficult meeting location – noisy, hard to hear (maybe Jefferson School next time).
- Low participant turn out.

The next meeting (Meeting 4) will be held on May 21st, 2014 from 4 – 7 p.m., at a yet-to-be determined location. The second field trip, to the area south of Free Bridge, will take place sometime in April. Additional information on both the next meeting location and the field trip date will be sent out as soon as it is established.

Meeting Participants

Stephen Bach, City of Charlottesville – Citizen Representative
Ken Boyd, Albemarle Couty BOS
Morgan Butler, Southern Environmental Law Center
Diane Caton, Albemarle County - Citizen Representative
Elaine Echols, County Staff
Bill Emory, City of Charlottesville – Citizen Representative
Chris Gensic, City Parks and Rec
Anne Hemenway, Lewis and Clark Exploratory Center
Satyendra Huja, City of Charlottesville CC
John Jones, Charlottesville Area Transit
Mac Lafferty, Planning Commission CTAC
Dan Mahon, County Parks and Rec
Cal Morris, County Planning Commission
John Pfaltz, City of Charlottesville – Citizen Representative
Chuck Proctor, VDOT, Culpeper District
Stanley Rose, Albemarle County – Citizen Representative
Donna Shaunesey, JAUNT
Andrea Terry, RWSA
Jeff Werner, Piedmont Environmental Council
Clara Belle Wheeler, Albemarle County – Citizen Representative

Appendix: Eco-Logical Pilot Project – Free Bridge Area Congestion Relief Forum Registration Instructions

TJPDC is providing stakeholders with access to an online discussion forum for the Free Bridge project. The forum is a place where participants can communicate with one another outside the regular meetings. The forum has been configured so it will only be accessible to users who register online as members. The information below outlines how to complete the registration process.

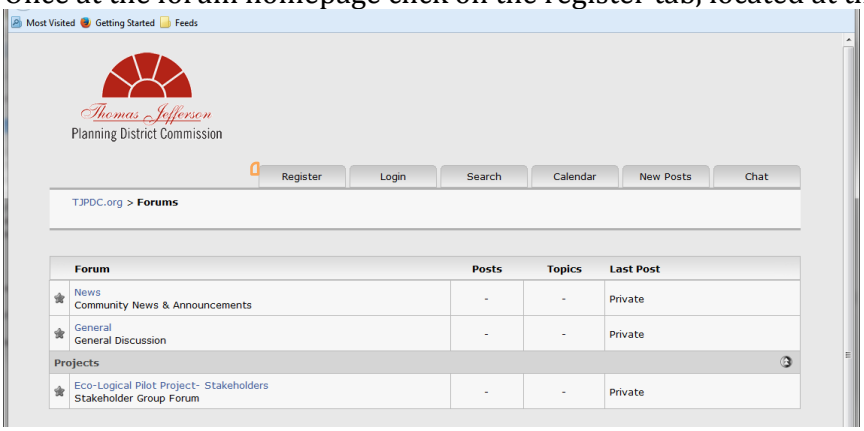
Registration

Step 1:

The forum can be accessed directly at http://forums.tjpdc.org or from the project website at http://www.tjpdc.org/ecological/index.asp.

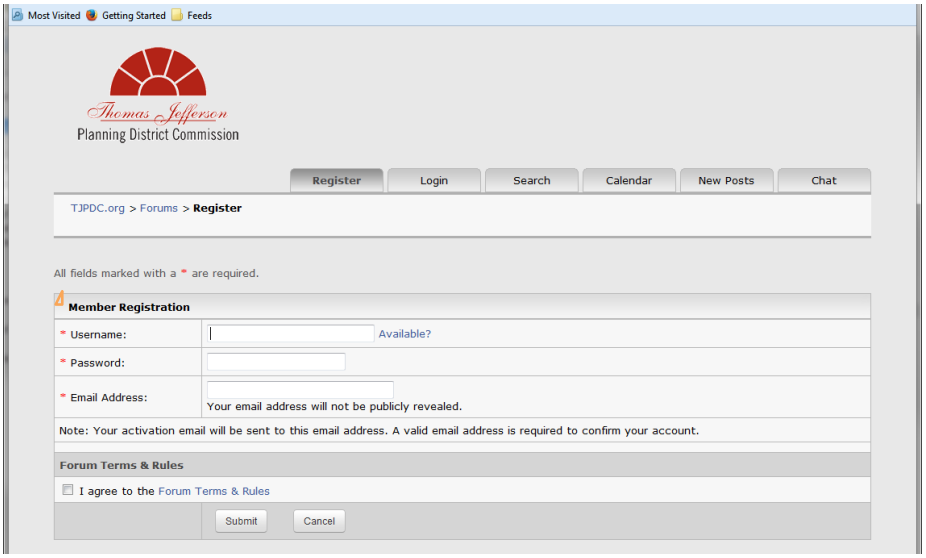
Step 2:

Once at the forum homepage click on the register tab, located at the top of the screen.



Step 3:

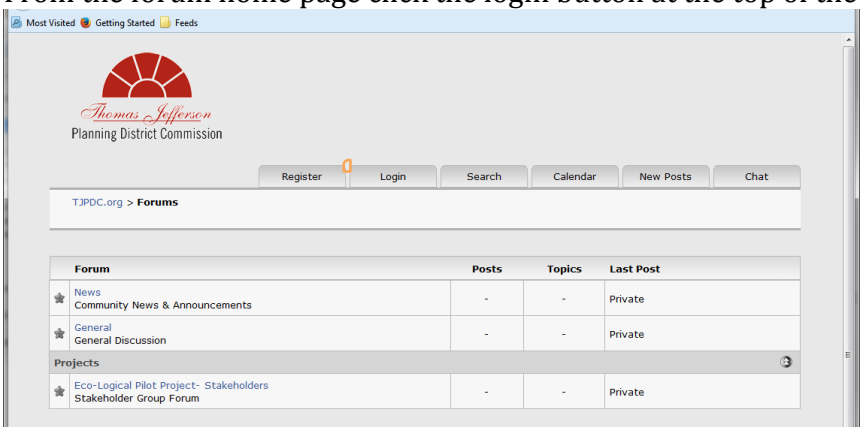
On the register page fill in the three fields with a username, password and a valid email address. Since your user name will be how other users will recognize who you are we would like everybody's user to be first name and last name separated with a period **I.e. Thomas.Jefferson.** Once you have agreed to the forum terms and rules you can submit your registration by clicking the submit button. To complete registration please follow the directions in the conformation email. Note that you will not be fully active until we have manually approved your account. Please allow up to 24 hours for this step to be completed.



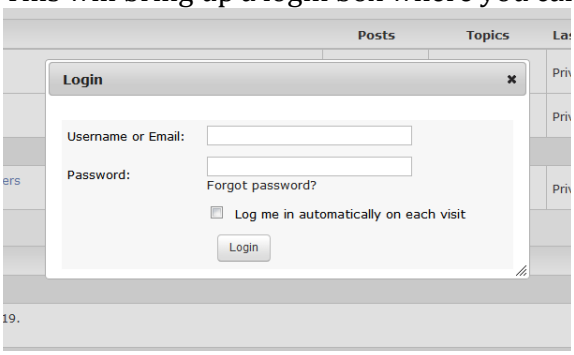
Logging on

Step 1:

From the forum home page click the login button at the top of the screen

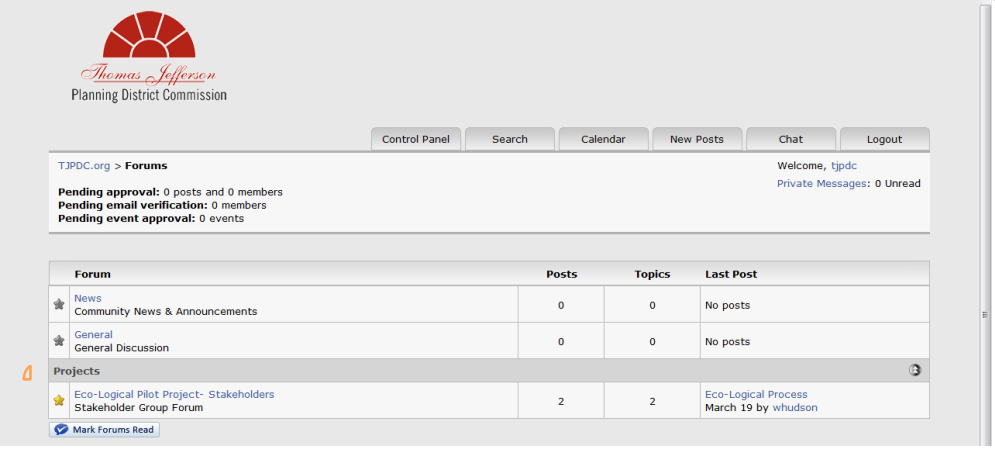


This will bring up a login box where you can enter your username and password



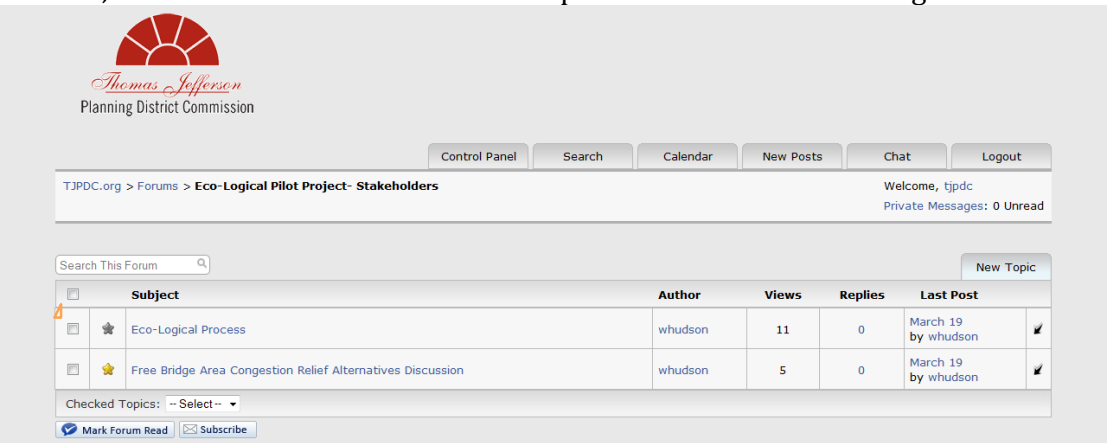
Step 2:

Once logged in you be redirected to the forum page. Message boards relating to the Eco-Logical Free Bridge Area Project can be found under the projects subheading.

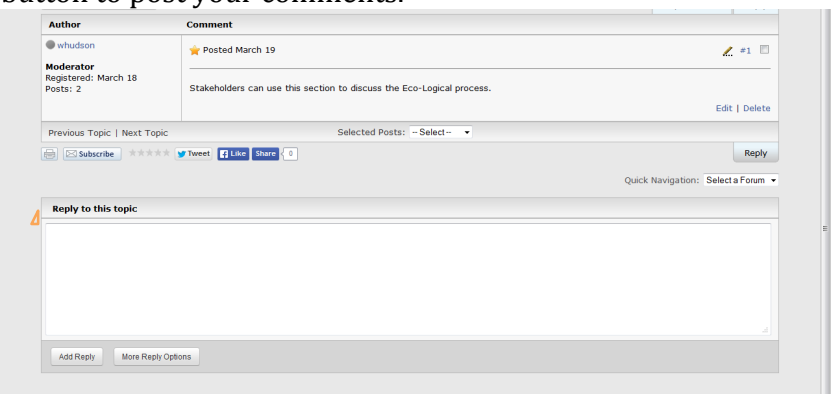


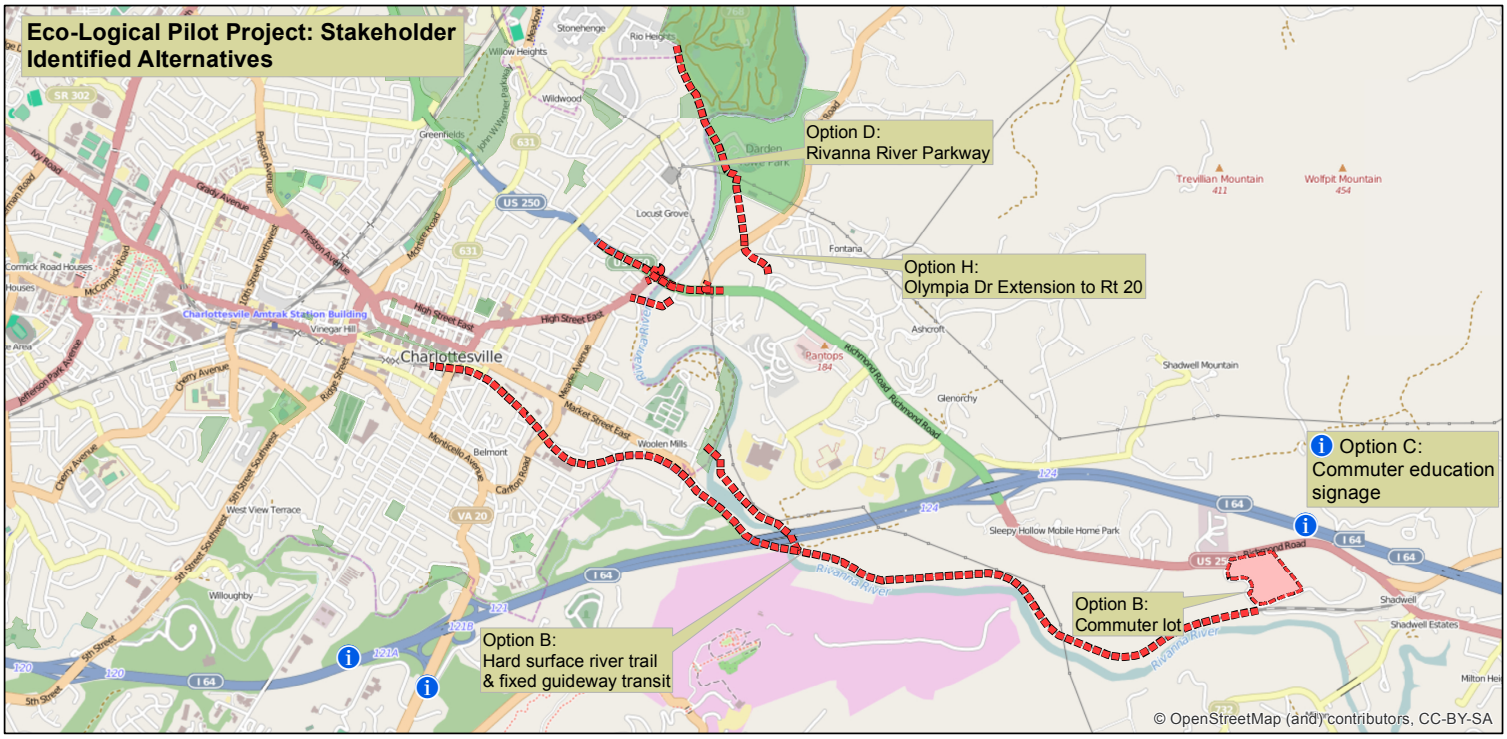
Step 3:

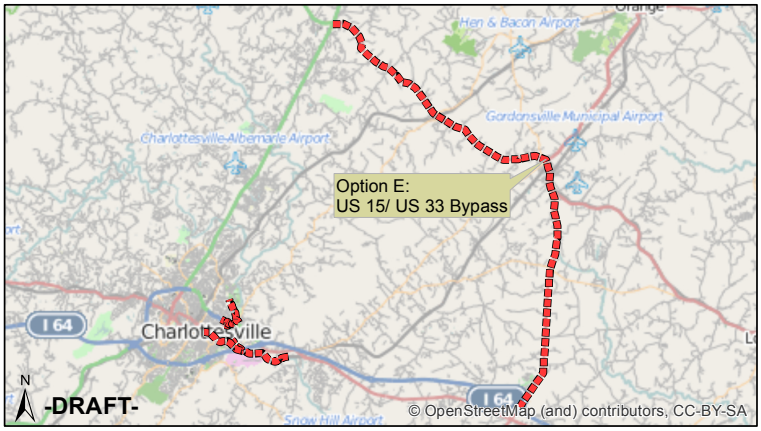
You can post topics by clicking on one of the two discussion headings The Eco-Logical Process, or discussions related to the transportation alternatives being discussed.

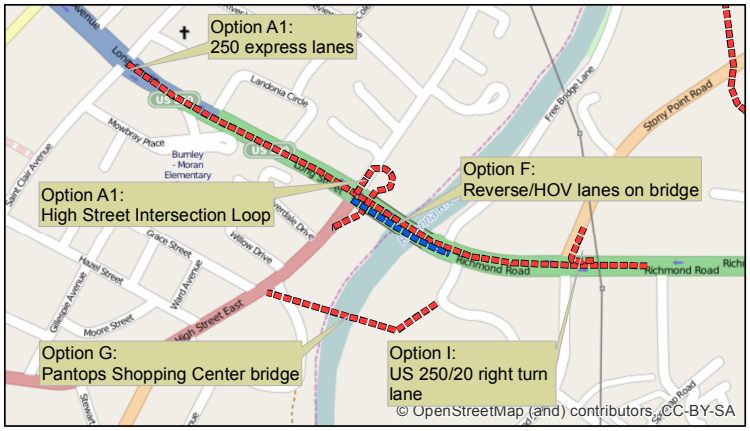


To post a question or comment click on one of the two topic headings, this will bring up a comment box window in which you can enter your text. When finishes click the add reply button to post your comments.




Eco-Logical Pilot Project: Stakeholder Identified Alternatives
Option D:
Rivanna River Parkway
Option H:
Olympia Dr Extension to Rt 20
Option C:
Commuter education signage
Option B:
Commuter lot
Option B:
Hard surface river trail
& fixed guideway transit
Charlottesville
© OpenStreetMap (and) contributors, CC-BY-SA


Hen & Bacon Airport
Gordonsville Municipal Airport
Charlottesville-Albemarle Airport
Option E:
US 15/ US 33 Bypass
Charlottesville
N
-DRAFT-
© OpenStreetMap (and) contributors, CC-BY-SA


Option A1:
250 express lanes
Option A1:
High Street Intersection Loop
Option F:
Reverse/HOV lanes on bridge
Option G:
Pantops Shopping Center bridge
Option I:
US 250/20 right turn lane
© OpenStreetMap (and) contributors, CC-BY-SA

Eco-Logical Pilot – Free Bridge Area Congestion Relief Project
DRAFT Stakeholder Team Meeting #4 Summary
Wednesday, May 21st, 2014, 4 – 7 p.m.
TJPDC's Water Street Center, 407 East Water Street, Charlottesville, Virginia

Facilitated by:
The Thomas Jefferson Planning District Commission and
The Institute for Environmental Negotiation, University of Virginia

Executive Summary

The fourth community and resource member Stakeholder Team meeting of the Eco-Logical Pilot – Free Bridge Area Congestion Relief Project took place on Wednesday, May 21st, 2014 at Thomas Jefferson Planning District Commission's (TJPDC) Water Street Center. At this meeting, stakeholders discussed refinements to the alternatives developed at the last meeting to relieve congestion in the US 250 Free Bridge study area. These alternatives will receive further study including an estimation of costs by Rinker Design Associates (RDA), the consultant to the project. Stakeholders also had an opportunity to remove alternatives from further analysis.

The next meeting will be held on July 16th from 4 – 7 p.m. at TJPDC's Water Street Center. An agenda and materials will be provided prior to the meeting.

Goals of the Stakeholder Team:
- Develop a viable project option for improving congestion issues at US 250 Free Bridge.
- Enhance and improve the existing Regional Ecological Framework (REF) Tool.

Goals of Eco-Logical Program Grant:
- Test the Eco-Logical approach for infrastructure planning and development on a local scale.
- Increase awareness of Eco-Logical approach among federal, state, and local transportation and resources agencies.

Introductions and Orientation

Frank Dukes and Kelly Wilder of the Institute for Environmental Negotiation (IEN) at the University of Virginia facilitated the meeting, with support from Wood Hudson and Sarah Rhodes of the TJPDC. John Giometti and Matthew Beales from transportation engineering firm RDA, and Asma Ali from T3 Design, were also in attendance.

Wood opened the meeting and welcomed Frank, who led the group in introductions, reviewed its protocols for working together (documented in past meeting summaries), and clarified IEN's role as facilitator. Kelly then discussed the day's agenda:

- Introductions and orientation
- Engineering firm feasibility analysis presentation
- Question and answer session
    - This time is only for clarifying questions about methodology and the alternatives as presented by RDA, not for comments or suggestions.
- Facilitated group discussion of alternatives
    - Stakeholders will be led through a collaborative discussion of alternatives and have the opportunity to suggest modifications to the existing alternatives.
    - Stakeholders will also select among alternatives any that they would like to see removed from further analysis.
- Overview of next steps
- Public comments and meeting evaluation

Wood then reviewed the goals of the process, and Frank oriented the group to where they are in the context of the entire process. Participants will have an opportunity to modify the previously identified alternatives and even drop those that do not look feasible, prior to RDA conducting an assessment of the costs of the remaining alternatives. During the July meeting we will hear from the consultants and discuss their findings; some time after that a public meeting will allow for further comment and questions. The Stakeholder Team's final meeting to consider recommendations will be in September, with a report due in October.

Wood prefaced the day's work by repeating information that had been shared before the meeting via email, concerning revisions made to a few of the alternatives to increase project feasibility or address topography, existing barriers, and roadway design standards:

- **Alternative C: Driver Signage and Education.** Staff determined that this alternative could be better addressed by working with VDOT to determine what actions would need to occur in order to make this alteration.
- **Alternative E: US15/US33 Ruckersville to Zion Crossroads Bypass Route.** This analysis would be tremendously costly due to its scale, could not be addressed with the REF tool, would address a project outside the MPO boundaries, and involves stakeholders not at the table. Therefore, the MPO could not recommend that this project move forward, but staff are open to ideas for how this project can be addressed outside this process.

- **Alternative B: Transit, Park and Ride, and Bike/Pedestrian.** An optional transit-only road running parallel to trail and railroad and crossing the Rivanna in the vicinity of Riverview Park was added, and an alternative park and ride location on VDOT land at Richmond Road and VDOT Way was identified.
- **Alternative D: Rivanna River Parkway.** Option H: Extension of Olympia Drive has been included as part of this alternative, alignment has been shifted to minimize floodplain impacts and reduce potential impacts to properties, and widening of Rio Road from two lanes to four lanes from Pen Park Lane to the intersection of John Warner Parkway and Rio Road has been considered.
- **Alternative I: Intersection Improvements at US 250/Route 20.** Lanes and turning movements have been reconfigured to include additional lanes to separate the left turn and straight movements for High street crossing US 250 and 20 crossing US 250.

Engineering Firm Feasibility Analysis Presentation

RDA was contracted by TJPDC to analyze the feasibility of the alternatives that stakeholders envisioned at the March meeting. (At the July meeting, RDA will present cost estimates based on modifications that were offered.) John from RDA progressed through each of the six alternatives, providing insight into its feasibility in terms of constructability congestion relief, initial estimated cost, property impacts, utility impacts, maintenance of traffic impacts, and other project impacts that RDA accounted for in its project impacts matrix (these matrices can be found on the Eco-Logical website).

The table below summarizes RDA's findings on constructability, congestion relief, and cost:

	Construction Feasibility	Congestion Relief	Cost
Alternative A	LOW	HIGH	HIGH
Alternative B	MOD	LOW	MOD
Alternative D	MOD	LOW/MOD	HIGH
Alternative F	MOD	LOW	LOW
Alternative G	HIGH	LOW	MOD
Alternative I	HIGH	LOW	LOW

During and following the presentation, the following questions and comments about each alternative were offered:

Alternative A: Free Bridge Overpass/Expressway

- Q: With the low clearance of Free Bridge, how does this alternative work during floods?
    - A: This is problematic due to the low clearance. Periodic flooding would be an issue.

Alternative B: Transit, Park and Ride, and Bike/Pedestrian

- Q: Could enough fill could be found if the option of filling in the quarry and making it into a park and ride lot was pursued?
    - A: With the quarry being 175 feet deep, finding enough fill would indeed be a major impediment.
- Q: How would this option interact with the Jefferson Memorial Foundation property and Riverside Park?
    - A: There would be impacts to the Foundation property that would be challenging to overcome. This option would tie into Riverside Park and its trail system, and users could then tap into the city bus system to continue their commutes.
- Q: Would cars be allowed on a bridge over the Rivanna?
    - A: No, only pedestrians, bikes, and buses.
- Q: Based on Charlottesville's size, is it true that we just don't have the population density to make transit effective?
    - A: Yes, this is likely.
- Q: Does the "moderate cost" assigned to this option incorporate the construction of the additional roadways up to Martha Jefferson and down into the quarry?
    - A: Yes, it does.
- Q: How are "low," "moderate," and "high" cost defined in the analysis?
    - A: They are rough estimates defined simply in reference to one another.

Refinements suggested:

- A participant asked whether, if route timing were calibrated, a one-lane bridge would be sufficient.
- The option of running buses parallel to the rail line was suggested.

Alternative D: Rivanna River Parkway

- Q: Does this option account for the 100-year floodway?
    - A: Yes.
- Q: Are wetlands and other environment impacts considered in relation to this alternative?
    - They would be with the REF Tool analysis.

- Q: What is the donut shaped object on the map?
    - A: The old sewage treatment plant.
- Q: What would happen to Free Bridge Lane?
    - A: It would cul-de-sac sooner or would require another bridge.

Refinements suggested:

- Could this option tie into the existing road in Darden Towe Park?

Alternative F: HOV/Reversing Lane on US 250 Free Bridge

- Q: Please clarify how this works.
    - A: The only way to make this concept work was to reverse and use HOV on the left turn lanes only.
- Q: Could you do reverse flow only, without HOV?
    - A: Yes, but this was not part of the alternative proposed at the last meeting that we were charged with analyzing.

Alternative G: South Pantops Drive Connector Bridge

- Q: Does this option have to continue into Grace Street, or could it be shifted to alleviate concerns about through traffic?
    - A: Yes, it could be shifted, but then you have concerns about locating it too close to the light at High Street and 250.

Alternative I: Intersection improvements at US 250/Route 20

- Q: Has VDOT analyzed similar intersection improvements in the past?
    - A: Project staff will try and check with the VDOT Charlottesville Residency for more information on past intersection analyses at 20 and High Street.
- Q: Are there studies on split-phase and what it does to accident rates?
    - A: Removing split-phase reduces congestion and improves safety.
- Q: Could this option be used in conjunction with the other options?
    - A: Yes. The final recommendations may well include some combination of these alternatives.
- Q: What is the status of the new development slated for the northeast corner of US 250 and Route 20
    - A: The preliminary site plan has been approved since one of the parcels was rezoned from residential to commercial use. Proffers include constructing a private road through the site and adding a second north bound lane to Route 20 along the frontage of the property.

Following their presentation, PDC explained that the alternatives will be further refined based on stakeholder input, and preliminary cost estimates will be developed. The following questions were asked during the Q&A session following RDA's presentation.

Question and Answer Session

- Q: What do you consider to be park impacts?
    - A: Fumes, noise impacts, visual impacts, etc. – these are the types of environmental impacts TJPDC is going to look into.
- Q: Have you considered raising Free Bridge to allow for more than a nine-foot clearance?
    - A: That is technically an option.
- Q: Following up from the last meeting, we need to know the results of traffic studies about where traffic originates and ends up.
    - A: We simply do not have sufficient data to address this question exactly.
    - We have some of this information from the modeling studies: 22 percent of trips crossing Free Bridge travel to or from the US 29 north corridor, 22 percent of trips crossing Free Bridge travel to or from the city, 24 percent of trips crossing Free Bridge travel to or from the Pantops area, and 32 percent of trips crossing Free Bridge travel to or from other areas of the county. This information can be found on page 8 of this study: http://www.tjpdc.org/pdf/ecologic/1%29%20FINAL%20TDM%20Analysis.pdf.
- Q: Can this group inspire traffic studies?
    - A: Yes, this could be a recommendation coming from the Stakeholder Team. Detailed traffic studies would also be required as part of any projects further development.

Facilitated Group Discussion of Alternatives

After RDA's presentation, the meeting progressed into a group discussion around refinements to the alternatives. Kelly clarified for participants the difference between refinements and wholesale changes to an option. She proposed starting with alternative A and moving around the room, and asked people to begin sharing their ideas. Refinements to each alternative are summarized below:

Alternative A: Free Bridge Overpass and Intersection Improvements

Comments:

- Make this alternative into two distinct projects
    1. Overpass
    2. Intersection improvements (jug handle concept)
- Exit ramp left at River Road
- Left exit from 250 onto High Street by passing through High Street/250 intersection and then making a right to circle back to River Road
- Eliminate jug-handles
- Explore the options of a quadrant intersection
- Run the overpass express lanes one way during rush hour

Modifications/Revisions:

- Remove the jug handle as depicted that would route vehicle traffic under Free Bridge
- Make into two separate projects
    1. (A1) Overpass Lanes
    2. (A2) Intersection improvements (jug handle-like concept)

Staff Notes:
Advance this project as two separate concepts: (A1) overpass and (A2) intersection improvements at 250 and High Street. Note: Staff are following up with stakeholders on two possible jug handle options. You can provide feedback on the jug handle options here: http://tinyurl.com/lozux9c.

Alternative B: Transit, Park and Ride and Bik/Pedestrian

Comments:

- Remove park and ride lot from quarry, remove bus but keep bike and pedestrian options
- Shorten hiker-biker trail and reduce transit only roadway to one lane
- Is there any existing trail use information (patronage)?
- How would you size a park and ride lot?
- Explore extending the trail concept to Glenmore
- Reduce focus to just a pedestrian bridge crossing the Rivanna River

Modifications/Revisions:

- Remove bus and rail component of project
- Remove park and ride lot at the Luck Stone quarry from concept

Staff Notes:
Advance this project without the transit components. The alternative now will include a bike/ped trail parallel to the railroad tracks that would cross the Rivanna River in the vicinity of Riverview Park. The hard surface trail will skirt the western edge of the Luck Stone Quarry and end at 250 Richmond Road. Explore providing a park and ride lot on the VDOT property. Provide a pedestrian traffic signal to facilitate crossing 250.

Alternative D: Transit, Park and Ride and Bike/Pedestrian

Comments:

- Explore using the existing Elk Drive alignment from Route 20 into the park
- Drop this alternative
- There is value in exploring this further. Cost and traffic impacts might provide useful information

Modifications/Revisions:

- Add Elk Drive route
- Calculate cost for existing alignment and Elk Drive alignment separately

Staff Notes:
Advance this alternative with the addition of an Elk Drive alignment option. See if it's possible to get cost estimates for current and Elk Drive alignments separately

Alternative F: HOV Reversing Lane on US 250 Free Bridge

Comments:

- Calibration with 250/High Street
- Turning movement and lane direction based on time of day
- Need east bound to be two lanes
- Four lanes inbound during AM rush
- Four lanes outbound during PM rush
- Option proves difficult to configure with intersection movements at 250 and 20
- Move sidewalks to a footbridge to gain lane space on bridge
- There is value in exploring this further, cost and traffic impacts might provide useful information

Modifications/Revisions:

- Drop HOV restrictions from concept

Staff Notes:
Continue to refine this vision with HOV restrictions omitted. Use lane as a reversing lane to "gain extra capacity during rush hour times." Note: Staff are following up with stakeholders on revisions to this alternative. You can provide feedback on these potential alternatives revisions here: http://tinyurl.com/lozux9c.

Alternative G: South Pantops Connector Bridge

Comments:

- Adjust intersection with High Street to align with Willow Drive
- Extend project to include improvements to South Pantops Drive from bridge to Riverbend Drive
- Is there data on left turn traffic?

Modifications/Revisions:

- Adjust intersection with High Street to align with Willow Drive
- Focus on improving South Pantops Drive through the Pantops Shopping Center

Staff Notes:
Revise alternative to have bridge intersect High Street at Willow Drive. Extend project improvements from New House drive to Riverbend Drive through the Pantops Shopping Center.

Alternative I: Route 20 and High Street Intersection Improvements

Comments:
- We like this alternative
- Explore ways that these improvements could work with others

Modifications/Revisions:
- No modifications

Staff Notes:
Look at ways of combining these improvements with others to enhance traffic congestion relief over the short and longer term.

Although the group had originally hoped to discuss which, if any, options to drop, Sarah weighed in that dropping ideas was less important than deciding on refinements to propose. Therefore, with limited time remaining in the meeting, participants concluded their input and transitioned into wrapping up the meeting.

Meeting Wrap Up and Evaluation

The next meeting will be held on July 16th, again at the Water Street Center from 4 – 7 p.m. RDA will be in attendance to share updates on modifications to the alternatives as well as preliminary cost estimates.

The meeting concluded with a "Plus/Delta" activity facilitated by IEN to share positive qualities (+) and things that could be changed for future meetings (Δ). These included the following:

+
- The meeting location was great.
- Interaction among participants and presenters was good.
- The presentation and material on alternatives were good.

Δ
- More people need to be attending the meetings.

Meeting Participants

Kirk Bowers, Sierra Club
Ken Boyd, Albemarle Couty BOS
Morgan Butler, Southern Environmental Law Center
Missy Creasy, City of Charlottesville
Dennis Duttere, Albemarle County -Citizen Representative
Elaine Echols, County Staff
Bill Emory, City of Charlottesville – Citizen Representative
Chris Gensic, City Parks and Rec
David Hannah, Streamwatch
John Jones, Charlottesville Area Transit
Mac Lafferty, Planning Commission CTAC
John Pfaltz, City of Charlottesville – Citizen Representative
Chuck Proctor, VDOT, Culpeper District
Donna Shaunesey, JAUNT
Jeff Werner, Piedmont Environmental Council
Clara Belle Wheeler, Albemarle County – Citizen Representative

Free Bridge Area Congestion Relief Study:

Construction Feasibility Assessment

May 21, 2014

Charlottesville Albemarle Metropolitan Planning Organization (CAMPO) and The Thomas Jefferson Planning District Commission

Alternative A

Feasibility Assessment

Process

1. **Review previous studies and stakeholder alternatives**
2. **Obtain and review GIS data**
3. **Develop preliminary concept drawings using aerial photography base mapping**
4. **Conduct site visits**
5. **Utility conflict analysis**
6. **Refine concept drawings based on site visits and input from TJPDC staff.**
7. **Develop an evaluation matrix for each alternative that summarizes key elements that can impact construction feasibility.**

2

Alternative A - Example of an elevated structure

Alternative A

Free Bridge Overpass and Intersection improvements at US 250 and High Street

This alternative includes construction of an elevated structure that would route two lanes of 250 east and west bound traffic over the intersections of US 250/20 and US 250 and High Street. The existing intersections and bridge will remain below the flyover structure.

Alternative A - Example of an elevated structure

Alternative A – Free Bridge clearance

Alternative B

Alternative A Evaluation Matrix

Free Bridge Overpass and Intersection improvements at US 250 and High Street

	LOW	MODERATE	HIGH
Property Impacts			X
Access Impacts			X
Utility Impacts			X
Park Impacts	X		
Trail Impacts		X	
Railroad Impacts	X		
Maintenance of Traffic Impacts			X
Bridges			X
Floodway Influence		X	
Drainage Structures i.e. Box Culvert, Stormwater Management Facilities	X		
Earthwork/Terrain	X		
Retaining Walls			X
Construction Feasibility	X		
Expected Congestion Relief @ Free Bridge			X
Expected Cost			X

Alternative B

Alternative B

Transit, Park and Ride, and Bike/Pedestrian

This alternative includes a new park and ride lot in the vicinity of the US 250/22 (Shadwell) intersection and limited stop transit service (fixed Rail or bus) from the lot to Martha Jefferson Hospital, Downtown Charlottesville and UVA Grounds. This alternative will also include paving the existing bike/pedestrian trail on the Albemarle County side of the Rivanna River (Old Mills Trail), construction of a bridge crossing in the vicinity of Riverside Avenue (Riverview Park), bike/pedestrian trail access from the park and ride lot to the Old Mills Trail system, and improvements to the Old Mills Trail.

Another option for Alternative B would add a roadway restricted to bus transit that would connect the Commuter Lot, Martha Jefferson Hospital, and Riverview Park. The Charlottesville Area Transit (CAT) could extend or modify either the Route 1 (currently serves the Riverview Park area) or the Route 10 (currently serves Pantops) to provide service to the Commuter Lot. Another option for the Commuter Lot would be to use the VDOT property across Route 250 from the Luck Stone Quarry.

Alternative B

Alternative B Evaluation Matrix

Transit, Park and Ride, and Bike/Pedestrian

	LOW	MODERATE	HIGH
Property Impacts			X
Access Impacts	X		
Utility Impacts	X		
Park Impacts		X	
Trail Impacts	X		
Railroad Impacts			X
Maintenance of Traffic Impacts	X		
Bridges		X	
Floodway Influence		X	
Drainage Structures i.e. Box Culvert, Stormwater Management Facilities		X	
Earthwork			X
Retaining Walls	X		
Construction Feasibility		X	
Expected Congestion Relief @ Free Bridge	X		
Expected Cost		X	

Alternative D

Alternative D

Rivanna River Parkway

This alternative includes construction of a new road linking Route 20 with Rio Road. This new road would have two vehicle travel lanes with two bike shoulder lanes (similar to the John Warner Parkway). This alternative also includes improvements to Pen Park Lane, and widening Rio Road to four lanes from Pen Park Lane to the John Warner Parkway intersection and the Olympia Drive extension.

Alternative D

Alternative D

Alternative D – Darden Towe Park Looking South

Alternative D – Darden Towe Park Looking Northwest

Alternative F

Alternative D Evaluation Matrix

Rivanna River Parkway

	LOW	MODERATE	HIGH
Property Impacts			X
Access Impacts	X		
Utility Impacts			X
Park Impacts			X
Trail Impacts	X		
Railroad Impacts	X		
Maintenance of Traffic Impacts		X	
Bridges			X
Floodway Influence			X
Drainage Structures i.e. Box Culvert, Stormwater Management Facilities			X
Earthwork/Terrain			X
Retaining Walls			X
Construction Feasibility		X	
Expected Congestion Relief @ Free Bridge	X	X	
Expected Cost			X

Alternative F - Looking West

Alternative F

HOV/Reversing lane on US 250 Free Bridge

This alternative includes an additional east/west vehicle travel lane on the US250 Free Bridge crossing the Rivanna River. This lane could extend from the Route 20 intersection through the High Street intersection. Evaluation of this alternative should look at ways of adding the lane without reconstruction of the bridge, e.g. removing a sidewalk and reducing lane widths.

Alternative F Evaluation Matrix

HOV/Reversing lane on US 250 Free Bridge

	LOW	MODERATE	HIGH
Property Impacts	X		
Access Impacts	X		
Utility Impacts	X		
Park Impacts	X		
Trail Impacts	X		
Railroad Impacts	X		
Maintenance of Traffic Impacts			X
Bridges	X		
Floodway Influence	X		
Drainage Structures i.e. Box Culvert, Stormwater Management Facilities	X		
Earthwork/Terrain	X		
Retaining Walls	X		
Construction Feasibility		X	
Expected Congestion Relief @ Free Bridge	X		
Expected Cost	X		

Alternative G

South Pantops Drive Connector Bridge

This alternative includes a new bridge connection between New House Drive/South Pantops Drive and East High Street. The bridge would be a two lane urban style bridge with appropriate bike and pedestrian facility accommodations. Additional considerations include a new intersection at High Street and New House Drive/South Pantops Drive.

Alternative G Evaluation Matrix

South Pantops Drive Connector Bridge

	LOW	MODERATE	HIGH
Property Impacts			X
Access Impacts		X	
Utility Impacts	X		
Park Impacts	X		
Trail Impacts	X		
Railroad Impacts	X		
Maintenance of Traffic Impacts	X		
Bridges		X	
Floodway Influence		X	
Drainage Structures i.e. Box Culvert, Stormwater Management Facilities	X		
Earthwork/Terrain	X		
Retaining Walls		X	
Construction Feasibility			X
Expected Congestion Relief @ Free Bridge	X		
Expected Cost		X	

Alternative G

Alternative I

Intersection improvements at US 250/Route 20

This alternative consists of intersection improvements improve left turns from US 250 onto RT 20 and right turns from US 250 Westbound onto Route 20. This alternative assumes that the 250 Express Lanes in Alternative 1 would be in place.

Additional improvements to be considered would eliminate the Split Phase Signalization. These additional improvements would include intersection improvements at both US 250/20 and US 250/High Street to increase throughput and allow for smoother turning movements.

Alternative G – Looking Southwest at S. Pantops Drive

Alternative I

Alternative I Evaluation Matrix

Intersection improvements at US 250/Route 20

	LOW	MODERATE	HIGH
Property Impacts		X	
Access Impacts	X		
Utility Impacts		X	
Park Impacts	X		
Trail Impacts	X		
Railroad Impacts	X		
Maintenance of Traffic Impacts	X		
Bridges	X		
Floodway Influence	X		
Drainage Structures i.e. Box Culvert, Stormwater Management Facilities	X		
Earthwork/Terrain	X		
Retaining Walls		X	
Construction Feasibility			X
Expected Congestion Relief @ Free Bridge	X		
Expected Cost	X		

Expected Cost Summary

	LOW	MODERATE	HIGH
Alternative A			X
Alternative B		X	
Alternative D			X
Alternative F	X		
Alternative G		X	
Alternative I	X		

Construction Feasibility Summary

	LOW	MODERATE	HIGH
Alternative A	X		
Alternative B		X	
Alternative D		X	
Alternative F		X	
Alternative G			X
Alternative I			X

Summary

	Construction Feasibility	Congestion Relief	Cost
Alternative A	LOW	HIGH	HIGH
Alternative B	MOD	LOW	MOD
Alternative D	MOD	LOW/MOD	HIGH
Alternative F	MOD	LOW	LOW
Alternative G	HIGH	LOW	MOD
Alternative I	HIGH	LOW	LOW

Expected Congestion Relief Summary

	LOW	MODERATE	HIGH
Alternative A			X
Alternative B	X		
Alternative D	X	X	
Alternative F	X		
Alternative G	X		
Alternative I	X		

Next Steps

1. **Further refinement of alternatives based on Stakeholder feedback**
2. **Develop Preliminary Cost Estimates to include Preliminary Engineering, Right of Way, and Construction**
3. **Presentation of Cost Estimates to Stakeholders on July 16**
4. **Final Report to be completed October 31, 2014**

36

Eco-Logical Pilot – Free Bridge Area Congestion Relief Project DRAFT Stakeholder Team Meeting #5 Summary

Wednesday, July 14th, 2014, 4 – 7 p.m.
TJPDC's Water Street Center, 407 East Water Street, Charlottesville, Virginia

Facilitated by:
The Thomas Jefferson Planning District Commission and
The Institute for Environmental Negotiation, University of Virginia

---

Executive Summary:
The fifth community and resource member Stakeholder Team Meeting of the Eco-Logical Pilot/Free Bridge Are Congestion Relief Project took place on Wednesday, July 16, 2013 at the Thomas Jefferson Planning District Commission (TJPDC) Water Street Center. In this meeting Rinker Design Associates presented the updated alternatives and gave a summary of their cost estimation process. Team members discussed the revised project feasibility assessments and detailed cost estimations.

The next meeting will be held on September 17 at 4 p.m. In this second to last Stakeholder Team meeting, comparisons of analyses of travel demand model results and anticipated environmental impacts will be discussed.

Goals of Stakeholder Team:

- Develop a viable project option for improving congestion issues at US 250 Free Bridge.
- Enhance and improve the existing Regional Ecological Framework (REF) Tool.

Goals of Eco-Logical Program Grant:

- Test the Eco-Logical approach for infrastructure planning and development on a local scale.
- Increase awareness of Eco-Logical approach among federal, state, and local transportation and resources agencies.

Introduction and Orientation

Frank Dukes and Tanya Denckla Cobb of the Institute for Environmental Negotiation (IEN) at the University of Virginia facilitated the meeting, with support from Wood Hudson and, later, Sarah Rhodes of the TJPDC. John Giometti and Matthew Beales from transportation engineering firm RDA were also in attendance, to present the updated Alternatives and the cost estimates of each proposed alternative.

Wood Hudson of TJPDC opened the meeting and briefly refreshed the attendees on its scope and purpose. Frank briefly restated the protocols for working together (documented in original meeting summaries), noting that the Stakeholder Team has listened to one another well, and clarified IEN's role as facilitator. The meeting's agenda was distributed and proceeded as follows:

- **Introductions and orientation (10 minutes)**
- **Review of alternatives and modifications (20 minutes)**
  - RDA will provide an overview of alternatives
  - Overview of changes and modification made based on last meeting suggestions
- **Question Period (15 minutes)**
  - Stakeholder will have the opportunity to ask questions about existing alternatives
- **Presentation of cost estimates (30 minutes)**
- **Question Period (15 minutes)**
  - Stakeholders will have a chance to ask questions about the costs and methodology
- **Facilitated group discussion of alternatives (60 minutes)**
  - Stakeholders will be led through a collaborative discussion of alternatives and have the opportunity to suggest modifications to the existing alternatives.
  - Stakeholders will also select among alternatives any that they would like to see removed from further analysis
- **Overview of next steps (10 minutes)**

Frank reminded the group that their comments and questions would be welcome during the two periods for questions following RDA's presentations and during the 60 minute facilitated discussion, when a straw poll would be taken to indicate the level of support for various options at this time.

Review of Alternatives and Modifications

John Giometti began his presentation by reminding Team members that their input had been collected since the last meeting and, along with the concept drawings and Feasibility Analysis, informed the refined alternatives that would be presented that evening.

Alternative A-1: Free Bridge Overpass/ Expressway

After the May meeting, Alternative A was split into A-1 and A-2. The A-1 Alternative involves construction of a freeway overpass that would route two lanes of US 250 east- and west-bound traffic over the intersections of US 250/20 and US 250/High Street, with the current structure remaining in use. The benefits to this option include that there are no trail impacts and previous issues with interference with flood walls along the Rivanna have been rectified.

Alternative A-2: Jug Handle/ Left turn elimination at US250 W and High Street Intersection

This refined version of the original Alternative A does away with the overpass, eliminates the left turn lane from 250 onto High Steet, and no longer proceeds under the bridge. Instead, traffic that wishes to enter High Street headed on 250 West will proceed through the light just after the bridge and be routed into a right turn onto Ledonia and continuing right onto River Road- thus a jug handle.

The downsides of these modifications are that this Alternative involves moderate property impacts, moderate access impact and moderate utility impacts, as it would require retrofitting streets to become one way and adding a traffic signal.

Q: Are you doing away with the light at the 250 intersections?

- **A:** No, the light would stay

Q: What does that buy you?

- **A:** Right now, that left turn phase is very long and the benefit is that it's reallocated to the jug handle
- It is a small improvement in operational efficiency

Q: Won't transitioning back from 3 to 2 (lanes?) be problematic? Shouldn't this be extended all the way to St. James?

- A: Yes, it will be extended that far.

Alternative B: Park and Ride, and Bike/Pedestrian Connections

This alternative involves a Park and Ride parking lot (capacity from 50-100 vehicles), which would be located at the VDOT property on the north side of Richmond Road (250) and a hard surface or stone-dust trail. This is a modification from the original Alternative B, when the parking lot was located at the Quarry. Little has been modified except that this Alternative now requires minimal takings for land acquisitions.

Q: How would pedestrians cross 250?

- We would suggest the use of a HAWK signal (High-Intensity Activated Crosswalk Beacon)-It is a high visibility pedestrian crossing system

Alternative D-1: Rivanna River Parkway

Alternative D has been refined and divided into two parts. D-1 remains largely unchanged from the original design, which involves a new road with two vehicle traffic lanes and two bike lanes, modeled after the John Warner Parkway in Charlottesville. This alternative

would connect Route 20 to Rio Road and widen Rio Road to 4 lanes from Pen Park Lane to the John Warner Parkway.

Alternative D-2: Rivanna River Parkway

The D-2 version follows the same route as D-1 but includes improvements to Elk River Drive, through Darden Towe Park. This alternative would have a greater impact on park property than D1 option (1.65 acres for D1 vs. 2.6 acres for D2).

Q: Is that because of bridge alignment?

- A: No, the extension would move through Darden Towe Park

Alternative F: Increased Lane Capacity on Free Bridge

This is the alternative that has changed most since last meeting. Alternative F increases the capacity of vehicles traveling between Route 20 and High Street, by adding two additional lanes to the existing bridge. The initial concept included a reversible HOV lane, but this feature was eliminated given concerns over safety. This alternative requires removing of existing sidewalk and bike lane infrastructure and relocating them to a separate bike and foot bridge adjacent to the bridge. This alternative involves high property impact, increased utility impact and increased construction costs, but it is expected to provide high congestion relief at Free Bridge.

Alternative G: South Pantops Drive Connector Bridge

Alternative G has been slightly refined in response to comments from May's meeting. The urban style bridge from the original concept will now connect to the west side of the Rivanna on Willow Drive, as opposed to Grace Street. Other features have been slightly modified as well, including the addition of two new intersections (one at High Street aligned with Willow Drive and a second at New House Drive/South Pantops Drive) and improvements to the proposed design for South Pantops Drive, which now runs through the shopping center. This alternative has high property impacts and would require more maintenance of traffic impact, but has low impact otherwise and high construction feasibility.

Alternative I: Intersection Improvements at US 250/Route 20

This final alternative involves few alterations from the original concept. The primary feature of this alternative is the addition of side-street lanes to the Route 20 and High street intersections, which will work in conjunction with split phase light timing to improve intersection efficiency.

Summary of Costs and Benefits for each Alternative:

	Construction Feasibility	Congestion Relief	Cost
Alternative A-1	LOW	HIGH	HIGH
Alternative A-2	HIGH	LOW	LOW
Alternative B	MOD	LOW	LOW
Alternative D	MOD	LOW/MOD	HIGH
Alternative F	MOD	MOD/HIGH	MOD
Alternative G	HIGH	LOW	MOD
Alternative I	HIGH	LOW	LOW

Question and Answer Period

- **Q:** Have you done traffic modeling to test any of these options.
  - **A:** No, none yet- that will occur in September, before the next meeting.

- **Q:** Alternative to river-side trail (Alternative B) —is there an engineering reason that it exists in its current state? Could we locate the trail closer to the river so there is a view?
  - **A:** Getting across the rail road would require more construction, but there are no major obstacles to that option
  - Albemarle County has a plan for that now—we need to go 100 meters past (and under) the railroad trestle
    - Parks and rec are currently looking at a trail head near Milton and the Clifton Inn

- **Q:** Alternative B-- Transit relief is not a strong feature of this alternative, but what about the 'zoo trolley' option? We have talked to VDOT about bringing these in, perhaps on an hourly basis.
  - **A:** Crozet has been considering something similar
  - This can be considered as part of this option.

- **Q:** How many people does this trolley carry?
  - **A:** About 15 people with a driver
  - Reference Key West, Florida System in use currently

- **Q:** On the widening of 250 (Alternative F) -- does that include removing median strips?
  - **A:** Yes, we would remove the median to widen High Street

- **Q:** In reference to creating 'a congestion relief area', do we have any definition of what 'congestion' is? Is it backed up traffic? People waiting through two light signals? Wouldn't that make the cost/benefit analysis easier?
    - **A:** We will look into that with the traffic evaluation in September
        - We will use a metric defined by FHA , which is a set of standards that correspond to a letter grade
        - We can model how an overpass, or other changes might impact traffic but we have to take into consideration the constraints of the grant and time

- **Q:** Alternative B – It sounds like the point is to take people off of Free Bridge—do we know that there is any guarantee of this happening with this alternative?
    - **A:** No, we can't predict how many people will use the park and ride
    - **Comment**: I question whether cost of this project is going to have a great enough impact to justify going ahead with this alternative

- **Comment:** I question whether the Letter rating system will be sufficient to represent impact on traffic and fluctuations in volume of traffic depending on time of day – we might need a more specific, localized grading system

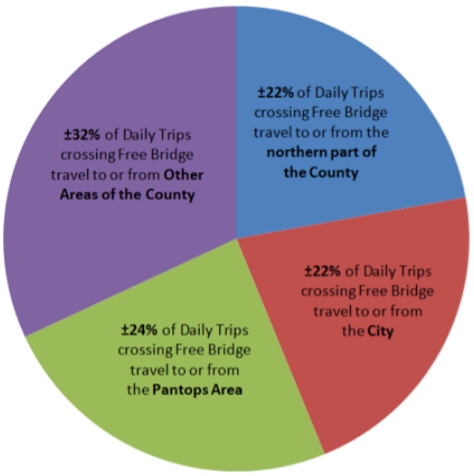
    - **A:** I'll have to get back to you with more details on what is available in terms of a more specified metric. The FHWA metric referred to as the Volume to Capacity ratio looks at the total number of vehicles using a section of roadway divided by the roadway design capacity (roadway design and speed limit). The result is expressed as a ratio and a letter grade

- **Q-** Is it time sensitive though? How do we know that the over all measure is sufficiently reporting on specific times of day and isn't skewed by data collected at times of day when there are only a few vehicles in an hour?
    - **A:** That was just an example – the metric compares volume on road to the capacity number
    - **Comment:** I'd rather see a comparison of volume, given time of day

- **A:** If you have congestion from 7 am to 9 am and 4 pm - 6 or 7 pm at night, how long does it take to get through the bypass? I think you need hourly counts for your traffic study. Are you going to have a multi million-dollar project just to address a problem that only exists at a certain time of day?
    - **A:** We are looking at the necessary capacity we think we'll need in the future, not just today
        - Models that take into account commercial and residential developments in the area show that it's going to get worse over time

- **Q:** So what are your predictions?
    - **A:** Conclusive data from past studies show that volume will increase

- **Q:** Do we have a way of knowing where the traffic originates?
    - **A:** Research already done shows that most of the congestion is local traffic traveling to and from Pantops, the City, and 29 North



2040 Travel Demand Model Origin and Destnation ofAreas of Trips crossing Free Bridge

Frank noted that the gist of these questions is, to what extent is the problem of congestion going to improve at the times when we need improvement most?

- **Q:** I would be curious to know if the model reflects (my prediction that) the density we're seeing is related to secondary highways?
    - **A:** Part of the development of the model and its purpose is to define socio-economic data, that is business sensitive
        - The researchers looked at a forecast model, to understand the building density we'll face in the future – that's where the volume comes from

- **Q:** Does housing generally create more traffic than commercial development?
    - **A:** Commercial development is the generator of traffic, housing is the source

- **Q:** These alternatives involving Darden Towe and Pen Parks (Alternatives D1 and D2): has the impact of that been weighted?
    - **A:** That's coming up, with the environmental impact study
        - Technical development: development on the new site just off of Rt. 20 will increase the amount of park land – Wood is following up on this currently

Presentation of Cost Estimates

Estimated as a percentage of the Construction Cost using a sliding scale from 20% for a $5 million project to 10% for a $400 million project:

Preliminary Engineering	$13,791,000
Right of Way	$7,000,344
Construction	$120,453,482
Total	$141,244,826

Alternative A-1: Free Bridge Overpass/ Expressway

Preliminary Engineering	$823,855
Right of Way	$4,508,527
Construction	$3,744,793
Total	$9,077,175

Alternative A-2: Jug Handle/Left turn elimination at US250 W and High Street

Preliminary Engineering	$1,337,635
Right of Way	$487,226
Construction	$7,565,070
Total	$9,389,931

Alternative B: Park and Ride, Bike/Pedestrian Connections

(Stone Dust Trail)

Preliminary Engineering	$1,461,401
Right of Way	$487,226
Construction	$8,265,033
Total	$10,213,660

Alternative B: Park and Ride, Bike/Pedestrian Connections

(Paved Trail)

Preliminary Engineering	$6,950,000
Right of Way	$9,646,828
Construction	$53,424,076
Total	$70,020,904

Alternative D-1: Rivanna River Parkway

Preliminary Engineering	$6,750,000
Right of Way	$9,386,604
Construction	$51,905,393
Total	$68,041,997

Alternative D-2: Rivanna River Parkway (Elk River Drive)

Preliminary Engineering	$1,063,712
Right of Way	$942,437
Construction	$5,414,294
Total	$7,420,443

Alternative I: Intersection Improvements at US 250/Route 20

Cost Summary

	PE	RW	CN	TOTAL
Alternative A-1	$13,791,000	$7,000,344	$120,453,482	$141,244,826
Alternative D-1	$6,950,000	$9,646,828	$53,424,076	$70,020,904
Alternative D-2	$6,750,000	$9,386,604	$51,905,393	$68,041,997
Alternative G	$2,740,000	$6,098,514	$18,267,565	$27,106,079
Alternative F	$1,850,000	$7,820,216	$10,874,119	$20,544,335
Alternative B - Paved	$1,461,401	$487,226	$8,265,033	$10,213,660
Alternative B- Stone Dust	$1,337,635	$487,226	$7,565,070	$9,389,931
Alternative A-2	$823,855	$4,508,527	$3,744,793	$9,077,175
Alternative I	$1,063,712	$942,437	$5,414,294	$7,420,443

Question and Answer Period (Two)

- **Q:** We need a cost/benefit ratio of existing options and consider secondary road funds
  - **A:** 250 is not a secondary road

- **Q:** Alternatives F and I – they strike me as being complementary to one another. If we were to do both, would there be some reduction in cost?

  - **A:** There wouldn't be any overlapping construction, but combining would have some savings, in synergy. You could add them together and it would still be a little less than some of the other alternatives, yes.

- **Q:** Isn't Option I a necessity no matter what?
  - **Comment:** There was general assent from a number of Team members

- **Q:** Option F- When you look at the cost of F, did you consider a standard ped/bike path in addition, or did you consider another bike and ped bridge as well?
  - **A:** I imagined it (the bridge) standing alone, so no

- **Q:** Back to the congestion issue: combining Alternatives F and I still comes back to wanting to understand which is going to most efficiently relieve congestions, based on cost vs. benefits
  - **A:** Each option is compounded, so if you combine scenarios, you don't necessarily combine relief
    - You can't eliminate one and achieve corridor-wide efficiency
    - Most of these can be mixed- but I and A2 would conflict and cannot go together well

- **Q:** I hear people on Proffit Road saying they can't get out of their homes in the morning because of State Farm traffic, and that in effect this is an Eastern Bypass. Are we taking that into consideration? Alternative I could address this problem**.**
  - Proffit road is outside of the project's immediate study area.
  - **Comment:** You're missing a lot of the traffic, if you're not looking at Route 20 and other highways feeding in
  - **Comment:** Since the signalization improvement of a few years ago, traffic that used to back up all the way to I64 is improved, except on route 20

- **Q:** Alternative A-2: Did you consider a jug handle coming the other way (headed east, to turn onto 20 North)?
  - **A:** No, we weren't asked to do that- it would impact too many businesses and residences.

- **Q:** Have you looked at technology changes that could improve our ability to decrease congestion (different/more specialized traffic signals)?
  - **A:** We're considering including that as part of these measures

Comment from Wood: Going into the next meeting, we're going to take the cost and traffic demand into consideration to calculate cost per improvement unit—that is coming and we hear your concerns about not using a blanket standard.

Facilitated Group Discussion of Alternatives

The Stakeholder Team reviewed each of the options with the possibility of adding minor adjustments. The facilitators took a straw poll for each option to allow members to see where others stood at this time, with "3" meaning fully support, "2" meaning can support but have some questions or reservations, and "1" meaning cannot support this option as currently designed.

Alternative A-1: Free Bridge Overpass/ Expressway

Comments:

- Our goal is congestion relief, and your evaluation metrics say this is the higher costing ones BUT there isn't enough proof that this will have a significant impact on congestion.
- Seconded – This is "a huge run for a teeny slide"—"Thumbs down to this one"

Straw Poll: The majority were "1" at this time.

Alternative A-2: Jug Handle/ Left turn elimination at US250 W and High Street Intersection

Comments:

- Is there a sound wall in this design? Answer: No.
- What would happen if it was one way all the way ALL the way around, River Road included, with two lanes?
    - Concept is to eliminate the left movement
    - Advantage—two lanes of traffic on jug handle, more efficiency
    - C: Wouldn't that overcomplicate getting to E High? Is there a net gain?

Straw Poll: Many were in favor but support was mixed at this time.

Alternative B: Park and Ride, and Bike/Pedestrian Connections

Comments:

- That's not a lot of people who are going to park and ride a bike that far, but the tram might improve the number of people diverted from the road
- I don't think this is is going to improve traffic congestion- I understand that it's attractive, but I don't see it as a traffic improvement
- I like the idea, but 50 parking spaces makes it difficult to justify expense
- Can't see it as "taking 50 cars off the road" but a quality of life standard, and from that perspective dollar for dollar it does as much as many other alternative
- The County is probably going to build this trail anyhow—the parking lot is the only thing that isn't in the works
    - Already have proffers for 90-95% of segment (of land)
- Additionally- we want the trail to be near the water

  - Areas that flood periodically would need to be paved
  - This is along a heritage trail and part of the proffer for the right of way (which is a majority of the trail), in the conditions of use, says stone-dust rather than paving must be used

Straw Poll: This had strong support but no consensus at this time.

Alternative D-1: Rivanna River Parkway
Comments:

- This option is politically dead already, as currently configured
- Have we considered realigning it along Pen Park Road, through a neighborhood?
- Based on John Warner parkway, the speed limit would be 35 mph
- This would require several at-grade crossings considering park and residential areas
  - Want to preserve access to park as much as possible and embrace the natural value of the river
- Concerned with the alignment along the Darden Tower area and river
  - Floodplain limits of the Rivanna are the biggest concerns
- Concern that this option will create more congestion on Route 20
- The impact on Pen Park is a concern - would include new access to the Park
  - We're already having trouble managing the amount of people who come to use Park facilities
  - No additional access on B2, maybe on B1

Straw Poll: The question was first whether to remove this from further analysis. There was no consensus yet, even though the group realizes that it is politically, economically, and socially not viable. But the argument was made that it could possibly be realigned to have less of an impact and that it is the most effective option for congestion relief problem.

- This Alternative will be run through the model, but realignment almost certainly would not be included in the final set of consensus options
- For the sake of the grant and value of research that may result this will be useful to keep as an alternative.

Alternative D-2: Rivanna River Parkway
Comments:

- I would like to see this eliminated totally
- Is the alternative road really going to be used?
  - Improvements to Olympia drive and 250 would be necessary to make this a viable option for people, logistically (and therefore, to have an impact on congestion)

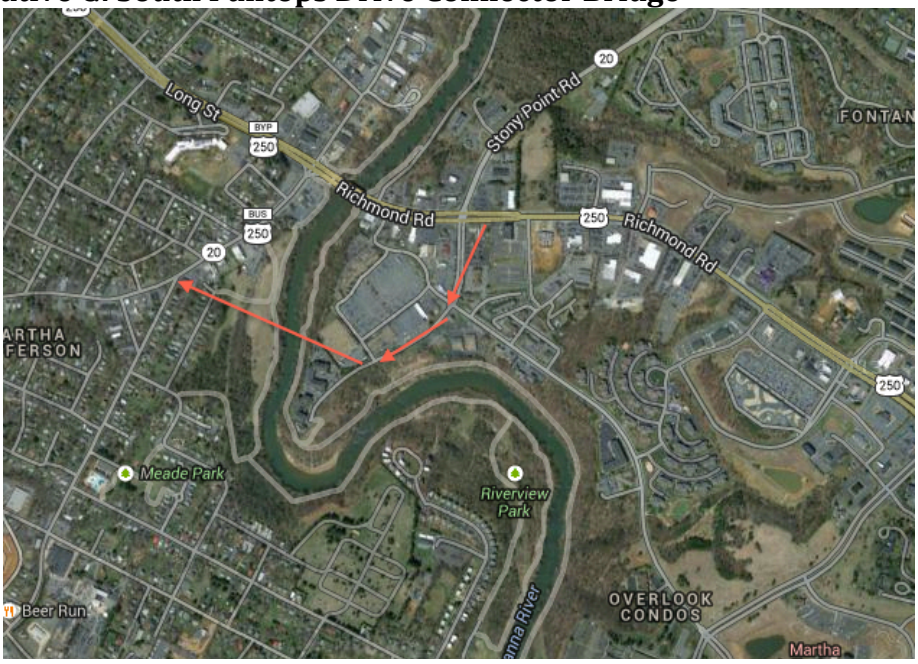
Straw Poll: The group agreed to drop further analysis of D2 as infeasible.

Alternative F: Increased Lane Capacity on Free Bridge
Comments:

- What type of bridge is being considered? Could the pedestrian bridge be attached to the vehicle bridge, would we save money?
    - A: There is insufficient information to make that judgment at this point
    - A: Based on input methodology, it would not change much in price, however

Straw Poll: This option received considerable support at this time.

Alternative G: South Pantops Drive Connector Bridge



The group spent considerable time discussing this option. One member asked if an analysis could be made about routing the road around the back of the shopping center. There would be potentially more impact from an environmental standpoint; this might be too late to include in this study, but could be considered in future.

There was concern about a lot going on in a small commercial space. It may be beneficial in the long run, considering what kind of development we can predict occurring in the area, to have access along this area. It was noted that this concept is part of Pantops Master Plan already and the owners may be amenable to changing the current use in the future.

Straw Poll: There was no consensus for this option at this time.

Alternative I: Intersection Improvements at US 250/Route 20
Comments: Overwhelmingly positive

Straw Poll: The group strongly supported this option.

Overview of Next Steps

The next meeting will be held on September 17, after the traffic congestion relief models have been run and the modifications/revisions for the alternatives have been applied and run through the ecological impact tool. These results will be presented at a public meeting. The MPO committees will be briefed on the Stakeholder Team's suggestions. The final meeting will be in November.

Meeting Evaluation (+ / Δ)

Things we liked:

- Agenda was flexible and worked beautifully!
- Seconded all around!

No negative feedback!

Meeting Participants

Stakeholder Team Representatives

Dave Benish, substituting for Elaine Echols, Albemarle County
Stephen Bach, Citizen Representative
Kirk Bowers, Sierra Club
Ken Boyd, Albemarle County Board of Supervisors
John Conover, Lewis and Clark Exploratory Center
Dennis Duttere, Albemarle County-Citizen Representative
Bill Emory, Citizen Representative
Chris Gensic, Parks and Greenway Planner for City of Charlottesville
Dan Mahon, Albemarle County Parks and Recreation
Cal Morris, Albemarle County Planning Commission
Stan Rose, Citizen Representative
Donna Shaunesey, JAUNT
Clara Belle Wheeler, Albemarle County – Citizen Representative
Chuck Procter, VDOT Culpeper Office

TJPDC:

Wood Hudson
Sarah Rhodes
Pat Groot, Grants Administrator
Chip Boyles, Executive Director

Rinker Design Associates:
John Giometti
Matt Beale

Facilitators:
Frank Dukes, with support of Tanya Denckla Cobb, from IEN, University of Virginia
Sydney Shivers, graduate intern
Nadine Skaff, extern from University Mediation Services

Eco-Logical Pilot – Free Bridge Area Congestion Relief Project Stakeholder Team Meeting #6 Summary

Wednesday, September 17th, 2014, 4 – 7 p.m.
TJPDC's Water Street Center, 407 East Water Street, Charlottesville, Virginia

Facilitated by:
The Thomas Jefferson Planning District Commission and
The Institute for Environmental Negotiation, University of Virginia

---

EXECUTIVE SUMMARY

The sixth community and resource member Stakeholder Team Meeting of the Eco-Logical Pilot/Free Bridge Area Congestion Relief Project took place on Wednesday, September 17, 2014 at the Thomas Jefferson Planning District Commission (TJPDC) Water Street Center. In this meeting Wood Hudson of TJPDC presented the results of analysis for each of seven alternatives, analyzed using four elements: Cost, Engineering Feasibility, Regional Ecological Framework (REF) scoring, and Potential Congestion Relief. Team members reviewed each of the alternatives based on the model results, suggested improvements for clarity of presentation of information to the public, and discussed the efficacy of the tool for this particular project.

The final meeting of the Stakeholder Team will be held on November 19 at 4 p.m. Prior to that, a public meeting will allow a space for the public to see the work the stakeholder group has done and comment on various elements of the proposed alternatives.

Goals of Stakeholder Team:

- Develop a viable project option for improving congestion issues at US 250 Free Bridge.
- Enhance and improve the existing Regional Ecological Framework (REF) Tool.

Goals of Eco-Logical Program Grant:

- Test the Eco-Logical approach for infrastructure planning and development on a local scale.
- Increase awareness of Eco-Logical approach among federal, state, and local transportation and resources agencies.

Thomas Jefferson Planning District Commission (TJPDC) Eco-Logical Pilot – Free Bridge Congestion Relief Project Stakeholder Team

INTRODUCTIONS AND ORIENTATION

Frank Dukes of the Institute for Environmental Negotiation, University of Virginia began the meeting with introductions and orientation to where the team is in the process. The Stakeholder Team was reminded that the engineering firm has competed their work so no more engineering changes would be done at this point. They were reminded that they were at the point where they could discard any alternative they did not deem feasible, and that the next step would be getting feedback on the process to be shared with FHA. It was noted that Kelly Wilder (IEN) and Sarah Rhodes (TJPDC), who had been a part of the facilitation and leadership of the project, have moved to other cities and are no longer with the project. Wood Hudson, Will Cockrell and Chip Boyles can be contacted in place of Sarah.

The meeting's agenda was distributed and proceeded as follows:

1. **Introductions, and orientation (10 minutes)**
2. **Presentation: Eco-Logical modeling results and impacts (20 minutes)**
    - TJPDC will give a presentation on the results of the Eco-Logical modeling process and the results of the REF tool
3. **Questions (15 minutes)**
    - Stakeholder will have the opportunity to ask questions about the REF modeling
4. **Presentation on project alternatives ranking matrix (15 minutes)**
5. **Questions (15 minutes)**
    - Stakeholders will have the opportunity to ask questions about the ranking matrix.
6. ***Break: 10 Minutes***
7. **Facilitated group discussion of alternatives (60 minutes)**
    - Stakeholders will be led through a collaborative discussion of alternatives and have the opportunity to comment and suggest minor changes to alternatives
    - Stakeholders will also have an opportunity to select among alternative(s) any that they would like to see removed from further analyses.
8. **Overview of next steps (10 minutes)**
9. **Public comments (10 minutes)**
    - *Each speaker has 2 minutes to speak.*

ECO-LOGICAL MODELING RESULTS AND IMPACTS

Wood presented the REF model of ecological impacts for each of the proposed alternatives, explaining the results. He reviewed the objective for the process and described the REF

tool, reemphasizing that this modeling is a decision support tool, not to replace other elements of a decision making process, but to help add other information. Wood highlighted one change to the engineering plans from the last meeting, which was moving the bike trail to the river side of the railroad.

Table 1: REF tool score for each alternative

Alternative	Project Score
D-2	10.5
A-1	9.5
G	9.0
F	9.0
B	6.5
I	4.5
A-2	3.5

Question and Answers

Q. Do any of these numbers demonstrate impact on air quality or water quality? It would be nice to have air quality information.

A. Water run-off would have to be done through water management process, but we can probably provide those numbers in the future. We cannot do air quality tests or evaluations due to lack of access to those technologies

Q. Can we have someone review or supplement the model results adding other information?

A. This is basically a cursory review of the alternatives; the ones we choose to move forward with will then undergo further analysis.

Q. Are there other maps that don't show this specific data that could also be used? How does this compare with a land cover map?

A. With a land cover map you're not getting certain values coming through. Land cover

will not show bald eagle presence. This map combines resources and values attached to those resources. Federal Highway Administration (FWHA's) Ecoplan tool can be added to using local data, but that only shows you what is there and does not provide any calculation of value. There is a newer tool called the Natural Heritage Data Explorer, which has more data for endangered species. You can overlay your projects onto this map and submit it for DCR for further review; however, this as well only shows you what is present in that area and DCR does the analyzing and sends it back. There is no attempt of ranking or scoring anything.

Further Discussion

500-Foot Buffer

There was a fair amount of discussion around the 500-foot buffer used as part of the REF model. This buffer length was structured on the figures that TJPDC has used in the past for transportation planning projects. There was the concern of wanting to maintain uniform standards for potential environmental impact across the alternatives; however stakeholders felt that some alternatives would not have an environmental impact up to 500 feet. Stakeholders identified that the construction for the bike path might not take up as large an environmental impact area as that for road widening, and this should be considered in the model. One stakeholder suggested inputting the actual construction profile area rather than the 500-foot buffer, and suggested running the model with a 6-foot buffer zone for the bike path to see how the REF would change. The model program's smallest units are 30 m by 30 m pixels, which limits the minimum buffer size.

It was also pointed out that some of the projects, such as the intersection improvements, consist of work done on existing roads rather than creation of a new road, and yet the 500-foot buffer was used in these areas as well. The general feeling among the group was that this is an element of the model that needs further investigation and may not be accurately reflecting the real environmental impact of each alternative. They would be interested in seeing an REF result of the construction footprint of each project to compare with the REF with the 500-foot buffer. One stakeholder pointed out the incongruity of the Bike Path having an REF score of 10 (high) while the Parkway had a score of 3 (lower), illustrating that the model is not credible. A further critique of the model was that it takes into account only negative environmental impacts, but should include positive impacts of each of the projects as well.

Datasets

One stakeholder asked if there is opportunity to incorporate local knowledge and datasets into the model. Wood responded that they chose federal agency datasets because those are the ones that many organizations are using. TJPDC were hesitant to use data that would

only exist for one county, as that would skew the tool. The respondent pointed out that for such a limited geographic area as Free Bridge, local information could be really important, more relevant, and rich. To include local knowledge, it would require rebuilding the entire tool to incorporate the datasets/data. It could be possible to supplement the model review with local data as a further step of analysis after running the model.

PROJECT ALTERNATIVE RANKING MATRIX

Wood then presented the final ranking for each alternative, which takes into account the Cost, Engineering Feasibility, Traffic Alleviation, and Environmental Impact.

Table 2: Rankings of each element for each alternative, with final scores

Alternative	Estimated Cost	Traffic reduction	Construction Feasibility	REF Impacts	Overall Rank
D-2	High	Moderate	Moderate	Moderate	High
A-1	High	High	Low	Low	High
G	Moderate	Low	Moderate	Low	Mod/High
F	Moderate	Low	High	Moderate	Mod/High
B	LOW	n/a	Moderate	High	Moderate
I	Low	n/a	High	Low	Low
A-2	LOW	n/a	High	Low	Low

Question and Answers

Traffic Alleviation Data

There was general agreement among stakeholders that the main thing people are going to want to know is whether they are going to be able to get through the study area in less time. If this information cannot be provided, they felt there is no point in presenting to the public. Too many of the alternatives in the model had an "N/A" in the traffic column because the model program was unable to calculate effects on traffic.

Table for Presentation of Data
The stakeholders felt that the table was not very clear. It was confusing that in some columns "High" was good and in others bad. The use of color coordinating helped demonstrate this, but the team still felt that it was confusing. They also felt it would be helpful to have some sort of context or reference point showing which numbers are good (For example, the REF scores of Manhattan versus Charlotesville.)

Ranking Numbers
The stakeholders felt that the ranking numbers 1-3 were not a good representation of the relation of each number to one another. For example, under project cost, one project is $141 million and another $67 million, yet they receive the same rank number. One stakeholder suggested shifting to a 1-6 tiered ranking system, to incorporate the 1-3 for other elements, but allow a wider span for cost.

Traffic versus Congestion
It was pointed out that it is more accurate to say "Congestion Alleviation" or "Congestion Reduction," than "Traffic Reduction" because these alternatives are not going to reduce the number of cars moving through the study area, but are aiming to increase the flow of cars moving through the study area. The models that were available for TJPDC are only able to analyze volume of cars, however, not congestion, so this is an area of challenge between the model and needs of the stakeholders and public. Stakeholders agreed that the verbiage should change to "Congestion Reduction" for the table presenting numbers or that an additional column should be added for congestion relief to incorporate those numbers.

EVALUATION OF THE ECO-LOGICAL TOOL

Wood asked the Stakeholder Team if they felt this type of tool is helpful for each member and their sector. He explained that at the end of the process, the model of the study area will be available for further use.

Helpfulness of the Tool
Stakeholders felt that the REF tool was helpful in generating discussion about some of these issues, yet it is limiting and needs to incorporate other information and databases to be useful. Suggested data included: biodiversity, riparian communities, natural heritage communities, economic information, cultural information, and locally sourced data. It was also suggested that it would be helpful if there were a way to communicate to other localities how to incorporate their own specific data into it, even if it is manually.

Appropriateness of the Tool
The stakeholders felt that this particular tool might be very useful when analyzing something on a much larger regional scale (e.g. a road from Charlottesville to Virginia Beach), but is likely not an appropriate tool for doing something on as small a scale as Free Bridge. One stakeholder articulated that this is an intersection study, and what is needed is models to analyze that.

Other Comments from the Stakeholder Team

- At some point we need to advocate the solution that makes the most sense for us. We are the experts and we should make a concrete decision.
- Some stakeholders are interested to know how they could make more nuanced recommendations, such as "This alternative might be good but we need to know x, y, and z about traffic analysis."
- Similarly, stakeholders were interested in knowing how to say to the public, "This could be a good choice for the future, not now."

Further comments on each alternative and modifications

- A-1 – Free Bridge overpass/expressway (Two lane deck over the existing bridge)
    - This one is costly but it does address the problem.

- A-2 – Jug Handle/left turn elimination at US250 W and High Street (Relieve left turn onto high street, this will remove the left turn backup and reroute traffic up along the river road)
    - The traffic modeler doesn't understand intersections and so cannot compute this alternative's effect on traffic.
    - It could feel like less waiting because people are moving, even though the distance is greater.
    - It could end up being worse and taking up more time to go through two intersections then taking the one left turn.
    - Traffic could build up on Locust Avenue.
    - A more sophisticated analysis is needed.

- B – Park and Ride, Bike/Pedestrian Connections
    - Surprisingly, this alternative had a very high negative environmental impact, due to its long length and the 500-foot buffer in the model.
    - It could be interesting to look at the effect of the bridge alone, rather than the entire path and park and ride, because that might alleviate some of the pressure with people traveling to Martha Jefferson and State Farm, and would have lower cost and environmental impacts.

- D-1 Rivanna River Parkway

  - One stakeholder expressed confusion that they thought this alternative had already been removed. Others noted that while the group had agreed that it was not an alternative they were pursuing, they felt it could be valuable to have the information from the modeling, to demonstrate why it was rejected.

- F – Increased lane capacity on Free Bridge
  - This has the potential to actually increase traffic because over time it will encourage more people to pass through the area.
  - The question is, does it affect traffic speed?
  - This alternative would cause the loss of the car wash business.

- G – South Pantops Drive connector bridge
  - The model showed a "0" in congestion decrease, so it is not giving the information needed. It did not assign a single trip to the model.
  - The thrift store, a tire shop and a restaurant would be lost.
  - This route gives a better and safer way to the hospital from the city.
  - There is potential for redeveloping Pantops Shopping area to make it more attractive to people and so this alternative could be appealing.

- I – Intersection improvements at US250/Route 20
  - On the presentation slide for this alternative, it would be helpful not to have two split photos showing each intersection and to display direction and where CVS and McDonalds are.

FURTHER SUGGESTIONS FOR PRESENTATION TO THE PUBLIC

- Include clear features on maps for better quick orientation, especially those maps which are not in the same north-south delineation.
- Include clear, large labels for each alternative, with names other than A-1 or D-2.
- Include more color on the maps.
- In the final table contrasting scores for each of the alternatives, there is one Traffic Reduction "High" that should be changed from red to green.
- Make sure that the public knows that this was an exploratory process and does not expect something to be built as a result, as there is no money for it currently.
- Assign some value of congestion. Figure out a way to say "It decreases" or "It increases" for the congestion for each alternative, and if people want greater detail you can give them the data.
- Remove the last column from the table, letting people look at each of the element columns, and not worrying about adding them up.
- Part of this project was testing a model; however we should not present the model process to the public. What should be presented are the solutions that we have worked on as a group.

- There should be a way for the public to comment online if they are unable to attend the open house.

- *Weight of Scores in the Matrix*
  After discussion about the weight of elements in the model, including suggestions to place a higher weight on the REF score, stakeholders concluded that it would be better not to weigh any one element of the model and to present the general scores, numbers, or dollars, letting the public deduce the relation of each to each other.

- *Narrative*
  One stakeholder suggested that it would be clearer to present a narrative next to each map, explaining what is in the table. After discussion, stakeholders agreed to have the map of each alternative, the table with the numbers for each element in the model, and a narrative explaining the alternative and table.

- *Combinations of Solutions*
  It was articulated that is important to communicate to the public that there is the option to choose more than one alternative. It could be helpful to be able to run a model showing the effects of combinations of alternatives. It would be great if it were possible to give these combination numbers to the public as well.

- *Presenting Unrecommended Alternatives to the Public*
  The Stakeholder team was given a chance to test for consensus about whether there were any alternatives that they would choose not to present to the public during the open house. Some of them were happy to do that with the Parkway; others felt it would be better to present them all equally, in an effort to demonstrate that they had considered all the proposed alternatives. Consensus was not reached. Some stakeholders felt that if an alternative is discarded, (i.e. the Parkway), it is important to retain the smaller part of it (connecting road from Olympia drive) for consideration.

Overview of Next Steps

Stakeholders felt that there is not adequate information (traffic relief results), and not the appropriate format, to present to the public yet. It was suggested to move the public open house to November or later in October. Wood will work on editing the presentation based on feedback from this meeting and will share it with the stakeholders before the public meeting.

Meeting Evaluation (+/Δ)

- It is important to be talking to potentially affected businesses to find out their opinion on the situation.
- It is important for planners to be talking to landowners well in advance of a proposed project, if it could be a potential years down the road. A benefit of this is possibly being able to buy a right of way cheaper than waiting until the project is imminent.
- There should be more parallel conversations with other people, developers, etc.

Meeting Participants

Stephen Bach	City of Charlottesville - Citizen Representative
Kirk Bowers	Sierra Club
Ken Boyd	Albemarle County BOS
Missy Creasy	City of Charlottesville Planning
Elaine Echols	County Staff
Bill Emory	City of Charlottesville - Citizen Representative
Chris Gensic	City Parks and Rec
Satyendra Huja	City of Charlottesville CC
Lucas Lyons	JAUNT
David Mitchell	Albemarle County - Citizen Representative
Cal Morris	County Planning Commission
Chuck Proctor	VDOT, Culpeper District
Stanley Rose	Albemarle County - Citizen Representative
John Santoski	City Planning Commission
Jeff Werner	Piedmont Environmental Council
Clara Belle Wheeler	Albemarle County - Citizen Representative

Non Stakeholder Attendees:
Will Cockrell TJPDC
Chip Boyles TJPDC
Sean Tubbs Charlottesville Tomorrow
Rachel Goldberg, visiting professor from DePaul University

TJPDC:
Wood Hudson

Facilitators:
Frank Dukes, with support of Elizabeth Moore, from IEN, University of Virginia
Abigail Sandberg, graduate intern

Eco-Logical Pilot – Free Bridge Area Congestion Relief Project DRAFT Stakeholder Team Meeting #7 Summary

Wednesday, November 19th, 2014, 4 – 7 p.m.
TJPDC's Water Street Center, 407 East Water Street, Charlottesville, Virginia

Facilitated by:
The Thomas Jefferson Planning District Commission and
The Institute for Environmental Negotiation, University of Virginia

---

EXECUTIVE SUMMARY

The seventh community and resource member Stakeholder Team Meeting of the Eco-Logical Pilot/Free Bridge Area Congestion Relief Project took place on Wednesday, November 19, 2014 at the Thomas Jefferson Planning District Commission (TJPDC) Water Street Center. In this meeting Wood Hudson of TJPDC presented the feedback received from the public forum. The Stakeholder Team reviewed and discussed each alternative to arrive at final group recommendations. This was the last Stakeholder Team meeting for this project. The Stakeholder Team provided feedback on the REF tool and the overall process. TJPDC, with assistance from the Institute for Environmental Negotiation, will be preparing a final document reflecting the process and decisions of the Stakeholder Team to send out for comment along with an online evaluation of the process.

Goals of Stakeholder Team:

- Develop a viable project option for improving congestion issues at US 250 Free Bridge.
- Enhance and improve the existing Regional Ecological Framework (REF) Tool.

Goals of Eco-Logical Program Grant:

- Test the Eco-Logical approach for infrastructure planning and development on a local scale.
- Increase awareness of Eco-Logical approach among federal, state, and local transportation and resources agencies.

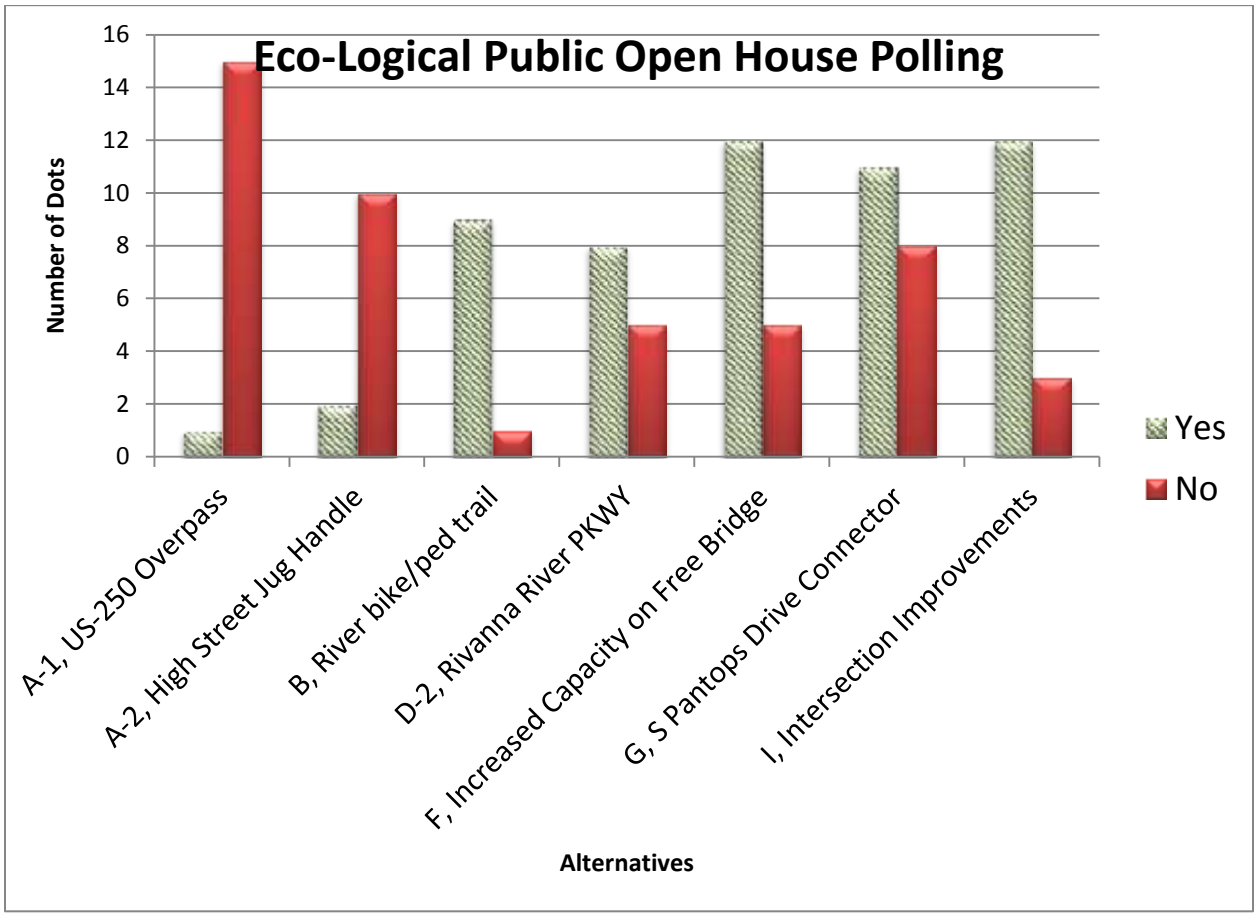
Introduction

Frank Dukes of the Institute for Environmental Negotiation, University of Virginia, began the meeting with introductions. He reflected on the fact that this is the last Stakeholder Meeting and that it has been a full year since the group started the process. Stakeholders were reminded that this is the final opportunity for voting for consensus as a group, but that members will also be free to make comments to the draft report that will be sent out to all members.

Wood Hudson of the Thomas Jefferson Planning District Commission (TJPDC) reviewed the meeting objectives, which include getting feedback on the process and REF tool. He pointed out that three of the project goals had been met at this point. The only item left is deciding which options would be recommended for further analysis and possible implementation.

Report on the Public Open House

Wood felt that the public open house was very successful. At least 26 people participated and there was great discussion and engagement from those who came. He also noted that many participants were talking amongst themselves and offered a variety of interesting questions. Wood explained the process of feedback for the meeting, in which each participant got red and green dots to place on alternatives they did not like or liked, respectively. Participants received as many dots as they wanted but could only vote once per alternative. He presented the graph of the results, which can be found below.



Question and Answers

Wood asked the members if anything was surprising or if there were any questions about the feedback received from the public. Some members were surprised that the bike trail did not receive more green dots. Wood explained that he had overheard a few comments that some people liked the idea of a bike trail but did not vote for it because they didn't think that it would relieve congestion. One participant at the meeting said that they were from Charlottesville and favored it because the county would pay for it. Others may not have voted for it because they felt it was already in the works and therefore irrelevant. This illuminated the fact that the feedback received in the form of sticky dots did not articulate reasons why people voted or didn't vote for certain alternatives.

Transportation Project Process

Will Cockrell, TJPDC, spoke about the transportation project approval process. Recommendations would have to be included in the Long Range Transportation Plan to be realized. A diagram of the relation between the comprehensive and long-range plans can be found below. One member wanted to know if there would be a scoring process for the alternatives, and Will said that this is indeed what they are anticipating. Another member asked whether, if there are three ideas that have some level of consensus that are similar to one another, one might not do one alternative if they are undertaking another. They also asked what will happen if there is no one clear winner for alternatives within the Stakeholder Team. Wood responded that whatever recommendations come out of the project, the MPO will look at them compared to what is proposed in the long-range plan. Chuck Proctor, Culpeper VDOT, encouraged the team to identify the options that they would *not* want: what members would want to throw out. The top four projects might all address different issues, and might all be chosen.

Some members had questions about the financing for such a project. Funding depends upon other projects included in the long-range plan. Anyone with further questions about the nuts and bolts of the process is welcome to contact Wood or Will for further information.

Discussion of each alternative and modifications

- **A-1 – Free Bridge overpass/expressway**

Team members found that this alternative was both costly and unattractive. They pointed out that the pedestrian scale would be lost with this alternative. This alternative was envisioned as a means of segregating local traffic from vehicles traveling between Interstate 64 and Route 29; however, some members suggested that most people do not go through Pantops from I-64 to get to RT29. Another member noted that other alternatives are more ideal for local traffic at this point and that this would be an overkill solution.

Conclusion: The group agreed that this alternative would not be recommended for further analysis.

- **A-2 – Jug Handle/left turn elimination at US250 W and High Street**

The members discussed the fact that this alternative is solely for dealing with left-hand turns, and if other alternatives also take care of left-hand turns, this one would not be necessary. Some argued that this is inexpensive and could have a small benefit in combination with other alternatives. Others said that drivers would not actually use this; since River Road can be very busy, they would move on to the next exit instead of looping around to wait at two potential congestion spots. It was pointed out that this adds time to the current wait for a left turn, and the neighbors would also dislike this alternative. Chuck Proctor of VDOT pointed out that this type of scenario only works when it eliminates all left hand turns, but this one only eliminates the one.

Conclusion: A large majority of the group would like to eliminate this alternative for further analysis; however, some members believe that it may be a viable option at a later time.

- **B – Park and Ride, Bike/Pedestrian Connections**

Stakeholder Team members discussed the high environmental impact score given to this alternative. Wood ran the model again with the smaller buffer (rather than the 200 foot buffer in the other alternatives), and it still returned a high number because there is a significant amount of river buffer along the path, and it is a very long path. Members asked about the actual potential environmental impact. One member said that a lot of the path would be restorable road route because it is the old bed of Three Notched Trail, thus the environmental impacts would be a lot lower than the score indicates.

In response to a question, Wood stated that it is possible to change the environmental impact scoring on the report if they think it would actually be lower than what the model said. Another member pointed out that this alternative could actually have a positive environmental impact, getting people out in the environment.

Team members discussed the potential congestion relief of this alternative. Most stated that congestion relief would be low, but some did suggest that it could help relieve congestion. One member said that he is working with Martha Jefferson Hospital to put a trail on the bluff, which could possibly connect to a parking lot at the hospital. This has the potential to make a more reasonable commuter route from downtown.

Another member brought up the concern that if this project is in the works to be completed through another source, the Stakeholder Team would not want to say anything that could negatively impact its completion. Another member clarified that even if the Team did not recommend it, it would not affect the construction. Frank suggested that if the group decides that the alternative would not address in any meaningful fashion the reason this group is convened - traffic congestion - they could still say that they are pleased to see it.

Conclusion: Members agree that this is a valuable project, with minimal to light reductions of congestion.

- **D-1 Rivanna River Parkway**

Members mentioned the fact that this alternative may not be politically viable due to high costs and high impacts on park and residences, although there might be a place for this in the future. Two members noted that while politically it is dead, it was the option that would do most to address the traffic congestion.

Conclusion: Members agreed to eliminate this option from further consideration.

- **F – Increased lane capacity on Free Bridge**

One member mentioned that this alternative would not address the left hand turn issue on Free Bridge. One member asked why there would be a separate bridge for pedestrians, rather than attaching it to the road structure, with the answer being that the cost of building another pedestrian bridge would be cheaper than adding a pedestrian extension onto the existing bridge.

There was concern about required pilings and how close construction would be to the river. Chuck Proctor of VDOT replied that it could be built in ways that would not need river pilings. Members discussed the issue of pedestrians having difficulty crossing the road, including crossing Rt. 250 North to South. One member reminded the Team that it is as necessary to think about the pedestrians needing to navigate the area, as cars and traffic congestion. One member said that there are two objectives for what is happening on the river: 1) the need to move traffic more efficiently; and 2) the interest in slowing people down to bring them to the river for river amenities. He said that a pedestrian crossing might be better at increasing and alternative pace.

Conclusion: Members think that this alternative would be most effective combined with Alternative I. The group agreed that this alternative would be recommended to move forward for analysis and construction.

- **G – South Pantops Drive connector bridge**

One member pointed out that this alternative has been in the plans for a long time and this is the reason that Pantops Drive was made so wide. Someone asked why the proposed route swings south and doesn't go straight across the river through Cosner's. The answer is that if this route went straight across it would be too close to the other intersection so would not provide a lot of bottleneck relief. The fact that it is so close to the other intersection also means that the congestion relief reading is also very low. Before completing construction, a hydraulic study would need to be carried out.

Discussion of the positive points of this alternative included its potential for reducing traffic congestion and for developing that commercial area. A member pointed out that bike path connectivity could be done in a way that would create a nice route into the commercial area with the interest in the riverfront commercial interests. This alternative helps local trips rather than people coming off I-64. One member mentioned that in Europe, there are many river crossings in cities and that we should not try to funnel all traffic through one bridge. The transportation grid should also cross the river. Multiple members said that this was the right project. Chuck Proctor noted that this helps with transit plan. David Mitchell read a message from the property owner at Pantops Shopping Center, saying that they would be in support of this alternative if the traffic circle could be shifted south to avoid the gas station, even if it means they would need to take out some buildings.

Discussion of the undesirable points of this alternative revolved around political feasibility and recreational use. One member brought up the political element with this alternative as well, saying that they dislike routing more people into the city. They said that Mayor Huja said that City Council would never approve this alternative, just like the County may never approve the parkway. There was further discussion about the reality of whether it is people coming into the city or the issue of city residents coming out of the city to the hospital or other workplaces. Another member pointed out that it is not increasing traffic into the city but relocating it.

There was discussion about the recreational use of this area. One member pointed out that many people use the field area on the west side of the river recreationally. It is a beautiful area in the city and he believes that enjoyment of the area would be greatly compromised by putting a road over top of it, even with mitigating design features. Sound carries, regardless of the height cars are above the ground. Others suggested that the construction of a road would provide more access to the area and that the bridge could be designed to be aesthetically pleasing, and that the height of the bridge would mean it was less intrusive. At the public meeting, Councillor Kristin Szakos mentioned that they were planning a park in this spot, which is another consideration.

Conclusion: This group has not been able to address all concerns. Members agree that there is a congestion relief advantage and that there are continuing concerns about increasing

development of the commercial area, people entering from the county into the neighborhoods, and impacts to recreation in that area. This warrants further study to address those concerns.

- **I – Intersection improvements at US250/Route 20**

Some members suggested that this alternative should not even be included in the alternatives to review because it should just be done. One member said that it should be paired with Alternative G. Another member stated that this alternative would be essential if the Pantops Connector were chosen. One member was surprised at the cost of this; in reply, the estimated cost includes acquisition of land, relocation of a mega-transformer, and the building of retaining walls.

Conclusion: The group agreed that this alternative would be combined with I and recommended for analysis and construction.

Further Questions and Comments

Wood let the team know that he uploaded the engineering sheets on the website if anyone wanted to look at any of them more closely.

One member wanted to know how the congestion relief numbers were generated. They are based on engineers' knowledge and what has been seen in the past with similar situations, taking models and forecasting it into this particular situation. Currently, there is no modeler on staff, so they are approximations. If any of these projects makes it to the engineering phase, a more in-depth traffic study would be undertaken.

One member felt frustrated by the discussion of political viability. He felt that if there are alternatives that the Stakeholder Team likes and feels merit recommendation, they should recommend them, regardless of if someone may veto it later.

Discussion of Process and Ecological Tool

Stakeholder Team members suggested that the REF tool was less valuable for small areas of this sort. Its purpose should be with projects that span a larger geographic area, rather than traffic congestion projects. Others observed that it is also ineffective in areas that are already paved or developed. One member pointed out that this should not be used to compare lots of projects in different types of areas, but for comparing one project through multiple area options. Some stated that the tool could be helpful as a component but should never replace National Environmental Policy Act. It is useful to be able to quantify elements, but certain benefits are not quantifiable and that is the importance of the NEPA. Knowing the qualitative data is the only way to make a sound decision.

Overview of Next Steps

A draft report will be sent out to all members for comment. Comments from those who were not present at this meeting but who may submit comments later will be incorporated into the report. This report will not be completed before Thanksgiving, but members should look for final comments and offer recommendations for final language.

An evaluation will be sent out to Stakeholder Team members via email in the form of a Survey Monkey online survey. Members are welcome to voluntarily share their names on this survey, but if not, it will be anonymous.

Frank closed the meeting by thanking Wood and Sarah who did exceptional work and were very interested in making the process work for the Stakeholder Team, and also expressed appreciation for each Stakeholder Team member who gave their time to be a part of the process.

Process Evaluation (+/Δ)

+

Stakeholder members appreciated the process in that it brought together diverse perspectives. They felt that the human dimension of this process was unique and important. They found it valuable to have discussions together, and appreciated the level of information, flexibility and civility allowed the group by the facilitation process. Members felt that Frank and Wood's guidance was good. One member pointed out how it was helpful that they were allowed freedom of departing from the agenda if other things needed discussion and also that they had the freedom to disagree with no requirement to reach consensus. Members appreciated that VDOT was in the room and offered their opinion. One member identified the chart used to compare elements (traffic congestion, environmental impact, and so forth) as very helpful in its simplicity and use of high, medium, and low reductions in congestion. One member noted that in other situations the same people in the room would be throwing things at each other but this process was completely different, civil, respectful, and informative.

Δ

Some members said that it would have been helpful to have more initial grounding at the beginning of the process, rather than jumping right in with the map work and generation of alternatives. Other members stated that a major missing piece was the traffic modeling data. The last complaint was the air handling system, which was loud at times.

Public Comments

There were no public comments at this meeting.

Thomas Jefferson Planning District Commission (TJPDC) Eco-Logical Pilot – Free Bridge Congestion Relief Project Stakeholder Team

APPENDIX

Meeting Participants

Stephen Bach	City of Charlottesville - Citizen Representative
Ken Boyd	Albemarle County BOS
Morgan Butler	Southern Environmental Law Center
Missy Creasy	City of Charlottesville Planning
Wayne Cilimberg	County Staff
Dennis Dutterer	Albemarle County – Citizen Representative
Bill Emory	City of Charlottesville - Citizen Representative
Chris Gensic	City Parks and Rec
Anne Hemenway	Lewis and Clark Exploratory Center
Lucas Lyons	JAUNT
Dan Mahon	Albemarle County Parks and Recreation
David Mitchell	Albemarle County - Citizen Representative
Cal Morris	Albemarle County Planning Commission
John Pfaltz	City of Charlottesville - Citizen Representative
Chuck Proctor	VDOT, Culpeper District
Stanley Rose	Albemarle County - Citizen Representative
Jeff Werner	Piedmont Environmental Council
Clara Belle Wheeler	Albemarle County - Citizen Representative

Non Stakeholder Attendees:
Rachel Goldberg, visiting professor from DePauw University
Mack Frost, Federal Highway Administration

TJPDC:
Wood Hudson
Will Cockrell
Chip Boyles

Institute for Environmental Negotiation:
Frank Dukes, Director
Elizabeth Moore, Project Assistant
Abigail Sandberg, Graduate Intern

Thomas Jefferson Planning District Commission (TJPDC) Eco-Logical Pilot – Free Bridge Congestion Relief Project Stakeholder Team

Nov. 19 Agenda

1. Introductions (10 minutes)
    - Staff, facilitators and stakeholder participants will introduce themselves.
    - Review meeting goals
        - Discussion and final recommendation of alternatives
        - Feedback on identified mitigation
        - Comments on process and tool
2. Report on Public Open House (10 minutes)
    - Staff will give an overview of the October 23rd Public Open House
3. Next steps, How a project would move forward after the process (15 minutes)
    - Stakeholder will have the opportunity to ask questions about the REF modeling
4. Review of Alternatives (15 minutes)
    - Staff will briefly run through each of the analyzed alternatives
5. *Break: 10 Minutes*
6. Facilitated group discussion of alternatives (60 minutes)
    - Stakeholders will be led through a collaborative discussion of alternatives and provide their feedback about which alternative(s) they would be comfortable recommending for further funding and study by the MPO
    - Stakeholders will be asked to provide input on possible mitigation and feasibility of each alternative
7. Discussion of Process and Ecological Tool (40 minutes)
    - Staff will solicit feedback on the stakeholders overall experience and take comments on how to improve the process and usefulness of the approach
8. Next Steps (5 minutes)
    - Circulation of a final report for comments by stakeholders
    - Online survey
9. Public comments (10 minutes)
    - *Each speaker has 2 minutes to speak*