

Meeting Summary

Volusia County Expressway Authority Coalition

August 23, 2000

Volusia County Mobility Management Center
950 Big Tree Road, South Daytona, Florida

Members Present:

Maryam Hosseini Ghyabi
Richard McMahan
Lori Campbell Baker
Brad Blais
Jon Cheney

James Ely
Charles Lydecker
Karl Welzenbach
Linda White

Members Absent:

Joseph Benedict III

Doug Daniels

Others Present:

Darla Zakaluzny, Recording Secretary
Patrick Hubbard
Bill Nelsen
Hugh Miller
Lee Bidgood
Catherine Bidgood
Alexa Ross
Loy Crumbley

Derek Catron
Dwight Lewis
Joe Jaynes
Big John
Kathy Marsh
Nora Hall
Glenn Storch
JJ (Jeri) Valaer

1. Welcome and Introductions

Chair Maryam Ghyabi called the meeting of the **Volusia County Expressway Authority Coalition** to order at 10:05 AM. It was determined that a quorum was present. Introductions of the members and staff were made.

Chair Ghyabi recognized Council Member Dwight Lewis.

2. Approval of June 21, 2000 Meeting Minutes

Mr. Lydecker moved to approve the June 21, 2000 meeting minutes. The motion was seconded and carried unanimously.

3. Presentation on Traffic and Revenue by Dr. Hugh Miller, URS Greiner

Mr. Ely stated that he considers this presentation the most significant of all of the presentations made since January 2000. He stated that previous presentations included:

- Mr. Lowell Clary, FDOT's Chief Financial Planner, on the importance of traffic and revenue studies and the financial plan for a toll project.
- Ms. Jodi Hecht, Standard and Poors of New York, on traffic and revenue studies and how important they are to the rating agencies and the investment agencies.

Mr. Ely stated that if an expressway authority is recommended and a toll road is planned, then this subject and the traffic/revenue data would be critical to the success of an authority or to any project. He stated that due to the complexity of the traffic/revenue studies and toll feasibility studies, only three firms in the nation handle these types of studies. The firm used by the Turnpike District is URS Greiner and Dr. Hugh Miller, Vice President of URS Greiner is present today. Mr. Ely stated that URS Greiner was established in 1904 and the firm started working with the Turnpike District in 1957, which is the year the Turnpike District opened for business.

Mr. Ely stated that Dr. Miller has been asked to provide a general explanation about toll feasibility and traffic/revenue studies, and how they are conducted. Mr. Ely stated that Dr. Miller has also been asked to provide information on a national level on why some toll projects miss their forecasts. He stated that Dr. Miller would also give a case study on the Seminole County Expressway Project #1, which is a Turnpike project that opened in 1994 and is part of the eastern beltway around Orlando.

Mr. Ely stated that Dr. Miller would also cover the lessons learned by all three of the nationally recognized firms on the reliability of traffic and revenue forecasts. He stated that the reality of the forecasts is important to any toll project and particularly those that are stand alone projects without a track record and without a large system of finances to support it.

Mr. Ely stated that Dr. Miller is here today at his request and by invitation of the Coalition. He went on to say that Dr. Miller is not here to promote his firm or render an opinion on any future projects in the area. Mr. Ely stated that over \$24 billion in transportation projects (nationally) and approximately \$3 billion in Florida have been funded based on traffic and revenue studies that have been done by URS.

Dr. Hugh Miller distributed copies of the power point presentation to the members for their review and files.

Dr. Miller stated that information is needed five years before the road is to open and in many cases it is even longer than that time period. He stated that if you wanted to sell bonds and use bond money to produce the design, right-of-way and construction feasibility studies would be needed at the very beginning of the project and a decision would need to be made on whether or not the project would move forward.

Dr. Miller stated that the typical feasibility studies are: the engineering feasibility study, an environmental feasibility study, and perhaps a planning study that concern the need for the project. He stated that a toll feasibility study would also be included.

Slide information included the following:

Toll Facility Studies: Traffic and Revenue Basics

- Traffic and revenue forecasts are one of several results used by decision-makers
- New facilities have more uncertainty, with more unknowns and more reliance on the work of others
- Structure of the team ensures that T & R work is independent of other activities
- Also, bond rating analysts provide an independent opinion concerning the project and the toll agency's creditworthiness
- The toll agency makes the ultimate decision

Traffic and Revenue Studies:

- Preliminary Study
 - uses readily available data and models
- Comprehensive Study
 - significant field work and model development
- Financing Study
 - Traffic and Earnings Report for bond sale

Dr. Miller stated that his firm or other firms that do the traffic and revenue studies are called in after a project has been planned and completed. They are called in at the very end to do the funding study as part of the bond sale. Dr. Miller stated that every case is different and it would depend on what the needs are.

Traffic Forecasting Approaches:

Dr. Miller stated that if you take away the operating expenses and the maintenance expenses (paid by the toll road), you would then have Net Toll Revenue, which is available to pay the debt service.

- For existing toll facilities
 - Trend Analysis
- For new toll facilities
 - Traffic Survey - traditional toll road method
 - Travel Demand Models - traditional for long range transportation planning

Travel Demand Models Basics:

- Travel patterns depend on
 - socio-economic characteristics of population
 - land use patterns
 - characteristics of transport system
- Establish computer model that explains current travel patterns
- Obtain local forecasts of future population, land use and traffic
- Use model to predict future travel

Travel Demand Models Specifics:

- Start with model approved by local MPO
- Calibrate to existing travel behavior
- Forecast future travel based on conservative assumptions of future land use and network
- Conservative choices for toll roads
 - calibration
 - socio-economic forecasts
 - treatment of DRIs
 - treatment of planned transportation improvements
- Special study of future land uses

Travel Demand Models Improvements:

- First projects opened in 1994, with less than forecasted revenues
- Developed post-model adjustment factors (ramp-up factor, land-use-lag factor and traffic peaking factor)
- Revised forecasts for all Turnpike projects in 1995
- Review and update factors every year
- Standard practice in estimates for new projects

Dr. Miller stated that the relationship between the toll plan and the traffic is that if there are higher toll rates there would be less traffic. He stated that these items must be worked on together. Dr. Miller stated that as the toll rates go up and the traffic goes down, there is an increase in toll revenues.

Toll Collection Plan:

- Consultant recommendation on toll rate, based on demand and market analysis
- Collection options are ticket, coin, and/or electronic toll collection (ETC)
- Locate mainline and ramp plazas to provide equitable tolls and efficient collection
- Truck tolls are higher than passenger vehicles

Gross Toll Revenues:

- Derived from traffic volumes and toll schedule
- Adjusted for non-revenue traffic and toll discounts

Operating Expenses:

- Traffic volumes
- Toll plan (number and type of plazas)
- Staffing levels
- ETC usage

Maintenance Expenses:

- Roadway and bridges
- Toll plazas and buildings
- Signing and lighting
- Roadside maintenance (mowing)

Net Toll Revenues:

- Gross toll revenues less operating and maintenance expenses (O&M)
- Revenue available for debt service

Industry Experience (Early 1990's):

- National experience of actual toll revenues being less than forecasts
- Toll agencies and consultants critically examined and identified causes
- Applied this experience to improve forecasting methods

Frequently Cited Causes for Revenue Variances:

- Long elapsed time between forecast and open-to-traffic dates
- Delays and reductions in planning land development

Dr. Miller stated that for one project in Florida, they used 40% of what was approved and planned. Eight years after the road has been opened it is less than 10%. Dr. Miller stated that there is a long time from then to now and that is what happened in this particular case where forecasts were not achieved.

- Delays in planned toll rate increases
- Unforeseen competing roads
- Unfinished connecting roads
- Unanticipated increases in fuel prices
- Unexpected general economic decline (some of these items happened in California)
 - loss of employment or layoffs
 - closing of retail centers
 - reduction in tourism
- Changes in government policy
- Natural disasters

Dr. Miller stated that the Department has decided to have a toll rate discount which is if you go through the Turnpike Toll Plaza forty (40) times you will get a 10% discount.

Mr. Ely stated that several years ago, the Florida Legislature directed that with SunPass ETC, whoever had the transponder for SunPass in Florida were given a 10% toll discount based on forty transactions per month. Mr. Ely stated that this promotes ridership.

Ms. Campbell Baker asked if this has been known to increase traffic? Mr. Ely replied yes, to some extent but not enough to offset the revenue losses. Dr. Miller noted that if you lower the tolls, you would lose revenue at a six cent per mile rate with the turnpikes.

Dr. Miller stated that when there is an emergency such as a hurricane, tolls are lifted by the Department of Transportation. Mr. Ely stated that the policy of the federal government and the state is not to reimburse the toll agency the loss of revenues. He stated that every day the tolls are not charged, the Turnpike District loses \$1 million and it would be much less for a smaller facility.

Florida Experience:

- Seminole Expressway, Project 1
- Southern Connector Extension
- Turnpike Mainline

Conclusions:

- Need to recognize the presence of uncertainty, especially for new facilities
- Need to test the potential impacts of these uncertainties on each new facility
- Continually improve the methods for traffic and revenue forecasting

Toll Agency Observations:

- Traffic and Revenue estimates are forecasts, not guarantees
- The Traffic and Revenue forecast is ultimately the responsibility of the Toll Agency
- Estimates for new projects are less reliable than for existing facilities
- Everyone has their own forecast
- Understand and test your assumptions
- Give your consultant the time, emphasis and resources to do it right
- Relationship must be professional between client, bond rating agency, and consultant
- Have staff that is capable of asking relevant questions
- Be responsive if a forecast misses the mark

Mr. McMahan asked what options are available if mistakes are made? Mr. Ely replied that every toll project has a different financial plan and there is a backer/supporter. He stated that if a large system like the Turnpike System misses its mark for a project, then the Turnpike System itself would support the shortfall in revenues.

Mr. Ely stated that if it is a county project or a locally funded project, then generally speaking and depending on the financial plan, the county government may have to be responsible for that shortfall in revenue projections. He stated that the traffic and revenue forecasts need to be as accurate as possible.

Mr. Ely noted that the rating agencies and the investment houses in New York will be looking for a backer just in case that does not produce the revenue forecasts. He stated that Ms. Hecht had discussed this at a previous meeting. Mr. Ely stated the primary reason for the projects is to satisfy a transportation need. He stated that there must be a need for the project.

Ms. Campbell Baker asked what the average cost for this type of study is? Dr. Miller replied that it depends on the information that you have. He stated that the cost for the projects that appeared in the charts cost approximately \$100,000. Dr. Miller noted that a preliminary study may be less than the comprehensive study and certainly less than a financial study.

Dr. Miller stated that there are uncertainties in this forecast, but it does not mean that you don't need to do it. Ms. Campbell Baker clarified that the forecast must be done. Dr. Miller replied yes, before you get a bond rating and an investment banker to loan the money, you would have to do something like this. Ms. Campbell Baker asked if the rating agencies take into account things like accuracy of previous studies? Dr. Miller replied yes, they follow the events that occurred in the 1990's and they are aware of them now.

Mr. Welzenbach asked if it was a fair assumption that where the two lines intersect on the graph on page 9 of handout would be considered the optimum toll rate. Dr. Miller replied that transportation economists would say that the rate that maximized revenues **words unclear**. Mr. Welzenbach asked if there is uncertainty, would the maximum be taken and used? Dr. Miller replied that the current toll rate (\$0.06, \$0.10, or \$0.12) is way to the left of that. He stated that as toll rates are increased, more toll revenues are received.

Mr. Welzenbach stated that he was referencing the top curve (intersecting) where it shows the willingness to pay the toll. He asked if that should be ratcheted down several steps to become more realistic? Dr. Miller replied that is a way to think about it, but in the cases that they were looking at, they used the FSUTMS model which does not have curves like that.

Mr. Ely stated that the mission of an Expressway Authority or a Turnpike District is to help meet the transportation needs of the state or an area of the state, not to maximize its revenues.

Mr. Ely stated that if the private sector was building a project, they might be more inclined to charge a higher toll rate because they are interested in the return on their investment.

Mr. Blais asked if the models are developed internally? Dr. Miller replied yes. He stated that MPOs and FDOT develop models that are used to plan transportation facilities in the county and their focus is long-range.

Dr. Miller stated that it is better to have as much data as possible and that it needs to be current. He stated that one way to reduce the uncertainty is to invest in market research and data collection.

Ms. White asked if average household income figure into the forecasting model? Dr. Miller replied yes. Ms. Campbell Baker asked if tourism was also a factor? Dr. Miller replied yes.

Mr. Blais asked if publications were available in order to get counts for Volusia County? Mr. Welzenbach replied that the MPO has traffic counts and projections that give an estimate of traffic on a particular roadway for a day. He stated that he believes that this would be used in the traffic revenue study, with some tweaking in order to bring it to a localized level rather than using the entire model.

Dr. Miller stated that when you put a toll rate (\$0.06 per mile etc.) on, the traffic volumes might be reduced by 40% or 50%. Mr. Ely stated that the toll rate itself is part of the toll feasibility study and you would present to the client the toll rate of the area, recommendations of possible toll rates, and revenues to be derived from the toll rates.

Mr. Welzenbach asked if costs would be used as a factor? Dr. Miller replied that they have a new item, which is treating tolls as a mode choice. This should be in place in about six months.

Ms. Campbell Baker asked if the study would find out what the public would be willing to pay? Dr. Miller replied that the traffic and revenue consultant would provide the information. He stated that there are issues about the financing of the project that are involved as well and it would be up to the Expressway Authority to decide. Dr. Miller stated that they would provide information on the impacts of a higher toll rate on traffic and revenue.

Mr. Ely stated that the general willingness to pay (by the citizens) should be looked into early on.

4. Discussion

Mr. Lee Bidgood, representing the Volusia/Flagler Environmental Action Committee, asked what the projected gasoline prices are for 10-20 years from now? Dr. Miller replied that they are not in that business but his firm would explain the likely impacts of it.

Mr. Bidgood stated that other states have found that building more roads (toll road or non-toll roads) is not the answer to traffic congestion. He stated that there is enough information for the Committee to draw some pretty firm conclusions. Mr. Bidgood stated that a toll road in Volusia County would be the worst of all choices as you would be gambling that the revenues are going to be able to pay off the debt. He stated that this has happened in a number of other situations around the State of Florida.

Mr. Bidgood stated that the revenue question is a gamble and the local government would have to pick up the difference for an independent expressway. He went on to say that toll roads would be destructive to the environment because building the road and right-of-

way cuts off and separates ecosystems. Mr. Bidgood stated that there is also a noise factor and a road kill factor which impacts the environment.

Mr. Bidgood stated that he hopes that the conclusion reached is that it would be a poor idea to build a toll expressway in Volusia County.

Ms. Jeri Valear, South Daytona, referenced news articles that were recently published regarding forecasts made by URS Greiner. She suggested that surveys with balanced questions be used to find out what the public wants for the future of the community and the State, and not base the numbers on what the bank needs to provide funding.

Ms. Valear challenged the assumption that traffic is the problem. She stated that traffic encourages people to use other forms of transportation and to have people live closer to their jobs.

Ms. Valear suggested using math whiz kids who can work for FDOT on data.

Mr. Ely stated that Ms. Valear was referencing an article that appeared in the July 16, 2000 St. Pete Times Newspaper. He stated that a response from the FDOT was sent to the newspaper regarding the article. Mr. Ely stated that the article contained inaccuracies and a copy of his response to the article was provided to Ms. Valear and to the members of the Committee.

Mr. Ely assured everyone that the Turnpike District, the FDOT or the traffic and revenue consultants do not guess at traffic and revenue projections. Ms. Valear replied that she was quoting the Vice-President of URS. Mr. Ely stated that the facts are noted in his response and he would be happy to discuss the issue further after the meeting.

Mr. Lydecker asked if there is a credit enhancement vehicle of any sort? If the feasibility study is off and the debt service requirement is unable to be met, what would this mean to Volusia County? Mr. Ely replied that it would depend on the financing plan for the project. He stated that projects built by the Turnpike District over the past eleven years had no pledge from the local county, so if the revenues did not materialize as forecasted, then the Turnpike System picked up the difference.

Mr. Ely referenced the Sawgrass System in South Florida. He noted that the revenues did not materialize because of the lack of connecting roads. Mr. Ely stated that in 1990, the legislature directed the Turnpike District to purchase the facility and pay back the county for the use of their secondary gas tax. He stated that the county was the back-stop to that particular project.

Chair Ghyabi stated that the purpose of the Coalition is to look at the pros and cons of having an Expressway Authority. She stated that this is a proactive step toward planning for our community and we need to look into seeing if we need the road.

Ms. Kathy Marsh expressed concern that the facts are “cooked” in order to come up with the results for the desire to build roads. She stated that once the roads are built the damage is done as far as the environmental impact. Ms. Marsh stated that any area of the county would have significant environmental damage by a toll road whether it is SR 40, SR 415, etc. that is being discussed.

Mr. Welzenbach expressed his appreciation for the comments voiced by Ms. Marsh and Ms. Valear and stated that he understands their concerns. He stated that this group is to make a recommendation to the County Council on whether it is feasible or appropriate for an authority to be created. Mr. Welzenbach stated that the Coalition is not promoting any route, road or project.

Mr. Welzenbach stated that once that is done, then it is in the County Council’s hands as to decide: whether an expressway authority is created, what sort of authority should be created, and what projects, if any, would be pursued.

Ms. Valear stated that expert advice is needed to make a decision. Mr. Welzenbach replied that advice has been received on the idea of an authority, but Ms. Marsh and Ms. Valear are speaking more at the project level. He stated that this group will not make any recommendations or suggestions about projects, this committee will make a recommendation to the County in regards to the formation of an expressway authority.

Mr. Welzenbach stated that the concerns expressed today are valid and should be brought up while the process is underway, but the concerns are somewhat misdirected at this time.

Mr. Glenn Storch reiterated that this group will only look at whether or not an expressway authority should be created and then all other issues would be looked at when and if such an authority is set up.

Mr. Cheney asked if Ms. Marsh’s concerns were about toll roads or all new roads and their environmental impact on the County? Ms. Marsh replied she would not say all new roads because she feels that **words unclear**. She stated that the County Council may approve the Expressway Authority, but they won’t be in office when the road is built.

Council Member Joe Jaynes stated that he would base his decision on whether or not it is good for the County and all factors would be considered. He stated that the County Council is interested in questioning the need for an expressway authority.

Council Member Jaynes expressed his appreciation to the members of the Coalition for committing time to serve on the committee.

Council Member Dwight Lewis stated that it is not known yet whether an expressway authority is needed. He stated that the Council would be derelict in their duty if they did not look at everything regarding roads, water, and other issues.

Mr. McMahan asked if Mr. Bidgood was against all roads being built? Mr. Bidgood replied that we need to look at all methods of transportation such as light rail and public transportation. He stated that roads may be necessary.

Mr. Storch stated that the big question is if the expressway authority is a planning tool that could be utilized in the mix of other planning tools. He stated that the whole picture needs to be looked at.

Ms. Valear asked if the Expressway Authority would have the funds to hire unbiased public service whiz kids to assist in the planning? Chair Ghyabi replied that the County Council would make the decision on having an expressway authority and this Committee would not address this issue.

5. Public Comments - - See comments noted above.

6. Other Business

Chair Ghyabi expressed congratulations to Mr. Lydecker and his wife on the birth of their baby.

Chair Ghyabi stated that Commissioner David Brown, Florida Transportation Commission and Mr. Mike Snyder, District Secretary of FDOT would be speaking at the next meeting. There will be discussion at the November meeting and a decision will be made in January.

7. Adjournment

The meeting adjourned at 11:45 AM.