

# Capstone Project Assignment – Economic Development

## *Scenario:*

You are the freight unit of your state's department of transportation. Your duties include capital investments in public infrastructure, regulation and enforcement, operation of some facilities, working with the economic development agency to retain and attract businesses, and interfacing with several independent transportation agencies that are specifically tasked with running the port, airport and the one of the major highways.

Your state is home to an international port, an airport with domestic and international service, a few distribution center clusters, and some manufacturing plants (including an auto production facility). The port has handled large quantities of petroleum and grain in the past and has recently been successful in attracting container vessels. The port is not the largest container operation on the East Coast, but does have the space and channel depth to attract additional containerized traffic.

Agricultural production continues, though some farm land is under increasing pressure to be developed for other purposes. There are three major urban areas (one of which also contains the port and another contains the airport), along with a mix of suburban and rural areas. The population is growing, and new suburban residential, retail, and office developments continue to spring up further and further from the core cities, along major highways and arterials. Communities of newly migrated and underemployed individuals exist, primarily in the urban and older rural areas.

Your state has two national Class I railroads and several short line railroads, along with unused but available rail rights of way. New passenger rail service is under consideration for some of the existing rail freight lines, along with at least one of the available rail rights of way. Some coastal sites are in use or available for barge and other maritime movements. Transit service exists throughout most of the urban areas, with rail and bus service to some of the suburban communities.

Highway congestion is an issue near the urban areas. One of these highways serves the port and airport. Both highways are critical transportation spines in your State. Congestion could affect the competitiveness of the Port in the future.

Rail freight service also faces hurdles – major routes have height and weight issues that do not currently enable them to handle “doublestack” containerized rail movements or industry standard weight rail cars. The rail lines also have multiple at grade rail crossings, some in residential communities.

The Governor has made economic growth a top priority, with the enactment of a robust set of incentives. The Governor would like to both attract domestic and international businesses, including growing import and export trade. Large tracts of inexpensive property are available in rural areas near some highway interchanges. The rail freight lines run near but are not connected to any of these sites. In the urban areas, some properties are available, but they tend to be smaller and require environmental mitigation. Transportation access improvements may also be needed.

While communities are very supportive of the creation of new jobs and tax abatements in their areas, they are also concerned about potential increases of truck and rail freight traffic coming through

their neighborhoods. The residents cite noise, air quality, and safety for their children as their main concerns.

Fiscal conditions are tight. The state has a deficit and traditional funding mechanisms are stretched. The amount of federal funding anticipated in the near term is unknown.

***Your Assignment:***

The DOT commissioner has turned to your team to work with the economic development department to develop a comprehensive plan to retain, attract and grow major business clusters, including major distribution centers and manufacturing operations. She has asked that you create a plan that details the transportation actions and investments needed. You must decide whether to involve the other transportation agencies in your plan. Your proposal needs to answer the following questions:

- How can transportation investments and policies enhance economic development?
- How will you reach out to and engage the private sector and the public? Who will you include in this conversation and how?
- How will you work with other public agencies?
- What background information will you collect to paint the picture of the current situation, as well as potential opportunities? Where will you get this data? How will you present it?
- What will you propose to the commissioner and other decision makers?
- If transportation investments will be allowed for a given site, how will you decide which sites receive the investments?
- How will you address the funding needed for the recommended actions?

***Product:***

Be prepared to present your recommendations and answer questions on it at the Annual Meeting of the I-95 Corridor Coalition. Each capstone group will give a 30 minute PowerPoint presentation. The group of presentations will be followed by 90 minutes of group Q&A and discussion with an outside panel of public and private sector representatives. You are also required to compile your findings and recommendations into a final report (about 10 pages in length), due at the time of presentation. The report should be prepared as an executive briefing document that would be given to the DOT Commissioner and Governor's Office.

## Capstone Project Assignment – Economic Development

As part of the I-95 Corridor Coalition, we were charged with completing a Capstone Project that focused on Economic Development and Transportation Enhancements. The memorandum below represents a report that could be given to a Secretary of a state transportation department or to a Governor and outlines a strategic plan for transportation enhancements that compliment a state's goals of economic growth.

The project team includes:

Erik Deline, Morris County Division of Transportation  
Juan Flores, Mississippi Department of Transportation  
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### MEMORANDUM

TO: Secretary Mary Grace Parker  
State Department of Transportation

FROM: Transportation Development Division

RE: **Strategic Plan for Transportation Enhancements and Economic Growth**

DATE: July 22, 2009

## **Executive Summary**

This plan outlines the opportunities for transportation actions and investments to support economic development goals. It focuses on the means by which transportation investments and policies enhance economic development and the strategic actions that will be taken to aid in the recruitment and sustainment of both domestic and international business while preserving the environment and quality of life.

A four-point plan for transportation and economic development was developed including the following points:

1. Outreach Opportunities
2. Data Development
3. Creative Financing for Transportation Projects
4. Partnership between economic development and transportation departments on site selection.

Each section is briefly described below:

### **Outreach Opportunities**

The Department of Transportation (DOT) would develop a stakeholder advisory committee for freight transportation and economic development to include invited representatives of logistics agencies, industries, providers and other interests such as non-profits to serve in an advisory role to the State. This committee would meet throughout the year and review freight plans, legislation, projects and issues, as well as to serve as a voice for freight. DOT would also have a modal committee with representatives from the Department of Economic Development (ED) that would participate with the stakeholder group as well.

### **Data Development**

DOT would initiate a coordinated data program to collect, keep and use in modeling and forecasting current data on commodity flows, business activity, available properties, planning and zoning, demographics and potential job creation benefits of transportation projects that would help illustrate the impacts of projects and to provide justification for their completion.

### **Creative Financing and Policies for Transportation Projects**

DOT and the State can no longer rely on the federal Trust Fund or State funds as a means of fully funding improvements. The need is too massive and the economy is not supportive at this time. The State needs to build a toolkit of creative financing mechanisms and policies such as tax increment financing, rail tax credits, port zones and other programs. This may take significant legislative actions and a change in the way the State traditionally does business; however, this will provide the State with the ability to do projects without relying on public financing.

### **Partnership in Site Selection and Business Recruitment**

Economic entities in the State can no longer be reactive in business recruitment. We must be proactive and DOT must be in the deal discussions. For example, a local economic development agency cannot try to locate any and all businesses for the sake of having a business. They, along with the ED must work with DOT to identify where businesses should be located to maximize the multi-modal use of the transportation network. This will also involve Planning and Zoning representatives, but DOT can aid in recruitment deals that lead to better land use, reduced congestion, more economic benefit for the industries and better environmental outcomes.

### **Introduction: Economic and Transportation Conditions**

Our State is faced with broad challenges, yet excellent opportunity. We are fortunate to have Class I railroad access, an international airport, a strong workforce and to have metropolitan areas with a relatively mature transportation network. This network has some current capacity, but in the future, this capacity will be greatly compromised by growth in population, aging infrastructure and shifts in economics. For years, urban sprawl was permitted and this led to the development of miles of roadway but also increased freight costs and infrastructure costs as the population was less concentrated. Today, keeping up with the infrastructure is the highest expenditure of transportation dollars and it infringes on the State's ability to fund new projects of other modes, and a mode shift for both passenger and freight operations is needed. More people need to utilize public transit, and it is critical to move more freight by rail, air or water. Years of no coordination between local government economic development offices and a highly reactive State economic development division were simply spent recruiting companies anywhere and anyhow. This contributed to the high number of truck movements on the roadway network and the lack of industrial and commercial connectivity to the railway or other multi-modal opportunities. Given the future growth and its need for consumption, as well as the need for a balanced economy, it is critical that the State pursue means of transportation improvements and Smart Growth that contribute to the balanced economy and help it grow through the diversion of truck movements to other modes through coordinated planning and the availability of public project financing mechanisms that are legislatively permitted.

### **Transportation's Role in Economic Development**

Transportation is critical to the well being of the economy. It is fundamental for workers to get to work, for customers to be mobile, for freight to move and for products to reach store shelves. The flow of the supply chain, which is part of the price of a product, is determined by the transportation network. So as the State hopes to increase economic opportunities, it is critical to include transportation planning as a part of economic development agenda. As Smart Growth goals are a national priority and preventing urban sprawl is an issue in the State, it is no longer good practice to locate industry wherever property is available. Industrial growth thrives only when it can be part of an efficient and congestion free logistics network, part of a well thought out and coordinated land use plan.

There are a number of ways that transportation investments can support economic growth projects. The following illustrate opportunities for the State:

- Partnering with planning entities on the state and local level can help plan for industrial locations that maximize access to multi-modal transportation options for efficient freight flow. Additionally, industrial areas can be clustered so that multiple businesses could take advantage of transportation infrastructure. Improved freight flow results in reduced cost for production and more reliable product availability.
- Freight Corridor designation can improve access and freight flow in the designated areas by reducing encroachment to the industrial areas and encouraging freight uses on these corridors over residential or commercial options.
- Improved freight technology such as virtual yards, emissions reduction technology, and communications improves efficiency and freight flow.
- Marine highways help to identify ways in which water movement can be used as an extension of surface transportation. If opportunities to do this are available, it can reduce congestion on roadways and decrease product cost due to the fact that water movement is cheaper than other modes.

### **Elements of a Comprehensive Plan for Transportation and Economic Development**

Wisely investing in transportation enhancements is key to the economy in the State, and this plan identifies the appropriate steps that are recommended including outreach, a strong data program, the implementation of creative financing mechanisms for transportation improvements and the partnership with economic development entities on site selection and business recruitment. Each step is detailed below:

### **Outreach Opportunities**

Outreach is the first and most important component of the plan as it builds a relationship with local governments, the modal administrations and stakeholders. Many states employ stakeholder advisory groups as essential elements to their planning processes and the future Transportation and Infrastructure reauthorization bill appears to mandate these types of groups for the transportation improvement decision making process. Our plan includes reaching out to the modes as well as establishing a stakeholder advisory group to help review planning and financing programs.

### **Data Development**

Essential to the decision making process is developing strong data capacity. This would help us to make sound decisions and to see the truth in benefit estimates of projects – another mandate in the future reauthorization bill. The State would utilize data to better understand how improvements would aid in job creation and this would tell the story of how transportation improvements are critical to the economy. The data would be used to model greenhouse gas reduction, job creation, congestion and many other elements that would make the case for projects.

### **Creative Financing for Transportation Projects**

The state needs a toolkit for making projects work. Economic conditions no longer afford the State of the luxury of having a high level funding stream for projects, so mechanisms for financing that are non-traditional are needed. Implementing through legislation or other means the ability to engage in tax increment financing or public private partnerships is necessary to further transportation projects, and when justified by the benefit data, would make sense to investors and local governments.

### **Working with Economic Development Offices on Site Selection**

One of the most critical ways to ensure the most efficient use of the transportation network is to advise local governments, new businesses and other economic entities during the site location or site preparation process. For example, the DOT would aid a local economic development office in identifying the most beneficial locations for certain industries so that the industry could make the best use of the freight network. If the industry could utilize the rail network, then the DOT would work with them to locate on the rail line and in creatively financing spurs or sidings rather than that industry locating elsewhere are relying on trucks.

### **Comprehensive Approach = Multiple Benefits**

With these four main plan elements in place and working together, this plan affords a comprehensive and proactive approach for the DOT to be effective in the economic development process and to help the State realize benefits for the economy and transportation network leading to improved environmental conditions, workforce access and quality of life.

### **Outreach Opportunities**

Important to the development and implementation of any transportation project is the effort made to reach out to the public and private stakeholders. It is imperative that stakeholders are engaged so that they can understand the meaning and benefit of economic development projects, as well as the process by which transportation projects are planned and implemented. There is limited land for increased economic development in urban areas, but these areas are the most appropriate areas for growth since they are adjacent to multi-modal freight opportunities that would serve an industrial project. There is land in rural areas near interchanges, but this would require a significant investment in rail in order to link these projects to a mode other than highways.

With growth being an issue, stakeholder involvement helps to educate people on the implications of projects. Often, there's opposition to projects because of the unknown, but a well thought outreach strategy can help.

Stakeholders, both private and public, will be involved by:

- Contacting the identified businesses directly.
- Sharing our proposed business plans with them.
- Reaching out through their business associations such as the Chamber of Commerce and/or Business Improvement Districts (BID).
- Advertising in the state and local news papers inviting interested parties to submit comments.
- Mailing out brochures and infomercials to identified stakeholders.
- Using available state and local business directories and phone books to mine for any and all groups in the state that will be impacted.
- Mine for businesses through the state agency responsible for business registration in the state.
- Reach out to mass transit users by distributing flyers and other project description booklets in the buses and trains.
- Contact community groups/residents residing within and immediately outside the boundaries of proposed project or development areas.
- Establish and publicize our website address where project status is posted and interactive discussion ensured.
- Set a project time line with certain dates for a public forum to update and exchange ideas on the project for each proposed project and continue to send updates to attendees.

To implement this project successfully, the state needs to use a context sensitive approach. This requires involving and engaging all the representatives of identified stakeholders listed below from project inception, writing the scope of work, through design phase and to project construction/completion. A solid way to engage these groups is to incorporate the representatives as members of the project Advisory Committee. As committee members, this body meets often to discuss status before any scheduled community/public meetings. This conversation should include the following groups:

- The Port Authority
- The Airport
- Auto production industry
- Trucking industry
- Petroleum industry
- Shipping Association – for container goods
- The owners/operators of the distribution centers and warehouses
- Labor union representatives
- Farmers
- Real estate developers
- Barge owners/operators
- Mass transit
- Class I railroads and passenger railroad operators
- Port security / Homeland Security
- Other private businesses and residents

The stakeholder advisory committee and included representatives from the external agencies would meet every other month or additionally as needed. The group would review projects and would provide input and

coordination for planning and implementation. Because these types of advisory committees require a high degree of planning and strategy, the DOT's Office of Planning would be assigned responsibility for logistics.

Several states have advisory committees that could serve as a model. In Maryland, for example, there is a Freight Stakeholder Advisory group that includes hand picked members of the listed groups who serve by invitation of the Secretary. This group meets four times a year to review the freight plan, discuss freight issues, provide input on legislation and to contribute to a discussion on other issues that the state needs to consider. Virginia has a similar group that is much more formal and appointed to provide a higher level of input to freight operations.

We propose that the advisory group for transportation and economic development begin as an invited group of representatives chosen by the Secretary (recommendations will be provided). This group would be invited to the DOT and would meet four times a year initially. The DOT Planning staff would set the agenda in conjunction with policy staff and the Secretary to identify the key needs of the group. For example, one of the first meetings could include a discussion of ways in which to creatively finance freight projects, as well as opportunities for locals to engage businesses in diverting commodities to rail or other modes. It would be important to map out the year and identify when meetings would be held so that calendars could be set and to identify when the legislative discussion would need to take place or when a freight plan should be updated or in work, etc.

### **Public Agency Involvement**

It is important to involve other agencies in any project planning. Within the Department of Transportation it is important to involve the modal administrations. It may be beneficial to create a modal project team consisting of:

- Department of Transportation
- Aviation Administration
- Mass Transit Administration
- State Highway Administration
- The Port Authority
- Any other State Authorities by which we fund transportation projects

We may also consider including as needed the following agencies:

- Gubernatorial staff
- Department of Economic Development
- Customs
- Environmental Protection Agency and State Department of Environment
- Transportation Police
- Coast Guard
- Department of Planning
- Federal Highway Administration
- Elected Officials, especially those from the impacted areas
- Local Government staff in economic development, planning and zoning, and public works

Of key importance is the partnership with the State and local economic development offices. In working with the State Department of Economic Development (ED), it is critical to include staff members from their outreach or regional divisions in every step of the infrastructure planning process. ED normally keeps excellent data on available properties, companies and workforce, so we would want to include their data in any of our data efforts and modeling projects. Additionally, we would include staff members in our stakeholder advisory committee,

as well as our modal meetings to encourage coordination. ED has several financing mechanisms that are targeted to companies for improvements, but there may be ways in which we can work with them to structure deals in luring companies to our State through the use of their financing programs and in offering improvements such as docks, airport ramp facilities, rail sidings, etc., through the use of creative financing detailed below. It would be beneficial for the DOT Secretary and ED Secretary to meet and discuss point personnel and or divisions for a mandated, top down support of these coordination efforts placing greater importance in the partnership.

### **Creating a Strong Data Program to Show Benefits of Transportation Projects**

In order to make the most efficient and appropriate transportation enhancements to support the State's economic growth goals, it is necessary to do a comprehensive review of the current transportation system and needs. This requires a review of data on growth, freight movement, growth trends, commuter needs, congestion and other indicators. The following represent the possible data that would be used to better understand the transportation network.

- Collect data on numbers of containers and tonnage of other shipments in and out of the port for the last 10 years. Gather origin and destination data on these shipments as well along with the transportation mode on which these shipments travel to and from the port. This data would be gathered through the port authority and operators. Present the data in a chart or graph form with narrative.
- Collect traffic count data for the port area and the urbanized area to show routes and times of greatest traffic flow and congestion again for the last 10 years. This will provide information to plan for future port expansion and capital needs of the local highway system. This data would be gathered from the State Department of Transportation (DOT) and the local Metropolitan Planning Organization. Present in chart or graph format with narratives.
- Review information on the rail infrastructure in the area to gather information on the weight and height restrictions on the rail lines serving the port, and where they are located. Develop engineering estimates on the costs to remove these restrictions. Recommend routes where investments should be made and involve the railroad operator in potential public/private partnerships to remove the restrictions.
- Information would come from Railroads and the State DOT. Develop a regional rail map with areas that are restricted numbered and highlighted. Each number would translate to a short narrative description at the bottom of the map. Rank improvements based on return on investment and ability of the private RR to participate.
- Review information on at-grade rail crossings in the area in coordination with traffic data look for opportunities to close at-grade crossings where possible. Where closures are not possible, review crossing locations to look at opportunities to move roadway overhead or underneath rail line to reduce at grade crossings. Gather data from the Federal Railroad Administration (FRA) and Federal Highway Administration (FHWA) on these crossings, their safety scoring and the availability of Federal Section 130 crossing safety funding to assist in paying for closures and moving to split the grades to improve safety and efficiency. Where this is not possible improve signal systems at the at-grade crossings to make the flow of traffic and trains more efficient. Present as a regional rail map with reference numbers. Print FRA inventory page for each crossing with safety scoring. Highlight recommended crossings for improvement.
- Review US Geological Survey (USGS) maps and aerial photographs to look for locations to develop an off port intermodal hub to reduce congestion around the port and urban area. Locations should have

nearby access to rail lines and the interstate highway system. This mapping would be available from the State DOT and regional Metropolitan Planning Organizations (MPO's). Present maps with potential development locations highlighted. Each area should have a narrative laying out the pros and cons of each location and recommended sites.

- Collect additional background data on intermodal development locations including available land and detail on rail and highway access. Development sites should have the ability to have a dedicated interstate access and rail access by both class 1 railroads with dedicated sidings and loading sites. The land tract should be able to be accessed from the port and urbanized areas by at least one of the existing rail right of ways (ROW's) to allow worker access by passenger rail and a freight rail shuttle. An alternative would be dedicated haul road for off road trucks hauling containers for efficiency and the ability to use overweight trucks. Development site should have additional land for warehousing and distribution facilities on site with access either by rail or internal road system. Parcels should be ranked based on the number of important criteria the site meets with cost as a secondary factor. Cost estimates would be developed with the project in multiple phases. Ability to develop each site with multiple public/private partnership models should be assessed. Public support might include, land purchase, development of interstate ramp and circulation roads, and development of multi-use corridor to include freight rail, passenger rail and potential dedicated heavy haul road, with lease provisions to a private developer. Lease payments received can be used to maintain infrastructure and support commuter rail to the site.
- Gather data from regional planning organizations, municipalities, developers/business park operators and others to include as part of development/business plan.

### **Creating Financing and Policy Initiatives**

#### **Traditional Financing**

Currently the utilization of user fees to finance surface transportation improvements has proven to be a reliable and equitable method to support the nation's highway and transit infrastructure network. User fees, by their nature, ensure the individuals or groups who derive the benefit from a service or products are responsible for its cost.

The finance system has contributed to the success of the highway program in delivering a positive return to the national investment in highways because fees modestly discourage motorists from making trips of little value, spending is limited by the revenues generated from users, and motorists can see the cost of providing roads in the fuel taxes and registration fees they pay. However, highway programs have important failings related to finance. The system does not provide a strong check that individual projects are economically justified. Congestion and pavement costs are tolerated and could be avoided if motorists were charged prices that more closely match the cost of their use of roads.

At this time, a series of highway user fees generate revenues that are deposited in the Highway Trust Fund to support the federal highway and public transportation programs. The most prominent of these is the federal excise tax on motor fuels, which yields almost 90 percent of Highway Fund revenues. There are also taxes on commercial trucks, tires, and heavy use vehicles. The structure should continue to provide the financial foundation for the core federal highway and transit programs. These user fees, however, must be increased to better enable these programs to meet their defined mission.

All options presented are expected to be combined as appropriate, utilizing a variety of funding mechanisms. While not recommended, another alternative is to do nothing new to raise funds, and rely on current funding sources and the constraints those present. This would mean a much longer time frame within which priority projects could be constructed.

Vehicle related revenue sources are fee-based and may be viable methods of funding transportation facilities. The fees should be assessed for stability, adequacy predictability, responsiveness to inflation and road usage, flexibility, appropriateness of dedications for transportation, point of taxation and number of taxpayers, compliance and administrative costs, potential for tax evasion, equity by income class, relationship to economic efficiency, ease of implementation and political acceptability. The following is a list of vehicle-related revenue sources:

- Tolling of transportation facilities
- Value pricing
- Vehicle miles traveled fees
- Weight distance fees
- Vehicle property fees
- Alternative fuel taxes

*Given that the current economy places considerable demand on the funding potential for new projects, it is necessary to develop creative funding mechanisms.*

### **Policy Alternatives for Creative Funding Mechanisms**

There are multiple alternatives for addressing freight infrastructure at the federal level, but due to the economy and competing needs for transportation funding, states must develop creative policies for addressing their own freight infrastructure issues. We need an independent mechanism for addressing freight infrastructure deficiencies through financing so that it does not have to rely on the federal government and can continue to be competitive in the global economy. For example, if the railroads, privately owned or state owned, could keep up with the pace of its infrastructure needs, then we might not need an alternative except perhaps an incentive in areas where investments would not be made naturally due to low profit potential. To remain competitive, however, we need to implement freight financing alternatives that best fit our needs and foster the infrastructure investment needed for a strong, efficient, and maintained rail system.

### **Options for Alternatives**

In researching policy alternatives, the following have been successful in other states or appear to have the most potential for implementation. These alternatives do not represent the universe of options, but they do represent the top alternatives that, on the surface, show some opportunity. It is important to note that these alternatives would strengthen the ability to fund freight infrastructure while reducing its reliance on federal programs, which are no longer reliable enough to count on continuously.

### **Tax Credits**

A tax credit may encourage companies to invest in infrastructure improvements or additions without seeking public funding. For example, a rail spur paid for by a manufacturing company would entitle them to a tax credit. The State could determine whether the credit would be for property tax or income, and structure the tax to generate the greatest benefit. The manufacturing companies would be rewarded for investing in freight infrastructure that they might otherwise expect the state or a Class I Railroad such as CSX to implement through receiving a tax credit for a set number of years will offset the cost of such investment and increases their capacity to ship more efficiently via rail rather than use solely trucking. This helps reduce the cost of their product and boost revenues.

### **Tax Increment Financing**

A Tax Increment Financing District or (TIF) allows the State local government to set a designated area in which development or redevelopment may occur and to utilize an increment of the new tax revenues to pay for infrastructure, either by paying debt service to a bond or by paying the actual infrastructure cost. For example, if a county established an industrial area and wanted to maximize rail usage, it might use a bond to pay for the rail connection or upgrade to serve this area rather than have it completely served by trucking. Because of the upgrades and efficiency of rail access, they would likely be able to lease out or sell the industrial property to a company and they could then dedicate a portion of the increased tax revenue from the area to pay the debt of the bond.

### **Public Private Partnership**

Public Private Partnerships (PPP) present an opportunity for the private sector to build a public use entity such as a rail line or dock and establish revenue sharing agreements with the government. There are multiple ways in which a PPP can be structured. For example, the State might seek to have a private corporation build a short line railroad for the State, operate it, but establish a cost sharing mechanism that pays for the improvement. This can also be thought of as “contracting” where a private entity does more efficiently what the government would have done on behalf of the government.

### **Rail Enhancement Funds or Grant/Loan Programs**

Rail Enhancement Funds (REF) are grant funds or loan funds that can be used to make infrastructure improvements that usually require the grantee or borrower to contribute 30% of the cost as a match. The grant funded option would help to use the combined State funds and matching funds to do projects or purchase equipment. If a loan, it could be structured as a revolving loan fund where the interest could be used to pay for future projects.

In order to promote economic development in our State, we must make strategic decisions that maximize the expenditures necessary to create investment. Innovative solutions are necessary to promote an environment where companies will want to locate and grow. We feel these set of proposals will give a competitive advantage to our state and allow businesses that rely on a strong supply chain to prosper:

### **Port Zone Tax Credits**

Businesses that locate in a designated port development zone would be reimbursed the cost of tax for new equipment, expansions to their facility and retrofits to existing equipment and facility to make them more modern and energy efficient.

In addition, new employees hired by companies in the zone would receive a deduction on that company’s payroll tax for that employee encouraging greater employment and reducing costs.

While the state would not gain additional tax revenue from this program, it would generate increased commerce for new equipment and greater employment.

### **Container Fees Dedicated to Improving the Port Zone**

In order to fund many of our proposed initiatives, we believe that assessing container fees for containers entering and leaving the port is a necessary and viable way to generate revenue to improve infrastructure and promote business around the port.

The proposed green bank will be continually replenished through these fee collections. In addition, these fees can be used to bond and pay for the construction of a shared parking garage in the port district which will eliminate the need for individual parking at each business and provide more space on each parcel for actual supply chain activities. These fees will also be used for infrastructure and utility improvements and maintenance around the port, training programs, and port marketing programs.

### **Brownfield Fast Permitting and Zoning**

The state will work with businesses within the designated port development zone or businesses interesting in locating there to remediate brownfield parcels in an environmentally friendly, but also business friendly way.

Because the zone is strictly industrial, businesses will be able to remediate in a less stringent manner with few environmental permits required to begin work. These steps will reduce the cost of the process and the timeline needed to make it happen.

In addition to a more streamlined permitting process, the state will work with businesses to lessen the density requirements in the port zone to increase the square footage that can be used for value added services. These include relaxation of height and parking requirements as well storm water management being done on a district wide basis rather than site to site.

### **Promoting Green Initiatives**

By promoting business practices and investments that are environmentally friendly, the state will reduce the amount on energy consumption and pollution by businesses in the area.

These steps will include tax credits to businesses that purchase diesel retrofit engines for their vehicles or trains, energy efficient equipment, and modifications to their facility.

These credits will not only improve the environment around the port but will also encourage businesses to make improvements that make them more competitive.

In addition, a green bank will be formed from revenues and taxes generated within the port district to purchase solar panels and other energy efficient equipment on a district wide basis where they will be sold to the business at cost. This program will reduce the cost of such equipment to the business through economies of scale.

### **24-Hour Services**

Removing restrictions on hours of operation for port activity would increase employment and allow businesses to conduct their operations as all hours of the night. In addition, trucks headed to the port would no longer have to furlough overnight while they wait for daytime hours of operation. This would increase the amount of activity that be conducted at the ports as well reduce congestion at peak hours.

### **E-Tolling**

The ability for a business to streamline its processes and cut down on the time needed for goods to reach their destination from the port is a great incentive for development in our state. Moving tolling and fee functions to the Internet while providing businesses along our highway corridor with free wi-fi are ways to promote such investment.

By replacing traditional toll booths with virtual toll plazas for trucks would improve freight reliability and velocity. The state would work with a software company, Google for example, to design a software package able to be installed onto miniature notebooks for use in trucks. From there, wi-fi points would be installed in the port development zone and along the highway corridors to the port.

Truckers would be able to pay tolls, fees, access and renew port credentials, navigate via Global Positioning System (GPS) and receive traffic and other alerts right from this laptop. Grants and credits to purchase these laptops would be made available to improve the widespread distribution of such a system.

In addition to free access to the internet, businesses would have total visibility of their rolling assets and be able to monitor their progress and communicate with them.

The project would also have benefit to first responders and highway authority. The GPS transponders would estimate speed between e-toll points and send back information on congestion and accident information. Notices could be sent to trucks with the software alerting them of events or weather conditions. In addition, trucks could report on accidents which would be sent to first responders for a better response time.

### **Factors Important for Site Selection**

As we better understand the state of the transportation network along with the opportunities for future growth, we need to work cohesively with economic development interests to make decisions about supporting an economic development project. Below are the important factors for site selection.

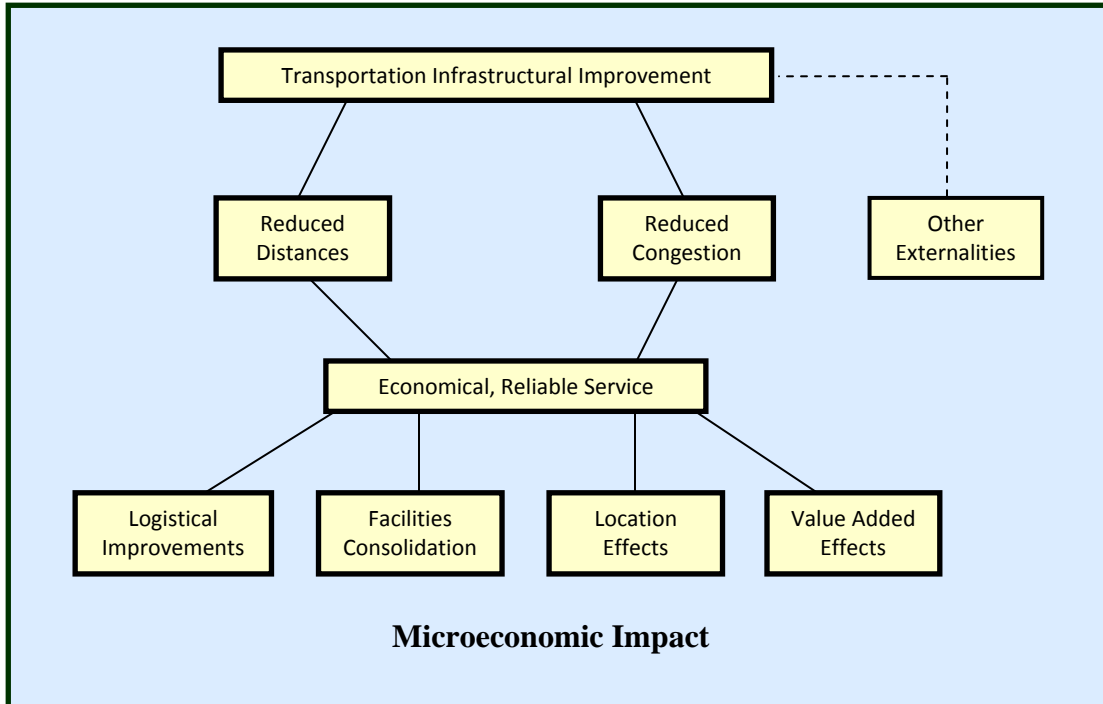
- Is the project in a designated growth area?
- What is the proximity to multi-modal transportation options?
- Proximity to water channel
- Existing roadways
- Future roadway potential
- Congestion issues
- Rail system
- Potential investment needed in rail system
- Airports
- Access to the major freight corridors
- Availability of workforce
- Affordable housing
- Taxes
- Low exposure to natural disasters
- Work with Federal inspection agencies to evaluate the security needs

Freight long range planning should be a major component of all future transportation decisions around the area. Using the Statewide Freight Plan as a guide, we can best help in the site selection process from the outset by identifying sites that have the most potential before a site selection is made based on access to the freight system.

Investments in transportation infrastructure can lead to better or cheaper freight services, which in turn lead to increased productivity of individual firms. Cost Benefit Analysis (CBA) is the conventional means of assessing microeconomic benefits. The first and most obvious of these benefits is the reduction in inbound and outbound transportation costs. Highway infrastructure improvements such as additions of new roads, expansion or improvement of existing roads, and expansion of effective capacity through implementation of Intelligent Transportation Systems (ITS), reduce costs for two reasons. First, as the network expands the density of its links increases, making point-to-point trips less circuitous and thereby reducing distances. Second, addition of new roads and capacity expansions on existing roads may decrease congestion and thereby travel times. Either way, the amount of transportation input per unit of production—measured in the first case in vehicle miles and in the second case in vehicle hours—goes down, hence an improvement in productivity.

Using these site selection criteria, we can best work with the proposed advisory committee to help with the site selection process and then to make better decisions about transportation projects that have the maximum impact for economic growth.

## Recommended Investments



Aside from building more infrastructures, emphasis should be on more efficient operation of the existing transportation system. ITS investments would be the key to an efficient transportation system.

Business clusters are attracted by:

- Targeted capacity expansion that alleviates high frequency bottlenecks to improve transit time and,
- Reliability

FHWA research indicates that demand for shipping services varies with the expected speed of delivery.

## Key elements of Transportation Investments:

Basic Infrastructure:

- Roads
- Bypasses
- Airport capacity
- Port development and improvement
- Extension of railroads

Technology Investment:

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- Deployment of ITS technology and adopting best practices for improved operation
- Identify emerging technologies to facilitate intermodal movement of goods
- Integrating Freight in transportation planning
- Work with international stakeholders to develop an integrated communication system to ensure better tracking and smoother operation
- Invest in ITS tracking technologies for security

Workforce Investments:

- Technical training
- Access to business centers via public transportation
- Development of support industries to keep manufacturing and supply costs low

**Conclusion**

Freight Projects provide a tremendous opportunity for economic advancement. With outreach, data efforts, and creative financing, the State can plan and start implementing projects that make the State more competitive and increase capacity for economic growth. Additionally, strong freight programs help alleviate congestion and issues pertaining to growth providing additional benefits such as air quality improvement and land preservation. There are a multitude of projects the State can implement quickly and cheaply, but strong support from the Executive Office would help to advance the long term, high cost, yet beneficial projects which provide maximum benefits in the long run.

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# ***Capstone Group Project Presentation - Economic Development***

November 17, 2009

2:00 PM to 3:00 PM

## **Some reminders to make sure the web cast runs smoothly...**

- Please do not put your telephone on hold at any point during the call
- Please mute your telephone line unless participating in discussion
  - \*6 to mute, \*7 to return to talk mode
- Feel free to utilize the chat function for questions, or to indicate that you would like to speak



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# ***Agenda***

- Welcome
- Introductions
- Meeting Objectives
- Capstone Presentation
- Questions and Answers, and Feedback



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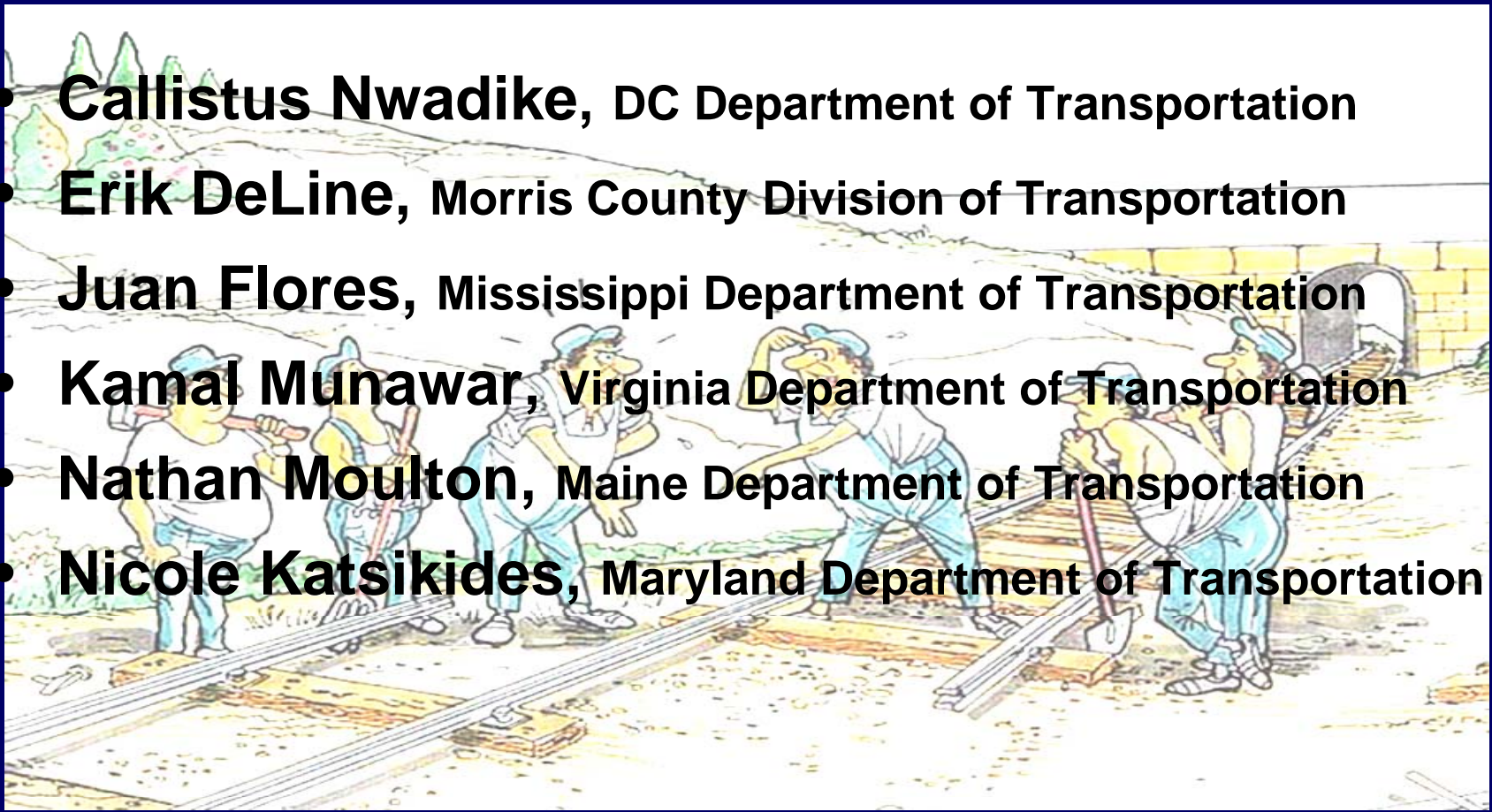


# ***Strategic Plan for Transportation Enhancement and Economic Growth***



# ***Team Members***

- **Callistus Nwadike**, DC Department of Transportation
- **Erik DeLine**, Morris County Division of Transportation
- **Juan Flores**, Mississippi Department of Transportation
- **Kamal Munawar**, Virginia Department of Transportation
- **Nathan Moulton**, Maine Department of Transportation
- **Nicole Katsikides**, Maryland Department of Transportation





# ***Scenario Background***

- International port
- Airport with domestic and international service
- Distribution center clusters
- Some manufacturing plants (auto)
- Agricultural production continues
- Growth pressures
- Two Class I railroads and several short lines
- Barge opportunities
- Highway congestion
- Need double-stack capacity for the Port
- Economic growth is a top priority!



## ***4 Point Approach to Economic Growth Through Transportation Focus***

- Collaboration with other agencies & Outreach Opportunities
- Data Development
- Creative Financing
- Partnerships for Economic Recruitment and Sustainability



# ***Key Outreach Strategies***

- Reach out to all stakeholders - commuters, transit users, community groups, Chamber of Commerce / Business Improvement Districts



# ***Outreach Strategies (Continued)***

- Establish direct contact with affected private entities and share plans with them
- Solicit public's input through advertising, mailings, interactive discussions, etc.
- Set project timeline and include public forums at various stages



# ***Potential Partners***

- A solid way to engage the maximum number of stakeholders from the project's inception to completion is to form a Project Advisory Committee involving representatives from:



# ***Potential Partners (Continued)***

## **Project Advisory Committee**

- Port / Airport Authority
- Auto Industry
- Trucking Industry
- Petroleum Industry
- Shipping Association
- Distribution Centers/Warehouses
- Labor Unions





## ***Potential Partners (Continued)***

- Elected Officials
- Farmers
- Real Estate Developers
- Barge Owners/Operators
- Public Transportation Authorities
- Railroads
- Homeland Security
- Businesses and Residents





# ***Data Program For Improvement in Freight Flow***

A Data Program should be comprehensive enough to address the following issues

- Port – Number and Tonnage of Containers, Origin and Destination information, transportation means for shipments to and from the port.



## ***Data Program For Improvement in Freight Flow (Cont.)***

- Department of Transportation or MPOs – Traffic Counts for routes used by port traffic, congestion statistics
- Rail Infrastructure – Height & Weight restrictions for rail lines serving the port, data on at-grade rail crossings
- Geological Surveys – For example, consider an off-port inter-modal hub
- Land use data –



# ***Traditional Financing for Infrastructure Improvements***

- User Fees – excise tax on VMT based or motor fuels yields about 90% of Highway revenue funds
  - o Equitable Method but does ensure that individual projects are economically justified
  - o User fees will shrink in the future due to fuel economy standards
- Vehicle Related revenue – Tolls, Weight distance fees, Vehicle property fees, Alternative fuel tax



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# ***Creative Financing***

- Tax Credits
- Tax Increment Financing
- Public Private Partnerships
- Rail Enhancement Funds or Grant/Loan Programs
- Port Zone Tax Credit





## ***Creative Financing (Cont.)***

- Container fees dedicated to Port Zone Improvements
- Fast Permitting & Zoning of Brownfields
- Promoting Green Initiatives
- 24-Hr Services
- E-Tolling





# ***Factors Important in Site Selection***

- Potential for forming Business Clusters
- Existing transportation infrastructure & future Potential
- Proximity to water channels
- Access to major freight corridors
- Security & Congestion issues
- Tax concessions/exemptions
- Availability of workforce
- Housing/Health Services
- Environmentally Friendly/Renewable Energy



# *Next Steps*

1. Establish Economic Advisory Committee
2. Do outreach to understand issues and needs
3. Collect and analyze data, use modeling
4. Prioritize projects based on data and evaluation measures
5. Build a toolkit of creative financing mechanisms, help locals to implement
6. Build relationship with economic development entities and aid in site selection opportunities



# ***Conclusion***

- Industrial growth thrives when it can be part of an efficient and congestion free logistics network, and part of a well thought-out and coordinated land use plan.

