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PUBLIC HEARING

before

SENATE TRANSPORTATION AND COMMUNICATIONS COMMITTEE

To discuss roadway congestion and "gridlock" in southern New Jersey,
with special reference to Routes 42, 55, and 295

May 1, 1987
Council Chambers
Deptford Municipal Building
Deptford, New Jersey

MEMBERS OF COMMITTEE PRESENT:

Senator Walter Rand, Chairman
Senator James R. Hurley

ALSO PRESENT:

Assemblyman Wayne R. Bryant
District 5

Peter R. Manoogian
Office of Legislative Services
Aide, Senate Transportation and
Communications Committee

New Jersey State Library

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Hearing Recorded and Transcribed by
Office of Legislative Services
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State House Annex
CN 068
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New Jersey State Legislature

SENATE TRANSPORTATION
AND COMMUNICATIONS COMMITTEE

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April 16, 1987

NOTICE OF PUBLIC HEARING

The Senate Transportation and Communications Committee will hold a public hearing on May 1, 1987 at 10:00 A.M. in the Council Chambers located in the Deptford Municipal Building, Deptford, New Jersey.

The purpose of this hearing is to discuss roadway congestion and "gridlock" in southern New Jersey, with special reference to Routes 42, 55 and 295.

Anyone wishing to testify should contact Peter R. Manoogian, Committee Aide, at (609) 984-7381.

Directions to Deptford Municipal Building:

For those traveling south on Route 295, take the exit marked "Deptford-Westville" and proceed on Route 47 (east) to Deptford. Take Route 47 to the third light and take a left there onto Cooper Street (the intersection has a Midlantic Bank). Proceed to 1011 Cooper Street, the Deptford Municipal Building.

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mjz: 1-45

SENATOR WALTER RAND (Chairman): Good morning, ladies and gentlemen. If you will please take your seats, we will get started.

My name is Walter Rand, and I am Chairman of the Senate Transportation and Communications Committee. On my right is Senator Jim Hurley, from the First District -- from Cumberland and Cape May Counties. I am very pleased to tell you that he came up by Route 55, and I am sure he will have some comments to make on that.

I would like to welcome you here today to this public hearing. At this time, let me tell you that if you wish to speak today and have not notified the Committee, please give your name to Peter Manoogian, our Committee Aide, after the opening remarks are concluded.

On my left is Peter Manoogian, who is the Office of Legislative Services Staff Aide on Transportation to this Committee, and on my extreme right is John Strachan, the Minority Aide to Senator Hurley.

I call this public hearing to order for the purpose of considering the matter of traffic congestion and gridlock in southern New Jersey, with special reference to Routes 42, 55, and 295. Those of you who commute to Philadelphia are painfully aware of the traffic situation on Route 42 caused, it appears, by the faulty road design of Route 295, which permits traffic along that route to be mixed at certain points with the traffic from Route 42, and vice versa.

We are interested today to hear from public officials and members of the public concerning this problem and any remedies which might be proposed to alleviate it. In addition, at the conclusion of the testimony, we look forward to the views of the Department of Transportation on this matter. I want to thank Commissioner Gluck for sending a representative down here to give us her views, and to give us some idea of what is going to be done in response to the testimony we are about to hear.

The first witness will be Freeholder Director Joseph Roberts. Good morning, Freeholder. We are delighted to have you with us.

F R E E H O L D E R D I R. J O S E P H R O B E R T S:
Good morning, Senator Rand.

SENATOR RAND: Oh, pardon me. Before I start -- forgive me -- I know that Senator Hurley wanted to make a few comments.

SENATOR HURLEY: Since Freeholder Director Roberts is here, why don't you go ahead, and I will make my comments later on?

SENATOR RAND: Okay, fine.

FREEHOLDER DIRECTOR ROBERTS: Senator Rand, I want to first thank you for holding this Committee hearing, and for holding it so close to the problem area. I also want to thank Senator Hurley for being kind enough to join us today in Gloucester County.

I am here today as the Director of the Camden County Board of Freeholders to speak about an issue that affects not just Camden County or Gloucester County, but the entire South Jersey region -- the issue of gridlock in the 295 sub-area, which impacts upon all the citizens of South Jersey.

The highway problem, that is where I-295, I-676, I-76, I-55, and Route 42 converge, otherwise known as "The South Jersey Gridlock," poses severe problems for both motorists and the adjacent municipalities in Gloucester and Camden Counties. These municipalities include: Bellmawr, Brooklawn, Gloucester City, Gloucester Township, Mt. Ephraim, Runnemede, Waterford, and Winslow in Camden County, and Deptford Township, Monroe Township, Washington Township, Wenonah Borough, West Deptford Township, Westville Borough, Woodbury City, and Woodbury Heights Borough in Gloucester County -- a total of 16 gridlocked municipalities.

The most noted and noticed problem with the present configuration of the major motorways in the gridlock is, of course, traffic congestion. In just the five-year period from 1982 to 1987, daily traffic congestion on I-76, between U.S. 130 and I-676, has increased 10.8%, or 2.2% annually.

Even more striking statistics on the road congestion problem come from the Delaware River Port Authority and toll counters for the Walt Whitman Bridge. In 1960, the average weekday traffic count on the bridge was approximately 59,000 cars. By 1985, this count had risen to 94,445 vehicles per day -- a dramatic increase of 37%.

What all these statistics mean is that each year more and more vehicles are converging on this sub-295 gridlock area. Yet, since the 1960s, the roadways have not fundamentally changed in order to accommodate the increased traffic. In fact, the problem has only become exacerbated by the addition of single-lane entrance and egress ramps for I-55.

All indicators say that the traffic congestion is only likely to increase. For the record, I am submitting two charts which address this point. On chart one, I have listed population changes from 1980 to 1985 for the 16 gridlocked municipalities. As you can see, the combined population growth in the gridlocked corridor has been 5.8%. Some municipalities, such as Winslow Township, have grown by as much as 15.6%.

Perhaps an even more startling indicator of growth is the percentage change in housing units authorized by building permits, as listed on chart two. Here, I list the number of housing units for the seven fastest growing gridlocked municipalities from 1981 to 1985: Gloucester, Waterford, Winslow, Deptford, Monroe, Washington, and West Deptford Townships.

As you can see, the combined number of housing units in the seven municipalities increased an astonishing 67.8%. Housing units in Gloucester County alone grew 77.5%. Yet, the

motorways have not been altered to accommodate this growth -- growth which has no clear end in sight.

What is the price of the gridlock crisis? First, there are the certain prospects of more traffic jams and serious delays. Secondly, the number of traffic accidents is likely to increase. On Route 42 alone, between I-295 and U.S. 168, there was a 21% increase in the number of road accidents during the 13-year period from 1971 to 1984, according to the New Jersey Department of Transportation. Without drastic changes in the roadway system, the number of accidents will multiply as growth continues unbounded and more people travel the Atlantic City Expressway on their way to the casinos.

Third, there is the problem with pollution from all the exhaust fumes, as greater numbers of vehicles sit idly waiting in traffic jams.

Finally, the long-term prospect is that the maligned roadway system may inhibit economic growth, providing a disincentive for businesses to locate near traffic jams.

It seems to me that there are two basic solutions to burst open this gridlock: First, the State, that is the Department of Transportation, must help South Jersey. Too often, in my view, the State looks to alleviate the problems in the middle and northern end of the State, neglecting the problems in the southern part of New Jersey.

Like Route 1, the I-295 sub-area is one of the fastest growing areas of the State. Unlike Route 1, the State has done little to ameliorate the problem. The Department must widen ramp entrances and exists, clearly mark highway dividers, and provide better continuity on I-295, without transgressing Route 42.

The second solution is that the State should continue its support of the Philadelphia-Atlantic City Rail Line. This line would have an enormous effect on alleviating the gridlock problem.

My final thoughts are just to impress upon the Committee that the gridlock problem is not going to disappear by itself. All the statistics that I have presented this morning indicate that the problem is only going to get worse, and there is really a need to take action now.

Senator Rand, as you know, I have a good deal of familiarity with the traffic congestion problem that exists along Route 42 at the intersection of Route 55, since I live about a mile away, and have the obligation, as you do on a regular basis, to use that road. So I would just convey, in conclusion, that it is a very, very serious problem. I know of your interest and your willingness to encourage the Department of Transportation to be sensitive to problems in South Jersey, and I would just respectfully suggest, as I believe you know already, that this is something that needs the Department's immediate attention.

Again, I want to thank you and Senator Hurley for being here today to focus on this very, very important issue.

SENATOR RAND: Freeholder Director, we thank you very much for your testimony, and especially your supporting data, which we will use in the presentation of our case.

I just want to tell you one thing before I turn it over to Senator Hurley: We do not intend to just listen to the problems, which you so carefully summarized. We do have a representative from the Department of Transportation here, and I am sure that at the conclusion of this, we will be satisfied that Commissioner Hazel Gluck, of the Department of Transportation, is going to take some kind of definitive action on this matter, so we won't be left in the lurch, writhing and continuing our inquiries as to what is going to be done.

Senator Hurley?

SENATOR HURLEY: My only comment is to say how much we appreciate the thoroughness of your presentation, and the severity of the problem.

FREEHOLDER DIRECTOR ROBERTS: Thank you very much.

SENATOR RAND: Thank you. Senator Hurley, would you like to make any other comments?

SENATOR HURLEY: I would like to make comments in this direction. I am familiar with this problem, because I recently witnessed this: On the opening night of the Phillies, which was also the final regular season game for Dr. Julius Erving, I traveled Route 55 and tried to get off on 42. That was quite an experience. I was an hour earlier than I usually traverse this road, because I wanted to be in my seat at the Spectrum. I was in black tie, and I wanted to do the whole thing properly. I thought I might even see Dr. J before the game, or something. But, it is a severe problem. I was trying to imagine the solution; I was trying to contemplate the solution. So, I will be anxious to hear what the Department has to say, because as a layperson I cannot immediately imagine how you are going to solve this problem.

That is one of the compelling reasons for my being here today -- to hear how any engineer would address this problem, noting its growth and how severe it is.

I have one other comment. I live at the southern end of Route 55, which now ends in Port Elizabeth. I want to bring to the attention of the Committee, and to the attention of the Department of Transportation, and to the attention of all of you, what is going to happen when the construction is completed on what we call the northern end. All of the traffic that is traveling south, and will be traveling south on Route 55, is going to abruptly back up at Route 47 in Port Elizabeth. So, the kinds of problems you have now in this area, we are going to have in the little village of Port Elizabeth at the southern end of 55. People are going to be backed up for miles, not just for hundreds or thousands of feet, but for miles and miles, because there is no place to go in the summer. If you want to travel Route 47 into Cape May County, and you're going

on 55, it is abruptly going to end there. I just wanted to bring that problem to the attention of the Committee and the Department.

Thank you, Mr. Chairman, for allowing me to speak.

SENATOR RAND: Senator, thank you very much. Is Mayor John Robertson in the house? (no response) Then we will have Mr. Scolpino, the Planning Director of Gloucester County. Good morning, sir.

R O B E R T S C O L P I N O: Good morning. Senator Rand, Senator Hurley: My name is Bob Scolpino. I have been Gloucester County Planning Director for 12 years. I am sorry I don't have anything prepared. I am a last-minute substitute to appear before this Committee. However, I can speak to the program problems and projects.

In the 12 years I have been with the planning office-- I believe the very first month I was here, I was invited to a meeting by the then Mayor of Woodbury. They had some problems they wanted us to address. We had a meeting with State representatives about the interconnection between southbound 295 and 42. I am sure that problem has surfaced a few times. Historically, it has always been a problem and, as pointed out by Freeholder Director Roberts, it is not going to get any better. A connection has to be made.

There have been attempts to explore solutions to this by construction and design, but they have run into some problems because there are some concerns at the local municipal level and with the property owners who will be disrupted by any solutions.

About 20 years ago, I spent six years as Assistant Planning Director in Bergen County, and I recall some problems we had in North Jersey. We were working on Route 46 and Route 80 when they were being proposed; Route 2, which then became Route 17 -- the same types of problems. Development was overcoming the capacity of the roads to handle it. No

intersections could handle the flow of traffic being generated. Solutions were being offered historically from 1937, and this was 1960.

The only reason I bring this up, Senators, is that the problems have been well-documented here in South Jersey. Route 295, Route 42, Route 41, Route 73 -- all have been documented as problems. With the development of Route 55, they are only going to be compounded. The point I am making is, there have been solutions offered. They have not been accepted socially, politically, or financially. All I would like to say here is, in order to find solutions, we are going to have to develop a very broad base of support, and that broad base of support has to be from the municipal level and the citizens, because the design engineers at the State Highway Department and the design engineers at the county level can offer solutions. We have it within our realm of technology to offer solutions right now. I won't speak for the State Highway office, but I know because we are participating in certain studies now on Routes 55 and 42.

There are designs on 41 already, and the 42 intersection, which would relieve some of the congestion by making some better interchanges with those two highways. There is a corridor study now being done on 55, from the Walt Whitman Bridge to Atlantic City. Part of that study will be done to ascertain what some possible solutions would be to this gridlock and the interconnection between -- the complete interchange between 42 and 55, 295 and 42.

As I said before, we need to have a better understanding at the municipal level that someone is going to pay. I don't mean just dollars. I am talking about disruption.

SENATOR RAND: Inconvenience.

MR. SCOLPINO: I'm sorry?

SENATOR RAND: Inconvenience.

MR. SCOLPINO: Inconvenience, disruption, possibly buy-outs. The point I am just trying to make is, we are aware

that there is a problem, and it is only going to grow worse. It is not going to abate itself without intervention by us.

SENATOR RAND: I understand, Mr. Scolpino. We have a saying in the Department -- and I am not part of the Department, except that I have a relation to it -- "Every time you solve a problem, you create one."

I do want to say that when you are talking about the municipal level, this hearing is purposely being held in Deptford -- and I represent both communities; I want Senator Hurley to know that I represent Bellmawr and Deptford-- Both communities have suffered tremendously by the incursion of roads and cutoffs and interruptions and so forth. If there is a problem that has to be solved, I don't think there is just one answer to a problem. There are many answers to a single problem, and that is what we are going to try to do -- get an answer to the problem which does not impact either on Deptford or Bellmawr. Bellmawr has been cut by 295, by the Turnpike, by 42 -- everything you can think of, and Deptford, no less. Route 55 was unbelievable until we went through here in the past two, two and a half years -- detours and cutoffs and protests and so forth.

You are absolutely right, but what we want to do is make sure that the impact is softened -- whatever has to be done. If there are alternatives, we want to explore the alternatives and see what can be done without creating havoc on two major communities, one in Camden County and the other in Gloucester County.

MR. SCOLPINO: There are alternatives that we are exploring now, sir, but only between the levels of government of counties and municipalities, to abate some of these problems. We are working closely with them to find these alternatives and to bring in not only the elected municipal public officials, but the private developers; they are being brought into it now. It is a positive step, working with the

county and the municipalities, in attempting to develop a pace of growth with the construction of the highways.

We are running into some problems on the timing of the financing, and with some of the engineering on it. There is going to be a more serious problem, if we don't come up with a combined joint effort, sir.

Thank you very much for the opportunity to appear here, sir.

SENATOR RAND: You're absolutely right. We are going to try to work with you 100%.

Senator Hurley, do you have any questions?

SENATOR HURLEY: I have no questions. Thank you.

SENATOR RAND: Mr. Scolpino, thank you very much.

I see that Mayor Robertson just came in. You are just in time, Mayor Robertson. Good morning.

M A Y O R J O H N W. R O B E R T S O N: Good morning, Senator. How are you today?

SENATOR RAND: Fine, how are you?

MAYOR ROBERTSON: Very well. Where can I possibly put this, so the Committee can see it? (referring to easel and map) Do you want me to just turn this around?

SENATOR RAND: I was remiss earlier, because I didn't see my aide sitting on the left. That is my aide, Pat Jones. She tells me what to say and what not to say. Pat, forgive me. I didn't see you sitting there.

MS. JONES: You are forgiven, sir.

SENATOR RAND: Mayor, if I could see that far, I would be in good shape. (laughter) (referring to map).

SENATOR HURLEY: That's an eye test.

SENATOR RAND: You flatter me, Mayor.

MS. JONES: Why don't you put it in the middle?

MAYOR ROBERTSON: Yeah, I'm sorry. I can't see it sitting here, so-- (laughter)

SENATOR RAND: Carolyn (addressing Ms. McCallum from DOT), I want you to hear Mayor Robertson from Washington Township, because he's really got one big--

C A R O L Y N M. M c C A L L U M (speaking from audience): Which Washington?

SENATOR RAND: Washington Township, where we have our New Jersey Transit facility, in Gloucester County. (Ms. McCallum's response from audience inaudible; no microphone) Well, he really has a legitimate request on Route 55, which is a very--

MS. McCALLUM: Is this the one we just talked about?

SENATOR RAND: No, this is another. He wants an interchange there -- a cutoff from 55 into the community. He will be speaking about it, I'm sure. He has been in touch with me a few times. This will give him the opportunity to really stress what he wants. (Mayor Robertson and Ms. Jones conversing while arranging display materials and microphone)

Carolyn, would you like to look at this? You might want to take a look at it from the vantage point up here.

SENATOR HURLEY: Pull a chair over here. She can sit right between us.

SENATOR RAND: Okay. This lady is the liaison person between the Department of Transportation and the Legislature. She is going to give us the answers, so I want to make sure-- That's fine, Carolyn.

MAYOR ROBERTSON: If I may begin, Senator. It is a pleasure to have your Committee represented so close to the problem -- so physically close to the problem. That makes it much easier for myself and other people who have lived through a series of problems with transportation in South Jersey. It truly is a convenience for us to come to Deptford, rather than go to Trenton or Elizabeth or Newark, to talk about South Jersey problems. I am appreciative, and I know the other people here are appreciative. That's government at work, as far as I am concerned, and I thank you for coming.

I would like to apologize to the members of the audience for my back, but my map is very small, and there are some critical points here I have to show the Senators. I will leave the map here and talk with anyone who might want to ask some questions as a result of what I am going to say.

Washington Township has developed as a major bedroom community in the Delaware Valley and, as such, has the majority of our residents employed in Philadelphia, Cherry Hill, Camden, Trenton, and points west and north of Washington Township. The Black Horse Pike and Route 55 have, therefore, become the major arterials to accommodate the daily home-to-work trips. In Washington Township, the collectors feeding these arterials are Greentree Road, Ganttown Road, and Egg Harbor Road, which are all at or near their capacity, at what the engineers call Level of Service F, for failure.

Because of the tremendous land development our town has experienced, these highways, and particularly the intersections of the Black Horse Pike at Greentree Road and the Black Horse Pike at Ganttown Road, cannot be improved to accommodate the existing and continued growth of Washington Township without severe social economic impacts on the business community.

In this regard, we see an opportunity for the New Jersey Department of Transportation to take advantage of the yet-to-be-developed western portion of the Township where Route 55 crosses Salina Road and lessen the continual impact on these already failed areas, by diverting the home-to-work trip to Route 55 with a new interchange at Salina Road.

I would like to point out some of the areas we are talking about that will follow here. The advantages of a new interchange will clearly enhance the following areas. Just a brief review of the map: This is our Black Horse Pike coming through Washington Township. The North-South Freeway begins here. The old Black Horse Pike comes in. This is the area of

the new bus garage -- right here. This is the Delsea Drive, which is a State highway. Orange is the State highways; red is county highways; and the green is municipal streets.

The first point-- By the way, this is Route 55. I just ran out of map over here, but-- This is the interchange, the Deptford Interchange at the landfill -- right here, where Delsea Drive comes out of town into Deptford Township, and this is the Mantua Interchange. Excuse me, the Mantua Interchange is down here. Okay?

Number one, the failed intersection of Routes 41, 47, and Egg Harbor Road, for the Five Points area, where the State currently has a consultant studying various improvements. That will be right here. (pointing to map) There was recent construction of a McDonald's. Most of our traffic coming from Washington Township to access Route 55 travels Egg Harbor Road. In the mornings, it is horrendous here. This intersection, which has all of these five points coming together, has yet to be improved to accommodate the extensive traffic that is trying to access 55 from Washington Township, as well as from Williamstown and points south and east of us.

So, this is a major problem for us. It is a major problem for the county, because it is a county highway. We have municipal streets that intersect that roadway, but in the mornings, in the rush hour traffic, we have a lot of people coming up from Glassboro who will even come up this way, rather than access 55 through Pitman, because they have to come up through that Woodbury-Glassboro Road, which is also horrendous to access Route 55.

Now I realize that future construction of 55 will probably alleviate some of that problem, but we are experiencing increased accidents in the area. We are experiencing a lot of illegal lefthand turns, instead of using a little short jug handle that is here. It is basically at capacity, as a result of this only access to 55.

Two, if you consider an interchange at Salina Road, the congested intersection at Egg Harbor Road and Greentree Road, the State's consultant is considering jug handles through and around existing businesses, in order to make this intersection work. We think if there is consideration for an access to 55 from Salina Road, we can alleviate this area. This is the major hub of Washington Township, where you have the Acme Shopping Center. Most of the people from this part of town access Egg Harbor through Greentree Road, pick up Egg Harbor, and shoot out to 55.

Now, you probably say to yourself, "Why would you do that, instead of going up the Pike?" Well, because the Pike is so overcrowded now, and that part of Route 42 is so impacted by traffic, that they have found the point of least resistance is to come internal and shoot out that way.

Three, the failed highway Route 630, or Egg Harbor Road: The county cannot come up with the funds to convert this two-lane country road to a four-lane urban arterial. The problem is, we have sporadic improvement on Egg Harbor Road. This area of our community houses the Washington Memorial Hospital. That gives you an idea of where we are from there. Egg Harbor Road-- We have improvement from here up through Greentree Road, somewhat beyond Greentree Road down to Hurffville Grenloch Road. But, from that point on, you go up past the old stone house. It is really a two-lane, winding, asphalt country road -- the busiest internal street in Washington Township today.

Four, the failed intersection at the Black Horse Pike and Greentree Road, which nothing short of a fly-over will correct. Greentree coming out to the Black Horse Pike, to provide immediate access to the North-South Freeway. This intersection in the mornings is absolutely horrendous. Although we have two lanes that will permit a left turn, it backs up so far that a lot of the people in these developments,

in this part of our community, will go back to Egg Harbor Road rather than go out the Black Horse Pike.

SENATOR RAND: They will come back down this way and--

MAYOR ROBERTSON: They will come back this way, and then shoot out this way to pick up 55.

Number five, the failed intersection at the Black Horse Pike and Ganttown Road. Again, another county road access to the Black Horse Pike -- the State highway -- that picks up a portion of these developments. We have only one lane permitted to turn left. We have requested two left-turn lanes, and have been turned down several times by the State. Their reasoning is, if we permitted those two lanes to turn left, then we would back up people wanting to turn right to go down to Williamstown. Well, we refute that, and we are in the process of preparing some traffic engineering data to justify the reasoning for it. We believe that intersection needs at least a half a million dollars of improvement to accommodate that.

SENATOR RAND: So, we're getting the shopping list ready, Carolyn? (addressed to Ms. McCallum in audience)

MAYOR ROBERTSON: Well, I am just seizing the opportunity.

SENATOR RAND: No, no, she understood that, because we're getting ready for a new Trust Fund next year.

MAYOR ROBERTSON: Okay.

SENATOR RAND: And, of course, Senator Hurley and I represent the South, so we will make sure that we get our share.

MAYOR ROBERTSON: If the State were to alleviate these traffic problems through a new Route 55 interchange, the Township of Washington would assure, through the Land Development and Highway Improvement process, that Salina Road would be designed as an arterial highway connecting to the center of the township, before land development precludes good highway planning, and I will point that out in just a minute.

In this fashion, the township, the county, and the State, collectively, can practice good transportation planning and have land use follow highway improvement, rather than have highway improvement react to land development.

What we are proposing is a mere on-ramp and off-ramp access northernly flow, so people could come onto 55 at the Salina Road interchange -- just come on, and then come home from work here. We would take this municipal street in green (referring to map), and improve this to county standards, all the way through to Delsea Drive, signalizing Salina Road at Delsea Drive and improving that intersection. We would improve this portion of Salina Road to county standards, and build a connector into Hurffville Road. This is vacant land now, but destined to be developed; already planned to be developed. We will construct that road and improve all of this in exchange for an exchange.

SENATOR RAND: You say you will pay for that; you will do that entire--

MAYOR ROBERTSON: We will improve this intersection with signalization cooperatively with the county. We will improve this intersection with signalization and build this road ourselves; improve this road, and upgrade this road to accommodate that traffic. And I would like to explain to you why.

As you can see (referring to map), these areas that are marked here, are all approved and housing developments are being built. So, if you look at all of the green on this map, compared to all of the red and the orange, you can see whose responsibility it is to move people and automobiles. We think it is ours.

This is all development that is under construction right now -- every single one of those. We don't know how we are going to get the people to work.

SENATOR RAND: With that interchange, you will relieve the congestion?

MAYOR ROBERTSON: We believe that with this interchange here, Senator, we will be able to draw the southernly portion of the township right to there.

SENATOR RAND: So, they won't walk to the Black Horse Pike, or they won't come across that Five Points?

MAYOR ROBERTSON: Pulling them off the Black Horse Pike, and pulling them off here. Now, we do know that the county is eager to try to correct this Egg Harbor Road problem. I know that in talking to some of the officials at the County Engineering Department that there are some plans -- or applications being made for Federal funds, but that is quite a ways off.

SENATOR RAND: Mayor Robertson, can we get a photograph of that, or a copy of that, so we can make sure the Department gets it.

MAYOR ROBERTSON: Absolutely. Actually, I can leave this with you today. I drew this myself last night. Or, I can photo it. It's up to you.

SENATOR RAND: Carolyn, do you want to take charge of this?

MS. McCALLUM: I would be glad to take it back, if you'd like. I think it is laid out, and I'm sure that the people at the office are familiar with it.

SENATOR RAND: If you have a copy of that, fine, but I don't want to take your only piece because you might want to show it around. You might want to use it, you know, for your own--

MAYOR ROBERTSON: Well, it is only a working piece.

SENATOR RAND: I'll tell you what: If we need it, we will get back to you and ask you for it, because you might want to use that for your own purposes, and so forth and so on.

MAYOR ROBERTSON: There is just one point of our master plan, if I may conclude with that, and then I will--

SENATOR RAND: Yes, indeed.

MAYOR ROBERTSON: --be happy to answer any questions.

We are in the process, with our growth mode, as many municipalities like Washington Township are, of redoing our master plan for development. Right now, Washington Township is about 35,000 people. Our master plan projects us at total population saturation -- according to the plan -- at 55,000. So, we are a little more than halfway there.

In late 1985, a portion of Route 55 was completed and opened from the North-South Freeway through Deptford Township to Egg Harbor Road. Recently, additional segments through the south have been opened. This limited access highway is expected to be a major influence on opening up the southern end of the county to new development. However, the new highway was designed without any access directly into Washington Township. As a result, all Washington Township traffic is channeled down Egg Harbor Road and through the Five Points Delsea Drive intersection to reach Route 55. That is not completely correct. We also have people coming down -- well, it is listed as Pedricktown Mill Road, but that is not as we refer to it -- coming across Delsea Drive and picking up Route 55 at Mantua.

In order to relieve this traffic situation, the master plan strongly recommends that additional on-off ramps be added to Route 55 at Salina Road. Also, a new connecting road should be added between Grenloch, Salina Road, and Hurffville Road, and that is the one which I showed here, the one that we will build. This will allow all traffic originating in the heavily developed eastern part of the township to drive directly to either Route 55, by-passing the Five Point intersection, or to split travel routes and use both access points. That latter scenario will relieve congestion at most intersections affected by Route 55-oriented traffic.

As you know, Senator -- I have talked to you about this repeatedly -- over the last four or five years, we have made appeals to the New Jersey Department of Transportation for

consideration of an interchange at Route 55. At one point in time, I believe when the plans were altered to permit and allow grade crossings, we were then given the interchange, and then when the plans were changed again, it was taken away.

SENATOR RAND: That was before the tremendous growth explosion.

MAYOR ROBERTSON: Absolutely. One point I think is somewhat a Catch-22 for us-- When talking to the New Jersey Department of Transportation, their concern to us has been -- their reasoning has been -- "We are in the business of moving people. We are in the business of getting people from one point to another, to improve the traffic patterns and circulation of people on the move. When the Governor came down to cut the ribbon at Route 55 -- and you were at that ceremony, and so was I -- his comments centered on the industrial growth of South Jersey; that Route 55 would certainly provide that access for industrial growth -- a boom for this part of the State.

Well, when we approached the New Jersey Department of Transportation about that, they said they weren't concerned with industrial growth; they were concerned with moving people. Well, my concern here today has two points: Moving people. My people have to get to work and have to get home. But, we also need some industrial growth in my community. It is something we have been harping for. Many of the areas that you don't see shaded are zoned for industrial and commercial development. Our problem is, we can't get to them.

The area where we are proposing this interchange at 55, through here (referring to map), is in excess of 1700 acres already zoned for industry. We are frustrated, to the point where our Industrial Development Council has thought about putting up a sign right at the overpass at Route 55, saying: "Welcome to Washington Township. We're sorry you can't get off here."

SENATOR RAND: Mayor, thank you very much. Senator Hurley, do you have any questions?

SENATOR HURLEY: Mayor, are you familiar with what is called Transplan?

MAYOR ROBERTSON: No.

SENATOR HURLEY: Peter (speaking to Aide), perhaps you could give a couple of sentences on it, because I think we need to get a reaction from a local official. As State Senators who are considering legislation, we need to get your feeling about this, because it is going to impact on projects like this all over the State.

MR. MANOOGIAN (Committee Aide): Well, Transplan is a package of three bills the Department of Transportation has proposed. One of the bills that we are now considering would provide for the review of municipal plans by the county, so some of the developments of regional significance in Washington Township might be subject to review by the county, and in some cases by the State. So, Transplan is going to impact on the development in your township.

MAYOR ROBERTSON: Well, to respond to that, we currently have a review process on many things we do by the county planning board and the county agencies. Many of those things have been helpful to us, and many of those have been harmful to us. We don't always agree with the county. The county doesn't always agree with us. Understanding their limitations budgetarily, many times when we have made direct requests of the county to improve-- I don't mean political requests, gentlemen; I mean engineering requests -- things that have been studied and thoroughly reviewed. The county sympathizes and agrees, but cannot afford to do them.

I would think there are some points of Transplan that would be helpful -- without knowing all of the details -- but others that would not be helpful. How that would affect our growth-- I think we have managed our growth pretty well.

There are a couple of things. You know, it's a hot building season right now. We know, through our master plan, that we can control the amount of growth, but the economy controls the rate of growth, and that rate is somewhat out of control right now.

SENATOR HURLEY: One other question, Mayor. In the short term, do you think that any improved signalization can alleviate any of the problems you addressed here today?

MAYOR ROBERTSON: Well, Senator--

SENATOR HURLEY: Particularly on the Black Horse Pike.

MAYOR ROBERTSON: Well, I believe that one of the most immediate concerns would be merely some line painting and some signage at Ganttown Road and the Black Horse Pike. The reason people-- (walks to map) As you can see, both of these roads parallel one another and hit the Pike. The reason most people will not use that Ganttown Road, is because there is only one lane turning left to go to work in the morning, and it backs up past the funeral home.

If we could get two lanes out, number one, we would pull a lot of this traffic right off of Greentree Road immediately, because people would know that for that period of time they could get onto the Ganttown pickup. This development is splitting, and this one, instead of coming out here and down, may go out that way. That is an immediate thing.

SENATOR HURLEY: Well, the members of this Committee are always looking for solutions. Most of the things you have pointed to today are long-term problems, and long-term solutions will have to be developed to answer them. But that, I think, we need to convey -- the Committee needs to convey -- along with you, to the Department. That is perhaps something that can help you.

MAYOR ROBERTSON: The Department is currently studying the intersection -- Area #1, Egg Harbor, Delsea Drive, the Five Points intersection. They are currently studying that, because

I guess that is about at failure capacity now. When you have people coming up the Delsea Drive to access 55 this way, there is -- which doesn't show here -- just a little jug handle coming in here. This road comes in and bends around, so that the jug handle parallels that. While there is just a mishmash of traffic, they know there is a problem, and they know that the opening of this interchange has caused that.

SENATOR RAND: We will certainly be in touch with them. We will find out who you have been conversing with.

MAYOR ROBERTSON: Okay.

SENATOR RAND: If there has to be some kind of a meeting set up, we will be able to do that.

MAYOR ROBERTSON: Okay. This, I believe, is being coordinated with the county -- this particular study area.

Then, just one minor small point: I use Route 55 a lot and, while I am a home-grown resident of a little hamlet known as Hurffville, I take some pleasure in knowing that when I get to my exit it says, "Get off here for Hurffville." But, there is no sign that says, "Washington Township," or "This exit for Washington Township." So, while it makes me happy, it doesn't make my neighbors happy.

SENATOR RAND: We thank you very much, Mayor.

MAYOR ROBERTSON: Do you want me to leave this map?

SENATOR RAND: Carolyn?

MS. McCALLUM: I would be glad to take it back. It is entirely up to Mayor Robertson.

MAYOR ROBERTSON: You are more than welcome to it.

MS. McCALLUM: All right.

SENATOR RAND: Thank you very much.

MAYOR ROBERTSON: Thank you; thank you for your time.

SENATOR RAND: We appreciate it. Before I call Mayor Petruzzi, who is the next person to testify, we have been joined by the Honorable Wayne Bryant from the New Jersey General Assembly, who represents this district. I would like

to take this opportunity to welcome him here. Wayne, if you would like to say something, go right ahead.

ASSEMBLYMAN BRYANT: Thank you, Senator Rand. I appreciate the Senate Transportation and Communications Committee coming down here. I understand that this is a very, very important hearing in terms of the gridlock we have in our area. You can see from the testimony of Freeholder Joe Roberts and the Mayor of Washington Township, that this is something that we have lived with over the last five to ten years. All you have to do is come out at seven o'clock any morning. It affects so many of our towns that you just can't name all of them -- Barrington, Washington Township, Deptford. You name a town in South Jersey where 42, I-676, or 295 come into being, and you basically, virtually have a gridlock for every one of those towns, because they all feed into that section.

I think it is imperative that we, as the State Legislature, address this issue. I think the Mayor of Bellmawr is definitely going to tell us-- He has been telling me about this for at least eight or ten years -- how difficult it is. This is where most of our homes are built. This is the traffic route to Philadelphia, to Atlantic City. It is important. It is the main, main corridor. I can't impress enough on anyone that if we don't do something soon, you are going to find gridlocks for at least an hour, hour and a half. I find it appalling when I come to work, because I come up 295 where 42 meets, that I spend 15 to 20 minutes to get to a section, where it should take me about two and a half minutes to get to 676. That is just of small magnitude. Those who are further down the line, coming in from the Gloucester County side, and Winslow, and places like that, are spending anywhere from an hour to an hour and a half to get to where I am coming from.

So, I would ask that this Committee-- I thank you again, and ask that you seriously look at how we can change the configurations so we can move traffic smoothly, because you are

talking about a major, substantial portion of Gloucester and Camden Counties -- people who need to get back and forth from work. This needs to be addressed.

Thank you, Senator.

SENATOR RAND: Thank you, Assemblyman Bryant. Mayor Petruzzi?

M A Y O R J O S E P H N. P E T R U Z Z I: I just want to go ahead with what Mr. Scolpino was talking about -- the ramps for Bellmawr. As always, we are dead against them. We have proven that they are totally unnecessary. If you read your Delaware Valley Regional Planning Commission Report, it is listed as that in that report. Woodbury may have a problem, or Deptford, with traffic. If I go back many years ago, I think there was a suggestion that Cooper Street be widened to help to alleviate some of the problem. This was immediately killed. If Woodbury has a problem and it is not willing to do the suffering that Mr. Scolpino mentioned, then that is still their problem. I do not want them to shift their problem to my town, and I will show everyone why.

This major interchange right here (using chart or map to demonstrate) is dead center of Bellmawr. That is only part of the problem. There are exits here. We have 295 going through Bellmawr here. We have the New Jersey Turnpike going here. We have Black Horse Pike coming here, and 130 here. Every major artery in this part of the State, and Camden County and Gloucester County, impacts Bellmawr. We take all of their traffic; truck traffic, whatever it is, Bellmawr gets it. The exits for every one of these major highways -- 295, the Turnpike, 42 -- are in Bellmawr. This is why I fought vigorously, and will continue to fight: Do not put those ramps anywhere in my town.

The first reason is, it is totally unnecessary, simply because if you go north on the Freeway -- on 295, you can, indeed, go south on the Freeway, or vice versa. The State was

supposed to have put up direction signs for people who are not from the area, directing them to the interchanges already existing which can take the traffic. If you are going north on 295 coming here, you only have to go that far to the Market Street exit, where you can exit Market Street, make the loop, come back, and you are south on Route 42, the Freeway. Going the opposite way, the same procedure reversed. There are exits there. There are ways of going both ways on 42, no matter which way you come on 295.

The exit theory is totally irresponsible. It is not cost-effective, simply because whatever we need to change the flow of traffic already exists. All you need are signs directing people to that particular point.

We talked about the various means -- exit ramps from Bellmawr. Even the planning was totally ridiculous. One of them called for cutting a major artery through town in half, and dead ending it on both sides. If that happened, if we had a fire, the best thing for the people to do would be to call the insurance company first, and us second, because we would never make it to their home. If everyone will read that Delaware Valley Regional Planning Commission Report, it will state that the ramps are not needed in Bellmawr. The simple solution is the State putting up the various directional signals, or signs, whatever, to direct people to make the proper changes to go any way they want to go with the existing roadways that are there. There is no need to put in any more ramps; there is no need to take any more ratables out of my town, or give me more added traffic, which I certainly do not need, to alleviate traffic somewhere else. Just put the signs up and that problem will be solved.

Another problem with some of the backup: If you check right under the Creek Road Overpass Bridge, another lane added under that bridge -- there is ample room to do it -- would take some of that bottleneck that takes the traffic from here on

back through Deptford and there (demonstrating), and would keep the 295 traffic flowing on one side and all on the bridge flowing on the other side. That would help some to alleviate that bottleneck.

That is all I have at this point.

SENATOR RAND: Mayor, thank you very much.

SENATOR HURLEY: You completely lost me, but since the Chairman lives there he will explain it to me someday in Trenton.

MAYOR PETRUZZI: I would be happy to sit with you, Senator.

SENATOR HURLEY: You didn't lose me in your comments; I meant geographically. I am not familiar with the territory.

SENATOR RAND: Mr. Dennis Bradley, Vice President, South Jersey Chamber of Commerce.

D E N N I S F. B R A D L E Y: Thank you, Senator Rand.

SENATOR RAND: We will get to everyone very shortly.

MR. BRADLEY: As I indicated earlier to you, and to Pat Jones, we weren't going to have any prepared testimony, but reviewing some files this morning, I ran across a couple of things I felt it might be appropriate to give to the Committee.

SENATOR RAND: What vintage are they?

MR. BRADLEY: Pardon?

SENATOR RAND: What vintage are they?

MR. BRADLEY: Well, let's try this on for size.
(handing papers to Senator Rand and Senator Hurley)

SENATOR RAND: Okay, thank you very much.

SENATOR HURLEY: Thank you.

SENATOR RAND: We welcome your comments.

MR. BRADLEY: I apologize for the condition this is in. On the first page you have, go down to number nine, "Route 295 (sec 10 E) and Route 42." That is a connector in Bellmawr. The current status: It is not in design. Our recommendation is to reactivate design, or modify signage.

There is a temporary solution on the top of the next page. I do not reside in this area, so, Senator, you are probably a little more familiar with it than I, but I will read it:

"It is possible to enter Route 295 south when traveling north on Route 42, but the signs need to be more obvious at Exit 1C. Once off of Route 42, the signs for 295 south should state that you will get back on Route 42 in the opposite direction before entering 295 south at Exit 1A." I guess this is a solution. At that point, there should be signs saying, "Woodbury," in addition to the existing "Delaware Memorial Bridge" sign. That might be a helpful temporary solution.

Number 12 on that page, "Route 42 - widening from the Walt Whitman Bridge to Route 55." Our recommendation is: Proceed with design and improvements promptly, to take care of the traffic increase due to Route 55 opening.

Item 14 on that page, "Route 42 Southbound to Route 295 Northbound -- ramp improvements." Our recommendation is on the following page: Add ramp to take traffic from Walt Whitman Bridge to outer lanes of Route 42 southbound and eliminate dangerous weave. Improve weave from 42 northbound to the Walt Whitman Bridge.

These are our comments, Senator.

SENATOR RAND: Thank you very much, Mr. Bradley.

MR. BRADLEY: Okay, thank you.

SENATOR RAND: Senator Hurley?

SENATOR HURLEY: No questions.

SENATOR RAND: Thank you. Mayor Kivlen?

SENATOR HURLEY: He must have gone outside.

SENATOR RAND: All right. Freeholder Paul Oland?

Good morning, Paul.

F R E E H O L D E R P A U L A. O L A N D: It's good to see you, Senator.

SENATOR RAND: It's good to see you.

FREEHOLDER OLAND: We appreciate your being here with us this morning.

SENATOR RAND: (addressing Mr. Bradley) At least from Mayor Petruzzi we had a recommendation that the signs should be improved, and the markings. That makes Mayor Petruzzi very happy, by the way.

MR. BRADLEY (speaking from audience): This is only about four or five years old. (referring to his information)

SENATOR RAND: Good morning, Freeholder.

FREEHOLDER OLAND: Senator, good morning, and thank you very much for bringing the Senate Transportation and Communications Committee to Gloucester County this morning. As a Freeholder from this county, and certainly along with the citizens of Deptford, we much appreciate the efforts of you and your Committee in coming here today to hear our concerns.

Let me start by saying that I also want to thank Assemblyman Bryant for showing his concern by stopping in today.

Now, to get on to my remarks: As you know, the highways of South Jersey are becoming more heavily trafficked. We have seen corridors such as Route 47, Route 42, and Route 295 become increasingly choked with traffic. This bodes ill for our future, as increased traffic means greater air pollution, and eventually, gridlock.

We have seen the Route 1 Corridor in Mercer County become a traffic nightmare, with projections for the year 2000 showing an average speed on the highway of only seven miles per hour, if steps are not taken. I believe we should make plans now for alternatives to such a situation here. Just as the so-called Gamblers' Express is now being prepared to take passengers by rail from Philadelphia to Atlantic City, so should we look at the establishment of train service through Gloucester County.

This could be accomplished by an upgrading of the current Conrail tracks through communities such as Woodbury,

Wenonah, Pitman, and Glassboro. The Gamblers' Express, with its station stops in communities such as Hammonton and Egg Harbor City, will give commuters and other travelers a necessary alternative to reach Atlantic City or Philadelphia. I don't see why once that route has been established, other possible rail routes could not be reestablished. The tracks from Glassboro, for example, run to both Vineland and Bridgeton. Eventually, I believe we could see the establishment of needed service into these communities.

This is one of the reasons why I support the Gamblers' Express. I think from that we will see the success of passenger railroads once again in South Jersey. Studies should be immediately undertaken to establish the feasibility of the routes I have suggested and possibly others. My own opinion is that with proper education, the public would support passenger rail service in our region. Perhaps a future bond issue could be utilized for this purpose.

I want to say, of all of the comments and criticisms we are hearing about the highways today, and the increased pollution, the increased problems with traffic, as Assemblyman Bryant and others have pointed out, there is no way we are going to be able to continue the status quo and see any real solution to the problem. That is why I offer these thoughts this morning.

With that, gentlemen, I thank you for listening to these ideas, and I would be glad to discuss them with you at any time in the future.

SENATOR RAND: Freeholder, thank you very much. You referred to the Gamblers' Express and, of course, this Committee does not refer to it as the Gamblers' Express. This Committee, in which Senator Hurley has been very supportive, refers to it as the Atlantic City Railroad. We support it for a fundamental reason: South Jersey has not had a nickel of subsidy money for rail for probably some three to four years.

Is that correct? That was the last we had some subsidy money, when the old Atlantic City Rail--

SENATOR HURLEY: I think so.

SENATOR RAND: And North Jersey gets \$60 million to \$65 million in rail subsidies. We believe that the inception of this rail service, which will have 11 commuter stops and will service that line of employees, hopefully, to relieve traffic congestion, is the first step in the restoration of some other rail service in South Jersey. And, of course, Senator Hurley is very interested in freight in his area, as we are interested in rail in Gloucester County, up to Burlington County.

So, your viewpoint is very well taken. We appreciate your interest, because we have to adopt several modalities of transportation. You just can't depend on highways, roads, cars, and so forth, because if everyone traveled by that particular method, whatever we build would not be enough within the next 20 years.

FREEHOLDER OLAND: Well, I couldn't agree more. I appreciate your remarks, and I know Senator Hurley has also been very interested in this subject. To me, when we have the basic necessities to establish the service now, it certainly makes sense to do some studies to see what exactly it would take monetarily to upgrade those tracks, rights-of-way, stations, and what have you, at this stage, rather than wait another 10 or 15 years, when perhaps there would be a deterioration that would not allow us to utilize what we already have.

So, I am very pleased to hear your remarks. Certainly I hope you will keep me fully informed, as an official of this county, on anything that might be considered. We certainly offer our services in Gloucester County government to the Committee and to the full Senate and Legislature, with regard to this problem, so that we can bring about some meaningful reform in the future and see rail service meaningfully restored.

SENATOR HURLEY: I just want to make one comment about the rail service: We on the Committee do agree with you, but we see the Atlantic City line, as Senator Rand said, as the first step--

FREEHOLDER OLAND: Yes.

SENATOR HURLEY: --and a necessary step, because if it does not come to fruition, then you won't have the core around which other rail services might develop, whether they be freight -- continued freight or new freight -- or passenger service. I know that in Cape May County -- I represent the entire county there -- they are waiting for the Atlantic City line, because they believe that some day it is going to be a help, or the salvation of the traffic situation in that county, as that resort county continues to expand.

FREEHOLDER OLAND: Senator, once again I agree with your comments. I think that through the Atlantic City Railway -- I stand corrected -- through the reestablishment of that service with the commuter stops-- I don't think a lot of people realize that this involves commuter service. That should be the hub from which we build around. As I said before, in Gloucester County, we stand ready to work with you in any way possible to see that reestablished.

SENATOR RAND: Assemblyman Bryant, by the way, was very instrumental in getting those 11 commuter stops. Originally, that was not the amount. He would probably like 25, but they finally got 11. So, we can thank Assemblyman Bryant for at that time being very, very persuasive in getting the Department and New Jersey Transit to have that many.

Assemblyman Bryant, do you have anything to--

ASSEMBLYMAN BRYANT: No. I am pretty sure the Freeholder has covered all of the issues. He is always very responsible, very cooperative, and we appreciate his interest.

FREEHOLDER OLAND: Thank you very much.

SENATOR RAND: Thank you very much.

FREEHOLDER OLAND: It was a pleasure.

SENATOR RAND: Mayor Kivlen, we called on you before, but you were indisposed. We are going to call on you now.

M A Y O R J O S E P H J. K I V L E N: Thank you, Senator.

SENATOR RAND: For the record, Senator Hurley, this is the Mayor of Deptford Township, another one of our towns. I am sure if you mention any ramps to him, he will come out slugging.

SENATOR HURLEY: I met him on the road; we met on the road when we opened 55. You were there.

SENATOR RAND: That's right.

MAYOR KIVLEN: Senator Rand, Senator Hurley, Assemblyman Bryant: I would like to welcome you to Deptford, along with the Committee members. I apologize for not physically being here when you came through the front door, but I was tied up in a Route 55 traffic jam. (laughter) That is not quite true, but it does make a point.

I recall, in the not-too-distant past, when Route 55 became a reality and it was opened for the first time. I had made a statement that, "In my opinion, this is to be the gateway to the southern part of the State." Senator Hurley, I have to agree with you, because I am very familiar with the area you briefly talked about at Route 55 and Route 47, in your district. I think you are absolutely correct. But, since I have been seated as the Mayor in Deptford Township, I automatically sit on the Planning Board of this community. I have been able to gather a lot of insight and experience with the problems that we, as a township, and our neighboring communities, experience. As you may or may not know, Deptford Township is in the throes of a very in-depth master plan. So far, we have been working at it for almost one year. Transportation, of course, is one of the major parts of this master plan we are putting together.

Because of the problems we realize exist, and which will continue to exist, we have expanded our Board to include a

professional planning consultant. We have hired a full-time community development player, who is present today in this courtroom. We, of course, have our township engineers on board, and we also have a consulting traffic engineering firm that works with us here in Deptford because, as Mayor Robertson so well put it, we also have a responsibility to the people we represent to see to it that they can, in fact, move throughout the community. To use an example, I would not like to see Deptford become another Cherry Hill. We certainly recognize the problems they face.

As we meet, we have discussions here in Deptford with many high-powered building firms and developers from all over the nation, because the major part of our industry is retail commercial, at this point in time. We know in the depths of our stomachs that traffic is a major portion of what our future is to be here in Deptford Township. With this, we have no problem negotiating with developers and builders for them to provide their fair share of funding and expertise, so we can continue to move traffic throughout this community.

This has paved the way for us here in Deptford to seriously consider an inter-district transportation fund. We have had one meeting with professionals dealing with this, and we will have more. Until we get all of the information, I will not take that consideration to Council.

What it boils down to is simply this: We must locally provide a way that a developer will pay his fair share of dissolving the traffic problems that he will contribute to. So, financially, we are saying to the builders, developers: "You must, by ordinance, provide the funds that are necessary for design, development, and construction of the roadways to keep moving traffic here in Deptford."

Then we come to Route 55. The Planning Board has given preliminary approval to a development known as Locust Grove. There is a 10-year prospective build-out to this

community of 2145 residential dwellings. This is in the area of Clements Bridge Road, Almonesson Road, Route 55, and Route 42. I understand there has been brief conversation with the Department of Transportation about re-engineering the ramp heading south on 55 at Deptford Center Road. I have been advised that it was received very well by DOT.

I guess what I'm saying, Senators, is, this community is prepared to work a partnership with the State of New Jersey, as we have already discussed with the county, to help to alleviate the problems we experience here in this town. We must solve them as a partnership, because the future of Deptford relies on what we do today. Every action we take is in perpetuity. We may not see the immediate suffering, but certainly those who follow us will.

We also have to be part of training our people to receive the development that is coming to these communities. I listen to other mayors with their problems. Certainly we all have those, but we are all one little part of a bigger picture, and we must be cognizant of that fact.

I read, of course, the news clippings dealing with the Route 42, Route 55 gridlock, and I can testify to you this morning that certainly once you reach that area of Routes 42 and 55, at approximately 6:30 to 6:45 in the morning, you can anticipate a full-fledged backup. It comes into the Runnemede area; it comes into the Deptford Mall area. It is a problem, and the only people moving around that problem are the helicopters that are telling us what is happening on the radio. That is how serious it is.

I will also represent to the Department of Transportation that another major problem in this area exists with overpasses at the Turnpike, because if you look at a map that envelopes all of Deptford Township, even though we, in our sincere ability to solve a problem, have gotten approval from the county to expand to a four-lane road, Almonesson Road, it

bottlenecks at the Turnpike. Even though there are plans to expand Clements Bridge Road and Cooper Street, again it bottlenecks at the Turnpike.

So I say to you, if we are going to address the problem, I think we have to look at this as part of the solution. I don't think it would be appropriate for us to say that all the traffic existing, or that will develop, should, in fact, go on Route 42 and Route 55. I think the wisest way is to divert some of this traffic through the communities by a better road network, which we cannot provide today because of the bottlenecked overpasses.

We do not know what the solution is, because certainly we are municipal government. We are not State. But, as the Freeholder preceding me said very well, this township stands ready to work with, and to assist the Department of Transportation in any way possible. I know that through cooperation we can definitely solve this problem.

I thank you for listening to me. Again, if we can provide you with any studies -- Lord knows, we have the Deptford Mall area studied to death -- we will certainly make them available to your Committee.

SENATOR RAND: Mayor, you touched on a lot of subjects here. I don't know if you intentionally touched on them, or if you just covered them because they affect Deptford, but I'll take them both ways. You touched on the Transplan package. One of them is the Transportation Development District, which you are touching on, which is a part of that overall package. You touched on the Turnpike, which, of course-- I happen to believe that the Turnpike and the Expressway and the Garden State Parkway ought to be able to contribute their share to the overall solution of the transportation problem. We are trying to weave that into effect. So, you touched on many things.

I can assure you that on Locust Grove, both Assemblyman Bryant and myself, and the members of this

Committee, stand ready to help you. If the solution is to move that interchange from where it is supposed to be now, on Almonesson Road, to the Locust Grove area, you will have our support, as you have always had.

We thank you. Maybe Senator Hurley has some comments.

SENATOR HURLEY: No, I have no comments, except to say that I appreciate very much the attitude you are taking, and the direction you are taking. It seems to me to be terribly responsible.

SENATOR RAND: Assemblyman Bryant?

ASSEMBLYMAN BRYANT: I have no questions. I would just like to thank the Mayor for always making his facilities available for hearings such as this. We do appreciate it, Mayor.

MAYOR KIVLEN: I thank you all so very much.

SENATOR RAND: Thank you, Mayor. We have a couple of people from the audience, but before we have them, I would like to have Carolyn McCallum, who is the legislative liaison person between the Department of Transportation and the Legislature. I think she has some comments to make at this time. I want to thank Commissioner Hazel Gluck for sending her down, and I want to thank Carolyn for coming down. Would you come up, please? Good morning, Carolyn.

MS. MCCALLUM: Good morning. Thank you very much, both for the hearing and for everyone who has spoken. I found that everyone was very positive, had good ideas, and expressed their concerns. I feel it has been a very good hearing, personally.

I will read the points I want to make. I think almost everyone in the room is familiar with the map, so rather than standing at the map, which I could also do-- If there are any questions, I will be glad to answer them. I simply want to tell you that this area has been a concern of the Department's for some time. In March, a fly-over was done of the area --

the mapping -- so we would know exactly what was there, without the leaves on the trees. In June, we anticipate having a consultant on board to do a study which will take about a year. The things we hope will come out of what he has been asked to do are-- The study limits are:

Route I-295, from just south of Route 47, which is Milepost 25, to just north of 168, which is Milepost 28.4;

Route I-76, from the I-295 interchange to the Walt Whitman Bridge;

Route 42, from the Atlantic City Expressway, which is Milepost 6, to the I-295 interchange, which is Milepost 14.

The study will also look into geometric and capacity improvements at the I-295, 76, and 42 interchange, specifically the I-295 northbound and southbound connectors, and will also examine the feasibility of connecting Route 295 northbound to Route 42 southbound, and Route 42 northbound to 295 southbound.

On Route I-76 and 42, between the Walt Whitman Bridge and Route 41, the study will look into additional lanes and reexamine the reversible lane possibility in conjunction with the improvements at the I-295, 76, 42 interchange.

On Route 42, between Route 41 in Deptford and Turnersville, where the Atlantic City Expressway comes in, the study will elaborate on the interchange improvements mentioned in the reversible lane study done a year ago by McCormick Taylor Associates.

The study will also include an environmental sensitivity report, and any other recommendations that may simply fall out of this study. As I indicated, the fly-over mapping has been done -- the aerial mapping -- and the study will begin in June, and will take 12 months.

SENATOR RAND: I don't know if it is permissible or not, but I think this Committee would like you to also put our recommendation in as to that 55 situation in Washington Township.

MS. McCALLUM: Yes. I have taken careful notes.

SENATOR RAND: Also, we are not precluding, when you talk about the southbound and the northbound of 295, the proper marking. We want to be very careful about the impacting of Bellmawr and Deptford. That is a very, very important-- I am sure that Senator Hurley will support Assemblyman Bryant and myself, that there are some 40,000 people in both communities, and we don't want to cause them any more disruption than they have already gone through. If there are other solutions, we would look at other solutions for that problem.

MS. McCALLUM: I am sure that will be part of the concern when this study is done. I appreciate your comments.

SENATOR RAND: Senator Hurley?

SENATOR HURLEY: No.

SENATOR RAND: Assemblyman Bryant?

ASSEMBLYMAN BRYANT: I would just ask that early on, when the consultant is chosen, that the Mayors of Deptford, Washington Township, and Bellmawr, who have had engineers do some studies, be impacted early, as opposed to at the end of the study, that they be pulled in -- I'm saying maybe within the first couple of months -- so we can have a real partnership as we are going through the process.

MS. McCALLUM: I don't know if that has or hasn't been done. It is certainly a good suggestion. I heard here today that everybody has the same concerns. I appreciate your comment.

I do feel compelled to say one more thing: I think it was Freeholder Roberts who indicated that South Jersey had been ignored. I think the Committee will agree that that is the last thing that has happened in the last five years -- the ignoring of South Jersey. Too many good things have happened -- changes, Route 55, and the rail we are talking about, and many things down in the further southern area of Atlantic County, with 147 and 152, and certainly with improvements to 70

and 73 and 38. I think that everybody-- It was a promise from Governor Kean, and he has kept that promise. It is a constant, ongoing process with the Department of Transportation.

SENATOR RAND: Well, I think he said the Department of Transportation must help South Jersey, and that is a positive statement. Then he said: "Too often, the State looks to alleviate the problems in the middle and northern end of the State, neglecting the problems in the southern part of the State." That was probably true in the past, but I will say there is no question in my mind -- and I would address this to Freeholder Roberts -- that we do get a more positive response than we have ever gotten before. The history of that has been true, that the southern part, in many ways, has been neglected. But I am very happy, and I am very proud to say, on behalf of this Committee, that certainly Mrs. Gluck, and certainly John Sheridan have been most responsive to the problems in South Jersey.

MS. McCALLUM: As has the Legislature.

SENATOR RAND: Yes.

MS. McCALLUM: Through Trust Fund I. We wouldn't be here without that.

SENATOR RAND: It's amazing. Let me say one thing -- and I am going to send a letter out to Mr. Kelly -- there was an article in the paper the other day that remarks were made by the new Chairman of the Delaware River Port Authority that he understands why the North Jersey legislators might not be happy helping with port unification, because they are only interested in the New Jersey/New York Port Authority. Of course, we have answered that by letter today, which we are going to send out. That is really not so. The North Jersey legislators have been very understanding. I want to make that very clear. When we need them, they are there to support us on South Jersey projects. They will be there if we need them for port unification. If we can show that it is good for New Jersey,

our North Jersey brethren and sisters will be there to support us. Isn't that right, Senator Hurley?

SENATOR HURLEY: Yes. I would like to make a comment, too: I deliberately, Carolyn, waited for you to testify, because I wanted you to have the first opportunity to say something about this north versus south issue that was raised -- or which is constantly raised. You're absolutely right. Chairman Rand is one of those persons who recognizes the support we get. On this Committee, we can say absolutely that we get support from the North Jersey legislators. But generally speaking, in the Senate and the Assembly, on our problems here, what has transpired in the last five years has been leadership in a bipartisan way for legislated initiatives, such as the Transportation Trust Fund, which has enabled us -- enabled the State to do things in South Jersey that it never could do, or would do before. I think a tribute should be paid not only to the Governor, but to people like Senator Rand, who offered so much leadership in the Transportation Trust Fund, and in so many areas.

We are trying to become one State. That is what I am trying to say.

SENATOR RAND: Thank you, Senator Hurley, for that endorsement.

SENATOR HURLEY: Any time.

SENATOR RAND: On the Assembly side, let me say--

SENATOR HURLEY: If you would reciprocate, I would be very happy. (laughter)

SENATOR RAND: I offered today Route 55 to Lower Jim Hurley Road.

On the Assembly side, certainly Assemblyman Bryant has been most supportive and most energetic in seeking solutions for South Jersey. Assemblyman, would you like to say something to Carolyn, or send a message to the Commissioner?

ASSEMBLYMAN BRYANT: Well, Senator, we all tip our hats to you. You have been a leader in transportation for a long while. I think Carolyn is completely right. We have been more sensitive toward South Jersey in the last few years. But I think with Freeholder Roberts' comments, I don't want us not to be vigilant. We have known dry times. We still have a marked difference in mass transportation, in terms of funds spent in North Jersey more than in South Jersey.

So I think that even though things have improved quite a bit, and South Jersey legislators on both sides -- both Republican and Democrat -- have been quite on the mark, we need to be ever vigilant and we need to do even more in terms of providing better mass transportation, as well as regular road transportation.

MS. McCALLUM: You're absolutely right. I think the fact that it has been bipartisan is really that has made it go -- made it work. But I think that the Planning Director for Gloucester County, Mr. Scolpino, mentioned a South Jersey study which everybody is waiting for, for the crossroads of South Jersey. That is due out this summer. I wanted to mention that, too.

SENATOR RAND: Thank you very much, Carolyn.

MS. McCALLUM: Thank you.

SENATOR RAND: There are a couple of people who wanted to speak. Sir, we will give you a couple of minutes to come up here to express yourself. Just identify yourself, please.

B I L L S C H A E F E R: I am Bill Schaefer from Deptford Township, representing myself.

SENATOR RAND: Yes indeed.

MR. SCHAEFER: Okay. If I may go over here to the map for a few minutes-- Everybody has touched on the things I was going to say, but to offer a quick solution, coming off the Walt Whitman Bridge, you have two lanes -- you have two areas of three lanes each, side by side there. I would like to offer a temporary traffic program and pattern change.

Now, the left side, as you are going south-- What is it, eastbound from there, right? (no response) I think so. Well, on the left side, those three lanes, could encompass Routes 55 and 42, and the other side -- the right side -- could encompass 295 and 130. Here is your proof right in this area here. Route 295 comes this way, just like this, and you could go through. In this area here, you have a lot of crossovers back and forth -- a mishmash of traffic, and a lot of accidents. It's beautiful. Therefore, it backs up the whole shebang.

Now, Thursday and Friday nights especially, you get a lot of Atlantic City gambler traffic coming out of Philadelphia. Instead of those people having the decency to wait for the commuter traffic to get by before they make their weekly runs to Atlantic City, they crowd in and, therefore, you get your backups, and you also get your mishmash. The most dangerous part is this part right here coming off the express part of it, and over here, and then down here on 295. In that particular area, the blind side is on the right side of your vehicle, and bang. I almost got it there a half a dozen times coming off that ramp, which I would normally use.

What I would propose to the State is this: This side being 295 and 130, because 130 comes off over here, through Bellmawr and all that area. A lot of people will mishmash. They come and crowd all those four sections in on both sides. As a temporary solution, until the State engineers get this whole shebang squared away, my suggestion is 295 and 130 on this side; 42 and 55 on this side. As you can see here, if you go through here, that left side there would follow right into the flow of 42. The right side would follow through -- the 295 -- and you would eliminate a lot of this mishmash in here.

As I say, this would be a temporary solution until the State engineers get this highway realigned, which I understand they are going to do in the near future.

Now I am going to touch on another situation down here -- 47 and 295. None of the gentlemen who testified know our traffic problems and everything. Gentlemen, I would think that just a simple completion of this cloverleaf here would take a lot of traffic off of Woodbury, Cooper Street, out of Deptford from Route 47. Those who would have to come through the local towns to get onto Route 47 would just make use of this cloverleaf down here, you know the cloverleaf of 295 and Route 47. Two quadrants of that are completed as far as the loops, but you need two more loops there to get from the access, go north on 47, to hit south 295, you know, that one loop so you could get to south 295, off of going north 47.

Also, coming south on 47, out of Westville, you could still-- There is still no real access to south 295 from Route 47, coming in that direction -- in the southerly direction out of Westville. I think that this area here, with the simple cloverleaf completion, would be a beautiful step. If that could be done even ahead of the development of this, it would get rid of a lot of the gridlock around this general area of Deptford, Washington Township, Westville, and Bellmawr. That would take an awful lot of traffic off of 130 in Bellmawr also, because these trucks have to come through Bellmawr on 130 to access Route 295, the major north-south highways of this southern part of the State.

I drive this area every day, that includes 676. Now, 676 was a fine idea. It's a beautiful highway, but now you have them coming off of Route 38 out of Cherry Hill to the Ben Franklin Bridge, and there is another tie-up. You are backing up at least two miles on a major interstate -- 676. Every morning, there is at least a two-mile backup, well mainly because right now they are constructing-- Well, they are resurfacing the Ben Franklin Bridge, which, incidentally, is about three years behind now.

A lot of these problems are the tie-ups of your gridlock. Again, I would like to repeat my suggestions: This side, 295 and Route 130 only; the other side, Route 42 and 55 only, because your access route from 42 is going on to 55.

SENATOR RAND: You want to divide the traffic -- the group going to 55 and 42 on one side, and the group doing 295 and 130 on the other side.

MR. SCHAEFER: Right. The reason for that is-- See, all of your gamblers' traffic, especially on Thursday and Friday nights-- There are-- (Mr. Schaefer walking back and forth to map; some remarks inaudible to transcriber as he moves away from microphone) Even if you go to the other side by the toll gates, okay, have lanes one and two for 295 and 130; lanes three and four for 42 and 55 only. That would set your gamblers' traffic and your major things right here.

SENATOR RAND: We certainly will have the Department look at that. We thank you very, very much.

MR. SCHAEFER: This is an immediate suggestion on my part, because I notice this follows through. Enclose this loop here off entirely. That is very dangerous. It is a suicidal thing to begin with. Why it was put there, I don't know. It was done before I moved into the area.

I hope you will take my suggestions to heart. I wish to thank you for your time, gentlemen.

SENATOR RAND: Thank you, Mr. Schaefer. Is there anyone who wishes to make a comment? You are certainly welcome. We have a few minutes. If I have missed anyone, please forgive me. (no response) Anything from the Delaware River Port Authority?

UNIDENTIFIED SPEAKER FROM AUDIENCE: I am here to listen and learn, thank you.

SENATOR RAND: I want to thank everybody for giving up their time to come here to testify. I certainly appreciate it; the Committee appreciates it. Again, let me thank Ms. McCallum, and let me thank Hazel Gluck for sending her down.

Senator Hurley, if you have any concluding remarks, be my guest.

SENATOR HURLEY: No, I have no concluding remarks, other than to say thank you, Mr. Chairman, for setting this up.

SENATOR RAND: Thank you very much for driving up. This hearing is adjourned. Thank you very much, ladies and gentlemen.

(HEARING CONCLUDED)

APPENDIX

DELAWARE RIVER PORT AUTHORITY
DAILY TRAFFIC VOLUME

WALT WHITMAN BRIDGE

APRIL 1986

DATE	PASSENGER CARS	TOTAL TRAFFIC
1	96,239	105,754
2	93,339	102,811
3	93,947	103,327
4	100,995	110,528
5	88,961	92,595
6	81,904	84,005
7	92,441	101,175
8	93,287	102,586
9	94,668	104,364
10	95,421	104,962
11	104,861	114,274
12	94,145	97,829
13	88,013	90,589
14	95,014	104,249
15	92,770	101,943
16	87,668	96,343
17	89,638	93,391
18	103,785	112,762
19	94,404	98,266
20	93,122	95,881
21	90,142	90,891
22	89,966	99,206
23	89,912	98,818
24	96,372	105,817
25	104,203	113,699
26	96,509	100,644
27	92,796	95,852
28	52,176	101,505
29	92,987	102,640
30	96,399	106,496
TOTAL S	2,816,372	3,046,842

27th Tues day

WALT WHITMAN BRIDGE

DELAWARE RIVER PORT AUTHORITY
DAILY TRAFFIC VOLUME

MAY

1986

DATE	PASSENGER CARS	TOTAL TRAFFIC
1	93,538	103,294
2	105,644	115,161
3	97,594	101,261
4	94,988	97,680
5	96,605	106,085
6	98,241	107,800
7	99,275	109,048
8	98,286	108,100
9	106,516	116,054
10	101,213	105,261
11	104,722	107,121
12	95,777	105,245
13	93,811	103,379
14	98,517	108,136
15	98,867	108,499
16	108,198	117,815
17	100,336	104,608
18	103,525	106,678
19	97,613	107,345
20	93,953	103,477
21	97,728	107,452
22	101,203	111,224
23	112,900	122,898
24	96,707	100,632
25	91,595	94,000
26	90,530	93,104
27	104,369	113,858
28	98,704	108,612
29	102,908	113,010
30	115,897	126,029
31	101,946	106,541
TOTALS	3,101,706	3,339,407

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WALT WHITHAN BRIDGE

DELAWARE RIVER PORT AUTHORITY
DAILY TRAFFIC VOLUME

JUNE

1986

DATE	PASSENGER CARS	TOTAL TRAFFIC
1	105,036	108,052
2	102,386	111,857
3	100,760	110,406
4	103,606	113,691
5	101,929	112,260
6	110,213	120,107
7	99,398	103,374
8	102,219	105,137
9	101,110	110,942
10	98,819	108,641
11	99,805	109,670
12	97,821	107,355
13	117,602	127,187
14	114,175	118,326
15	116,636	119,618
16	104,101	113,682
17	100,812	110,660
18	103,968	113,927
19	107,321	117,598
20	119,069	129,026
21	115,366	119,841
22	113,367	116,568
23	108,216	117,970
24	101,824	111,730
25	106,573	116,695
26	105,784	116,242
27	114,779	125,038
28	106,036	110,295
29	105,716	108,890
30	107,024	117,202
TOTALS	3,191,471	3,431,987

3X

WALI WHITMAN BRIDGE

DELAWARE RIVER PORT AUTHORITY
DAILY TRAFFIC VOLUME

JULY 1986

DATE	PASSENGER CARS	TOTAL TRAFFIC
1	96,636	106,070
2	101,294	110,536
3	118,906	128,369
4	93,360	96,004
5	100,262	103,212
6	97,120	99,773
7	110,430	119,524
8	103,368	113,212
9	102,269	111,861
10	103,796	113,682
11	109,733	119,028
12	99,726	103,399
13	98,454	101,255
14	102,863	111,966
15	99,515	109,335
16	101,796	111,635
17	106,540	116,283
18	114,478	123,718
19	103,694	107,291
20	102,856	105,747
21	104,847	114,025
22	100,571	110,219
23	104,674	114,319
24	114,539	124,391
25	113,511	122,793
26	108,123	111,926
27	101,941	104,651
28	107,466	116,818
29	102,107	111,795
30	106,066	115,880
31	105,276	115,253
TOTALS	3,236,217	3,473,970

WALT WHITMAN BRIDGE

DELAWARE RIVER PORT AUTHORITY

DAILY TRAFFIC VOLUME

AUGUST

1986

DATE	PASSENGER CARS	TOTAL TRAFFIC
1	116,276	125,805
2	109,759	113,632
3	102,091	104,859
4	106,682	116,039
5	103,553	113,244
6	104,148	113,555
7	104,490	114,102
8	107,653	116,559
9	107,959	111,908
10	101,159	104,263
11	111,611	120,977
12	109,513	119,399
13	109,626	119,533
14	108,671	118,465
15	117,367	127,068
16	112,284	116,373
17	102,558	105,285
18	101,945	110,805
19	100,795	110,483
20	103,067	112,946
21	99,295	108,221
22	113,105	122,851
23	114,602	118,811
24	108,894	111,874
25	105,720	115,265
26	101,284	110,958
27	101,951	111,568
28	108,559	118,071
29	117,539	126,944
30	104,337	108,072
31	94,382	96,646
TOTALS	3,310,875	3,544,581

5-X

WALT WHITMAN BRIDGE

DELAWARE RIVER PORT AUTHORITY
DAILY TRAFFIC VOLUME

SEPTEMBER 1986

DATE	PASSENGER CARS	TOTAL TRAFFIC
1	89,250	91,952
2	107,949	116,764
3	98,119	107,636
4	96,315	105,968
5	105,793	115,080
6	101,894	105,941
7	97,866	100,751
8	96,079	105,575
9	94,753	104,481
10	95,760	105,552
11	96,366	106,364
12	114,211	123,536
13	108,092	112,228
14	104,766	107,762
15	97,399	106,736
16	95,427	104,836
17	96,952	106,054
18	98,873	108,417
19	106,461	115,675
20	101,551	105,383
21	104,993	107,735
22	91,264	100,619
23	89,720	99,263
24	94,678	104,241
25	97,989	107,558
26	107,978	117,413
27	92,023	95,737
28	101,650	104,519
29	94,454	103,976
30	95,689	105,769
TOTALS	2,974,314	3,203,521

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WALT WHITMAN BRIDGE

DELAWARE RIVER PORT AUTHORITY
DAILY TRAFFIC VOLUME

OCTOBER 1986

DATE	PASSENGER CARS	TOTAL TRAFFIC
1	99,406	108,445
2	98,835	107,820
3	105,581	114,287
4	95,139	98,897
5	95,486	98,305
6	91,976	101,172
7	94,777	104,262
8	95,389	104,943
9	99,819	109,470
10	106,902	116,391
11	93,660	97,381
12	86,343	88,823
13	88,459	95,893
14	94,836	103,819
15	98,499	108,171
16	99,915	109,429
17	104,017	113,463
18	93,385	97,242
19	103,290	106,021
20	93,618	103,049
21	95,252	105,145
22	97,614	107,453
23	99,726	109,512
24	98,432	107,356
25	93,201	97,165
26	88,870	91,174
27	89,231	98,409
28	93,824	103,540
29	96,849	106,743
30	99,329	109,270
31	101,381	110,606
TOTALS	2,993,041	3,233,656

2X

WALT WHITMAN BRIDGE

DELAWARE RIVER PORT AUTHORITY
DAILY TRAFFIC VOLUME

NOVEMBER 1986

DATE	PASSENGER CARS	TOTAL TRAFFIC
1	89,641	93,433
2	82,388	84,630
3	90,696	99,918
4	92,406	101,410
5	99,810	98,758
6	93,410	103,098
7	105,700	113,412
8	92,511	96,128
9	92,428	94,954
10	91,049	100,526
11	82,799	91,556
12	95,938	105,860
13	99,767	109,859
14	101,751	111,621
15	90,459	94,465
16	97,346	99,818
17	90,476	100,285
18	91,412	101,406
19	95,830	105,757
20	94,312	104,493
21	101,886	111,805
22	92,173	96,000
23	81,737	83,956
24	97,924	100,006
25	90,015	109,340
26	102,125	111,635
27	87,625	88,982
28	95,396	101,750
29	92,760	96,040
30	85,660	91,771
TOTALS	2,790,224	3,002,634

X8

WALT WHITMAN BRIDGE

DELAWARE RIVER PORT AUTHORITY
DAILY TRAFFIC VOLUME

DECEMBER 1986

DATE	PASSENGER CARS	TOTAL TRAFFIC
1	92,693	102,004
2	88,356	97,765
3	92,730	102,341
4	97,715	108,012
5	101,224	111,334
6	95,887	99,777
7	91,116	93,249
8	90,189	100,135
9	89,403	99,132
10	95,317	105,045
11	91,047	101,168
12	99,744	109,076
13	89,122	92,675
14	80,980	82,908
15	93,074	102,997
16	94,445	104,705
17	96,979	107,100
18	95,573	104,839
19	106,567	116,118
20	92,988	96,610
21	93,322	95,154
22	98,658	108,629
23	101,577	111,417
24	97,479	102,943
25	83,131	83,631
26	91,136	95,841
27	92,304	95,322
28	89,341	91,091
29	97,072	105,899
30	96,097	105,229
31	97,777	105,218
TOTALS	2,913,049	3,137,364

X6

DELAWARE RIVER PORT AUTHORITY
DAILY TRAFFIC VOLUME

JANUARY 1987

DATE	PASSENGER CARS	TRUCK TRAFFIC
1	41,964	62,527
2	74,827	80,222
3	83,779	86,085
4	84,432	46,099
5	50,060	98,730
6	94,157	103,416
7	92,507	104,622
8	95,554	104,999
9	102,766	111,502
10	82,813	85,711
11	79,403	81,203
12	91,644	103,745
13	88,543	102,502
14	92,912	106,407
15	91,005	107,033
16	102,431	113,049
17	91,162	97,155
18	79,001	72,250
19	88,223	52,526
20	92,145	100,012
21	92,034	105,459
22	56,763	64,826
23	50,360	62,733
24	62,050	63,151
25	52,523	51,161
26	25,410	32,640
27	72,234	75,347
28	81,000	91,550
29	52,003	100,034
30	67,035	95,549
31	82,200	60,340
TOTALS	2,554,037	2,743,174

WALT WHITMAN BRIDGE

DELAWARE RIVER PORT AUTHORITY
DAILY TRAFFIC VOLUME

FEBRUARY 1987

DATE	PASSENGER CARS	TOTAL TRAFFIC
1	80,202	82,060
2	90,387	99,181
3	92,437	101,371
4	95,092	104,224
5	94,789	103,934
6	102,948	112,079
7	95,765	99,141
8	88,241	90,283
9	60,294	66,126
10	87,110	96,316
11	94,759	104,178
12	91,167	100,237
13	102,507	111,969
14	92,514	95,866
15	84,501	86,349
16	96,409	102,692
17	92,885	102,110
18	94,031	103,364
19	96,809	106,218
20	105,240	114,637
21	96,470	100,007
22	93,040	95,333
23	46,096	50,059
24	89,724	98,907
25	95,273	104,791
26	94,936	104,568
27	105,770	115,467
28	93,197	96,881
TGTALS	2,552,593	2,748,368

X/1

MALT WHITMAN BRIDGE DELAWARE RIVER PORT AUTHORITY DAILY TRAFFIC VOLUME 1987 MARCH

DATE	PASSENGER CARS	TOTAL TRAFFIC
1	79,545	81,096
2	93,504	102,829
3	95,349	104,737
4	99,015	107,509
5	99,733	104,601
6	108,859	113,522
7	103,044	106,758
8	103,347	110,775
9	97,403	100,302
10	95,709	105,021
11	101,176	110,751
12	100,973	110,594
13	109,305	118,722
14	103,805	104,466
15	93,228	96,116
16	97,205	106,759
17	97,071	106,734
18	102,640	112,140
19	103,050	113,758
20	109,977	120,049
21	100,895	104,546
22	98,775	101,042
23	101,992	111,536
24	99,017	109,041
25	100,274	110,531
26	102,138	112,629
27	110,758	120,893
28	101,646	105,631
29	103,318	106,102
30	99,704	109,364
31	95,201	104,495
TOTALS	3,109,496	3,350,339

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Table III-7
TYPICAL HOURLY TRAFFIC VARIATIONS
Walt Whitman Bridge

HOUR ENDING	EASTBOUND					WESTBOUND				
	PASSENGER CARS		Trucks and Others	Total	Percent Of Total	PASSENGER CARS		Trucks and Others	Total	Percent Of Total
	Cash	Commuter				Cash	Commuter			
1:00 A.M.	407	418	67	892	1.7	567	85	90	732	1.3
2:00	200	111	50	361	0.7	299	52	69	420	0.8
3:00	132	86	50	268	0.5	245	81	77	403	0.7
4:00	100	51	44	195	0.4	190	114	73	377	0.7
5:00	116	68	83	267	0.5	212	153	107	472	0.9
6:00	252	155	165	572	1.1	473	631	144	1,248	2.3
7:00	573	460	227	1,260	2.4	1,628	2,853	312	4,793	8.8
8:00	947	889	355	2,191	4.2	2,325	3,571	427	6,323	11.6
9:00	1,272	637	359	2,268	4.3	2,042	2,045	446	4,523	8.3
10:00	1,823	325	491	2,369	5.0	1,843	801	443	3,087	5.7
11:00	2,217	267	531	2,925	5.5	1,785	455	443	2,683	4.9
12:00 Noon	2,031	304	514	2,849	5.4	1,675	337	437	2,449	4.5
1:00 P.M.	1,858	381	435	2,674	5.1	1,614	326	444	2,384	4.4
2:00	1,644	364	458	2,466	4.7	1,895	337	456	2,388	4.4
3:00	1,809	627	462	2,898	5.5	1,625	590	395	2,610	4.8
4:00	2,262	1,715	407	4,384	8.4	1,754	511	387	2,652	4.9
5:00	2,543	3,207	424	6,174	11.8	1,690	609	297	2,596	4.8
6:00	2,210	2,381	274	4,865	9.3	1,629	662	287	2,578	4.7
7:00	1,961	1,162	226	3,349	6.4	1,847	465	254	2,566	4.7
8:00	1,863	662	205	2,730	5.2	1,807	370	226	2,403	4.4
9:00	1,474	516	112	2,102	4.0	1,574	255	189	2,018	3.7
10:00	1,191	429	106	1,726	3.3	1,513	253	161	1,927	3.5
11:00	917	343	176	1,436	2.7	1,196	313	123	1,632	3.0
12:00 Midnight	554	366	73	993	1.9	908	317	82	1,307	2.4
TOTAL	30,255	15,924	6,294	52,484	100.0	32,036	16,186	6,359	54,581	100.0

SOURCE: Delaware River Port Authority. Based on counts for Tuesday, August 23, 1983.

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Origin-Destination Surveys

A comprehensive program of field survey operations was undertaken to obtain a current measure of travel patterns and trip characteristics of motorists now using the seven Delaware River toll bridges. These field efforts included an extensive mailback origin-destination survey and a comprehensive program of route reconnaissance and travel time/distance studies.

The origin-destination surveys were conducted during the week of August 22-26, 1983. The objective of this survey was to obtain sufficient trip pattern and characteristic data from motorists traveling over the seven bridges to permit the development of a detailed and meaningful traffic profile.

Given the close proximity of some of the bridges, the fact that no such surveys had recently been undertaken on any of the seven bridges, and the compelling mandate that the study findings be capable of being used in supporting possible future bond issues, it was deemed essential to obtain current travel patterns and trip characteristics data.

Mailback Survey Questionnaire - Printed on 6" x 8" cards, color coded and serial numbered, each questionnaire contained a brief explanation of the survey, seven basic questions concerning trip patterns and characteristics, and special codes for time of day and survey station. Motorists traveling westbound were stopped at the toll booths on each bridge and handed a form which requested the desired information and its return by mail.

A sample of the survey form is provided as Appendix Figure A-1. The motorist was first queried as to the origin and destination of the particular trip on which he/she was intercepted and

distributed a questionnaire. The respondents were asked to include nearest street intersection or address, as well as the city, state and postal zip code of both the trip origin and destination. Characteristics requested included vehicle classification, primary trip purpose, trip frequency per week, vehicle occupancy, state of registration (or home base if commercial vehicle) and method of toll payment. Since the payment methods varied among the bridges, the choices also varied on the questionnaire form.

Location and Operation of Survey Stations - All of the survey stations were operated on a weekday between the hours of 7:00 A.M. and 7:00 P.M. Questionnaires were distributed as follows: Walt Whitman Bridge on Tuesday, August 23; Delaware Memorial Bridge and Commodore Barry Bridge on Wednesday, August 24; Betsy Ross Bridge and Tacony-Palmyra Bridge on Thursday, August 25; and Ben Franklin Bridge and Burlington-Bristol Bridge on Friday, August 26. Temporary employees of the agencies performed the actual distribution under the supervision of Wilbur Smith and Associates' staff.

In an effort to assure a meaningful level of response while still minimizing costs, an analysis was made of estimated traffic volumes at each station location prior to the beginning of the survey. A predetermined number of survey forms were allocated to each bridge. The survey operations supervisor kept records of the card serial numbers distributed hourly at each bridge.

As may be seen in Table III-12, a total of 112,705 questionnaires were handed out, representing about 88 percent of the total westbound traffic passing through the survey stations during the hours of distribution.

Table III-12
MAILBACK SURVEY SAMPLE SIZE

BRIDGE	PASSING TRAFFIC(1)	QUESTIONNAIRES DISTRIBUTED	USEABLE QUESTIONNAIRES		
			Returned	Percent of Passing Traffic	Percent of Distribution
Delaware Memorial	19,689	18,580	2,941	14.9	15.8
Commodore Barry	6,073	5,695	1,178	19.4	20.7
Walt Whitman	38,221	31,418	5,916	15.5	18.8
Ben Franklin	26,971	23,931	4,075	15.1	17.0
Betsy Ross	5,448	5,390	964	17.7	17.9
Tacony-Palmyra	23,142	19,196	3,313	14.3	17.3
Burlington-Bristol	<u>10,577</u>	<u>8,595</u>	<u>1,442</u>	<u>13.4</u>	<u>16.6</u>
TOTAL	130,121	112,705	19,809	15.2	17.6

(1) Westbound direction only between 7:00 A.M. and 7:00 P.M.

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New Jersey State Library

A total of approximately 27,000 questionnaires were returned, of which nearly 20,000 were actually useable. The remaining questionnaires were discarded due to such problems as round trip routings, improper origin/destination information, illegibility and a variety of other difficulties. The 19,809 useable sample amounted to approximately 17.6 percent of the total questionnaires distributed, and about 15.2 percent of total westbound passing traffic.

The percentage of useable questionnaires relative to those given out varied slightly from bridge to bridge, ranging from a low of 15.8 percent at the Delaware Memorial Bridge, to a high of 20.7 at the Commodore Barry Bridge.

Data Reduction - After completing the field data collection phase of the origin-destination survey, a major data reduction effort was undertaken. Completed questionnaires were received at the Walt Whitman Bridge Administration Building at a rate of more than 3,000 per day during the peak days following the survey.

A team of clerical personnel was organized to code each survey form individually. The process, which required over 10 days, included verifying travel characteristic responses and coding each origin and destination to an appropriate traffic zone. A total of 474 internal traffic zones were defined within the study area. In addition 46 external stations were identified on the perimeter, or cordon line around the study area. The traffic zone system is shown in Figures 2 and 3.

The interview records at each survey station were entered into computer files and expanded to match traffic counts from the day of survey. Daily and seasonal factors were then applied to

the expanded data base to develop a traffic profile at each bridge representative of an average day in 1983. Also, a "seven-day" factor was generated for all bridges so that an overall average daily traffic profile could be developed.

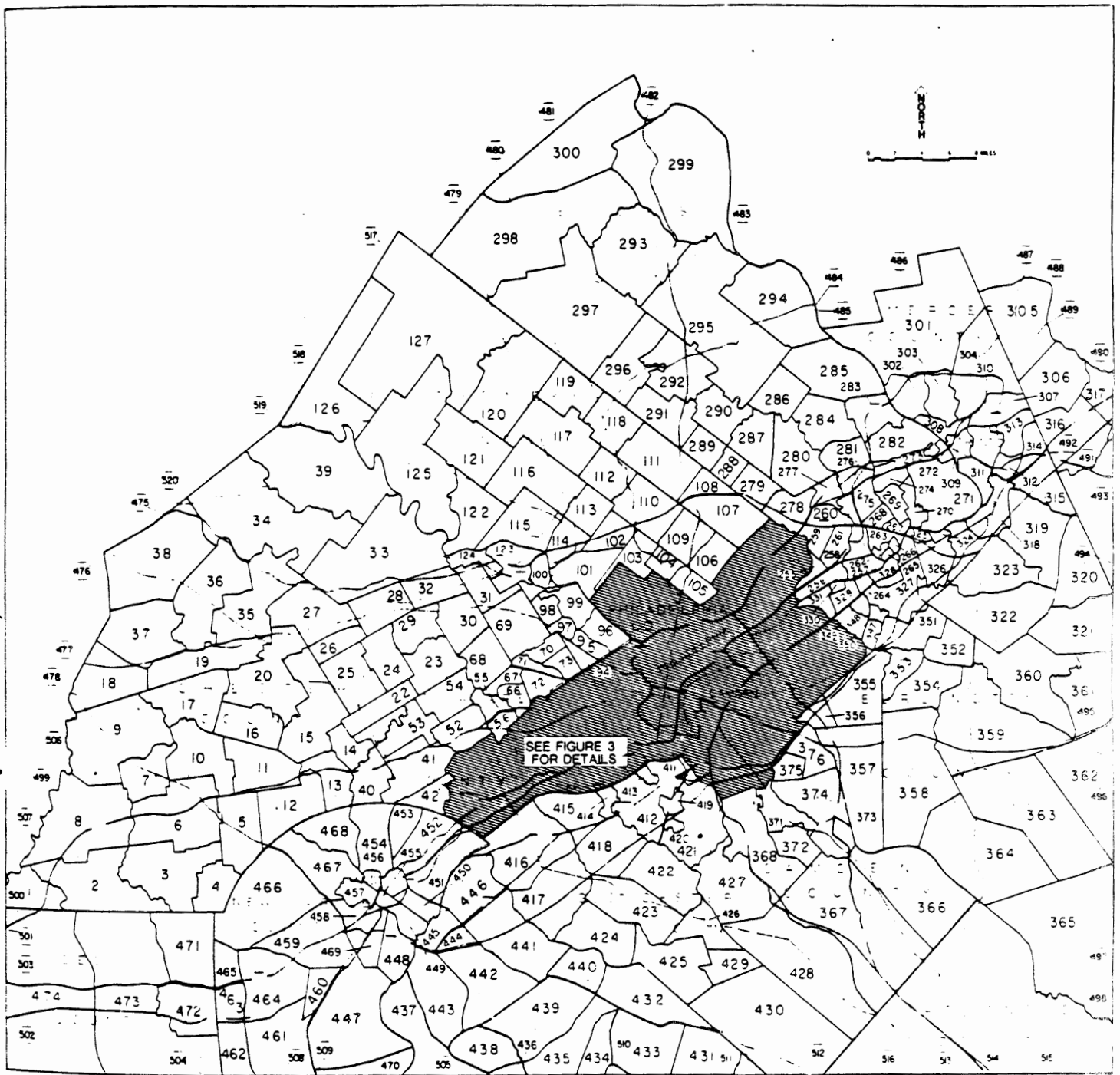
Due to the unique nature of this study, directional travel patterns by peak and off-peak periods were critical. Since travel pattern data was collected in one direction only on each crossing, a complex "cross-factoring" approach was used to estimate travel patterns in each direction by major time period and travel market segment. The basic market segments used in this analysis included:

- Passenger cars - cash;
- Passenger cars - commmuter payments; and
- Commercial vehicles and others.

Route Reconnaissance and Time/Distance Studies - A comprehensive program of route reconnaissance and travel time/distance studies was conducted on various routes in the Study Area. More than 1,000 route-miles were surveyed during August, 1983.

Each run included the recording of time and mileage at numerous check points along each route. In addition, various roadway characteristics were recorded, including:

- Traffic controls (signals, stop signs, etc.);
- Number of lanes;
- Speed limits;
- Road conditions;
- Truck limitations (height, weight, etc.);



TRAFFIC ZONE MAP
REGIONAL AREA

Hilbur Smith and Associates

FIGURE

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Table III-13

TRIP PURPOSE DISTRIBUTION

Passenger Cars

<u>TRIP PURPOSE</u>	<u>DELAWARE MEMORIAL</u>	<u>COMMODORE BARRY</u>	<u>WALT WHITMAN</u>	<u>BEN FRANKLIN</u> (percent)	<u>BETSY ROSS</u>	<u>TACONY- PALMYRA</u>	<u>BURLINGTON- BRISTOL</u>
Work	19.26	48.28	54.96	57.99	65.06	54.91	61.43
Business	14.34	16.04	13.60	17.59	15.43	14.03	12.79
Shopping	5.25	1.28	1.84	3.14	1.84	4.59	4.87
School	9.18	1.74	2.16	2.10	0.96	0.96	0.28
Recreation/Travel	40.82	21.85	16.07	9.98	7.33	14.82	11.43
Other	11.15	10.81	11.37	9.20	9.38	10.69	9.20
TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00

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- Roadside culture; and
- Weather conditions.

The studies were conducted during both peak and off-peak periods on selected routes including all major expressways and highways in the study area, and all routes in close proximity to the bridges. The information was tabulated and evaluated to provide a profile of the major routes on the regional highway system.

Bridge Traffic Characteristics

Following completion of the data collection effort, application of data reduction methods and entry of the data on the computer, a comprehensive profile of present travel patterns and characteristics of motorists using the seven Delaware River toll crossings was developed.

Vehicle Classification - Vehicles at each of the survey station locations were recorded for the survey day in terms of their classification by the particular toll bridge classification system. These data were critical in expanding the interview sample to average daily volume. These classifications facilitated the development of numerous additional tabulations of characteristics such as trip purpose, trip frequency, method of toll payment, vehicle occupancy and patterns of origin and destination. Expansion of the survey sample was achieved utilizing primarily the three market segments defined earlier in this chapter.

These classification categories were then utilized for summary of the vehicle trip characteristics by time period of the vehicle trips over the bridges. The trip data were summarized

into peak hour trips made during the morning peak period (6:00 A.M. to 9:00 A.M.) or the evening peak period (4:00 P.M. to 7:00 P.M.). The off-peak trips included all those traveling over the bridges between 9:00 A.M. and 4:00 P.M. plus evening hours.

Trip Purpose - A complete analysis was made of the distribution of trip purposes of vehicles crossing each of the seven toll bridges under study. Motorists were asked to identify their trip purpose from a list of six categories for passenger cars including work, business, shopping, school, recreation/travel, and "other". For commercial vehicles, seven categories of load information took the place of the trip purpose.

The trip purpose information was thus limited to the passenger car categories for either commuters or persons paying full cash fares. Table III-13 presents the summary of the distribution of passenger cars by trip purpose for each of the toll facilities. It is noted that trips to and from work appear to be predominant at all of the crossings except the Delaware Memorial Bridge which recorded only 19 percent of its trips for the purpose of work. At the other six bridges the work trip purpose ranged from 48 percent at the Commodore Barry Bridge to 65 percent at the Betsy Ross Bridge, with the more heavily traveled Walt Whitman, Ben Franklin and Tacony-Palmyra Bridges ranging from about 55 to 58 percent of the trips made for the purpose of commuting to and from work.

The major trip category recorded at the Delaware Memorial Bridge was recreational travel with nearly 41 percent of the total vehicles crossing that bridge recording that purpose. Recreation/travel was not a significant trip purpose at most of the other bridges, although it was the second most heavily repor-

ted purpose at the Commodore Barry Bridge, where nearly 22 percent of the motorists indicated that as their primary purpose. The Walt Whitman Bridge found 16 percent of the motorists, again the second highest purpose category at this bridge, were traveling for recreation while the Tacony-Palmyra Bridge found nearly 15 percent of its motorists on recreation trips.

Apart from the trips to and from work, business trips were the predominant trip purpose at the Ben Franklin Bridge and the Betsy Ross Bridge, with all of the bridges recording business purposes ranging between 12 percent at the Burlington-Bristol Bridge and 18 percent at the Ben Franklin Bridge.

Nearly one out of ten passenger car trips recorded cited "other" as the purpose of their trip. This would include any purpose not identified in the five or six basic purposes and would probably include doctor visits, serving passengers, and other less frequently found urban area trip purposes. Other trip purposes ranged from 9 percent on the Ben Franklin and the Burlington-Bristol Bridges to the high of 11 percent on the Walt Whitman Bridge.

Shopping trips were not a significant element in the total traffic stream at any of the crossings. These vehicles were heaviest in percentage of total at the Delaware Memorial Bridge, slightly over five percent, while they only amounted to slightly over one percent at the Commodore Barry Bridge, and between four and five percent on both the Tacony-Palmyra and Burlington-Bristol Bridges.

Trip Frequency Distribution - The data obtained on trip frequency distribution indicates that the Delaware Memorial Bridge differs in characteristics of travelers from the other six bridges which are more directly related to the Philadelphia Metropolitan Area. The trip frequency distribution information of the average weekly trips per vehicle surveyed over the various bridges finds the Delaware Memorial with the low average of 1.7 trips per week while the other six bridges all record average trips per week ranging from three to four.

As shown in Table III-14, there is still a core of 12 percent of the total Delaware Memorial Bridge trips which recorded five trips per week, but the vast majority of the trips over the Bridge, over 60 percent, indicated less than one trip per week. The major category of trip frequency recorded by the other six bridges is the five trips per week category which would suggest daily commuting into the Philadelphia area. The five trip percentages ranged from 32 percent at the Commodore Barry Bridge to nearly 40 percent of the Burlington-Bristol travelers, with the Walt Whitman Bridge at 32.9 and the Ben Franklin Bridge at 37.6 percent.

Vehicle Occupancy - Table III-15 shows the average occupancy for each of the bridges and the distribution of vehicles recording one through six-or-more persons in their vehicles at the time of the crossing. The overall average occupancy for all of the seven bridges approximates 1.6 persons per vehicle, with the low occupancy recorded, an average of 1.4 persons, for traffic crossing the Betsy Ross Bridge. Four of the bridges recorded occupancies ranging from 1.53 to 1.58 persons per vehicle and the Commodore Barry Bridge recorded 1.60 persons per vehicle. The Delaware Memorial Bridge again shows its unique characteristics

Table III-14

TRIP FREQUENCY DISTRIBUTION
All Vehicles

<u>TRIPS PER WEEK</u>	<u>DELAWARE MEMORIAL</u>	<u>COMMODORE BARRY</u>	<u>WALT WHITMAN</u>	<u>BEN FRANKLIN</u> (percent)	<u>BETSY ROSS</u>	<u>TACONY- PALMYRA</u>	<u>BURLINGTON- BRISTOL</u>
Less than One	60.47	23.39	21.84	20.21	14.31	19.60	16.81
One	9.32	12.23	10.23	16.54	6.20	10.64	7.75
Two	6.25	6.84	7.84	6.28	6.06	6.65	7.19
Three	4.17	3.59	5.30	6.24	4.84	6.15	4.19
Four	1.77	2.40	3.45	3.62	7.69	3.98	3.22
Five	12.06	32.00	32.92	37.63	38.79	36.02	39.95
More than Five	5.96	13.55	17.72	19.48	22.11	16.97	20.89
TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Average Trips Per Week	1.68	3.02	3.38	3.67	3.97	3.50	3.81

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Table III-15
VEHICLE OCCUPANCY CHARACTERISTICS
 Passenger Cars

<u>OCCUPANTS PER PASSENGER CAR</u>	<u>DELAWARE MEMORIAL</u>	<u>COMMODORE BARRY</u>	<u>WALT WHITMAN</u>	<u>BEN FRANKLIN</u>	<u>BETSY ROSS</u>	<u>TACONY-PALMYRA</u>	<u>BURLINGTON-BRISTOL</u>
	(percent)						
One	36.68	62.93	62.85	72.91	72.91	66.98	67.19
Two	34.00	23.44	23.89	23.73	17.81	21.41	20.53
Three	14.98	7.51	7.39	6.19	4.71	6.29	6.79
Four	10.43	3.65	4.16	3.33	4.03	3.55	3.33
Five	2.99	1.54	1.36	0.96	0.54	1.03	1.91
Six	0.69	0.93	0.32	0.30	0.00	0.63	0.22
More than Six	0.23	0.00	0.03	0.20	0.00	0.11	0.03
TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Average Occupancy	2.12	1.60	1.58	1.53	1.40	1.53	1.53

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ting beyond the survey area counties on the east side of the River.

Walt Whitman Bridge - Use of the Walt Whitman Bridge develops different patterns of concentration of trip ends on the east and west sides of the Delaware River. The trip ends on the east side of the River are fairly heavily concentrated in Camden County and adjacent Gloucester County. These two counties together account for over half of the trip ends on the New Jersey side of the Walt Whitman Bridge. The third major origin of trips across the Walt Whitman Bridge are trips entering the area from outside the adjacent study area counties; these account for nearly 20 percent of the total movement across the Bridge.

On the west side of the Bridge, the clustering of trip ends is not nearly as marked as it is on the New Jersey side of the Bridge. The heaviest area of trip destination on the west side of the River is the downtown Philadelphia area which accounts for nearly 30 percent of Walt Whitman Bridge traffic. Next heaviest area of destinations is the West Philadelphia area, west of the Schuylkill River, which accounts for over 15 percent of total traffic. Traffic moving beyond the study area to the west from the Walt Whitman Bridge is less than 5 percent of the Bridge crossing volume, and trips oriented to any other of the 11 major summary zones on the west side of the River are all less numerous than the external trips.

Ben Franklin Bridge - Nearly two-thirds of the trips crossing the Ben Franklin Bridge have been identified in the summarization of crossing trips.

Chapter IV

TRAFFIC IMPACT ANALYSIS

After the travel patterns and trip characteristics were developed for existing highway conditions, an analysis was undertaken to estimate the potential redistribution of traffic in response to the implementation of "approved" highway improvements, "planned" highway improvements and the implementation of one-way toll collection. In addition, estimates of traffic impacts under each of several one-way toll scenarios were also developed. The results of these traffic impact analyses are summarized in this chapter.

Estimated Traffic Growth

The decade of the 1970's was a particularly troublesome period for much of the nation's industrialized areas. Trends which had been emerging for decades, namely the slow drift from the concentrated inner cities to the outlying suburbs, increased substantially with advances in the technologies of manufacturing, transportation and communication. Add to this, the era of the "energy crisis" which began in 1973 with the Arab oil embargo and the stage was set for the high inflation and subsequent severe economic downturn from which the nation is now recovering.

As this traditional picture of the industrial U.S. began to unravel, the areas contained in the primary study area were undergoing changes which can be characterized by manufacturing relocating to non-metropolitan areas and attracting the needed

population. In the Philadelphia metropolitan area, these changes were beginning as early as the 1950's but the rates of population growth in non-metropolitan counties did not exceed those in the metro area until the 1970's.

Population Trends - Table IV-1 shows population trends and projections for the study area counties and states, as well as recently prepared state level and U.S. forecasts, which have been prepared by the Department of Commerce, Bureau of the Census, taking into account the 1980 Census. Throughout the years 1970, 1975 and 1980, much of the study area grew at rates which were below the national average. Decreases in the Pennsylvania Counties of Delaware and Philadelphia can be seen occurring in the early seventies and worsening as time progresses. Also, such decreases can be seen in Camden and Mercer Counties in New Jersey in the late 1970's, although these were relatively slight when compared to mid-decade estimates. The experience over the entire decade shows that the study area declined an average of 0.1 percent per year with a total net loss of around 100,000 persons, particularly from the Philadelphia metropolitan area.

Employment Trends - Employment trends collected in the Bureau of the Census, County Business Patterns, further illustrate a decade of disruption to the area's economic base, first seen in the early 1970's, resulting from the 1973 energy crisis and recession which followed, beginning again around 1980 as the effects of the second energy crisis and inflation were combining to drive the nation, and particularly its industrial areas, into severe recession. Table IV-2 shows that a majority of the study area counties between 1980 and 1981 were

Table IV-1
POPULATION TRENDS AND PROJECTIONS

<u>STATE/COUNTY</u>	<u>1970</u>	<u>AVERAGE ANNUAL PERCENT CHANGE</u>	<u>1975</u>	<u>AVERAGE ANNUAL PERCENT CHANGE</u>	<u>1980</u>	<u>AVERAGE ANNUAL PERCENT CHANGE</u>	<u>ESTIMATED 1990</u>
Pennsylvania:	11,801,000	0.0	11,829,000	0.1	11,864,000	(0.1)	11,720,000
Bucks	416,728	2.0	459,600	0.8	479,211	-	N.A.
Chester	277,746	1.0	291,900	1.6	316,660	-	N.A.
Delaware	603,456	(0.4)	591,500	(1.3)	555,007	-	N.A.
Montgomery	624,080	0.3	632,700	0.3	643,621	-	N.A.
Philadelphia	1,949,996	(1.3)	1,823,200	(1.5)	1,688,210	-	N.A.
New Jersey:	7,171,000	0.4	7,313,000	0.1	7,365,000	0.2	7,513,000
Burlington	323,132	1.4	345,696	1.0	362,542	-	N.A.
Camden	456,291	0.9	476,511	(0.2)	471,650	-	N.A.
Gloucester	172,681	1.9	189,562	1.1	199,917	-	N.A.
Mercer	304,116	0.9	318,374	(0.7)	307,863	-	N.A.
Salem	60,346	0.7	62,489	0.8	64,676	-	N.A.
Delaware:	548,000	1.1	579,000	0.5	549,000	0.6	630,000
New Castle	385,856	0.7	399,000	0.0	398,115	-	N.A.
Maryland:	3,924,000	1.0	4,115,000	0.5	4,217,000	0.6	4,491,000
Cecil	53,291	1.0	55,900	1.6	60,430	-	N.A.
United States	203,302,000	1.2	215,465,000	1.0	226,546,000	1.0	249,731,000

NOTE: Population estimates by Department of Commerce for years 1975 and 1990.

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Table IV-2
EMPLOYMENT TRENDS

<u>STATE/COUNTY</u>	<u>1970</u>	<u>AVERAGE ANNUAL PERCENT CHANGE</u>	<u>1975</u>	<u>AVERAGE ANNUAL PERCENT CHANGE</u>	<u>1980</u>	<u>AVERAGE ANNUAL PERCENT CHANGE</u>	<u>1981</u>
Pennsylvania:	3,672	(2.7)	3,652	2.1	4,045	(1.4)	3,987
Bucks	93	4.2	114	5.6	150	(0.7)	149
Chester	73	4.7	92	3.1	107	(1.9)	105
Delaware	137	0.6	141	2.7	161	1.2	163
Montgomery	237	3.2	277	2.8	318	0.6	320
Philadelphia	776	(3.6)	647	(0.5)	632	(1.7)	621
New Jersey:	2,165	0.1	2,175	2.9	2,512	0.9	2,535
Burlington	54	4.1	66	4.4	82	3.7	85
Camden	118	1.3	126	2.4	142	0.7	143
Gloucester	28	3.3	33	6.4	45	0.0	45
Mercer	105	(0.8)	101	3.5	120	0.0	120
Salem	17	(1.2)	16	0.0	16	0.0	16
Delaware:	176	1.1	186	2.7	213	2.8	219
New Castle	132	1.5	142	2.7	162	3.1	167
Maryland:	979	1.7	1,065	3.6	1,271	-	N.A.
Cecil	9	(2.3)	8	4.6	10	-	N.A.
Total Study Area Counties	1,779	(0.2)	1,763	1.2	1,945	-	1,934 (1)
United States	57,265	1.1	60,564	4.3	74,836	0.0	74,850

(1) Maryland County Business Patterns are not yet available from the Department of Commerce.
 NOTE: County Business Patterns exclude gov't. and railroad employees and self employed persons.
 SOURCE: County Business Patterns, Bureau of the Census, U.S. Department of Commerce.

31X
IV-4

directly affected by the recessionary events which are now subsiding.

Monthly unemployment statistics, which are not shown in Table IV-2, developed by the Department of Commerce, indicate the worst effects of the recession resulting in unemployment in Pennsylvania and New Jersey which occurred in January of 1983 and November of 1982, respectively. Pennsylvania's highwater mark reached 13.6 percent unemployed at that time but is currently at a level of 9.8 percent while New Jersey, which had peaked at 9.7 percent, is now 6.2 percent, as of the month of February.

Energy Considerations - The energy situation has in recent years imposed itself upon American society both in terms of cost and availability. Lessons of the first embargo were quickly forgotten and the U.S. consumption rate which had dropped from 17.3 million barrels per day in 1973 to 16.3 million in 1975, quickly rose to the highest level in American history by 1978, 18.8 million barrels per day. Once again, shocked by the events in the Persian Gulf in 1979, Americans tightened up on the use of petroleum, in part through the use of voluntary constraints and in the market place by means of price rationing. By year end 1982, the U.S. was consuming 15.3 million barrels per day and had cut its import dependence on OPEC sources by 62 percent.

However, as the world recession is ending, so it appears that conservation is receding as well. By July of 1983, year-to-date total U.S. consumption of gasoline had exceeded 1982

levels by 0.7 percent, Pennsylvania remained 2.2 percent below last year while New Jersey recorded the nation's second highest consumption rate increase of 6.5 percent, 1.7 percentage points below Delaware's rate of 8.2 percent.

Bridge Traffic Growth

Historical trends in economic indices and bridge traffic suggest that the recent recession severely impacted the study area. While forecasts of long range economic growth for the region are generally modest, it is expected that some traffic growth on most of the bridges under study will occur during the forecast period, 1985-1989. This will largely be the result of recovering from depressed traffic levels during the recession and to a lesser extent on long-term economic growth.

Base condition traffic estimates for the seven toll bridges under study are shown in Table IV-3. Growth in total River-crossing traffic on all seven bridges combined is expected to average nearly 1.5 percent per year during the forecast period. When related to actual 1982 average daily traffic levels, growth through 1989 is forecast to average less than 2.0 percent per year.

Traffic Diversion Methodology

A computer traffic assignment process was used to estimate the potential traffic diversion at each bridge due to highway improvements, and one-way tolls.

Table IV-3
 ESTIMATED AVERAGE DAILY BRIDGE TRAFFIC
 Base Condition

BRIDGE	AVERAGE DAILY TRAFFIC (1)				
	1985	1986	1987	1988	1989
Delaware Memorial	55,800	56,400	56,900	57,400	57,900
Commodore Barry	18,400	19,100	19,900	20,600	21,200
Walt Whitman	98,600	99,300	99,900	100,500	101,000
Ben Franklin	72,500	73,900	75,300	76,900	77,600
Betsy Ross	16,400	16,900	17,300	17,600	17,900
Tacony-Palmyra	63,400	63,800	64,300	64,700	65,000
Burlington-Bristol	<u>26,100</u>	<u>26,500</u>	<u>26,900</u>	<u>27,400</u>	<u>27,700</u>
TOTAL	351,200	355,900	360,500	365,100	368,300

IV-7

34X

The first phase of the assignment process was the development of computer-based highway network which included the DVRPC region, plus New Castle County in Delaware, Salem County in New Jersey and Cecil County in Maryland. Links were specially coded to enable traffic assignments to be made at various toll rates and for various time-period/market segment categories. The same zone system used to code origin-destination data from the surveys was used in this network. As shown previously in Figures 2 and 3, special efforts were made to assure greater detail in the zone system and network near each of the seven bridges, thus gaining more accuracy in estimating the traffic distribution among the seven bridges.

Using the origin-destination data gathered and expanded earlier in the study, a complete trip table was developed for each of the seven bridges. These total trip tables were further broken into six time-period/market segment categories, as follows:

	<u>PEAK PERIOD</u>	<u>OFF-PEAK PERIOD</u>
Passenger Cars-Cash	X	X
Passenger Cars-Commuters	X	X
Trucks and Others	X	X

In the case of the Burlington-Bristol and Tacony-Palmyra Bridges, where there currently is no commuter rate, only four market segments were defined. To estimate traffic shifts for 1985 and 1988 assumed highway conditions, the trip tables were factored to these levels based on recent traffic trends on each bridge and preliminary results of the corridor growth analysis.

With the network and trip tables developed, preliminary assignments were run for network calibration purposes. This calibration consisted of a loading of all of the seven total vehicle trip tables on the network. Based on the results of the calibration assignments, the network was "tuned-up" to increase its accuracy. Calibration was obtained when traffic loadings on each bridge accurately reflected actual traffic volumes.

Traffic assignments were made separately for each bridge in order to identify expected traffic shifts between crossings. Although the diversion technique used was the same for each bridge, it is easier to explain the process using a sample crossing, for instance, the Ben Franklin Bridge.

The Ben Franklin Bridge trip table was used to estimate traffic diverted to other bridges, just as other bridge trip tables were used to estimate traffic diverted to the Ben Franklin Bridge. By using the 1983 network, a series of routings, or "trees", were built between each zone pair assuming that each trip crossed the Ben Franklin Bridge. Since each network link was coded with a certain speed and distance, and using current values of cost per minute and cost per mile, the routings between each zone pair were converted into trip costs. Tolls were also included in these costs.

A set of alternate trees in which zone-to-zone movements were not allowed to use the Ben Franklin Bridge was developed. These zone pair routings were also converted into costs.

Delaware River such as that operated by the Pennsylvania Turnpike Commission.

Trips diverted to the Ben Franklin Bridge, for example, as a result of highway improvements, were estimated when each of the other bridges were analyzed. That is, traffic diverted from the Walt Whitman Bridge to the Ben Franklin Bridge was estimated while analyzing the Walt Whitman Bridge.

Six assignments, one for each time-period/market segment category, were run for the "approved" condition. The total of the six assignments represented the total diversion from the Ben Franklin Bridge.

The same process was then repeated for the other six bridges, separately. Thirty-eight assignments were run and aggregated to represent the 1985 ADT's at each of the seven bridges. The results of the traffic assignment process were then reviewed in light of capacity constraints on the various bridges and immediate feeder routes.

This procedure was also used to estimate the redistribution of traffic due to "approved" plus "planned" highway improvements (the 1988 assumed highway condition) and each of the one-way toll options tested.

Anticipated Highway Improvements

Based on contacts with the Delaware, New Jersey and Pennsylvania Departments of Transportation, the Pennsylvania Turnpike Commission, and review of the Transportation Improvement

Programs by the Delaware Valley Regional Planning Commission and Wilmington Metropolitan Area Planning Committee for 1983, two lists of highway improvement projects, "approved" and "planned" were developed to prepare a future year traffic assessment of the seven bridges along the Delaware River. Only those improvement projects generally considered to potentially affect travel patterns on the seven bridges were included on the two lists.

Preliminary lists of improvements were submitted to the DRPA, DRBA, BCBC for review and approval prior to undertaking the complex traffic impact analysis. The final grouping of improvements, agreed by all Agencies, is shown in Figure 4. "Approved" projects are shown with a dashed pattern, "planned" projects are shown as a solid pattern.

Per agreement with the Agencies, the "approved" category, generally regarded as committed, was assumed to be fully implemented by 1985. The "planned" category, generally considered probable but not committed, was assumed to be in place by 1988.

Detailed listings of the improvements in each category are provided below.

APPROVED PROJECTS

A-1	New I-95 ramps to the Commodore Barry Bridge.	Delaware County
A-2	Completion of NJ Route 55 from NJ Turnpike to U.S. Route 40.	Gloucester County

A-3	I-95 completion in the Philadelphia Airport area.	Philadelphia and Delaware County.
A-4	Penrose Avenue relocation and I-95 Ramp U to Platt Bridge.	Philadelphia
A-5	Kings Highway (NJ Route 41) resurfacing.	Camden County
A-6	New I-95 ramps to and from Edgemont Avenue in Chester, PA.	Delaware County
A-7	New I-95 ramps at PA Route 413 from I-295 to DE Route 7.	Bucks County
A-8	I-95, Delaware Turnpike widening.	New Castle County

PLANNED PROJECTS

P-1	I-95 Interchange with Pennsylvania Turnpike.	Bucks County
P-2	I-476 Interchange with Pennsylvania Turnpike including connection to existing completed portion of I-476.	Montgomery County
P-3	Completion of U.S. 1 Bypass - Morrisville, PA.	Bucks County
P-4	NJ Route 90, from U.S. Route 130 to NJ Route 73, improving access to the Betsy Ross Bridge.	Burlington County
P-5	Completion of Vine Street Expressway (I-676) from Ben Franklin Bridge to I-76, including new ramps to I-95, (and improved access from Bridge to I-95).	Philadelphia
P-6	Completion of I-476, from I-95 to Baltimore Pike.	Delaware County

P-7	I-76, Schuylkill Expressway resurfacing from Passyunk Avenue to Pennsylvania Turnpike.	Philadelphia
P-8	Improvement of U.S. Route 1, from I-95 to Middlesex County border.	Mercer County
P-9	New I-495 Interchange at Edgemoor Road.	New Castle County
P-10	Completion of I-295, from U.S. Route 130, to I-295 in Hamilton Township.	Mercer and Burlington Counties

Traffic Impacts Due to Highway Improvements

After traffic assignments for the "approved" and "approved plus planned" conditions were run, a thorough analysis was conducted to identify all traffic shifts between crossings. These shifts are discussed below.

1985 Highway Conditions - The estimated average daily traffic shifts between bridges in the study area due to the implementation of "approved" improvements are shown in Table IV-4. All impacts are relatively low. As might be expected, the highest shifts are shown near the southernmost crossings. The primary factors in these shifts are the new ramps to the Commodore Barry Bridge from I-95 and the completion of I-95 in the vicinity of Philadelphia International Airport.

Approximately 350 daily vehicles would shift from the Delaware Memorial Bridge to the Commodore Barry Bridge, essentially due to the new ramp from I-95. The shift of 200 trips from the Delaware Memorial Bridge to the Walt Whitman Bridge is largely due to the completion of I-95, as is the shift from Commodore Barry Bridge to the Walt Whitman Bridge.

Table IV-4
ESTIMATED TWO-WAY AVERAGE DAILY TRAFFIC SHIFTS
 1985 Levels

BRIDGE DIVERTED FROM	BRIDGE DIVERTED TO								TOTAL
	Delaware Memorial	Commodore Barry	Walt Whitman	Ben. Franklin	Betsy Ross	Tacony- Palmyra	Burlington Bristol	Other	
Delaware Memorial	--	350	200	--	--	--	--	--	550
Commodore Barry	--	--	300	--	--	--	--	--	300
Walt Whitman	--	200	--	50	--	--	--	--	250
Ben Franklin	--	--	100	--	--	--	--	--	100
Betsy Ross	--	--	--	--	--	--	--	--	--
Tacony-Palmyra	--	--	--	--	50	--	50	--	100
Burlington-Bristol	--	<u>50</u>	<u>50</u>	--	--	--	--	--	<u>100</u>
TOTAL	--	600	650	50	50	--	50	--	1,400

NOTE: Assumes "approved" highway projects completed.

42X
 IV-15

The estimated net change in average daily traffic at each bridge due to the implementation of "approved" highway improvements is shown in Table IV-5. The Delaware Memorial Bridge is estimated to have the largest net loss in traffic, 550 trips per day. Other bridges expected to lose traffic are the Ben Franklin Bridge and Tacony-Palmyra Bridge, losing 50 and 100 trips per day, respectively. The Walt Whitman Bridge is estimated to have the largest net increase in traffic at 400 trips per day. The Commodore Barry, Betsy Ross and Burlington-Bristol Bridges are also expected to increase in net daily traffic.

Since one improvement can cause a decrease in traffic on a certain bridge, while another improvement can cause an increase in traffic on that bridge, changes in average daily traffic are expressed in net trips. These net trips represent the result of all the "approved" improvements affecting the average daily bridge traffic.

None of the trips are expected to divert to bridges outside the system, such as the Pennsylvania Turnpike and U.S. Route 1 crossings of the Delaware River, due to "approved" highway improvements. Improvements to I-95 and its new ramps to the Commodore Barry Bridge would likely attract a small amount of traffic from the Pennsylvania Turnpike.

With the exception of the Commodore Barry Bridge, the net impacts do not exceed one percent of the estimated base 1985 traffic; hence these impacts would be difficult to discern from normal annual and seasonal variations.

Table IV-5
ESTIMATED NET CHANGE IN AVERAGE DAILY TRAFFIC
1985 Levels

<u>BRIDGE</u>	<u>ESTIMATED 1985 ADT WITHOUT IMPROVEMENTS</u>	<u>ESTIMATED 1985 ADT WITH IMPROVEMENTS</u>	<u>NET CHANGE IN AVERAGE DAILY TRAFFIC</u>	<u>PERCENT CHANGE</u>
Delaware Memorial	55,800	55,250	(550)	(1.0)
Commodore Barry	18,400	18,700	300	1.6
Walt Whitman	98,600	99,000	400	0.4
Ben Franklin	72,500	72,450	(50)	(0.1)
Betsy Ross	16,400	16,450	50	0.3
Tacony- Palmyra	63,400	63,300	(100)	(0.2)
Burlington- Bristol	<u>26,100</u>	<u>26,150</u>	<u>50</u>	0.2
TOTAL	351,200	351,300	100	--
Diverted From Other Bridges(1)			100	

(1) Primarily Pennsylvania Turnpike.

NOTE: All values are two-way average daily traffic.

X77

IV-17

1988 Highway Conditions - At 1988 levels, both the "approved" and "planned" improvements are assumed to be in the highway network. The estimated two-way average daily traffic shifts between bridges are shown in Table IV-6. As shown in this table, a total of 13,850 motorists would shift crossings in response to "approved" plus "planned" improvements. The heaviest shift, 3,300 vehicles per day, would be from the Walt Whitman Bridge to the Ben Franklin Bridge. This is largely due to the completed Vine Street Expressway. However, 2,800 trips would shift from the Ben Franklin Bridge to the Walt Whitman Bridge, mostly in response to the new ramps in Center City to and from the south on I-95.

The completion of NJ Route 90 from NJ Route 73 to US Route 130 would result in a significant shift of traffic to the Betsy Ross Bridge; 2,500 from the nearby Tacony-Palmyra and 1,000 from the Ben Franklin. The improvements to I-95, and in particular its interchange with the Pennsylvania Turnpike, would result in a significant shift from several of the study bridges to the Pennsylvania Turnpike and U.S. Route 1. Most significant would be a shift of 1,000 vehicles from the Ben Franklin Bridge, 400 from the Delaware Memorial Bridge and 500 from the Walt Whitman Bridge. In total, 2,300 trips would be diverted totally away from the bridges operated by DRBA, DRPA and BCBC. Approximately 250 vehicles per day would be attracted to the study bridges from other crossings, such as the Pennsylvania Turnpike.

As shown in Table IV-7, the estimated 1988 ADT on all study bridges combined is expected to decrease by 2,050 trips due to "approved" and "planned" highway improvements. Most of

Table IV-6
ESTIMATED TWO-WAY AVERAGE DAILY TRAFFIC SHIFTS
1988 Levels

BRIDGE DIVERTED FROM	BRIDGE DIVERTED TO								TOTAL
	Delaware Memorial	Commodore Barry	Walt Whitman	Ben Franklin	Betsy Ross	Tacony- Palmyra	Burlington- Bristol	Other	
Delaware Memorial	--	300	200	--	--	--	--	400	900
Commodore Barry	--	--	400	--	--	--	--	--	400
Walt Whitman	--	200	--	3,300	100	--	--	500	4,100
Ben Franklin	--	--	2,800	--	1,000	--	--	1,000	4,800
Betsy Ross	--	--	--	200	--	--	--	200	400
Tacony-Palmyra	--	--	100	100	2,500	--	100	--	2,800
Burlington-Bristol	--	--	--	--	--	--	--	200	200
Other	--	50	100	100	--	--	--	--	250
TOTAL	--	550	3,600	3,700	3,600	--	100	2,300	13,850

NOTE: Assumes "approved" and "planned" highway improvement projects completed.

IV-19

X97

Table IV-7
ESTIMATED NET CHANGE IN AVERAGE DAILY TRAFFIC
1988 Levels

<u>BRIDGE</u>	<u>ESTIMATED 1988 ADT WITHOUT IMPROVEMENTS</u>	<u>ESTIMATED 1988 ADT WITH IMPROVEMENTS</u>	<u>NET CHANGE IN AVERAGE DAILY TRAFFIC</u>	<u>PERCENT CHANGE</u>
Delaware Memorial	57,400	56,500	(900)	(1.6)
Commodore Barry	20,600	20,750	150	0.7
Walt Whitman	100,500	100,000	(500)	(0.5)
Ben Franklin	76,900	75,800	(1,100)	(1.4)
Betsy Ross	17,600	20,800	3,200	18.2
Tacony- Palmyra	64,700	61,900	(2,800)	(4.3)
Burlington- Bristol	<u>27,400</u>	<u>27,300</u>	<u>(100)</u>	<u>(0.4)</u>
TOTAL	365,100	363,050	(2,050)	(0.6)
Diverted To Other Bridges			2,050	

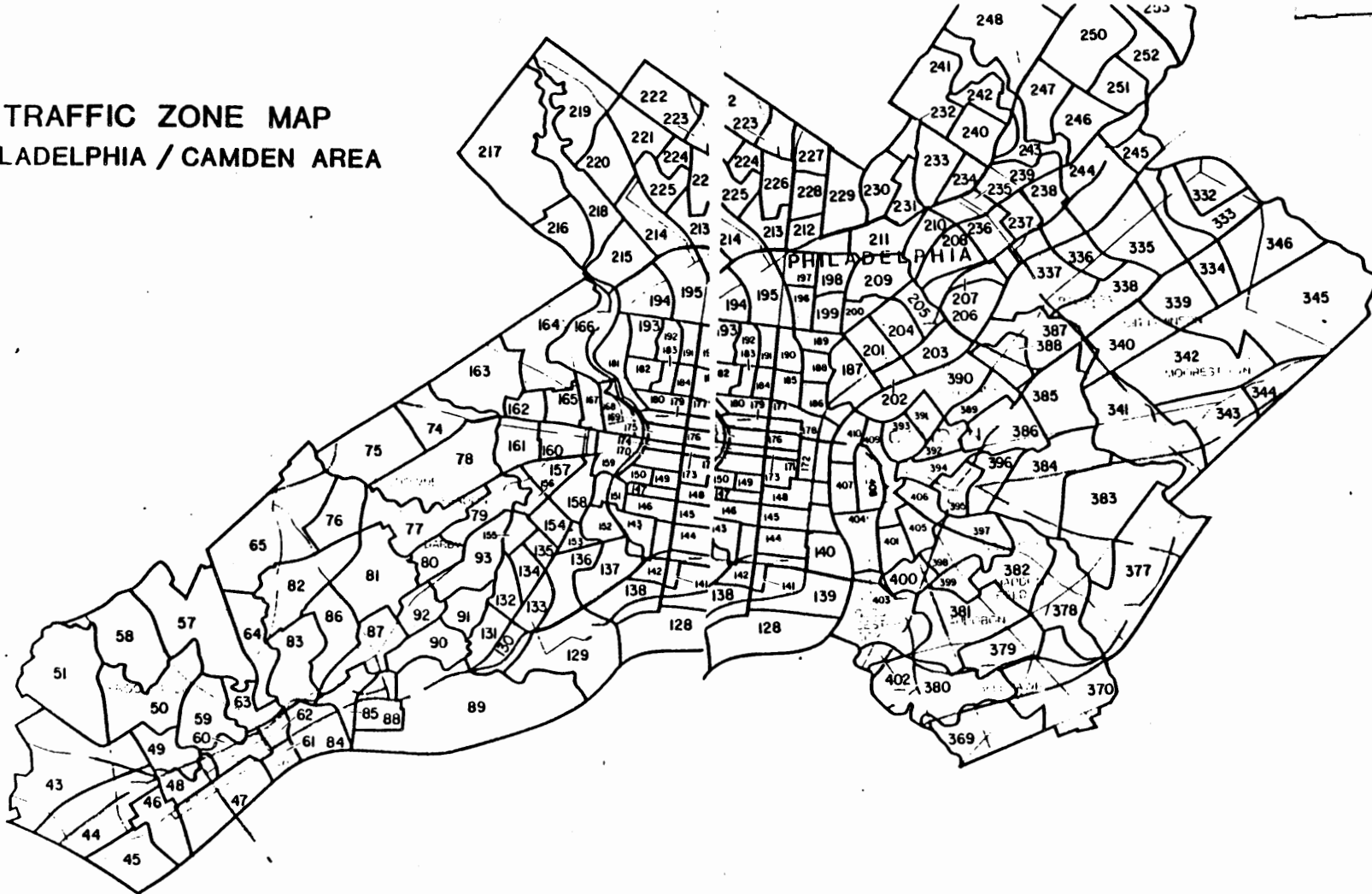
(1) Includes Pennsylvania Turnpike and U.S. Route 1 in Trenton.
NOTE: All values are two-way average daily traffic.

47X

IV-20

TRAFFIC ZONE MAP
PHILADELPHIA / CAMDEN AREA

X.87



WESTMONT, NEW JERSEY
DEPTFORD MALL
CAMDENBERLAND MALL
WESTMONT, N.J. 08108

BRISTOW'S SPORTING GOODS INC.

206 HADDON AVENUE
WESTMONT, N.J. 08108

(609) 858-0568



April 29, 1987

Mr. Peter R. Manoogian
New Jersey State Legislature
Senate Transportation and
Communications Committee
State House Annex, CN-068
Trenton, N.J. 08625

Dear Mr. Manoogian:

Due to previous scheduling I am unable to attend the public hearing conducted by the Senate Transportation and Communications Committee on Friday, May 1, 1987, in the Deptford Municipal Building, Deptford, New Jersey; therefore, written testimony is being submitted.

I would like to present two concepts for consideration in future planning of roadway construction and traffic flow in the area of Routes 42, 55 and 295.

1. An interchange at the point where New Jersey Turnpike and Route 42 intersect.
2. Access to Route 42 South for traffic traveling North on 295.

The creation of these two access areas would direct traffic flow along major highways eliminating cross traffic through municipalities that already are facing their own traffic problems with the increase of development. An overall picture which includes the Deptford Mall, Camden County College and Camden County Lakeland Complex being situated near Route 42 and Route 42 leading directly to the Atlantic City Expressway, I feel, exemplifies the necessity for consideration of these two proposals.

Sincerely,

David Everett
Manager
Deptford Mall Branch

CHART I

POPULATION OF "GRIDLOCKED MUNICIPALITIES"

CAMDEN COUNTY

	<u>POPULATION</u> <u>1980</u>	<u>POPULATION</u> <u>1985</u>	<u>%CHANGE</u>
BELLMAWR	13,721	13,526	-.014
BROOKLAWN	2,133	2,086	-.022
GLOUCESTER TWP.	45,156	49,284	+ 9.0
GLOUCESTER CITY	13,121	13,158	+ .03
MT. EPHRAIM	4,863	4,786	- 1.6
RUNNEMEDE	9,461	9,341	-.012
WATERFORD	8,126	9,396	+13.6
WINSLOW	20,034	23,711	+15.6
	<u>116,615</u>	<u>125,288</u>	<u>+ 7%</u>

GLOUCESTER COUNTY

	<u>POPULATION</u> <u>1980</u>	<u>POPULATION</u> <u>1985</u>	<u>%CHANGE</u>
DEPTFORD TOWNSHIP	23,473	24,056	+2.5
MONROE TOWNSHIP	21,639	22,758	+5.0
WASHINGTON TOWNSHIP	27,878	31,763	+12.3
WENONAH BOROUGH	2,303	2,240	+2.7
WEST DEPTFORD TWP.	18,002	18,143	+ .08

GLOUCESTER TOWNSHIP

	<u>POPULATION</u> <u>1980</u>	<u>POPULATION</u> <u>1985</u>	<u>%CHANGE</u>
WESTVILLE BOROUGH	4,786	4,691	-2.0
WOODBURY CITY	10,353	10,180	-1.6
WOODBURY HEIGHTS BORO	3,460	3,344	-.03
	<u>111,894</u>	<u>117,175</u>	<u>+4.7%</u>

CAMDEN COUNTY

	<u>1980</u>	<u>1985</u>	
	116,615	125,288	+7.0

GLOUCESTER COUNTY

	<u>1980</u>	<u>1985</u>	
	111,894	117,175	+4.7
	<u>228,509</u>	<u>242,463</u>	<u>5.8</u>

Source: N.J. Department of Labor, September 1986

CHART II

FASTEST GROWING GRIDLOCKED MUNICIPALITIES
HOUSING UNITS AUTHORIZED BY BUILDING PERMITS

<u>CAMDEN COUNTY</u>	<u>1981</u>				<u>1985</u>		
	TOTAL HOUSING UNITS	IN STRUCTURE WITH			TOTAL HOUSING UNITS	IN STRUCTURE WITH	
		1 UNIT	2 UNITS	3+ UNITS		1 UNIT	2 UNITS
GLOUCESTER TOWNSHIP	215	205	10	—	367	367	—
WATERFORD	48	37	8	—	73	63	—
WINSLOW	157	117	—	40	526	444	42
	<u>420</u>	<u>359</u>	<u>18</u>	<u>43</u>	<u>966</u>	<u>874</u>	<u>42</u>
<u>GLOUCESTER COUNTY</u>							
DEPTFORD	56	56	—	—	95	95	—
MONROE	32	32	—	—	87	87	—
WASHINGTON TWP.	128	120	8	—	831	724	4
WEST DEPTFORD	39	39	—	—	116	100	—
	<u>255</u>	<u>247</u>	<u>8</u>	<u>—</u>	<u>1129</u>	<u>1006</u>	<u>4</u>

CHANGE IN TOTAL HOUSING UNITS

	<u>1981</u>	<u>1985</u>	<u>PERCENTAGE CHANGE</u>
<u>CAMDEN</u>	420	966	56.6%
<u>GLOUCESTER</u>	255	1129	77.5
<u>TOTAL</u>	675	2095	67.8%

Source: DVRPC Data sheets, 1986, 1983.

NEW JERSEY DEPARTMENT OF TRANSPORTATION

MEMORANDUM

TO: Carolyn M. McCallum

FROM: William C. Dickinson

SUBJECT: Routes I-295, I-76 and 42 DATE: 4/29/87 EXT: 52507
Intersection Study
Camden County

This is in response to your request regarding the Scope of Work and Status of the 295, 76, and 42 study.

The study limits are:

Route I-295 - From just south of Route 47 (MP 25.0) to just north of Route 168 (MP 28.4)

Route I-76 - From the I-295 Interchange (MP 0.0) to the Walt Whitman Bridge.

Route 42 - From the Atlantic City Expressway (MP 6.0) to the I-295 Interchange (MP 14.28)

This study is to look into geometric and capacity improvements at the I-295, 76 and 42 Interchange, specifically, the I-295 NB and SB connectors, and also to examine the feasibility of the connecting Rt. 295 NB to 42 SB and Rt. 42 NB to 295 SB ramps.

On Route I-76 and 42 between the Walt Whitman Bridge and Route 41, the study will look into additional lanes and re-examine the reversible lane possibility in conjunction with the improvements at the I-295, 76, 42 interchange.

On Route 42, between Route 41 and the Atlantic City Expressway, the study will elaborate on the interchange improvements mentioned in the reversible lane study done by McCormick Taylor Associates in July of 1986.

The study will include an environmental Sensitivity Report.

A proposal has been submitted by McCormick, Taylor Associates and is currently being negotiated. We anticipate the modification will be executed in June and the study will take around 12 months. The flights for the aerial photography were completed by ADR Associates in mid March 1987.

William C. Dickinson
Regional Design Engineer
Region IV

RECEIVED

APR 30 1987

DAS:cp
cc: K. Afferton
D. Hutchinson
D. Sichik

GOVT. AFFAIRS

