

Understanding of the Assignment

At ORA, our experience tells us that far too many transportation studies look at mobility from the eyes of the motorists and far too many citizens demand an ease of travel by personal automobile, often at the expense of what makes a strong community. Fortunately, communities, transportation agencies and informed citizens are realizing that simply moving traffic leads to more dependency on single occupancy vehicle trips and encourages development practices that have a lower sustainability and a greater carbon footprint. In street level terms, if we don't change the way we do transportation planning, thriving communities like Newark will suffer.

ORA sees a different way. A leader in bringing Smart Growth Principles to Transportation, we recently worked with the Delaware Valley Regional Planning Commission, the New Jersey Department of Transportation and the Pennsylvania Department of Transportation on a publication titled, *The Smart Transportation Guidebook, Planning and designing Highways and Streets that Support Sustainable and livable Communities*. This new Guidebook embodies our core beliefs that **congestion cannot be solved by building more, wider and faster highways because there will never be enough financial resources to supply the endless demand for capacity**. Simply, faster roadways merely speed traffic to new, less dense developments even further into sprawling suburban areas. That philosophy does not bode well for traditional urbanized districts like Newark. Which at it's core was originally designed as a walking community, but now has evolved into a community infused with vehicular oriented commercial and office development, wider, less walkable intersections and multi-level parking garages along once pedestrian friendly roadways.

Our approach is different. **We see the street as a transportation resource for all modes of transportation and its width is from building line to building line and not just curb to curb.** We strive to identify the context of the community and

the best balance between pedestrians, bicyclists, parking and moving lanes – not just find what is needed for the cars and trucks and then pedestrians and bicycles get the rest. We ask the question, what is the best use of the public space between the building lines? Others ask, can I fit in the extra pavement width to achieve a good level of service? Compared to the recent past, this is a radically different approach but it is one we believe in and believe can work in Newark.

When you select us, you are selecting a uniquely qualified group of experts who have worked with communities to improve their quality of life. ORA understands that the vision is to improve the quality of life and improve the economic vitality of the City. The City's center core, which encompass the University of Delaware as well as land use associated with shopping and entertainment, is a district with high demand for pedestrian and bicycle accessibility. At the same time, the area has experienced increased vehicular and parking needs that must be accommodated. This mixed set of demands brings difficult challenges to this assignment. However, our proven and award winning approach as detailed in DVRPC's Smart Transportation Guidebook, captures many of the same principles as DelDOT's Complete Streets initiatives. Our approach is geared to address those future concerns by truly addressing all modes of transportation in a holistic manner.

With today's economic and environmentally green climate, it is more obvious than ever that our planning and engineering efforts cannot simply call for building our way out of our transportation problems. As professionals in the industry we have known this for years and it remains our role to educate the public on our philosophies.

We understand that agencies must do more with less. Our approach to this assignment does exactly that, as we intend to rely heavily on previously competed reports, analyses and plans to develop an updated transportation plan for the City center and surrounding areas.

We also understand that effective management and optimization of the existing traffic system is vital to the City. Our proposal is to focus heavily on the issue of corridor management through better use of the existing traffic signal equipment. We will do this by developing an updated traffic optimization/simulation model for the City. The model would be used to focus on individual corridors and to perform sensitivity analyses along key traffic corridors. Additionally we would use the model as a effective presentation tool to help stakeholders and the community understand that combinations of traffic speed, increased volume and the desire to improve levels of service affect walkability and bikability within the community. Through our work on the Wilmington Signals Improvement Project, we faced these dilemmas on a citywide basis as we evaluated all 274 signalized intersections within the City, ensuring the needs of pedestrians and bicyclists were included in the design plans.

Additionally, during the design phase of the Main Street Improvements in Newark, we incorporated bump-outs at several crosswalk locations. This in-turn created shorter pedestrian crosswalks (yielding less signal time required) and a wider sidewalk area (fostering greater capacity for pedestrian movement). In this case, **our focused commitment to properly accommodate all modes of travel resulted in a balanced design that today is paying dividends to the community.** This is our proven "Smart Transportation" philosophy and we are offering it to you for this assignment.

Of course these are just two particular real world examples that we decided to highlight for the purpose of this proposal. There are others that would provide similar benefits. Our approach to the project is focused on the community and not just vehicular traffic flow.

We pledge that, if selected, we will bring forward a team of senior transportation planners that will work together with the all stakeholders on a durable plan that will result in strengthening the City of Newark so that it can continue to be a

vibrant center of activity that is more accessible for all modes of transportation.

Orth-Rodgers & Associates, Inc. would be honored to be selected for this important step in updating and implementing transportation recommendations for the City of Newark. **We look forward to working with WILMAPCO and its member agencies to recommend comprehensive City-wide transportation initiatives that will help to improve quality of life and multimodal mobility throughout the City of Newark.**

Technical Approach

We have reviewed the request for proposal and believe that our approach will not only result in producing an updated transportation plan for the City but also provide a direct and immediate improvement to the existing traffic signal operations in the area. **With our acclaimed knowledge and experience in the area of transportation planning, together with our hands-on technical experience in the field of traffic signal design and system management, our approach to this assignment will ensure that cost-effective solutions will be made for both long and short term initiatives.** In fact, we believe that we can recommend several low cost signal timing improvements that could be implemented rather quickly with immediate benefit. Additionally, we consider our ongoing relationship with DeIDOT's TMC and traffic engineering staff as a means to having sensible solutions quickly applied in the field.

Our approach recognizes that most City streets are for all modes of mobility – pedestrians, bicycles, transit vehicles, trucks and private autos. If the plan favors vehicles at the expense of the other modes, the streets will not see the activity levels the stakeholders' desire.

As we work through the process, you will see us create a balance among the modes, not just achieving a desired level of service for vehicles. In short, if we can give back space in the public right of way to the pedestrian or bicyclist, we will suggest it. We invite you to review our approach in the tasks that follow.

Task 1 – Confirm and Identify Transportation Issues and Opportunities

Stakeholder Meeting/Walking Field Review – Upon notice to proceed we will request all previously completed reports as noted in the RFP. We will review those studies' objectives and desired outcomes. **In addition to meeting at a conference room table, we propose a walking field view with**

the City, WILMAPCO, and DeIDOT representatives. We see the first stakeholder meeting as the ideal moment to discuss our concepts of balancing the modes, maximizing street space for people – much as we did for the Wilmington Urban Corridor Studies. As we walk, we will bring forward the ideas from our proposal and review how we intend to analyze them as well as understand the positions and reactions of the partners.

The studies which we assume will be available to the project team for use in this project include the following:

- a. Newark/Elkton Intermodal Transportation Plan, 1998
- b. Newark/Elkton Intermodal Transportation Plan Short Range Analysis, 1996
- c. City of Newark Comprehensive Development Plan
- d. WILMAPCO's Regional Transportation Plan (RTP)

Upon reviewing the current status of all available data and after the walk through of key corridors, a detailed summary will be prepared outlining the current status of all ongoing or previously identified initiatives.

Task 2 – Review/Analyze Key Issues

We anticipate beginning this Task with a Stakeholders meeting. At this meeting we will update the project team on the results of our review of existing conditions and ongoing initiatives. We will also prepare an illustrated handout for the meeting for the record that serves as our discussion outline. We will solicit input from all stakeholders at this time regarding planning strategies and potential solutions. We will prepare minutes of each meeting for circulation to the attendees.

Traffic Volume Data – As a means to minimize cost and streamline the project schedule, it is assumed that all available traffic data will be provided to ORA for this assignment and any additional data that may be required will be collected by either DelDOT or WILMAPCO. At a minimum we would presume that peak hour traffic volumes for the following corridors would be required and provided:

- A. Main Street
- B. Delaware Avenue
- C. S. College Avenue
- D. Elkton Road
- E. Cleveland Avenue
- F. Library Avenue

Pedestrian and Bicycle Facilities – The first step of this assessment is determine general compliance with ADA guidelines (compliant handicap ramps and pedestrian buttons at signals as required). We will note any missing links and ‘unfriendly’ streets with regards to bicycles and pedestrians. We will note any updates to the official DelDOT bicycle plan. The ultimate plan will note difficult and broken links and suggest recommendations to ‘repair’ them. Such recommendations could be narrowing travel lanes for bicycle lanes, widening sidewalks where possible, etc. Again, these **recommendations are focused on balancing the use of the public right of way among the modes of transportation.**

Transit – In formulating our approach, we have assumed that the key to developing rational initiatives and updating the preferred plan is to tap into any recent and comprehensive data. Specifically, we would request that information relating to service inventory, ridership data and other transit/rail strategies be supplied to ACG for their use in reviewing and updating the latest transit initiatives. Additionally it is anticipated that all previously completed work efforts relating to

the relocation of the Newark Train Station would be provided.

We would anticipate that the information above will allow us to better understand the current system in terms of service by time of day, street and direction.

Based on the assessment of the current system from both an operational and planning perspective, an assessment of any on-going initiatives will be reviewed. A brief summary outlining the current status of on-going initiatives will be prepared and any potential new initiatives will be called out. A host of amenities could be made as part of the options and could include items such as bus stop signs, benches, shelters, information kiosks.

Alternatives could also be formulated that reflect ACG’s recommendations for physical improvements and capital investment. For example, relocation and construction of the Newark Train Station could be reviewed. ORA is aware that plans are currently underway to attempt to keep the Newark Train Station in its current location. However, it is understood that an analysis of this option has previously been completed and similar studies may still be ongoing. As part of ACG’s work effort, we would provide an alternative source for review and comment. It is not expected that ACG would have a lead role in the Train Station relocation efforts.

Traffic Modeling - **We will develop a City-wide Synchro and SimTraffic model that will reflect the current conditions of all traffic signals within the City.** The model will be built upon the latest traffic count data (Model 1), running the AM and PM peak hours. We will prepare a level of service analysis for each of the study area intersections and note any deficiencies. However, we propose to take the analyses one step further. In the center of Newark, deficiencies lasting for one or two hours a day are not as critical as deficiencies lasting outside of the peak hours. This is often critical information in a busy City area. If the roadways didn’t experience some level of congestion, the City wouldn’t thrive as

a business center. If all the intersections were operating at level of service 'C' or better, traffic would zip through, hardly stopping to participate in the activities of the City and, perhaps most importantly, wouldn't be inclined to use the transit system. In short, the City of Newark would look like any vehicular-oriented suburb and lose its unique ambiance. Accordingly, in key areas with excessive peak hour delays (LOS F), we will note the duration of the deficient level of service using published 24 hour data to estimate duration.

We will also request the Stakeholders to consider other measures of effectiveness as well. As indicated, we propose to consider travel speed, number of stops and delay per vehicle. These measures relate to sustainable development. We all want to be 'green' in our planning and transportation planning is no different. In this case, we want to 'manage' these measures. For example, keeping speeds along Main Street 10 miles per hour (including stops) is reasonable since it is in the core of the City where there are lots of pedestrians. Whereas outside the core, higher speeds might be acceptable. Reducing the number of stops and reducing delay are always important. Again, this is a balance ORA will strive to create. Making the streets less pedestrian friendly in order to increase vehicular speed or reduce a delay that is troublesome for only one hour a day is not the measure of a sustainable balance.

Next we will create Model 2 to show the existing traffic volumes increased by 10%. We will repeat the model runs to identify new deficiencies and determine how the existing deficiencies fare with the increased traffic. We will also make comparisons with the other measures of effectiveness. We will make comparisons of the measures as well as summarize the levels of service comparisons.

Upon completion of the model we will report our findings to DelDOT and submit all Synchro files to them for their use. **We will identify any timing adjustments that could be implemented immediately** and request that DelDOT update their

timing plans accordingly. We will work directly with DelDOT's Traffic Engineering staff to ensure these adjustments are implemented.

Noting the deficiencies, we will work with the Stakeholders to develop a program of improvements that are sustainable as described above in our proposal. Our search for recommendations will not be limited to fixing level of service deficiencies. Rather, we propose a holistic look at the entire street system.

The first analysis we will consider is for the street system as it exists. For those streets, with excess capacity we can determine how many travel lanes they actually need, whether a bicycle lane is needed, whether the sidewalk is sufficient for the activities the city desires for those blocks. From previously completed parking surveys, we will review the parking occupancy and whether additional on-street parking ought to be added or restricted to the public right of way. We will suggest sustainable typical sections in balance with all the uses of the public right of way.

Task 3 – Develop a Consensus with Stakeholders

To better understand the current situation in downtown Newark, it is important to be aware of and address the vision, ideas and concerns of local leaders. As noted in the RFP, this would include WILMAPCO, the City, and DelDOT but we understand that it will also include groups such as merchants, developers, business interests, elected officials, U of D officials and the like, each with their own view of the City's transportation system. In strategic planning assignments, these individuals often are referred to as "stakeholders" that is, those with a stake in the future of the enterprise. To ascertain the views of these individuals, we propose to conduct panel discussions with these individuals involved in local transportation and development policy decisions. The direct participation of these individuals can identify the diverse views held within the project's study area. **We have used the stakeholder involvement process in numerous studies and find it a valuable technique for**

putting the specific issues of the planning effort in a comprehensive context.

We would work with WILMAPCO staff to identify which individuals should be included as stakeholders. A list of topics will be presented to participants for their review. It will reflect the concerns with existing initiatives, existing conditions and what the possible directions for the future may be. Of particular interest will be developing some insights as to which issues and changes are most important to the stakeholders and those that they represent.

Upon completion of the stakeholder's panel discussion, ORA will coordinate with WILMAPCO to finalize the best set of multimodal initiatives to include in the updated plan.

Task 4 –Public Workshops

As noted in the RFP, we would plan for attendance at three public workshops. In order to minimize the cost of the contract we would agree to having WILMAPCO's staff take the lead role in planning, scheduling and conducting the public workshops. ORA will however serve a support role in this important part of the project. We will prepare up to four poster board displays to be used at the workshops. We will have at least one person from the project team in attendance for each public workshop. It would be expected that Derrick Kennedy, the Project Manager, would be the likely attendee. Our role at the Public Workshops would be similar to those conducted for the Wilmington Urban Corridor Studies. We see these as informal interactions with the public. **We will establish stations with different information and engage the attendees in a dialogue about their impressions of what they are seeing and what they are hearing from the project team.** We do not anticipate a formal presentation. It is anticipated that the workshops will begin in the afternoon and last through the early evening. The first workshop will be designed to update the public on the changes since the 1998 study and the other

initiatives as well as review the work program for this study.

The second workshop will discuss the initial results of the traffic model and the type of improvements suggested by the technical analysis.

The last workshop will review the final recommendations. This workshop will again have stations and feature one-on-one dialog with the public.

Task 5 – Report Preparation/Deliverables

- We will prepare a draft report that includes the results of our review and analysis. One original hard copy and an electronic file (MS Word) will be provided.
- Up to four poster boards will be prepared for use at Public Workshops. Electronic files will be provided for use on WILMAPCO's website.
- Attendance at up to five meetings are assumed. These meetings include two with project stakeholders and three public workshops.
- One original hard copy of the final report will be submitted and an electronic file will be provided.
- Any proposed physical improvements will be posted to a GIS layer and submitted to WILMAPCO for use with their existing GIS files.

Project Schedule

Assuming notice to proceed is granted in January of 2010, we have assumed a 10 month schedule for this assignment. Based on this assumption we are anticipating an end date in October 2010. A more detailed graphic display showing the task by task schedule is included in the following sections of the proposal.